



COLORADO

**Colorado Water
Conservation Board**

Department of Natural Resources

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John Hickenlooper, Governor

Robert Randall, DNR Executive
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James Eklund, CWCB Director

TO: Colorado Water Conservation Board Members

FROM: Ben Wade, Water Supply Planning Section

DATE: November 16, 2016

AGENDA ITEM: Agenda Item #11 Water Efficiency Grant Application for the Town of Frisco to Develop a Blue River Watershed Regional Water Efficiency Plan.

Introduction:

The Town of Frisco is a non-covered entity in the Colorado River Basin and will be the fiscal agent for this grant application. The other project partners included in this regional planning effort are; Town of Breckenridge, Town of Silverthorne, Town of Dillon & Copper Mountain Consolidated Metro District.

The Blue River Regional Water Efficiency Plan will be comprised of five individual Water Efficiency Plans. The Plan will summarize, consolidate and integrate all five individual plans into a single document where opportunities can be identified throughout the Blue River watershed collectively and individually. Estimated water savings vary among the water providers but there is an effort among the larger of the five providers, the towns of Breckenridge & Silverthorne respectively, to reduce residential & commercial water use by 10% over the planning period.

One action laid out in Section 6.3.1 of the Colorado Water Plan is to continue to help the CWCB identify opportunities to assist smaller water providers to create a regional plan to help with the basins M&I supply gap. This project helps the CWCB continue the implementation of those statewide conservation programs.

The total project cost for the regional plan is \$162,422. If approved, the CWCB would provide \$94,160 to the Town to offset consultant fees. The project partners will contribute \$31,387 in cash and \$36,875 of in-kind labor, a 42% match, for the remainder of the project.

Staff Recommendation:

Staff recommends the Board approve a Water Efficiency Grant not to exceed \$94,160 to the Town of Frisco, to develop the Blue River Watershed Regional Water Efficiency Plan.





Blue River Watershed – Regional Water Efficiency Plan

CWCB Water Efficiency Grant Program
Water Conservation Planning Grant Application

September 26, 2016

1. Contact information of entity seeking grant:

Lead Applicant/Fiscal Agent

Town Of Frisco
Jeff Gobel, Assistant Public Works Director
P.O. Box 4100
Frisco, CO 80443
970-668-5276
jeffg@townoffrisco.com

Project Partners

Lead Partner - High Country Conservation Center
Jessica Burley, Community Programs Manager
P.O. Box 4506
Frisco, CO 80443
jessie@highcountryconservation.org

Town of Breckenridge – Water Division
Laura Lynch, Water Division Manager
P.O. Box 168
Breckenridge, CO 80424
laural@townofbreckenridge.com

Town of Silverthorne – Water and Sewer Department
Zach Margolis, Utilities Manager
P.O. Box 1309
Silverthorne, CO 80498
zachm@silverthorne.org

Town of Dillon – Water Department
Scott O’Brien, Public Works Director
P.O. Box 8
Dillon, CO 80435
scotto@townofdillon.com

Copper Mountain Consolidated Metro District – Water and Sewer Department
Ed Pankevicius, EPankevicius@cmcmdi.com
0800 Copper Rd, Box 3002
Copper Mountain, CO 80443
EPankevicius@cmcmdi.com

2. Organizations/individuals assisting in preparation of the Plan:

Project Staff

Jessica Burley, Community Programs Manager, High Country Conservation Center (HC3) –

Ms. Burley will provide all project management, coordination and oversight for this project. HC3 is viewed as the lead project partner and facilitator of the Regional Plan. HC3 is a 501 (c)3 non-profit dedicated to resource conservation in Summit County. For over 40 years, HC3’s programs have benefited both residents and the ecological community in the areas of waste reduction and reuse, sustainable food production, energy efficiency and water conservation. HC3 has longstanding partnerships with county and municipal governments and is looked to as the primary organization for conservation issues. Ms. Burley oversees programs in waste reduction, sustainable food, and water conservation. She has a M.A. in International Studies with a focus in sustainability.

Troy Wineland, Water Commissioner, Colorado Department of Natural Resources –

Mr. Wineland serves on HC3’s and the Blue River Watershed Group’s Board of Directors and is the chair of HC3’s Water Committee, the entity responsible for facilitating the Plan. He has a B.S. and M.S. in Environmental Studies from the University of Colorado, Boulder with a focus on water science and policy. Mr. Wineland served as Hydrologist to the U.S. Forest Service for nine years primarily on the Dillon Ranger District of the White River National Forest.

Participating Water Providers

Each of the individuals listed in the *Project Partners* section above will represent their respective agencies within this project. Each has spent considerable time gathering information necessary to complete this grant application. Water providers and their staff are uniquely familiar with all aspects of their water system, including: treatment, distribution, management, metering, billing, and public education.

Project Consultant

On June 27th, 2016, HC3 released the attached Request for Proposals for preparation of the *Blue River Regional Water Efficiency Plan*. Four (4) consultant proposals were received on July 15th. The Water Efficiency Committee narrowed the decision down to two candidates with a top preference. After checking references, the committee selected Brendle Group as the project consultant pending funding from CWCB and partners. The grant funding requested in this application is directly informed by Brendle Group’s project and fee proposal.

Judy Dorsey, Executive Project Manager, Brendle Group –

Ms. Dorsey will oversee Brendle Group’s consultancy on the Regional Plan. She has 22 years of executive leadership in sustainability, innovation, and entrepreneurship. Her specialties include district and community-scale planning in energy and climate, clean energy, sustainable economic development, organizational development, net zero energy, and water initiatives. Ms. Dorsey has led the completion of more than 300 sustainability projects for over 150 clients across 30 states, including more than a dozen energy plans for some of the nation’s most progressive communities, ski areas, airports, and major cities.

Becky Fedak, Project Manager, Brendle Group –

Ms. Fedak will manage Brendle Group’s preparation of the plan. Ms. Fedak has 11 years of experience in the industry, and is the water and climate practice area lead at Brendle Group. She supports a wide range of projects, including water foot printing and action planning; climate and sustainability planning; greenhouse gas inventories; water and energy profiles; and on-site energy, water, and waste assessments. She also has extensive experience as a water resources engineer and is well versed in water operations modeling and large-scale water resources planning and design. Ms. Fedak is a lead engineer and project manager for Brendle Group’s Net Zero Water Planning toolkit, a water management tool and companion guidebook that builds off the concepts of net zero energy and climate neutrality to help users become water neutral.

3. Identification of retail water delivery by the entities for each of the past five years (in acre-feet) and additional information characterizing past water use by sector and source.

The municipal communities of the Blue River Watershed are served by several water providers that have come together in this grant application. They include the Town of Breckenridge, Town of Frisco, Town of Dillon, Town of Silverthorne and the Copper Mountain Consolidated Metro District. Their annual (2015) combined water use is approximately 4,029 AF per year. It has been discovered through the process of this grant research that water providers in Summit County account for their water in different ways, so determining residential, commercial, irrigation and other uses has proven difficult. It is something that will need to be addressed in the planning process.

Retail Water Delivery & Water Use By Sector

	Total Annual Water Sales		Annual Residential Water Sales		Annual Commercial Water Sales		Annual Irrigation/Snowmaking Water Sales	
	Acre Feet	Gallons	Acre Feet	Gallons	Acre Feet	Gallons	Acre Feet	Gallons
Breckenridge								
2011	1,953	636,387,003	1,196	389,717,796	358	116,654,658	399	130,014,549
2012	2,199	716,546,349	1,226	399,493,326	460	149,891,460	513	167,161,563
2013	2,006	653,657,106	1,310	426,864,810	417	135,879,867	279	90,912,429
2014	1,865	607,712,115	1,222	398,189,922	367	119,587,317	276	89,934,876
2015	1,985	646,814,235	1,223	398,515,773	360	117,306,360	402	130,992,102
Frisco								
2011	653	212,780,703	366	119,261,466	181	58,979,031	106	34,540,206
2012	757	246,669,207	380	123,823,380	188	61,259,988	189	61,585,839
2013	682	222,230,382	391	127,407,741	173	56,372,223	118	38,450,418
2014	662	215,714,024	323	105,249,873	192	62,563,392	147	47,900,097
2015	691	225,163,041	363	118,283,913	195	63,540,945	133	43,338,183
Silverthorne								
2011	704	229,399,104	N/A	N/A	N/A	N/A	N/A	N/A
2012	678	220,926,978	N/A	N/A	N/A	N/A	N/A	N/A

	2013	814	265,242,714	N/A	N/A	N/A	N/A	N/A	N/A
	2014	694	226,140,594	N/A	N/A	N/A	N/A	N/A	N/A
	2015	735	239,500,485	N/A	N/A	N/A	N/A	N/A	N/A
Dillon				*multi-family and single-family					
	2011	272	88,720,883	156	50,832,756	116	37,798,716	N/A	N/A
	2012	265	86,505,906	152	49,529,352	116	37,798,716	N/A	N/A
	2013	264	85,940,477	152	49,529,352	112	36,495,312	N/A	N/A
	2014	282	91,872,932	162	52,787,862	120	39,102,120	N/A	N/A
	2015	285	92,770,954	164	53,439,564	121	39,427,971	N/A	N/A
Copper Mt.									
	2011	280	91,318,000	N/A	N/A	N/A	N/A	N/A	N/ N/A
	2012	305	99,434,000	N/A	N/A	N/A	N/A	N/A	N/A
	2013	337	109,919,000	N/A	N/A	N/A	N/A	N/A	N/A
	2014	334	108,994,000	N/A	N/A	N/A	N/A	N/A	N/A
	2015	333	108,561,000	N/A	N/A	N/A	N/A	N/A	N/A

Water Use By Source

	Groundwater AF	Surface Water AF
Breckenridge		Blue River
2011	N/A	1,953
2012	N/A	2,199
2013	N/A	2,006
2014	N/A	1,865
2015	N/A	1,985
Frisco	Wells #5, #6, #3	N. Ten Mile Creek
2011	416	236
2012	445	312
2013	456	267
2014	423	238
2015	429	262
Silverthorne	Blue River Alluvium	
2011	704	N/A
2012	678	N/A
2013	814	N/A
2014	694	N/A
2015	735	N/A
Dillon		Straight Creek
2011	N/A	272
2012	N/A	265
2013	N/A	264
2014	N/A	282
2015	N/A	285
Copper Mt.	Well #1, #2, #3	
2011	280	N/A
2012	305	N/A
2013	337	N/A
2014	334	N/A
2015	333	N/A

4. A reasonable estimate must be submitted with detailed projections of future annual retail demand for the next five years based on predicted population (provide source of data), building permits, expected new taps, and/or some other credible information.

5 Year Projections of Annual Water Demand in Acre Feet

Breckenridge	5 Year projections of annual water demand (AF) -based on + 158 SFE/yr and 2015 customer usage of 129 gal/SFE/day
2017	2,025
2018	2,048
2019	2,071
2020	2,094
2021	2,117
Frisco	5 year projections of annual water demand (AF) – based on 1.4% resident population growth per year and 1.6% increase in transient visits per year
2017	711
2018	733
2019	755
2020	777
2021	800
Silverthorne	Population information based on State Demography Office with 1-3% growth annually
2017	770
2018	793
2019	817
2020	841
2021	866
Dillon	Population information based on State Demography Office with .9% growth annually
2017	275
2018	277
2019	280
2020	282
2021	284
Copper Mt.	Population information based on number of empty lots/land left to build
2017	341
2018	345
2019	348
2020	351
2021	354

5. Background characterizing the water system, potential growth, and any other pertinent issues provided in 4. Information must include:
- a. Current and past system wide and single family residential per capita water use for the last five years, and the basis for those calculations.

<u>Breckenridge</u>	System- Wide Average Gallons per Capita per Day	Single-Family Residential Gallons Per Capita Per Day
2011	133	N/A
2012	144	N/A
2013	144	N/A
2014	132	194
2015	129	165

** Per Capita Water Usage gal/SFE/day (based on water billing, not plant production)*

<u>Frisco</u>	System- Wide Average Gallons per Capita per Day	Single-Family Residential Gallons Per Capita Per Day
2011	106	117
2012	109	120
2013	108	122
2014	97	99
2015	104	110

** Per Capita Water Usage 2014 population information from City-Data.com. Remaining years population data derived from 2000-2014 and assumes 1.37% increase per year. Transient population (accounted for in system-wide calculation) estimated from CDPHE water system information sheet at average 1800 people per day.*

<u>Silverthorne</u>	System- Wide Average Gallons per Capita per Day	Single-Family Residential Gallons Per Capita Per Day
2011	N/A	N/A
2012	N/A	N/A
2013	N/A	N/A
2014	N/A	N/A
2015	N/A	N/A

<u>Dillon</u>	System- Wide Average Gallons per EQR	Single-Family Residential Gallons Per Capita Per Day
2011	139	94
2012	136	92
2013	136	91
2014	145	98
2015	147	99

**Based on 2 per household (1290 households), average 2 per household based on 2010 census.*

<u>Copper Mt.</u>	System- Wide Average Gallons per Capita per Day	Single-Family Residential Gallons Per Capita Per Day
2011	50	N/A
2012	54.5	N/A
2013	60	N/A
2014	60	N/A
2015	59.5	N/A

**Based on system wide per capita = use/365(days)/5,000 population service area.*

b. Population for the past five years, current year and 10 year projection served by the entity and the source of this information.

<u>Breckenridge</u>	2010 Winter Population	Estimated 2026 Population
Permanent – Residents within water service area	4,988	6,734 *assumes 2.2% annual growth, medium probability
Transient – 2 nd homeowners and others who spend the night	23,536	31,774 *assumes 2.2% annual growth, medium probability
Non-Transient – day visitors who do not spend the night	14,023	14,696 *assumes .3% annual growth, medium probability

**Source of info: Second Water Plant Feasibility Study by HDR Engineering, 2013*

<u>Frisco</u>	Year	Population	Estimated 2026 Population
Permanent – Residents within water service area	2011	2,794	3,185*assumes 1.4% annual growth
	2012	2,832	
	2013	2,871	
	2014	2,914	
	2015	2,954	
Transient – 2 nd homeowners and others who spend the night		Average 1,800/year over past 5 years	2,090*assumes 1.6% annual growth

** Population data derived from 2000-2014 and assumes 1.4% increase per year. Transient population (accounted for in system-wide calculation) estimated from CDPHE water system information sheet at average 1800 people per day. Note: Lake Hill is a residential property under consideration by the Town of Frisco and could add as many as 1,200 to the total population estimates and is not accounted for in the table above.*

<u>Silverthorne</u>	2011 Population	Estimated 2026 Population
Estimated Population	3,892	5,447 *assumes 1-3% annual growth

** Population information from State Demography Office.*

<u>Dillon</u>	2011 Population	Estimated 2026 Population
Estimated Population	898	1065 *assumes .9% annual growth

**Population information from DOLA growth projections for Summit County.*

<u>Copper Mountain</u>	2016 Population	Estimated 2026 Population
Estimated Population	5,000	5,250 *assumes 5% growth over ten years

**Population information for Copper Mountain Consolidated Metropolitan District not available for past five years. 5,000 estimate from permits issues by water provider.*

c. Estimated water savings goals to be achieved through implementation of the Plan in acre-feet and as a percentage.

Many participating water providers have already achieved water savings by implementing water conservation measures such as leak detection, metering, rate structures, and other voluntary conservation programs. The scope of this project includes identifying additional measures and potential savings pertaining to the participating communities and the watershed as a whole. These goals reflect current efforts, not any additional water savings goals that will be the result of the Plan.

	% Annual Savings Potential	Annual Savings Potential in Acre- Feet
Breckenridge	10% reduction goal in residential and commercial – no expected savings in snowmaking	158 Acre Feet
Frisco	1.5% savings in water assuming 3% population (permanent and transient) increase	5.4 Acre Feet
Silverthorne	10% reduction in residential and commercial use.	73.5 Acre Feet
Dillon	2-4% over five years based on drop in billable gallons of 4% over past 5 years.	11 Acre Feet
Copper Mt.	10% over five years in residential and commercial	35.4 Acre Feet

d. Adequacy, stability, and reliability of the entity's water system and provide the entities location with respect to areas of current and future water needs as identified by the Statewide Water Supply Initiative (SWSI).

The Blue River watershed is located in central Colorado on the west side of the Continental Divide. The watershed drains 680 square miles covering all of Summit County and parts of Grand and Lake Counties. The watershed also includes Dillon and Green Mountain Reservoirs which support trans-basin diversions to Colorado's Front Range communities. The Middle Blue River, between Dillon Reservoir and Green Mountain is approximately the same size as the Upper Blue between Quandary Peak and Dillon Reservoir. The Middle Blue includes the Ptarmigan and Eagles Nest wilderness areas. The Lower Blue flows from Green Mountain to the confluence with the Colorado River. Rivers in the basin include the Blue, Snake, and Ten Mile, all of which converge as the Blue River at Dillon Reservoir before flowing north to the confluence with the Colorado River near Kremmling.

Annual snowfall between November and April comprises the majority of annual precipitation with sporadic and isolated thunderstorms from July through September producing the remainder. The major population centers in the watershed include Breckenridge, Keystone, Dillon, Silverthorne, Frisco, and Copper Mountain. The peak seasonal population for the area is over quadruple the permanent, year-round population of 28,073 in Summit County.

According to the State Water Supply Initiative (SWSI), the Colorado River supplies water to more than 30 million people in the arid southwest, with the Blue River contributing roughly 324,000 acre feet or 105.5 billion gallons per year. The projected municipal and industrial water supply gap for the Colorado identified in the study is nearly 40% with respect to new water demand.

Breckenridge

The Town of Breckenridge's water system currently has a medium level of adequacy, sustainability, and reliability. It is a gravity system from source to plant, with the option to pump into the plant. There is currently one source. There is redundancy in the plant to maintain continual operation. The distribution system has some looped mains, however there are areas that are vulnerable to outages. There are ten finished water storage tanks that maintain reliability by providing fire protection and demand. Some water mains have been upgraded to reduce main breaks. An annual leak survey is in place. All pumping stations have redundancy. Water rates were changed to encourage conservation.

To address future growth and demand, a second water plant is being designed, with an online date of 2019. This will provide additional redundancy by providing an additional source. Additional water infrastructure projects include water main replacement, connecting pressure zones, leak repairs, valve insertions, and public education.

Frisco

The Town of Frisco's water system contains a high level of adequacy, stability and reliability. Specifically, Frisco's water treatment facility has undergone recent upgrades from conventional filtration to micro-filtration as well as chlorine contact time upgrades. These two projects have created a more reliable system that will provide water service to the Town of Frisco for years to come.

Frisco's water distribution system contains only high quality ductile iron pipe that has a life expectancy of 50 or more years. There is redundancy in the system through the availability of both surface water and ground water sources. Utilization of both sources has already proven beneficial in dry or drought years. Frisco is currently designing a new ground water source to be constructed and brought on-line in 2017. They are also upgrading their automated meter reading system to identify any leaks in a customer's building within one day which will greatly reduce the waste of water through leaks.

Silverthorne

The Town of Silverthorne's water system has a very high level of adequacy, sustainability, and reliability. The TOS is solely a groundwater system. They have an excellent water rights portfolio and the water rights are adequate to handle projected growth.

The Town has eight wells, four pump stations, and five underground storage tanks distributed around the town. The storage tanks adequately cover the need for fire protection. Any two of the stations can adequately cover the water usage needs, therefore providing substantial redundancy in the system.

Additional water infrastructure and programs include; bi-annual leak detection surveys, valve exercising program, hydrant maintenance program, system flushing, and continual water main maintenance, replacement and upgrades.

Dillon

Dillon has worked in the past and present diligently to maintain a stable and reliable water system and to meet the future needs of the town and its customers. Town of Dillon water comes from Laskey Gulch and Straight Creek. Dillon strives to produce the highest quality water that is safe and pleasing to drink. Water must also be delivered with adequate pressure and volume to meet other safety issues like fighting fires.

Recently, Town of Dillon added additional water storage capacity from .900MG to 2.000MG. The resulting capacity increases the provider's ability to supply water during potential incidents that impact the water source. Dillon's water source is along the I-70 corridor so hazmat spills, wildfire, and cloudburst events are of concern. They are also able to provide an adequate volume of water for longer durations during a firefighting event within town limits.

Copper Mountain Consolidated Metropolitan District

The Copper Mountain water system is adequate, stable and reliable. The water and distribution system is more than adequate to handle population and visitor flow throughout the year. Some wells will have to be taken offline and replaced with new GWUDI rule. They are currently in the process of developing new wells to get water supply to the capacity of buildout.

The water distribution system contains looped systems at the main core of Copper Mountain with a couple branches. It contains two water storage tanks and two backup power generators. It is more than adequate to accommodate fire department needs in case of fire.

The water system is reliable and redundant for any emergency that is anticipated, would it be power outages, fire or water main breaks and repairs. Copper Mountain transitioned to new rates 2014 and another study is planned at the end of 2016 and beginning 2017. A Leak Detection Survey is done bi-annually. Monthly newspaper articles are designed to familiarize and educate the public of water management. An annual efficiency implementation program is in the works.

6. Scope of Work

- A.** This section outlines the tasks that HC3 and Brendle Group will conduct in order to complete the Blue River Watershed Efficiency Plan (hereinafter referred to as the Regional Plan).

The Regional Plan will be comprised of five (5) Individual Water Efficiency Plans ('The Individual Plans'), which will be prepared for the participating water providers listed in Figure 1. The Regional Plan will summarize, consolidate, and integrate the Individual Plans into a single document that identifies opportunities for participating water providers to address water efficiency throughout the Blue River Watershed, both collectively and individually. From the point of project funding approval, it is anticipated that this project will take 12-16 months.

Figure 1: Participating Water Providers

Number	Name
1.	Town of Frisco
2.	Town of Silverthorne
3.	Town of Breckenridge
4.	Town of Dillon
5.	Copper Mountain

The Regional Plan and each of the Individual Plans will be prepared by Brendle Group in accordance with steps and procedures outlined in the Colorado Water Conservation Board's (CWCB) July 2012 Municipal Water Efficiency Plan Guidance Document. Where possible, existing plans and studies conducted by partner organizations and participating water providers will be used to support both Individual and Regional Plan development.

It should be noted that some of the participating water providers are already working toward efficiency planning in accordance with the 2012 Guidance Document and that this Scope of Work is not intended to duplicate or supersede any of that work, but rather to build on it and resolve conflicts that may be identified between it and the other Individual Plans being developed as part of this Scope of Work.

The following generally describes the scope of work to be led by the Brendle Group with oversight by HC3:

I. Project Management & Communications

The following tasks will be used by the consultant to manage, engage and communicate with the participating water providers during the water efficiency planning effort. These tasks will be comprised of meetings with individual providers to support data collection and organization, Individual Plan development, and to secure organizational approvals.

- 1. Kickoff Meetings with Stakeholder Group and Participating Water Providers** – HC3 and Brendle Group will meet with each of the participating water providers and the stakeholder group as a whole to discover needs and issues, establish project communications protocols, and set data gathering and reporting timelines. HC3 will utilize the kickoff meetings to introduce data collection needs and methods, project goals, timelines, and processes as well as introduce Brendle Group and bring them up to speed on regional stakeholders.
- 2. Mid-Project Meetings** – Brendle Group will meet with each of the participating water providers and the stakeholder group as a whole to discuss project status, review data collection, and

identify potential data gaps. Brendle Group will also present various water conservation measures and best management practices to help the individual water providers preliminarily identify those measures and programs that would best fit the needs of their customers and water community.

3. **Present Draft Plans** – HC3 and Brendle Group will meet with each of the participating water providers and the stakeholder group as a whole to present a draft of their Individual Plans and Regional Plan. Each draft plan will contain all of the required plan elements, including a profile of the water provider’s existing water supply systems, an overview of historic water demand trends, the influence of water demand management activities, forecasted future water demands, potential benefits of water conservation efforts, identified water conservation goals, and measures that the water provider has selected for implementation. Each of the Individual Plans will also include an implementation and monitoring plan identifying how the water provider will work with HC3, our partnering organizations and other participating water providers to effectively implement the selected activities and monitor their overall effectiveness going forward.
4. **Make Board Presentations**- To assist the participating water providers with their individual plans, Brendle Group will make presentations to each of the participating water provider’s Boards, presenting the draft Individual Plans, the Regional Plan, an overview of the planning process and its intended outcomes.
5. **Project Administration** – Brendle Group will prepare progress reports to the stakeholder group and HC3 will prepare CWCB report and invoices in conjunction with the Town of Frisco staff as necessary.

II. Public Stakeholder Involvement

To ensure an open and transparent planning process, Brendle Group will conduct regular public stakeholder meetings throughout plan development. A plan will also be developed to ensure public involvement during plan implementation and monitoring. Participating water providers will help to identify and convene organization representatives and members of the public to serve on a public stakeholder committee.

III. Water Conservation Plan Development Activities – Water Efficiency Plan

The Individual and Regional Plans shall be prepared (or updated if they already exist) by Brendle Group and in accordance with the CWCB’s July 2012 Municipal Water Efficiency Plan Guidance Document (MWEPGD). Pursuant to C.R.S. 37-60-126, the Plans shall undertake the following steps for plan development (additional details concerning these steps can be found in the MWEPGD – available online at www.cwcb.state.co.us):

Step 1: Profiling of Existing Water Supply System – Collection and development of supply-side information and historical supply-side water efficiency activities.

- 1.1 Overview of Existing Water Supply
- 1.2 Water Supply Reliability
- 1.3 Supply Side Limitations and Future Needs

Step 2: Profile Water Demand and Historical Demand Management – Collection and development of demand data and historical demand management activities.

- 2.1 Demographics and Key Characteristics of the Service Area
- 2.2 Historical Water Demands
- 2.3 Past and Current Demand Management Activities and Impacts to Demands
- 2.4 Demand Forecasts

Step 3: Integrated Planning and Water Efficiency Benefits and Goals – Identification of how water efficiency will be incorporated into future water supply planning efforts and development of water efficiency benefits and goals.

- 3.1 Water Efficiency and Water Supply Planning
- 3.2 Water Efficiency Benefits
- 3.3 Water Efficiency Goals

Step 4: Selection of Water Efficiency Activities – Assessment, identification, screening, and evaluation process to select and fully evaluate a portfolio of water efficiency activities for implementation.

- 4.1 Demand Management Activities

Step 5: Implementation and Monitoring Plans – Development of an implementation and monitoring plan.

- 5.1 Implementation Plan
- 5.2 Monitoring Plan

Step 6: Adoptions of New Policy, Public Review and Formal Approval

- 6.1 Adoption of New Policy
- 6.2 Public Review Process
- 6.3 Local Adoption and State Approval Process
- 6.4 Periodic Review and Update
- 6.5 Local Water Efficiency Plans and Information Resources

The participating water providers will provide input and contributions to every step of the process, in order to assist Brendle Group in plan preparation, and to fulfill a portion of their in-kind contribution to the planning effort.

IV. General Project Deliverables

- Create (or update) individual water efficiency plans for the participating water providers.
- Create a regional water efficiency plan for the Blue River Watershed.
- Prepare and submit monthly invoices and project status reports (50% and 75%).
- Prepare meetings notes/minutes and group action items and provide follow-up (as needed).
- Present Draft plan for review and comments by public stakeholders, participating water providers, HC3, and CWCB.

- Present Individual and Regional Water Efficiency Plans for adoption by participating water providers, HC3, and CWCB.

Assuming grant approval at the CWCB's November 2016 meeting, HC3 anticipates that work will begin in January 2017 and be complete by March 2018. A 50% progress report will be filed at the end of July 2017 and a 75% progress report will be filed at the end of October 2017. The Draft Plan will be submitted to CWCB in December. A 60 day public comment period will inform the final draft of the plan along with any needed revisions based upon CWCB input. HC3's goal is to schedule formal adoption of the plan for April 2018. The preliminary project timeline from Brendle Group (showing a breakdown of tasks spread over the course of 14 months) is as follows:

Steps/Tasks	Month 1-2	Month 3-4	Month 5-6	Month 7-8	Month 9-10	Month 11-12	Month 13-14
Project Management							
Stakeholder Involvement		SAC1	SAC2	Survey	SAC3	SAC4	
Step 1: Supply System Profile							
Step 2: Demand/Management Profile							
Step 3: Integration, Benefits, Goals							
Step 4: Efficiency Activities							
Step 5: Implementation and Monitoring							
Step 6: Plan Adoption							Public, Board

SAC = Stakeholder Advisory Committee Meeting
Public = Public Review Period

Survey = Public Outreach Survey
Board = Water Provider and CWCB Board Presentations

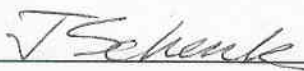
A detailed budget for this project is attached. Town of Frisco, High Country Conservation Center and our partners respectfully request \$94,160 in Water Conservation Planning Grant funds, which will be matched by \$31,387 in cash commitments plus an estimated \$36,875 in-kind contributions, for a total project budget of \$162,422 to carry out the scope of work needed to develop the Plans in accordance with the Colorado Water Conservation Board's approval guidelines. The Project Partners are prepared to work with the Project Consultant to guarantee that the project does not exceed this budget and that all tasks and deliverables are completed within the budget and timeframe presented. Should this timeline change, we would immediately submit any proposed changes to CWCB for approval.

8. Authorizations/Commitment of Resources

The Town of Frisco, High Country Conservation Center, and our Project Partners understand and commit that upon approval of a Water Conservation Planning grant of \$94,160 from the Colorado Water Conservation Board, we will provide an estimated \$36,875 in-kind contribution and cash match of up to \$6,277 from each participating water provider (in order to satisfy a total cash commitment of \$31,387), and will complete development of the Blue River Regional Water Efficiency Plan to comply with all of the conservation measures identified in the Colorado Water Conservation Board model plan as required.



Bill Efting
Town Manager
Town of Frisco



Jennifer Schenk
Executive Director
High Country Conservation Center

9/26/16

Consultant Fees - Brendle Group	Exec. PM (\$210/hr)	Project Manager (\$142/hr)	Senior Engineer (\$142/hr)	Project Planner (\$110/hr)	Project Engineer (\$83/hr)	Design & Mktg (\$83/hr)	Admin Support (\$72/hr)	Total	Local Cash Contribution (25%)	CWCB Grant Request (75%)
Steps/Tasks										
Project Management	3	46	3	-	3	-	-	\$7,777	\$1,944	\$5,833
Kick-Off	3	10	3	-	3	-	-	\$2,608		
Regular Check-ins	-	36	-	-	-	-	-	\$5,169		
Stakeholder Involvement	3	70	10	-	83	-	44	\$22,559	\$5,640	\$16,919
Engagement Plan	-	5	-	-	-	-	10	\$1,487		
Advisory Committee	-	52	-	-	31	-	-	\$10,454		
Public Survey	3	13	10	-	52	-	34	\$10,618		
Step 1: Supply System Profile	-	-	40	9	33	-	-	\$9,094	\$2,274	\$6,821
Overview	-	-	7	3	7	-	-	\$1,749		
Reliability	-	-	13	3	13	-	-	\$3,211		
Limitations and Future Needs	-	-	20	3	13	-	-	\$4,134		
Step 2: Demand/Management Profile	6	34	-	6	65	-	-	\$11,675	\$2,919	\$8,756
Demographics and Characteristics	3	7	-	-	13	-	-	\$2,548		
Historical Demand	-	3	-	3	39	-	-	\$3,985		
Demand Mangement	-	20	-	3	7	-	-	\$3,595		
Forecast	3	3	-	-	7	-	-	\$1,547		
Step 3: Integration, Benefits, Goals	3	20	-	-	20	-	-	\$5,227	\$1,307	\$3,920
Integration	3	10	-	-	-	-	-	\$2,023		
Benefits	-	5	-	-	10	-	-	\$1,602		
Goals	-	5	-	-	10	-	-	\$1,602		
Step 4: Efficiency Activities	-	30	17	20	72	-	-	\$14,684	\$3,671	\$11,013
Assessment	-	3	3	5	7	-	-	\$2,035		
Identification	-	7	7	5	13	-	-	\$3,497		
Screening	-	7	-	5	13	-	-	\$2,574		
Evaluation/Selection	-	13	7	5	39	-	-	\$6,578		
Step 5: Implementation & Monitoring	2	8	-	-	31	-	-	\$4,243	\$1,061	\$3,182
Implementation	1	5	-	-	21	-	-	\$2,738		
Monitoring	1	3	-	-	10	-	-	\$1,505		
Step 6: Plan Adoption	6	85	33	5	81	51	12	\$30,388	\$7,597	\$22,791
Draft Individual Plans	3	13	13	5	39	20	7	\$10,134		
Draft Regional Plan	3	10	10	-	21	21	5	\$7,327		
Incorporate Feedback	-	10	10	-	21	10	-	\$5,543		
Board Approval	-	52	-	-	-	-	-	\$7,384		
Brendle Group Totals	20	293	103	40	388	51	56	\$105,647	\$26,412	\$79,235
Project Oversight High Country Conservation Center						Program Manager (\$55/hr)	Program Coordinator (\$45/hr)	Total		
280 hours of project management (assistance in data gathering, attending and scheduling public meetings, reviewing draft plans, overseeing local government engagement, implimenting plan, public outreach and education around plan etc...)						\$15,400		\$15,400	\$3,850	\$11,550
100 hours of project coordination, scheduling meetings, helping TOF with invoicing and grant reporting, design/marketing							\$4,500	\$4,500	\$1,125	\$3,375
HC3 Totals								\$19,900	\$4,975	\$14,925
Project Cash Total								\$125,547	\$31,387	\$94,160
Estimated In-Kind Local Staff Time Contributions		Estimated Hours	Total Estimated hours	Hourly Rate	Estimated Total In-Kind					
Five (5) water providers		100 each	500	\$50	\$25,000					
Blue River Watershed Group		50	50	\$50	\$2,500					
Troy Wineland		100	100	\$75	\$7,500					
County Commissioner		25	25	\$75	\$1,875					
Total In-Kind					\$36,875					
Estimated Project Contribution Totals (Including In-Kind)		Cash	In-Kind	Total	Project Contribution Percentage					
Combined Local Cash and In-Kind		\$31,387	\$36,875	\$68,262	42%					
CWCB Grant Request		\$94,160	\$0	\$94,160	58%					
Total Project Cost				\$162,422	100%					

Name of Applicant: Town of FriscoDate Received: 9/27/2016Grant Request: \$94,160**HB 04-1365: (Plans) Evaluation Checklist**

Applicant Demonstrates:	Yes	No	Comments:
Is the applicant a covered entity?		✓	
If answered "no" to the above question, then is it an entity which will soon become a covered entity?	✓		ONLY BRECKENRIDGE
(Only answer this question if the applicant is NOT currently a "covered" entity) Did they provide a reasonable engineering estimate of future annual retail demand for the next 3-5 yrs. , all based on population projections, building permits, expected new taps, and or some other creditable information that would show that the entity will become a "covered" entity	✓		Pg. 5
If the applicant is a covered entity, have they fully complied with HB1051 requirements?	✓		BRECKENRIDGE - 2013-14 SUBMITTED
Cover letter with the entities: name, contact information , and a signature of an individual with the authority to commit the resources of the entity		✓	
Application Requirements:	—	—	—
A written statement from the entity's governing board, stating the entity's commitment to the "plan" and the implementation of long-term water savings measures and programs (w/authorized signature)	✓		Pg. 11
Disclosure of organizational structure/chart	✓		
Current retail water demand (metered water use) for <i>each</i> of the past five years (in acre ft. or million gallons)	✓		Pg 3-4
A list of people and/or organizations that will be involved in assisting with putting the plan together (list of who will be utilizing the grant money)	✓		Pg 1-3
Not required , but preferred, Information characterizing past water use by sector, (e.g. residential, commercial, industrial) and the source (e.g. surface water, groundwater, etc).	✓		Pg. 3-4
Characterization of the water system:			
Current (and <i>if available</i> past) per capita water use for the last five years and the basis for this calculation	✓		Pg. 6
Past, current, and predicted future population served by the entity, (and the source of this information)	✓		Pg 7-8 (DATA)
List estimated water savings <u>goals</u> to be achieved through the implementation of the "Plan", based on water system, the past conservation efforts and the future water needs	✓		Pg. 8
Adequacy, Stability, and reliability of the entity's water system *to be measured and examined by staff through analysis	✓		Pg. 8-10
Paragraph stating the purpose and the primary features of the entity's desire to create a water conservation plan	✓		

A detailed Scope of Work of tasks to be performed with grant monies (related to the plan & water efficiency measures)	✓		
The "Plans" timeline, stating milestones with dates and end products with dates; also state the estimated dates when progress reports will be submitted to OWCDP staff (50% & 75% completion)	✓		
List of how the creation of the "plan" will be funded; list grants, entities funds, and/or in-kind services	✓		
Does the applicant demonstrate 25% matching funds? In cash, in-kind services, or through payment of consulting fees or a combination thereof?			TOTAL = \$162,422 CASH = \$31,387 IN-KIND = \$36,875 = 42%
Does this applicant have a loan with the CWCB?		✓	
Did the entity provide their location with respect to SWSI recommendations?	✓		Pg. 8

Summary – CWCB comments and request for additions/change