BUREAU OF RECLAMATION

Draft Environmental Assessment Upper Stewart Ditch Pipeline Project

Colorado River Basin Salinity Control Program
Western Colorado Area Office, Upper Colorado Region

U.S. Department of the Interior

April 2020

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 Upper Stewart Ditch Pipeline Project

Colorado River Basin Salinity Control Program
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Prepared for Reclamation by Rare Earth Science
under Cooperative Funding Agreement R18AC00073

Cover Photo: View of the existing Stewart Ditch, proposed for piping. (Rare Earth Science/Dawn Reeder)

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List of Acronyms & Abbreviations

a.k.a.	also known as
BMP	Best Management Practice
CDOT	Colorado Department of Transportation
CDPHE	Colorado Department of Public Health & Environment
CFR	Code of Federal Regulations
cfs	cubic feet per second
CPW	Colorado Department of Natural Resources Division of Parks & Wildlife
CWA	Clean Water Act
EA	Environmental Assessment
EPA	U.S. 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
HQS	Habitat Quality Score
LLC	Limited Liability Company
MBTA	U.S. Migratory Bird Treaty Act
MOA	Memorandum of Agreement
mi	Mile
NAAQS	National Ambient Air Quality Standards
NCA	National Conservation Area
NEPA	National Environmental Policy Act
NPDES	National Pollutant Discharge Elimination System
NRCS	U.S. Department of Agriculture Natural Resources Conservation Service
NRHP	National Register of Historic Places
OAHP	Colorado Office of Archaeology and Historic Preservation
PBF	Physical and biological feature (formerly primary constituent element)
PBO	Programmatic Biological Opinion
PL	Public Law
PM	Principal Meridian
PVC	Polyvinyl chloride
Reclamation	U.S. Department of the Interior Bureau of Reclamation
ROW	Right of Way
SHPO	State Historic Preservation Office
SMPW	Selenium Management Program Workgroup
TAILS	Advanced Tracking and Integrated Logging System
THV	Total Habitat Value
UDP	Unanticipated Discovery Plan
USACE	U.S. Army Corps of Engineers
USC	U.S. Code
USDA	U.S. Department of Agriculture
USGS	U.S. Geological Survey

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1 Introduction

This Draft Environmental Assessment (EA) has been prepared in compliance with the National Environmental Policy Act (NEPA) to disclose and evaluate the potential environmental effects of the Stewart Ditch & Reservoir Company's (Company's or "Applicant's") proposed Upper Stewart Ditch Pipeline Project (hereinafter, "Project" or "Proposed Action"). The Proposed Action is located in Delta County, Colorado (Figure 1 [Appendix A]).

Rare Earth Science, LLC prepared this EA on behalf of the U.S. Department of the Interior Bureau of Reclamation (hereinafter "Reclamation"), which is authorized by the Colorado River Basin Salinity Control Act to provide funding assistance for the Proposed Action. Reclamation awarded a financial assistance agreement to the Company for the Project under Funding Opportunity Announcement (FOA) BOR-UC-17-F003 and Cooperative Funding Agreement R18AC00073. As the funding agency, Reclamation is the lead federal agency for the NEPA analysis of the Proposed Action. Ongoing operation and maintenance of the constructed project would be funded through the Company's annual shareholder assessments.

After a public review period for this Draft EA, Reclamation will determine whether further study or a Finding of No Significant Impact (FONSI) for the Proposed Action is warranted before the Proposed Action can be implemented.

1.1 Background

The threat of salinity loading in the Colorado River basin is a major concern in both the United States and Mexico (Reclamation 2017). Salinity affects water quality, which in turn affects downstream users, by threatening the productivity of crops, degrading wildlife habitat, and corroding residential and municipal plumbing. Irrigated agriculture contributes approximately 37 percent of the salinity in the system (Reclamation 2017). Irrigation increases salinity in the system both by depleting in-stream flows, and by mobilizing salts found in underlying geologic formations into the system, especially during flood irrigation practices.

In June 1974, Congress enacted the Colorado River Basin Salinity Control Act, Public Law 93-320, which directed the Secretary of the Interior to proceed with a program to enhance and protect the quality of water available in the Colorado River for use in the United States and Republic of Mexico. Public Law 104-20 of July 28, 1995, authorizes the Secretary of the Interior, acting through the Bureau of Reclamation, to implement a Basinwide Salinity Control Program. The Secretary may carry out the purposes of this legislation directly, or make grants, enter into contracts, memoranda of agreement, commitments for grants, cooperative agreements, or advances of funds to non-federal entities under such terms and conditions as the Secretary may require.

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

Figure 2 [Appendix A] shows the locations of Program projects completed and/or recently funded in the vicinity of the Proposed Action.

1.2 Purpose & Need for the Proposed Action

The Proposed Action would eliminate ditch seepage loss thereby reducing salinity in the Colorado River basin by an estimated 1,622 tons of salt per year. 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.

The purpose of the Proposed Action is to comply with the Colorado River Basin Salinity Control Act (Reclamation's federal nexus). The need for the Proposed Action is to reduce salinity concentrations in the Colorado River basin to address downstream natural resource concerns in the Lower Gunnison Basin and the Colorado River Basin. The Proposed Action will provide benefits for a broad spectrum of downstream water users, as explained in Section 1.1, above.

1.3 Overview of Proposed Action

The Proposed Action is to provide funding to the Company to complete the Upper Stewart Ditch Pipeline Project. The Project would replace approximately 2.6 miles of Stewart Ditch with buried pipe. The Proposed Action is described in detail in Section 2.2 of this EA.

1.4 Alternatives Considered but Not Carried Forward

Several alternatives were considered during the conceptual design process for the Project but were not proposed to Reclamation because they were determined to be technically challenging, economically prohibitive, and/or potentially more destructive to existing habitat than the Proposed Alternative.

1.5 Setting & Location of the Proposed Action

The Proposed Action Area lies in the North Fork Valley of Delta County, south and southwest of the Town of Paonia, and about 25 direct miles east-by-northeast of the City of Delta, the county seat (Figure 1 [Appendix A]).

The general physical location of the Proposed Action includes (Figure 1 [Appendix A]):

- Township 14 South, Range 91 West of the 6th Principal Meridian (6th PM), Sections 6 and 7: areas of ditch piping.
- Township 14 South, Range 92 West of the 6th PM, Section 12: areas of ditch piping.
- Township 14 South, Range 92 West of the 6th PM, Section 14: a materials storage area adjacent to the North Fork Valley Airport.

1.6 Relationship to Other Projects

Other salinity control projects in progress or recently implemented in the general vicinity include the following (Figure 2 [Appendix A]):

- Cattleman's Ditches Pipeline Project Phase I & II
- C Ditch Company's C Ditch/Needle Rock Pipeline Project
- Clipper Irrigation Salinity Control Project 4, Zanni Lateral Pipeline Project, and Center Lateral Pipeline Project
- Grandview Canal Piping Project
- Rogers Mesa Water Distribution Association's Slack and Patterson Laterals Piping Project
- Minnesota Canal and Minnesota L75 Lateral Piping Projects
- Lower Stewart Ditch Pipeline Project
- Bostwick Park Water Conservation District's Siphon Lateral Salinity Control Project
- Forked Tongue/Holman Ditch Company's Salinity Control Project
- Fire Mountain Canal Piping Project
- North Delta Canal Salinity Control Project I
- Gould Canal Improvement Projects A & B
- Uncompahgre Valley Water Users Association (UVWUA) East Side Laterals Piping Project Phase 9

1.7 Scoping, Coordination, & Public Review

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 Alternative:

- U.S. Fish and Wildlife Service, Western Colorado Ecological Services Field Office, Grand Junction, CO
- U.S. Army Corps of Engineers, Colorado West Regulatory Branch, Grand Junction, CO
- Colorado Office of Archaeology and Historic Preservation, Denver, CO
- Southern Ute Indian Tribe, Ute Mountain Ute Tribe, and Ute Indian Tribe (Uintah and Ouray Reservation)
- Delta County Historic Landmarks Board and Delta County Historical Society
- Advisory Council on Historic Preservation

Concerns raised during recent similar projects (see Section 1.6) and related informal consultations with Colorado Parks and Wildlife, Gunnison, Colorado, also helped identify potential concerns for the Proposed Action.

In compliance with NEPA, this Draft EA will be available for public comment (see Section 5.2). Any public comments received within the 30-day comment period will be included as an Appendix to the Final EA. Notice of the availability of this Draft EA will be distributed to private landowners and Company shareholders adjacent to the Proposed Action, and the organizations and agencies listed in Appendix B.

Resources analyzed in this EA are discussed in Section 2. The following resources were identified as ***not present or not affected***, and are not analyzed further in this EA:

- *Indian Trust Assets and Native American Religious Concerns* (not applicable). No Indian trust assets have been identified within the Proposed Action Area. No Native American sacred sites are known within the Proposed Action Area. Neither the No Action Alternative, nor the Proposed Action, will have an effect on Indian trust assets or Native American sacred sites. To confirm this finding, Reclamation provided the Ute tribes with historic presence in the region with a description of the Proposed Action and a written request for comments regarding any potential effects on Indian trust assets or Native American sacred sites as a result of the Proposed Action. No comments were received.
- *Environmental Justice & Socio-Economic Issues* (not applicable). The Proposed Action Area does not occur on Indian reservation lands or within disproportionately adversely affected minority or low-income populations. The Proposed Action 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, will have an environmental justice effect.
- *Jurisdictional Wetlands and Other Waters of the U.S.* The Proposed Action would affect surface and shallow subsurface hydrology supplied to wetland and riparian areas in the Proposed Action Area associated with the ditch and ditch seepage. Written confirmation is being requested from the U.S. Army Corps of Engineers to verify that the Clean Water Act (33 USC 1344) exemption for Farm or Stock Pond or Irrigation Ditch Construction or Maintenance is applicable to the Proposed Action (included as Appendix C to the Final EA).
- *Wild and Scenic Rivers, Land with Wilderness Characteristics, or Wilderness Study Areas* (not applicable). No Wild and Scenic Rivers, land with wilderness characteristics, or Wilderness Study Areas exist in the Proposed Action Area.

2 Proposed Action & Alternatives

As explained in Section 1.3, the alternatives evaluated in this EA include a No Action Alternative and the Proposed Action. The resource analysis contained within this document, along with other pertinent information, will guide Reclamation's decision about whether or not to fund the Proposed

Action for implementation. The Proposed Action is analyzed in comparison to a No Action Alternative in order to determine potential effects.

2.1 No Action Alternative

Under the No Action Alternative, Reclamation would not provide funding to the Company for the Upper Stewart Ditch Pipeline Project.

2.2 Proposed Action Alternative

Under the Proposed Action Alternative, Reclamation would authorize funding to the Company to implement the Upper Stewart Ditch Pipeline Project. The specific location of the Proposed Action Alternative is provided in Section 1.3 and shown on Figures 3a and 3b (Appendix A). Table 1 (below) provides a summary of project components.

Overall, approximately 2.6 miles of the open, earthen Stewart Ditch would be replaced with a total of approximately 2.6 miles of buried pipe, including approximately 2.3 miles of large-diameter (42 to 54-inch) PVC pipe (or similar) buried in the existing ditch prism, a large-diameter (42-inch) bypass PVC pipe (or similar) buried outside the existing ditch prism, and a small-diameter (4 to 6-inch) lateral PVC pipe buried in the existing ditch prism (the "Smith Lateral"). As a result of the bypass, approximately 0.3 mi of the existing Stewart Ditch prism would be abandoned and backfilled. A total of 4 irrigation turnouts would be replaced with upgraded structures and fitted with measuring devices. A concrete inlet structure with a trash rack would be installed at the initiation of the buried pipeline, and the end of the project would connect to the existing previously completed pipeline. A staging area has been identified adjacent to the North Fork Valley Airport to support the project (Figure 1 [Appendix A]).

Table 1. Summary of Project Components for the Proposed Action

Component	Total	Comment
Existing ditch to be piped	2.6 miles	Beginning on Stewart Ditch just west of Lamborn Mesa Road and culminating at the beginning of the Lower Stewart Pipeline Project. About 5% of this ditch segment is in miscellaneous culverts or concrete lined—all would be replaced with buried pipe, except at county road crossings, where the existing culverts would serve as pipe sleeves.
Length of pipe to be buried in existing ditch prism	2.3 miles	The majority of the pipeline would be installed in the existing ditch prism, except for a bypass length (see below).
Length of pipe to be buried outside existing ditch prism (i.e., the "bypass")	0.3 miles	The bypass portion of the buried pipe would depart from the existing ditch prism along O Road, and cross O Road and German Creek before reconnecting to the existing ditch prism.

Component	Total	Comment
Length of existing ditch prism to be abandoned and filled	0.3 miles	Installation of the bypass and creation of the Smith lateral would require 0.3 miles of ditch prism to be abandoned and backfilled.
Irrigation structures	5	A concrete inlet structure with a trash rack would be installed at the origin of the Proposed Action, and four metered irrigation turnout structures would be replaced along the buried pipeline.
Staging area	5.3 acres	One equipment and materials staging area adjacent to the North Fork Airport on previously disturbed ground would be used for the Proposed Action.
Access ways	--	With the exception of a new dirt road along the proposed bypass; the entire project alignment has an access road along the ditch prism, which would be accessed from existing county roads or private roads. The staging area would be accessed from an existing private road. No alterations of existing roads would be required.

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

The following paragraphs provide descriptions of the various aspects of the Proposed Action. No water storage, pump stations, compressor stations, or new irrigated areas would be associated with the project.

2.2.1 Pipeline Installation

Installation of the pipeline would involve using trackhoes and possibly a bulldozer to grub ditch bank vegetation and fill and bed the existing ditch. The pipe would be buried with fill material from within the ditch prism, or with fill obtained from a commercial source. An excavator would then trench in the prepared bed to place the pipe, and a trackhoe would position the pipe in the trench. The pipe would be buried, and the alignment smoothed with trackhoes (without back-dragging the blade) to match the surrounding land contours and restore drainage patterns. A one-lane dirt maintenance road or ATV trail would remain on the pipe alignment project following construction (see Photograph 2, below), with appropriately-sized culverts at drainage crossings. Small sections of the ditch are either lined with concrete or enclosed in a steel culvert (Figure 3a [Appendix A])—these will be removed and disposed at the county landfill or recycled, except for the steel culvert in "the springs" section. The culvert in "the springs" section would be blocked and abandoned in place in order to avoid disturbance to several mature cottonwoods growing adjacent to it, and the new pipe would be buried in the adjacent existing ditch access road.

Photograph 1. Pipeline installation in the lower Stewart Ditch area, near where the terminus of the Proposed Action will connect. (Harward Engineering/Marcel Orton)

Photograph 2. View of pipeline installation area shown in Photograph 1, four years following installation. (Rare Earth Science/Dawn Reeder)

The bypass pipe installation would cross irrigated pastures, the German Creek drainage, and semi-desert shrublands. Installation methods would be the same as those described above, except for the German Creek channel crossing. To install the buried pipeline under the active channel of German Creek, the crossing area would first be dried by guiding the flow of the creek into a large-diameter

40-foot-long corrugated culvert placed on the ground in or near the creek channel. A pipeline trench would then be excavated across (perpendicular to) the creek channel, and the pipeline buried in imported bedding material with two feet of overburden topped with 6 inches of rock. Dewatering of the pipeline trench across the German Creek drainage may be necessary, and would be conducted in accordance the Colorado Department of Public Health & Environment's Water Quality Control Division dewatering general permit. A geotextile liner would then be placed over the buried pipe location and covered with riprap. The corrugated culvert carrying the creek flow would be removed and the creek returned to its original flowline. A dirt road for construction access and maintenance would be established along the proposed bypass portion of the project (0.3 mi), and a dirt maintenance road or ATV trail would remain on the bypass alignment following construction.

The small-diameter Smith Lateral pipeline would be buried in the existing ditch prism across the German Creek drainage (the creek channel is culverted under the ditch).

The pipeline installations would involve three crossings of public roads: O Road would be crossed by both the proposed large diameter bypass pipe and the proposed small-diameter Smith lateral pipe, and Skyhill Road would be crossed by the proposed small-diameter Smith lateral pipe. O Road and Skyhill Road are both Delta County-maintained gravel roads (Figure 3a [Appendix A]). The bypass pipe crossing of O Road would require the installation of a 60-inch diameter culvert under the road to serve as a sleeve for the pipeline. The small-diameter Smith Lateral pipeline would be threaded through the existing culverts at these road crossings. All three road crossings would be conducted to the specifications of the Delta County Road and Bridge Department.

2.2.2 Ditch Abandonment and Decommissioning

As a result of the bypass, approximately 0.3 mi of the existing Stewart Ditch prism would be abandoned and backfilled. To ensure no runoff water could flow in the abandoned ditch, an excavator would fill the ditch with material from the existing ditch prism. Then a trackhoe would smooth and recontour the filled ditch alignment to match the surrounding contours, including natural drainage patterns that cross the alignment.

2.2.3 Staging and Borrow Activities

One approximately 5.3-acre staging area on private land adjacent to the North Fork Valley Airport has been identified for the Proposed Action (Figure 1 [Appendix A]). All staging activities would take place on the identified staging area on previously disturbed ground. The staging area would be used to store pipe and other project supplies and equipment. Pipe arriving and leaving the staging area would be transported on 50-foot flatbed trucks. Front end loaders with pallet forks would likely be used to handle pipe in the staging area.

Fill material may be necessary to complete the pipeline installation. If adequate fill cannot be generated from within the construction footprint, fill would be purchased and transported to the project area in dump trucks from a local commercial source. To generate fill material onsite, a screen or crusher bucket may be used in the construction footprint to prepare the fill material.

2.2.4 Access

The section of Stewart Ditch involved in the Proposed Action is in historic prescriptive easements on private lands. All landowners in the footprint of the Proposed Action where activities would take place outside the historic prescriptive easement have agreed to allow the activities of the Proposed

Action to be conducted on their lands. Access easement agreements either have been or would be executed with these landowners prior to construction.

The width of the construction area for the Proposed Action is anticipated to be 60 feet wide or less. In most areas, the width of the construction area would be confined to the existing ditch prism (less than approximately 60 feet wide). In "the springs" section, the width of the construction area would be approximately 20 feet. Construction footprints would be limited to only those necessary to safely implement the Proposed Action.

All access ways for construction of the Proposed Action would be on the existing ditch prism, in the proposed bypass easement, from county roads, or existing private roads with landowner permission. Any private land easements for the Proposed Action and their specific locations would be clearly marked on the construction drawings.

Some short-term disruption of traffic on O Road would occur during installation of the large-diameter bypass pipe crossing.

2.2.5 Post-Construction Revegetation & Weed Control

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

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

2.2.6 Habitat Replacement

In accordance with the Colorado River Basin Salinity Control Act, habitat replacement would be required to mitigate for riparian and wetland habitat lost as a result of the Proposed Action. As part of the previous piping project on lower Stewart Ditch, the Company developed a Habitat Replacement Site that generated enough excess credit to provide replacement habitat for the Proposed Action. The general location of the Habitat Replacement Site is shown on Figure 1.

2.2.7 Schedule

Construction would occur incrementally across the Proposed Action Area according to the schedule presented in Table 2, below. The schedule is designed to avoid sensitive periods for nesting migratory birds and the federally-listed western yellow-billed cuckoo (also see Section 3.7 and the Environmental Commitments [Section 4]). Installation of the pipeline in the existing ditch would occur during the irrigation off-season to avoid interrupting irrigation activities of the shareholders.

Table 2. Schedule and Timing Restrictions for the Proposed Action

Component	Schedule / Timing
Pipeline installation in existing ditch prism	Activity restricted to September 15 through April 30, with no vegetation grubbing between April 1 through April 30.
Pipeline installation outside the existing ditch prism (the "bypass")	No timing restrictions, except no vegetation grubbing or clearing may occur between April 1 and July 15.
Ditch abandonment and decommissioning	No timing restrictions, except no vegetation grubbing between April 1 and July 15.

It is anticipated that the Proposed Action would be completed during a single irrigation off-season, although construction could extend into a second irrigation off-season depending on project progress.

2.2.8 Permits & Authorizations

If the Proposed Action is approved, the following permits, plans, and authorizations 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.
- 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.
- Executed private landowner agreements where pipe would be buried outside the existing ditch alignment.

3 Affected Environment & Environmental Consequences

This section discusses resources that may be affected by the Proposed Action and the No Action Alternative.

For each resource, the potentially affected area and/or interests are identified, existing conditions described, and potential impacts and environmental consequences predicted under the No Action and Proposed Action Alternatives. BMPs or other mitigative or protective measures described below are considered part of the Proposed Action and are taken into consideration when predicting environmental consequences. A summary of impacts/environmental consequences of the Proposed Action is included at the end of this section.

3.1 Water Rights & Use

The Stewart Ditch system delivers irrigation water to farms on Stewart and Bone Mesas in Delta County, irrigating approximately 2,726 acres. Stewart Ditch is diverted at head gate structure #1206 on the North Fork River, approximately 6.5 miles upstream from the inlet of the pipeline component of the Proposed Action. The absolute total decreed water right for this head gate is 77.04 cubic feet per second (cfs) for irrigation water and 5 cfs for winter stock water. The irrigation season is approximately 173 days.

No Action. 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, the Company would have the ability to better manage irrigation water with efficiencies gained from eliminating seepage by improving the system. The new turnout structures include adequate controls and measuring devices which would further improve water management in the system. The Proposed Action would not include new water storage or the irrigation of new lands. No adverse effects on irrigation water rights in the Gunnison or Colorado River Basins would occur due to implementation of the Proposed Action. Winter stock water delivery to the Company's shareholders may be temporarily impacted during construction of the Proposed Action. All but four shareholder turnouts lie downstream of the Proposed Action on the ditch system, in that portion of the system that was piped during a previous project. The Company will ensure that the existing downstream Stewart Ditch pipeline is full prior to turning off the ditch water for construction of the Proposed Action. Shareholders would have access to this stored water during construction. If or as the stored water is depleted, each shareholder would be responsible for furnishing their own stock water for the remaining duration of the construction season.

The Proposed Action would also create a significant risk reduction for the Company, because a significant portion of the ditch is located on a steep hillside and requires a

significant amount of maintenance to repair ditch failures. Piping the ditch across steep ground would significantly reduce maintenance and risk of system failure.

3.2 Water Quality

Irrigation practices in the region and on Stewart Mesa 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.

No Action. Under the No Action Alternative, the estimated 1,622 tons of salt annually contributed to the Colorado River Basin from the Stewart Ditch system would continue. Current selenium loading levels would continue.

Proposed Action. In the long term, the Proposed Action would eliminate seepage from the earthen Stewart Ditch, reducing salt loading to the Colorado River Basin at an estimated rate of 1,622 tons per year at a cost-effectiveness value of $58.67 per ton (Reclamation 2018). The Proposed Action is also expected to reduce selenium loading into the Gunnison River basin, although the amount of selenium loading reduction that could result from the Proposed Action has not been quantified. Improved water quality would likely benefit downstream aquatic species by reducing salt and selenium loading in the Gunnison River, an important Colorado River Basin tributary. Maintenance or improvement of water quality in the Gunnison River is of importance to users and to wildlife.

Project construction would take place in the ditch prism when water is not present. In the German Creek corridor, best management practices would be implemented during construction to minimize erosion and protect water quality. The construction contractor would be required to operate under a Stormwater Management Plan, a Stormwater Discharge Permit, a Spill Response Plan, and a Dewatering Permit (if dewatering is conducted) (see Section 2.2 and Section 4).

Although the Proposed Action would disturb some wetland and riparian vegetation associated with the ditch, the "irrigation exemption" from Section 404 of the Clean Water Act applies to the Proposed Action, because the Proposed Action is an irrigation ditch maintenance and construction project. The Company is requesting verification of the irrigation exemption in writing by the U.S. Army Corps of Engineers that no Section 404 Permit is required for the Proposed Action (to be included in the Final EA).

3.3 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 2019). Minor impacts to air quality from routine maintenance of Stewart Ditch include dust from occasional travel in light vehicles along the Proposed Action corridor.

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

Proposed Action. There would be no long-term impacts to air quality from the Proposed Action. Dust from construction activities would be minimized by BMPs, and any residual dust would have a temporary, short-term effect on the air quality in the immediate Proposed Action Area. Following construction, impacts to air quality from routine maintenance and operation activities along the pipeline corridor would be similar in magnitude to those currently occurring for the existing ditch.

3.4 Access, Transportation, & Construction Impacts

The Stewart Ditch currently operates in historic prescribed rights-of-way on private land (collectively, the "right-of-way").

The main transportation routes in the vicinity of the Proposed Action are Lamborn Mesa Road, O Road, and Skyhill Road (Figure 3a [Appendix A]). Private roads and county roads generally provide access and mobility for local residents traveling in and out of the Proposed Action Area.

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

A moderate baseline level of noise and visual disturbance occurs in the Proposed Action area, associated with the Town of Paonia, the Union Pacific Railroad, farming and ranching activities, and the Company's operation and routine maintenance of the ditch system. Operation and maintenance involve the use of light-duty trucks and, occasionally, heavy equipment. Farming and ranching activities involving the use of farming equipment, light vehicles, all-terrain vehicles, and occasionally heavy equipment are ongoing in the immediate area and surroundings of the Proposed Action.

That portion of the existing Stewart Ditch prism / historic prescriptive right-of-way within the Proposed Action area that stretches between Lamborn Mesa Road and the ditch's first crossing of O Road is a popular walking route for the residents of Paonia. People using the right-of-way are trespassing on private property without permission of the landowners or the Company.

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

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

There would be no need for construction of new access roads outside the ditch right-of-way, except for a new dirt road in the proposed bypass alignment. There are no known bridges with weight restrictions that would be used by construction vehicles. Implementation of the

Proposed Action may cause brief delays along public roadways near the Proposed Action Area from construction vehicles entering or leaving the ditch right-of-way, or during construction of the O Road crossing of the bypass pipeline. Appropriate traffic signage would be used to notify drivers of active construction ingress/egress. The Company and the construction contractor would coordinate with the Delta County Road and Bridge Department for construction road crossings. The Company and the construction contractor would coordinate with the counties and sheriff departments when traffic or access would be delayed or significantly re-routed.

All utilities would be located and marked, and if necessary, relocated or raised, prior to any construction activities in the Proposed Action Area. Proposed Action construction activities would generate noise and visual disturbance to rural residents near the Proposed Action. These disturbances would occur during daylight hours (typically 7 am to 4 pm), Monday through Saturday, on a sequenced basis along the ditch section involved with the Proposed Action. Pedestrians accustomed to using the ditch corridor would not be able to walk in the ditch corridor during the construction period. To ensure public safety, pipe trenches left open while unattended (e.g. overnight) would be covered.

3.5 Vegetative Resources & Weeds

Beginning at the proposed pipeline inlet near Lamborn Mesa Road, the ditch contours along the relatively steep north and northwest flank of Cedar Hill in pinyon pine and Utah juniper woodlands (pinyon-juniper woodlands) with a mixed mountain shrub and sagebrush understory. Leaving the flank of Cedar Hill, the ditch continues southwest, contouring along the face of Lamborn Mesa below Paonia Cemetery and several irrigated fruit orchard blocks. The vegetation surrounding the ditch along the first part of this section is tall semi-desert shrubland dominated by sagebrush, rubber rabbitbrush, and saltbushes. The second part of this section, before the ditch bends to the southeast around the west headland of Lamborn Mesa, is a relatively steep slope vegetated with mature cottonwoods, coyote willow, Russian olive, salt cedar, rabbitbrush, and three-leaf sumac (i.e., "the springs" section shown on Figure 3a [Appendix A]). Several adjudicated and/or developed springs emerge from the hillside here and support this hillslope of riparian vegetation. This section of the ditch (approximately 450 feet) flows through an enclosed culvert due to unstable soil conditions on the wet hillside. Continuing around the west headland slope of Lamborn Mesa, after the ditch exits the enclosed culvert, the surrounding vegetation is again dominated by tall semi-desert shrublands. Seeps above the ditch support scattered stands of cottonwoods, and sparsely scattered cottonwoods line the ditch in this reach, until the ditch crosses O Road and the German Creek drainage. German Creek is culverted under the ditch at the crossing, and the upstream reach of the creek is densely vegetated with a broad swale of coyote willow and Russian olive, while the downstream reach of the creek is more channelized and supports a narrower corridor of willow shrub vegetation. Following the German Creek crossing, the ditch contours through a combination of irrigated hay meadows and low semi-desert shrublands dominated by shadscale or sagebrush (see the cover photo of this report), until reaching the pipe inlet for the lower part of Stewart Ditch.

The ditch itself is flanked by a narrow margin of coyote willow, wild rose, reed canary grass, smooth brome, and western wheatgrass, with the occasional cottonwood, Russian olive, and salt cedar. The Company occasionally grubs vegetation out of the ditch and from the ditch banks with heavy machinery.

Photograph 3. Looking southwest in "the springs" section, where the pipeline would be installed in the access road next to the existing enclosed culvert. (Rare Earth Science/Dawn Reeder)

Photograph 4. Looking northeast along the proposed bypass pipe alignment, shown as yellow dotted line. (Rare Earth Science/Dawn Reeder)

The proposed bypass pipeline alignment crosses irregularly irrigated hayfield or pasture, the gullied channel of German Creek vegetated with greasewood and coyote willow, and sparsely-vegetated low semi-desert shrublands on adobe ground.

Around the staging area are pinyon-juniper woodlands, and the staging area itself is previously disturbed ground (mostly bare ground with scattered herbaceous weeds).

Weeds in the Proposed Action Area are the nonnative weed trees Russian olive (Elaeagnus angustifolia) and salt cedar (*Tamarisk sp.*), and herbaceous weeds such as Russian knapweed (*Acroptilon repens*), cheatgrass (*Bromus tectorum*), field bindweed (Convolvulus arvensis), and whitetop (*Cardaria draba*). Additional weedy or invasive species observed along the ditch include Canada thistle (Cirsium arvense), musk thistle (*Carduus nutans*), curly dock (*Rumex crispus*), sweetclover (*Melilotus sp.*), and common mullein (*Verbascum thapsus*). Flowing water in the canal is a vector for the continued spread of weeds. Vehicles, people and their dogs, livestock, and wildlife traveling on the ditch prism can also contribute to the spread of weeds. The Company manages noxious weeds on the ditch prism by spot-spraying seasonally, as resources permit.

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

Proposed Action. The Proposed Action would directly disturb and result in the permanent loss of approximately 1.3 acres of riparian and wetland vegetation associated with the open ditch and seepage from the ditch. Following construction, the riparian and wetland areas and open water associated with the ditch would be replaced by upland vegetation compatible with pinyon-juniper woodland-type vegetation community, both by reseeding and natural recolonization. Construction activities would directly disturb other previously disturbed areas, such as the staging area. Dust from operating equipment and vehicles could also temporarily affect nearby natural vegetation. A minor amount of riparian vegetation in "the springs" section of the proposed pipeline would be temporarily affected by construction. In order to avoid disturbance to several mature cottonwoods growing adjacent to the enclosed culvert that carries the existing ditch through "the springs" section, the enclosed culvert would be blocked and abandoned in place, and the new pipe would be buried in the adjacent existing ditch access road through this section. Because riparian vegetation in "the springs" section of the Proposed Action is supported by other water sources, cottonwood saplings and shrub willows are expected to regenerate within a few years following construction in this section. Similarly, the riparian vegetation along the existing ditch section and the proposed bypass pipe crossings of the German Creek drainage are expected to quickly regenerate following pipe installation. Across the entire project, vegetation removal and construction footprints would be confined to the smallest portion of the ditch prism or construction ROW necessary for safe completion of the work. Following construction, the disturbed areas adjacent to natural plant communities would be recontoured and reseeded with a Reclamation-approved drought-tolerant seed mix (Appendix D) appropriate for the habitat. Disturbed agricultural areas would be smoothed and reseeded with compatible hay or pasture seed mixes. Agricultural areas are expected to return to a condition similar to or better than their pre-construction condition within a year of construction. Although a mature pinyon-juniper woodland overstory would require a few decades to become re-established, understory vegetation consisting of semi-desert native

shrubs and grasses is expected to become re-established within a few years following construction in revegetated woodland areas.

Following construction, the riparian and wetland areas and open water associated with the ditch would be replaced by upland vegetation compatible with pinyon-juniper woodland-type vegetation community, both by reseeding and natural recolonization. Recognizing that the wetland and riparian vegetation associated with ditch margins supports or contributes to the support of aquatic and terrestrial wildlife and migratory birds, the Colorado River Basin Salinity Control Act requires mitigation of its loss. An evaluation[1] was performed for the Proposed Action Area to quantify potential wetland and riparian habitat values that would be lost due to implementation of the Proposed Action (Zeman 2019). Consistent with the Colorado River Basin Salinity Control Act, to compensate for the loss of habitat values that would result from implementation of the Proposed Action, the Company developed a Habitat Replacement Site for a previous salinity control project in 2012—the Lower Stewart Ditch Pipeline Project. Excess replacement habitat was developed at the site in anticipation of compensating for the habitat loss to be generated by the current Proposed Action, the Upper Stewart Ditch Pipeline Project.

To curtail the spread of noxious weeds, environmental commitments (such as cleaning vehicles and equipment prior to bringing them onsite—see Section 4 of this EA) would help minimize the risk of such infestations, and ongoing weed management efforts by the Company would be implemented during revegetation of construction alignments. In the long-term, piping the ditch would remove an important vector of weed seed transport—open water. Seeps from the earthen ditch that currently support herbaceous and woody noxious weeds would be dried and the ability of the environment to support these weeds would be diminished.

3.6 Wildlife Resources

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

The Proposed Action Area falls within overall range of black bear and mountain lion (CPW 2019). Colorado Parks & Wildlife (CPW) describes the entire Proposed Action Area as mule deer summer range, winter range, severe winter range, and a resident population area (CPW 2019). A small CPW-mapped mule deer winter concentration area lies on Cedar Hill, just east of the north part of the piping component of the Proposed Action. The entire Proposed Action Area lies within CPW-mapped elk winter range and severe winter range (CPW 2019), although proximity to the Town of Paonia and the increased amount of development and human activity on the mesas immediately surrounding the town have led to a diminished presence of wintering elk. Big game in the Proposed Action Area experiences a baseline level of disturbance from residential activities, people and

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

vehicles traveling on county and private roads, people walking dogs and hiking on the ditch alignment, and ranching and farming activities.

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

No Action. Under the No Action Alternative, terrestrial and amphibian wildlife habitat would remain in its current condition, and no displacement of wildlife would occur. Salinity loading of the Colorado River Basin would continue at current rates, which will continue to affect water quality within the drainage, potentially affecting the wildlife using the area.

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

Direct impacts to small animals, especially burrowing amphibians, reptiles, and small mammals, could include direct mortality and displacement during construction activities, both in the irrigated pasture areas and the exiting ditch alignment. However, these species and habitats are relatively common throughout the area and population-level impacts would not be likely; therefore, impacts would be minor.

Bird and amphibian species dependent on wetland and riparian habitats would experience a long-term (greater than five years) loss of habitat as described in Section 3.5. In compliance with the Colorado River Basin Salinity Control Act, the wetland and riparian habitat value that would be lost due to implementation of the Proposed Action would be mitigated with a nearby Habitat Replacement Site created and maintained by the Company during the implementation of a previous salinity control project (see Section 3.5).

Improved water quality would likely benefit downstream aquatic species in the region (amphibians, birds, and fish) by reducing salt and selenium loading in the Gunnison and Colorado river basins.

3.7 Special Status Species

3.7.1 Migratory Birds

Migratory birds, including songbirds and raptors (birds of prey), find nesting and/or other habitat in the Proposed Action Area. Migratory birds are protected under the Migratory Bird Treaty Act (MBTA) and bald and golden eagles are also protected under the Bald and Golden Eagle Protection Act of 1940. Birds of conservation concern with the potential to occur in the Proposed Action Area (FWS 2019) are bald eagle (wintering and potentially nesting), golden eagle (year-round), Brewer's sparrow (breeding, migrating, wintering [year-round]), brown-capped rosy finch (wintering), Lewis's woodpecker (breeding, wintering), pinyon jay (year-round), rufous hummingbird (summer and fall migration), Virginia's warbler (breeding, migrating), and willow flycatcher (breeding). The most common raptor in the area is the red-tailed hawk.

The primary nesting season for migratory songbirds in the Proposed Action Area is April 1 through July 15. The core nesting season for raptors in the area is April 1 through July 15; however, individuals—especially red-tailed hawk and great-horned owl—may begin courtship and nest construction as early as February 15 (CPW 2008). Bald eagles nest during the period between October 15 and July 31 (CPW 2008). Documented bald eagle communal roosts and nests in Delta County lie outside the recommended buffer distances for human encroachment (CPW 2008). Several songbird species are expected to nest in the Proposed Action corridor. A baseline level of disturbance in the area to migratory birds and raptors occurs from recreational, residential, and farming and ranching activities.

A dozen species of migratory songbirds are expected to migrate through or winter in the Proposed Action Area. Wintering and migrating raptors could include red-tailed hawk, rough-legged hawk, ferruginous hawk, and golden eagle. Bald eagles are common hunters during winter on the local mesas around the Proposed Action, especially on open and agricultural ground where ground-dwelling rodents provide prey. The entire Proposed Action Area lies within CPW-mapped bald eagle winter range and bald eagle winter foraging grounds (CPW 2019). Bald eagles often shelter in communal roosts. The nearest active bald eagle communal roost site is greater than 3 miles from the Proposed Action and outside the ½-mile CPW-recommended buffer distance (CPW 2008; CPW 2019).

No Action. In the absence of the Proposed Action, migratory songbird and raptor nesting and foraging habitat would remain unchanged from its current condition. Salinity and selenium loading in the Colorado River Basin would continue at current rates, which will continue to affect water quality within the drainage, potentially affecting the migratory birds using the area.

Proposed Action. Direct impacts to migratory songbirds and raptors would include minor short-term disturbance and displacement from the Proposed Action Area during construction. Disturbance from construction would cause temporary displacement of wintering and migrating songbirds and raptors; however, effects would be minor because adult birds have the flexibility to move away to other suitable areas. Wintering foraging and migrating habitat for songbirds and raptors (including eagles) in the vicinity of the Proposed Action Area is extensive, and foraging habitat is not unique or exceptional in the Proposed

Action Area compared to surrounding areas. No bald eagle active nest sites or roost locations are mapped within CPW-recommended buffer distances of the Proposed Action.

There would be no direct effect to nesting songbirds since pre-construction vegetation grubbing would occur outside the primary nesting season (potential nesting habitat including scattered shrubs and a few trees along the ditch would be grubbed and removed outside the period of April 1 through July 15). In compliance with the Colorado River Basin Salinity Control Act, the wetland and riparian habitat value (potential nesting habitat for certain migratory birds) that would be lost due to implementation of the Proposed Action has been mitigated at the nearby Reclamation-approved Habitat Replacement Site created by the Company during a previous project (see Section 3.5).

Project activities taking place outside the recommended buffer distances and seasonal restrictions for Colorado nesting raptors (CPW 2008) would have no measurable effects on raptors. Some direct loss of potential raptor nesting habitat (a few tall trees established on or near the canal lateral) would occur as a result of the Proposed Action. The majority of activities planned for the Proposed Action take place outside core raptor nesting season (April 1 through July 15). A nesting raptor database review (CPW 2018) and survey was conducted in the Proposed Action Area during May 2019, and reconfirmed during March of 2020, to identify active raptor nests with the potential to be disturbed by the Proposed Action—none were identified.

If a new active raptor nest is discovered within 1/3 mile of the Proposed Action during construction, or bald eagle roost site or nest site is discovered within ¼ mile of the Proposed Action during construction, construction would cease until Reclamation could complete evaluations and consultations with FWS and CPW.

3.7.2 Threatened & Endangered Species & Their Critical Habitats

The Endangered Species Act (ESA) of 1973 protects federally listed endangered, threatened and candidate plant and animal species ("T&E species") and their critical habitats. The following federally-listed species were determined to occur or have the potential to occur within or near the Proposed Action Area. These determinations were developed by reviewing published range maps and habitat requirements of each of the species on a list of potential species in the Proposed Action Area provided by FWS (FWS 2019).

3.7.2.1 Western Yellow-Billed Cuckoo and Proposed Critical Habitat

The western yellow-billed cuckoo was listed as threatened in 2014 (79 FR 59992–600038), after several years as a candidate for listing. Critical habitat was proposed for the species on August 15, 2014, at 79 FR 48548–48652, including cottonwood riparian forests and woodlands along the North Fork River 4 miles upstream of Paonia to about 3 miles downstream of the Town of Hotchkiss (proposed critical habitat Unit 56: CO-3 [North Fork Gunnison River, Delta County]). Cuckoos migrate to the area as early as May 15 and depart as late as September 15.[2]

[2] Terry Ireland (FWS, Western Colorado Ecological Services Field Office, Grand Junction, CO). Personal communication with D. Reeder (Rare Earth Science), September 2017.

No part of the Proposed Action Area contains suitable breeding habitat for western yellow-billed cuckoos. However, "the springs" area (Figure 3a [Appendix A]) may be attractive to foraging cuckoos breeding in the North Fork Valley.

3.7.2.2 Colorado River Endangered Fishes & Their Designated Critical Habitat

The Colorado River basin has four endangered fishes: the bonytail, the Colorado pikeminnow, the humpback chub, and the razorback sucker. None of the four endangered Colorado River fishes occurs in the Proposed Action Area and the Proposed Action Area does not occur within or adjacent to designated critical habitat. The closest designated critical habitat and the closest potential populations of the Colorado pikeminnow, and razorback sucker are in the Gunnison River near the Uncompahgre River confluence, west of the City of Delta. The bonytail has recently been stocked in the Gunnison River and humpback chubs have been recorded.

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 are resulting from continuing irrigation practices in the Gunnison Basin. The historic depletion rate from the Company's system operations is estimated as 4,335 acre-feet per year. Historic depletions by federal facilities in the Gunnison Basin are covered under the umbrella of the Gunnison Basin Programmatic Biological Opinion (PBO) (FWS 2009), which avoids the likelihood of jeopardy and/or adverse modification of critical habitat for the endangered fishes. Many private irrigation companies in the region have also executed Recovery Agreements with FWS to ensure that their historic depletions are covered under the PBO and they can continue to operate consistently with Section 7 of the ESA.

The potential reduction in selenium loading to the Colorado River and Gunnison River basins as a result of the cumulative efforts of the Colorado River Basin Salinity Control Program is improving water quality within designated critical habitat for the Colorado pikeminnow, razorback sucker, humpback chub, and bonytail throughout the Colorado river and Gunnison river basins (SMPW 2011).

No Action. In the absence of the Proposed Action, historic water depletions would continue, and salt and selenium loading from the Proposed Action Area would continue at current rates, continuing to indirectly affect the endangered fishes and their downstream critical habitat. Impacts to western yellow-billed cuckoo and its proposed critical habitat would remain unchanged.

Proposed Action. The potential impacts of the Proposed Action on threatened and endangered species are as follows:

Western Yellow-Billed Cuckoo. Given that there is no overlap between the timing of the Proposed Action and the of the breeding season of western yellow-billed cuckoo in the North Fork Valley (cuckoos are not expected to be present in the North Fork Valley during construction of the Proposed Action), and given that there would be no indirect effects to yellow-billed cuckoos since the potentially attractive mature woodland foraging habitat at "the springs" area would not be significantly modified by Proposed Action activities (Section 3.5), the Proposed Action would have no effect on western yellow-billed cuckoo.

Western Yellow-Billed Cuckoo Proposed Critical Habitat. There would be no effect to proposed critical habitat for western yellow-billed cuckoo. The Proposed Action lies entirely outside proposed critical habitat.

Colorado River Basin Endangered Fishes. The Proposed Action Area does not lie within the ranges of the endangered Colorado pikeminnow, razorback sucker, humpback chub, and bonytail. Based on previously issued biological opinions that all depletions (including historical) within the Upper Colorado River Basin may adversely affect the four fishes, the Proposed Action may affect, and is likely to adversely affect, the Colorado pikeminnow, razorback sucker, humpback chub, and bonytail, due to historical depletions.

Colorado River Basin Endangered Fishes Critical Habitat. Consumptive loss of water in the Gunnison and Colorado River basins due to agricultural irrigation practices from the ditch involved with the Proposed Action results in depletions from the Colorado River Basin, affecting downstream critical habitat for the endangered Colorado pikeminnow, razorback sucker, humpback chub, and bonytail. The estimated historic average annual depletion rate due to operation of Stewart Ditch (consumptive use) is 4,335 acre-feet. This amount is not expected to change as a result of the Proposed Action. Following a Section 7 of the ESA consultation with FWS for a previous salinity control project (the Lower Stewart Ditch Pipeline Project), the Company executed a Recovery Agreement with FWS (Attachment E) to ensure their depletions are covered under the Gunnison Basin PBO and in compliance with the ESA (FWS TAILS: 06E24100-2013-F-0015). Therefore, in accordance with the Gunnison Basin PBO (FWS 2009), the Proposed Action will not destroy or adversely modify the designated critical habitat for the Colorado River endangered fishes. Additionally, reduction in selenium loading to the Gunnison basin as a result of the Proposed Action would contribute to the overall success of the Gunnison Basin Selenium Management Program (SMPW 2011).

3.8 Cultural Resources

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

Alpine Archaeological Consultants conducted Class III cultural resource inventories of the Proposed Action Area. All ditch reaches and pipe alignments involved with the Proposed Action were inventoried in a 100-foot-wide corridor. The proposed staging area was also examined. The inventories resulted in the documentation of a new segment of the Stewart Ditch that supports its eligibility for listing in the National Register of Historic Places (NRHP).

No Action. The No Action Alternative would have no effect on cultural resources.

Proposed Action. As a result of the Class III cultural resources inventory of the Proposed Action Area, and in consultation with the Colorado State Historic Preservation Officer (Colorado SHPO), Reclamation has determined that the Proposed Action would have an adverse effect on the documented segment of the Stewart Ditch involved with the Proposed

Action, which is a resource that is eligible for listing in the NRHP. A Memorandum of Agreement (MOA) has been executed between Reclamation and the Colorado SHPO, with the Company participating as an invited party, to mitigate the adverse effects of the Proposed Action (Appendix F). The MOA stipulates that Level II documentation be completed and any post-review discoveries trigger an Unanticipated Discovery Plan (UDP; Appendix B to the MOA). The UDP outlines procedures that would be followed in order to protect potential archaeological materials or cultural resources discovered during implementation of the Proposed Action. In addition, the MOA stipulates that the Level II documentation be made available to the public via the Reclamation Western Colorado Area Office's cultural resources webpage (https://www.usbr.gov/uc/wcao/rm/cr/index.html).

3.9 Soils & Farmlands of Agricultural Significance

The soils units mapped by the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) in the Proposed Action Area are generally silty clay and clay loams derived from marine shale.

In accordance with the Farmland Protection Policy Act, NRCS characterizes some of the mapped soil units in the Proposed Action Area as farmlands of national or statewide significance (NRCS 2007). About 400 feet of the bypass pipeline crosses soil mapped as "Farmland of Unique Importance."

No Action. 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 current Stewart Ditch would continue as it has in the past.

Proposed Action. Under the Proposed Action Alternative, installation of the buried pipe would disturb soils in the previously-disturbed ditch prism and potentially disturb native soils several feet beyond the ditch prism. Installation of the buried pipe would require the establishment of one new unimproved dirt road (along the bypass pipe alignment). The new road would be one lane wide and of native surface materials. Staging activities would take place on previously disturbed ground or pasture 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. Some of the irrigated agricultural lands are designated as agriculturally significant by NRCS (see description above). However, 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. Stewart Ditch conveys irrigation water to agriculturally significant lands across Stewart and Bone mesas; however, no change in the configuration of irrigated lands would occur as a result of the Proposed Action. No part of the irrigation season is expected to be lost during implementation of the Proposed Action.

Overall, the Proposed Action would give the Company the ability to better manage the irrigation water with efficiencies gained from piping the system. Soil erosion from irrigation water conveyances would be significantly reduced where ditch reaches are proposed for

replacement with buried pipe. Therefore, no direct adverse effects on soils or agriculturally significant lands are expected to occur due to implementation of the Proposed Action.

3.10 Cumulative Impacts

Cumulative impacts are direct and indirect impacts on the resources potentially affected by the Proposed Action, which result from the incremental impact of the Proposed Action when added to other past, present, and reasonably foreseeable future actions, regardless of what agency (federal or non-federal) or person undertakes such actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time. Cumulative impacts can also be characterized as additive or interactive. An additive impact emerges from persistent additions from one kind of source, whether through time or space. An interactive—or synergistic—impact results from more than one kind of source.

The analysis of cumulative impacts for the Proposed Action considers both spatial (geographic) boundaries and temporal limits of impacts, on a resource-by-resource basis. Spatial and temporal analysis limits vary by resource, as appropriate (see Table 3 for the spatial and temporal limits of analysis for each resource). Spatial analysis limits were selected to be commensurate with the impacts on, and realm of influence of, each resource type. The temporal limits of analysis were established as 50 years for each resource type (a standard timeframe for cumulative impacts analysis), except for resource types perceived to have only temporary impacts (impacts that end following construction of the Proposed Action or within a few seasons following construction).

The direct and indirect effects of past and ongoing (present) actions are reflected in the current conditions described in the affected environment above in each of the resource topics of Section 3. Reasonably foreseeable future actions are specific actions, and not speculative actions, in that they have approved NEPA documentation or approved plans with the potential to impact the same resources affected by the Proposed Action.

Table 3. Cumulative Impacts Analysis Spatial & Temporal Limits by Resource

Resource	Spatial Limits of Analysis	Temporal Limits of Analysis
Water Rights and Use	Stewart Mesa and Bone Mesa	50 years
Water Quality	Stewart Mesa and Bone Mesa	50 years
Air Quality	Proposed Action Area plus 1-mile buffer	Duration of Proposed Action Construction
Access, Transportation, and Construction Impacts	Proposed Action Area	Duration of Proposed Action Construction
Vegetative Resources and Weeds	Proposed Action Area plus 1-mile buffer	50 years

Resource	Spatial Limits of Analysis	Temporal Limits of Analysis
Wildlife Resources	Stewart Mesa	50 years
Threatened and Endangered Species	Stewart Mesa	50 years
Cultural Resources	Proposed Action Area	50 years
Agricultural Resources and Soils	Proposed Action Area	50 years

There are currently no known reasonably foreseeable future actions potentially affecting resources within the spatial and temporal limits of this analysis (Table 3). Therefore, the Proposed Action would not contribute to cumulative impacts on resources when combined with effects from reasonably foreseeable future actions.

3.11 Summary of Impacts

Table 4 summarizes the predicted impacts/environmental consequences of the No Action and Proposed Action Alternatives analyzed in this EA.

Table 4. Summary of Impacts of the Proposed Action

Resource Issue	Impacts	
	No Action	Proposed Action
Water Rights and Use	No Effect	No effect or possible beneficial effect
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 1,622 tons per year to the Colorado River Basin will result from implementation of the Proposed Action. The Proposed Action is also expected to reduce selenium loading into the Gunnison River (the amount has not been quantified). Improved water quality would likely benefit downstream aquatic species by reducing salt and selenium loading in the Gunnison and Colorado rivers.

Resource Issue	Impacts	
	No Action	**Proposed Action**
Air Quality	No Effect	Minor short-term effects due to dust and exhaust created by construction equipment; no long-term effect or possible beneficial long-term effect due to reduction in maintenance vehicle trips.
Access, Transportation, and Construction Impacts	No Effect	Minor temporary disruptions to local public roadways from construction traffic entering and existing roadways. No long-term effects.
Vegetative Resources and Weeds	No Effect	Impacts to vegetation where construction would occur in upland areas. Estimated long-term loss of riparian/wetland habitat due to elimination of seepage from the involved canal segments would be mitigated with a Habitat Replacement Site (constructed under a previous salinity control project; see Section 3.6). Weed control measures would be implemented as a part of the Proposed Action, and piping of the canal would remove open water and seepage from the Proposed Action Area—both important vectors for the spread of weeds.
Wildlife Resources	No Effect	Short-term temporary adverse effect to local wildlife during construction. A Habitat Replacement Site has been constructed to mitigate for the long-term loss of riparian and wetland habitat due to the Proposed Action (completed during a previous salinity control project; see Section 3.6).
Migratory Birds, Raptors	No Effect	No impacts to nesting migratory birds since vegetation grubbing would take place outside the primary nesting season. Long-term impacts due to loss of nesting habitat for both migratory birds and raptors along the current ditch has been mitigated with a Habitat Replacement Site (constructed under the Lower Stewart Ditch Salinity Piping Project; see Section 3.6). A raptor survey conducted during May 2019 (reconfirmed in March 2020) and database review found no nesting raptors within CPW-recommended buffer distances (CPW 2008).

Resource Issue	Impacts	
	No Action	**Proposed Action**
Threatened and Endangered Species	Salt and selenium loading from the Proposed Action Area would continue to affect aquatic dependent species	Water depletions (irrigation water consumption) would continue at historic levels, and would continue to adversely affect downstream designated critical habitat for the four Colorado River federally endangered fishes. However, the Upper Colorado River Endangered Fish Recovery Program serves as mitigation for these impacts, and a Recovery Agreement has been executed between FWS and the Company to ensure compliance with the ESA (Appendix E). The Proposed Action would improve water quality by contributing to the reduction of salt and selenium loading in the Gunnison and Colorado rivers.
Cultural Resources	No Effect	The Proposed Action would have an adverse effect on an NRHP eligible cultural resource. The adverse effect would be mitigated with a MOA between Reclamation and the Colorado SHPO.
Agricultural Resources and Soils	No Effect	The Proposed Action would temporarily disturb the ground surface in the Action Area. BMPs would conserve soils and minimize the potential for erosion in the Proposed Action Area. The Proposed Action would not permanently affect productive irrigated farm areas or soils of agricultural significance.
Cumulative Impacts	No Effect	There are currently no known reasonably foreseeable future actions potentially affecting resources within the spatial and temporal limits of this analysis (Table 3). Therefore, the Proposed Action would not contribute to cumulative impacts on resources when combined with effects from reasonably foreseeable future actions.

4 Environmental Commitments

This section summarizes the environmental commitments to protect resources and mitigate adverse impacts from the Proposed Action to a non-significant level. The actions in the following environmental commitment checklist will be implemented as an integral part of the Proposed Action and shall be included in the contractor bid specifications. If the Proposed Action is approved, the Company shall use this checklist to document compliance with each environmental commitment. The Company shall submit the relevant component of the completed checklist to Reclamation immediately following each phase of the Project, i.e., Pre-Construction, During

Construction, and Post-Construction, along with documents generated to meet environmental commitments.

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

Table 5. Environmental Commitment Checklist

Environmental Commitment	Resource(s) that Benefit	Date of Compliance and Initials
Pre-Construction		
A Spill Response Plan shall be prepared in advance of construction by the contractor for areas of work where spilled contaminants could flow into water bodies.	Water Quality	
A Stormwater Management Plan shall be prepared and submitted to Colorado Department of Public Health & Environment (CDPHE) by the construction contractor prior to construction disturbance.	Water Quality	
A Clean Water Act (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	
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	

Environmental Commitment	Resource(s) that Benefit	Date of Compliance and Initials
A Memorandum of Agreement (MOA) is in place to mitigate the Proposed Action's adverse effects to cultural resources. The MOA commits Reclamation to complete historic resource documentation of the historic property in accordance with the guidance for "Level II documentation," and to post this documentation on the Reclamation Western Colorado Area Office's cultural resources webpage.	Cultural Resources	
The Company shall ensure that the existing downstream Stewart Ditch pipeline is full prior to turning off the ditch water for construction.	Water Rights	
The Company shall coordinate with the Delta County Road and Bridge Department prior to pipe installation across O Road.	Access, Transportation	
Construction limits shall be clearly flagged onsite to avoid unnecessary plant loss or ground disturbance.	Vegetation, Weeds, Habitat, Wildlife	
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	
Prior to construction, vegetative material shall be removed by mowing or chopping, and either hauled to the County landfill or to a proposed staging area to be burned, chipped, and/or mulched. Stumps shall be grubbed and hauled to the County landfill or a proposed staging area to be burned.	Soil, Vegetation, Weeds, Habitat	
Vegetation removal shall be confined to the smallest portion of the Proposed Action Area necessary for completion of the work.	Soil, Vegetation, Weeds, Habitat	
Vegetation removal shall avoid the primary nesting season of migratory birds (April 1 – July 15). This timing restriction shall be noted on Project construction drawings.	Special status species	

Environmental Commitment	Resource(s) that Benefit	Date of Compliance and Initials
Construction activities related to pipeline installation in the existing ditch prism shall avoid the period of June 1 through September 15, a sensitive period for western yellow-billed cuckoo. This timing restriction shall be noted on Project construction drawings.	Special status species	
Topsoil shall be stockpiled and then redistributed as top dressing after completion of construction activities.	Soil, Vegetation, Weeds, Habitat	
During Construction		
Straw wattles, silt curtains, cofferdams, dikes, straw bales, or other suitable erosion control measures shall be used to prevent erosion from entering water bodies during construction.	Water Quality, Soil	
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	
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	
Equipment shall be inspected daily and immediately repaired as necessary to ensure equipment is free of petrochemical leaks.	Water Quality, Soil	
Construction equipment shall be parked, stored, and serviced only at an approved staging area.	Water Quality, Soil	
Ground disturbances and construction areas shall be limited to only those areas necessary to safely implement the Proposed Action.	Soil, Vegetation, Weeds, Habitat, Wildlife	

Environmental Commitment	Resource(s) that Benefit	Date of Compliance and Initials
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, Grazing, Public Safety	
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 attached MOA. Stipulations in the MOA with the SHPO are incorporated herein by reference. Additional surveys shall be required for cultural resources if construction plans or proposed disturbance areas are changed.	Cultural Resources	
In the event that threatened or endangered species are encountered during construction, the Company 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.	Special Status Species	
Construction activities shall take place only in accordance with the schedule and any timing restrictions outlined in Sections 2.2 and 3.7 of this EA (no vegetation grubbing during the core migratory bird nesting season of April 1 through July 15; no construction work during June 1 through September 15 in potentially sensitive areas for western yellow-billed cuckoo).	Special Status Species	
If an active bald eagle nest or bald eagle roost site is discovered within ¼ mile of the Proposed Action during construction, or if any other active raptor nest is discovered within 1/3-mile of the Proposed Action Area during construction, construction shall cease until Reclamation can complete consultations with FWS and CPW.	Special Status Species	

Environmental Commitment	Resource(s) that Benefit	Date of Compliance and Initials
Post-Construction		
Following construction, all disturbed areas shall be smoothed with tracked equipment (without back dragging blade), shaped, and contoured to as near to their pre-project conditions as practicable.	Soil, Vegetation, Weeds, Habitat	
All drainage patterns that intersect the ditch shall be shaped to their natural flow patterns following ditch piping.	Soil, Vegetation, Habitat	
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	
Re-seeding in areas surrounded by native vegetation shall occur following Project construction at appropriate times and with appropriate methods, using a drought tolerant, weed-free seed mix per Reclamation specifications (see Appendix D of the EA). The Company shall coordinate with landowners to reseed any disturbances to irrigated areas.	Soil, Vegetation, Weeds, Habitat	
Weed control shall be implemented by the Company or a contractor in accordance with current County weed control standards (Delta County 2010).	Soil, Vegetation, Weeds, Habitat	

5 Consultation & Coordination

Reclamation's consultation and coordination process presents other agencies, interest groups, and the general public with opportunities to obtain information about a given project and allows interested parties to participate in the project through written comments. The key objective is to facilitate a well-informed, active public that assists decision-makers throughout the process, culminating in the implementation of an alternative. This section explains consultation and coordination undertaken for the Proposed Action.

5.1 Agency Consultation

The following local, state, and federal agencies were contacted and/or consulted in the preparation of this EA. Additional entities were given the opportunity to comment during a public review period.

- U.S. Fish and Wildlife Service, Western Colorado Ecological Services Field Office, Grand Junction, CO
- U.S. Army Corps of Engineers, Colorado West Regulatory Branch, Grand Junction, CO
- Colorado Office of Archaeology and Historic Preservation, Denver, CO
- Southern Ute Indian Tribe, Ute Mountain Ute Tribe, and Ute Indian Tribe (Uintah and Ouray Reservation)
- Delta County Historic Landmarks Board and Delta County Historical Society
- Advisory Council on Historic Preservation

5.2 EA Comments

The Draft EA will be released for a 30-day public review period (via Reclamation's website at http://www.usbr.gov/uc/wcao/envdocs/index.html). Any substantive comments received from the public, regulatory agencies, or other entities during the review period will be addressed in this section of the Final EA.

5.3 Distribution

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 B. The Final EA will also be available on Reclamation's website. Publicly-available electronic versions of the Draft and Final EA will meet the technical standards of Section 508 of the Rehabilitation Act of 1973, so that the documents can be accessed by people with disabilities using accessibility software tools.

6 References

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CPW (Colorado Parks and Wildlife). 2019. Public SAM Data Layer accessed in ArcGIS from the ArcGIS online server. Last updated by CPW on November 8, 2018.

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Delta County. 2010. Delta County Noxious Weed Management Plan. Adopted April 5, 2010. http://www.deltacounty.com/DocumentCenter/View/1013

EPA (U.S. Environmental Protection Agency). 2019. Current nonattainment counties for all criteria pollutants, updated June 30. https://www3.epa.gov/airquality/greenbook/ancl.html.

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OAHP (Office of Archaeology and Historic Preservation, History Colorado). 2013. Historic Resource Documentation Standards for Level I, II, and III Documentation. Publication 1595.

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SMPW (Selenium Management Program Workgroup). 2011. Selenium Management Program: Program Formulation Document, Gunnison River Basin, Colorado. Compiled by U.S. Bureau of Reclamation. http://www.usbr.gov/uc/wcao/progact/smp/docs/Final-SMP-ProgForm.pdf

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Zeman, Michael (Wildlife and Natural Resources Concepts & Solutions, LLC). 2019. Stewart Ditch and Reservoir Company Habitat Loss Assessment Report on Upper Stewart Ditch Piping Project. July 8. 20 pp.

APPENDIX A

Figures

1. Regional & Local Locator Maps
2. Regional Salinity Control Projects

3a. Project Configuration – Pipeline Component

3b. Project Configuration – Staging Area

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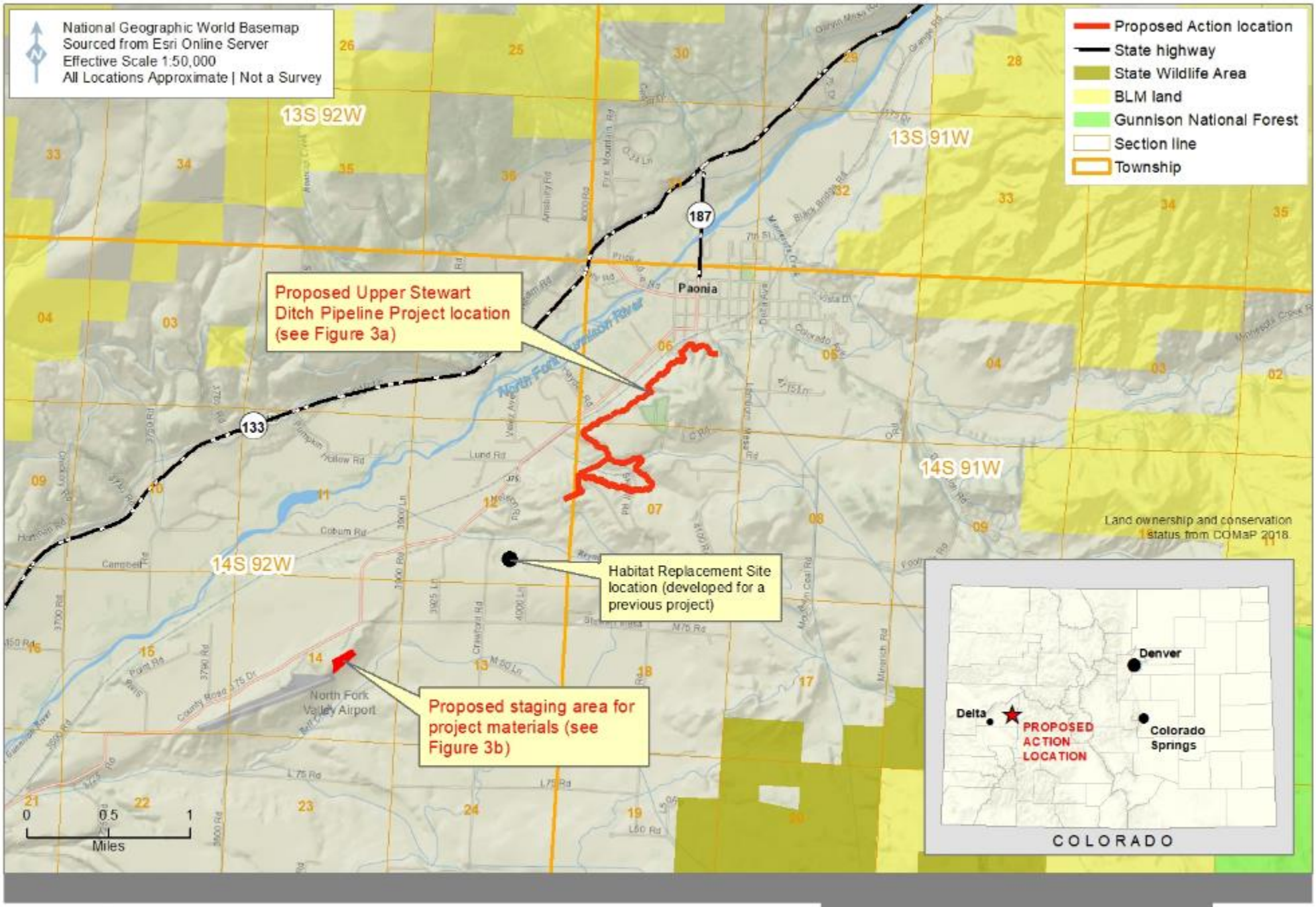

Environmental Assessment
Delta County, Colorado
www.rareearthscience.com
Map by D. Reeder | March 2020

Regional & Local Locator Maps

UPPER STEWART DITCH PIPELINE PROJECT

FIGURE
1

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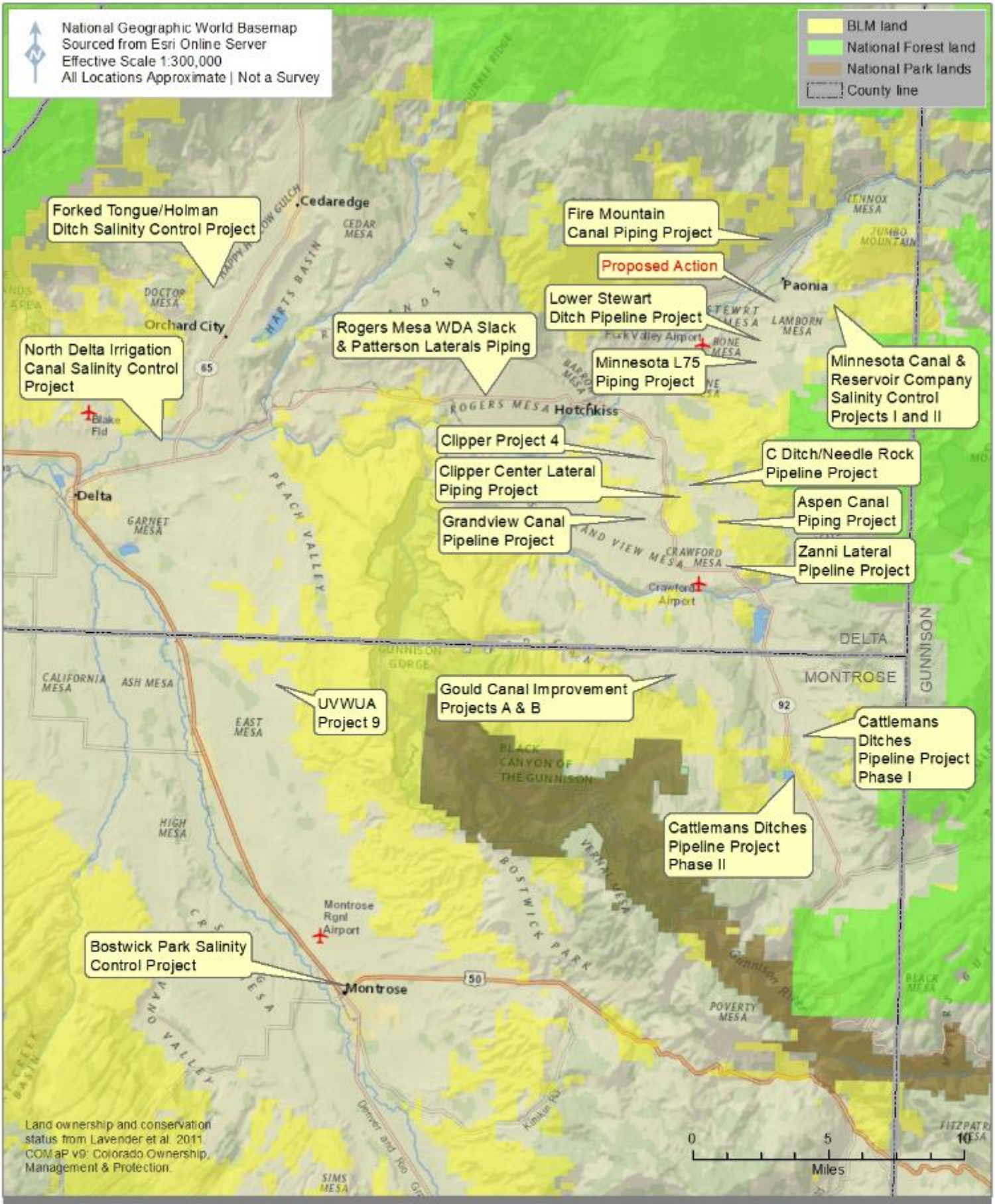

Environmental Assessment
Delta County, Colorado
www.rareearthscience.com
Map by D. Reeder | March 2020

Regional Salinity Control Projects

UPPER STEWART DITCH PIPELINE PROJECT

FIGURE
2

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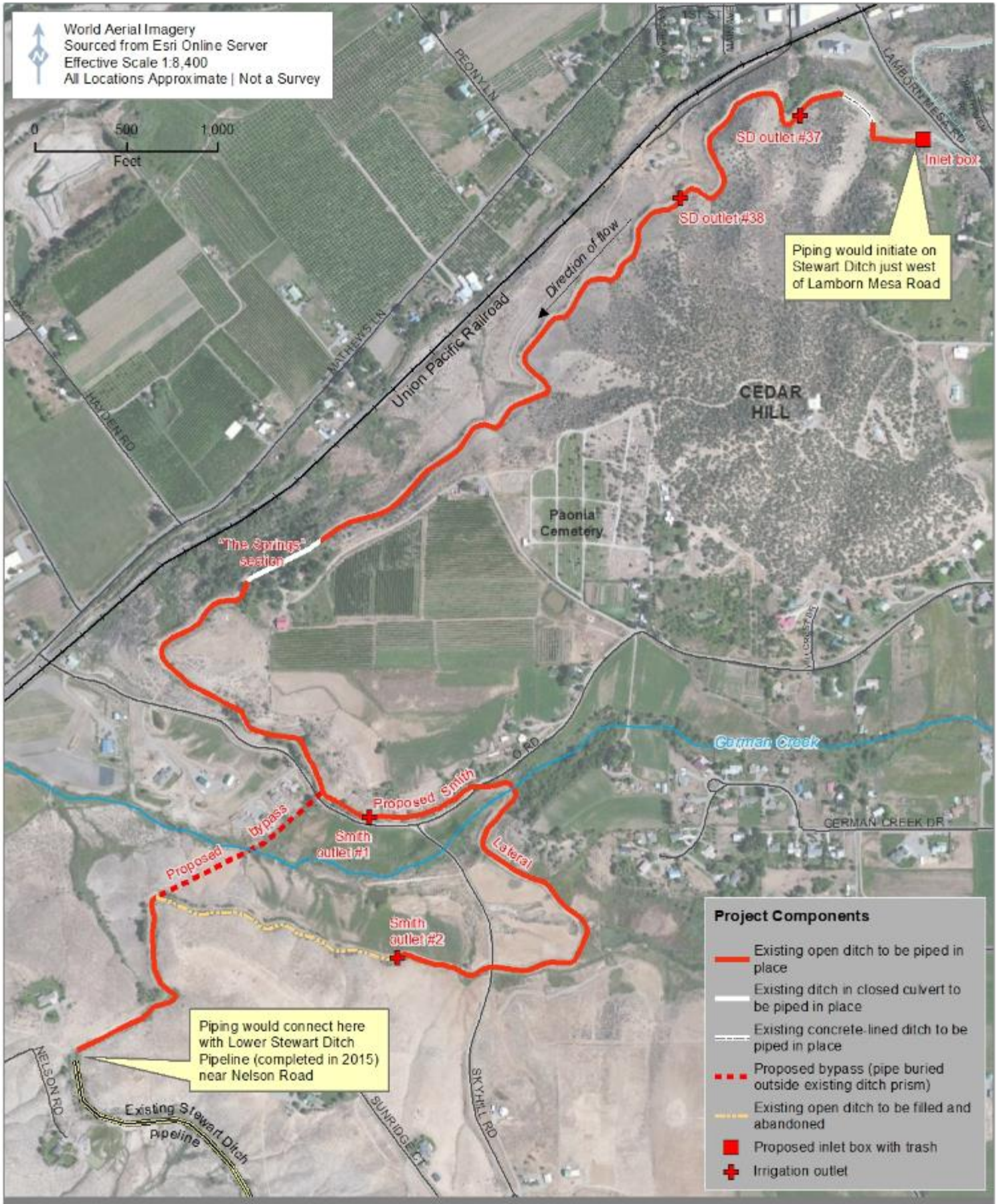

Environmental Assessment
Delta County, Colorado
www.rareearthscience.com
Map by D. Reeder | March 2020

Project Configuration
Pipeline Component

UPPER STEWART DITCH PIPELINE PROJECT

FIGURE
3a

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Environmental Assessment
Delta County, Colorado
www.rareearthscience.com
Map by D. Reeder | March 2020

Project Configuration
Staging Area

UPPER STEWART DITCH PIPELINE PROJECT

FIGURE
3b

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APPENDIX B

Distribution List

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

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APPENDIX C

RESERVED FOR Section 404 Clean Water Act Compliance Documentation

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APPENDIX D

Seed Mix Required for Non-Irrigated Areas

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Sagebrush and Pinyon-Juniper Zone Mid Elevations

Common	Cultivar	Genus	species	Seeds/Pound (NRCS)(Granite)	Desired % of Planting
BOTTLEBRUSH SQUIRRELTAIL	State Bridge	ELYMUS	elymoides	192000	30%
INDIAN RICEGRASS	rimrock	ACHNATHERUM	hymenoides	161920	26%
Slender Wheatgrass	White River	Elymus	trachycaulus	159000	26%
BLUESTEM PENSTEMON*	UP	PENSTEMON	cyanocaulis	656000	3%
Rocky Mtn Penstemon	Bandera	PENSTEMON	strictus	656000	2%
NORTHERN (UTAH) SWEETVETCH	TIMP	HEDYSARUM	boreale	46313	3%
LEWIS FLAX	Maple Grove	LINUM	lewisii spp. lewesii	170000	5%
Mulit-lobed groundsel	UP	Senecio	multilobata	922000	3%
WESTERN YARROW	UP	Achillea	millefolium	2770000	1%
Showy Goldeneye	VNS	Heliomeris	multiflora	1055000	1%
				TOTAL	**100%**

PLS = Pure live seed

* If volumes not readily available, substitute Rocky Mtn Penstemon (Bandera)

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APPENDIX E

Endangered Species Act Compliance Documentation

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United States Department of the Interior

FISH AND WILDLIFE SERVICE

Ecological Services
764 Horizon Drive, Building B
Grand Junction, Colorado 81506-3946

IN REPLY REFER TO:
ES/GJ-6-CO-09-F-0001-GP-022
TAILS 06E24100-2013-F-0015

November 2, 2012

Memorandum

To: Area Manager, Bureau of Reclamation, Grand Junction, Colorado

From: Western Colorado Supervisor, Ecological Services, Grand Junction, Colorado

Subject: Consultation of Stewart Ditch and Reservoir Company Historic Depletions for Gunnison Basin Programmatic Biological Opinion (PBO)

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

The Bureau of Reclamation under the Colorado River Salinity Control Program has entered into a contract with the Stewart Ditch and Reservoir Company (Stewart) to pipe portions of the Lower Stewart Ditch to reduce salt loading into the Colorado River. Stewart has an estimated average annual depletion of 4,335 acre-feet based on data provided by the Colorado Water Conservation Board for the period from 1990-2000. Lands irrigated by the Minnesota Canal are estimated at 2,726 acres with diversion on the North Fork of the Gunnison River, northeast of Paonia, Colorado.

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

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

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

2. A fee to fund recovery actions will be submitted as described in the proposed action for new depletion projects greater than 100 acre-feet/year. The 2012 fee is $19.21 per acre-foot and is adjusted each year for inflation.

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

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

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

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

REINITIATION NOTICE

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

control over the action has been retained (or is authorized by law) and under the following conditions:

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

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

3. **The identified action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in the BO.** It would be considered a change in the action subject to consultation if the reoperation of Aspinall and the Selenium Management Program described in this opinion are not implemented within the required timeframes. If a draft Selenium Management Program document is not completed within 18 months of the final PBO and a final document within 24 months, reinitiation of consultation will be required. Reinitiating consultation could consist of an exchange of memoranda examining the progress made on the plan and evaluating the consequences of extending the timeframe. Also, at any time, if funding is not available to implement the Selenium Management Program reinitiation of consultation will be required.

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

4. **The Service lists new species or designates new or additional critical habitat, where the level or pattern of depletions covered under this opinion may have an adverse impact on the newly listed species or habitat.** If the species or habitat may be adversely affected by depletions, the Service will reinitiate consultation on the PBO as required by its section 7 regulations. The Service will first determine whether the Recovery Program can avoid such impact or can be amended to avoid the likelihood of jeopardy and/or adverse modification of critical habitat for such depletion impacts. If the

Recovery Program can avoid the likelihood of jeopardy and/or adverse modification of critical habitat no additional recovery actions for individual projects would be required, if the avoidance actions are included in the Recovery Action Plan. If the Recovery Program can't avoid the likelihood of jeopardy and/or adverse modification of critical habitat then the Service will reinitiate consultation and develop reasonable and prudent alternatives.

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

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

If you have any questions regarding this consultation or would like to discuss it in more detail, please contact Barb Osmundson of our Grand Junction Ecological Services Field Office at (970) 243-2778, extension 21.

Sincerely,

Patricia S. Gelatt
Western Colorado Supervisor

Attachment

cc: FWS/UCREFRP, Denver

BOsmundson:BRStewartDitchBOGP022.docx:110212:KM

GUNNISON RIVER RECOVERY AGREEMENT

This RECOVERY AGREEMENT is entered into this 2nd day of Nov., 2012, by and between the United States Fish and Wildlife Service (Service) and Stewart Ditch and Reservoir 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 Stewart Ditch and Reservoir Company (Water Project), which causes or will cause depletions to the Gunnison River subbasin; and

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

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

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

1. The Service agrees that implementation of the Recovery Elements specified in the 2009 Opinion will avoid the likelihood of jeopardy and adverse modification under section 7 of the ESA, for depletion impacts caused by Water User's Water Project. Any consultations under section 7 regarding Water Project's depictions 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. Language to protect a water user that does their part, but actions of others cause se goals to not be met.

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□s 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.

Karl Burma
Stewart Ditch and Reservoir Company

Date 10/31/12

Western Colorado Supervisor
U.S. Fish and Wildlife Service

Date 11/2/2012

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APPENDIX F

Cultural Resource Compliance Documents

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MEMORANDUM OF AGREEMENT
AMONG
THE WESTERN COLORADO AREA OFFICE, BUREAU OF RECLAMATION,
THE STEWART DITCH AND RESERVOIR COMPANY,
AND THE COLORADO STATE HISTORIC PRESERVATION OFFICER
REGARDING THE
UPPER STEWART DITCH PIPING PROJECT,
COLORADO RIVER BASIN SALINITY CONTROL PROGRAM,
LOCATED IN DELTA COUNTY, COLORADO

WHEREAS, the Bureau of Reclamation (Reclamation) and the Stewart Ditch and Reservoir Company (SDRC) plan to pipe 2.6 miles of the Stewart Ditch (Project); and

WHEREAS, Reclamation plans to fund SDRC to pipe the Stewart Ditch, as authorized by the Basinwide Program under the Colorado River Basin Salinity Control Program, thereby making the Project an 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 the undertaking's area of potential effect (APE) as contained within a 100-foot-wide corridor centered on the Stewart Ditch, and a construction work space, totaling 30.3 acres on private land, as described in Attachment A; and

WHEREAS, Reclamation as lead Federal agency has determined, in consultation with the Colorado State Historic Preservation Officer (SHPO), that the Stewart Ditch (5DT1832.10) is eligible for listing on the National Register of Historic Places (NRHP) under Criterion A, and that the Project will result in an adverse effect to historic properties; and

WHEREAS, the SDRC as the sponsor of the Project, has participated in the consultation, and has been invited to participate in the Memorandum of Agreement (MOA) as a Signatory; and

WHEREAS, Reclamation consulted with the Southern Ute Indian Tribe, Ute Indian Tribe – Uintah and Ouray Reservation, and the Ute Mountain Ute Tribe via a January 14, 2019 letter to invite the tribes to participate in the proposed undertaking, and the tribes did not respond as of the signing of this document; and

WHEREAS, Reclamation consulted with the Delta County Historic Landmarks Board and the Delta County Historical Society via a January 14, 2019 letter to invite the local government to participate in the proposed undertaking, and they did not respond as of the signing of this document; 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 Council has chosen not to participate in the consultation pursuant to 36 CFR § 800.6(a)(1)(iii);

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

Prior to any modification of the Stewart Ditch, Reclamation will ensure that the ditch (5DT1832.10) shall be recorded in accordance with the guidance for Level II Documentation found in "Historic Resource Documentation, Standards for Level I, II, and III Documentation" (Office of Archaeology and Historic Preservation Publication 1595, March 2013). The documentation will be of archival quality, and will include a detailed narrative history, plan mapping of the property and photographic documentation of the portions of the historic property to be included in the project. Photographs will be black and white archival quality (4" x 6") prints. Features will be plotted on the maps with GPS waypoints and will be extensively described and indexed in the report. Representative design drawings consisting of two (2) cross section maps will be prepared.

Stipulation I shall be satisfied prior to construction and/or any earth disturbances within the APE.

II. GENERAL REQUIREMENTS AND STANDARDS

Reclamation will submit a copy of the Level II Documentation to the SHPO within two (2) years of the execution of this MOA. The SHPO shall review and provide comments within thirty (30) calendar days of receipt. Once accepted by SHPO, SHPO shall receive a minimum of one archivally stable copy of the final recordation for its files and provide documentation of acceptance. The activities prescribed by the stipulations of this MOA shall be carried out by or under the direct supervision of a person or persons meeting, at minimum, the Secretary of the Interior Professional Qualifications Standards (48 FR 44738-39) (PQS) in the appropriate discipline. This does not preclude the use of properly supervised persons who do not meet the PQS.

III. INFORMATION ACCESSIBILITY

A Rehabilitation Act Section 508 compliant copy of the Level II Documentation will be placed on the Reclamation Western Colorado Area Office's cultural resource webpage. The SHPO shall receive notification once the document is placed on the webpage.

IV. DURATION

This MOA will expire if its terms are not carried out within two (2) 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 VIII below.

V. POST-REVIEW DISCOVERIES

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

VI. MONITORING AND REPORTING

No later than June 30th of each year following the execution of this MOA until its stipulations are carried out, it expires, or is terminated, SDRC on behalf of Reclamation shall provide all parties to this MOA a summary report detailing work carried out pursuant to its terms. Such report shall include any scheduling changes proposed, any problems encountered, and any disputes and objections received in SDRC's efforts to carry out the terms of this MOA.

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

VII. DISPUTE RESOLUTION

Should any signatory or concurring party to this MOA object at any time to any actions proposed or the manner in which the terms of this MOA 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 MOA, 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 MOA that are not the subject of the dispute remain unchanged.

VIII. AMENDMENTS

This MOA 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.

IX. TERMINATION

If any signatory to this MOA 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 VI, above. If within thirty (30) days (or another time period agreed to by all signatories) an amendment cannot be reached, any signatory may terminate the MOA upon written notification to the other signatories.

Once the MOA is terminated, and prior to work continuing on the undertaking, Reclamation must either (a) execute an MOA 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 MOA by SDRC, 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 Effect and Site Locations
Attachment B: Unanticipated Discovery Plan

SIGNATORIES:

Colorado State Historic Preservation Office

By: Holly K Norton Date: 2/25/2019
for Steve Turner, AIA, State Historic Preservation Officer

Bureau of Reclamation, Western Colorado Area Office

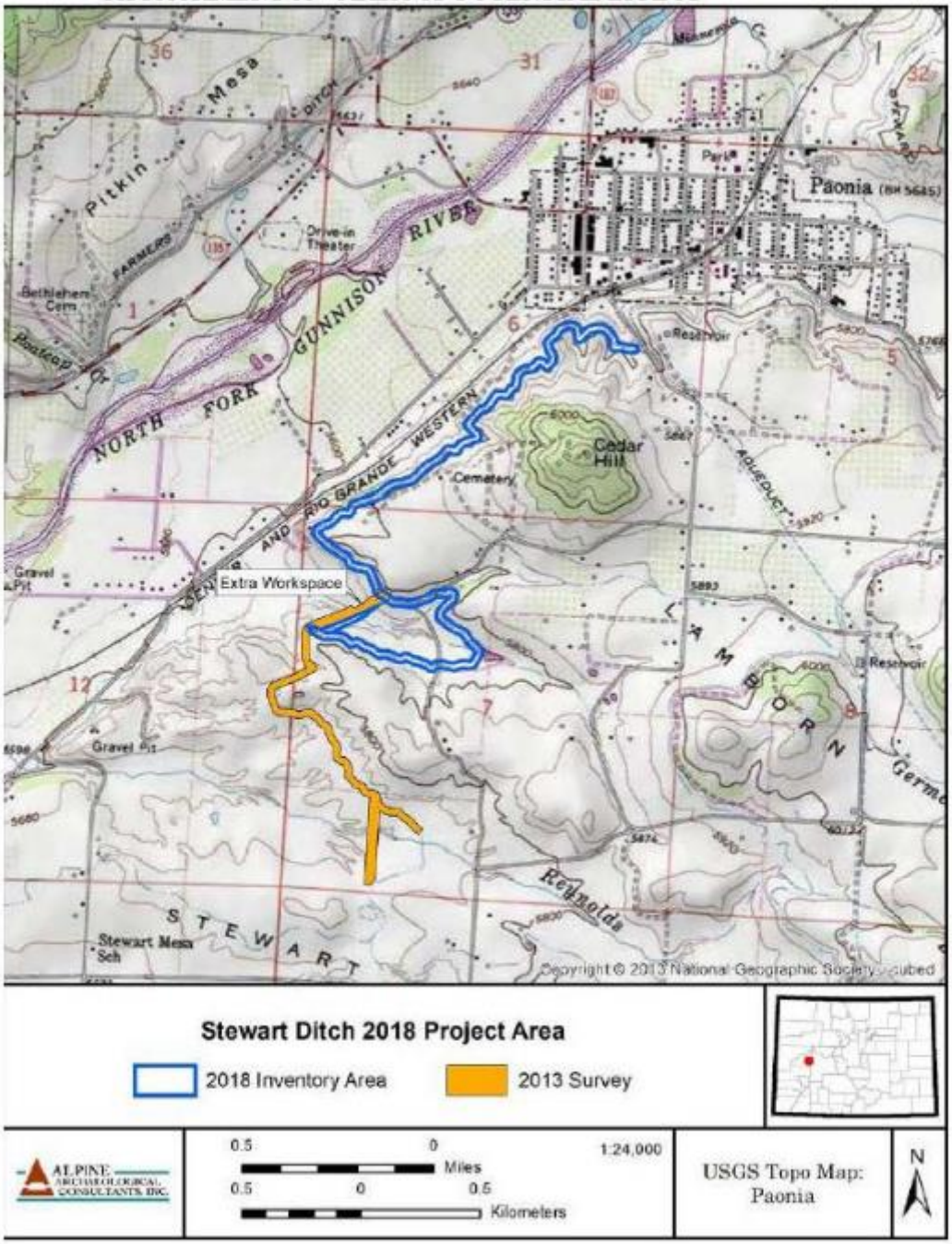
By: _____ Date: 2-20-19
Ed Warner, Area Manager

INVITED SIGNATORIES:

Stewart Ditch and Reservoir Company

By: Karl Burns Date: 2-19-19
Karl Burns, President

ATTACHMENT A – AREA OF POTENTIAL EFFECT



ATTACHMENT B – UNANTICIPATED DISCOVERY PLAN

PLAN AND PROCEDURES FOR THE UNANTICIPATED DISCOVERY OF CULTURAL RESOURCES

STEWART DITCH AND RESERVOIR COMPANY
UPPER STEWART DITCH PIPING PROJECT
SALINITY CONTROL PROGRAM,
DELTA COUNTY, COLORADO

1. INTRODUCTION

The Stewart Ditch and Reservoir Company (SDRC) plans to pipe 2.6 miles of the Stewart Ditch. The purpose of this project is to reduce the salt load in the Colorado River Basin. The following Unanticipated Discovery Plan (UDP) 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 SDRC 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 stop. The discovery location should be secured at all times.

STEP 2: NOTIFY MONITOR. If there is an archaeological monitor for the project, notify that person. If there is a monitoring plan in place, the monitor will follow its provisions. If there is not an archaeological monitor, notify the project manager.

STEP 3: NOTIFY BUREAU OF RECLAMATION. Contact the Project Overseer at the Bureau of Reclamation:

Project Manager:	Reclamation Project Overseer:
Karl Burns	Jennifer Ward
970-270-1727	970-248-0651
kandjburnsranch@paonia.com	jward@usbr.gov

The Project Manager or the Reclamation Project Overseer 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.

4. FURTHER CONTACTS AND CONSULTATION

A. Project Manager's Responsibilities:

- Protect Find: The SDRC 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.

- Direct Construction Elsewhere On-site: The SDRC Project Manager may direct construction away from cultural resources to work in other areas prior to contacting the concerned parties.

- Contact CR Manager: If there is a CR Program Manager, and that person has not yet been contacted, the Project Manager will do so.

- Contact Project Overseer: If the Project Overseer at the Bureau of Reclamation has not yet been contacted, the Project Manager will do so.

- Identify Find: The Project Manager will ensure that a qualified professional archaeologist examines the find to determine if it is archaeological.

    - If it is determined not archaeological, work may proceed with no further delay.

    - If it is determined to be archaeological, the Project Manager will continue with notification.

- If the find may be human remains or funerary objects, the Project Manager will ensure that a qualified physical anthropologist examines the find. If it is determined to be human remains, the procedure described in Section 5 will be followed.

B. Project Overseer's Responsibilities

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

Colorado State Historic Preservation Office:
Mr. Steve Turner, AIA
State Historic Preservation Officer
History Colorado
1200 Broadway
Denver CO, 80203
(303)866-3355

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 private lands. The requirements under State Law Colorado Revised Statute (CRS) 24-80 part 13 apply. The Unmarked Human Graves Colorado Statute (CRS 24-80-1301-1305) applies if the human remains are Native American and/or determined to be of archaeological interest.

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 County Coroner and the Delta County Sheriff. If the remains are found to have no forensic value, the coroner shall notify the SHPO, in accordance with applicable law. A plan of action shall be developed by SHPO in consultation with appropriate federally recognized 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 is the preferred option for treating human remains.

SDRC will comply with the procedures outlined, and will coordinate with the following contacts:

Reclamation CR Manager
(970) 385-6500

Delta County Sheriff
(970) 874-2000

Delta County Coroner
(970) 874-5918

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 Project Manager will ensure the proper documentation and assessment of any discovered cultural resources in cooperation 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 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 the SHPO and affiliated tribes, the Project Manager and Project Overseer 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 SDRC, Reclamation, and SHPO determine that compliance with state and federal laws is complete.

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