COLORADO
Colorado Water Conservation Board
Department of Natural Resources

Colorado Water Conservation Board

Water Plan

Water Project Summary

Name of Applicant	Colorado Trout Unlimited
Name of Water Project	South Boulder Creek–Watershed Restoration PH III
Grant Request Amount	**$1,000,000.00**
Primary Category	$1,000,000.00
Watershed Health & Recreation	
Total Applicant Match	**$101,000.60**
Applicant Cash Match	$0.00
Applicant In-Kind Match	$101,000.60
Total Other Sources of Funding	**$499,000.00**
US Fish & Wildlife Service	$250,000.00
County of Boulder Colorado	$25,000.00
Goodhue Ditch & Reservoir Company	$10,000.00
Howard Ditch Company	$10,000.00
City of Boulder Colorado	$50,000.00
Marshallville Ditch Company	$10,000.00
City of Lafayette Colorado	$25,000.00
City of Louisville Colorado	$24,000.00
Davidson Ditch & Reservoir Company	$10,000.00
New Dry Creek Carrier Ditch Users by Base Line Reservoir & Land Company	$10,000.00
City of Boulder Colorado	$50,000.00
City of Lafayette Colorado	$25,000.00
Total Project Cost	**$1,600,000.60**

Applicant & Grantee Information

Name of Grantee: Colorado Trout Unlimited
Mailing Address: 1536 Wynkoop Street, Suite 320 Denver CO 80202
FEIN: 840,628,113

Organization Contact: David Nickum
Position/Title: Executive Director
Phone: 303-440-2937
Email: david.nickum@tu.org

Organization Contact - Alternate: Stephen Brant
Position/Title: Project Sponsors' Representative / Project Coordinator
Phone: 303-885-4141
Email: slbrant62@gmail.com

Grant Management Contact: David Nickum
Position/Title: Executive Director
Email: david.nickum@tu.org

Phone: 303-440-2937

Grant Management Contact - Alternate: Stephen Brant
Position/Title: Project Sponsors' Representative / Project Coordinator
Email: slbrant62@gmail.com
Phone: 303-885-4141

Description of Grantee/Applicant

CTU is a statewide organization of more than 12,000 members in 24 local chapters dedicated to conserving, protecting, and restoring Colorado's coldwater fisheries and their watersheds. CTU is coordinating with its Boulder Flycasters Chapter, which led previous South Boulder Creek (SBC) Stream Management Plan (SMP PH I & II) and Watershed Restoration – Engineering (WSR PH I) project phases. CTU works through collaboration, education, grassroots action, and on-the-ground volunteerism. Current efforts include cooperation with front range and west slope water users on "Learning by Doing" in the Colorado headwaters; partnership with Colorado Parks and Wildlife on native trout restoration; and local youth education initiatives.

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	39.932000
Longitude	-105.281000

Lat Long Flag	
Water Source	South Boulder Creek below Gross Reservoir
Basins	South Platte
Counties	Boulder
Districts	6-Boulder Creek

Water Project Overview

Major Water Use Type	Municipal
Type of Water Project	Design / Engineering
Scheduled Start Date - Design	8/1/2024
Scheduled Start Date - Construction	

Description

The proposed SBC Watershed Restoration Phase III (“WSR PH III”) – this grant application - will (a.) progress the two final design structures from PH II through the permitting process required to initiate a future construction phase; (b.) progress three structures from concept (one structure) / preliminary design (2 structures) completed in PH II to final (100%) designs; (c.) progress the three structures completing final design in this phase through the permitting process required to initiate a future construction phase of work; (d.) advance bypass and measurement modifications at two structures; and (e.) broaden previous stakeholder communications to a local public outreach and education effort to support permitting support from the stakeholders / community.

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)
36,000	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

Once construction is completed:

1. Habitat remediation proximate to the structures
2. Several thousand annual recreational users will enjoy a healthier creek in the open space lands

Water Project Justification

South Boulder Creek’s environmental and recreational attributes were called out in the South Platte Basin non-consumptive use analysis, and the stream corridor is an important environmental resource for native and valued recreational species. South Boulder Creek is also an important recreational resource close to major population areas, with extensive public access through local open space properties.

At a high level, this initiative will help advance the Colorado Water Plan (CWP) values for Vibrant Communities, for Robust Agriculture, and for Thriving Watersheds. Elements of this work address multiple of the contemplated

“partner actions” under the Water Plan: “Thoughtful Storage” (helping enable environmental benefits from anticipated Gross Reservoir environmental pool storage), “Meeting Future Water Need” (addressing identified environmental flow needs while also delivering municipal water), “Wise Water Use” (improving efficiency and resiliency of water infrastructure), “Healthy Lands” (enhancing the health of the riparian and aquatic habitats), “Engaged Partners” (collaborative planning across stakeholders), and “Integration with Other Water Sectors” (collaborations across multiple water uses and entities within the watershed)

More specifically, this program fits well within desired partner actions identified in the Colorado Water Plan:
• Thoughtful Storage – Streamflow enhancement (retiming and releases) (p. 205)
• Improving fish passage through replacement of agricultural headgates (p. 205)
• Wise Water Use – Streamflow and lake level protections for environmental needs (p. 206)
• Healthy Lands – Improving riparian and aquatic habitat (p. 206)
• Meeting Future Water Needs – Multi-purpose projects for building resiliency (p. 217)

In a similar vein, by focusing on progressing engineering designs and permitting for fish / aquatic species passage and related efforts (habitat, flow management), as well as ditch automation, this project will help progress multiple elements of the South Platte Basin Implementation Plan.

Strategy 1A: Promote implementation of identified projects for all water use categories. This project helps enable important elements of the planned mitigation for the Moffat Firming Project.

Strategy 2A: Collaboratively develop multi-purpose (e.g., municipal, industrial, agricultural, environmental, and recreational) projects. These projects may include storage, conveyance, and system interconnections that promote basin wide water use efficiency and enhance supply reliability while maintaining compliance with the prior appropriation doctrine. This project incorporates benefits not only to environmental and recreational values in South Boulder Creek, but in modernizing and improving efficiency and operation of infrastructure used in delivery of municipal and agricultural supplies.

Strategy 6C2: Encourage implementation of projects and programs identified within these stream management plans. This project advances projects identified through the South Boulder Creek stream management plan through final design and permitting.

Strategy 7C: Identify, assess, and implement actions, programs and measures that aim to protect, maintain, and improve conditions and long-term sustainability of streams, lakes, floodplains, riparian areas, wetlands, and wet meadows for self-sustaining fisheries and functional waterfowl, beaver, and other aquatic habitats. By developing and permitting designs for environmental flow management, fish passage and potential habitat improvement projects along South Boulder Creek, this project helps advance this BIP strategy.

Strategy 8.B: Identify, assess, and implement actions, programs, and measures that aim to protect and strengthen local outdoor recreation economies derived from recreational water uses while protecting sensitive habitats. The environmental and facility improvements advanced through this project will contribute to improved outdoor recreation opportunities for a stream reach with significant public access and proximate to a large population of recreationists.

• This project also complies with the criteria for state support.
It demonstrates “a commitment to collaboration” (SWP p.9-43)
• The past phases and the proposed WSR PH III will continue to facilitate the multi-purpose aspects of the Moffat Collection System IPP and provide multiple stakeholders opportunities for input (SWP p.9-44)

By helping fill the non-consumptive gap on South Boulder Creek – and insofar as this also assists in implementing required mitigation for the Moffat Collection System project, indirectly helping with the region's consumptive (sustainability) gap as well. Avoiding adverse impacts and creating positive impacts on the environment through proximate habitat improvement, water use efficiency, and facilitating a water-sharing program through which water delivered for municipal use will create environmental and recreational benefits. (SWP p.9-44)

Finally, the results of the SMP and WSR projects to date and plans going forward demonstrate "fiscal and technical feasibility" (SWP p.9-44). Local partners are contributing both cash and in-kind to the project, and the combination of Denver Water, Cities of Lafayette, Louisville and Boulder, Boulder County, and 13 ditch companies have the capacity and commitment to provide implementation funds for this and future phases.

Related Studies

1. South Boulder Creek (SBC) Stream Management Plan (SMP) PH I & II (April 2018 – September 2022) - recommendations from the SMP resulted in the SBC Watershed Restoration project sequence
2. SBC Watershed Restoration (WSR) PH I (August 2020 - September 2022) & PH II (in-process from October 2022 to complete July 2024) - resulted from SMP recommendations. Engineering design for 8 diversion structures, focused on structure modifications for flow management, aquatic species passage / channel connectivity, associated operational improvement, and proximate habitat / environmental improvements. At the end of WSR PH II, 1 structure will be under construction, 2 structures will be at 100% final design level, 3 structures will be at preliminary design level, and 2 structures will be at the conceptual design level.
3. SBC WSR Automation Demonstration (in process from October 2022 to complete April 2024) - design / build project to automate an in-main channel head gate including automated actuators, up stream/down stream/down ditch electronic flow gauges (linked to DWR DSS), solar power at the site, equipment connected through a cellular network, and operated from mobile or desktop devices. This is a proof of concept project to develop knowledge for use with other structure redesigns in the WSR project sequence.

Taxpayer Bill of Rights

None noted