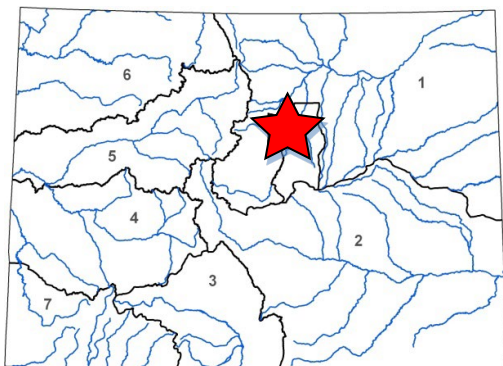


September 2023 Board Meeting

Water Plan Grant Application



L O C A T I O N	
Counties:	Gilpin & Boulder
Drainage Basin:	South Platte

D E T A I L S	
Total Project Cost:	\$397,200.00
Water Plan Grant Request:	\$198,600.00
Recommended amount:	\$198,600.00
Other CWCB Funding:	\$0
Other Funding Amount:	\$0
Applicant Match:	\$198,600.00
Project Types:	Study & Implementation/Construction
Project Category:	Watershed Health and Recreation
Measurable Results:	100 acres of restored or preserved habitat

Boulder Watershed Collective (BWC) is a non-profit, stakeholder-driven organization established to address forested watershed health, resiliency, and stewardship. BWC is requesting funding for the Boulder Creek Engagement and Innovation Project to develop local capacity amongst engaged stakeholder and watershed groups within the Boulder Creek watershed, while simultaneously advancing technical solutions for wet meadow restoration in the headwaters, and developing long-term data to guide wildfire and soil health recovery. This project advances basin goals of addressing water scarcity, protecting watershed function, implementing restoration projects.

To accomplish the project's variable goals, this project will include three distinct tasks. Task 1 will build off the BWC's existing Colorado Water Conservation Board Resilient Headwaters Planning grant to build relationships and capacity with small, local organizations who have historically lacked the staff and/or funding to engage to their full potential. Without increasing local capacity, communities have been unable to access and use available resources and unable to leverage their own strengths. By investing BWC staff time in capacity building with local organizations, BWC feels strongly that there is great opportunity to scale up local restoration potential and adoption of innovative practices on private and public lands.

Task 2 will expand on BWC's recently completed Sediment Source and Storage Study for Disaster Planning to build a Meadow Restoration program within BWC's Watershed Restoration program area. This restoration program specifically focuses on identifying, assessing, and prioritizing meadows for restoration and working with landowners and consultants to design and implement restoration projects. This task advances years of planning at individual sites and will develop a foundational approach for moving from planning to implementation in a streamlined fashion.

Task 3 will be focused on conducting long-term monitoring of a 15-acre woodchip/mycelium inoculation project on a denuded agricultural property owned by City of Boulder Open Space and Mountain Parks. This project will address the challenging biomass issue associated with wildfire mitigation, while improving soil fertility and water cycling on prairie grasslands and agricultural properties and building the opportunity for a local circular economy where forest biomass can be used to support food production. Task 3 will support BWC's "Peaks to Prairies" restoration education effort, and is financially supported, in-part, by The Climate Innovation Fund.

Funding Recommendation: This project is recommended for full funding of the \$198,600.00 requested.



COLORADO

Colorado Water
Conservation Board

Department of Natural Resources

Colorado Water Conservation Board

Water Plan

Water Project Summary

Name of Applicant	Boulder Watershed Collective
Name of Water Project	Boulder Creek Engagement & Innovation Project
Grant Request Amount	\$198,600.00
Primary Category	\$198,600.00
<i>Watershed Health & Recreation</i>	
Total Applicant Match	\$198,600.00
<i>Applicant Cash Match</i>	\$198,600.00
<i>Applicant In-Kind Match</i>	\$0.00
Total Other Sources of Funding	\$0.00
Total Project Cost	\$397,200.00

Applicant & Grantee Information

Name of Grantee: Boulder Watershed Collective
Mailing Address: 1740 Fourmile Canyon Dr. Boulder CO 80302
FEIN: 842,674,914

Organization Contact: Maya MacHamer
Position/Title: Email: maya@boulderwatershedcollective.org
Phone: 303-817-2261

Organization Contact - Alternate: Catherine Price
Position/Title: Program Manager Email: cat@boulderwatershedcollective.org
Phone: 303-449-3333

Grant Management Contact: Maya MacHamer
Position/Title: Email: maya@boulderwatershedcollective.org
Phone: 303-817-2261

Grant Management Contact - Alternate: Catherine Price
Position/Title: Program Manager Email: cat@boulderwatershedcollective.org
Phone: 303-449-3333

Description of Grantee/Applicant

Watershed Group in Boulder/Gilpin counties.

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	40.018239
Longitude	-105.326499
Lat Long Flag	Municipal centroid: Coordinates based on centroid of municipal boundary
Water Source	North, Middle & South Boulder Creeks and Coal Creek.
Basins	South Platte
Counties	Gilpin; Boulder
Districts	6-Boulder Creek

Water Project Overview

Major Water Use Type

Type of Water Project	Capacity Building
Scheduled Start Date - Design	10/30/2023
Scheduled Start Date - Construction	4/30/2027

Description

This project is aimed at expanding local capacity and scaling climate informed solutions to regional challenges. Regional challenges include drought and wildfire and associated impacts including soil degradation and erosion. This project looks at innovative solutions to improve soil health and carbon sequestration, reduce erosion and increase the absorptive capacity of soil to improve hydrological conditions in forested and grassland/agricultural areas. To accomplish these solutions, engagement activities will focus on small, local non-profits and community organizations. Building capacity within local organizations is a key component of scaling regional climate solutions.

This project will focus on three district tasks. 1) building relationships and capacity with small, local organizations,

- 2) develop and implement a meadow restoration program to build climate resilience in the upper watershed, and
- 3) conduct long-term monitoring of a woodchip/mycelium inoculation project to add tools for addressing biomass issues from wildfire mitigation projects while also building soil fertility and water holding capacity.

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)
100	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
1,000	Number of Coloradans Impacted by Engagement Activity
Other	
	No additional measurable results provided

Water Project Justification

The Colorado Water Plan (CWP) Executive Summary states that local communities know their water and landscapes best and supports grassroots planning and implementation efforts. While the CWP applies this to Basin Roundtables (p.2) it also applies to other local community groups and planning efforts. This project aims to engage local organizations to increase capacity to play a larger role in designing and implementing climate informed solutions. The CWP includes four interconnected action areas, all of which are addressed in this project: vibrant communities, robust agriculture, thriving communities and resilient planning (p. 13). The recommended partner actions for thriving watersheds include: 1) Enhance streamflows using a variety of available tools, 2) Rehabilitate streams to improve habitat, reduce erosion, and support ecosystem needs, and 3) Reconnect floodplains using nature-based solutions (p. 16). These solutions are included in task 2 of this project to develop a Meadow Restoration Program. For Robust Agriculture, this project will create opportunity for "on-farm efficiency improvements" through soil health, reduced erosion improving the water holding capacity of soil.

The primary challenge for the South Platte Basin is water scarcity (p. 119). Developing and implementing methods to slow water moving through headwater areas and retaining water in soils for longer periods of time can help reduce erosion, improve carbon sequestration, biodiversity and habitat. It is time for communities to be bold with their land use and water choices and it necessary that place based organization develop the capacity to meet the resources and needs which currently exist, in order to fully participate in decision making processes.

Watershed challenges identified in the Basin Implementation Plan which are addressed by this project include: 1) Additional data are needed to evaluate the health of streams and watersheds more completely and identify ways to improve conditions (Task 3), 2) Protection of watersheds and the forests within them requires management of large areas of land that may be owned or managed by multiple entities and may be difficult to access (Task 2).

Specific goals for the South Platte and Metro Roundtables include protecting and enhancing watershed function and encouraging implementation projects (p. 120). This project supports those goals.

Related Studies

Some of the related studies will help in the development and implementation of a Wildfire Ready Watershed Action Plan which has yet to be developed.

1. Sediment Source and Storage for Disaster Planning storymap.

Provides preliminary identification of meadow areas which can provide sediment capture in a post wildfire setting.

2. Meadow prioritization, Draft Assessment Protocol and Draft Restoration Type Scorecard. These resources were developed in support of the Sediment study above (

https://drive.google.com/drive/folders/1C88ducbrKIXz4TMD3zq79-8q78O_rWB?usp=sharing).

These resources can be used as part of the assessment and prioritization process for a BWC Meadow Restoration Program.

3. The fungal degradation of the woody by-products of forest management activities. Authors: Jeffrey Ravage , Lauren Czaplicki Ph.D.

Describes the concepts, methods and results of inoculating wood chips with fungi to reduce woody biomass.

4. Boulder County Sustainability, Climate Action and Resilience Plan (2023).

Prioritizes strategies and innovation that support ecosystem restoration and water planning activities at scale.

5. Boulder County Community Wildfire Protection Plan (update is under development).

Highlights wildfire risk, critical infrastructure and prioritizes projects for distinct areas.

Taxpayer Bill of Rights

Boulder Watershed Collective is not aware of any TABOR related issues which would preclude our organization from receiving funding.