

Drainage Basin:

# Water Plan Grant Application



South Platte

UEIAIL	- 3
Total Project Cost:	\$119,177.52
Water Plan Grant Request:	\$48,871.60
Recommended Amount:	\$30,163.60
Other CWCB Funding:	\$0
Other Funding Amount:	\$33,500
Applicant Match:	\$36,805.92
<pre>Project Type(s): Other</pre>	
Project Category(Categories): Engagement/Innovation	
Measurable Result: Up to 100,000 residents living within the Big Thompson Watershed Impacted by Engagement Activity.	

The applicant, the Big Thompson Watershed Coalition (BTWC) was formed as a 501(c)3 to help private and public landowners collaborate recovery efforts after the 2013 state-declared flooding emergency. Since its formation, BTWC has restored approximately 15 miles of river and completed 17 restoration projects. BTWC recognizes the need for continued action in this watershed as it: supplies 1,000,000 downstream users; provides for nearly 100,000 people in the watershed; welcomes 4+ million annual visitors; and supports both human and ecological needs. With these factors in mind, BTWC continues to enhance the watershed through partnerships and a dedication to stewardship, restoration, outreach, and watershed science.

BTWC proposes to: 1) build stronger community understanding of wildfire risk to the Big Thompson River, Colorado-Big Thompson project, and our water resources; 2) create better communication between the public and forest/fire managers to build rapport, elicit feedback, and encourage stronger transfer of accurate information, and 3) provide resources and capacity for landowners to conduct defensible space and forest thinning efforts on private lands neighboring public lands.

Through these engagement and information-sharing objectives, BTWC will expand the knowledgebase, capacity, and involvement of watershed residents to enhance the scope and pace of regional forest management and wildfire mitigation to protect our local water resources.

This project meets goals identified by the South Platte Basin Roundtable by focusing on addressing threats associated with increased fire hazards, and water quality degradation related to post-fire sedimentation and erosion issues. It also meets goals identified in the Water Plan to "Monitor, protect and improve watershed water quality and identify and document progress and improvements", and "maintain or improve watershed health through source water protection, wildfire mitigation, sedimentation control, and erosion control."

Funding Recommendation: Staff is recommending a grant of \$30,163.60 from the Engagement and Innovation category of funding. The recommended funding is \$18,708 less than the requested amount due to effects current COVID-19 guidelines have on outreach components of the proposal.

Big Thompson Watershed Coalition July 2020 Board Meeting



# **Colorado Water Conservation Board**

# Water Plan Grant Application

# Instructions

To receive funding for a Water Plan Grant, applicant must demonstrate how the project, activity, or process (collectively referred to as "project") funded by the CWCB will help meet the measurable objectives and critical actions in the Water Plan. Grant guidelines are available on the CWCB website.

If you have questions, please contact CWCB at (303) 866-3441 or email the following staff to assist you with applications in the following areas:

Water Storage Projects Conservation, Land Use Planning Engagement & Innovation Activities Agricultural Projects Environmental & Recreation Projects Anna.Mauss@state.co.us Kevin.Reidy@state.co.us Ben.Wade@state.co.us Alexander.Funk@state.co.us Chris.Sturm@state.co.us

# FINAL SUBMISSION: Submit all application materials in one email to waterplan.grants@state.co.us

in the original file formats [Application (word); Statement of Work (word); Budget/Schedule (excel)]. Please do not combine documents. In the subject line, please include the funding category and name of the project.

	Water Projec	t Summary
Name of Applicant	Big Thompson V	Vatershed Coalition
Name of Water Project	Building the Con Health	nmunity-Information Connection for Watershed
CWP Grant Request Amount		\$48,871.60
Other Funding Sources Northern Water Annual Contribution		\$10,000
Other Funding Sources City of Fort Collins Pending		\$5,000
Other Funding Sources USFS - CPRW		\$9,000
Other Funding Sources CSU Graduate Student		\$9,500
Applicant Funding Contribution		\$45,305.92
Total Project Cost		\$127,677.52



	Applicant & Grantee Information	
Name of Grantee(s)	Big Thompson Watershed Coalition	
Mailing Address	P.O. Box 1923 Loveland, CO 80539-1923	
FEIN	81-0753905	
Organization Contact	Courtney Gutman	
Position/Title	Director	
Email	Courtney.gutman@bigthompson.co	
Phone	(970) 699-2906	
Grant Management Contact	Same as organizational contact above	
Position/Title		
Email		
Phone		
Name of Applicant (if different than grantee)		
Mailing Address		
Position/Title		
Email		
Phone		
Description of Grantee/Applicant		

Provide a brief description of the grantee's organization (100 words or less).

Big Thompson Watershed Coalition (BTWC) formed as a 501(c)3 to help private and public landowners collaborate recovery efforts after the 2013 state-declared flooding emergency. Since its formation, BTWC has restored approximately 15 miles of river and completed 17 restoration projects. Yet, BTWC recognizes the need for continued action in this watershed as it: supplies 1,000,000 downstream users; provides for nearly 100,000 people in the watershed; welcomes 4+ million annual visitors; and supports both human and ecological needs. With these factors in mind, BTWC continues to enhance the watershed through partnerships and a dedication to stewardship, restoration, outreach, and watershed science.

Type of Eligible Entity (check one)
Public (Government): Municipalities, enterprises, counties, and State of Colorado agencies.
Federal agencies are encouraged to work with local entities. Federal agencies are eligible, but
only if they can make a compelling case for why a local partner cannot be the grant recipient.
Public (Districts): Authorities, Title 32/special districts (conservancy, conservation, and irrigation
districts), and water activity enterprises.



	Private Incorporated: Mutual ditch companies, homeowners associations, corporations.
	<b>Private Individuals, Partnerships, and Sole Proprietors:</b> Private parties may be eligible for funding.
Х	<b>Non-governmental organizations (NGO):</b> Organization that is not part of the government and is non-profit in nature.
	Covered Entity: As defined in Section 37-60-126 Colorado Revised Statutes.

	Type of Water Project (check all that apply)
	Study
	Construction
	Identified Projects and Processes (IPP)
Х	Other

Cat	Category of Water Project (check the primary category that applies and include relevant tasks)		
	Water Storage - 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 <i>Applicable Exhibit A Task(s):</i>		
	Conservation and Land Use Planning - Activities and projects that implement long-term strategies for conservation, land use, and drought planning. <i>Applicable Exhibit A Task(s):</i>		
x	<ul> <li>Engagement &amp; Innovation - Activities and projects that support water education, outreach, and innovation efforts. Please fill out the Supplemental Application on the website.</li> <li><i>Applicable Exhibit A Task(s):</i> <ul> <li><u>Task 1</u>: Improve network capacity building through the creation of the Northern Colorado Fireshed Network</li> <li><u>Task 2</u>: Expand BTWC forest and wildfire engagement programs</li> <li><u>Task 3</u>: Develop information sharing web-resources for forestry planning</li> <li><u>Task 4</u>: Develop private landowner services and identify interested parties for future BTWC-partnered thinning projects and defensible space work</li> </ul> </li> </ul>		
	Agricultural - Projects that provide technical assistance and improve agricultural efficiency. <i>Applicable Exhibit A Task(s):</i>		
	Environme recreation. <i>Applicable</i>	ntal & Recreation - Projects that promote watershed health, environmental health, and <i>Exhibit A Task(s):</i>	
	Other	Explain:	



Location of Water Project		
Please provide the general county and coordinates of the proposed project below in <b>decimal degrees</b> . The Applicant shall also provide, in Exhibit C, a site map if applicable.		
County/Counties	Larimer County	
Latitude	40.433951	
Longitude	-105.340182	

# Water Project Overview

Please provide a summary of the proposed water project (200 words or less). Include a description of the project and what the CWP Grant funding will be used for specifically (e.g., studies, permitting process, construction). Provide a description of the water supply source to be utilized or the water body affected by the project, where applicable. Include details such as acres under irrigation, types of crops irrigated, number of residential and commercial taps, length of ditch improvements, length of pipe installed, and area of habitat improvements, where applicable. If this project addresses multiple purposes or spans multiple basins, please explain.

The Applicant shall also provide, in Exhibit A, a detailed Statement of Work, Budget, Other Funding Sources/Amounts and Schedule.

The Big Thompson watershed and the Colorado-Big Thompson Project provide valuable natural resources across a diverse mosaic of forest, riparian, and prairie habitats. The most critical community needs provided by these natural and man-made freshwater transport systems include high quality drinking water for approximately 1 million residents in 32 towns, millions of dollars in local businesses and tourism economies, over 600,000 acres of irrigated farmland, state renown recreation opportunities, and enjoyment by the 4.5 million visitors that visit this gateway to Rocky Mountain.

With a strong history and expertise in restoration implementation and community engagement with CWCB, BTWC proposes to weave together the needs of both public and private landowners to improve the community information-connection around Big Thompson forestry needs. BTWC respectfully requests \$48,871.60 to develop and implement 4 program areas over 2020-2022 that enhance relations between partners and community members, expand information access and sharing, and build community trust and involvement in forest management practices across public-private boundaries.

CWCB WPG funding will support BTWC's network capacity and the impact of our watershed education and protection by building upon and connecting community engagement, communication, and partnership development within the Big Thompson watershed and across Northern Colorado's watershed coalitions.

Measurable Results		
To catalog measurable results achieved with the CWP Grant funds, please provide any of the following values as applicable:		
	New Storage Created (acre-feet)	
	New Annual Water Supplies Developed or Conserved (acre-feet), Consumptive or Nonconsumptive	
	Existing Storage Preserved or Enhanced (acre-feet)	



	Length	of Stream Restored or Protected (linear feet)	
	Efficier	ncy Savings (indicate acre-feet/year OR dollars/year)	
	Area o	f Restored or Preserved Habitat (acres)	
	Quanti	ty of Water Shared through Alternative Transfer Mechanisms	
	Numbe into La	er of Coloradans Impacted by Incorporating Water-Saving Actions nd Use Planning	
Up to 100,000 residents living within Big Thompson watershed	Numbe	Number of Coloradans Impacted by Engagement Activity	
	Other	Explain:	

# Water Project Justification

Provide a description of how this water project supports the goals of <u>Colorado's Water Plan</u>, the most recent <u>Statewide Water Supply Initiative</u>, and the applicable Roundtable <u>Basin Implementation Plan</u> and <u>Education Action Plan</u>. The Applicant is required to reference specific needs, goals, themes, or Identified Projects and Processes (IPPs), including citations (e.g. document, chapters, sections, or page numbers).

The proposed water project shall be evaluated based upon how well the proposal conforms to Colorado's Water Plan Framework for State of Colorado Support for a Water Project (CWP, Section 9.4, pp. 9-43 to 9-44;)

This project supports goals within Colorado's Water Plan, Statewide Water Supply Initiative, South Platte Roundtable Basin Implementation Plan, and South Platte Roundtable Basin Education Action Plan related to public outreach, engagement, and education around forest management and wildfire mitigation which promotes the health and resiliency of water resources in Northern Colorado. Below we summarize the goals from each plan this project will support.

#### Colorado's Water Plan

Chapter 6, Section 6.2: Meeting Colorado's Water Gaps, pg. 6-27 & 6-50

- 1. "Monitor, protect and improve watershed water quality and identify and document progress and improvements."
- 2. "Maintain or improve watershed health through source water protection, wildfire mitigation, sedimentation control, and erosion control."

Our project will meet these goals through community outreach, engagement, and information sharing that promotes an understanding of forest management and its ties to water quality and overall watershed health. Community engagement work will consist of outreach and education opportunities to provide baseline awareness of forestry-river health connections and stewardship participation through engagement events (tours, workshops, and community workdays), enhanced messaging and information distribution strategies, data collection using MyWatershed app and warehousing, and strategic planning for BTWC programmatic establishment and growth.

This community-generated participatory mapping data, submitted through Lefthand Watershed Center's MyWatershed app, will help to increase our knowledge of on-the-ground issues such as erosion and areas of high tree mortality (related to Copper Study in "Related Studies") as well as fill in gaps of knowledge on individual perceptions of forest management and where stewardship practices



are already being conducted by landowners. An increased level of community participation will help BTWC and partners identify community receptiveness to forest management education and projects that align common interests in community-supported forest stewardship projects and priority treatment locations for water resource protection. When communities help to identify project locations they are more likely to be supportive and involved in the process, which can increase the long-term success of a project. Further, by promoting community involvement, information sharing, and defensible space site assessments, community members are more likely to take action in the form of thinning, increasing defensible space, or coordinating community collaboration to develop neighborhood-level Community Wildfire Protection Plans (CWPP) all of which mitigate the potential impact of wildfire, post-fire sediment yields, and post-fire erosion for the Big Thompson River and its critical water resources.

Chapter 7: Water Resource Management and Protection, pg. 7-5, 7-7, & 7-10

- 1. "Successful watershed management necessitates a pragmatic approach that includes coalition-building, data collection, planning, prioritization, implementation, and monitoring. This is a cyclical process, and each phase requires continued efforts."
- 2. "Participants will aid in the assemblage and assimilation of watershed information—including geographic information systems data, maps, monitoring reports, risk analysis, and existing assessments."
- 3. "Assist stakeholders in existing watershed groups to identify tools and resources that address gaps and build capacity in existing plans."

Our project will directly contribute toward these goals through three main avenues.

First, we will add to the data collection, monitoring, and source water protection prioritization happening in the Big Thompson watershed by involving communities as integral parts of these processes. By utilizing the MyWatershed app, we will open new channels for community-generated data . This data will be housed on CitSci.org and automatically placed into spreadsheets which will reduce staff time for data entry and increase efficiency in analyzing and sharing data. Additionally, through increasing community knowledge of forest management and wildfire threat reduction needs, we will advance conversations around implementation projects which span private and public lands.

Second, we will consolidate our own forestry-based information augmented with the communitygenerated data and identify web-platforms to house and share this data so that it is publically accessible to our watershed partners and can be used to enhance regional and state-wide decisionmaking structures related to forest management and watershed health.

Third, we will work with four other Northern Colorado watershed coalitions and others within the Northern Colorado Fireshed Network to collectively address and build capacity.

Chapter 7 Water Resource Management and Protection, pg. 7-14, 7-38

- 1. "Even when people come together to face catastrophe, having a plan and sufficient resources in place ahead of time makes both the immediate response and the long recovery effort easier and less costly. In fact, studies have shown that for every one dollar of investment in natural hazard mitigation, society saves four dollars in response costs."
- 2. "Protect Colorado water supplies and critical infrastructure from catastrophic wildfire and other threats by maintaining healthy, resilient watersheds through collaboration, implementation, leveraging, and education."

This project will advance both of these goals. Although BTWC was formed in reaction to the 2013 floods, we intend to shift our focus to more proactive planning and implementation measures, specifically around wildfire threat reduction through forest management. We understand the disorder that follows a natural disaster, and plan to help private landowners and public land and water



management entities prepare for future events in the Big Thompson watershed. We will do this largely through community engagement work that empowers communities to take action in regards to forest stewardship practices for catastrophic wildfire mitigation while linking efforts and momentum across public and private lands.

Chapter 9, Section 9.5: Outreach, Education, and Public Engagement pg. 9-53, 9-54, 9-59

- 1. "Colorado's Water Plan provides technical and financial assistance for high-quality, balanced, and grassroots water education and outreach efforts that inform Coloradans about the issues so that they may engage in determining Colorado's water future."
- 2. "Develop information and communication tools that can be used statewide."
- 3. "Education and outreach to support environmental and watershed strategies, such as those designed to protect imperiled warm-water fish species and forest health."

Our proposed work will address and advance each of these goals. BTWC has already led a 5-part workshop series on wildfire impact to watershed health, forest management, and wildfire preparedness that engaged over 70 community members from across the watershed. We plan to continue these workshops and expand on them to include community workdays and trainings for the MyWatershed app. We also plan to facilitate increased communication and collaboration between landowners and land management entities which will help members of the public to participate in determining the future of the Big Thompson watershed which will substantially effect Colorado's water future. Lastly, we will compile our forestry workshop curriculum and a broad range of other data so that it is accessible to the public and statewide organizations who may benefit from it.

#### Statewide Water Supply Initiative

The executive summary of the Statewide Water Supply Initiative highlights multiple goals which are supported by this project:

Growing populations in the Wildland Urban Interface (WUI) increase the incidences of human caused wildfire. Wildfire, especially in forests where burn regimes have been suppressed for a century, imperil clean water supplies for downstream users. An effective strategy to reduce human-caused wildfire incidents and to reduce the severity of wildfire is to educate landowners about wildfire risk and actions they can take in regards to threat reduction.

BTWC will approach our forestry engagement work through a long-term lens which seeks to create lasting support and action from Big Thompson communities and the general public. To do this we will leverage existing resources and connections to conduct outreach and education that empowers communities to become more involved in decision-making and stewardship of their resources. Further, we will emphasize the importance of strategic planning in reducing damages from wildfire. This strategic planning can, and should, be done at multiple levels; from neighborhood to county level planning. This will be crucial in mitigating the damage of future wildfire events, particularly in regards to post-fire sediment yields and erosion which have significant impacts on water supply infrastructure and high associated costs.

#### South Platte Basin Implementation Plan

1. S.5.5 - Focused attention is needed to address threats associated with extensive tree mortality in the basin, increased fire hazards and water quality degradation...

BTWC's proposed engagement work is highly focused on addressing threats associated with increased fire hazards, tree mortality, and water quality degradation related to post-fire sedimentation and erosion issues. We will not only work to educate communities and the general public on these issues, but also involve them in the monitoring, proactive wildfire mitigation work, and in identifying priority areas for



future projects that will help to address these threats. Further, our project seeks to formalize a Big Thompson Forestry Partnership which will have increased capacity to coordinate work through collaboration and alignment of goals.

2. S.5.9 - Improving public understanding about the goals, needs, and plans of the state and the South Platte Basin will help to improve public acceptance of the need for innovative water rate structures, energetic conservation measures, and more integrated land use and water supply planning.

Recommendation: Design and implement an intensive education, participation and outreach program designed to generate a lasting baseline of public awareness and support.

Our project will begin to tackle the issue of improving public understanding of the goals, needs, and plans of the state and the SPB through an engagement campaign to collaboratively build a more involved citizenry with enhanced capacity to partake in conservation measures, especially those that span landownership boundaries and involve diverse stakeholders. By improving communities' understanding of the benefits of large-scale wildfire mitigation efforts and informing them of opportunities to expand these efforts, we can also begin to better integrate current efforts which are commonly disconnected from one another- increasing the scale, pace, and impact of collaboration outcomes.

#### South Platte Basin Education Action Plan

1. "This Basin deserves and needs an intensive education, participation and outreach program designed to generate a lasting baseline of public awareness and support. The focus of a joint strategic communications plan will be to maximize existing opportunities, avoid duplication of effort, and streamline Basin communication in a cost effective way"

BTWC proposes to enhance and expand upon the organization's existing community outreach and education program to not only increase public awareness and support around the relationship between forest management, wildfire preparedness, and watershed health, but also to strengthen transparency and develop co-management opportunities in the natural resource decision-making process. We intend to do this by facilitating open channels of communication between land management entities and communities. BTWC's current forestry project in the Cedar Park, for example, has expanded USFS's ability to thin acreage by bringing private landowners into the project who have land and access points to adjacent USFS parcels. By acting as the liaison between these groups BTWC will also help to streamline communication and reduce unfavorable interactions between groups with competing values.

# **Related Studies**

Please provide a list of any related studies, including if the water project is complementary to or assists in the implementation of other CWCB programs.

This project builds upon BTWC's completed and ongoing partnered restoration and stewardship work within the Big Thompson Watershed.

#### **CWCB-Related Studies**

Monitoring and Adaptive Management program

In 2018, with the help of CWCB's Restoration Grant funding, BTWC began a large-scale project focused on the development of an adaptive management framework and protocol to help ensure BTWC-led restoration projects naturalize over time without overly degrading. To create the monitoring protocol, which was completed in November 2019, BTWC worked with a consultant team to identify



parameters to assess key watershed functions using quantifiable and replicable methods that are efficacious in dynamic watershed systems. To develop a clear picture of post-construction restoration site conditions, BTWC is using the established monitoring protocols to build upon pre-existing monitoring efforts through piloting a community science and stewardship program which involves community members in the ongoing stewardship of the Big Thompson River ecosystem through volunteer monitoring, weeding, and planting days. By augmenting existing monitoring data with data collected through the community science program, we can build a more robust picture of adaptive management and corrective action needs at each restoration site. This will provide a critical link to build on the previous efforts of BTWC and numerous other organizations to ensure the long-term success of our combined efforts.

#### Stream Management Plan

BTWC, along with an Advisory Committee composed of diverse water interests, is leading the "Big Thompson River Envisioning Project" along approximately 15 miles of river corridor. The overall goal of the plan is to engage citizens and stakeholders to create a shared vision for improving the Big Thompson River by identifying strategies and action plans that address diverse interests. Collection, consolidation, and sharing of information and data across stakeholder groups and with community members is a role that BTWC has come to fill across many projects. Task 1 of the SMP identifies a guiding question of "how can [BTWC] provide a hub of information for those interested in the long-term health of the Big Thompson River?". Task 3 of the SMP focuses on a River Health and Benefits Assessment and asks "How can [BTWC] best utilize existing data to evaluate current conditions?". Both of these SMP questions are extremely relevant to the development of our forest health programs as BTWC solidifies its role as a hub of data and information sharing for watershed-wide natural resource planning and communication efforts across our partner and community networks.

#### Non-CWCB Related Studies

#### Peaks to People Modeling Forest Thinning in the Colorado-Big Thompson Project

In 2019, BTWC's forestry partners, Peaks to People and Northern Colorado Water Conservancy District, announced extensive modeling to identify where forest thinning and restoration should be implemented to reduce wildfire threat to the vulnerable C-BT project. This assessment indicated a high potential to reduce wildfire risk to the Colorado-Big Thompson Project by up to 90% if an investment of \$70 million dollars is dispersed to forest thinning and prescribed fire projects across the 215,198 total project acres over the next decade. With a high percentage of private landowners in the Big Thompson watershed, this large goal will need to be a joint effort of both public and private land owners. It is in this need for a joint effort that the dataset has a gap. It does not have clear information on landowner and community management efforts. There is a clear need to incorporate private efforts into public agency efforts to expand potential treatment acreage. BTWC's proposed project will help to fill this gap by communicating with communities to identify where work is already being done and also by empowering communities through education initiatives to participate in joint efforts with public land management entities.

#### Canyon Lakes Collaborative Coalition Restoration – At Cedar Park

The Cedar Park project, which is entering the design phase, is BTWC's second forestry project. The project is in coordination with another forestry project in the Poudre River watershed. For the sake of clarity, this application will focus solely on the Big Thompson location.

The project engages Sylvan Dale Ranch, a landowner that works closely with the BTWC & shares a boundary with the planned USFS Cedar Park treatments. The project is on the north facing slope of Palisade Mountain and is focused on thinning overly dense lower montane ponderosa pine forest. The targeted treatments have been identified as high risk to drinking water supplies by the Colorado Forest



Restoration Institute (CFRI). The project site and surrounding area drains into the Big Thompson River, which provides drinking water to the residents of Loveland, and is part of the C-BT Project that delivers water from the West Slope to the Front Range. CO-WRAP also shows the nearby residences as high risk WUI. The project will reduce fuel loading between the meadow system and the Palisade Mountain ridgeline. In addition to reducing the direct impacts of wildfire, this layout is intended to improve suppression capabilities in the event of a wildfire.

#### Collaborative Copper Study Project

Starting this year, BTWC and partners: Big Thompson Watershed Forum, Northern Water, Trout Unlimited, and Big Thompson Conservation District will begin a collaborative project to mitigate the entrance of copper into Big Thompson water bodies. High levels of copper in water supplies can have deleterious effects on human health and is one of the most toxic metals to aquatic organisms and ecosystems. Copper occurs naturally within the Big Thompson Canyon, but due to fire suppression over the last century, forests have become denser and are therefore sequestering larger amounts of copper from the soil. When tree falls occur this copper leaches from trees and moves through soil into water bodies. The mainstem of the Big Thompson river and all tributaries and wetlands within Rocky Mountain National Park are on the 303(d) impaired list for copper. Our intent is to use forestry to investigate possible mitigation options that align with other forestry goals, such as the need for extensive thinning. Once we have developed a better understanding, we will communicate this to our partners and use it to inform future forestry work in order to reduce the likelihood of copper infiltration.

#### Glen Haven Wildfire Resilience Project

The Glen Haven Wildfire Resilience project will collaboratively implement a forest thinning project that improves forest health and reduces catastrophic wildfire threat to ponderosa pine forests surrounding the Glen Haven community and North Fork of the Big Thompson River, a critical fresh water source for Northern Colorado. BTWC will manage community engagement and thinning treatments on approximately 60 acres of private land owned by the Glen Haven Association (GHA). BTWC will coordinate efforts with USFS work that is part of the Joint Chiefs Glen Haven focal area to link landscape level forest health and management, outreach, information sharing, treatment, and benefits. The proposed project aligns with the Colorado Forest Action Plan's central themes by managing and reducing threats to forest and ecosystem health while enhancing public benefits such as water quality and community program support (for GHA's defensible space program). The Larimer County CWPP currently ranks the Thompson River Planning Area as the highest priority for mitigation among the 48 areas total, and calls for more planning, outreach and implementation to reduce negative impacts on human values from wildfire. The proposed project also builds on the Glen Haven CWPP, which identifies fuels management as priorities for waterways, utilities, and infrastructure.

#### Community Wildfire Protection Plans

Community Wildfire Protection Plans can be pivotal in the long-term planning and mitigation of risk in regards to wildfire events. Larimer County has recently updated their CWPP and Loveland is currently updating. Education and outreach are critical components of both Larimer County's and Loveland's CWPP. Within Big Thompson canyon communities, Glen Haven is the only community to have established a CWPP. Through this engagement project, we will encourage the creation of CWPPs for communities within the canyon, we will also help to facilitate the development of CWPPs and ensure they highlight the importance of fuels reductions projects to decrease wildfire threat.



funded)

# Previous CWCB Grants, Loans or Other Funding List all previous or current CWCB grants (including WSRF) awarded to both the Applicant and Grantee. Include: 1) Applicant name; 2) Water activity name; 3) Approving RT(s); 4) CWCB board meeting date; 5) Contract number or purchase order; 6) Percentage of other CWCB funding for your overall project. 1) "Big Thompson River Envisioning Project," Big Thompson Watershed Coalition via Shayna Jones, Contract: CMS 141168, CTGG1 2020-2098 CWCB Provided just over \$140,000 and was matched by South Platte Basin Round Table's project contribution of \$40,000. 2) "Adaptively managing the Big Thompson watershed for long-term health." Big Thompson Watershed Coalition via Shayna Jones, Contract: CMS 111631, CTGG I: CTGG I PDAA 20J9\*00197 3) CWCB Emergency Watershed Protection projects: MS1+2 and Waltonia, contract: CTGG1 PDAA 2018\*786 CMS #104776) Other project site contracts with CDOT but BTWC involved in project management: Cedar Cove and Jasper Lake, Drake and Moodie, Glen Haven, North Fork,

CWCB provided 12.5% construction costs for each project (excluding Jasper Lake, 100% CWCB

 Taxpayer Bill of Rights

 The Taxpayer Bill of Rights (TABOR) may limit the amount of grant money an entity can receive. Please

describe any relevant TABOR issues that may affect your application.

As BTWC is a non-profit organization, TABOR issues will not affect our application

CWP Grant Application | 11



Submittal Checklist		
Х	I acknowledge the Grantee will be able to contract with CWCB using the Standard Contract.	
Exhib	it A	
Х	Statement of Work <sup>(1)</sup>	
Х	Budget & Schedule <sup>(1)</sup>	
	Engineer's statement of probable cost (projects over \$100,000)	
Х	Letters of Matching and/or Pending 3 <sup>rd</sup> Party Commitments <sup>(1)</sup>	
Exhib	it C	
	Map (if applicable) <sup>(1)</sup>	
Х	Photos/Drawings/Reports	
Х	Letters of Support (Optional)	
Х	Certificate of Insurance (General, Auto, & Workers' Comp.) <sup>(2)</sup>	
Х	Certificate of Good Standing with Colorado Secretary of State <sup>(2)</sup>	
Х	W-9 <sup>(2)</sup>	
	Independent Contractor Form <sup>(2)</sup> (If applicant is individual, not company/organization)	
Enga	Engagement & Innovation Grant Applicants ONLY	
Х	Engagement & Innovation Supplemental Application <sup>(1)</sup>	

(1) Required with application.

(2) Required for contracting. While optional at the time of this application, submission can expedite contracting upon CWCB Board approval.



# ENGAGEMENT & INNOVATION GRANT FUND SUPPLEMENTAL APPLICATION

#### Introduction & Purpose

Colorado's Water Plan calls for an outreach, education, public engagement, and innovation grant fund in Chapter 9.5.

The overall goal of the Engagement & Innovation Grant Fund is to enhance Colorado's water communication, outreach, education, and public engagement efforts; advance Colorado's water supply planning process; and support a statewide water innovation ecosystem.

The grant fund aims to engage the public to promote well-informed community discourse regarding balanced water solutions statewide. The grant fund aims to support water innovation in Colorado. The grant fund prioritizes measuring and evaluating the success of programs, projects, and initiatives. The grant fund prioritizes efforts designed using research, data, and best practices. The grant fund prioritizes a commitment to collaboration and community engagement. The grant fund will support local and statewide efforts.

The grant fund is divided into two tracks: engagement and innovation. The Engagement Track supports education, outreach, communication, and public participation efforts related to water. The Innovation Track supports efforts that advance the water innovation ecosystem in Colorado.

### **Application Questions**

\*The grant fund request is referred to as "project" in this application.

#### Overview (answer for both tracks)

In a few sentences, what is the overall goal of this project? How does it achieve the stated purpose of this grant fund (above)?

A community poll delivered during our first workshop identified strong community sentiments of lacking communication between our communities and forestry planning efforts with our watershed, especially to WUI residents. Through our 2019 community forestry events and initial stakeholder engagement, BTWC has identified forestry programmatic needs as described in this project proposal. With this funding, we propose to:

1) build stronger community understanding of wildfire risk to the Big Thompson River, Colorado-Big Thompson project, and our water resources,

2) create better communication between the public and forest/fire managers to build rapport, elicit feedback, and encourage stronger transfer of accurate information, and

3) provide resources and capacity for landowners to conduct defensible space and forest thinning efforts on private lands neighboring public lands.

Through these engagement and information-sharing objectives, BTWC will expand the knowledgebase, capacity, and involvement of watershed residents to enhance the scope and pace of regional forest management and wildfire mitigation to protect our local water resources.

Who is/are the target audience(s)? How will you reach them? How will you involve the community?

Target audiences for this project include both broad audiences such as 1,000,000 water users of Colorado-Big Thompson watershed and as narrow as individual private landowners living in the watershed's Wildland-Urban Interface. Target audiences are specific to each of the tasks identified in this proposal's Statement of Work. The Big Thompson Forestry Partnership, a forestry planning and



#### Overview (answer for both tracks)

advisory committee, will expand on the already established Northern Colorado Fireshed Network (NCFN) to draw local Big Thompson forest management practitioners together, conjoining planning efforts across the Estes Valley Watershed Coalition's and the Big Thompson Watershed Coalition's network partners. As the Big Thompson Forestry Partnership. This joint effort will expand relevant stakeholders not yet involved in the NCFN through collaborative planning and on-the-ground efforts between forest management practitioners, wildfire emergency response specialists, local municipalities, and downstream water utility agencies. Unifying these diverse stakeholders will expand cross-boundary work, improving sector-to-sector information and goal sharing, watershed and community threat prioritization, landowner planning and stewardship empowerment, and the pace and identification of funding sources for source water protection between Estes Park and the Big Thompson canyon walls. These meetings will engage approximately 20 individuals to collaborate over source water and water quality protection, forest management, catastrophic wildfire mitigation, and funding structures to support scaling of these practices. Forestry program engagement will provide inperson and online workshops and initial site assessments for some of the watershed's 2,000 forest landowners within identified "priority" communities (at or nearby Estes Park, Glen Haven, Cedar Park/Storm Mountain, Chimney Hallow, Pinewood, Drake, and Round Mountain) as identified by existing modeling tools and data assessments. Mapping tools and landowner forestry programs will target a few hundred people across aforementioned communities to improve the forestry-watershed health education connection and increase the rate of adoption for participation in collaborative planning and fire mitigation projects. Program progress and educational information, however, will be made available to the larger Northern Colorado community of 40,000+ people through social media, website, newsletter, and local newspaper content. Beyond those mentioned, communication tools include community calendars, existing community events and groups (such as the Big Thompson Canyon Association), local Volunteer and Big Thompson Canyon Battalion fire departments, homeowners and road associations, community calendars, and hardcopy mailers such as flyers, post cards, brochures, etc.

Describe how the project is collaborative or engages a diverse group of stakeholders. Who are the partners in the project? Do you have other funding partners or sources?



#### Overview (answer for both tracks)

This project is rooted in a collaborative effort to engage Big Thompson communities and the public in education and awareness campaigns which advocate for coordinated action-based solutions and increased levels of community stewardship. To effectively approach community engagement, we will utilize community relations developed from 2013-2019 flood recovery efforts and network contacts who have similar missions of affecting positive change to Big Thompson natural resource management. This project is critical to linking stakeholder leaders and encouraging collaboration across natural resource and community management fields in organized, outcome driven meetings that are rarely conducted. BTWC and network partners closely coordinate our messaging and jointly develop and host engagement opportunities to build trust and personal relationships between partnering entities and community members. We will also collaborate with Lefthand Watershed Center and CitSci.org to evolve the MyWatershed app to gather community-generated participatory mapping data.

Additionally, as part of the proposed engagement work, BTWC will work with NCFN and other Big Thompson partners to expand upon the network and formalize the creation of a Big Thompson Forestry Partnership.

Overall this project will involve a wide array of partners, including, but not limited to: USFS, CSFS, USDA-NRCS, Northern Colorado Water Conservancy District, City's of Estes Park, Fort Collins, Loveland, and Greeley water utility departments, Loveland Fire and Rescue Authority, Big Thompson Fire Department - Canyon Battalion, Glen Haven Volunteer Fire Department, Glen Haven Association (and other upper watershed HOAs), Larimer County Sheriffs' Office, Larimer County Office of Emergency Management, Lefthand Watershed Center, CitSci.org, Four Mile Watershed Coalition, Coalition for the Poudre River Watershed, Estes Valley Watershed Coalition, The Nature Conservancy, Big Thompson Watershed Forum, The Forest Stewards Guild, Peaks to People, CSU's Water Center and Water Literate Leaders, Colorado Trout Unlimited, Colorado Parks and Wildlife, CSU's Human Dimensions of Natural Resources department, Colorado Forest Restoration Institute, Team Rubicon - Northern Colorado Chapter, and potentially upper watershed landowners and the downstream urban residents.

Supplemental project funders include: Northern Colorado Water Conservancy District, Colorado State Forest Services, Coalition for the Poudre River Watershed via United States Forest Service, City of Fort Collins, City of Loveland, Colorado State University Human Dimensions of Natural Resources department, Nina Mason Pulliam Charitable Trust.

Describe how you plan to measure and evaluate the success and impact of the project?

Specific target metrics will coincide with each of the program tasks indicated in the Statement of Work section below. Many of these metrics will be numerically based to get a better understanding of the number of community events held, participants involved, labor hours donated (for volunteers and stakeholder/partners), production and installation/distribution of indicated educational materials, and description of event outcomes and areas of improvement. For web and social media based outreach, online metrics will be tracked and reviewed in relation to type of event, number of community web actions (responses, comments, sharing, likes, etc), and action items of how to improve these communication tools.

A survey has been created to capture information on landowner knowledge-base, perceptions of forestry work, and other relevant information. This data will continue to be collected and will be analyzed and shared with relevant stakeholders including community members, BTWC Board, partners, BTFP, and others through a BTWC Forestry Program Plan.



#### Overview (answer for both tracks)

Beyond the project timeline, the success of the forest stewardship program will be measured in the continuation of the Big Thompson Forestry Partnership and continued landowner investment and participation in forest mitigation projects.

What research, evidence, and data support your project?

"The last 50 years or so have seen a steady increase in the rate of destructive wildfires across the world, partly as a result of climate change and partly as a result of encroachment of human settlement on fire-based ecosystems. Years of active fire suppression in such areas has inevitably led to the build-up of hazardous fuel loads, creating ideal conditions for destructive wildfires" (Johnson et al. 2001 & Carver et al., 2009). To confront this growing issue, a better understanding of forest management needs and how to involve people in wildfire threat mitigation work is necessary (Kline et al., 2015). Yet, "the need to have a comprehensive understanding of ecosystem integrity, including function and structure, is often confounded by a lack of, or inadequate and incomplete, data and monitoring initiatives by professional scientists and government agencies" (Conrad & Hilchey, 2011). To collaboratively fill this gap, and to better involve communities in information gathering and sharing, management decision-making, and stewardship, citizen science initiatives have been developed (Conrad & Hilchey, 2011). These citizen science initiatives "promote the reconnection between people and nature and more generally between people and science" (Devictor et al., 2010).

A key aspect of citizen science initiatives is participatory community-based mapping. Participatory mapping can, among other things, help to identify priority locations for forest thinning and prescribed fire and can also be used as a tool to map community values toward natural resources (Beverly et al., 2008; Haworth et al., 2016). These tools, enabled through social media and web-based mapping platforms, have the potential to lead to "a new disaster management context" where individuals create, share, and map geographic information (Haworth et al., 2016). Further, it has been shown that participation in these activities can "…increase community connectedness for building disaster resilience" (Haworth et al., 2016). Community connectedness correlates with levels of social capital, which managers can take advantage of "…to improve the effectiveness of community outreach education and they can, in turn, use wildfire preparedness education to increase social capital. Because people who perceived higher social capital also were found to be more likely to take action around their homes to reduce their wildfire risk, educational programs that emphasize building social capital may help managers achieve better community preparedness." (Agrawal & Monroe, 2006).

As community outreach and education programs are built, expanded upon, and evolve to incorporate the above components, another focus must be upon relaying and creating a more holistic picture of how forest management and wildfire connect to broader watershed health and water quality issues. Wildfire can affect both watershed health and water quality through changes in source-water chemistry which can affect drinking water-treatability, post-fire erosion and associated transport of sediment to reservoirs and water treatment plants, and burned watersheds lead to earlier snowmelt (Writer et al., 2012). By articulating these connections between wildfire and water quality issues, organizations expand the scope of those affected and can therefore engage a broader group of stakeholders in discussions on and actions toward wildfire preparedness and preventative mitigation efforts (Cooke et al., 2016). If these connections can be articulated through interactive exchanges, rather than unidirectional information sources, it can also help to increase community levels of trust toward shared information and management actions (McCaffrey & Olsen, 2012). Further, if the process of articulating these connections includes modeling tools which predict expected benefit from management action, it can increase trust in individual and community investment into forest management and wildfire preparedness efforts (Cooke et al., 2016).



#### Overview (answer for both tracks)

As it becomes increasingly critical for communities in fire-adapted ecosystems to invest in planning efforts and threat reduction strategies, it also becomes increasingly critical to build trust and establish open lines of communication with communities involved and affected by forest management efforts, as they are often long and involved processes. This process of relationship building can help to reduce conflict and lead to an alignment of management regimes across adjacent lands and between different stakeholders (Carver et al., 2009).

With all this in mind, we look toward Kline et al.'s suggested direction of a coupled biophysicalsocial framework in which we use "social science to understand wildfire risk perceptions and the degree of collaboration and mitigation behavior among landowners, land management agencies and local officials. Such an approach potentially would provide an improved method for defining the spatial extent of wildfire risk to communities compared to current planning processes, and creates an explicit role for social science to improve understanding of community-wide risk perceptions and predict landowners' capacities and willingness to mitigate risk by treating hazardous fuels and conducting Firewise activities" (2015).

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#### Overview (answer for both tracks)

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Writer, J. H., McCleskey, R. B., Murphy, S. F., Stone, M., Collins, A., & Thoms, M. (2012). Effects of wildfire on source-water quality and aquatic ecosystems, Colorado Front Range. Wildfire and Water Quality: Processes, Impacts and Challenges, 354, 117-122.

Describe potential short- and long-term challenges with this project.

As a project which requires high levels of collaboration and action from network partners and community members there are inherent challenges, both short- and long-term, which may present themselves.

Short-term challenges include:

- Activating community interest and discerning program effect on community understanding of water health and wildfire mitigation. While we have had a diverse attendance at our previous forestry-based events, it has been a consistent challenge to effectively market events and generate increased attendance, especially for tour or outdoor activity-based events.
- Collaborating with a wide network of partners can often be a bottleneck to efficiency as coordinating diverse work and project schedules can be difficult.
- Developing staff forestry technical experience to promote linkages between water health and forest management practices to increase understanding and behavior change.
- Working to open channels of communication between the public/communities and natural resource management entities could lead to challenging interactions with people who are hesitant to work with government entities.
- Evolving the MyWatershed app as a data collection platform to effectively capture landowner knowledge, practices, and participation interest data beneficial to planning. The app also has identified barriers to access that we must work around.
- Consolidating resources around water management, threat reduction, forestry, wildfire preparedness practices, and more could be complicated by mixed messaging. We will have to work to ensure resources do not present contradictory or mixed recommendations and messages.
- Consolidating Big Thompson data on a singular web-based platform may present challenges in locating, reviewing, and uploading all relevant data.

Long-term challenges include:

- Continued long-term engagement and investment of communities to effectively plan for and reduce wildfire threats when natural disasters do not trigger a community response.
- Long-term investment of Forestry partners in non-duplicative and capacity-building manners.
- Generating future funding sources to continue with this critical engagement work.
- Long-term alignment of goals between diverse network partners.
- Long-term alignment of goals with diverse communities.
- Capacity to update and maintain Big Thompson data on web-based platform.
- Staff capacity to maintain and monitor subsequent forest thinning implementation projects this project will help to develop.



#### Overview (answer for both tracks)

BTWC readily understands the realistic challenges that this complicated and multi-objective project will entail and we look forward to working with network partners and CWCB to address challenges as they present themselves. We feel that as long as we maintain high levels of trust, transparency, and collaboration and that we understand the breadth of challenges this work may bring about that we will be able to effectively respond to them.

Please fill out the applicable questions for either the Engagement Track or Innovation Track, unless your project contains elements in both tracks. If a question does not relate to your project, just leave it blank. Please answer each question that relates to your project. Please reference the relevant documents and use chapters and page numbers (Colorado's Water Plan, Basin Implementation Plan, PEPO Education Action Plan, etc.).

#### Engagement Track

Describe how the project achieves the education, outreach, and public engagement measurable objective set forth in Colorado's Water Plan to "significantly improve the level of public awareness and engagement regarding water issues statewide by 2020, as determined by water awareness surveys."

Section V (pg. 1) of the water awareness surveys identified seven key awareness topics from the northeast region. Of those seven awareness topics, this project will address four: awareness of water issues; performance of government agencies; water-related concerns; and need for more information and most trusted sources. Through addressing these issues, this project will also help to achieve Colorado's Water Plan measurable objective to: improve the level of public awareness and engagement regarding water issues.

To create increased awareness and to affect measurable changes in human behavior the best strategies are often rooted in outreach and education campaigns. While ample research supports the importance of both forest managements for water resource health, little peer reviewed content identifies community engagement in water resource health and related wildfire threat to water resources as an influencer of public support of forest management. Largely, educational resources and opportunities that link water health and forest stewardship are generally lacking for Northern Colorado. To effectively approach the forest management and water health connection, this project will identify local gaps in public knowledge and information sharing, and establish network-wide consistency on how, from whom, and to whom information is being shared to engage landowners and enhance participation.

The proposed project will use these factors to address the four aforementioned awareness topics as well as engage the public on the importance and management of the Big Thompson's native and Colorado-Big Thompson Project water resources. BTWC will administer surveys that combine statewide water awareness questions with existing Big Thompson watershed-forestry perception surveys and discussions with community members to identify knowledge gaps and communication needs around the watershed-forestry connection. We will also use our established relationships with both land management entities and Big Thompson communities to open up channels of communication between the two groups. Through increased dialogue we hope to enhance community levels of trust in information provided by those entities and also improve public perceptions of the performance of land management government agencies.



The BTWC-led community events and workshops will provide a space for community members to expand their awareness of water issues, in this case, with a focus on the relationship between wildfire threat reduction, forest health, and water quality. We will also use events, workshops, and partner involvement to fill knowledge and communication content and resource gaps that exist between those connected to water and forests in our watershed. Events will feature water resource/utility managers, emergency response teams, and forest and wildfire managers as a united front of partners to provide insight and address community interest and concerns about regional water, forest, and wildfire management. It will also improve the general sharing of information as the workshops prioritize dialogue and facilitated focus groups rather that a lecture format. Lastly, we intend to use events as a place to collaboratively plan implementation projects, which will lead to increased public engagement and awareness as we will include communities in the planning, design, implementation, monitoring, and maintenance.

BTWC will also record speakers' talks and compile relevant resources which can be provided across online platforms. Public access to this information will further education goals as the public can engage with workshop information when and where they please and share it across other platforms.

Describe how the project achieves the other measurable objectives and critical goals and actions laid out in Colorado's Water Plan around the supply and demand gap; conservation; land use; agriculture; storage; watershed health, environment, and recreation; funding; and additional.

Project relevant measurable objectives and critical goals and actions from Colorado's Water Plan include:

- "Every acre-foot of conserved water used to meet new demands is an acre-foot of water that does not need to come from existing uses."
- "Protect and enhance river-based environments and recreational opportunities that support local and statewide economies and are important for the enjoyment of current and future generations of Coloradans."
- "The protection and restoration of water quality should be a key objective when planning for Colorado's current and future consumptive, recreational, and environmental water needs."
- "Colorado's Water Plan promotes water resource resilience from natural disasters through strategic preparedness and response."

Our proposed project will achieve these through:

- Conserving and protecting water by increasing public awareness and stewardship levels, which in turn may lead to more coordinated forestry implementation projects. Forestry projects which reduce wildfire threat mitigate the potential impact on water quality and supplies from high levels of post-fire sediment yields and erosion.
- Reducing potential wildfire impacts in the Big Thompson canyon also help to protect recreational opportunities and tourist-based economies as the Big Thompson canyon is the gateway to Rocky Mountain National Park-the number 1 attraction in the state.
- Prioritizing strategic planning in regards to wildfire preparedness. Strategic planning will include building awareness for the need of community-level CWPPs, working with available assessment models and research teams to identify priority areas for implementation projects, and promoting forestry stewardship and mitigation projects.

Describe how the project achieves the education, outreach, and public engagement goals set forth in the applicable Basin Implementation Plan(s).



Goals of the South Platte Basin Implementation plan education, outreach, and public engagement section (4.1.3) include:

- Leverage existing basin resources
- Complement existing state efforts
- Develop and maintain basin-specific outreach tools and approaches

BTWC's engagement project will achieve all of these goals.

- Leverage existing basin resources by partnering with land management entities, emergency operations, and other organizations like Colorado Forest Restoration Institute. Many of these entities have existing resources related to wildfire threat reduction. Our role will be to help disseminate these resources so that communities may better utilize them. We will also work with regional wood chippers, tree haulers, and wood carvers to expand the benefit of forestry work to local businesses.
- Complement existing state efforts by leveraging resources already created through CSFS, SPBR, the Water Plan, Firewise, and others. BTWC will also utilize our connections to facilitate increased conversation between public agencies and Big Thompson landowners.
- Utilize the MyWatershed app, which was created through a coordinated effort by Left Hand Watershed Center and CitSci.org. This app has the functionality to be tailored to specific projects and organizations. BTWC will use this functionality to create Big Thompson specific projects that allow community members to upload participatory mapping and monitoring data regarding forest conditions. We will also compile Big Thompson specific resources, and videos/activities from our wildfire preparedness workshops which can all be shared on online platforms and used to generate increased community interest in such topics.

Describe how the project achieves the basin roundtable's PEPO Education Action Plans.

The South Platte Basin Roundtable Education Action Plan has a goal to "encourage dialogue on water, broaden the range of stakeholders actively participating in water decisions, and create a locally driven process where the decision-making power rests with those living in the state's river basins" (pg. 1 SPBR EAP 2015 update). The Plan also has a focus on solutions-oriented water supply planning.

These goals parallel the goals of BTWC's proposed engagement project.

- Promote healthy dialogue between the general public—namely landowners in the Big Thompson watershed—BTWC, partner organizations, and land management entities.
- To encourage this dialogue BTWC will host workshops, community event days, and encourage use of the MyWatershed app to provide an app-based avenue to elicit feedback and on-the-ground information from community members.
- Fill knowledge gaps of the connections between forest management and watershed health with a focus on post-wildfire sedimentation of water bodies.
- Strengthen existing partnerships and foster new ones to broaden the range of stakeholders participating in water decisions. This will be done through multiple avenues, but will include the expansion of the NCFN which will further encourage collaborative multi-agency efforts to better coordinate current and future forest work across the watershed.
- Coordinate work in an efficient way that also allows communities to seize on opportunities to take place in thinning and wildfire threat reduction work which spans private/public boundaries.
- Provide outreach and education that are directly related to solutions-based actions such as defensible space site assessments and assistance in the creation of CWPPs.



#### Innovation Track

Describe how the project enhances water innovation efforts and supports a water innovation ecosystem in Colorado.

N/A

Describe how the project engages/leverages Colorado's innovation community to help solve our state's water challenges.

N/A

Describe how the project helps advance or develop a solution to a water need identified through TAP-IN and other water innovation challenges. What is the problem/need/challenge?

#### N/A

Describe how this project impacts current or emerging trends; technologies; clusters, sectors, or groups in water innovation.

N/A

# Colorado Water Conservation Board

### Water Plan Grant - Exhibit A

Statement Of Work		
Date:	1/30/2020	
Name of Grantee:	Big Thompson Watershed Coalition	
Name of Water Project:	Building the Community-Information Connection for Watershed Health	
Funding Source:	CWCB Water Plan Grant – Engagement	
Water Project Overview:		



In 2019 BTWC developed and delivered community forestry workshops, to develop rapport between watershed residents, general community members, and partnering public entities in communicating information on regional and watershed-wide forestry, wildfire mitigation, and emergency response efforts. Thus far, these workshops have engaged over 70 participants from 7 different cities from Estes Park to Fort Collins and Boulder and developed professional connections for the next steps in our organization in the formalization of the Big Thompson Forestry Partnership (as proposed in Task 1 below).

During engagement event associated community polling activities, workshop participants identified that the most common reason they believe in forest management is for the protection of water quality and supply. Since the 2013 flood, BTWC has been working closely with watershed communities to repair the health and function of the waterways and ecosystems that they are deeply connected to. BTWC has worked to develop trusting relationships, water health awareness, and commitment to watershed protection and resilience with local communities. BTWC has identified a strong role for itself in promoting health of the C-BT project and Big Thompson watershed through the facilitation of information sharing between stakeholders and advancement of forestry projects and community participation to reduce wildfire threat to our fresh water resources.

With this CWCB engagement grant funding BTWC proposes to:

- Improve network capacity building through the creation of the Big Thompson Forestry Partnership (Task 1)
- Expand BTWC engagement programs emphasizing water resource health in forest management and wildfire threat reduction (Task 2)
- Develop information sharing web-resources for forestry planning (Task 3), and
- Develop private landowner services and identify future potential BTWC-partnered education and outreach needs and potential forestry projects (Task 4).

#### **Project Objectives:**

Objective 1: Create a more informed public that is educated in threats to local water resources and invested in the future health and resilience of the Big Thompson watershed for various water uses and values.

Objective 2: Enhance capacity, communication, and discourse between private landowners and natural resource managers and between various sectors of natural resource management to improve awareness and understanding of watershed-wide forest management initiatives.

Objective 3: Increase local landowner awareness and participation in programs that support private forest management to expand multi-benefit, cross-boundary forest thinning and defensible space projects that reduce risk from wildfire to our water resources, communities, and wildlife.

#### Tasks

#### Task 1 – Network Capacity Building

Description of Task: Develop BTWC capacity to facilitate a multi-entity network to coordinate watershedwide roles, resources, and an understanding of needs around forestry and wildfire information, engagement, and on-the-ground water resource threat reduction implementation.



#### Tasks

In 2019, BTWC joined the Northern Colorado Fireshed Network (NCFN), a multi-agency collaborative effort to better correlate forestry project design, implementation, and communication across federal, state, and private lands in Northern Colorado. This effort started by concentrating energy in the Poudre River Watershed and is strategically working to draw their network, structure, and operations south through neighboring watersheds using watershed coalitions as managing bodies. The Big Thompson Watershed Coalition has been a part of multiple 2019 Network discussions, and is currently organizing the first quarterly Big Thompson-specific network gathering for spring/summer 2020. The capacity of BTWC to coordinate and facilitate this working group and host community events is currently being paid for out-of-pocket and through unrestricted funding because of the program's high level of need.

BTWC proposes to initiate the formation of the Big Thompson Forestry Partnership (BTFP). This will be conducted through the following sub-tasks:

#### Sub-task 1.1: Create the "Fireshed Roadmap"

Develop a better understanding of water resource, forestry, and emergency response stakeholders for the Big Thompson watershed through a comprehensive map of active entities, their resources, and gaps. This will include partners listed in "Partners Included" section.

#### Sub-task 1.2: Organize Stakeholder Meetings

Organize, host, and record BTFP seasonal meetings for Roadmap identified stakeholders throughout 2020 and 2021 and conduct one-on-one stakeholder meetings with each entity to better understand their operations, objectives, role, and geographic scope in the Big Thompson watershed.

#### Sub-task 1.3: Enhance Public Communication

BTFP will develop a communication sub-committee that works with BTWC's Forestry Communications Plan (Task 2) to produce a BTFP Communication Plan that strategizes how and when the network will communicate development, progress, and relevant information.

#### Method/Procedure:

Sub-task 1.1: Create the "Fireshed Roadmap"

- 1. Identify and compile contact information based off of existing frameworks developed by the Northern Colorado Fireshed Network and Boulder County Forest Collaborative.
- 2. Develop visual representation of the BTFP Roadmap.
- 3. Verify each entity's contact information, assets, and perceived gaps in the system that BTWC should address through the BTFP.
- 4. Communication network expanse through community engagement efforts (Task 2), BTWC website, and other relevant opportunities for sharing.

#### Sub-task 1.2: Organize Stakeholder Meetings

- 1. Utilize road map to initiate contact with each organization
- 2. Schedule 4 stakeholder wide Network meetings for 2020 and 2021
- 3. Schedule individual meetings with stakeholder entities
- 4. Develop agendas, presenters, and communication tools necessary for each meeting.

#### Sub-task 1.3: Enhance Public Communication

- 1. Develop Communications sub-committee of network members
- 2. Develop work plan and timeline for the sub-committee
- 3. Review BTWC's Forestry Communications Plan
- 4. Develop BTFP Communications Plan
- 5. Carry out communication of network activities and updates through the communication methods (as described in Task 2.4).



#### Tasks

6. Collect and analyze metrics on network communication success through multi-media metrics (as described in Task 2.5).

#### Deliverable:

- Production of a BTFP Roadmap visualization chart
- BTFP quarterly and one-on-one meeting agendas, minutes, and meeting packets
- BTFP Operational Plan (including identification of processes for inter-entity communication, structural development, community engagement, and data/visualization sharing)

#### Tasks

#### Task 2 - Forestry Engagement Program Development

Description of Task: Community engagement in Big Thompson forestry

Funding provided by the Department of Local Affairs, Colorado State Forest Service, and Northern Water, enabled BWTC to develop and deliver forestry project engagement and wildfire workshop series to local residents and the general public in 2019. While project-focused engagement is geared towards communication for directly impacted communities, these workshops provide information for landowners and the general public across Northern Colorado. We see great value in building on the strong platform that BTWC has already developed to expand information sharing and public participation in watershed protection, wildfire threat, and forest management as preventative measures for water resource and community protection. Our engagement program as described here in Task 2 is directly linked to the effectiveness and success of Task 4.

#### Sub Task 2.1 – Provide Workshops

Improve and host piloted "For the Love of the Forest" workshop series through four community events with partnering agencies, water utilities, local government, and wildfire response services. Workshops will include seasonally relevant topics, activities, and define linkages between forest management practices and watershed health protection.

#### Sub-Task 2.2 – Host Volunteer Events

Develop, organize, and host 6 volunteer outreach opportunities (in addition to Cedar Park volunteer opportunities) with local community and corporate groups. Groups will assist BTWC's Round Mountain and Cedar Park project sites as well as Glen Haven Association's FireWise Community initiatives. General volunteer programs will expand water resource protection, forestry health, and wildfire mitigation information and education to watershed community members and our general public across Northern Colorado.

#### Sub-Task 2.3 – Develop Education Materials

Develop, collect, and distribute educational resources for landowners and Big Thompson Forestry Partnership collaborators. BTWC has recognized a need to identify and consolidate community resources for water, forest, and wildfire managers to share with community members. BTWC will work with the Boulder County Forest Collaborative, NCFN's Outreach and Engagement Committee, and CWCB's water surveys to consolidate and improve survey design to capture a more robust picture of our community's understanding, perception, and interest in water resource protection through forest stewardship and wildfire mitigation activities. These materials will be collected and distributed to community members during workshops, volunteer events, property site visits (under Task 4), and through partner entity events. Additionally, we will develop, fabricate, and install an educational sign for the Round Mountain Forestry Demo. project that can



#### Tasks

capture and educate up to 40,000 annual visitors between Round Mountain and Viestenz-Smith Mountain Park on the need for watershed forestry restoration and wildfire mitigation efforts.

#### Sub-Tasks 2.4 – Improve Communication

Enhance communication of information between watershed residents and natural resource managers on forestry, wildfire ecology, water resource risk from wildfire, and preparedness programs available to community members.

#### Sub-Task 2.5 – Collect Data and metrics

Collect, organize, and analyze data and information on community attendance and interest in further forestry involvement, volunteer program participation and contact information, and web-based forestry program content.

#### Method/Procedure:

Sub Task 2.1 – Provide Workshops

- 1. Refine 2019 community workshops using debrief feedback from past presenters and participants (community member).
- 2. Set dates and content for 2020 community workshops.
- 3. Develop Forestry Communications Plan section specific to workshops and the communities each workshop will be located in. The plan outlines communication information sharing outlets, content, community leaders, pre-scheduled community events, and optimum schedule of press releases.
- 4. Develop and distribute hardcopy educational resources to publicize the event.
- 5. Distribute, collect, and analyze community survey at workshops and other events and maintain community database of contact information and landowner interests for follow-up engagement.

#### Sub-Task 2.2 – Host Volunteer Events

- 1. Identify existing and new contacts of community groups interested in engaging in a group volunteer event.
- 2. Host volunteer dates and maintain metrics and contact information in community database.

Sub-Task 2.3 – Develop Education Materials

- 1. Develop and post content for BTWC website including information on the BTFP.
- 2. Hire multi-media contractor to film and develop web-based workshop videos for remote access of workshop content.
- 3. Develop, fabricate, and install Round Mountain educational signage with the City of Loveland Parks and Recreation team to meet design and educational performance criteria.
- 4. Develop content for presentations and outreach events to general community at BTWC and other organization's events.
- 5. Distribute, collect, and analyze community survey at workshops and other events.

#### Sub-Tasks 2.4 – Improve Communication

- 1. Develop a Forestry Communications Plan that includes the identification of most used information platforms, organized community groups (road associations, home owner's associations, etc.), respected community leaders, and other inter-community tools to sets schedules and content for communication.
- 2. Share forestry and wildfire updates with 150,000+ watershed residents and extended community through BTWC and partnering entities' social media, newsletters, newspapers, NextDoor, and other outlets.
- 3. Attend 3 annual community outreach festivals or events hosted by other organizations or entities. These may include the Risk canyon festival, the BTCA pancake breakfast, the Larimer County Emergency Planning festival, or others deemed relevant and generated for our target audiences.

Sub-Tasks 2.5 Collect data and metrics



#### Tasks

- 1. Install, monitor, and analyze metrics on the success of BTWC website, social media, and newsletters reaching target populations.
- 2. Use metrics to adaptively manage communication plan, tools, and methods that support the expansion of communication tools to unreached communities.

#### Deliverable:

- List of engagement events held, event planning materials, records of attendance and labor hours (for volunteer events), and description of event outcomes.
- 2-3 short educational videos on forest and fire ecology, forest management in the Big Thompson, and at-home defensible space and forest thinning practices for private landowners.
- Forestry Communications Plan with engagement sub-task specific work plans.
- Data collection and analysis on community surveys, outcomes will be consolidated into a project-end report and shared with relevant stakeholders including community members, BTWC Board, partners, BTFP, and others.

#### Tasks

#### Task 3 - "Streamline" - Web-Resource for Forestry Planning

Description of Task: Research and develop shared information and data systems for community and partner planning efforts

Linking knowledge, people, and collaboration over shared information is a fundamental value of BTWC and other watershed coalitions. Although many existing data sets are being shared between partnering entities on a request basis (if the data is known to exist and not restricted to single-entity access), collaboration will benefit from housing data and information in a single location that can be easily accessed by partners. BTWC has identified two data collection and housing functions to pilot in unison with our 2020 forestry program and BTFP development. These systems will provide data, information organization, and enhanced communication from the initial stages of programmatic development.

Sub-Task 3.1 Develop "Big T - Streamline"

"Streamline" will be a data consolidation tool that provides a single access point for data, reports, and information organized by watershed. We propose to work with the Boulder County Forest Collaborative to develop a shared access mechanism for housing and accessing forestry, fire, water resource, and community demographic-based data, reports, and information for partner access through an internal network such as ArcGIS.

#### Sub-Task 3.2 Enhance MyWatershed App

Both the Lefthand Watershed Center (LWC) and the Coalition for the Poudre River Watershed (CPRW) have developed an initial framework of web applications to improve user experience and efficiency in river health data collection. We propose to work with LWC's MyWatershed application to create a new survey that can be used by staff, students, and partners to collect and consolidate landowner information on current understanding of forestry for watershed health, existing or desired forest management practices, and interests and involvement level for future engagement, resources, and implementation. This task will emphasize local science and capture and digitize landowner knowledge to guide forestry planning and long-term outreach and education efforts. This type of information is critical to ensure that local, institutional knowledge is captured and shared and that landowner interests and practices are considered in practitioner planning.

Method/Procedure:



	Tasks
Sub-Ta	sk 3.1 Develop "Big T - Streamline"
1.	Work with BTFP to develop understand of existing data, data sharing preferences and needs, and best consolidation and network access tools.
2.	Contact data managing entities and staff contacts within the BTFP to understand existing tools and their fit and application for this type of data sharing.
3.	Request data sets, inventory categorization information, and contact information from BTFP and out- of-network entities with data.
4.	Upload, pilot, and adapt program needs based on the interests, concerns, and use needs of its stakeholders.
Sub-Ta	sk 3.2 Enhance MyWatershed App
1.	Work with BTFP to develop an understanding of landowner survey parameters and data that BTWC should collect.
2.	Work with LWC (as a part of their cross-watershed mobile app sharing interests) to convert datasheets into app functions and format for remote data collection and uploading. Through this process we hope to better understand and work within app limitations, quality control needs, and user interface to enhance data accuracy, consistency, and minimize data loss.
3.	Pilot and adapt app function to suit field needs and new survey questions or data collection needs as they arise. Basic functionality needs may include survey questions, various answer fields (such as dropdown menus or comment boxes), camera use, geolocation, and offline data collection capabilities.
Deliver	rable:
•	ArcGIS (or other host if found preferable) database that houses consolidated stakeholder forest and fire data for the Big Thompson watershed.
•	MyWatershed monitoring activity and form created for private landowner forestry and wildfire mitigation information consolidation.

• A Forestry Data Inventory document and primary staff contact will be produced and held internally by staff for reference. A professional data version can be included on the shared access web-resource. A landowner version will be maintained by BTWC. Landowner contact information will not be shared amongst stakeholders unless permitted.

#### Tasks

#### Task 4 - Forest Landowner Engagement

Description of Task: Feasibility study for BTWC home and property wildfire assessments

BTWC initiated forest implementation projects in 2019 to fulfill a role and need in the Big Thompson canyon. By increasing organizational capacity and resources, this coalition can increase the pace and scale of crossboundary wildfire risk reduction projects to protect watershed health while utilizing the strong community relations developed in flood recovery efforts.

Along with our successful general outreach and education efforts, BTWC can specifically target small to medium acreage landowners adjacent to or draining to nearby waterways to initiate the first steps in forest management projects on their properties. This task will leverage watershed health partners to identify and prioritize areas of the watershed most at risk and leverage existing landowner relationships to identify forest thinning needs and points of entry into community-based planning and collaboration. The local USFS staff are ready and willing to advance collaborative partnership planning with community members, but they need to



#### Tasks

start to identify and address community concerns to find common ground between practitioners and rural watershed residents.

#### Sub-Task 4.1 Conduct Landowner Outreach

Through talks, engagement events, and MyWatershed app expansion (task 3), BTWC will build a better understanding of community perceptions of watershed health threats, forest management, and wildfire mitigation efforts. BTWC will also share information on the importance of these activities in regards to watershed health, community stewardship, and protection of life and property.

#### Sub-Task 4.2 Enroll Landowners in Mitigation projects

BTWC will conduct site-visits with a professional forester to identify potential water way threat based on property topography and assess defensible space and forested property for potential mitigation actions (alone or in partnership with a resource program). Landowners will be encouraged to discuss mitigation with neighbors for peer-to-peer learning opportunities and potential expansion to multi-property project connectivity. BTWC will work with grant funders and project partners such as Peaks to People to identify and fund project treatment areas.

#### Sub-Task 4.3 Enhance the Community-Information Connection

BTWC will work with communities to share information gathered through this entire program development process. Information will be conveyed on the form, function, and progress of the BTFP and BTWC forestry program development and request community commentary on methodology, plans, and implementation process identified herein. Educational materials will be developed to promote information sharing on watershed protection, private land stewardship, available landowner participation programs, and partnered work in the Big Thompson watershed.

#### Sub-Task 4.4 Build Staff Capacity

BTWC would like to support the position of a CSU graduate researcher from the Human Dimensions of Natural Resources department to assist with developing an understanding of educational resources and information sharing on watershed health and water quality impacts of wildfire, stakeholder values, perceptions of wildfire mitigation practices, as well as providing general assistance in programmatic development.

#### Method/Procedure:

#### Sub-Task 4.1 Conduct Landowner Outreach

- 1. Draw on research, CWPPs, and community engagement to better understand what communities value in regard to protection from the threat of wildfire.
- 2. Utilize BTFP partner databases to locate larger or otherwise strategic parcels of land and ownership that coincide with community, freshwater resource, natural firebreaks, wildlife corridors, social benefit and other areas of value to protect from wildfire.
- 3. Identify and reach out to these and neighboring landowners to gauge interest in talking in person about program development.

Sub-Task 4.2 Enroll Landowners in Mitigation projects

- 1. Research feasibility, capacity needs, and cost-benefit of BTWC's Landowner Assessment Program, which would charge a market-rate fee for homeowner assessments of defensible space assessments and forest health and threat assessment.
- 2. Procure contractor to train staff in site assessment to build internal, sustainable capacity for future assessments.
- 3. Provide site assessments by parcel for defensible space, forest health, and forest thinning linking adjacent parcels together under a single project treatment area.
- 4. Discuss Community Wildfire Protection Planning interests and development benefits for project funding support.



#### Tasks

5. Obtain contract agreement with landowner for BTWC to pursue funding for their project site.

Sub-Task 4.3 Enhance the Community-Information Connection

- 1. Conduct whole-community and individual landowner outreach to inform landowners of wildfire mitigation programs available to them through BTWC and other entities.
- 2. Collaborate with BTFP stakeholders and community leaders to develop, print, and distribute a brochure of available programs landowners can take part in.

#### Sub-Task 4.4 Build Staff Capacity

- 1. Onboard and train a CSU graduate student in forestry program progress and development needs.
- 2. Host student in office and manage capstone project goal setting, research and development, appropriate research strategy, and develop clear understanding of deliverables.

#### Deliverable:

- A BTWC Landowner Forestry and Fire Implementation Plan will draw on information and stakeholder input elicited from all tasks in this proposal (Tasks 1-3). This plan will identify how BTWC can strategically identify and prioritize private land mitigation projects based on aforementioned criteria.
- A homeowner inventory will be produced to maintain information and metrics on contacts made, interest level, site assessments conducted, wildfire mitigation investment level (defensible space vs. full forestry) number of participants/projects of interest.

# Budget and Schedule

This Statement of Work shall be accompanied by a combined Budget and Schedule that reflects the Tasks identified in the Statement of Work and shall be submitted to CWCB in excel format.

#### **Reporting Requirements**

**Progress Reports:** The applicant shall provide the CWCB a progress report every 6 months, beginning from the date of issuance of a purchase order, or the execution of a contract. The progress report shall describe the status of the tasks identified in the statement of work, including a description of any major issues that have occurred and any corrective action taken to address these issues.

**Final Report:** At completion of the project, the applicant shall provide the CWCB a Final Report on the applicant's letterhead that:

- Summarizes the project and how the project was completed.
- Describes any obstacles encountered, and how these obstacles were overcome.
- Confirms that all matching commitments have been fulfilled.
- Includes photographs, summaries of meetings and engineering reports/designs.

The CWCB will pay out the last 10% of the budget when the Final Report is completed to the satisfaction of CWCB staff. Once the Final Report has been accepted, and final payment has been issued, the purchase order or grant will be closed without any further payment.



#### Payment

Payment will be made based on actual expenditures and must include invoices for all work completed. The request for payment must include a description of the work accomplished by task, an estimate of the percent completion for individual tasks and the entire Project in relation to the percentage of budget spent, identification of any major issues, and proposed or implemented corrective actions.

Costs incurred prior to the effective date of this contract are not reimbursable. The last 10% of the entire grant will be paid out when the final deliverable has been received. All products, data and information developed as a result of this contract must be provided to CWCB in hard copy and electronic format as part of the project documentation.

### Performance Measures

Performance measures for this contract shall include the following:

(a) Performance standards and evaluation: Grantee will produce detailed deliverables for each task as specified. Grantee shall maintain receipts for all project expenses and documentation of the minimum in-kind contributions (if applicable) per the budget in Exhibit B. Per Water Plan Grant Guidelines, the CWCB will pay out the last 10% of the budget when the Final Report is completed to the satisfaction of CWCB staff. Once the Final Report has been accepted, and final payment has been issued, the purchase order or grant will be closed without any further payment.

(b) Accountability: Per Water Plan Grant Guidelines full documentation of project progress must be submitted with each invoice for reimbursement. Grantee must confirm that all grant conditions have been complied with on each invoice. In addition, per Water Plan Grant Guidelines, Progress Reports must be submitted at least once every 6 months. A Final Report must be submitted and approved before final project payment.

(c) Monitoring Requirements: Grantee is responsible for ongoing monitoring of project progress per Exhibit A. Progress shall be detailed in each invoice and in each Progress Report, as detailed above. Additional inspections or field consultations will be arranged as may be necessary.

(d) Noncompliance Resolution: Payment will be withheld if grantee is not current on all grant conditions. Flagrant disregard for grant conditions will result in a stop work order and cancellation of the Grant Agreement.



**COLORADO** Colorado Water

Conservation Board

Department of Natural Resources

# **Colorado Water Conservation Board**

# Water Plan Grant - Exhibit B Budget and Schedule

Prepared Date: 1/30/2020

Name of Applicant: Big Thompson Watershed Coalition

Name of Water Project: Building the Community-Information Connection for Watershed Heal Project Start Date: July 1, 2020

Project End Date: July 1, 2022

Task No.	Task Description	Task Start Date	Task End Date	Grant Funding Request
	BTWC Personnel			
Task 1	Fireshed Capacity Development	7/1/2020	7/1/2022	\$9,266.80
Task 2	Community engagement	7/1/2020	7/1/2022	\$13,708.00
Task 3	Data Collection and web-resources	7/1/2020	3/1/2021	\$3,134.80
Task 4	Landowner Enrollment	7/1/2020	7/1/2022	\$22,762.00
	Contractual Services			
			Total	\$48,871.60
	Total Match	Cash	In-Kind	Pending
Amount (\$)	\$78,805.92	\$46,642.00	\$32,163.92	\$39,163.92
Percent of total	100%	59%	41%	50%
Page 1 of 1				

th			
Match Funding	Total		
\$11,903.20	\$21,170.00		
\$21,202.72	\$34,910.72		
\$13,500.00	\$16,634.80		
\$32,200.00	\$54,962.00		
	\$0.00		
\$78,805.92	\$127,677.52		
<b>\$78,805.92</b> Received	<b>\$127,677.52</b> CWCB Match		
<b>\$78,805.92</b> Received \$39,642.00	<b>\$127,677.52</b> CWCB Match 0		
\$78,805.92 Received \$39,642.00 50%	\$127,677.52 CWCB Match 0 0%		
\$78,805.92 Received \$39,642.00 50%	\$127,677.52 CWCB Match 0 0%		
2500 2500 Match total

	Matching Contributions			
Т	ask # Amount	Cash/in-kind	Status	Descripti
	45.000		<b>D</b> · · ·	
1	\$5,000	Cash	Received	Northern Water 2020 BTWC su
1	\$800	Cash	Received	Cedar Park project education a
1	\$6,103.20	In-Kind	Pending*	6 community leaders/stakehold
Task 1 Sub-total:	\$11,903.20			
2	\$2,042.00	Cash	Received	Pulliam Foundation Letter and
2	<mark>\$12,816.72</mark>	In-Kind	Pending*	6 volunteer workdays*12 parti
2	\$3,744.00	In-Kind	Pending	Cedar Park volunteer labor con
2	\$2,000.00	Cash	Pending*	City of Loveland staff involvement
2	\$600.00	Cash	Received	Portion of \$1300 Cedar Park pr
Task 2 Sub-total:	\$21,202.72			
3	\$8,500.00	Cash	Received	Bureau of Reclamation WaterS recepient 6/2020-6/2022
3	\$5,000	Cash	Pending	City of Fort Collins 2020 BTWC forestry capacity and program
Task 3 Sub-total:	\$13,500.00			
4	\$5,000	Cash	Received	Northern Water 2020 BTWC su
4	\$9,000	Cash	Received	USFS 2020 BTWC support for fc
4	\$8,000	Cash	Received	\$8,000 CSFS community relatio
4	\$9,500	In-Kind	Pending*	Graduate student researcher (r
4	\$700.00	Cash	Received	Portion of \$1300 Cedar Park pr
Task 4 Sub-total:	\$32,200.00			
*= completed with this	project proposal if fu	unded by CWCB		
Amount (\$)	Total Match \$78.805.92	Cash \$46.642.00	In-Kind \$32.163.92	Pending Received \$39.163.92 \$39.642.00
Percent of total match (	%) 100%	59%	41%	50% 50%

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pport for BTWC general I material	
der partners provide 40	
Donation for Forestry	
icipants *7hours (with	
nmittment project	
ent in educational sign	
oject travel for	
MART grant award support for BTWC development	This funding will provide professional forestry contracting services to BTWC fo disciplinary scientific assessments to characterize conditions and trends of wat health parameters in relation to wildfire behavior and forest conditions to pric forestry project locations and community outreach. BTWC Spoke with Richard Thorpe, City of Fort Collins, on Monday 4/13/2020. of Fort Collins is undergoing 2020 budget adjustments for its source water pro program and are very optimistic about making a 2020-2021 contribution to BT general operations and forestry capacity building. They are not able to make a committment at this time, but should have a clearer idea of contributiion com by June 2020
pport for BTWC general prestry engagement and n/engagement ate approved for CWCB oject travel for	
CWCB Match 0 0%	

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The City rtection "WC's mittments



Ben Wade Water Conservation Coordinator Colorado Water Conservation Board 1/30/2020

RE: Letter of Cash Match Descriptions for Colorado Water Conservation Board Water Plan Grant Engagement and Innovation Application - "Building the Community-Information Connection for Watershed Health" program.

Dear Mr. Ben Wade,

The Big Thompson Watershed Coalition (BTWC) is writing to provide information on matching funding as indicated in our Exhibit B Project Budget included in this application.

Matching Contributions					
-	Task #	Amount	Cash/in- kind	Status	Description
1		\$5,000	Cash	Received	Northern Water 2020 BTWC support for BTWC general capacity and program development
1		\$800	Cash	Received	Cedar Park project education al material production/printing
1		\$6,103.20	In-Kind	Pending*	6 community leaders/stakeholder partners provide 40 hours of communication, information sharing, and programmatic development @\$25.43
Task 1 Sub-total:		\$11,903.20			
2		\$2,042.00	Cash	Received	Pulliam Foundation Letter and Donation for Forestry Workshops (letter attached to application)
2		\$12,816.72	In-Kind	Pending*	6 volunteer workdays*12 participants *7hours (with travel)*25.43 volunteer rate
2		\$3,744.00	In-Kind	Pending	Cedar Park volunteer labor committment project travel for community engagement
2		\$2,000.00	Cash	Pending*	City of Loveland staff involvement in educational sign design, approval, and installation 3 staff @20 hrs each for approx. \$35/hr
2		\$600.00	Cash	Received	Portion of \$1300 Cedar Park project travel for community engagement
Task 2 Sub-total:		\$21,202.72			



3	\$5,000	Cash	Pending	City of Fort C forestry capa	ollins 2020 BT\ city and progra	NC support for BTWC am development
Task 3 Sub-total:	\$5,000					
4	\$5,000	Cash	Received	Northern Wa general capa	ter 2020 BTW0 city and progra	C support for BTWC Im development
4	\$9,000	Cash	Received	USFS 2020 BT engagement down throug	TWC support fo and communi h CPRW	or forestry ty connections, passed
4	\$8,000	Cash	Received	\$8,000 CSF developm \$19k tota	S community r ent through Ce I for BTWC pro	elation/engagement dar Park project (of vject management)
4	\$9,500	In-Kind	Pending*	Graduate stu CWCB S	udent research MP) - \$40/hr (	ner (rate approved for @ 300hrs  = \$1200
4	\$700.00	Cash	Received	Portion of \$1 community e	300 Cedar Parl Ingagement	k project travel for
Task 4 Sub-total:	\$32,200.00					
*= completed with this project proposal if funded by CWCB						
	Total Match	Cash	In-Kind	Pending	Received	CWCB Match
Amount (\$)	\$70 305 92	\$38 142 00	\$32 163 92	\$39 163 92	\$31 142 00	0
Percent of total match (%)	100	54	46	56	44	0

Please contact me should additional information be needed or to confirm receipt of pending items not associated with this grant application.

Sincerely,

non ound we

Courtney Gutman
Director | Big Thompson Watershed Coalition
Cell: 970-699-2906 | courtney.gutman@bigthompson.co | www.bigthompson.co





Natural Resource Ecology Laboratory Colorado State University Fort Collins, Colorado 80523-1499 (970) 491-0410

Ben Wade Water Conservation Coordinator Colorado Water Conservation Board

# RE: Letter of support for the Big Thompson Watershed Coalition Colorado Water Conservation Board Water Plan Grant Engagement and Innovation Application

Dear Mr. Ben Wade,

CitSci.org is pleased to support the Big Thompson Watershed Coalition (BTWC) in its application for a Colorado Water Conservation Board Water Plan Engagement and Innovation Grant to provide funding for BTWC's "Building the Community-Information Connection for Watershed Health" program.

CitSci.org is a citizen science support platform and initiative to promote citizen engagement in science and provide tools to help facilitate the research process. This work is enhanced through partnerships with organizations, like BTWC, who are involved in community engagement and data collection on-theground. CitSci and BTWC plan to partner on a future project to advance a citizen science monitoring app that has already been developed between Left Hand Watershed Center and CitSci. To more effectively approach this process, BTWC will work with CitSci to establish a clearer understanding of the current and desired functionality of the app and its long-term potential as a citizen science tool in the Big Thompson watershed. As an organization focused on the development of web-tools and community science engagement, CitSci's participation in this program will add a high level of insight and expertise based on over ten years of experience working with community organizations to co-design and implement citizen science projects. These experiences have helped CitSci understand the unique challenges associated with developing web and mobile tools for citizen science and in developing effective programs.

The additional proposed engagement work planned by BTWC will promote community engagement events and information sharing about forestry and wildfire preparedness, year round community science and stewardship activities, defensible space site assessments, and development of forestrybased educational materials. The overarching goal of this work is to involve diverse stakeholders in collaborative efforts to enhance a holistic understanding of forest resource management and watershed health, empower communities to become active stewards of their natural resources, and help to coalesce people around a shared vision of regional watershed health.

To successfully undertake this work and develop the necessary connections requires a large commitment of staff time and resources. We feel that BTWC's past record of successful restoration projects, established relationships with countless public agencies and private land and business owners, plus their unique understanding of diverse community/stakeholder interests and conservation threats in the Big Thompson watershed prove their ability to greatly contribute toward these broad goals. Further,

January 31, 2020

we are excited about the prospects of collaborating with BTWC to achieve watershed health and sustainability goals.

CitSci.org respectfully requests the approval of this grant proposal to support BTWC's operations. If you have any questions, please contact Dr. Greg Newman at 970-491-0410 or email me at <u>Gregory.newman@colostate.edu</u>. Many thanks for your consideration of the BTWC proposal.

Sincerely,

My Norman 1/31/2020

Greg Newman, PhD Research Scientist | Director, CitSci.org Natural Resource Ecology laboratory Colorado State University Fort Collins, Colorado 80523-1499 (970) 491-0410 Coalition for the Poudre River Watershed 320 East Vine Drive, ste 121 Fort Collins CO 80524 Tel 970-222-5754 www.poudrewatershed.org



1/30/2020

Ben Wade Project Manager, Water Supply Planning Colorado Water Conservation Board 1313 Sherman St., Rm. 721 Denver, CO 80203

# Re: Letter of support for the Big Thompson Watershed Coalition Colorado Water Conservation Board Water (CWCB) Plan Grant Engagement and Innovation Application

Dear Mr. Wade

On behalf of the Coalition for the Poudre River Watershed (CPRW), I am writing to express our support the Big Thompson Watershed Coalition (BTWC) in its application for a Colorado Water Conservation Board Water Plan Engagement and Innovation Grant to provide funding for BTWC's "Building the Community-Information Connection for Watershed Health" program. CPRW's mission is to improve and maintain the ecological health of the Poudre River watershed through community collaboration.

As Northern Colorado watershed coalitions, BTWC's and CPRW's missions closely align. BTWC has been a vital community resource to local natural resource management through multi-objective and collaborative efforts that benefit people, the ecosystem, and freshwater resources. These shared values have led to a partnership strengthened through partnered forestry projects across both watersheds including the DOLA funded Round Mountain-North Rim Road project and the Canyon Lakes Collaborative Coalition Forest Restoration project. We feel our partnership will further enhance engagement work that generates community-stewardship in our communities in Northern Colorado.

The proposed engagement work planned by BTWC will benefit the goals of the Colorado Water Plan by promoting year-round community science and stewardship activities, expansion of community information sharing on forestry and wildfire impacts to watershed function, development of watershed-based educational materials, a better understanding of data consolidation and web-tool needs amongst regional and state-wide collaborations. Their work will enhance a holistic understanding of water resource management among a diverse set of stakeholders, watershed health, and empower communities to become active stewards of their natural resources.

Coalition for the Poudre River Watershed 320 East Vine Drive, ste 121 Fort Collins CO 80524 Tel 970-222-5754 www.poudrewatershed.org



I strongly encourage you to fully fund their proposal. Please don't hesitate to contact me if you have any questions regarding our support for the approval of this grant proposal to support BTWC's operations.

Sincerely,

Jennifer Kovecses Executive director Coalition for the Poudre River Watershed jenk@poudrewatershed.org



# Colorado Water Conservation Board

# Water Plan Grant Application

# Instructions

To receive funding for a Water Plan Grant, applicant must demonstrate how the project, activity, or process (collectively referred to as "project") funded by the CWCB will help meet the measurable objectives and critical actions in the Water Plan. Grant guidelines are available on the CWCB website.

If you have questions, please contact CWCB at (303) 866-3441 or email the following staff to assist you with applications in the following areas:

Water Storage Projects Conservation, Land Use Planning Engagement & Innovation Activities Agricultural Projects Environmental & Recreation Projects Anna.Mauss@state.co.us Kevin.Reidy@state.co.us Ben.Wade@state.co.us Alexander.Funk@state.co.us Chris.Sturm@state.co.us

# FINAL SUBMISSION: Submit all application materials in one email to waterplan.grants@state.co.us

in the original file formats [Application (word); Statement of Work (word); Budget/Schedule (excel)]. Please do not combine documents. In the subject line, please include the funding category and name of the project.

	Water Projec	t Summary	
Name of Applicant	Big Thompson V	Big Thompson Watershed Coalition	
Name of Water Project	Building the Community-Information Connection for Watershed Health		
CWP Grant Request Amount		\$48,871.60	
Other Funding Sources Northern Water Annual Contribution		\$10,000	
Other Funding Sources City of Fort Collins Pending		\$5,000	
Other Funding Sources USFS - CPRW		\$9,000	
Other Funding Sources CSU Graduate Student		\$9,500	
Applicant Funding Contribution		\$36,805.92	
Total Project Cost		\$119,177.52	



	Applicant & Grantee Information		
Name of Grantee(s)	Big Thompson Watershed Coalition		
Mailing Address	P.O. Box 1923 Loveland, CO 80539-1923		
FEIN	81-0753905		
Organization Contact	Courtney Gutman		
Position/Title	Director		
Email	Courtney.gutman@bigthompson.co		
Phone	(970) 699-2906		
Grant Management Contact	Same as organizational contact above		
Position/Title			
Email			
Phone			
Name of Applicant (if different than grantee)			
Mailing Address			
Position/Title			
Email			
Phone			
Description of Grantee/Applicant			
Provide a brief description of the grantee's organization (100 words or less).			

Big Thompson Watershed Coalition (BTWC) formed as a 501(c)3 to help private and public landowners collaborate recovery efforts after the 2013 state-declared flooding emergency. Since its formation, BTWC has restored approximately 15 miles of river and completed 17 restoration projects. Yet, BTWC recognizes the need for continued action in this watershed as it: supplies 1,000,000 downstream users; provides for nearly 100,000 people in the watershed; welcomes 4+ million annual visitors; and supports both human and ecological needs. With these factors in mind, BTWC continues to enhance the watershed through partnerships and a dedication to stewardship, restoration, outreach, and watershed science.

Type of Eligible Entity (check one)			
Public (Government): Municipalities, enterprises, counties, and State of Colorado agencies.			
Federal agencies are encouraged to work with local entities. Federal agencies are eligible, but			
only if they can make a compelling case for why a local partner cannot be the grant recipient.			
Public (Districts): Authorities, Title 32/special districts (conservancy, conservation, and irrigation			
districts), and water activity enterprises.			



	Private Incorporated: Mutual ditch companies, homeowners associations, corporations.
	Private Individuals, Partnerships, and Sole Proprietors: Private parties may be eligible for funding.
Х	<b>Non-governmental organizations (NGO):</b> Organization that is not part of the government and is non-profit in nature.
	Covered Entity: As defined in Section 37-60-126 Colorado Revised Statutes.

	Type of Water Project (check all that apply)
	Study
	Construction
	Identified Projects and Processes (IPP)
Х	Other

Cat	Category of Water Project (check the primary category that applies and include relevant tasks)					
	Water Storage - 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 <i>Applicable Exhibit A Task(s):</i>					
	Conservati strategies Applicable	ion and Land Use Planning - Activities and projects that implement long-term for conservation, land use, and drought planning. <i>Exhibit A Task(s):</i>				
x	<ul> <li>Engagement &amp; Innovation - Activities and projects that support water education, outreach, and innovation efforts. Please fill out the Supplemental Application on the website.</li> <li>Applicable Exhibit A Task(s): <ul> <li><u>Task 1</u>: Improve network capacity building through the creation of the Northern Colorado Fireshed Network</li> <li><u>Task 2</u>: Expand BTWC forest and wildfire engagement programs</li> <li><u>Task 3</u>: Develop information sharing web-resources for forestry planning</li> <li><u>Task 4</u>: Develop private landowner services and identify interested parties for future BTWC-partnered thinning projects and defensible space work</li> </ul> </li> </ul>					
	Agricultural - Projects that provide technical assistance and improve agricultural efficiency. Applicable Exhibit A Task(s):					
	Environmental & Recreation - Projects that promote watershed health, environmental health, and recreation. Applicable Exhibit A Task(s):					
	Other	Explain:				



Location of Water Project			
Please provide the general county and coordinates of the proposed project below in <b>decimal degrees</b> . The Applicant shall also provide, in Exhibit C, a site map if applicable.			
County/Counties	Larimer County		
Latitude	40.433951		
Longitude	-105.340182		

# Water Project Overview

Please provide a summary of the proposed water project (200 words or less). Include a description of the project and what the CWP Grant funding will be used for specifically (e.g., studies, permitting process, construction). Provide a description of the water supply source to be utilized or the water body affected by the project, where applicable. Include details such as acres under irrigation, types of crops irrigated, number of residential and commercial taps, length of ditch improvements, length of pipe installed, and area of habitat improvements, where applicable. If this project addresses multiple purposes or spans multiple basins, please explain.

The Applicant shall also provide, in Exhibit A, a detailed Statement of Work, Budget, Other Funding Sources/Amounts and Schedule.

The Big Thompson watershed and the Colorado-Big Thompson Project provide valuable natural resources across a diverse mosaic of forest, riparian, and prairie habitats. The most critical community needs provided by these natural and man-made freshwater transport systems include high quality drinking water for approximately 1 million residents in 32 towns, millions of dollars in local businesses and tourism economies, over 600,000 acres of irrigated farmland, state renown recreation opportunities, and enjoyment by the 4.5 million visitors that visit this gateway to Rocky Mountain.

With a strong history and expertise in restoration implementation and community engagement with CWCB, BTWC proposes will weave together the needs of both public and private landowners to improve the community information-connection around Big Thompson forestry needs. BTWC respectfully requests \$48,871.60 to develop and implement 4 program areas over 2020-2022 that enhance relations between partners and community members, expand information access and sharing, and build community trust and involvement in forest management practices across public-private boundaries.

CWCB WPG funding will support BTWC's general capacity and the impact of our watershed education and protection by building upon and connecting community engagement, communication, and partnership development within the Big Thompson watershed and across Northern Colorado's watershed coalitions.

Measurable Results				
To catalog measurable results achieved with the CWP Grant funds, please provide any of the following values as applicable:				
	New Storage Created (acre-feet)			
	New Annual Water Supplies Developed or Conserved (acre-feet), Consumptive or Nonconsumptive			
	Existing Storage Preserved or Enhanced (acre-feet)			



Last U	pdated:	July	2019
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	Length	of Stream Restored or Protected (linear feet)	
	Efficiency Savings (indicate acre-feet/year OR dollars/year)		
	Area of	f Restored or Preserved Habitat (acres)	
	Quanti	ty of Water Shared through Alternative Transfer Mechanisms	
	Number of Coloradans Impacted by Incorporating Water-Saving Actions into Land Use Planning		
Up to 100,000 residents living within Big Thompson watershed	Number of Coloradans Impacted by Engagement Activity		
	Other	Explain:	

## Water Project Justification

Provide a description of how this water project supports the goals of <u>Colorado's Water Plan</u>, the most recent <u>Statewide Water Supply Initiative</u>, and the applicable Roundtable <u>Basin Implementation Plan</u> and <u>Education Action Plan</u>. The Applicant is required to reference specific needs, goals, themes, or Identified Projects and Processes (IPPs), including citations (e.g. document, chapters, sections, or page numbers).

The proposed water project shall be evaluated based upon how well the proposal conforms to Colorado's Water Plan Framework for State of Colorado Support for a Water Project (CWP, Section 9.4, pp. 9-43 to 9-44;)

This project supports goals within Colorado's Water Plan, Statewide Water Supply Initiative, South Platte Roundtable Basin Implementation Plan, and South Platte Roundtable Basin Education Action Plan related to public outreach, engagement, and education around forest management and wildfire mitigation which promotes the health and resiliency of water resources in Northern Colorado. Below we summarize the goals from each plan this project will support.

## Colorado's Water Plan

Chapter 6, Section 6.2: Meeting Colorado's Water Gaps, pg. 6-27 & 6-50

- 1. "Monitor, protect and improve watershed water quality and identify and document progress and improvements."
- 2. "Maintain or improve watershed health through source water protection, wildfire mitigation, sedimentation control, and erosion control."

Our project will meet these goals through community outreach, engagement, and information sharing that promotes an understanding of forest management and its ties to water quality and overall watershed health. Community engagement work will consist of forestry project site tours, wildfire preparedness workshops, community workdays, defensible space site assessments, and use of the MyWatershed app so community members may upload their own data.

This community-generated participatory mapping data, submitted through Left Hand Watershed Center's MyWatershed app, will help to increase our knowledge of on-the-ground issues such as erosion and areas of high tree mortality (related to Copper Study in "Related Studies") as well as fill in gaps of where forestry work is already being conducted. An increased level of community participation will help BTWC and partners identify priority areas for coordinated forestry projects. When communities help to identify project locations they are more likely to be supportive and involved in the process,



which can increase the long-term success of a project. Further, by promoting community involvement, information sharing, and defensible space site assessments, community members are more likely to take action in the form of thinning, increasing defensible space, or coordinating community collaboration to develop neighborhood-level Community Wildfire Protection Plans (CWPP) all of which mitigate the potential impact of wildfire, post-fire sediment yields, and post-fire erosion.

Chapter 7: Water Resource Management and Protection, pg. 7-5, 7-7, & 7-10

- 1. "Successful watershed management necessitates a pragmatic approach that includes coalition-building, data collection, planning, prioritization, implementation, and monitoring. This is a cyclical process, and each phase requires continued efforts."
- 2. "Participants will aid in the assemblage and assimilation of watershed information—including geographic information systems data, maps, monitoring reports, risk analysis, and existing assessments."
- 3. "Assist stakeholders in existing watershed groups to identify tools and resources that address gaps and build capacity in existing plans."

Our project will directly contribute toward these goals through three main avenues.

First, we will add to the data collection, monitoring, and prioritization happening in the Big Thompson watershed by more heavily involving communities in the process. By utilizing the MyWatershed app we will open up new channels for community-generated data uploads. This data will be housed on CitSci.org and automatically placed into spreadsheets which will reduce staff time for data entry and increase efficiency in analyzing and sharing data. Additionally, through increasing community knowledge of forest management and wildfire preparedness needs, we will advance conversations around implementation projects which span private and public lands.

Second, we will consolidate our own forestry-based information augmented with the communitygenerated data and identify web-platforms to house and share this data so that it is publically accessible and can be used to enhance regional and state-wide decision-making structures related to forest management and watershed health.

Third, we will work with four other Northern Colorado watershed coalitions and others within the Northern Colorado Fireshed Network to collectively address and build capacity.

Chapter 7 Water Resource Management and Protection, pg. 7-14, 7-38

- 1. "Even when people come together to face catastrophe, having a plan and sufficient resources in place ahead of time makes both the immediate response and the long recovery effort easier and less costly. In fact, studies have shown that for every one dollar of investment in natural hazard mitigation, society saves four dollars in response costs."
- 2. "Protect Colorado water supplies and critical infrastructure from catastrophic wildfire and other threats by maintaining healthy, resilient watersheds through collaboration, implementation, leveraging, and education."

This project will advance both of these goals. Although BTWC was formed in reaction to the 2013 floods, we intend to shift our focus to more proactive planning and implementation measures, specifically around forestry. We understand the disorder that follows a natural disaster, and plan to help private landowners and public land management entities prepare for future events in the Big Thompson watershed. We will do this largely through community engagement work that empowers communities to take action in regards to defensible space, creation of CWPPs, and coordinated forest thinning (mechanical and prescribed burns) between public land management entities and private landowners.

Chapter 9, Section 9.5: Outreach, Education, and Public Engagement pg. 9-53, 9-54, 9-59



- 1. "Colorado's Water Plan provides technical and financial assistance for high-quality, balanced, and grassroots water education and outreach efforts that inform Coloradans about the issues so that they may engage in determining Colorado's water future."
- 2. "Develop information and communication tools that can be used statewide."
- 3. "Education and outreach to support environmental and watershed strategies, such as those designed to protect imperiled warm-water fish species and forest health."

Our proposed work will address and advance each of these goals. BTWC has already led a 5-part workshop series on forest management and wildfire preparedness that engaged over 70 community members from across the watershed. We plan to continue these workshops and expand on them to include community workdays and trainings for the MyWatershed app. We also plan to facilitate increased communication and collaboration between landowners and land management entities which will help members of the public to participate in determining the future of the Big Thompson watershed which will substantially effect Colorado's water future. Lastly, we will compile our forestry workshop curriculum and a broad range of other data so that it is accessible to the public and statewide organizations who may benefit from it.

## Statewide Water Supply Initiative

The executive summary of the Statewide Water Supply Initiative highlights multiple goals which are supported by this project:

Growing populations in the Wildland Urban Interface (WUI) increase the incidences of human caused wildfire. Wildfire, especially in forests where burn regimes have been suppressed for a century, imperil clean water supplies for downstream users. An effective strategy to reduce human-caused wildfire incidents and to reduce the severity of wildfire is to educate landowners about wildfire risk and actions they can take in regards to threat reduction.

BTWC will approach our forestry engagement work through a long-term lens which seeks to create lasting support and action from Big Thompson communities and the general public. To do this we will leverage existing resources and connections to conduct outreach and education that empowers communities to become more involved in decision-making and stewardship of their resources. Further, we will emphasize the importance of strategic planning in reducing damages from wildfire. This strategic planning can, and should, be done at multiple levels; from neighborhood to county level planning. This will be crucial in mitigating the damage of future wildfire events, particularly in regards to post-fire sediment yields and erosion which have significant impacts on water supply infrastructure and high associated costs.

## South Platte Basin Implementation Plan

1. S.5.5 - Focused attention is needed to address threats associated with extensive tree mortality in the basin, increased fire hazards and water quality degradation...

BTWC's proposed engagement work is highly focused on addressing threats associated with increased fire hazards, tree mortality, and water quality degradation related to post-fire sedimentation and erosion issues. We will not only work to educate communities and the general public on these issues, but also involve them in the monitoring, proactive wildfire mitigation work, and in identifying priority areas for future projects that will help to address these threats. Further, our project seeks to formalize a Big Thompson Fireshed Network which will have increased capacity to coordinate work through collaboration and alignment of goals.

2. S.5.9 - Improving public understanding about the goals, needs, and plans of the state and the South Platte Basin will help to improve public acceptance of the need for innovative water rate



structures, energetic conservation measures, and more integrated land use and water supply planning.

Recommendation: Design and implement an intensive education, participation and outreach program designed to generate a lasting baseline of public awareness and support.

Our project will begin to tackle the issue of improving public understanding of the goals, needs, and plans of the state and the SPB through an engagement campaign focused on collaboration to build a more engaged citizenry with enhanced capacity to partake in conservation measures, especially those that span landownership boundaries and involve diverse stakeholders. By informing communities of opportunities to partner on thinning projects and improving their understanding of the benefits of large-scale wildfire mitigation efforts we can also begin to better integrate current efforts which are commonly disconnected from one another.

## South Platte Basin Education Action Plan

1. "This Basin deserves and needs an intensive education, participation and outreach program designed to generate a lasting baseline of public awareness and support. The focus of a joint strategic communications plan will be to maximize existing opportunities, avoid duplication of effort, and streamline Basin communication in a cost effective way"

BTWC proposes to enhance and expand upon the organization's existing community outreach and education program to not only increase public awareness and support around the relationship between forest management, wildfire preparedness, and watershed health but also to strengthen transparency and develop co-management opportunities in the natural resource decision-making process. We intend to do this by facilitating open channels of communication between land management entities and communities. This will help to maximize existing opportunities, for example, BTWC's current forestry project in the Cedar Park community has expanded USFS's ability to thin acreage by bringing private landowners into the project who have lands which connect USFS parcels. By acting as the liaison between these groups BTWC will also help to streamline communication and reduce unfavorable interactions between groups with competing values.

# **Related Studies**

Please provide a list of any related studies, including if the water project is complementary to or assists in the implementation of other CWCB programs.

This project builds upon BTWC's completed and ongoing partnered restoration and stewardship work within the Big Thompson Watershed.

## **CWCB-Related Studies**

## Monitoring and Adaptive Management program

In 2018, with the help of CWCB's Restoration Grant funding, BTWC began a large-scale project focused on the development of an adaptive management framework and protocol to help ensure BTWC-led restoration projects naturalize over time without overly degrading. To create the monitoring protocol, which was completed in November 2019, BTWC worked with a consultant team to identify parameters to assess key watershed functions using quantifiable and replicable methods that are efficacious in dynamic watershed systems. To develop a clear picture of post-construction restoration site conditions, BTWC is using the established monitoring protocols to build upon pre-existing monitoring efforts through piloting a community science and stewardship program which involves community members in the ongoing stewardship of the Big Thompson River ecosystem through volunteer monitoring, weeding, and planting days. By augmenting existing monitoring data with data



collected through the community science program, we can build a more robust picture of adaptive management and corrective action needs at each restoration site. This will provide a critical link to build on the previous efforts of BTWC and numerous other organizations to ensure the long-term success of our combined efforts.

## Stream Management Plan

BTWC, along with an Advisory Committee composed of diverse water interests, is leading the "Big Thompson River Envisioning Project" along approximately 15 miles of river corridor. The overall goal of the plan is to engage citizens and stakeholders to create a shared vision for improving the Big Thompson River by identifying strategies and action plans that address diverse interests. Collection, consolidation, and sharing of information and data across stakeholder groups and with community members is a role that BTWC has come to fill across many projects. Task 1 of the SMP identifies a guiding question of "how can [BTWC] provide a hub of information for those interested in the long-term health of the Big Thompson River?". Task 3 of the SMP focuses on a River Health and Benefits Assessment and asks "How can [BTWC] best utilize existing data to evaluate current conditions?". Both of these SMP questions are extremely relevant to the development of our forest health programs as BTWC solidifies its role as a hub of data and information sharing for watershed-wide natural resource planning and communication efforts across our partner and community networks.

## Non-CWCB Related Studies

## Peaks to People Modeling Forest Thinning in the Colorado-Big Thompson Project

In 2019, BTWC's forestry partners, Peaks to People and Northern Colorado Water Conservancy District, announced extensive modeling to identify where forest thinning and restoration should be implemented to reduce wildfire threat to the vulnerable C-BT project. This assessment indicated a high potential to reduce wildfire risk to the Colorado-Big Thompson Project by up to 90% if an investment of \$70 million dollars is dispersed to forest thinning and prescribed fire projects across the 215,198 total project acres over the next decade. With a high percentage of private landowners in the Big Thompson watershed, this large goal will need to be a joint effort of both public and private land owners. It is in this need for a joint effort that the dataset has a gap. It does not have clear information on landowner and community management efforts. There is a clear need to incorporate private efforts into public agency efforts to expand potential treatment acreage. BTWC's proposed project will help to fill this gap by communicating with communities to identify where work is already being done and also by empowering communities through education initiatives to participate in joint efforts with public land management entities.

## Canyon Lakes Collaborative Coalition Restoration – At Cedar Park

The Cedar Park project, which is entering the design phase, is BTWC's second forestry project. The project is in coordination with another forestry project in the Poudre River watershed. For the sake of clarity, this application will focus solely on the Big Thompson location.

The project engages Sylvan Dale Ranch, a landowner that works closely with the BTWC & shares a boundary with the planned USFS Cedar Park treatments. The project is on the north facing slope of Palisade Mountain and is focused on thinning overly dense lower montane ponderosa pine forest. The targeted treatments have been identified as high risk to drinking water supplies by the Colorado Forest Restoration Institute (CFRI). The project site and surrounding area drains into the Big Thompson River, which provides drinking water to the residents of Loveland, and is part of the C-BT Project that delivers water from the West Slope to the Front Range. CO-WRAP also shows the nearby residences as high risk WUI. The project will reduce fuel loading between the meadow system and the Palisade Mountain ridgeline. In addition to reducing the direct impacts of wildfire, this layout is intended to improve suppression capabilities in the event of a wildfire.



## Collaborative Copper Study Project

Starting this year, BTWC and partners: Big Thompson Watershed Forum, Northern Water, Trout Unlimited, and Big Thompson Conservation District will begin a collaborative project to mitigate the entrance of copper into Big Thompson water bodies. High levels of copper in water supplies can have deleterious effects on human health and is one of the most toxic metals to aquatic organisms and ecosystems. Copper occurs naturally within the Big Thompson Canyon, but due to fire suppression over the last century, forests have become denser and are therefore sequestering larger amounts of copper from the soil. When tree falls occur this copper leaches from trees and moves through soil into water bodies. The mainstem of the Big Thompson river and all tributaries and wetlands within Rocky Mountain National Park are on the 303(d) impaired list for copper. Our intent is to use forestry to investigate possible mitigation options that align with other forestry goals, such as the need for extensive thinning. Once we have developed a better understanding, we will communicate this to our partners and use it to inform future forestry work in order to reduce the likelihood of copper infiltration.

## Glen Haven Wildfire Resilience Project

The Glen Haven Wildfire Resilience project will collaboratively implement a forest thinning project that improves forest health and reduces catastrophic wildfire threat to ponderosa pine forests surrounding the Glen Haven community and North Fork of the Big Thompson River, a critical fresh water source for Northern Colorado. BTWC will manage community engagement and thinning treatments on approximately 60 acres of private land owned by the Glen Haven Association (GHA). BTWC will coordinate efforts with USFS work that is part of the Joint Chiefs Glen Haven focal area to link landscape level forest health and management, outreach, information sharing, treatment, and benefits. The proposed project aligns with the Colorado Forest Action Plan's central themes by managing and reducing threats to forest and ecosystem health while enhancing public benefits such as water quality and community program support (for GHA's defensible space program). The Larimer County CWPP currently ranks the Thompson River Planning Area as the highest priority for mitigation among the 48 areas total, and calls for more planning, outreach and implementation to reduce negative impacts on human values from wildfire. The proposed project also builds on the Glen Haven CWPP, which identifies fuels management as priorities for waterways, utilities, and infrastructure.

## Community Wildfire Protection Plans

Community Wildfire Protection Plans can be pivotal in the long-term planning and mitigation of risk in regards to wildfire events. Larimer County has recently updated their CWPP and Loveland is currently updating. Education and outreach are critical components of both Larimer County's and Loveland's CWPP. Within Big Thompson canyon communities, Glen Haven is the only community to have established a CWPP. Through this engagement project, we will encourage the creation of CWPPs for communities within the canyon, we will also help to facilitate the development of CWPPs and ensure they highlight the importance of fuels reductions projects to decrease wildfire threat.

# Previous CWCB Grants, Loans or Other Funding

List all previous or current CWCB grants (including WSRF) awarded to both the Applicant and Grantee. Include: 1) Applicant name; 2) Water activity name; 3) Approving RT(s); 4) CWCB board meeting date; 5) Contract number or purchase order; 6) Percentage of other CWCB funding for your overall project.



- "Big Thompson River Envisioning Project," Big Thompson Watershed Coalition via Shayna Jones, Contract: CMS 141168, CTGG1 2020-2098 CWCB Provided just over \$140,000 and was matched by South Platte Basin Round Table's project contribution of \$40,000.
- "Adaptively managing the Big Thompson watershed for long-term health," Big Thompson Watershed Coalition via Shayna Jones, Contract: CMS 111631, CTGG I: CTGG I PDAA 20J9\*00197
- 3) CWCB Emergency Watershed Protection projects: MS1+2 and Waltonia, contract: CTGG1 PDAA 2018\*786 CMS #104776) Other project site contracts with CDOT but BTWC involved in project management: Cedar Cove and Jasper Lake, Drake and Moodie, Glen Haven, North Fork, CWCB provided 12.5% construction costs for each project (excluding Jasper Lake, 100% CWCB funded)

## Taxpayer Bill of Rights

The Taxpayer Bill of Rights (TABOR) may limit the amount of grant money an entity can receive. Please describe any relevant TABOR issues that may affect your application.

As BTWC is a non-profit organization, TABOR issues will not affect our application



# Submittal Checklist

Х	I acknowledge the Grantee will be able to contract with CWCB using the Standard Contract.		
Exhibit A			
Х	Statement of Work <sup>(1)</sup>		
Х	Budget & Schedule <sup>(1)</sup>		
	Engineer's statement of probable cost (projects over \$100,000)		
Х	Letters of Matching and/or Pending 3 <sup>rd</sup> Party Commitments <sup>(1)</sup>		
Exhibit C			
	Map (if applicable) <sup>(1)</sup>		
Х	Photos/Drawings/Reports		
Х	Letters of Support (Optional)		
Х	Certificate of Insurance (General, Auto, & Workers' Comp.) <sup>(2)</sup>		
Х	Certificate of Good Standing with Colorado Secretary of State <sup>(2)</sup>		
Х	W-9 <sup>(2)</sup>		
	Independent Contractor Form <sup>(2)</sup> (If applicant is individual, not company/organization)		
Enga	Engagement & Innovation Grant Applicants ONLY		
Х	Engagement & Innovation Supplemental Application <sup>(1)</sup>		

(1) Required with application.

(2) Required for contracting. While optional at the time of this application, submission can expedite contracting upon CWCB Board approval.



## ENGAGEMENT & INNOVATION GRANT FUND SUPPLEMENTAL APPLICATION

## Introduction & Purpose

Colorado's Water Plan calls for an outreach, education, public engagement, and innovation grant fund in Chapter 9.5.

The overall goal of the Engagement & Innovation Grant Fund is to enhance Colorado's water communication, outreach, education, and public engagement efforts; advance Colorado's water supply planning process; and support a statewide water innovation ecosystem.

The grant fund aims to engage the public to promote well-informed community discourse regarding balanced water solutions statewide. The grant fund aims to support water innovation in Colorado. The grant fund prioritizes measuring and evaluating the success of programs, projects, and initiatives. The grant fund prioritizes efforts designed using research, data, and best practices. The grant fund prioritizes a commitment to collaboration and community engagement. The grant fund will support local and statewide efforts.

The grant fund is divided into two tracks: engagement and innovation. The Engagement Track supports education, outreach, communication, and public participation efforts related to water. The Innovation Track supports efforts that advance the water innovation ecosystem in Colorado.

## **Application Questions**

\*The grant fund request is referred to as "project" in this application.

## Overview (answer for both tracks)

In a few sentences, what is the overall goal of this project? How does it achieve the stated purpose of this grant fund (above)?

A community poll delivered during our first workshop identified strong community sentiments of lacking communication to our communities and forestry planning efforts with our communities, especially WUI residents. Through 2019 organized community forestry events and initial stakeholder engagement, BTWC has identified forestry programmatic needs as described in this project proposal. With this funding, we propose to:

1) build stronger community understanding of wildfire risk to the Colorado-Big Thompson project and our water resources,

2) create better communication between the public and forest/fire managers to build rapport, elicit feedback, and encourage stronger transfer of accurate information, and

3) provide resources and capacity for landowners to conduct defensible space and forest thinning efforts on private lands neighboring public lands.

Through this engagement and information-sharing objectives, BTWC will expand the knowledgebase, capacity, and involvement of watershed residents to expand the scope and pace of regional forest management and wildfire mitigation to protect our local water resources.

Who is/are the target audience(s)? How will you reach them? How will you involve the community?

Target audiences for this project include both broad audiences such as 1,000,000 water users of Colorado-Big Thompson watershed and as narrow as individual private landowners living in the watershed's Wildland-Urban Interface. Target audiences are specific to each of the tasks identified in this proposal's Statement of Work. The Big Thompson Fireshed Network, a forestry planning and



## Overview (answer for both tracks)

advisory committee, will engage approximately 20 individuals (and their associated teams) from partnering environmental organizations, research institutes, natural resource management entities and fire and emergency response specialists to collaborate on watershed-wide forest and fire management projects. Forestry program engagement will provide in-person and online workshops and initial site assessments for over 2,000 forest landowners within identified "priority" communities (at or nearby Glen Haven, Cedar Park, Chimney Hallo, Drake, and Round Mountain) as identified by existing modeling tools and data assessment. Mapping tools and landowner forestry programs will target a few hundred people across aforementioned communities to enroll in landowner education and fire mitigation efforts. Our program progress and educational information, however, will be made available to the larger Northern Colorado community of 40,000+ people through social media, website, newsletter, and local newspaper content. Beyond those mentioned, communication tools include community calendars, existing community events and groups (such as the Big Thompson Canyon Association), local Volunteer and Big Thompson Canyon Battalion fire departments, homeowners and road associations, community calendars, and hardcopy mailers such as flyers, post cards, brochures, etc.

Describe how the project is collaborative or engages a diverse group of stakeholders. Who are the partners in the project? Do you have other funding partners or sources?

This project is rooted in a collaborative effort to engage Big Thompson communities and the public in education and awareness campaigns which advocate for coordinated action-based solutions and increased levels of community stewardship. To effectively approach community engagement, we will utilize network contacts who have similar missions of affecting positive change in regards to forest management and wildfire threat reduction. BTWC and network partners will need to closely coordinate our messaging and jointly take advantage of engagement opportunities. We will also collaborate with Left Hand Watershed Center and CitSci.org to take full advantage of the MyWatershed app as a tool for gathering community-generated monitoring and participatory mapping data. Engaging and enrolling community members in app and subsequent trainings will also require further collaboration.

Additionally, as part of the proposed engagement work, BTWC will work with Northern Colorado Fireshed Network and other Big Thompson partners to expand upon the network and formalize the creation of a Big Thompson Fireshed Network. This will rely on a collaborative process with numerous partners.

Overall this project will involve a wide array of partners, including, but not limited to: USFS, CSFS, USDA-NRCS, Northern Colorado Water Conservancy District, Loveland Fire and Rescue Authority, Loveland Parks & Recreation, Big Thompson Fire Department - Canyon Battalion, Glen Haven Volunteer Fire Department, Glen Haven Association (and other upper watershed HOAs), Larimer County Sheriffs' Office, Larimer County Office of Emergency Management, Left Hand Watershed Center, CitSci.org, Four Mile Watershed Coalition, Coalition for the Poudre River Watershed, Estes Valley Watershed Coalition, The Nature Conservancy, Big Thompson Watershed Forum, The Forest Stewards Guild, Peaks to People, CSU's Water Center and Water Literate Leaders, CSU's Human Dimensions of Natural Resources department, Colorado Forest Restoration Institute, Team Rubicon - Northern Colorado Chapter, neighboring watershed coalitions in Estes Park, Fort Collins, and Boulder, as well as upper watershed landowners and the general public.

Supplemental project funders include: Northern Colorado Water Conservancy District, Colorado State Forest Services, Coalition for the Poudre River Watershed via United States Forest Service, City of Fort Collins, City of Loveland, Colorado State University Human Dimensions of Natural Resources department, Nina Mason Pulliam Charitable Trust.



## Overview (answer for both tracks)

Describe how you plan to measure and evaluate the success and impact of the project?

Specific target metrics will coincide with each of the program tasks indicated in the Statement of Work section below. Many of these metrics will be numerically based to get a better understanding of the number of community events held, participants involved, labor hours donated (for volunteers and stakeholder/partners), production and installation/distribution of indicated educational materials, and description of event outcomes and areas of improvement. For web and social media based outreach, online metrics will be tracked and reviewed in relation to type of event, number of community web actions (responses, comments, sharing, likes, etc), and action items of how to improve these communication tools.

A survey has been created to capture information on landowner knowledge-base, perceptions of forestry work, and other relevant information. This data will continue to be collected and will be analyzed and shared with relevant stakeholders including community members, BTWC Board, partners, BTFN, and others through a BTWC Forestry Program Plan report.

Beyond the project timeline, the success of the forestry program will be measured in the continuation of the Big Thompson Fireshed Network and continued landowner investment and participation in forest mitigation programs.

What research, evidence, and data support your project?

"The last 50 years or so have seen a steady increase in the rate of destructive wildfires across the world, partly as a result of climate change and partly as a result of encroachment of human settlement on fire-based ecosystems. Years of active fire suppression in such areas has inevitably led to the build-up of hazardous fuel loads, creating ideal conditions for destructive wildfires" (Johnson et al. 2001 & Carver et al., 2009). To confront this growing issue, a better understanding of forest management needs and how to involve people in wildfire threat mitigation work is necessary (Kline et al., 2015). Yet, "the need to have a comprehensive understanding of ecosystem integrity, including function and structure, is often confounded by a lack of, or inadequate and incomplete, data and monitoring initiatives by professional scientists and government agencies" (Conrad and Hilchey, 2011). To collaboratively fill this gap, and to better involve communities in information gathering and sharing, management decision-making, and stewardship, citizen science initiatives have been developed (Conrad & Hilchey, 2011). These citizen science initiatives "promote the reconnection between people and nature and more generally between people and science" (Devictor et al., 2010).

A key aspect of citizen science initiatives is participatory community-based mapping. Participatory mapping can, among other things, help to identify priority locations for forest thinning and prescribed fire and can also be used as a tool to map community values toward natural resources (Beverly et al., 2008; Haworth et al., 2016). These tools, enabled through social media and web-based mapping platforms, have the potential to lead to "a new disaster management context" where individuals create, share, and map geographic information (Haworth et al., 2016). Further, it has been shown that participation in these activities can "…increase community connectedness for building disaster resilience" (Haworth et al., 2016). Community connectedness correlates with levels of social capital, which managers can take advantage of "…to improve the effectiveness of community outreach education and they can, in turn, use wildfire preparedness education to increase social capital. Because people who perceived higher social capital also were found to be more likely to take action around their homes to reduce their wildfire risk, educational programs that emphasize building social capital may help managers achieve better community preparedness." (Agrawal & Monroe, 2006).



## Overview (answer for both tracks)

It is increasingly critical for communities in fire-based ecosystem to have clear plans and to take steps toward threat reduction. It is also critical for fire and land management entities to improve communication and coordination with these communities as both mechanical thinning and prescribed burning can be long involved processes which have the "potential to create conflict between the different management regimes associated with adjacent lands and between the different inhabitants and stakeholders affected" (Carver et al., 2009).

With all this in mind, we look toward Kline et al.'s suggested direction of a coupled biophysicalsocial framework in which we use "social science to understand wildfire risk perceptions and the degree of collaboration and mitigation behavior among landowners, land management agencies and local officials. Such an approach potentially would provide an improved method for defining the spatial extent of wildfire risk to communities compared to current planning processes, and creates an explicit role for social science to improve understanding of community-wide risk perceptions and predict landowners' capacities and willingness to mitigate risk by treating hazardous fuels and conducting Firewise activities" (2015).

## References:

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Describe potential short- and long-term challenges with this project.



## Overview (answer for both tracks)

As a project which requires high levels of collaboration and action from network partners and community members there are inherent challenges, both short- and long-term, which may present themselves.

Short-term challenges include:

- Activating community interest and engagement in forest health and wildfire preparedness. While we have had a diverse attendance at our previous forestry-based events, it has been a consistent challenge to effectively market events and generate increased attendance, especially for project tours.
- Collaborating with a wide network of partners can often be a bottleneck to efficiency as coordinating diverse work and project schedules can be difficult.
- Development of staff forestry technical experience.
- Working to open channels of communication between the public/communities and land management entities could lead to challenging interactions with people who are hesitant to work with government entities and remove trees.
- Efficacy of the MyWatershed app as an interactive platform which can effectively capture the breadth of data we would like to collect. The app also has identified barriers to access that we must work around.
- Consolidating resources around forestry, wildfire preparedness, defensible space, city/county regulations, maps of priority areas for wildfire threat/risk reduction, and more could be complicated by mixed messaging. We will have to work to ensure resources do not present contradictory or mixed recommendations and messages.
- Consolidating Big Thompson data on a singular web-based platform may present challenges in locating, reviewing, and uploading all relevant data.

Long-term challenges include:

- Long-term engagement and investment of communities to effectively plan for and reduce wildfire threats within a reasonable timeline
- Long-term investment of Fireshed Network partners and effective use of time together.
- Generating future funding sources to continue with this critical engagement work.
- Long-term alignment of goals between diverse network partners.
- Long-term alignment of goals with diverse communities.
- Capacity to update and maintain Big Thompson data on web-based platform.
- Staff capacity to maintain and monitor subsequent forest thinning implementation projects this project will help to develop.

BTWC readily understands the realistic challenges that this complicated and multi-objective project will entail and we look forward to working with network partners and CWCB to address challenges as they present themselves. We feel that as long as we maintain high levels of trust, transparency, and collaboration and that we understand the breadth of challenges this work may bring about that we will be able to effectively respond to them.

Please fill out the applicable questions for either the Engagement Track or Innovation Track, unless your project contains elements in both tracks. If a question does not relate to your project, just leave it blank. Please answer each question that relates to your project. Please reference the relevant documents and use chapters and page numbers (Colorado's Water Plan, Basin Implementation Plan, PEPO Education Action Plan, etc.).



## Engagement Track

Describe how the project achieves the education, outreach, and public engagement measurable objective set forth in Colorado's Water Plan to "significantly improve the level of public awareness and engagement regarding water issues statewide by 2020, as determined by water awareness surveys."

Section V (pg. 1) of the water awareness surveys identified seven key awareness topics from the northeast region. Of those seven awareness topics, this project will address four: awareness of water issues; performance of government agencies; water-related concerns; and need for more information and most trusted sources. Through addressing these issues, this project will also help to achieve Colorado's Water Plan measurable objective to: improve the level of public awareness and engagement regarding water issues.

To create increased awareness and to affect measurable changes in human behavior the best strategies are often rooted in outreach and education campaigns. To effectively approach these campaigns takes a clear understanding of where there are gaps in public awareness, who the public trusts to provide them with information, and identifying key stakeholders who can leverage their connections to expand levels of participation.

The proposed project will take all of these factors into account to address the four aforementioned awareness topics as well as engage the public on broader talks of water issues. We will use the statewide water awareness surveys, BTWC-administered surveys which question levels of knowledge regarding watershed health and forest management, as well as prior and future discussions with community members to identify knowledge gaps. We will also use our established relationships with both land management entities and Big Thompson communities to open up channels of communication between the two groups. Through increased dialogue we hope to enhance community levels of trust in information provided by those entities and also improve public perceptions of the performance of land management government agencies.

The BTWC-led community events and workshops will provide a space for community members to expand their awareness of water issues, in this case, with a focus on the relationship between wildfire threat reduction, forest health, and water quality. We will also use events and workshops to begin to fill in identified knowledge gaps through expert speakers and compiled resources. The workshops will feature speakers from USFS, CSFS, Larimer County, fire districts and departments, and other organizations such as Colorado Forest Restoration Institute or Big Thompson Watershed Forum. This spectrum of speakers will allow community voices about water related concerns to be heard and addressed by multiple sectors. It will also improve the general sharing of information as the workshops prioritize dialogue and facilitated focus groups rather that a lecture format. Lastly, we intend to use workshops and other events as a place to collaboratively develop implementation projects, which will lead to increased public engagement and awareness as we will include communities in the planning, design, implementation, monitoring, and maintenance.

BTWC will also record speakers' talks and compile relevant resources which can be provided across online platforms. Public access to this information will further education goals as the public can engage with workshop information when and where they please and share it across other platforms.

Describe how the project achieves the other measurable objectives and critical goals and actions laid out in Colorado's Water Plan around the supply and demand gap; conservation; land use; agriculture; storage; watershed health, environment, and recreation; funding; and additional.



Project relevant measurable objectives and critical goals and actions from Colorado's Water Plan include:

- "Every acre-foot of conserved water used to meet new demands is an acre-foot of water that does not need to come from existing uses."
- "Protect and enhance river-based environments and recreational opportunities that support local and statewide economies and are important for the enjoyment of current and future generations of Coloradans."
- "The protection and restoration of water quality should be a key objective when planning for Colorado's current and future consumptive, recreational, and environmental water needs."
- "Colorado's Water Plan promotes water resource resilience from natural disasters through strategic preparedness and response."

Our proposed project will achieve these through:

- Conserving and protecting water by increasing public awareness and stewardship levels, which in turn may lead to more coordinated forestry implementation projects. Forestry projects which reduce wildfire threat mitigate the potential impact on water quality and supplies from high levels of post-fire sediment yields and erosion.
- Reducing potential wildfire impacts in the Big Thompson canyon also help to protect recreational opportunities and tourist-based economies as the Big Thompson canyon is the gateway to Rocky Mountain National Park-the number 1 attraction in the state.
- Prioritizing strategic planning in regards to wildfire preparedness. Strategic planning will include building awareness for the need of community-level CWPPs, working with Northern Colorado Fireshed Network and Peaks to People to identify priority areas for implementation projects, and promoting defensible space site assessments.

Describe how the project achieves the education, outreach, and public engagement goals set forth in the applicable Basin Implementation Plan(s).

Goals of the South Platte Basin Implementation plan education, outreach, and public engagement section (4.1.3) include:

- Leverage existing basin resources
- Complement existing state efforts
- Develop and maintain basin-specific outreach tools and approaches

BTWC's engagement project will achieve all of these goals.

- Leverage existing basin resources by partnering with land management entities, emergency operations, and other organizations like Colorado Forest Restoration Institute. Many of these entities have existing resources related to wildfire threat reduction. Our role will be to help disseminate these resources so that communities may better utilize them. We will also work with regional wood chippers, tree haulers, and wood carvers to expand the benefit of forestry work to local businesses.
- Complement existing state efforts by leveraging resources already created through CSFS, SPBR, the Water Plan, Firewise, and others. BTWC will also utilize our connections to facilitate increased conversation between public agencies and Big Thompson landowners.
- Utilize the MyWatershed app, which was created through a coordinated effort by Left Hand Watershed Center and CitSci.org. This app has the functionality to be tailored to specific projects and organizations. BTWC will use this functionality to create Big Thompson specific projects that allow community members to upload participatory mapping and monitoring data regarding forest conditions. We will also compile Big Thompson specific resources, and



videos/activities from our wildfire preparedness workshops which can all be shared on online platforms and used to generate increased community interest in such topics.

Describe how the project achieves the basin roundtable's PEPO Education Action Plans.

The South Platte Basin Roundtable Education Action Plan has a goal to "encourage dialogue on water, broadened the range of stakeholders actively participating in water decisions, and create a locally driven process where the decision-making power rests with those living in the state's river basins" (pg. 1 SPBR EAP 2015 update). The Plan also has a focus on solutions-oriented water supply planning.

These goals parallel the goals of BTWC's proposed engagement project.

- Promote healthy dialogue between the general public—namely landowners in the Big Thompson watershed—BTWC, partner organizations, and land management entities.
- To encourage this dialogue BTWC will host workshops, community event days, and encourage use of the MyWatershed app to provide an app-based avenue to elicit feedback and on-theground information from community members.
- Fill knowledge gaps of the connections between forest management and watershed health with a focus on post-wildfire sedimentation of water bodies.
- Strengthen existing partnerships and foster new ones to broaden the range of stakeholders participating in water decisions. This will be done through multiple avenues, but will include the expansion of the Northern Colorado Fireshed Network (NCFN) which will further encourage collaborative multi-agency efforts to better coordinate current and future forest work across the watershed.
- Coordinate work in an efficient way that also allows communities to seize on opportunities to take place in thinning and wildfire threat reduction work which spans private/public boundaries.
- Provide outreach and education that are directly related to solutions-based actions such as defensible space site assessments and assistance in the creation of CWPPs.

## Innovation Track

Describe how the project enhances water innovation efforts and supports a water innovation ecosystem in Colorado.

#### N/A

Describe how the project engages/leverages Colorado's innovation community to help solve our state's water challenges.

N/A

Describe how the project helps advance or develop a solution to a water need identified through TAP-IN and other water innovation challenges. What is the problem/need/challenge?

N/A

Describe how this project impacts current or emerging trends; technologies; clusters, sectors, or groups in water innovation.

N/A



## **Colorado Water Conservation Board**

## Water Plan Grant - Exhibit A

Statement Of Work			
Date:	1/30/2020		
Name of Grantee:	Big Thompson Watershed Coalition		
Name of Water Project:	Building the Community-Information Connection for Watershed Health		
Funding Source:	CWCB Water Plan Grant – Engagement		

#### Water Project Overview:

In 2019 BTWC developed and delivered community forestry workshops, to develop rapport between watershed residents, general community members, and partnering public entities in communicating information on regional and watershed-wide forestry, wildfire mitigation, and emergency response efforts. Thus far, these workshops have engaged over 70 participants from 7 different cities from Estes Park to Fort Collins and Boulder and developed professional connections for the next steps in our organization in the formalization of the Big Thompson Fireshed Network (as proposed in Task 1 below).

BTWC has identified a strong role for itself in promoting health of the C-BT project and Big Thompson watershed through the facilitation of information-sharing between stakeholders and advancement of forestry and defensible space projects on private lands.

With this CWCB engagement grant funding BTWC proposes to:

- Improve network capacity building through the creation of the Northern Colorado Fireshed Network (Task 1)
- Expand BTWC forest and wildfire engagement programs (Task 2)
- Develop information sharing web-resources for forestry planning (Task 3), and
- Develop private landowner services and identify interested parties for future BTWC-partnered thinning projects and defensible space work (Task 4).

## **Project Objectives:**

Objective 1: Create a more informed public that is educated in threats to local water resources and invested in the future health and resilience of the Big Thompson watershed for various water uses and values.

Objective 2: Enhance capacity, communication, and discourse between private landowners and natural resource managers and between various sectors of natural resource management to improve awareness and understanding of watershed-wide forest management initiatives.

Objective 3: Increase local landowner awareness and participation in programs that support private forest management to expand multi-benefit, cross-boundary forest thinning and defensible space projects that reduce risk from wildfire to our water resources, communities, and wildlife.



## Tasks

## Task 1 - Network Capacity Building

Description of Task: Develop BTWC capacity to facilitate a multi-entity network to coordinate watershedwide roles, resources, and an understanding of needs around forestry and wildfire information, engagement, and on-the-ground implementation.

In 2019, BTWC joined the Northern Colorado Fireshed Network (NCFN), a multi-agency collaborative effort to better correlate forestry project design, implementation, and communication across federal, state, and private lands in Northern Colorado. This effort started by concentrating energy in the Poudre River Watershed and is strategically working to draw their network, structure, and operations south through neighboring watersheds using watershed coalitions as managing bodies. The Big Thompson Watershed Coalition has been a part of multiple 2019 Network discussions, and is currently organizing the first quarterly Big Thompson-specific network gathering for spring 2020. The capacity of BTWC to coordinate and facilitate this working group and host community events is currently being paid for out-of-pocket and through unrestricted funding because of the program's high level of need.

BTWC proposes to initiate the formation of the Big Thompson Fireshed Network (BTFN). This will be conducted through the following sub-tasks:

## Sub-task 1.1: Create the "Fireshed Roadmap"

Develop a better understanding of forestry and wildfire stakeholders for the Big Thompson watershed through a comprehensive map of active entities, their resources, and gaps. This will include partners listed in "Partners Included" section.

## Sub-task 1.2: Organize Stakeholder Meetings

Organize, host, and record BTFN seasonal meetings for Roadmap identified stakeholders throughout 2020 and 2021 and conduct one-on-one stakeholder meetings with each entity to better understand their operations, objectives, role, and geographic scope in the Big Thompson watershed.

## Sub-task 1.3: Enhance Public Communication

BTFN will develop a communication sub-committee that works with BTWC's Forestry Communications Plan (Task 2) to produce a BTFN Communication Plan that strategizes how and when the network will communicate development, progress, and relevant information.

Method/Procedure:

## Sub-task 1.1: Create the "Fireshed Roadmap"

- 1. Identify and compile contact information based off of existing frameworks developed by the Northern Colorado Fireshed Network and Boulder County Forest Collaborative.
- 2. Develop visual representation of the BTFN Roadmap.
- 3. Verify each entity's contact information, assets, and perceived gaps in the system that BTWC should address through the BTFN.
- 4. Communication network expanse through community engagement efforts (Task 2), BTWC website, and other relevant opportunities for sharing.

## Sub-task 1.2: Organize Stakeholder Meetings

- 1. Utilize road map to initiate contact with each organization
- 2. Schedule 4 stakeholder wide Network meetings for 2020 and 2021
- 3. Schedule individual meetings with stakeholder entities
- 4. Develop agendas, presenters, and communication tools necessary for each meeting.

## Sub-task 1.3: Enhance Public Communication

- 1. Develop Communications sub-committee of network members
- 2. Develop work plan and timeline for the sub-committee



## Tasks

- 3. Review BTWC's Forestry Communications Plan
- 4. Develop BTFN Communications Plan
- 5. Carry out communication of network activities and updates through the communication methods (as described in Task 2.4).
- 6. Collect and analyze metrics on network communication success through multi-media metrics (as described in Task 2.5).

#### Deliverable:

- Production of a BTFN Roadmap visualization chart
- BTFN quarterly and one-on-one meeting agendas, minutes, and meeting packets
- BTFN Operational Plan (including identification of processes for inter-entity communication, structural development, community engagement, and data/visualization sharing)

## Tasks

## Task 2 – Forestry Engagement Program Development

## Description of Task: Community engagement in Big Thompson forestry

Funding provided by the Department of Local Affairs, Colorado State Forest Service, and Northern Water, enabled BWTC to develop and deliver forestry project engagement and wildfire workshop series to local residents and the general public in 2019. While project-focused engagement is geared towards communication for directly impacted communities, workshops provide information for landowners and the general public across Northern Colorado. We see great value in building on the strong platform that BTWC has already developed to expand information sharing and public participation in wildfire threat reduction to our watershed. Our engagement program as described here in Task 2 is directly linked to the effectiveness and success of Task 4.

## Sub Task 2.1 – Provide Workshops

Improve and host piloted "For the Love of the Forest" workshop series through four community events with partnering agencies and local government wildfire services. Workshops will include seasonally relevant topics and activities.

## Sub-Task 2.2 – Host Volunteer Events

Develop, organize, and host 6 volunteer outreach opportunities (in addition to Cedar Park volunteer opportunities) with local community and corporate groups. Groups will assist BTWC's Round Mountain and Cedar Park project sites. Groups may also join BTWC, the Glen Haven Association, and the Glen Haven Volunteer Fire Department and residents of Glen Haven and The Retreat in the communities' Community Wildfire Protection Plan slash maintenance program summer workdays (2 days) to improve defensible space. General volunteer programs will expand water resource protection, forestry health, and wildfire mitigation information and education to our general public across Northern Colorado.

## Sub-Task 2.3 – Develop Education Materials

Develop, collect, and distribute educational resources for landowners and Big Thompson Fireshed Network collaborators. Through initial meetings and workshop development, BTWC has recognized a need to identify and consolidate community resources for forest and wildfire managers to share with community members. BTWC has worked with the Loveland Fire and Rescue Authority and Larimer County Office of Emergency Response to focus resource provisions on Fire-Wise Communities, Ready-Set-Go, and County produced emergency planning materials. BTWC has created and disbursed community surveys to better understand local perception of forestry, wildfire threat reduction practices, wildfire insurance obligations, landowner



## Tasks

interest in partnering in forestry and defensible space. BTWC will work with the Boulder County Forest Collaborative and CSU researcher to consolidate surveys and improve survey design to capture a more robust picture These materials will be collected and distributed to community members during workshops, volunteer events, property site visits (under Task 4), and through partner entity events. We also have the potential to develop, fabricate, and install an educational sign for the Round Mountain Forestry Demo. project that can capture and educate up to 40,000 annual visitors between Round Mountain and Viestenz-Smith Mountain Park on the need for watershed forestry restoration and wildfire mitigation efforts.

## Sub-Tasks 2.4 – Improve Communication

Enhance communication of information between watershed residents and land/fire managers on forest and wildfire ecology, forestry project implementation, wildfire preparedness, and programs that community members can get involved with.

## Sub-Task 2.5 – Collect Data and metrics

Collect, organize, and analyze data and information collected on community attendance and interest in further forestry involvement, volunteer program participation and contact information, and web-based forestry program content.

#### Method/Procedure:

## Sub Task 2.1 – Provide Workshops

- 1. Refine 2019 community workshops using debrief feedback from BTWC Board members and project partners who attended as well as community feedback from participant (community member) surveys.
- 2. Set dates and content for 2020 community workshops
- 3. Develop Forestry Communications Plan section specific to workshops and the communities each workshop will be located in. The plan outlines communication information sharing outlets, content, community leaders, pre-scheduled community events, and optimum schedule of press releases.
- 4. Develop and distribute hardcopy educational resources to publicize the event.
- 5. Distribute, collect, and analyze community survey at workshops and other events and maintain community database of contact information and landowner interests for follow-up engagement.

## Sub-Task 2.2 – Host Volunteer Events

- 1. Identify existing and new contacts of community groups interested in engaging in a group volunteer event.
- 2. Host volunteer dates and maintain metrics and contact information in community database.

## Sub-Task 2.3 – Develop Education Materials

- 1. Develop and post content for BTWC website including information on the BTFN.
- 2. Hire multi-media contractor to film and develop web-based workshop videos for remote access of workshop content.
- 3. Develop, fabricate, and install Round Mountain educational signage. Content will be developed with City of Loveland Parks and Recreation team to meet the property owner's design and educational performance criteria.
- 4. Develop content for presentations and outreach events to general community at BTWC and other organization's events.
- 5. Distribute, collect, and analyze community survey at workshops and other events.

## Sub-Tasks 2.4 – Improve Communication

1. Develop a Forestry Communications Plan that includes the identification of most used information platforms, organized community groups (road associations, home owner's associations, etc.), respected community leaders, and other inter-community tools to sets schedules and content for communication.



## Tasks

- 2. Share forestry and wildfire updates with 150,000+ watershed residents and extended community through BTWC and partnering entities' social media, newsletters, newspapers, NextDoor, and other outlets.
- 3. Attend 3 annual community outreach festivals or events hosted by other organizations or entities. These may include the Risk canyon festival, the BTCA pancake breakfast, the Larimer County Emergency Planning festival, or others deemed relevant and generated for our target audiences.

## Sub-Tasks 2.5 Collect data and metrics

- 1. Install, monitor, and analyze metrics on the success of BTWC website, social media, and newsletters reaching target populations.
- 2. Use metrics to adaptively manage communication plan, tools, and methods that support the expansion of communication tools to unreached communities.

#### Deliverable:

- List of engagement events held, event planning materials, records of attendance and labor hours (for volunteer events), and description of event outcomes.
- 2-3 short educational videos on forest and fire ecology, forest management in the Big Thompson, and at-home defensible space and forest thinning practices for private landowners.
- Forestry Communications Plan with engagement sub-task specific work plans.
- Data collection and analysis on community surveys, outcomes will be consolidated into a project-end report and shared with relevant stakeholders including community members, BTWC Board, partners, BTFN, and others.

## Tasks

## Task 3 - "Streamline" - Web-Resource for Forestry Planning

Description of Task: Research and develop shared information and data systems for community and partner planning efforts

Linking information, people, and collaboration over shared information is a fundamental value of BTWC and other watershed coalitions. Although many existing data sets are being shared between partnering entities on a request basis (if the data is known to exist and not restricted to single-entity access) collaboration will benefit from housing data and information in a single location that can be easily accessed by partners. BTWC has identified two data collection and housing functions to pilot in unison with our 2020 forestry program and BTFN development. These systems will provide data, information organization, and enhanced communication from the initial stages of programmatic development, rather than as an afterthought.

## Sub-Task 3.1 Develop "Big T - Streamline"

"Streamline" will be a data consolidation web resource that would provide a consolidated access point for data, reports, and information organized by watershed. We propose to work with the Boulder County Forest Collaborative to develop a shared access mechanism for housing and accessing forestry, fire, water resource, and community demographic-based data, reports, and information for partner access through an internal network such as ArcGIS.

Sub-Task 3.2 Enhance MyWatershed App

Both the Lefthand Watershed Center (LWC) and the Coalition for the Poudre River Watershed (CPRW) have developed an initial framework of web applications, MyWatershed and the not yet named CPRW app respectively, to improve volunteer experience and efficiency in river health data collection. Their foundations


## Tasks

provide very valuable tools that can be easily adapted to improve information capture and sharing for BTWC's forestry program needs as well.

#### Method/Procedure:

Sub-Task 3.1 Develop "Big T - Streamline"

- 1. Work with BTFN to develop understand of existing data, data sharing preferences and needs, and best consolidation and network access tools.
- 2. Contact data managing entities and staff contacts within the BTFN to understand existing tools and their fit and application for this type of data sharing.
- 3. Request data sets, inventory categorization information, and contact information from BTFN and outof-network entities with data.
- 4. Upload, pilot, and adapt program needs based on the interests, concerns, and use needs of its stakeholders.

#### Sub-Task 3.2 Enhance MyWatershed App

- 1. Work with BTFN to develop understand of landowner survey parameters and data that BTWC should collect.
- 2. Work with LWC (as a part of their cross-watershed mobile app sharing interests) to convert datasheets into app functions and format for remote data collection and uploading. Through this process we hope to better understand and work within app limitations, quality control needs, and user interface to enhance data accuracy, consistency, and minimize data loss.
- 3. Pilot and adapt app function to suit field needs and new survey questions or data collection needs as they arise.

#### Deliverable:

- ArcGIS (or other host if found preferable) database that houses consolidated stakeholder forest and fire data for the Big Thompson watershed.
- MyWatershed monitoring activity and form created for private landowner forestry and wildfire mitigation information consolidation.
- A Forestry Data Inventory document and primary staff contact will be produced and held internally by staff for reference. A professional data version can be included on the shared access web-resource. A landowner version will be maintained by BTWC. Landowner contact information will not be shared amongst stakeholders unless permitted.

#### Tasks

#### Task 4 – Forest Landowner Engagement

Description of Task: Feasibility study for BTWC home and property wildfire assessments



#### Tasks

BTWC initiated forest implementation projects in 2019 to fulfill a role and need in the Big Thompson canyon. By increasing organizational capacity and resources, this coalition can increase the pace and scale of cross-boundary wildfire risk reduction projects while utilizing the strong community relations we have developed in flood recovery efforts.

Along with our successful general outreach and education efforts, BTWC can specifically target small to medium acreage landowners to initiate the first steps in forest thinning and defensible space implementation on their properties. This task will leverage existing landowner relationships to identify forest thinning needs and points of entry into community-based planning and collaboration. The local USFS staff are ready and willing to advance collaborative partnership planning with community members, but they need points of entry to identify and start to address community concerns as a way to start discourse and find common ground between practitioners and rural watershed residents.

#### Sub-Task 4.1 Conduct Landowner Outreach

Through talks, engagement events, and MyWatershed app expansion (task 3) BTWC will build a better understanding of community perceptions of forest management and wildfire mitigation efforts. BTWC will also share information on the importance of these activities in regards to watershed health and protection of life and property.

#### Sub-Task 4.2 Enroll Landowners in Mitigation projects

BTWC will conduct site-visits with a professional forester (either private contractor or public partner contractor) to assess defensible space and forested property for potential mitigation actions by voluntary landowners alone or in partnership with a resource program. Landowners will be encouraged to discuss mitigation with neighbors for multi-property connectivity of a project. BTWC will work with grant funders and project partners such as Peaks to People to identify and fund project treatment areas.

#### Sub-Task 4.3 Enhance the Community-Information Connection

BTWC will work with communities to share information gathered through this entire program development process. Information will be conveyed on the form, function, and progress of the BTFN and BTWC forestry program development and request community commentary on methodology, plans, and implementation process identified in this project. Educational materials will be developed to promote information sharing on available programs, partnerships, and current work going on and planned for the Big Thompson watershed.

#### Sub-Task 4.4 Build Staff Capacity

BTWC would like to support the position of a CSU graduate researcher from the Human Dimensions of Natural Resources department to assist with developing an understanding of stakeholder values, perceptions of wildfire mitigation practices, and assistance in programmatic development.

Method/Procedure:



#### Tasks

#### Sub-Task 4.1 Conduct Landowner Outreach

- 1. Draw on research, CWPPs, and community engagement to better understand what communities value in regard to protection from the threat of wildfire.
- 2. Utilize BTFN partner databases to locate larger or otherwise strategic parcels of land and ownership that coincide with community, freshwater resource, natural firebreaks, wildlife corridors, social benefit and other areas of value to protect from wildfire.
- 3. Identify and reach out to these and neighboring landowners to gauge interest in talking in person about program development.

#### Sub-Task 4.2 Enroll Landowners in Mitigation projects

- 1. Research feasibility, capacity needs, and cost-benefit of BTWC's Landowner Assessment Program, which would charge a market-rate fee for homeowner assessments of defensible space assessments and forest health and threat assessment.
- 2. Procure contractor to train staff in site assessment to build internal, sustainable capacity for future assessments.
- 3. Provide site assessments by parcel for defensible space, forest health, and forest thinning linking adjacent parcels together under a single project treatment area.
- 4. Discuss Community Wildfire Protection Planning interests and development benefits for project funding support.
- 5. Obtain contract agreement with landowner for BTWC to pursue funding for their project site.

#### Sub-Task 4.3 Enhance the Community-Information Connection

- 1. Conduct whole-community and individual landowner outreach to inform landowners of wildfire mitigation programs available to them through BTWC and other entities.
- 2. Collaborate with BTFN stakeholders and community leaders to develop, print, and distribute a brochure of available programs landowners can take part in.

#### Sub-Task 4.4 Build Staff Capacity

- 1. Onboard and train a CSU graduate student in forestry program progress and development needs.
- 2. Host student in office and manage capstone project goal setting, research and development,
- appropriate research strategy, and develop clear understanding of deliverables.

#### Deliverable:

- A BTWC Landowner Forestry and Fire Implementation Plan will draw on information and stakeholder input elicited from all tasks in this proposal (Tasks 1-3). This plan will identify how BTWC can strategically identify and prioritize private land mitigation projects based on aforementioned criteria.
- A homeowner inventory will be produced to maintain information and metrics on contacts made, interest level, site assessments conducted, wildfire mitigation investment level (defensible space vs. full forestry) number of participants/projects of interest.



# Budget and Schedule

This Statement of Work shall be accompanied by a combined Budget and Schedule that reflects the Tasks identified in the Statement of Work and shall be submitted to CWCB in excel format.

# **Reporting Requirements**

**Progress Reports:** The applicant shall provide the CWCB a progress report every 6 months, beginning from the date of issuance of a purchase order, or the execution of a contract. The progress report shall describe the status of the tasks identified in the statement of work, including a description of any major issues that have occurred and any corrective action taken to address these issues.

**Final Report:** At completion of the project, the applicant shall provide the CWCB a Final Report on the applicant's letterhead that:

- Summarizes the project and how the project was completed.
- Describes any obstacles encountered, and how these obstacles were overcome.
- Confirms that all matching commitments have been fulfilled.
- Includes photographs, summaries of meetings and engineering reports/designs.

The CWCB will pay out the last 10% of the budget when the Final Report is completed to the satisfaction of CWCB staff. Once the Final Report has been accepted, and final payment has been issued, the purchase order or grant will be closed without any further payment.

#### Payment

Payment will be made based on actual expenditures and must include invoices for all work completed. The request for payment must include a description of the work accomplished by task, an estimate of the percent completion for individual tasks and the entire Project in relation to the percentage of budget spent, identification of any major issues, and proposed or implemented corrective actions.

Costs incurred prior to the effective date of this contract are not reimbursable. The last 10% of the entire grant will be paid out when the final deliverable has been received. All products, data and information developed as a result of this contract must be provided to CWCB in hard copy and electronic format as part of the project documentation.

# **Performance Measures**

Performance measures for this contract shall include the following:

(a) Performance standards and evaluation: Grantee will produce detailed deliverables for each task as specified. Grantee shall maintain receipts for all project expenses and documentation of the minimum in-kind contributions (if applicable) per the budget in Exhibit B. Per Water Plan Grant Guidelines, the CWCB will pay out the last 10% of the budget when the Final Report is completed to the satisfaction of CWCB staff. Once the Final Report has been accepted, and final payment has been issued, the purchase order or grant will be closed without any further payment.

(b) Accountability: Per Water Plan Grant Guidelines full documentation of project progress must be submitted with each invoice for reimbursement. Grantee must confirm that all grant conditions have been complied with on each invoice. In addition, per Water Plan Grant Guidelines, Progress Reports must be submitted at least once every 6 months. A Final Report must be submitted and approved before final project payment.



## **Performance Measures**

(c) Monitoring Requirements: Grantee is responsible for ongoing monitoring of project progress per Exhibit A. Progress shall be detailed in each invoice and in each Progress Report, as detailed above. Additional inspections or field consultations will be arranged as may be necessary.

(d) Noncompliance Resolution: Payment will be withheld if grantee is not current on all grant conditions. Flagrant disregard for grant conditions will result in a stop work order and cancellation of the Grant Agreement.



# 01/30/2020

Ben Wade

Water Conservation Coordinator

Colorado Water Conservation Board

RE: Letter of support for the Big Thompson Watershed Coalition Colorado Water Conservation Board Water Plan Grant Engagement and Innovation Application

Dear Mr. Ben Wade,

The Forest Stewards Guild (Guild) is pleased to support the Big Thompson Watershed Coalition (BTWC) in its application for a Colorado Water Conservation Board Water Plan Engagement and Innovation Grant to provide funding for BTWC's "Building the Community-Information Connection for Watershed Health" project.

BTWC's and the Guild's missions closely in fostering ecological health and resilience in our communities through responsible forest management and community capacity building. BTWC has started to expand its forestry work to provide a vital role as a community resource providing multi-objective and collaborative efforts that benefit people, forests, and fresh water resources. Over the year we have become more familiar with BTWC's staff, operations, and vision through their participation in the Northern Colorado Fireshed Network. We plan to strengthen our organizations' partnership by participating in the Big Thompson Fireshed Network (as suggested in this funding proposal), expanding the Front Range Pile Burn Co-op into Big Thompson watershed's communities, and collaborating operations to improve ability of this area, its residents, and its resources to withstand large scale wildfire. We feel our partnership will be further enhanced through BTWC's engagement work, generating communitystewardship in this watershed as a part of our larger efforts across Colorado's Front Range.

2019 Galisteo St., Suite N7 Santa Fe, NM 87505

> *phone* 505-983-8992 *fax* 505-986-0798

The proposed engagement work planned by BTWC will provide critical community resources, network development, and relationship building between community members and diverse natural resource managers to promote stronger, unified forest

www.ForestStewardsGuild.org

management across Colorado's public and private lands. The Guild respectfully requests the approval of this grant proposal to support BTWC's operations. If you have any questions, please contact me at the information provided below.

Sincerely,

Taria Doduces

Daniel Godwin, Ast. Director of Fire Management

January 30, 2020

Ben Wade Water Conservation Coordinator Colorado Water Conservation Board

# RE: Letter of support for the Big Thompson Watershed Coalition Colorado Water Conservation Board Water Plan Grant Engagement and Innovation Application

Dear Mr. Ben Wade,

Jane Lopez, a Cooperator with Berthoud Fire Protection District, is pleased to support the Big Thompson Watershed Coalition (BTWC) in its application for a Colorado Water Conservation Board Water Plan Engagement and Innovation Grant to provide funding for BTWC's "Building the Community-Information Connection for Watershed Health" program.

The flood of 2013 had devastating effects on public and private lands along the river corridor in the Big Thompson Watershed. Since that time, the Big Thompson Watershed Coalition and partners, like Larimer County, USFS, WRV, and others, have been restoring key sections of the Big Thompson River corridor to build long-term resilience and function back into the system. Throughout this, BTWC was also developing working relationships with Big Thompson canyon communities and other stakeholders in the watershed. As BTWC moves away from flood recovery efforts and into more proactive measures to enhance the resiliency of the watershed, they plan to leverage these relationships to increase community engagement around forest management and wildfire preparedness. These established connections make BTWC one of few entities within the watershed that can address forest restoration and wildfire/fuels mitigation needs across private lands in coordination with public land management efforts.

As a former Assistant State Forester with Colorado State Forest Service with fuels and fire mitigation management responsibilities, Jane can attest to the critical importance of fuels mitigation as it relates to watershed health. According to the science analysis of the "National Cohesive Wildland Fire Management Strategy" (www.cohesivefire.nemac.org), Larimer County encompasses one of the areas designated as high priority for broad-scale fuels management. (https://cohesivefire.nemac.org/sites/default/files/appendix\_priorities\_0.pdf)

The proposed engagement work planned by BTWC will promote community engagement events, year round community science and stewardship activities, expansion of community information sharing on forestry and wildfire, defensible space site assessments, development of forestry-based educational materials, and a better understanding of data consolidation and web-tool needs amongst regional and state-wide collaborations. The overarching goal of this work is to involve diverse stakeholders in collaborative efforts to enhance a holistic understanding of forest resource management and watershed health, empower communities to become active stewards of their natural resources, and help to coalesce people around a shared vision of regional watershed health.

To successfully undertake this work and develop the necessary connections requires a large commitment of staff time and resources. With a strong history of successful watershed restoration implementation, weaving together the needs of both public and private landowners,

BTWC has the capacity and expertise to engage community members in better understanding of and participation in landscape scale forest management and wildfire threat reduction projects.

Jane Lopez respectfully requests the approval of this grant proposal to support BTWC's operations. If you have any questions, please contact Jane Lopez at <u>janelopez9193@gmail.com</u> or 970-217-4101

Sincerely,

Garem. Dogy

Jane M. Lopez



Loveland Fire Rescue Authority Community Safety Division 410 East Fifth Street • Loveland, Colorado 80537 (970) 962-2497 • FAX (970) 962-2912 • TDD (970) 663-5144 www.cityofloveland.org

Ben Wade Water Conservation Coordinator Colorado Water Conservation Board January 29, 2020

# RE: Letter of support for the Big Thompson Watershed Coalition Colorado Water Conservation Board Water Plan Grant Engagement and Innovation Application

Dear Mr. Ben Wade,

Loveland Fire Recue Authority (LFRA) is pleased to support the Big Thompson Watershed Coalition (BTWC) in its application for a Colorado Water Conservation Board Water Plan Engagement and Innovation Grant to provide funding for BTWC's "Building the Community-Information Connection for Watershed Health" project.

As the principal fire authority in the Big Thompson watershed, LFRA focuses its operations on emergency response measures and fire mitigation efforts through education and awareness campaigns. LFRA works with multiple other fire authorities within the watershed, including the Canyon Battalion and Estes Park Fire Protection District, but also prioritizes partnerships with organizations and agencies who are completing on-the-ground forest work and those that build awareness of the need for coordinated and collaborative wildfire preparedness efforts.

With the recent expansion of BTWC's forestry program, LFRA has become an integral partner in communicating the importance of preemptive wildfire mitigation action to Loveland and Big Thompson canyon communities. Further, this partnership between LFRA and BTWC will help to increase information sharing between LFRA's operations, on-the-ground forest work, and active community members. Enhancement of information sharing will not only improve operational efficiency but also help to create more informed communities which we feel often makes more engaged communities.

The proposed engagement work planned by BTWC will promote some of their largest community engagement events on forestry and wildfire, year round community science and stewardship activities, expansion of community information sharing on forestry and wildfire, development of watershed-based educational materials, and a better understanding of data consolidation and web-tool needs amongst regional and state-wide collaborations. The overarching goal of this work is to involve diverse stakeholders in collaborative efforts to enhance a holistic understanding of water resource management and watershed health, empower communities to become active stewards of their natural resources, and help to coalesce people around a shared vision of regional watershed health.

To successfully undertake this work and develop the necessary connections requires a large commitment of staff time and resources. We feel that BTWC's past record of successful restoration projects, established relationships with countless public agencies and private land and business owners, plus their unique understanding of diverse

community/stakeholder interests and conservation threats in the Big Thompson watershed prove their ability to greatly contribute toward these broad goals.

Loveland Fire Rescue Authority respectfully requests the approval of this grant proposal to support BTWC's operations. If you have any questions, please contact Division Chief Chief/Fire Marshal Ned Sparks.

Sincerely,

W Aparto Ned Sparks

Division Chief- Community Safety & Fire Marshal Loveland Fire Rescue Authority



970-962-2488 - office

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https://twitter.com/LovelandFRA

# D.R. & V. Pulliam Charitable Trust

December 20, 2019

Big Thompson Watershed Coalition Attn: Courtney Gutmaan PO BOX 1923 Loveland, CO 80539

Dear Courtney:

organization has been awarded a grant in the amount of \$2,042.00 for workshops on forestry and wildfire preparedness and mitigation and volunteer restoration days. On behalf of the D.R. & V. Pulliam Charitable Trust, it is my pleasure to inform you that your

these guidelines ask that you carefully review these guidelines to ensure your compliance with this grant. Please Enclosed please find the grant check along with a copy of our Grant Compliance Guidelines. We note that your endorsement of the enclosed grant check will confirm your agreement with

concerning this award, please feel free to contact us. recognition of your organization's charitable mission. Should you have any questions Once again, on behalf of the D.R. & V. Pulliam Charitable Trust, congratulations to you on this

Sincerely,

William Bouldin Trust Advisor

Encl. Grant Check Grant Compliance Guidelines

Comerica Wealth Management Professional Trustee Alliances 999 18th Street, Suite 2001 Denver, CO 80202 (303) 294-3359 wpbouldin@comerica.com

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# **BTWC Forestry and Wildfire Preparedness Workshops**



Photo 1: Daniel Bowker of CPRW presents historical comparison of forest densities to community members



Photo 2: Community members at first workshop of the series



Photo 3: Board members, Daniel Bowker, and community members participate in focus group



Photo 4: Community members heard from BTWC's director, Courtney Gutman, and picked up both hard copy and digital resources at fifth workshop



Photo 5: Matt Norville (CSFS), Ned Sparks (LFRA), Derek Rosenquist (LC – Emergency Management), and James White (USFS) answer community member questions in panel format



Photo 6: Community members engage with James White over participatory mapping exercise



Photo 7 & 8: Examples of community feedback from participatory mapping exercise at workshop 5