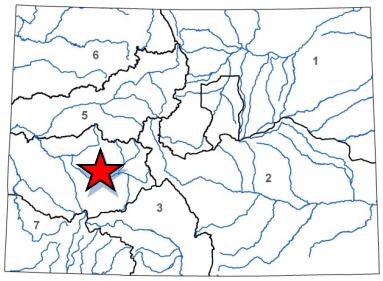
COLORADO
Colorado Water Conservation Board

Water Plan Grant Application

Portland Uncompahgre Restoration Project
Trout Unlimited
March 2022 Board Meeting



LOCATION	
County/Counties:	Ouray
Drainage Basin:	Gunnison

DETAILS	
Total Project Cost:	$43,500
Water Plan Grant Request:	$21,500
Recommended amount:	$0
Other CWCB Funding:	$0
Other Funding Amount:	$16,000
Applicant Match:	$22,000
Project Type(s): Planning and design	
Project Category(Categories): Environmental and Recreation	
Measurable Result: 5,280 linear feet of restored stream, 2 acres of restored habitat, local outreach and engagement	

The one mile segment of the Uncompahgre River between the Ward Ditch Diversion and the county road 23 bridge, like other parts of the river, has been heavily impacted by dredging and rip-rap placed on riverbanks, causing the river to be incised, unnaturally straight, disconnected from the floodplain, and lacking in diverse habitat. Native riparian trees are dying off and invasive trees such as Russian Olives are establishing. The combination of mine tailings runoff and lack of organic matter, riparian habitat and reduced river flows have rendered this reach almost devoid of fish and aquatic invertebrates. This riparian corridor does provide habitat for many neo-tropical migrant birds, waterfowl, birds of prey and small and large mammals however habitat is sparse due to the rivers shape. TU in conjunction with the landowners (all water users in the Ward Ditch) and Fred Phillips Consulting wish to complete an analysis of the site to understand the variables influencing the current condition of the system and to inform design.

Project objectives include:

1. Analyze current state of the Uncompahgre River corridor through subject site to identify deficiencies and existing conditions. Create restoration plan designs for 2 demonstration sites along this section of river.
2. Implement restoration projects that improve habitat and riparian function.
3. Analyze effectiveness of restoration projects through intensive monitoring.
4. Effectively and efficiently administer grant funds and manage project.

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Water Plan

Water Project Summary

Name of Applicant	Trout Unlimited_Denver Project-01902 -
Name of Water Project	Portland Uncompahgre Restoration Project
Grant Request Amount	**$21,500.00**
Primary Category	$21,500.00
Watershed Restoration & Recreation	
Additional Funding Category	
Watershed Restoration & Recreation	
Total Applicant Match	**$22,000.00**
Applicant Cash Match	$11,000.00
Applicant In-Kind Match	$11,000.00
Total Other Sources of Funding	**$16,000.00**
Ward Water Group	$11,000.00
Ward Water Group	$5,000.00
Total Project Cost	**$59,500.00**

Applicant & Grantee Information

Name of Grantee: Trout Unlimited_Denver
Mailing Address: 2032 Ivanhoe St. Denver CO 80207
FEIN: 381,612,715

Organization Contact: Cary Denison
Position/Title:
Phone: (970) 596-3291
Email: cdenison@tu.org

Grant Management Contact: Cary Denison
Position/Title:
Phone: (970) 596-3291
Email: cdenison@tu.org

Grant Management Contact - Alternate: Drew Peternell
Position/Title:
Phone:
Email: dpeternell@tu.org

Engineering Contact: Fred Phillips
Position/Title:
Phone: 9283805058
Email: fphillips@fredphillipsconsulting.com

Description of Grantee/Applicant

No description provided

Type of Eligible Entity

- ☐ Public (Government)
- ☐ Public (District)
- ☐ Public (Municipality)
- ☐ Ditch Company
- ☐ Private Incorporated
- ☐ Private Individual, Partnership, or Sole Proprietor
- ■ Non-governmental Organization
- ☐ Covered Entity
- ☐ Other

Category of Water Project

- ☐ Agricultural Projects
  Developing communications materials that specifically work with and educate the agricultural community on headwater restoration, identifying the state of the science of this type of work to assist agricultural users among others.
- ☐ Conservation & Land Use Planning
  Activities and projects that implement long-term strategies for conservation, land use, and drought planning.
- ☐ Engagement & Innovation Activities
  Activities and projects that support water education, outreach, and innovation efforts. Please fill out the Supplemental Application on the website.
- ■ Watershed Restoration & Recreation
  Projects that promote watershed health, environmental health, and recreation.
- ☐ Water Storage & Supply
  Projects that facilitate the development of additional storage, artificial aquifer recharge, and dredging existing reservoirs to restore the reservoirs' full decreed capacity and Multi-beneficial projects and those projects identified in basin implementation plans to address the water supply and demand gap.

Location of Water Project

Latitude	38.068561
Longitude	-107.695424
Lat Long Flag	
Water Source	
Basins	Gunnison
Counties	Ouray
Districts	68-Upper Uncompahgre River

Water Project Overview

Major Water Use Type	Environmental
Subcategory	
Scheduled Start Date - Design	7/1/2022
Scheduled Start Date - Construction	8/1/2022

Description

The one mile segment of the Uncompahgre River between the Ward Ditch Diversion and county road 23 bridge, like other parts of the river, has been heavily impacted by dredging and rip-rap placed on riverbanks, causing the river to be incised, unnaturally straight, disconnected from the floodplain, and lacking in diverse habitat. Native riparian trees are dying off and invasive trees such like Russian Olives are establishing. The combination of mine tailings runoff and lack of organic matter, riparian

habitat and reduced river flows have rendered this reach almost devoid of fish and aquatic invertrebrets. This riparian corridor does provide habitat for many neotropical migrant birds, waterfowl, birds of prey and small and large mammals however habitat is sparce due to the rivers shape.
TU in conjunction with the landowners (all water users in the Ward Ditch) and Fred Phillips Consulting wish to complete an analysis of the site to understand the variables influencing the current condition of the system and to inform design. 2. Develop two demonstration sites where low-tech restoration techniques will address deficiencies. 3. Evaluate this demonstration projects to guide future restoration efforts within the Uncompaghre watershed

Measurable Results

	New Storage Created (acre-feet)
	New Annual Water Supplies Developed or Conserved (acre-feet), Consumptive or Nonconsumptive
	Existing Storage Preserved or Enhanced (acre-feet)
	New Storage Created (acre-feet)
5,280	Length of Stream Restored or Protected (linear feet)
	Efficiency Savings (dollars/year)
	Efficiency Savings (acre-feet/year)
2	Area of Restored or Preserved Habitat (acres)
	Quantity of Water Shared through Alternative Transfer Mechanisms or water sharing agreement (acre-feet)
	Number of Coloradans Impacted by Incorporating Water-Saving Actions into Land Use Planning
40	Number of Coloradans Impacted by Engagement Activity

Water Project Justification

Restoring the riparian function in this one mile stretch of the Uncompahgre River will meet several goals and themes identified in the Colorado Water Plan and in the Gunnison Basin Implementation Plan (GBIP).

The overarching goal is the develop tools that can be used in the Uncompahgre basin and elsewhere to restore impacted river systems. Achieving this is in line with the goal stated on the fourth page of the water plan :Implementing projects and methods that take into account potential multiple beneficiaries, potential multiple uses, and the effects on river systems on which all Coloradans rely.

Watershed restoration like what is being proposed by TU and the WWG will complement the values of "A strong environment that includes healthy watershed, rivers and streams, and wildlife.

The Water Plan also identifies the need for collaboration to solve Colorado's many water needs. This project brings together landowners, water rights owners, irrigators, NGO, and others to address watershed health needs and to learn by doing , setting an example for future collaborative efforts.

The type of riparian restoration considered in this project are in line with the adaptive measures mentioned in Chapter 6 of the Water Plan. By reconnecting the river with the floodplain in this area, demands on diverted water can be reduced, groundwater supplies can be replenished, and late season low flow conditions can be mitigated. This project could also complement the CWCB’s instream flow right that is held on this section of river. As climate change impacts water supplies these strategies are increasingly important. This project will not only support environmental and recreational uses as well as consumptive demands which is a goal stated on page 10, chapter 6 of the Water Plan.

The water quality in the Uncompahgre River is impacted by heavy metals provided in part by historic mining

practices in the headwaters of the basin. Section 7.3 of the water plan discusses watershed health water quality issues. This project aims to develop strategies that could improve water quality.

Implementing and evaluating restoration strategies through this project will allow the project proponents, CWCB, and others the ability to share information about the processes and lessons learned. Doing so will help the State meet the goal of increasing public awareness and engagement on water issues as noted on page 7 in Chapter 10 of the Water Plan. Several of the goals in section F Watershed Health, Environment and Recreation in chapter 10 of the Water Plan will be met and addressed throught this project.

This project will meet goals 5 and 7 in the GBIP by protecting environmental and recreational water users and encouraging beneficial relationship between agricultureal and environmental/recreational water uses.

The GBIP idendifies this section of the Uncompahgre River as one of the target reaches where improvements to water quality and watershed health should be focused. (pg. 6 GBIP)

As mentioned in section 4 of the GBIP TU was to spearhead an Environmental and Recreational Project Identification and Inventory. This effort was wrapped into Ouray County's water supply and planning efforts which did not identify specific projects that could address environmental needs. This proposed project will provide a template for and a method of analyzing restoration techniques that could inform Ouray County and other landowners in the basin.

Related Studies

Uncompahgre Watershed Plan, 2018

Taxpayer Bill of Rights

TABOR will not affect TU's ability to use CWCB funds to complete this project.

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 and shall be submitted to CWCB in excel format.

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: (1) Summarizes the project and how the project was completed. (2) Describes any obstacles encountered, and how these obstacles were overcome. (3) Confirms that all matching commitments have been fulfilled. (4) 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 to 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 the Budget & Schedule Exhibit B. Per Water Plan 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 Water Plan 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 Water Plan 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.

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Last Updated: May 2021

Colorado Water Conservation Board
Water Plan Grant – Statement of Work – Exhibit A

Statement Of Work	
Date:	**12/2021**
Name of Grantee:	**Trout Unlimited with Support from Fred Phillips Consulting and WWG**
Name of Water Project:	**Portland Uncompaghre Restoration Project**
Funding Source:	**CWCB Water Plan - Environmental**

Water Project Overview: Restoration of the Uncompaghre Watershed

The one-mile segment of the Uncompahgre River between the Ward Ditch Diversion and county road 23 bridge near the town of Ouray, like other parts of the river, has been heavily impacted by dredging and riprap placed on riverbanks, causing the river to be incised, unnaturally straight, disconnected from the floodplain, and lacking in diverse habitat. Native riparian trees are dying off and invasive trees such like Russian Olives are establishing. The combination of mine tailing runoff and lack of organic matter, riparian habitat and reduced river flows have rendered this reach almost devoid of fish and aquatic invertebrates. This riparian corridor does provide habitat for many neotropical migrant birds, waterfowl, birds of prey and small and large mammals however habitat is sparce due to the rivers shape.

TU in conjunction with the Ward Water Group (landowners along river) and Fred Phillips Consulting wish to complete an analysis of the site to understand the variables influencing the current condition of the system and to inform design; develop two demonstration sites where low-tech restoration techniques will address deficiencies; and evaluate these demonstration projects to guide future restoration efforts within the Uncompahgre watershed. The project partners hope to create a better understanding of how river restoration on heavily impacted streams like the Uncompahgre River can be achieved and to share that information with stakeholders.

Project Objectives:

Objectives:
1. Analyze current state of the Uncompahgre River corridor through subject site to identify deficiencies and existing conditions. Create restoration plan designs for 2 demonstration sites along this section of river.
2. Implement restoration projects that improve habitat and riparian function.
3. Analyze effectiveness of restoration projects through intensive monitoring.
3. Effectively and efficiently administer grant funds and manage project.

Last Updated: May 2021

Tasks
Task 1 – Rapid Site Analysis and restoration plan development
Description of Task: Analyze state of river and design restoration plans
An assessment of this section of river will be completed and major deficiencies and issues will be identified. Plans will be created to guide restoration activities.
Method/Procedure:
The project Team, consisting of George Cathey of Oxbow Ecological Engineering, WWG members, Fred Phillips of Fred Phillips Consulting, and Cary Denison of Trout Unlimited, will review existing reports and data related to the health of this stretch of the Uncompaghre River, consult with local experts, and research the history of impacts on the river. The Team will then assess the floodplain through the site using a variety of inventory methods and comparison to other parts of the basin and similar water sheds. Vegetation and cobble/sediment analysis will be completed in key areas. Native and non-native vegetation will be identified. Photo monitoring points will be established for future analysis. Site surveys, and aerial imagery will be used to analyze geomorphology of the river. Using the collected data, a design using best management practices including low tech process-based restoration tools will be created for two sites. This design will be used to secure proper permits including US Army Corps of Engineer permits.
Deliverable:
Key data from the assessment will be compiled and recorded for disbursement to project partners and stakeholders. Draft and final designs along with key components or hurdles will be recorded and shared with CWCB and other project partners.

Tasks
Task 2 – Implement riparian restoration demonstration projects
Two restoration projects will be completed per the design to establish riparian function and improve habitat within the subject site.

Last Updated: May 2021

Method/Procedure: Implementation
The Team will use the designs to guide construction of two restoration projects within this segment of river. Using heavy equipment for earth moving, the Team will prep sites and remove non-native vegetation. Native plants and seed will be planted per the design and other material will be installed as specified. This work is expected to involve hand labor.
Deliverable:
The Team will document the progress of the restoration activities using photographs of each site from key locations.

Tasks
Task 3 – Restoration Site Evaluation
Description of Task:
After construction and restoration is complete the Team will monitor the performance of the restoration sites for the following year.
Method/Procedure:
During this task WWG and Fred Phillips Consulting will evaluate the performance of the restoration practices by conducting site visits in each of the 12 months after the completion of the project. These site visits will include photographs from key locations. Notes on water levels, vegetation growth, and other factors will be recorded during these site visit. Any erosion or other issues will be noted and addressed if possible. Project proponents will invite local stakeholders to visit the restoration sites during this phase of the project.
Deliverable:
The Team will document the performance of the restoration sites and provide reports to the CWCB and others.

Last Updated: May 2021

Tasks

Task 4 – Project management and Grant Administration

Description of Task:

Trout Unlimited will oversee, guide, and manage the various phases of this project including grant management and administrative duties.

Method/Procedure:

TU will administer grant funds, complete invoices, and other accounting tasks, prepare progress reports, oversee and manage various phases of the project and guide in-kind contributions.

Deliverable:

The CWCB and other granting agencies will be provided with in time and accurate invoicing, project reports, project photos, and provide a single point of contact for this project

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 and shall be submitted to CWCB in excel format.

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.

Last Updated: May 2021

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

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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 to 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 C. 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.

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Water Plan Grant - Detailed Budget Estimate

Fair and Reasonable Estimate

Prepared Date: 11/29/2021
Name of Applicant: Trout Unlimited
Name of Water Project: Portland Uncompaghre Restoration Project

EXAMPLE C: Construction

Sub-task	Unit	Quantity	Unit Cost	Total Cost	CWCB Funds	In-Kind Match	Matching Funds
Task 1 -Rapid Site Analysis and restoration plan development							
Landscape Architect	HR	42	$130	$5,460	$2,730		$2,730
Civil Engineer	HR	37	$130	$4,810	$2,405		$2,405
TU staff	HR	20	$80	$1,600		$1,600	
Ward Water Group	HR	25	$80	$2,000		$2,000	
Printing	EA	3	$10	$30			$30
Sub-total				**$13,900**	**$5,135**	**$3,600**	**$5,165**
Task 2- Implement riparian restoration demonstration projects							
Mobilization	EA	2	$1,290	$2,580	$1,580		$1,000
Rifflepool Structures , excavation etc	EA	2	$3,500	$7,000	$4,980	$500	$1,520
Materials (seed, plants, etc.)	EA	38	$110	$4,180	$3,180		$1,000
Revegetation	LS	2	$3,020	$6,040	$3,890	$400	$1,750
Non Native Erradication	LS	5	$700	$3,500	$1,235	$1,700	$565
Sub-total				**$23,300**	**$14,865**	**$2,600**	**$5,835**
Task 3- Restoration Site Evaluation							
Evaluation, data gathering, etc.	HR	30	$80	$2,400		$2,400	
Sub-total				**$2,400**		**$2,400**	
Task 3 - Project management and Grant Administration							
Grant Administration TU	Percentage	15	$1,500	$1,500	$1,500		
WWG and TU	hr	30	$80	$2,400		$2,400	

Sub-total	**$3,900**	**$1,500**	**$2,400**	
TOTAL	**$43,500**	**$21,500**	**$11,000**	**$11,000**

From:	Fred Owen Phillips
To:	Cary Denison
Cc:	Tara Colpitts; Craig Tessem; russtodieck@sbcglobal.net; Rick Colpitts; Kellner Phillips; nickpeck64@gmail.com; Jason Peck
Subject:	Matching
Date:	Wednesday, December 1, 2021 11:15:45 AM

Hello Cary,

The Ward Water group is excited about potentially implementing the Portland Uncompaghre Restoration and Rewalt Plumber Ditch Infrastructure Improvement Projects.

Myself and the members of the Ward Water Group will provide the $11,000 in cash and $5,000 in inkind matches required for this project.

We greatly appreciate Trout Unlimited being a partner in this project and look forward to working with you.

Best

Fred Phillips, President
Ward Water Group
928-380-5058
fphillips@fredphillipsconsulting.com
Ouray, Colorado