



Blue River Watershed Group

Watershed Group Development and Watershed Restoration Planning in the Blue River Watershed in Summit County Colorado

Blue River Watershed Group
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1. EXECUTIVE SUMMARY

Date: January 19, 2021

Applicant Name: Blue River Watershed Group

City, County, State: Silverthorne, Summit County, Colorado

Project Summary:

The Blue River Watershed Group (BRWG) is focused on the protection and restoration of the Blue River watershed, located in Summit County, Colorado. Over the next two years, BRWG will continue work on the Integrated Water Management Plan (IWMP) alongside partner Trout Unlimited. The IWMP will provide a comprehensive picture of the health of the watershed and a detailed roadmap for future restoration projects within the watershed. Phase 1 of the IWMP – which collected and reviewed all available data on the health of the watershed – is nearing completion. While Phase 1 did identify a number of restoration projects that will positively impact the health of the watershed, it also made clear the need for additional data in several key issue areas. Beginning in the summer of 2021, work will begin on Phase 2 of the IWMP, which will focus on gathering and analyzing additional data that will better inform recommendations for solutions to some of the larger issues of concern to our community. For example, Phase 2 will provide critical insight into the reason for the declining trout fishery in the Blue River between Dillon Reservoir and Green Mountain Reservoir. BRWG will also continue to expand the capacity of the watershed group to lead local protection and restoration efforts. The capacity of the group will be expanded through several key efforts including expanding the role of the Executive Director from a part-time to a full-time position. The additional hours will allow the Executive Director to do much more than attend to the day-to-day administrative duties and put much more effort into building new relationships, events, and programs that will allow us to have a greater positive impact on the Blue River watershed.

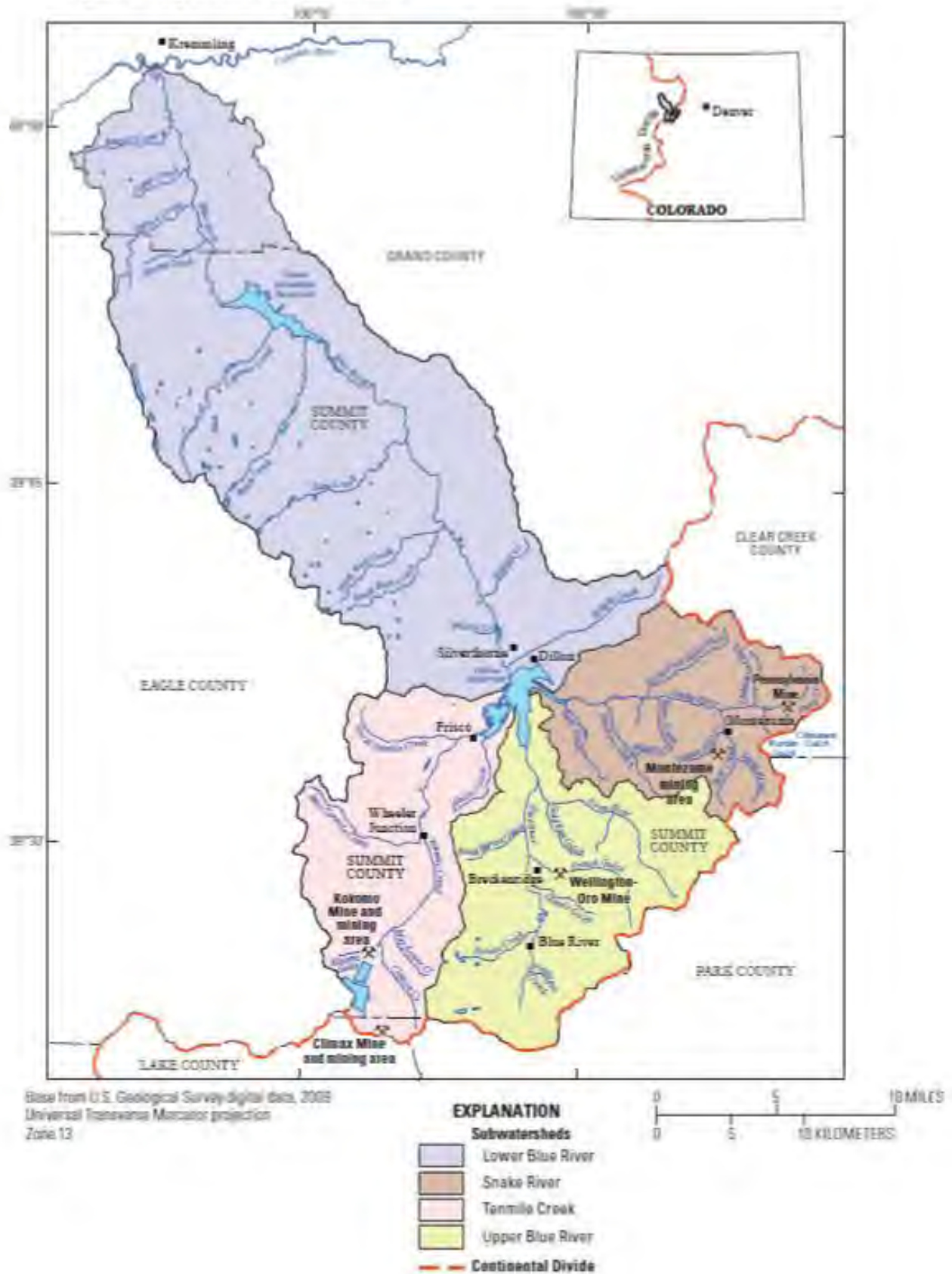
Project Dates: July 1, 2021 to June 30, 2023

Federal Facility: The Federal government owns the majority of land in the watershed.

2. PROJECT LOCATION

The Blue River Watershed Group is focused on protecting and restoring the entirety of the Blue River watershed. The watershed drains an area of approximately 680 square miles and the boundaries align primarily with the borders of Summit County, Colorado. The map below (Figure 1) shows the boundaries of the watershed in detail and includes the location of the watershed within the state of Colorado. Depending on exactly where you measure from, the Blue River watershed is approximately 80 miles west of Denver. This proximity to Denver, the presence of two large reservoirs, four ski resorts and easy fishing access make the watershed area a popular year-round tourist destination. The US Geological Survey Hydraulic Unit Code for the Blue River Watershed is 14010002.

Figure 1. Map of Blue River Watershed



3. TECHNICAL PROJECT DESCRIPTION

3.A. Applicant Category

The Blue River Watershed Group (BRWG) is applying for grant funding as an existing watershed group. BRWG was founded in 2004 by a group of local residents who wanted to ensure the watershed was protected for future generations. The group received 501(c) (3) status from the IRS on September 8, 2005. In the initial years, the group focused on holding educational sessions for the local community that focused on a host of water topics such as the Colorado River Compact, flood protection, water law, snowmaking, water and land trusts, and water conservation. BRWG continues this education effort by partnering with the Colorado River District to co-host the annual State of the River event in Summit County. The State of the River is held each spring and gives residents and watershed stakeholders predictions for the state of the watershed over the coming season. This event was held virtually in 2020 and was very well attended.

BRWG has experience in watershed planning prior to beginning the current IWMP effort. Thanks to a 2007 grant from the EPA, BRWG was able to work with the Snake River Task Force to create the Snake River Watershed Plan. Published in 2009, the plan identified many needed mine remediation projects and prioritized the worst problems. The plan was used to secure a grant in 2010 to complete three of the remediation projects identified in the plan including projects at the Silver Spoon Mine, the Delaware Mine, and Cinnamon Gulch. These remediation projects were completed in 2013.

BRWG has also been an important partner in several significant restoration projects in the watershed. In 2016, BRWG worked with the U.S. Forest Service to restore 2,800 linear feet of Tenmile Creek that had been heavily impacted over the years by historic mining activity, timber harvesting, and railroad and highway construction. This project also rehabilitated six acres of associated stream banks, wetlands, and floodplains, which enhanced floodplain connectivity, fish habitat quality, scenery, wetlands function, and improved recreational opportunities and public access to Tenmile Creek.

In 2009, Summit County Open Space and Trails embarked on an ambitious, several stage, restoration project on the Swan River, located just northeast of Breckenridge. This ongoing project will eventually restore 2.3 miles of river and 100 acres of the surrounding valley. Dredge mining in the early 20th century decimated the project area, which is now generally devoid of natural vegetation and ecological function. The restoration project is divided into four reaches, the first of which was completed in 2017. BRWG's role in this project was to complete a design plan for the upper two reaches of this project, which will be executed once the lower reaches are completed.

BRWG and Trout Unlimited have been working together since 2019 to produce an Integrated Water Management Plan (IWMP) for the Blue River watershed. The project team is nearing completion of Phase 1 of the IWMP and in the summer of 2021 will begin work on Phase 2. Phase 1 involved an extensive review of all available information regarding the health of the watershed to create a comprehensive picture of the health of the watershed and develop a list of

potential restoration projects. While Phase 1 did gather a great deal of data and several potential projects have been identified, it also revealed that more data and analysis is needed in several key issue areas. Phase 2 of the IWMP will complete these data needs to identify some solutions to issues such as the declining trout fishery between Dillon Reservoir and Green Mountain Reservoir.

3.B. Eligibility

The Blue River Watershed Group is a non-profit, non-regulatory, grassroots community organization and meets the definition of ‘watershed group’ as defined in Section 6001(5) of the Cooperative Watershed Management Act. As detailed in Section 3.A. above, BRWG has extensive experience working in partnerships to promote collaboration within the watershed and to forward results-oriented projects that significantly improve the quality of water and promote the sustainable use of water resources. Due to the significant experience working in this watershed, which is described in Section 3.A. above, BRWG is applying to this funding opportunity as an Existing Watershed Group.

3.C. Goals

The mission of the Blue River Watershed Group is to promote, protect, and restore a healthy Blue River watershed through cooperative community education, stewardship, and resource management. The group works to:

- Engage the Summit County audience and inform the community on important issues affecting the watershed
- Complete results-based projects that measurably improve the health of the Blue River watershed ecosystem
- Foster a strong network of organizations working for a more sustainable Blue River

To further this mission, BRWG is proposing activities that will help improve the organization’s operations; strengthen existing relationships and build new relationships among stakeholders; expand membership of the group; increase community awareness about watershed issues, complete a comprehensive Integrated Water Management Plan and begin preliminary project concept planning for additional restoration and conversation projects. BRWG also aims to ensure the continued sustainability of the group through further development of the organization and its role as a steward of collaborative education and partnership in the watershed.

3.D. Approach

BRWG’s first CWMP Phase 1 grant was truly transformative for the organization. The grant allowed the group to hire its first paid staff member. Having paid staff was instrumental in establishing BRWG as an expert in the field of watershed protection and restoration in Summit County. Furthermore, the addition of a paid staff member allowed BRWG to embark on the Integrated Water Management Plan (IWMP), an important planning effort for the future of water resources in our valley.

If BRWG is awarded a second CWMP Phase 1 grant, it would build directly on the progress made in the first round of funding by increasing the Executive Director position to a full-time position. Increasing the position from part-time to full-time will allow the Executive Director to accomplish two main goals for the organization. First, as a full-time staff member they will be able to further develop the watershed group. Secondly, they will be able to play a larger role in the completion of Phase 2 of the IWMP. The work proposed in this grant application will fall under Task A: Watershed Group Development and Task B: Watershed Restoration Planning and is described in further detail below.

Task A: Watershed Group Development

BRWG's board members are busy professionals who volunteer their time to oversee the work of the group. The hiring of a part-time Executive Director under the first CWMP Phase 1 grant that BRWG received has allowed the board members to shift their focus from handling administrative tasks for the group to thinking about strategy for the future of the group and helping to guide new events and other new opportunities for the organization. In 2021 BRWG plans to increase the Executive Director's hours to a full-time position. Increasing this position to full-time will provide the Executive Director enough time to complete the activities outlined below, which will contribute to the development of the group through increased diversity of funds and greater awareness of watershed issues. Additionally, a part-time position does not provide sufficient income for an individual to live in Summit County without other employment. By increasing this position to full-time, the Executive Director need only hold this job and the group will benefit from this increased focus. The activities that the Executive Director will be responsible for carrying out are described in detail below:

- *Conducting Outreach Activities:* The Executive Director will be responsible for conducting all outreach activities. The goal of these outreach activities is to increase community awareness of who BRWG is and what issues are facing our watershed, diversify our funding streams, and continue stakeholder engagement.
- o *Continued Stakeholder Engagement:* Future stakeholder engagement will focus on adding a few more members to our board of directors and continued engagement of the Advisory Committee. While a great deal of progress has been made to diversify the representation of the board of directors, there are still several areas where the board would benefit from having additional perspectives, especially those representing agriculture and local government. Secondly, the Advisory Committee that was formed under BRWG's initial CWMP Phase 1 grant will continue to play an important role in guiding the future of the IWMP and restoration projects. As such, BRWG will continue to hold Advisory Committee meetings at key points in the IWMP process and engage this valuable group of stakeholders in other matters when appropriate.
 - o As part of BRWG's stakeholder engagement plan the Executive Director will continue involvement with the Colorado Basin Roundtable. In 2005, the Colorado Water for the 21st Century Act established nine permanent roundtables, one in each of the State's eight major river basins plus the Denver Metro area. The purpose of the roundtables is to facilitate discussions on water issues and encourage locally driven collaborative solutions to water supply challenges. The

Executive Director will attend the Roundtable's monthly meetings to stay up to date on important water-related policies, regional planning efforts, funding opportunities, and more.

- *Continued Community Outreach:* The Executive Director will continue to reach out to the local community generally to inform them on the progress of our projects and gather input on their concerns for the watershed. Due to the ongoing COVID-19 pandemic, much of our outreach will continue to be conducted via email, social media, and virtual meetings. The Executive Director will also look for new ways to engage our audiences via these channels and others. Outreach conducted through BRWG's email list is particularly important, and BRWG will continue to build our email list. BRWG currently has a subscriber list of 650 people (increased from 250 during our first CWMP grant) and will continue to cultivate this audience.
- *Increased Diversity of Funding Sources:* BRWG has relied heavily on the Bureau of Reclamation for funding over the past two years. While we had expected to have a more diversified set of funding sources by this point, our efforts were severely hampered by the COVID-19 pandemic. As recovery seems to be on the horizon, we believe that another round of CWMP Phase 1 funding would support BRWG long enough to have a diverse set of funding sources fully developed. In order to achieve this, the Executive Director will:
 - Develop BRWG's fundraising events (which also help us build awareness of watershed issues) to reach more of our community and engage more local businesses as sponsors. In 2020, despite the pandemic, BRWG organized and implemented the first annual watershed cleanup. In partnership with Always Mountain Time, we raised more than \$10,000 and engaged over 200 community members to remove trash from the county's waterways. BRWG looks forward to continuing this event and engaging even more volunteers and sponsors in 2021. BRWG also holds an annual beer festival (which was cancelled in 2020 due to COVID-19) and co-hosts the State of the River. The beer festival has historically raised a small amount of funds and we plan to revisit this event in order to raise more funding. The State of the River is primarily an educational event and provides an important stage for BRWG to share our activities with the community. This event was held online in 2020, which increased our attendance. We plan to keep a virtual attendance option as part of all future State of the River events to accommodate people who live further outside of town.
 - Develop a membership program to encourage individual donors to give a small amount annually. In return for their annual donation, members will receive small perks, which are yet to be developed, but may include discounts at local businesses, invitations to member's only events, and the like. BRWG will also develop a similar program for local businesses to become members.
 - Cultivate individual donors who wish to contribute at a higher level than the annual membership program. These are people who the Executive Director will develop personal relationships with and help them leave a legacy with their philanthropic giving through protecting their local watershed.
 - Secure new grant funding from corporate foundations and private foundations. There are many small to medium sized private and corporate foundations that

focus on environmental issues throughout Colorado. The Executive Director will develop individual proposals to secure funding from these sources.

Task B: Watershed Restoration Planning

Completion of Phase 2 of the IWMP: Phase 1 of the IWMP gathered and reviewed all available data on the watershed. While Phase 1 did identify some potential project concepts, it also found that more data is needed before a full project list can be compiled. Accordingly, the project team has developed a list of tasks that will need to be accomplished during Phase 2 of the IWMP.

These are as follows:

- *Task 1:* Develop scientifically valid restoration strategies through evaluation of existing stream flows – both temporally and quantitatively – in relationship to the geomorphology of the stream. This analysis will help develop restoration strategies that take into account the fact that current stream flows are lower than they were decades ago and that the aquatic habitat may benefit from an altered stream channel that used the current stream flows more effectively.
- *Task 2:* Continue macroinvertebrate sampling, following the same protocol from 2020 at the eight sites sampling occurred at in 2020. We will also begin sampling at two new sites. This will help determine whether or not the bug population is healthy enough to support a thriving fishery.
- *Task 3:* Evaluate temperature profiles in Dillon Reservoir in relation to Blue River temperature data to provide a comprehensive picture of both stream and reservoir seasonal temperature variations and assess that data in terms of biological limitations for the aquatic community. The goal of this task is to identify whether or not it would be possible to manipulate the water temperature in the river in a way that would improve the spawning temperatures for trout without infringing on Denver Water’s operations of the dam.
- *Task 4:* Conduct a statistically valid angler creel census to provide a baseline value that could be used to help judge the effectiveness of future restoration projects.
- *Task 5:* Continue to work closely with stakeholders including the Advisory Committee and the Blue River Enhancement Workgroup to ensure the BRIWMP project stays on track with community priorities and concerns. Members of these groups also provide critical expertise in a wide variety of subject areas.
- *Task 6:* Integrate the findings of Phase 2 into an updated BRIWMP.

4. EVALUATION CRITERIA

4.A. Evaluation Criterion A – Watershed Group Diversity and Geographic Scope

4.A.1 Sub-criterion No. A1. Watershed Group Diversity

Description of Affected Stakeholders

The Blue River watershed is a vital headwaters region and there are many stakeholders vested in its management and use. These stakeholders come from a number of different sectors including private landowners, Federal, State and local governments, tourism and recreation, mining and industry, real estate development, agriculture, hydropower production,

environmental conservation, emergency services, and transportation. Following is a list, though not exhaustive, of some of the major stakeholders in the watershed.

ENTITY	SECTOR
U.S. Bureau of Reclamation	Federal Agency (Water Storage, Conveyance and Hydropower)
U.S. Forest Service	Federal Agency
U.S. Fish and Wildlife Service	Federal Agency
Bureau of Land Management	Federal Agency
Summit County	Local Government
Lake County	Local Government
Grand County	Local Government
Town of Frisco	Local Government
Town of Dillon	Local Government
Town of Silverthorne	Local Government
Town of Breckenridge	Local Government
Northwest Colorado Council of Governments	Association of Local Governments
Summit Water Quality Committee	Intergovernmental Committee
Colorado Department of Transportation	State Agency, Transportation
Colorado Parks and Wildlife	State Agency
Colorado River District	State Agency
Denver Water	Water Provider
Heeney Water District	Water Provider
East Dillon Water District	Water Provider
Dillon Valley Water District	Water Provider
Snake River Water District	Water Provider
Breckenridge Red White & Blue Fire Protection District	Emergency Services
Summit Fire & EMS Authority (includes Lake Dillon Fire Rescue & Copper Mountain Fire Department)	Emergency Services
Friends of the Dillon Ranger District	Environmental Conservation
Snake River Task Force	Environmental Conservation
Friends of the Lower Blue River	Environmental Conservation, Agriculture
High Country Conservation Center	Environmental Conservation
Vail Resorts	Tourism/Recreation, Real Estate Development
Copper Mountain Resort	Tourism/Recreation
Arapahoe Basin Ski Resort	Tourism/Recreation
Trout Unlimited	Tourism/Recreation, Environmental Conservation
Climax Mine	Mining

Blue Valley Ranch	Agriculture
Shadow Creek Ranch	Agriculture

Current Group Membership

BRWG’s Board of Directors currently includes individuals representing affected stakeholders including real estate development, water resources, recreation, municipal water users, trans basin diverters, and more. Their expertise includes subject matter experts in fisheries and water resources, expertise in research methodologies and best practices, hydrology, and local water use. BRWG is still seeking an additional board member from the agricultural and local government sectors. The current board members are listed in the chart below. All but two of these current board members were recruited during the first CWMP Phase 1 grant that BRWG received, greatly increasing the diversity of the group membership (the president and vice president are long standing members of the board).

Name	Board Position	Occupation
Jay Pansing	President	Real Estate Lawyer
<p>Jay has practiced real estate law in Colorado for over 40 years. He has an extensive background in access and rights-of-way laws, including RS 2477 roads, and has represented several landowners who have made conservation easement grants. Jay has served on the conveyancing subcommittee of the Real Estate Section of the Colorado Bar Association as well as the Advisory Committee of Attorneys Title Guaranty Fund. He was part owner and general counsel for New West Title Company.</p>		
Peggy Baily	Vice-President	Water Resources Engineer, registered Professional Engineer in the State of Colorado, Certified Floodplain Manager
<p>Peggy has a diverse range of experience specializing in water resources and aquatic restoration including the award-winning Blue River Restoration in downtown Breckenridge and numerous aquatic habitat enhancement projects for endangered fish species on the Colorado and Green Rivers. Peggy has extensive experience in resilient design and stabilization of heavily impacted rivers from human disturbance such as mining, and flood related damage. Peggy has served on the BRWG board since 2005.</p>		
Tim West	Member	Owner, Breckenridge Outfitters
<p>Tim is the owner of Breckenridge Outfitters, an Orvis endorsed fishing guide service and outdoor retail store in Breckenridge Colorado. Tim grew up in Oklahoma and attended Oklahoma University before transferring to Colorado Mountain College, where he focused on Sustainable Studies. Tim has a passion for wildlife conservation and preserving our precious water resources and environment, and he tries to volunteer his time with like-minded organizations any chance he can get. Tim loves to fish, hunt, hike, and enjoy the beauty of our great state with his family. He resides in Blue River, where he is a member of the Citizen Advisory Committee and has lived in Summit County since 2005.</p>		

Scott Price	Member	Executive Director, Snake River Water District
<p>Scott is the Executive Director for the Snake River Water District. He is passionate about water issues in the Colorado Rockies. As the CEO of Quality Water Management, he oversees drinking water testing, water rights accounting, construction of water treatment facilities, long-term capital planning, and financial reporting. He is active in local service organizations such as the Rotary Club, and he enjoys skiing, hiking, and biking.</p>		
Libby Pansing	Member	Postdoctoral Researcher – University of Iowa
<p>Libby is a quantitative ecologist with a background in forestry and alpine plant community ecology. She completed her doctorate at the University of Colorado Denver and has studied Rocky Mountain Ecosystems for over a decade. She is currently a postdoctoral researcher with the University of Iowa working remotely from Colorado. Libby is passionate about restoring healthy ecosystems and applying best science practices to land management, a passion ignited while working as Assistant to the Director of the Whitebark Pine Ecosystem Foundation. Libby grew up in Denver before moving to Summit County for high school.</p>		
Brad Stuhr	Member	Managing Member and Owner – Stuhr & Associates
<p>Brad is the managing member and owner of Stuhr & Associates, LLC a Frisco based CPA firm specializing in small business taxation as well as nonprofit auditing and tax services. Brad is a Nebraska native and a graduate of the University of Nebraska but has been a Summit County resident since 1982. Brad has been active in local nonprofit organizations such as Lord of the Mountains Church, Team Summit, Summit County Youth Baseball and American Legion over the years, while raising four children who are now proud residents of Colorado.</p>		
Tyler Johnson	Member	Operations Supervisor at Dillon Reservoir – Denver Water
<p>Tyler Johnson is the Operations Supervisor for Denver Water, where he oversees the operations and maintenance of the Dillon Reservoir. He has been working in the water industry since 2007 and has achieved some of the highest levels of certification in the industry. Tyler has lived and worked in Summit County since 2019.</p>		
Tanner Banks	Member	Project Manager – Trout Unlimited
<p>Tanner grew up in Summit County and after nearly a decade in Montana, is once again calling Colorado home. During his tenure in Montana, he received his degree in Aquatic Ecological Restoration from the University of Montana. After school he spent several years focused on the conservation of native trout species of Western Montana and overseeing terrestrial and aquatic restoration projects. Tanner is a project manager for Trout Unlimited and is actively involved in restoration and reclamation work throughout the region. Tanner joins our board enthused about restoring the resiliency of his home watershed. He appreciates deep snow, wild fish, good friends, and community.</p>		

Mike Looney	Member	Senior Slope Maintenance & Snowmaking Manager – Copper Mountain
<p>Mike grew up in Springfield, Missouri, where he spent his time going to the lake and playing in the nearby rivers and streams. He moved to Frisco in 1997 and began working for Copper Mountain as a snowmaker and groomer. He has worked his way up over the years, being promoted to Supervisor in 2005 and Slopes Manager in 2007. In 2019, Mike was promoted to his current position of Senior Slope Maintenance & Snowmaking Manager. Mike brings a wealth of experience in the relationship between our watershed and the ski industry to the BRWG board. He still loves the mountains and being outside as much as possible, and skis 120+ days a year.</p>		

Targeting Affected Stakeholders

During BRWG’s first CWMP Phase 1 grant, the Executive Director targeted affected stakeholders throughout the watershed, successfully building a diverse Advisory Committee with more than 40 members that has provided critical insight into the IWMP process and will continue to be directly involved in Phase 2 of the IWMP. BRWG Board Member Tanner Banks has also undertaken direct outreach to the agricultural community. Having grown up in the area, he had been able to get meetings with this group of stakeholders when our Executive Director was unable to. Mr. Banks will continue to develop relationships with the group on behalf of BRWG.

The Executive Director will continue to keep the Advisory Committee apprised of all developments with the IWMP and will recruit new members where appropriate. BRWG will also hold a community meeting this spring when the Phase 1 IWMP report is complete to garner feedback from our community.

4.A.2. Sub-criterion No. A2. Geographic Scope

Geographic Boundaries and Scope:

BRWG’s work includes the full geographic scope of the watershed. The watershed aligns, almost in its entirety, with the boundaries of Summit County. The map below (Figure 2) shows the location of the major population centers, road corridors, and water storage facilities within the county. About 83% of the land in Summit County is publicly owned, roughly 80% by the U.S. Forest Service and BLM, while the State of Colorado, Denver Water Board, and local governments own around 3%. The remaining 17% are private lands.

The basin is also home to four major ski resorts: Breckenridge, Keystone, Arapahoe Basin, and Copper Mountain. Major population centers in the county are also located near these resorts in the towns of Dillon, Silverthorne, Frisco, and Breckenridge (which you can see noted on the map below). Most stakeholder groups have interests that range throughout the county and are not bound by geographic locations. The USGS Hydrologic Unit Code for the Blue River Watershed is 14010002.

Figure 2. Summit County Basin Map



Extent to which the planned membership of the watershed group will represent the full geographic scope of the area:

BRWG has been involved in projects that span all three of the basins in the Upper Blue River watershed (e.g. Snake River Watershed Plan and restoration projects, Tenmile Creek restoration project and the Swan River restoration project in the Upper Blue Basin). BRWG would also like to explore projects in the Lower Blue, particularly those affecting water quality and recreation.

By completing Phase 2 of the IWMP, BRWG will be able to identify the project and issues where we can add the most value to the lower Blue River.

The current board possess knowledge of the full geographic scope of watershed, including members who live and/or work throughout the region. The current board membership lives and works in different communities throughout the watershed including Frisco, Silverthorne, Dillon, Breckenridge, Blue River, and Copper Mountain. The group has had trouble gaining traction with the agricultural community, which represents the northern area of the watershed. However, with our newest board member Tanner Banks having taken on responsibility for this outreach over the past summer we have had much better response and believe this will help the group find a board member who represents both that geographic area and the stakeholder area of agriculture.

Ensuring the watershed group will target stakeholders representing the full geographic scope:

The Advisory Committee members represent a very wide geographic scope of stakeholders. However, BRWG will continue to target stakeholders located throughout the watershed through outreach activities including conducting site visits, holding individual stakeholder meetings, and public engagement. With the current COVID-19 pandemic restrictions all meetings are being held virtually which is helpful when appealing to people across a wide geographic area.

4.B. Evaluation Criterion B – Addressing Critical Watershed Needs

4.B.1. Sub-criterion No. B1. Critical Watershed Needs or Issues

Historic Dredge Boat Mining

From 1889 to 1942, dredge boat gold mining was conducted in the Upper Blue River watershed, significantly affecting the Blue River and Swan River. The mining operations required the dredging of the river alluvium to extract gold. The alluvium was sorted by size with the fines being washed downstream and the larger material, ranging from approximately 4 to 12 inches in diameter, placed in large piles within the riverbed and floodplain, often extending 20 to 30 feet above the valley floor. What remains are straight, trapezoidal channels with tailings causing portions of the rivers to flow subsurface, conveyed downstream through the highly porous gravel and cobble material.

In general, dredge mined sites are very unaesthetic, and they are often mined for aggregate, leaving expansive areas of leveled dredge rock. The dredged sites are generally devoid of vegetation and have minimal value for riparian and wildlife habitat, fisheries, or natural ecosystem functions and little to no connectivity for aquatic life with the reaches above and below the sites. The tailings are also highly mobile, resulting in very unstable riverbeds and banks. The sites are typically extensive in size, in both width and length of river corridor, and require extensive planning and coordination between multiple public and private landowners. They also require extensive permitting and a significant design effort. Portions of several affected reaches on the Blue and Swan Rivers have been restored or partially restored, but critical reaches remain to be addressed.

Historic Hard Rock Mining

During the 1800's, hard rock mining for zinc, lead, silver, copper, and gold was conducted in the Upper Blue River watershed. Underground workings (tunnels, adits, drifts, stopes, and crosscuts) from these mine sites are significant sources of metals loading as groundwater and surface water seeps through these workings and associated waste piles. The result is heavy metal and mineral contamination of the streams, compromising source water quality in all three major tributaries of the watershed. The Snake River basin drains a heavily mineralized area that had significant hard rock mining operations in the late 1800's and has continued to have some ongoing mining related activities since then. The Snake River and several of its tributaries are on the Colorado 303(d) listing as streams that do not meet water-quality standards due to low pH and high concentration of four trace metals: dissolved cadmium, copper, lead, and zinc.

Much has been done to study the problems in the Snake River watershed, beginning around at least the early 1970s. Most of this work has focused on the Peru Creek tributary, which is home to the Pennsylvania Mine, the largest, longest serving mine in the watershed and targeted as the largest source of anthropogenic pollution. The BRWG, in cooperation with the Snake River Task Force, developed the Snake River Watershed Plan to contextualize and summarize the problems that exist and the actions taken to try and solve the water-quality problems in the watershed. The Plan identifies and prioritizes the numerous sources of water-quality degradation and identifies ten "Priority One" potential remediation-project sites. At each selected site, an estimate was made of the contribution of annual zinc load from that site. The Plan then proposes Best Management Practices (BMPs) at each of these sites and estimates the level of zinc removal that might be possible if remediations were implemented. Many sites remain at the planning stage, but remediation has begun at several others.

Mountain Pine Beetle Epidemic and Forest Health

The mountain pine beetle has destroyed significant areas of lodgepole pine forest throughout Colorado, including within the Blue River watershed. Normally, these insects attack old or weakened trees, allowing for the development of a younger forest in a balanced, sustainable manner. However, the pine beetle has thrived in the last few decades because of mild winters and forests highly populated with mature lodgepole pine. The result is significant deforestation with the increased risk of catastrophic wildfire, erosion control issues and threats of mudslides.

Impacts from Roadways

Roadways and paved surfaces can lead to excessive sediment loading into streams, particularly over the last thirty years of I-70 operation in the Straight Creek corridor. Nine miles of the mainstem of Straight Creek parallels I-70 from the point where it crosses under the west portal of the Eisenhower/Johnson Tunnel to the confluence with the Blue River below Dillon Dam. Straight Creek is a shared water source for the Town of Dillon and the Dillon Valley Metropolitan District as well as for surface water diversion for the Denver Water Board.

Sedimentation is caused by both cut and fill slope erosion and winter maintenance practices when traction sand is applied to I-70 for road safety. Relatively small contributions of sediment come from ambient loading of the surrounding watershed. Sediment is transported into the natural environment from the I-70 right-of-way by surface water runoff, depositing into streams, lakes, and wetlands. Excessive sediment loading can impair water quality, increase maintenance

necessary at the drinking water system intakes and plants, increase nuisance nutrient concentrations, reduce fish habitat, and inundate wetland vegetation. For the past couple of decades, the Colorado Department of Transportation has been incorporating BPMs into their road maintenance practices and instituting sediment control and mitigation measures. Hazardous materials also travel along this same route, and along U.S. Highway 6 over Loveland Pass, creating the potential for spill events which can impact both surface and ground water.

Invasive and Nuisance Aquatic Species

The watershed is home to a number of invasive and nuisance aquatic species. For example, the northern pike has been found in Green Mountain Reservoir. These fish are aggressive predators and could have significant impacts on the other fish in the reservoir and, if they were to escape and take up residency downstream. If the fish were to make it to federally listed critical habitat in the Colorado River, they would prey upon the state's endangered native fish species; the Colorado pikeminnow, humpback chub, razorback sucker, and bonytail.

Proximity to the front range and large volumes of boaters make both Dillon Reservoir and Green Mountain Reservoir high-risk locations for potential infestation from zebra and quagga mussels. These freshwater mollusks require high levels of nutrients from the water, including high quantities of plankton, which also act as food for juvenile fish. The mussels create food chain and water quality degradation concerns, can cause severe damage to existing water infrastructure and are almost impossible to remove. For Green Mountain Reservoir in particular, funding for boat inspection and other prevention measures has gotten harder to come by due to budget cuts over the past few years at the U.S. Forest Service and Colorado Division of Parks and Wildlife (CPW).

Loss of Gold Medal Fishing Status

Gold Medal designation is the highest ranking a fishery can achieve in Colorado. These fishing areas have been designated by the CPW as providing the necessary water quality and habitat to support healthy populations of large trout. They are defined as being able to produce 60 pounds of trout per acre, and at least twelve trout over 14 inches long per acre. Only 322 miles of Colorado's 9,000 miles of trout streams, and three lakes, carry the "Gold Medal" designation. Gold Medal fisheries are protected with special regulations limiting harvest numbers and the size of fish allowed to be kept in order to protect quality fly fishing in the future.

In 2016, a 19-mile stretch of the Blue River from Dillon Dam, through the Town of Silverthorne to Green Mountain Reservoir, lost its Gold Medal designation. Some limiting factors and challenges that reduce the potential for trout growth include water temperatures in Lake Dillon that are below the ideal temperature range for trout feeding, narrowing the window of time for trout to grow and lower nutrient levels in the water, with less insects for the fish to consume. A Gold Medal Committee was formed to further address the river's Gold Medal status. The IWMP is also seeking to address this complex issue.

Water Availability

Each year approximately 75,000 acre-feet of water is diverted from the Blue River watershed to the front range including: Denver Water through the Roberts Tunnel, Colorado Springs through the Con-Hoosier Tunnel, City of Golden through the Vidler Tunnel, City of Englewood through

Boreas Ditch No. 2, and MillerCoors through the Straight Creek Tunnel. On average, in Colorado, a total of 500,000 acre-feet of water is diverted from the Colorado River basin. Trans-mountain diversion of water is 100% consumptive for the basin-of-origin and results in diminished flows and reduced water availability, reduced assimilative capacity, and can have negative impacts upon aquatic and terrestrial biota. Diversions can be a contentious issue among stakeholders, particularly when new diversion projects are introduced or during periods of drought.

A prolonged drought in the Colorado River basin from 2002 – 2012 raised the specter of a Colorado River Compact Call, where the Upper Basin, which includes all of Colorado, would have to send water downstream under the provisions of the 1922 Colorado River Compact, and the Upper Basin would be faced with dramatic curtailment measures. The impacts and increasing likelihood of drought and the potentiality for a Colorado River Compact Call are of significant concern within the watershed and diversion communities.

4.B.2. Sub-criterion No. B2. Developing Strategies to Address Critical Watershed Needs or Issues

Over the past 16 years, BRWG has proven to be an effective partner in the stewardship of the watershed. BRWG proposes to use funding from this opportunity to expand the Executive Director position to full-time allowing them to spend more time on Phase 2 of the IWMP while continuing to build partnerships and expand our funding base.

Task A: Watershed Group Development

BRWG will continue to build upon the efforts taken over the past few years to build a diverse Board of Directors and Advisory Committee by cultivating these relationships with our existing members and building relationships outside of these groups to find additional, valuable perspectives. The group will also build upon new partnerships developed over the past few years to create lasting relationships. For example, in 2020 BRWG partnered with local media company Always Mountain Time to put on the first annual River Cleanup. It was successful despite COVID-19 related difficulties and we are excited to build on this event in 2021 and continue to develop this partnership with Always Mountain Time.

While establishing relationships with conservation organizations that advocate for balanced stewardship and use of public lands or advocating for increased access to public lands is not something that BRWG is actively pursuing, should the opportunity arise, we would be interested in supporting such endeavors. We do occasionally partner with other local conservation groups like High Country Conservation and Friends of the Dillon Ranger District when the opportunity presents itself.

Task B: Watershed Restoration Planning

Much of the work to gather information regarding the critical issues and needs of the watershed was completed through stakeholder and public outreach during Phase 1 of the IWMP. The IWMP project team also compiled and reviewed all available, relevant literature and data that was related to the watershed. This data came from many sources, some of which include Denver Water, U.S. Forest Service, independently contracted research firms, Colorado Parks and

Wildlife, and more. All data and information sources will be thoroughly cited in the appendices of the final IWMP report. During Phase 2 of the IWMP, BRWG will obtain some additional data by hiring an outside consultant to do some fieldwork for items such as macroinvertebrate sampling. For other data and required data analysis the project team will perform the data gathering and analysis. While these items (particularly contract work) will not be paid for out of BOR funds, the Executive Director will spend a significant portion of their time overseeing these actions, so it is relevant to mention them here.

While there is not much current conflict in our watershed, BRWG will always seek to identify opportunities to find mutually acceptable solutions for watershed and river protection and enhancement, such as facilitation of an agreement for a conservation easement. Most of the major issues in this valley are governed by formal agreements (issues such as trans-basin diversions) and therefore are no longer causing conflict. For other smaller issues that may cause disagreement as to the best way to handle them, BRWG hopes that the clearly described science and data in the IWMP will provide a clear way forward and help find mutually agreeable solutions to problems faced throughout the watershed.

BRWG will host a set of collaborative meetings to review the groups findings from its outreach and information gathering activities and to develop a priorities matrix of needed restoration and conservation projects. BRWG will then select one or more projects and create working groups to develop partnerships, funding strategies, and contract with a Consultant to develop initial site-specific concept plans. While BRWG had planned to complete this work as part of Phase 1 of the IWMP, more information is needed before we are able to propose projects to some of the larger issues in the watershed (namely the declining fishery between Dillon Reservoir and Green Mountain Reservoir).

While the group has developed watershed plans in the past, the IWMP has been a much larger undertaking but was still able to build upon knowledge gained in past planning efforts. Now, Phase 1 of the IWMP is almost complete and the work done over the next two years will build directly upon that work. Phase 2 of the IWMP will be combined with Phase 1 to produce one cohesive report.

Task C: Watershed Management Project Design

While the IWMP will propose some possible restoration projects that address the main issues affecting our watershed these will be only in the concept phase at the completion of this stage. It is not within our current scope to create fully designed restoration projects. That will come after Phase 2 of the IWMP has been completed.

4.C. Evaluation Criterion C – Implementation and Results

4.C.1. Sub-criterion No. C1. Project Implementation

The timeframes below are primarily within the proposed grant period. However, the main item we are requesting funds for is the Executive Director salary. Some of the activities under Phase 2 of the IWMP will begin outside of the BOR grant period, but will not be supported with BOR funding.

ACTIVITY		DATES	MILESTONES	COST
1	Task A: Watershed Group Development			\$53,877
	Expand Executive Director to Full-Time	7/1/2021 – 6/30/2023	The Executive Director will work full-time to further all BRWG goals and projects.	\$50,000 – Salary \$3,994 – Employer Tax
	Stakeholder Engagement	7/1/2021 – 6/30/2023	<ul style="list-style-type: none"> • Hold at least two Advisory Committee meetings each year until completion of the IWMP to continue to engage this critical group of stakeholders. • Recruit one new board member in each grant year to find representation for the agricultural and local government groups of stakeholders. 	Included in Executive Director Salary
	Colorado Basin Roundtable Involvement	7/1/2021 – 6/30/2023	<ul style="list-style-type: none"> • Attend monthly Colorado Basin Roundtable meetings to stay up to date on regional planning efforts, funding opportunities and more. 	Included in Executive Director Salary
	Fundraising Event Development	7/1/2021 – 6/30/2023	<ul style="list-style-type: none"> • Grow the annual watershed cleanup into a large signature event, and significant fundraiser for the group. • Raise \$15,000 in sponsorships in 2021 from this event. • Recruit 250 volunteers for the cleanup event in 2021. • Revamp the annual beer festival to reach around 200 attendees. 	Included in Executive Director Salary
	Develop Membership Program	7/1/2021 – 6/30/2023	<ul style="list-style-type: none"> • Develop a membership program with compelling benefits for both individuals and businesses. • Raise \$1,000 from this program in 2021. 	Included in Executive Director Salary
	Cultivate Individual Donors	7/1/2021 – 6/30/2023	<ul style="list-style-type: none"> • Build a program to cultivate individual donors who would like to make a major contribution to the health and protection of the watershed. Secure at least one major donation from an individual in 2021 (more than \$500). 	Included in Executive Director Salary

Secure New Grant Funding	7/1/2021 – 6/30/2023	<ul style="list-style-type: none"> Secure at least one grant of \$5,000 or more from a new foundation source (corporate or private) in 2021. 	Included in Executive Director Salary
2 Task B: Watershed Restoration Planning			
Assess stream flows in relation to geomorphology to provide recommendations for restoration	4/1/2021 – 9/30/2021	<ul style="list-style-type: none"> A report will be prepared after the assessment to be included in the IMWP along with project concepts for improving habitat in relation to stream flows. 	<p>Total Estimated Cost of Phase 2 IWMP: \$204,880</p> <p>Funds for Task B are requested from other sources. We have included them here though because this will be a significant portion of the Executive Director's work over the next two years. These activities are subject to change based on Advisory Committee feedback.</p>
Continue Macroinvertebrate Sampling	4/1/2021 – 6/30/2023	<ul style="list-style-type: none"> Macroinvertebrate sampling will continue for several years to monitor the condition of bug life and any changes as other projects are implemented. 	
Assess Temperature Profiles in Lake Dillon	4/1/2021 – 6/30/2021	<ul style="list-style-type: none"> A report will be prepared at the end of the summer to be included in the IMWP. The report will indicate whether the temperature profiles in the lake and the river could be manipulated in a way that could benefit aquatic life in the river. 	
Implement Angler use Creel Survey	3/1/2021 - 9/30/2021	<ul style="list-style-type: none"> An angler use creel survey will be implemented to set a baseline value for fishing use on the Blue River. 	
Integrate Phase 1 and Phase 2 of the IWMP	Jan. 2022 to July 2022	<ul style="list-style-type: none"> The results from Phase 2 (the tasks listed above) will be integrated into the Phase 1 report to create one comprehensive report. 	

4.C.2. Sub-criterion No. C2. Building on Relevant Federal, State, or Regional Planning Efforts

BRWG is integrally involved with state and regional planning efforts. As such, our proposed activities will complement and contribute to the goals of the 2015 Colorado Water Plan. The group also works closely with the Colorado Basin Roundtable (CBRT) on the regional Basin Implementation Plans. As part of the Basin Implementation update process the Round Table updated the project list that is home to all of the projects for the entire basin that the CBRT is

concerned with. BRWG was integral in helping to update and clarify the list of projects for our watershed. The Executive Director will continue to be involved with the Roundtable.

4.D. Evaluation Criterion D – Department of the Interior and Bureau of Reclamation Priorities

Creating a stewardship legacy second only to Teddy Roosevelt:

Through the IWMP BRWG and Trout Unlimited strive to identify best practices to help Summit County manage the water resources while adapting to a changing environment. For example, BRWG plans to analyze the river channel to determine whether or not it should be altered to make for better riparian habitat given that stream flows are now much lower than they were many years ago. Given current and future drought conditions coupled with trans-basin diversions, we are unlikely to see higher flows in the river; therefore, we have to adapt to the resource we have now. We hope that this emerges as a strategy to address ongoing draught in the west generally and our watershed more specifically. While BRWG is not currently focused on advocating for access to public lands, this is in line with our mission and should the opportunity arise to advocate with other conservation organizations, we certainly shall not hesitate to throw our support behind that cause.

Modernize Infrastructure:

We have heard from our outreach to agricultural water users in the area that many of their head gates and other irrigation infrastructure is out of date and needs work. We anticipate that some ditch improvement projects will be recommended in the final IWMP. BRWG plans to assist those agricultural users who would like our help in securing funding to modernize their irrigation infrastructure.

Positive impacts to federally threatened or endangered aquatic or riparian species:

The Upper Colorado River Basin is home to four endangered native fish species, the Colorado pikeminnow, humpback chub, razorback sucker, and bonytail. These endangered fish are found only in the Colorado River system. Green Mountain Reservoir is part of a coordinated release program for the Upper Colorado River Endangered Fish Recovery Program. Reclamation and Upper Basin water users manage releases from 10 reservoirs to provide spring and base flows to assist with endangered fish recovery. Any efforts within the watershed that benefit Green Mountain Reservoir (e.g. increased storage, enhanced water availability/conservation, improving water quality/security, improving long-term sustainability/resilience) stand to benefit the endangered Colorado river fish species.

5. ENVIRONMENTAL AND CULTURAL RESOURCES COMPLIANCE

BRWG will not engage in monitoring, measuring or fieldwork activities utilizing these grant funds. These endeavors will be undertaken under separate funding resources. BRWG will research and summarize environmental compliance for project concepts identified in the IWMP.

6. REQUIRED PERMITS OR APPROVALS

BRWG does not intend to do work under this grant that requires permits or formal approvals but will research and summarize permitting and approval requirements for project concepts.

7. PROJECT BUDGET

TABLE 1: Total Project Cost Table

Funding Source	Amount
Costs to reimbursed with the requested federal funding (BOR)	\$100,000
Costs to be paid by the applicant (BRWG)	\$37,427
Value of third-party contributors	\$204,880
Total Project Cost	\$342,307

TABLE 2: Project Budget

Budget Item Description	Computation		Quantity Type	Cost: Year 1	Cost: Year 2	Total Grant Period	Funding Source
	\$/Unit	Quantity					
Salary and Wages				\$50,000	\$50,000	\$100,000	BOR
Executive Director	\$24	2,080	Hour	\$50,000	\$50,000	\$100,000	
Fringe Benefits				\$3,994	\$3,994	\$7,987	BRWG
Employer Payroll Taxes	\$1.92	2,080	Hour	\$3,994	\$3,994	\$7,987	
Supplies and Materials				\$2,720	\$2,720	\$5,440	BRWG
Storage Unit	\$69	12	Month	\$828	\$828	\$1,656	
Financial Management Software	\$49	12	Month	\$588	\$588	\$1,176	
General Nonprofit Insurance	\$92	12	Month	\$1,104	\$1,104	\$2,208	
Printer Ink and Paper	\$200	1	Year	\$200	\$200	\$400	
Contractual				\$1,000	\$1,000	\$2,000	BRWG
Graphic Design	\$1,000	1	Year	\$1,000	\$1,000	\$2,000	
Other – Fundraising and Outreach Events				\$11,000	\$11,000	\$22,000	BRWG +
Watershed Cleanup	\$5,000	1	Event	\$5,000	\$5,000	\$10,000	Event
Beer Festival	\$6,000	1	Event	\$6,000	\$6,000	\$12,000	Sponsors
Other – Phase 2 of the IWMP				\$204,880	-	\$204,880	BRWG,
Task 1: Hydrology and Geomorphology Analysis	\$123,300	1	Assessment	\$121,720	-	\$121,720	Trout
Task 2: Macroinvertebrate Sampling	\$58,720	1	Sampling	\$58,000	-	\$58,000	, and
Task 3: Temperature Profile Study	\$28,580	1	Assessment	\$23,540	-	\$23,540	Various
Task 4: Angler Use Creel Survey	\$3,420	1	Survey	\$1,620	-	\$1,620	Sources
TOTAL ESTIMATED PROJECT COSTS				\$273,594	\$68,714	\$342,307	

7.A. Budget Narrative

Salaries and Wages - \$50,000 per year/ \$100,000 over the full grant period

Colorado has a low unemployment rate and the costs of living and housing in Summit County are higher than average. The pay rate of \$50,000 per year for a full-time Executive Director position reflects the costs of living in Summit County and also takes into account the experience and professionalism needed for this type of position. The current Executive Director (and acting Project Manager) is Erika Donaghy. The only use of funds that BRWG is requesting from the BOR is for this line item to create a stable source of funding for our Executive Director.

Fringe Benefits - \$3,994 per year/ \$7,987 over the full grant period

BRWG pays only required employer payroll taxes. Other fringe benefits are not provided. We have estimated that employer payroll taxes will be 8% of the salary.

Supplies and Materials - \$2,720 per year/ \$5,440 over the full grant period

- *Storage Unit* – BRWG does not have a physical office space, the Executive Director works remotely from their home office. Therefore, a storage unit is necessary for items such as our branded tent (used for outdoor events), historical records, giveaway items and supplies for events. The storage unit costs \$69 per month.
- *Financial Management Software* – BRWG uses Aplos, a nonprofit accounting software. This online financial management software costs \$49 per month.
- *General Nonprofit Insurance* – BRWG maintains basic liability insurance to cover our organization. This insurance costs \$92 per month.
- *Printer Ink and Paper* – BRWG does not currently use much in the way of office supplies, printer ink and paper are our main expenses. We estimate that we will use \$200 per year to cover this expense.

Contractual - \$1,000 per year/ \$2,000 over the full grant period

- *Graphic Designer* – BRWG will require the services of a graphic designer when we finalize the IWMP plan for public distribution. We also utilize similar services for outreach materials from time to time. We estimate \$1,000 per year will be sufficient to cover this expense.

Other Expenses – Fundraising and Outreach Events - \$11,00 per year/ \$22,00 over the full grant period

- *Watershed Cleanup* – This event directly contributes to two of our main goals as an organization. First, it raised more than \$10,000 in its first year and we believe it will become even more successful in the coming years as it becomes an established annual event. Secondly, it engages people in our community that had not otherwise heard about BRWG and brings them onto our email lists and social media where we can educate them about the issues facing our watershed. For our first year's event, we were not able to hold a post event gathering and all supplies were donated so there were very minimal event expenses. For 2021, we hope to be able to host a post cleanup celebration and so have budgeted to hire a band, provide lunch, and purchase necessary supplies. BRWG has committed to covering these expenses.

- *Beer Festival* – BRWG has historically held an annual beer festival in partnership with the local Summit County breweries. We were unable to hold this event in 2020 due to COVID-19 restrictions but are hopeful that we will be able to hold it this coming summer. The expenses budgeted for here are to hire a band, provide food, and giveaway items. BRWG is committed to covering this entire expense.

Other Expenses – Phase 2 of the IWMP \$204,880 in year one / no cost in year 2

While BRWG is not requesting any direct monetary support from the BOR to cover the costs associated with Phase 2 of the IWMP, we included this work in this grant application and grant budget because it is the critical project that we will be completing during this grant period and the project that will take up the greatest amount of our Executive Director’s focus and time. Funds for this project have been requested (but not yet confirmed) from the Colorado Water Conservation Board (\$100,000 grant request), Colorado River District (\$50,000), Colorado Trout Unlimited (\$10,000), National Trout Unlimited (\$25,000), Blue Valley Ranch (\$25,000), Town of Silverthorne (\$20,000), and Summit County (\$10,000). We have a total of \$240,000 requested for this project, will we estimate will cost \$214,020. We are confident that we will be able to secure enough funding for the highest priority projects and can adjust the others if necessary. Each task is discussed below (greater detail on these costs can be provided if requested by BOR):

- *Task 1:* BRWG believes that the average flows in the Blue River may be too low for the existing channel. We will conduct an assessment which analyzed the current flows in relationship to the geomorphology of the channel to determine whether restoration projects which address the physical characters of the channel would improve aquatic habitat. The costs associated with the are the cost of the assessment technology, estimated at \$121,720.
- *Task 2:* BRWG will continue macroinvertebrate sampling along the Blue River to monitor the bug life and determine whether this is a limiting factor for the fish populations. Costs associated with this task include field work, data collection, and data analysis. The total cost for this task is estimated at \$58,000.
- *Task 3:* A second hypothesis for the cause of the declining trout fishery is that the water in the Blue River below Dillon Dam is simply too cold (as a result of the bottom releases from the reservoir) to support fish spawning. BRWG will investigate options for manipulating the river temperature to a more ideal level for fish health. The research and analysis for this task is estimated at \$23,540.
- *Task 4:* BRWG would like to complete an angler use creel survey to set a baseline for fishing use on the Blue River. The estimate cost of conducting this survey is \$1,620.

8. LETTERS OF SUPPORT

Letters of Support have been included on the following pages from:

- Colorado Trout Unlimited
- The Summit Foundation
- The Town of Silverthorne
- The Town of Frisco
- Summit County Open Space and Trails
- Friends of the Dillon Ranger District
- Copper Mountain
- High Country Conservation

January 18, 2021



Bureau of Reclamation
Financial Assistance Operations
Attn: Mr. Edmund Weakland
P.O. Box 25007, MS 84-27815
Denver, CO 80225

Dear Mr. Weakland,

On behalf of Copper Mountain resort, this letter recommends that the BRWG is considered for the WaterSMART Cooperative Watershed Management Plan grant. This grant will help the BRWG continue to work on the Integrated Water Management Plan and see phase two to completion.

This grant will also be enough funding to keep an Executive Director on for the next two years while the group continues to diversify our funding streams (COVID has not been helpful in this endeavor.)

This group is here to promote, protect and restore a healthy Blue River Watershed through the cooperative, community education, stewardship and resource management. The BRWG is a dedicated group that regularly meets to discuss, develop and plan for community events to help the watershed improvement.

Since BRWG was formed in 2004, they have been instrumental in several important restoration and planning projects in the watershed. Most significantly, BRWG partnered with Trout Unlimited to complete phase one of an Integrated Water Management Plan for the valley. Phase two will begin in the summer of 2021. Once phase two is completed, BRWG can begin to work on specific watershed restoration projects throughout the county.

Thank you for your time and consideration,

Mike Looney

January 14, 2021

Bureau of Reclamation
Financial Assistance Operations
Attn: Mr. Edmund Weakland
P.O. Box 25007, MS 84-27815
Denver, CO 80225

Dear Mr. Weakland,

As a representative of Colorado Trout Unlimited, I would strongly recommend the Blue River Watershed Group (BRWG) to receive grant funding from the WaterSmart Cooperative Watershed Management Program. The funding stream is essential for BRWG to continue their leadership role in the Blue River Integrated Water Management Plan. This management plan is essential for the proactive management of the Blue River Watershed. The grant will also provide a stopgap-funding source for the salary of the Executive Director of the BRWG due to Covid-19 related funding shortfalls.

The BRWG has many unique management challenges due to the diversity of the watershed. The headwaters provide critical snowpack to the State and offers extensive recreational opportunities. The resident population of 31,000 grows to 160,000 persons during peak winter and summer tourist seasons. Additional water related challenges include the many legacy-mining issues, the operation of several large municipal trans-basin diversions, and a CPW Gold Medal trout stream. The lower portion of the Watershed is primarily agriculture, which further complicates the management of water. In summary, BRWG is a key Organization in problem solving of consumptive/non-consumptive water management issues in the Watershed. In the future, the need for their leadership is going to be paramount due to the effects of climate change and the rapid population increase in the State of Colorado.

The strengths of the BRWG lies in their mission of promote, protect, and restore the Blue River Watershed. They have a unique ability to communicate and resolve water issues across the Watershed. They also play a key role in educating the public on “all things water” which is vital for community support and understanding. The WaterSmart program funding is an essential source of funding for the BRWG to continue to grow and support their critical role.

Respectfully,

Greg Hardy

Board of Directors – Gore Range Anglers Chapter TU Summit County, CO
Vice President – Colorado Trout Unlimited

Public Works • 264 Brian Avenue • P.O. Box 1309 • Silverthorne, Colorado 80498

January 13, 2021

Bureau of Reclamation
Financial Assistance Operations
Mr. Edmund Weakland
P.O. Box 25007, MS 84-27815
Denver, CO 80225

RE: Blue River Watershed Group's application for Bureau of Reclamation WaterSMART Cooperative Watershed Management Program Grant

Dear Mr. Weakland:

On behalf of the Town of Silverthorne, I am writing to express our strong support for the application to the Bureau of Reclamation WaterSMART Cooperative Watershed Management Program for the Blue River Integrated Water Management Plan. This project will continue the work identified in the first phase of this plan and implement the most important of those projects. As a community reliant on the Blue River for municipal water supplies, tourism, and strong quality of life, the Town of Silverthorne will significantly benefit from an IWMP process by:

- Identifying the causes of decline for the Gold Medal fishery in the middle section of the Blue River between Dillon Reservoir and Green Mountain Reservoir;
- Furthering the work of the Blue River Enhancement Workgroup (BREW), through additional resources and project support;
- Providing opportunities to engage the various recreational, consumptive, and non-consumptive stakeholders in the valley to identify mutually beneficial projects and values;
- Highlighting project opportunities and leveraging outside resources for the use of Colorado River Cooperative Agreement funds;
- Ensuring that the environmental health and hydrology of the Blue River continue to support long-term economic and community goals

For the reasons listed above, the Town of Silverthorne fully support the Blue River Watershed Group's application to continue to develop a Blue River IWMP. As an invested stakeholder in the process, we will continue to support this effort through routine staff engagement, planning, and financial resources where it aligns with established goals of the Silverthorne community. We encourage you to support this important process for our community.

Thank you for your time and consideration.

Sincerely,



Tom Daugherty
Silverthorne Director of Public Works



OPEN SPACE & TRAILS DEPARTMENT

970.668.4060 ph | 970.668.4225 f
5660
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0037 Peak One Dr. | PO Box
5660
Frisco, CO 80443

January 13, 2021

Bureau of Reclamation
Financial Assistance Operations
Attn: Mr. Edmund Weakland
P.O. Box 25007, MS 84-27815
Denver, CO 80225

Dear Mr. Edmund Weakland,

On behalf of Summit County, I strongly recommend that the Bureau of Reclamation (BOR) select the Blue River Watershed Group (BRWG) for WaterSMART Cooperative Watershed management Program grant funding. This funding would allow the BRWG to continue their work on the Integrated Water Management Plan (IWMP) and see the second project phase through to completion. It will also provide the BRWG with enough funding to keep a paid Executive Director on their staff for the next two years while they continue to diversify their funding streams. The ongoing COVID-19 pandemic has significantly hindered their fundraising and development efforts, and continued BOR support is truly critical to the BRWG's future organizational capacity and capabilities.

For over a decade, Summit County and the BRWG have worked closely on important water resource management, stewardship, and enhancement projects throughout the Blue River watershed. Since their founding in 2004, they have been instrumental in advancing numerous important restoration and planning projects throughout the watershed. The Summit County Open Space and Trails Department has partnered closely with the BRWG on several efforts aimed at, among other things, repairing mine-scarred landscapes; most notably along the Swan River, a headwater tributary to the Blue River.

Recently, and perhaps most significantly, during the last several years the BRWG has partnered with Trout Unlimited on the first phase of the IWMP for the Blue River watershed. Phase two of this initiative, which is scheduled to begin during summer 2021, will identify and advance specific watershed restoration projects throughout the county.

We are excited and inspired by the BRWG's organizational mission and ongoing efforts to improve ecological function and services of the Blue River, and strongly urge the BOR to support their grant application and vision.

Sincerely,

Brian Lorch

Brian Lorch,
Director



January 14, 2021

Bureau of Reclamation
Financial Assistance Operations
Attn: Mr. Edmund Weakland
P.O. Box 25007, MS 84-27815
Denver, CO 80225

Dear Mr. Edmund Weakland,

On behalf of High Country Conservation, I strongly recommend that the Bureau of Reclamation (BOR) select the Blue River Watershed Group (BRWG) for WaterSMART Cooperative Watershed management Program grant funding. This funding would allow the BRWG to continue their work on the Integrated Water Management Plan (IWMP) and see the second project phase through to completion. It will also provide the BRWG with enough funding to keep a paid Executive Director on their staff for the next two years while they continue to diversify their funding streams. The ongoing COVID-19 pandemic has significantly hampered their fundraising and development efforts, and continued BOR support is truly critical to the BRWG's future organizational capacity and capabilities.

High Country Conservation and BRWG share a common purpose to protect the natural resources of our county. Since BRWG's founding in 2004, they have been instrumental in advancing numerous important restoration and planning projects throughout the watershed. The Summit County Open Space and Trails Department has partnered closely with the BRWG on several efforts aimed at, among other things, repairing mine-scarred landscapes, most notably along the Swan River, a headwater tributary to the Blue River.

Recently, and perhaps most significantly, during the last several years, the BRWG has partnered with Trout Unlimited on the first phase of the IWMP for the Blue River watershed. Phase two of this initiative, which is scheduled to begin during summer 2021, will identify and advance specific watershed restoration projects throughout the county.

We are excited and inspired by the BRWG's organizational mission and ongoing efforts to improve ecological function and services of the Blue River, and strongly urge the BOR to support their grant application and vision.

Sincerely,

A handwritten signature in black ink, appearing to read "Rachel Zerowin".

Rachel Zerowin
Community Programs Director
High Country Conservation Center
PO Box 4506
Frisco, CO 80443
rachel@highcountryconservation.org



P.O. Box 4506 • Frisco, Colorado 80443 • 970.668.5703 • highcountryconservation.org

Bureau of Reclamation
Financial Assistance Operations
P.O. Box 25007, MS 84-27815
Denver, CO 80225



January 15, 2021

Attn: Mr. Edmund Weakland

The Friends of the Dillon Ranger District (FDRD), a non-profit that leverages the power of community volunteers to assist with land and water management projects in the White River National Forest, has followed the lead of the Blue River Watershed Group (BRWG) in a collaborative effort to facilitate the Blue River basin planning issues. As FDRD works closely with the BRWG in their planning goals, we view their development of the Blue River Integrated Water Management Plan (BRIWMP) as a top priority. Because of this fact, we strongly endorse BRWG's application for a Bureau of Reclamation WaterSMART Cooperative Watershed Management Program grant.

The mission of the Blue River Watershed Group is to promote, protect and restore a healthy Blue River watershed through cooperative community education, stewardship, and resource management. Since BRWG was formed in 2004, they have been instrumental in several important restoration and planning projects in the watershed. Most significantly, BRWG partnered with Trout Unlimited to complete phase one of an Integrated Water Management Plan for the valley. Phase two will begin in the summer of 2021. Once phase two is completed, BRWG can begin to work on specific watershed restoration projects throughout the county.

The healthy restoration of the Blue River watershed is considered of utmost importance due to the jeopardized health of the water quality and the fragmented trout habitat. The intent of the BRIWMP is to provide a working roadmap to be used by the community to facilitate water planning decisions that reflect community priorities for the Blue River and its watershed. The BRIWMP is an evolving effort requiring multiple phases and several years to compile and complete. The report will be used and periodically updated by the Blue River Watershed Group in an effort to provide a "go to" community resource for basin wide water planning issues that affect consumptive and non consumptive users. The BRWG will also provide the document and subsequent updates to the CMU Water Center for the Colorado Basin Roundtable BRIWMP resource library.

As an organization, we ask that you please consider the work by the BRWG to be vital to the health of the Blue River watershed. If you have any questions or concerns regarding FDRD's involvement, please feel free to contact me anytime.

Respectfully yours,

Michael Connolly
Executive Director, Friends of the Dillon Ranger District
michael@fdrd.org

PO Box 1648, 680 Blue River Parkway, Silverthorne, CO 80424



TOWN of FRISCO

P.O. Box 4100 • Frisco, Colorado 80443

To Whom It May Concern:

I am writing in support of Blue River Watershed Group (BRWG) and their application for the WaterSMART Cooperative Watershed Management Program grant by recounting a recent work experience w with this group.

In the fall of 2019, BRWG reached out to the Town of Frisco regarding the possibility of planning an event in Frisco related to an upcoming river clean-up project. As we began talking through possibilities, BRWG decided to expand their event into a county-wide effort for Summit County's *Make A Difference Day in the fall of 2020*. In doing so, they were able to not only clean in every town in Summit County, but also to increase awareness of their organization and its mission. Despite the pandemic and its added difficulties, BRWG remained undeterred in their efforts and were able to arrive at a safe and effective event plan for clean-up participants. BRWG exhibited exceptional flexibility, strategic planning, and commitment to mission during a historic crisis when it would have just been easier to cancel their county-wide project.

If selected, this grant would allow the organization to complete the second phase of their Integrated Water Management Plan and secure critical staff for the coming years. Given the dedication, flexibility, and professionalism displayed throughout my experience, I am confident that these resources would be going to an organization where they would be responsibly utilized to their fullest potential.

I appreciate your time and for considering BRWG for this grant opportunity. Please contact me if further information is needed.

Sincerely,

Zane Myers
Town of Frisco | Events Coordinator
Email: ZaneM@townoffrisco.com
Office: 970-668-2564



Bureau of Reclamation
1849 C Street NW
Washington DC 20240-0001

Dear Bureau of Reclamation,

It is my pleasure to write this letter in support of the Blue River Watershed group's application for the WaterSMART Cooperative Watershed Management Program grant. The Summit Foundation endorses this application and recognizes its importance in supporting the organization and specifically, phase two of the Blue River Watershed Group's Integrated Water Management Plan.

For nearly 20 years, the Blue River Watershed Group (BWRG) has been a leader in protecting and restoring the Blue River watershed in Summit County, a critical component of our local ecosystem. Recently, BRWG partnered with Trout Unlimited to complete phase one of an Integrated Water Management Plan, and phase two is expected to begin in summer 2021.

The Summit Foundation is grateful to be a community partner of the Blue River Watershed group. In recent years, the two organizations have successfully collaborated in a river cleanup event through Make a Difference Day and the Swan River Restoration Project.

Grant support from the Bureau of Reclamation would provide the Blue River Watershed Group with the staffing and resources necessary to complete the Integrated Water Management Plan and begin work on specific watershed restoration projects throughout the county.

Please do not hesitate to be in touch with us at the Foundations if you have any questions regarding this endorsement.

Sincerely,

Tara Dew
Program Manager
The Summit Foundation
103 S. Harris St.
Breckenridge, CO 80424
970-453-5970

9. Official Resolution

Official Resolution

The Board of Directors of the Blue River Watershed Group has adopted the following resolutions regarding the organization's application for funding from the Bureau of Reclamation.

Resolution:

- The Board President is the individual with the legal authority to enter into an agreement.
- The Board of Directors is aware of the contents of this application. The Board of Directors support the content of this application.
- The Blue River Watershed Group will work with the Bureau of Reclamation to meet established deadlines for entering in a grant or cooperative agreement.

Signed:  President

Jay Pansing, President

Blue River Watershed Group