



Colorado Water Conservation Board

Water Plan

Water Project Summary

Name of Applicant	Coldharbour Institute
Name of Water Project	Western Colorado Water Resource Professional Capacity and Water Education Project
Grant Request Amount	\$27,317.00
Primary Category	\$27,317.00
<i>Engagement & Innovation Activities</i>	
Total Applicant Match	\$8,764.00
<i>Applicant Cash Match</i>	\$5,000.00
<i>Applicant In-Kind Match</i>	\$3,764.00
Total Other Sources of Funding	\$19,768.00
<i>Western Colorado University</i>	\$4,500.00
<i>Western Colorado University</i>	\$8,668.00
<i>Upper Gunnison River Water Conservancy District</i>	\$6,600.00
Total Project Cost	\$55,849.00

Applicant & Grantee Information

Name of Grantee: Coldharbour Institute	
Mailing Address: PO Box 463 Gunnison CO 81230	
Organization Contact: Julie Nania	
Position/Title: Executive Director	Email: director@coldharbourinstitute.org
Phone:	
Organization Contact - Alternate: Trace Brooks	
Position/Title: Board Chair	Email: boardchair@coldharbourinstitute.org
Phone:	
Grant Management Contact: Julie Nania	
Position/Title: Executive Director	Email: director@coldharbourinstitute.org
Phone:	
Grant Management Contact - Alternate: Trace Brooks	
Position/Title: Board Chair	Email: boardchair@coldharbourinstitute.org
Phone:	

Description of Grantee/Applicant

Coldharbour Institute is a non-profit organization that provides education and services in regenerative and restorative land practices. We run education sessions and conduct research at our 334 acre working ranch to provide technical training and increase awareness of management techniques that maintain the health of productive lands while providing for ecosystem needs. Examples of our educational areas involve grazing

practices to maintain soil health, process based restoration workshops, water quality sampling and analysis trainings, etc.

Tomichi Creek runs through our ranch for nearly three miles. We have 224 acres under a wetland conservation easement with the NRCS. These conserved lands are actively grazed while being managed for wildlife habitat and ecosystem functioning.

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	38.547871
Longitude	-106.938622
Lat Long Flag	Other: Coordinates based on other boundaries or locations
Water Source	N/A- Education courses are instructed in the Upper Gunnison Basin
Basins	Gunnison
Counties	Gunnison
Districts	28-Tomichi Creek; 62-Upper Gunnison River; 38-Roaring Fork River Basin; 40-North Fork/Tribs.; 59-East River Basin

Water Project Overview

Major Water Use Type	Education
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Type of Water Project Education

Scheduled Start Date - Design 9/1/2024

Scheduled Start Date - Construction 10/1/2026

Description

Colorado's Western Slope has a deficit of professionals with key technical skills in water resource analysis and watershed restoration techniques. At the same time, there is a need to increase water awareness across our general population.

This engagement project seeks to develop water awareness and water resources technical capacity through related educational initiatives. Partners will develop an Ecological Restoration Graduate Certificate program with an emphasis on watershed health at Western Colorado University (WCU). Programming will be designed in part as modules accessible to professionals seeking to supplement their technical training. This project also includes a K-12 educational component to enhance general water awareness and create a pipeline of youth interested in water resource issues.

This proposal stems from a broad collaborative partnership working towards shared educational objectives. In Phase 1 of this project we will develop, implement and refine educational programming targeting residents within our basin at different stages of their education (K-12, graduate, and professional). When implementing the tasks described below, project partners will incorporate Statewide Water Education Action Plan (SWEAP) principles. Ultimately, implementation of this project will help advance education goals articulated in the Colorado Water Plan, Gunnison Basin Implementation Plan, and Gunnison Basin Education Action plan.

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)

Length of Stream Restored or Protected (linear feet)

Length of Pipe, Canal Built or Improved (linear feet)

Efficiency Savings (dollars/year)

Efficiency Savings (acre-feet/year)

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

Number of Coloradans Impacted by Engagement Activity

Other

It is difficult to quantify this educational project as 1) building capacity through training tends to have far broader impacts than direct impacts and 2) while this project timeline spans approximately 2 years, the impact from funding will multiply as courses are taught year after year. In the first year of implementation, we will engage 8-10 graduate students in a certificate training, at least 10 professionals in training modules, and 150 middle/high school kids in trainings.

Water Project Justification

Our project closely aligns with values articulated in the Colorado Water Plan. The educational content of this project will help create "A strong environment with healthy watersheds, rivers, streams, and wildlife" by educating program participants about watershed sciences and watershed health (including restoration ecology). It will lead to a better "informed public with creative, forward-thinking solutions that are sustainable and resilient to changing conditions" by focusing on practices that increase watershed resiliency. In addition to being compatible with these

values, it will help address a common challenge identified in the plan of improving the health of watersheds and forests through education and capacity building.

This project addresses several shared basin goals articulated in the 2023 Colorado Water Plan (see page 141 of the 2023 CWP):

- It will lead to greater capacity to improve and maintain healthy watersheds by educating individuals on restoration techniques and empowering them to actively participate in improving the health of their local watersheds. This meets the shared basin goals to “Maintain, protect, and restore healthy rivers, lakes, wetlands, watersheds, and forests”.
- This project will use engaging on actual wetland restoration projects and water quality monitoring as part of course instruction leading to the enhancement of natural ecosystems. This fulfills the shared basin goal to “maintain and improve water quality”.
- It will contribute to increased water supply resiliency, another shared basin goal, by educating individuals on the importance of wetlands in maintaining water quality and water quantity and leading to greater engagement in watershed health discussion. Ultimately this will contribute to a more sustainable water supply for Colorado.
- This project advances the shared basin goal to “Collaborate and build partnerships” in the Gunnison basin and beyond. This proposal was developed out of a broad stakeholder group; partnering with professionals from different backgrounds will lead to a holistic educational experience and more effective watershed treatment approaches.
- Another common basin goal discussed in the CWP is “Broaden education, outreach, and participation”. By working through different educational and outreach approaches, this project will promote outreach, education and public engagement to empower Coloradans with knowledge and opportunities to engage in water-related decision-making. K-12 programming will foster water literacy from a young age. Through education about water conservation practices and innovative water management strategies, students can become informed future decision-makers.

The Gunnison Basin Roundtable “seeks to further educate and involve the people of the Gunnison Basin in their role in their water future.” In doing so, the Gunnison basin aims to create educational programming that will involve active engagement with water resources to help promote increasing public understanding and participation in important water issues. The approach we are taking with this project seeks to actively engage students and professionals in actual projects inside and outside of the classroom.

This project will further several goals articulated in the Gunnison Basin Education Action Plan 2021-2022, including:

- “Collaborating with K-12 educators, especially those involved with water related activities (e.g., seminars, field trips, and public forums)”(educational platform h; page2). We will be directly collaborating with K-12 educators to develop water science and use curriculum and engage in water related field trips.
- “Partnering with related higher education facilities such as the Water Center at Colorado Mesa University, Western Colorado University’s Environmental and Sustainability Program (Water emphasis section) and Water Education Colorado (WEco) to share pertinent water resource information” (educational platform i; page2). This will be a direct partnership with Western Colorado University’s Environmental and Sustainability Program.
- “Participating in regional activities consistent with guidance provided by the Statewide Water Education Action Plan (SWEAP)” (educational platform j; page2). Curriculum will incorporate learning objectives and guidance provided by SWEAP.

Finally, our outreach materials and curriculum will address several of the educational topics prioritized in the GBRT PEPO Plan on page 5, including:

- K-12 materials promoting the understanding how water uses are interrelated
- Curriculum on technical approach to sample and engage in water quality assessments

- Considerations of how hydro-climatic influences impact watershed health and potential approaches to mitigate impacts that affect water resources
- We will discuss new and evolving regulations, permitting, river restoration, and groundwater hydrology when considering project design

Related Studies

This project will help advance the goals and objectives outlined in the Statewide Water Education and Action Plan in numerous ways.

Taxpayer Bill of Rights

N/A