Blue River Watershed Group

Proposal Summary

The Blue River between Dillon and Green Mountain Reservoirs is a popular high-elevation tailwater with close access to Colorado's Front Range and is a significant contributor to the $36,000,000+ local fishing economy [1]. Unfortunately, this important reach of river has declined over the last several decades to the point that it now fails to support a healthy fishery and functioning aquatic ecosystem – leading to official delisting as a Gold Medal status water by Colorado Parks and Wildlife in 2016.

Fortunately, there is hope for the Blue River. In response to the delisting, local partners came together to better understand what was causing the decline in aquatic health and what can be done to correct it. Since 2018, Trout Unlimited and the Blue River Watershed Group have been working closely with local stakeholders, fly shops, municipalities, and resource managers to develop a science-based process to restore the Blue. This effort is known as the Blue River Integrated Watershed Management Plan (IWMP) and has already invested $250,000 during the first phase in 2019-2020.

In 2021, the IWMP project team will continue to oversee the implementation of several critical studies that will build on previous research and help partners identify the most likely impediments to the health of the Blue River – and propose actions to address them. Those key studies include seasonal macroinvertebrate and periphyton sampling, as well as an assessment of stream flow and channel morphology.

We can't do it alone. Good science takes money and IWMP partners are seeking $25,000.00 from our community of anglers, businesses, and conservationists (like you) to leverage over $185,000 in state and local funding to support critical research on the Blue River. Your contribution today can make a major difference for the future of the Blue.

[1] BBC Research and Consulting 2008. The Economic Impacts of Hunting, Fishing, and Wildlife Viewing in Colorado. Prepared for Colorado Division of Wildlife.

The Blue River contributes to the $36 million dollar local fishing economy

BUT

As of 2016, a 19-mile stretch of the Blue River has lost it's Gold Medal fishing status

We need your help

Total project cost	$ 210,000.00
Funds already raised	$ 185,000.00

$ 25,000.00 needed

Your contribution today will be matched 1:1 by CWCB funds and make a big impact for the future of the Blue River!

GETTING THE BLUE back to Gold

Project Background

2020 marked the first year of field research. Specifically, work focused on seasonal macroinvertebrate sampling, the establishment of year-round stream temperature monitoring stations, and periphyton (benthic algae) sampling. Activities also included a literature review of all existing relevant research in the Blue River watershed to date. The proposed 2021 field work will build on this research in order to help draw conclusions on **key environmental stressors** and opportunities to mitigate them.

Why Stream Flow and Geomorphology?

While stream biota is an emphasis of the 2021 field study, IWMP managers and stakeholders recognize the importance of abiotic factors such as seasonal stream flows and channel morphology (physical shape). Unaltered rivers exhibit a dynamic relationship between flow and morphology that creates a channel that provides critical habitat and refuge for biotic organisms throughout the season. While we cannot be certain that this reach of the Blue River is entirely lacking a balanced relationship between channel morphology and stream flow, this aspect of the study will identify reaches where habitat improvements such as narrowing the main channel and improving adjacent wetlands might support improved natural ecological processes.

Cost
$ 107,000.00
Funding
$ 100,000.00
Raised Remaining
$ 7,000.00

Why Macroinvertebrates?

Aquatic insect communities are an indicator of stream health. These insects are a main staple of a fish's diet, and without diverse and abundant insect life, a fishery can suffer. For this reason, the 2021 macroinvertebrate sampling will take place in spring, summer and fall to accurately depict macroinvertebrate communities throughout their life stages. Insects will be counted, identified, and compared to previously existing macroinvertebrate surveys. In addition, this data will be compared to numerous standardized indexes that indicate stream health and estimate potential forage for fish in the Blue River.

Cost
$ 70,000.00
Funding
$ 65,000.00
Raised Remaining
$ 5,000.00

Why Periphyton?

Periphyton (algae) is the foundation of any stream food web. Without healthy and diverse populations of periphyton, a river may not support a healthy and diverse invertebrate population. Without a sufficient food supply the fishery will likely suffer as a result. In 2021, periphyton sampling will be completed in concert with the macroinvertebrate field collections. Macroinvertebrates and periphyton populations will then be directly compared across all three sampling events. As demonstrated in most western streams, we expect to see changes in macroinvertebrate communities to be closely correlated to changes in periphyton community abundance and species composition.

Cost
$ 33,000.00
Funding
$ 20,000.00
Raised Remaining
$ 13,000.00

Donate Now and have your funding dollars matched!

Kendra Fuller
Executive Director
Blue River Watershed Group
info@blueriverwatershed.org

Tanner Banks
Trout Unlimited
Tanner.banks@tu.org

BRWG BLUE RIVER WATERSHED GROUP

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COLORADO TROUT UNLIMITED

Learn More at www.blueriverwatershed.org