

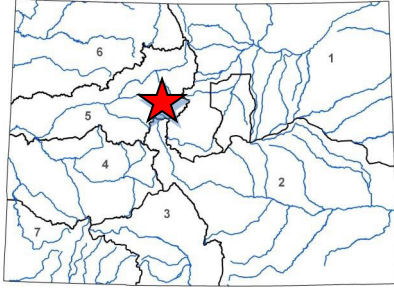


Blue River Habitat Restoration Project Blue River Watershed Group

September 2023 Board Meeting

Water Plan Grant Application

Lat: 39.62713
Long: -106.07173



LOCATION

County: Summit
Drainage Basin: Colorado

DETAILS

Total Project Cost:	\$2,857,800.00
Water Plan Grant Request:	\$425,115.00
Recommended Amount:	\$425,115.00
Other CWCB Funding:	\$0.00
Other Funding Amount:	\$2,432,685.00
Applicant Match:	\$0.00
Project Type:	Engineering/Design
Project Category:	Watershed Health & Recreation
Measurable Result:	Construction ready plans to restore 7,740 feet of stream

The Blue River Watershed Group (BRWG) was founded in 2004 by a group of community members passionate about protecting and preserving the health of the Blue River Basin in Summit County. Their mission is to promote, protect, and restore a healthy Blue River watershed through cooperative community education, stewardship, and resource management. In 2019 the Blue River Watershed Group and Trout Unlimited (TU) began a partnership to develop the Blue River Integrated Water Management Plan. Stakeholder feedback highlighted a strong interest in improving the fishery below Dillon Dam. Aquatic ecosystem function was evaluated through three years of research. The Technical Advisory Team reviewed the results of the research and identified the limiting factors on the Blue River. Poor habitat was identified as one of the most impactful limiting factors with the highest probability of restoration. The Technical Advisory Team prioritized two reaches of the Blue River as the most critical reaches based on the greatest ecological need in conjunction with public property, public use, and recreational accessibility. This project will improve three miles of the Blue River and riparian health by modifying the river channel to morphologically function under the current and future flow regimes.

This project will bring concept plans to a 100% design with construction-ready documents to implement restoration efforts on the two prioritized reaches. The proposed engineering design of the upper and lower reaches covers approximately three miles of river and will increase pool habitat, remove 17 detrimental rock weirs, increase cover habitat for fish and wildlife, minimize bank erosion through revegetation and social trail closures, improve public access, create point bars, import gravel substrate to improve wetland and spawning habitat, integrate boating recreational features such that they do not create fish passage barriers, and integrate stormwater outfalls such that stormwater is offered filtration.



This project emphasizes the importance of pre- and post-project monitoring which will continue to collect data on ecosystem function alongside fish population surveys. BRWG is contracting with TU and volunteers to complete monitoring. They are partnering with the Town of Silverthorne to design stormwater outfalls, and with a large group of stakeholders including the USFS Dillon Ranger District on project outreach and design.

Funding Recommendation: Staff recommends Board approval of \$425,115.00 to the Blue River Watershed Group for the Blue River Habitat Restoration Project through Watershed Health and Restoration category.

**COLORADO**Colorado Water
Conservation Board

Department of Natural Resources

Colorado Water Conservation Board

Water Plan

Water Project Summary

Name of Applicant	Blue River Watershed Group
Name of Water Project	Blue River Habitat Restoration Project
Grant Request Amount	\$425,115.00
Primary Category	\$425,115.00
<i>Watershed Health & Recreation</i>	
Total Applicant Match	\$0.00
<i>Applicant Cash Match</i>	\$0.00
<i>Applicant In-Kind Match</i>	\$0.00
Total Other Sources of Funding	\$2,432,685.00
<i>Bureau of Reclamation</i>	\$1,857,570.00
<i>Colorado River Water Conservation District</i>	\$425,115.00
<i>Town of Silverthorne</i>	\$150,000.00
Total Project Cost	\$2,857,800.00

Applicant & Grantee Information

Name of Grantee: Blue River Watershed Group
Mailing Address: PO Box 867 Silverthorne CO 80498
FEIN: 201,771,307

Organization Contact: Kendra Tully
Position/Title: Executive Director Email: director@blueriverwatershed.org
Phone: 7198381525

Organization Contact - Alternate: Jay Pansing
Position/Title: Board Director Email: jep@jaypansinglaw.com
Phone:

Grant Management Contact: Kendra Tully
Position/Title: Executive Director Email: director@blueriverwatershed.org
Phone: 7198381525

Grant Management Contact - Alternate: Vanessa Logsdon
Position/Title: Fundraising Coordinator Email: coordinator@blueriverwatershed.org
Phone: 7192099577

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 39.627140
 Longitude -106.071730
 Lat Long Flag Precise coordinates: Project coordinates are readily definable and precisely define the location of the project
 Water Source Blue River
 Basins Colorado
 Counties Summit
 Districts 36-Blue River Basin

Water Project Overview

Major Water Use Type
 Type of Water Project Design / Engineering
 Scheduled Start Date - Design 1/1/2024
 Scheduled Start Date - Construction
 Description
 The Blue River Habitat Restoration Project is an identified and prioritized project of the Blue River Integrated Water Management Plan. The Blue River Watershed Group (BRWG) in partnership with the Town of Silverthorne is working to improve river and riparian health on three miles of the Blue River by modifying the river channel to function under current and future flow regimes. The project prioritizes two separate upper and lower reaches as

noted in Appendix H: Location Map. With an interdisciplinary approach, the project will not only enhance habitat but also improve water quality at stormwater outfalls, increase recreational opportunities such as a kayak park, and improve public access. The goal is to approach river restoration with numerous stakeholder perspectives to ensure the ecosystem functions alongside the municipal, developmental, and recreational demands of the river. The project will start in January 2024 and conclude in December 2025, additional details regarding the project schedule and stages can be found in Appendix F: Timeline.

Measurable Results	
7,740	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	
Significant yet unknown Coloradans will be impacted by this project due to the project's location in downtown Silverthorne and easy accessibility off I-70.	

Water Project Justification	
The habitat improvement project continues to complement and further the objectives, goals and actions as described in Chapter 6 Vision and Actions for Addressing Colorado's Risks of the Colorado Water Plan, as well as the themes, goals and strategies stated in the Colorado Basin Roundtable's Basin Implementation Plan.	
The Colorado Water Plan:	
The Colorado Water Plan identifies "Vision and Actions" to address water related risks in Colorado and how both partners and CWCB (the agency) can work to address those risks. This project addresses these efforts in the areas of Vibrant Communities and Thriving Watersheds.	
The Blue River Habitat Restoration Project is supporting Vibrant Communities (The Colorado Water Plan - page 178) by creating a sustainable urban landscape in the Town of Silverthorne by working to balance ecosystem function under lower flow regimes within an attractive river corridor while integrating stormwater systems. BRWG is partnering with the Town of Silverthorne to work alongside numerous stakeholders to ensure many group priorities are factored into river design and access.	
Partner Actions (The Colorado Water Plan - page 176)	
- Healthy Lands: Landscapes should be built for a warmer and drier future and managed to optimize water efficiency. Specifically, holistically planning for urban landscapes that connect people to nature using stream habitat restoration and access to the Blue River. The partnership with the Town of Silverthorne will allow the project to capitalize on their recreational in-channel diversion water right.	

- Engaged Partners: Partner engagement at different scales is critical to the implementation of a One Water approach

Integration with Other Water Sectors: Supply and One Water strategies should seek to support the agricultural economy and a healthy environment and prepare for extremes

Agency Actions (The Colorado Water Plan - page 187)

- 1.6 Promote outdoor One Water strategies for integrated land use planning

To ensure the Blue River supports a Thriving Watershed, the project is working to increase stream health and ecosystem function while benefiting white water recreationalists, anglers, tourism, the fishery, and town infrastructure planning.

Partner Actions (The Colorado Water Plan - page 177)

- Meeting Future Water Need: Efforts to improve stream health and infrastructure efficiency benefit all water use sectors while enhancing the environment and recreation opportunities

- Wise Water Use: Resilient systems recognize social, ecological, and economic connections. Flow conditions created by trans mountain diversions and climate change are impacting the fishery below Dillon Reservoir. The fishery is a large economic driver in the area. Addressing the need for habitat improvement will offer systematic resilience.

- Healthy Lands: Shared stewardship improves watershed health and resilience across multiple jurisdictions. As a stakeholder driven process with project prioritization, the communities and entities charged with project success are varied.

- Engaged Partners: Agencies and stakeholders need to plan together, prioritize together, and act together. Conservation groups, nonprofits, land managers, water managers, and local governments are working together to plan and implement the Blue River Habitat Restoration Project.

Integration with Other Water Sectors: Efforts to improve stream health or function often benefit other water sectors.

Agency Actions (page 187)

- 3.6 Enhance use of Water Plan grant funding for watersheds, environment, and recreation

The CBRT-Updated Basin Implementation Plan

The Colorado Basin Roundtable Basin Implementation Plan Volume 2 employs the “6 Themes” and associated goals which are further supported by identified strategies. This project supports specific goals within the themes “Protect and Restore Healthy Streams, Rivers, Lakes and Riparian Areas” and “Develop Local Water Conscious Land Use Strategies”. (Colorado BIP Vol 2, Section 2, page 52)

- “Protect and Restore Healthy Streams, Rivers, Lakes and Riparian Areas” is supported by the project as its outcomes will rehabilitate damaged ecosystems, resolve impairments, support and provide quality river recreational opportunities with appropriate flows, and meet environmental and recreational needs.

- The Town of Silverthorne’s partnership supports and preserves local authorities’ management of stream health as is outlined in “Develop Local Water Conscious Land Use Strategies”.

This project aligns with the following strategies listed (Colorado BIP Vol 2, Section 2, page 53-54):

- Use the IMWP mechanism to reduce risks and enhance benefits across all sectors

- Implement projects that support the goals and are listed on the Project Database

- Plan for uncertainty in water supply using coordinated efforts for multi-beneficial projects addressing environmental and recreational needs

Identified Projects and Processes (IPPs)

- Project ID: CO-2015-0354 As part of the project scope, the Silverthorne Kayak Park engineering design is integrated into the upper reach.
- Project ID: CO-2015-0405-B As a result of the Blue River Integrated Water Management Plan, project CO-2020-0138 to assess environmental conditions associated with declining fishery between Dillon and Green Mountain Reservoirs was prioritized. The Habitat Restoration Project is the response to ecosystem function assessments and aligns with CO-2015-0390 Lower Blue River habitat improvements.

Related Studies

The Blue River Habitat Restoration Project is a prioritized project resulting from the Blue River Integrated Water Management Plan. The CWCB has been a key funder of the BRIWMP since its inception in 2019.

Blue River Watershed Group (BRWG) in partnership with Trout Unlimited (TU) was supported by the Technical Advisory Team, federal, state and local entities. See Appendix G for a complete stakeholder list. Community participation directed the project to conduct technical studies of the Blue River biotic system in order to determine the limiting factors of the declining fishery. BRWG and TU developed a thorough survey and monitoring program to scientifically determine the cause of the declining fish populations considering seasonal variation. Resultantly, the partners collected three consecutive years of data on water temperature, water chemistry, periphyton populations, aquatic invertebrate populations, and worked with the Town of Silverthorne on reducing non-point pollution caused by salts, hydrocarbons, pesticides and fertilizers. Habitat Assessments were conducted and reports generated for the upstream 10 miles of the river. These assessments included the habitat surveys, river cross section surveys, hydrologic and hydraulic analyses, and the development of recommendations focused on the improvement of habitat for the benefit of aquatic life.

Three years of sampling and surveys built a fairly comprehensive database of the biotic conditions of the river. This resulted in a list of prioritized recommended projects to enable the recovery of the Blue River fishery. A full list of the resulting projects is described in the final draft of the BRIWMP report. Habitat improvement has been identified as the first project the community and technical team aim to implement.

The Project will use the Draft Master Restoration Plan (Appendix B) developed by the Blue River Integrated Water Management Plan to communicate with stakeholders, build community support, secure financial backing, and initiate final engineering design. The report identifies chronic low flow regimes and channel morphology as the priority mitigation project.

In this design phase, river monitoring will employ the use of citizen science practices which is complementary to the CWCB's Public Education, Participation, and Outreach program goals.

Taxpayer Bill of Rights

This project is not affected by TABOR.