



**Colorado Water Conservation Board**

**Water Plan Grant – Statement of Work – Exhibit A**

**Statement Of Work**

<b>Prepared Date:</b>	<b>4/28/23</b>
<b>Name of Grantee:</b>	<b>Colorado Water Trust</b>
<b>Name of Water Project:</b>	<b>Little Cimarron River Fish and Flow Bypass Project</b>
<b>Funding Source:</b>	<b>Water Plan ATM</b>
<b>Water Project Overview:</b>	
<p>This project will implement a complete retrofit of the Collier Ditch Dam to provide for fish and instream flow passage on the Little Cimarron River, tributary to the Cimarron River and the Gunnison River). Fish in the Little Cimarron river have historically been impacted by a lack of longitudinal connectivity caused by irrigation diversions and infrastructure. In most years, irrigation withdrawals dewater miles of channel and the associated irrigation diversion infrastructure blocks fish passage. The Colorado Water Trust (Water Trust) has been working with partners in the Little Cimarron watershed for over a decade to implement the McKinley Ditch Project, a groundbreaking permanent split season ATM project designed to provide irrigation for agricultural use in the early summer and protect instream flows late in the irrigation season when the river typically has low flows or dewatered channels. In late 2018, the Water Trust and Colorado Water Conservation Board (CWCB) were granted a decree to protect the acquired portion of the McKinley Ditch water rights for both agricultural uses and instream flow. Late in the irrigation season, the decree allows water to be used for instream flow in over nine miles of the Little Cimarron and Cimarron Rivers, including three miles which has historically been dewatered. The Collier Ditch lies within this reach and its aging diversion infrastructure cannot currently bypass the instream flow and regularly dewater the river. Furthermore, the structure is a velocity and jump height barrier to resident fish which limits upstream spawning migrations and overall fishery health. The Water Trust has partnered with the shareholders on the Collier Ditch, to replace the existing infrastructure with roughened rock ramp which will allow for volitional fish passage and a return flow channel to bypass instream flow, while maintaining Collier Ditch irrigation withdrawals in priority. To accomplish these goals, the Water Trust will undertake a complete retrofit of the Collier Ditch Dam to provide flow and fish passage improvements.</p>	
<b>Project Objectives:</b>	



The objective of this project is to implement a complete retrofit of the Collier Ditch Dam which will provide for fish and instream flow passage on the Little Cimarron River. Project designs call for installation of a grouted rock ramp or “roughened channel” that will reduce the grade that fish must attain for passage and provide low velocity pocket water for fish to rest while completing passage. Designs also call for measurement equipment, a splitter and flow bypass channel or pipe to allow for accurate bypass of the Water Trust senior instream flows to the Little Cimarron River, while fully delivering Collier Ditch irrigation diversions in priority. Designs also call for replacing and upgrading aging diversion infrastructure for the benefit of both parties.

### Tasks

#### Task 1 – Design

Description of Task: Completion of Final Designs

The Colorado Water Trust has been working with Collier Ditch water users and WWC Engineering throughout the design process to ensure that this project will achieve its flow bypass, fish passage and irrigation delivery goals. To date, the team has held onsite meetings, completed a topographic site survey, developed HEC-RAS models, consulted with USFWS fish biologists and completed preliminary designs and cost estimates for two alternative design options (a roughened rock ramp or technical fishway). The results of these efforts are attached with this application. Stakeholders have selected the roughened rock ramp as the preferred design solution and provided extensive comment to inform future design work. WWC Engineering has taken the input and is currently refining the modeling and designs to incorporate the comments and develop a set of 80% designs, due in January 2023. The 80% designs will be shared with the stakeholders for another set of comment and revision before producing final designs, which will ultimately guide construction.

Method/Procedure:

WWC Engineering is following industry standard engineering practices to produce this design, informed by stakeholder input.

Deliverable: Final Designs

Final Designs are due by May 1<sup>st</sup>, 2023.

### Tasks

#### Task 2 – Implementation



Description of Task: Construction of Dam retrofits as guided by the final designs from Task 1.
Construction of the designed dam retrofit is slated for the fall of 2023 to allow for work during historically low flow periods. A combination of heavy equipment and hand labor will complete the roughened rock ramp, instream flow bypass channel and infrastructure upgrades using standard instream construction methods. Initial construction is scheduled to be completed in fall of 2023 followed by regular site visits in 2024 to ensure that the new diversion structures are functioning as designed. Fall 2024 is slated for any follow-up or modification work necessary.
Method/Procedure:
A combination of heavy equipment and hand labor will complete the roughened rock ramp, instream flow bypass channel and infrastructure upgrades using standard instream construction methods. Initial construction is scheduled to be completed in fall of 2023 followed by regular site visits in 2024 to ensure that the new diversion structures are functioning as designed. Fall 2024 is slated for any follow-up or modification work necessary.
Deliverable:
Completed retrofit structure. Photo documentation of completed structures. Project completion summary document.

### Budget and Schedule

This Statement of Work shall be accompanied by a combined Budget and Schedule that reflects the Tasks identified in the Statement of Work.

### Reporting Requirements

**Progress Reports:** The applicant shall provide the CWCB a progress report every 6 months, beginning from the date of issuance of a purchase order, or the execution of a contract. The progress report shall describe the status of the tasks identified in the statement of work, including a description of any major issues that have occurred and any corrective action taken to address these issues.

**Final Report:** At completion of the project, the applicant shall provide the CWCB a Final Report on the applicant's letterhead that:

- Summarizes the project and how the project was completed.
- Describes any obstacles encountered, and how these obstacles were overcome.
- Confirms that all matching commitments have been fulfilled.
- Includes photographs, summaries of meetings and engineering reports/designs.

The CWCB will pay out the last 10% of the budget when the Final Report is completed to the satisfaction of CWCB staff. Once the Final Report has been accepted, and final payment has been issued, the purchase order or grant will be closed without any further payment.



### Payment

Payment will be made based on actual expenditures and must include invoices for all work completed. The request for payment must include a description of the work accomplished by task, an estimate of the percent completion for individual tasks and the entire Project in relation to the percentage of budget spent, identification of any major issues, and proposed or implemented corrective actions.

Costs incurred prior to the effective date of this contract are not reimbursable. The last 10% of the entire grant will be paid out when the final deliverable has been received. All products, data and information developed as a result of this contract must be provided as part of the project documentation.

### Performance Measures

Performance measures for this contract shall include the following:

- (a) Performance standards and evaluation: Grantee will produce detailed deliverables for each task as specified. Grantee shall maintain receipts for all project expenses and documentation of the minimum in-kind contributions (if applicable) per the budget in Exhibit B. Per Grant Guidelines, the CWCB will pay out the last 10% of the budget when the Final Report is completed to the satisfaction of CWCB staff. Once the Final Report has been accepted, and final payment has been issued, the purchase order or grant will be closed without any further payment.
- (b) Accountability: Per Grant Guidelines full documentation of project progress must be submitted with each invoice for reimbursement. Grantee must confirm that all grant conditions have been complied with on each invoice. In addition, per Grant Guidelines, Progress Reports must be submitted at least once every 6 months. A Final Report must be submitted and approved before final project payment.
- (c) Monitoring Requirements: Grantee is responsible for ongoing monitoring of project progress per Exhibit A. Progress shall be detailed in each invoice and in each Progress Report, as detailed above. Additional inspections or field consultations will be arranged as may be necessary.
- (d) Noncompliance Resolution: Payment will be withheld if grantee is not current on all grant conditions. Flagrant disregard for grant conditions will result in a stop work order and cancellation of the Grant Agreement.