

**Water Supply Reserve Fund
Water Activity Summary Sheet
March 21, 2019
Agenda Item 24(r)**

Applicant & Grantee: Town of Silverton
Water Activity Name: Town of Silverton Water Supply/Storage Investigation
Water Activity Purpose: Municipal Supply Study
County: San Juan
Drainage Basin: Southwest
Water Source: Bear and Boulder Creek
Amount Requested: \$25,000 Southwest Basin Account
Matching Funds: Applicant Match (cash & in-kind) = \$25,000

- 100% of the Basin Account request (meets 25% min)
- 50% of the total project cost of \$50,000

Staff Recommendation:

Staff recommends approval of up to \$25,000 from the Southwest Basin Account to help fund the project titled: Town of Silverton Water Supply/Storage Investigation.

Water Activity Summary: WSRF grant funds, if approved, will aid the Town of Silverton with an alternatives and improvements supply study. Silverton's current Bear and Boulder Creek water supplies are at risk from physical hazards (fires, mud and debris flows, avalanche slides, rock fall hazards), a changing climate (extended droughts), and legal water rights administration. Both Bear and Boulder Creek sources have legal water rights vulnerable to an administrative curtailment during an extended drought period from calls placed by senior downstream water rights holders in the Animas River valley.

This study and resultant report will identify redundant new sources of surface and groundwater supplies and feasible locations for source water storage. Storage will allow for water security from the multiple natural hazards to the town's supply. The study will identify all feasible alternatives and provide cost estimates as well as implementation schedules and strategies. The characterization will be from the source watershed to the Town's existing Water Treatment Plant. The water supply will be characterized for age, physical availability, legal water rights, compliance with CDPHE Primary Drinking Water Regulations, and Potable Water Design Criteria, and finally Colorado Municipal water system industry standards and best management practices.

Discussion: As described in the Southwest basin roundtable (BRT) chair's recommendation letter, this project was supported and recommended for approval by the roundtable on January 9, 2019. The project addresses the Basin Plan measurable goal *11-A* and *Outcome C* as well as the Colorado Water Plan goal of 400,000 acre-feet of storage to meet municipal water needs. The Town of Silverton is a statutory town that is the County seat of, and the only incorporated municipality in San Juan County, Colorado. Silverton is a former silver mining camp with a current population of 531. Silverton provides potable water and wastewater services to residential and commercial customers

within the Town limits. Silverton is a hub of recreational activities in the San Juan Mountains, and is a portal for skiing, fishing, hiking, camping and commercial services in the San Juan National Forest.

Issues/Additional Needs: No additional needs have been identified.

Eligibility Requirements: The application meets requirements of all eligibility components.

Evaluation Criteria: Staff has determined this activity satisfies the Evaluation Criteria.

Funding Summary / Matching Funds:

<u>Funding Source</u>	<u>Cash</u>	<u>In-Kind</u>	<u>Total</u>
Town of Silverton	\$12,500	\$0	\$12,500
Southwest Water Conservation District	\$12,500	\$0	\$12,500
Sub-total	\$25,000	\$0	\$25,000
WSRF Southwest Basin Account	\$25,000	n/a	\$25,000
Totals	\$50,000	\$0	\$25,000

CWCB Project Manager: Megan Holcomb

SOUTHWEST BASINS ROUNDTABLE

Michael Preston, Chair

c/o Dolores Water Conservancy District

P.O. Box 1150

Cortez, Colorado 81321

970-565-7562

January 17, 2019

Megan Holcomb

Water Supply Management Section

Colorado Water Conservation Board

1580 Logan Street, Suite 600

Denver, Colorado 80203

SUBJECT: Town of Silverton Water Supply/Storage Investigation - \$25,000 Southwest Basin Fund

Dear Megan:

The Southwest Basin Roundtable has approved funding in the amount of \$25,000 from the Southwest Basin fund for the Town of Silverton Water Supply/Storage Investigation. The application was considered in detail at the January 9, 2019 meeting of the Southwest Basin Roundtable. There was a quorum of Roundtable members present.

The Project addresses Southwest Basin IPP 11-A, BIP Measurable Goal and Outcome C: Meet Municipal Needs, and Colorado Water Plan Measurable Objective of attaining an additional 400,000 acre feet of water storage from implementation of IPPs.

The completed Grant Application will be forwarded directly to you by the applicant. Please contact the applicant directly or me at 970-565-7562, mpreston@frontier.net, if you have questions or wish to discuss this application in more detail.

Sincerely,



Michael Preston

Southwest Basin Roundtable Chair



Last Update: July 31, 2018

Colorado Water Conservation Board
Water Supply Reserve Fund Grant Application

Instructions

All WSRF grant applications shall conform to the current [2016 WSRF Criteria and Guidelines](#).

To receive funding from the WSRF, a proposed water activity must be approved by a Roundtable(s) **AND** the Colorado Water Conservation Board (CWCB). The process for Roundtable consideration and recommendation is outlined in the 2016 WSRF Criteria and Guidelines. The CWCB meets bimonthly according to the schedule on page 2 of this application.

If you have questions, please contact the current CWCB staff Roundtable liaison:

Arkansas Ben Wade ben.wade@state.co.us 303-866-3441 x3238	Gunnison North Platte South Platte Yampa/White Craig Godbout craig.godbout@state.co.us 303-866-3441 x3210	Colorado Metro Rio Grande Southwest Megan Holcomb megan.holcomb@state.co.us 303-866-3441 x3222
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WSRF Submittal Checklist (Required)
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LM	I acknowledge this request was recommended for CWCB approval by the sponsoring roundtable.
LM	I acknowledge I have read and understand the 2016 WSRF Criteria and Guidelines .
LM	I acknowledge the Grantee will be able to contract with CWCB using the Standard Contract . ⁽¹⁾
Application Documents	
LM	Exhibit A: Statement of Work ⁽²⁾ (<i>Word – see Template</i>)
LM	Exhibit B: Budget & Schedule ⁽²⁾ (<i>Excel Spreadsheet – see Template</i>)
LM	Letters of Matching and/or Pending 3 rd Party Commitments ⁽²⁾
LM	Map ⁽²⁾
LM	Photos/Drawings/Reports
LM	Letters of Support (See approval of SW Basin Roundtable)
Contracting Documents ⁽³⁾	
	Detailed/Itemized Budget ⁽³⁾ (<i>Excel Spreadsheet – see Template</i>)
	Certificate of Insurance ⁽⁴⁾ (<i>General, Auto, & Workers' Comp.</i>)
	Certificate of Good Standing ⁽⁴⁾
	W-9 Form ⁽⁴⁾
	Independent Contractor Form ⁽⁴⁾ (<i>If applicant is individual, not company/organization</i>)
	Electronic Funds Transfer (ETF) Form ⁽⁴⁾

(1) Click "Grant Agreements". For reference only/do not fill out or submit/required for contracting

(2) Required with application if applicable.

(3) Additional documentation providing a Detailed/Itemized Budget maybe required for contracting. Applicants are encouraged to coordinate with the CWCB Project Manager to determine specifics.

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

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Schedule		
CWCB Meeting	Application Submittal Dates	Type of Request
January	December 1	Basin Account; BIP
March	February 1	Basin/Statewide Account; BIP
May	April 1	Basin Account; BIP
July	June 1	Basin Account; BIP
September	August 1	Basin/Statewide Account; BIP
November	October 1	Basin Account/BIP

Desired Timeline	
Desired CWCB Hearing Month:	March 2019
Desired Notice to Proceed Date:	July 2019

Water Activity Summary	
Name of Applicant	Town of Silverton
Name of Water Activity	Town of Silverton Water Supply/Storage Investigation
Approving Roundtable(s)	Basin Account Request(s) ⁽¹⁾
Southwest Basin Roundtable	\$25,000
Southwest Water Conservation District (Pending Request)	\$12,500
Town of Silverton	\$12,500
Basin Account Request Subtotal	\$25,000
Statewide Account Request ⁽¹⁾	\$0
Total WSRF Funds Requested (Basin & Statewide)	\$25,000
Total Project Costs	\$50,000

(1) Please indicate the amount recommended for approval by the Roundtable(s)

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Grantee and Applicant Information	
Name of Grantee(s)	Town of Silverton
Mailing Address	1360 Greene Street, Silverton, CO 81433
FEIN	84-6000-78
Grantee's Organization Contact ⁽¹⁾	John Sites
Position/Title	Public Works Director
Email	jsites@silverton.co.us
Phone	970-387-5522
Grant Management Contact ⁽²⁾	John Sites
Position/Title	Public Works Director
Email	jsites@silverton.co.us
Phone	970-387-5522
Name of Applicant (if different than grantee)	SGM C/O Louis Meyer PE
Mailing Address	555 Rivergate Lane Suite B4-82
Position/Title	Principal Engineer
Email	Louism@sgm-inc.com
Phone	970-379-1724

(1) Person with signatory authority

(2) Person responsible for creating reimbursement invoices (Invoice for Services) and corresponding with CWCB staff.

Description of Grantee
Provide a brief description of the grantee's organization (100 words or less).
<p>The Town of Silverton is a statutory town that is the County seat of , and the only incorporated municipality in San Juan County, Colorado. Silverton is a former silver mining camp, most or all of which is now included in a federally designated National Historic Landmark District, the Silverton Historic District. The Town population is 531 based upon the latest census.</p> <p>Silverton provides potable water and wastewater services to residential and commercial customers within the Town limits. Silverton is a hub of recreational activities in the San Juan Mountains, and is a portal for skiing, fishing, hiking, camping and commercial services in the San Juan National Forest. Silverton is the destination of the Durango-Silverton Narrow Gauge Railroad and is the end finish for the annual Ironhorse Bike Classic bike race.</p>

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Type of Eligible Entity (check one)	
X	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: are eligible for funding from the Basin Accounts but not for funding from the Statewide Account.
	Non-governmental organizations: broadly, any organization that is not part of the government
	Covered Entity: as defined in Section 37-60-126 Colorado Revised Statutes

Type of Water Activity (check one)	
X	Study
	Implementation

Category of Water Activity (check all that apply)		
	Nonconsumptive (Environmental)	
	Nonconsumptive (Recreational)	
	Agricultural	
X	Municipal/Industrial	
	Needs Assessment	
	Education & Outreach	
	Other	Explain:

Location of Water Activity	
Please provide the general county and coordinates of the proposed activity below in decimal degrees . The Applicant shall also provide, in Exhibit C, a site map if applicable.	
County/Countries	San Juan County
Latitude	37.8119 °N
Longitude	-107.6645 °W

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Water Activity Overview
<p>Please provide a summary of the proposed water activity (200 words or less). Include a description of the activity and what the WSRF funding will be used for specifically (e.g. studies, permitting, construction). Provide a description of the water supply source to be utilized or the water body affected by the activity. 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, area of habitat improvements. 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, and Schedule.</p> <p>This application requests funding for a water resources study for the Town of Silverton (Town) to study alternatives and improvements to the Town's current Bear and Boulder Creek water supplies which are at risk from physical hazards, a changing climate and legal water rights administration from an extended and unprecedented drought.</p> <p>The current supplies are at risk from extended droughts, fires, mud and debris flows, avalanche slides, rock fall hazards and a changing climate. The drought of 2018 and changing temperatures have changed the surface water hydrographs to earlier peak runoff cycles resulting in lower flows later in the season. The mud and debris flow from the aftermath of the 416 Fire demonstrated the potential risk to the Boulder and Bear Creek surface supplies. The Gold King Mine Spill in August of 2015 resulted in an increased awareness of the vulnerability of headwater tributaries from mining activity. Both sources have legal water rights vulnerable to an administrative curtailment during an extended drought period from calls placed by senior downstream water rights holders in the Animas River valley.</p> <p>This study and resultant report will identify redundant new sources of surface and groundwater supplies and feasible locations for source water storage. Storage will allow for water security from the multiple natural hazards to the Town's supply. The study will identify all feasible alternatives and provide cost estimates and implementation schedules and strategies.</p>

Measurable Results		
To catalog measurable results achieved with WSRF funds please provide any of the following values.		
10-20 Ac-FT	New Storage Created (acre-feet)	
200-300 Ac-FT	New Annual Water Supplies Developed or Conserved (acre-feet), Consumptive or Nonconsumptive	
Potential with Molas Lakes	Existing Storage Preserved or Enhanced (acre-feet)	
	Length of Stream Restored or Protected (linear feet)	
	Efficiency Savings (indicate acre-feet/year OR dollars/year)	
	Area of Restored or Preserved Habitat (acres)	
	Length of Pipe/Canal Built or Improved	
Provide reliable drinking water supply	Other	Explain: Provide reliable drinking water



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Water Activity Justification

Provide a description of how this water activity supports the goals of [Colorado's Water Plan](#), the most recent [Statewide Water Supply Initiative](#), and the respective [Roundtable Basin Implementation Plan and Education Action Plan](#) ⁽¹⁾. 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).

For applications that include a request for funds from the Statewide Account, the proposed water activity shall be evaluated based upon how well the proposal conforms to Colorado's Water Plan criteria for state support (CWP, Section 9.4, pp. 9-43 to 9-44;) (Also listed pp. 4-5 in [2016 WSRF Criteria and Guidelines](#)).

1. This section will provide Water Activity Justification by citing compliance with Colorado's Water Plan and the Southwest Basin Implementation Plan as follows:
2. The Southwest BIP and the 2010 SWSI both identified the need for storage for the Town of Silverton (ID 11-a). The SWBIP specifically included this project:
 - *Town of Silverton: Physical water supply is presently adequate, but the Town is applying for an augmentation plan to firm up supply from a potential senior call on the Animas River. The augmentation plan would utilize existing and enlarge capacity of Molas Lake as storage for augmentation water. If necessary, alternative storage sites may be reviewed to replace and or supplement Molas Lake*
 - The remaining steps state: Water is decreed, maintain diligence, Develop IPP to make use of project
 - Molas Lakes storage will be one of several storage sites to be studied as part of this report. Molas will provide augmentation storage but not physical storage and therefore other sites that can provide both physical and augmentation storage will be studied.
3. Colorado's Water plan identified that headwater communities water supplies are vulnerable from impacts of climate change and other natural hazards. Those without upstream storage and reliant upon flow of the stream diversions are particularly at risk. This study will identify more secure water supply options and upstream storage sites.
4. This project is consistent with the stated goals of the SWBIP including the following:
 - *Identifies specific and unique projects that are important to maintaining the quality of life in this region and should accommodate the development and maintenance of flows, including domestic supplies, environmental needs, agriculture, recreation, and commercial/industrial needs to provide for further economic development.*
 - *Intends to preserve the Southwest Basin's ability to develop Colorado River Compact entitlements and to meet our water supply gaps.*
 - *Recognizes and addresses the challenges to all water uses that future drought and/or climate variability may bring.*
5. One of the 7 themes of the SWBIP included:
 - C. Meet Municipal and Industrial Water Needs

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Measurable Results

6. This project complies with the Measurable Outcomes of “Meet Municipal and Industrial Water Needs” of Table 1 of the SWBIP which state:

1. Complete 40* IPPs aimed at meeting municipal water needs.
2. Consistently meet 100% of residential, commercial and industrial water system demands identified in SWSI 2010 in each sub-basin, while also encouraging education and conservation to reduce demand.
3. Implement at least 1* IPP that protects or enhances the ability of public water supply systems to access and deliver safe drinking water that meets all health-based standards.

7. The Executive Summary of Colorado’s Water Plan States:

Chapter 6 opens with scenario planning, which provides the framework for how Colorado will address its water future, no matter what water supply and demand challenges we may face. Scenario planning also indicates what Colorado needs to first accomplish in the short term, and the rest of Chapter 6 explores specific approaches to meet our water needs. Chapter 7 examines factors beyond supply and demand—such as natural hazards, watershed health, and water quality—that affect water availability.

Simply put this WSRA Application addresses the future of Silverton’s Water Supply by using scenario planning to consider the impacts to its present water supply from climate change, Watershed health, impacts from fires, impacts from Avalanche danger, and water quality and water quality concerns.

8. The Executive Summary of Colorado’s Water Plan States:

The success of Colorado’s Water Plan will ultimately be measured by whether or not the municipal water supply-and-demand gap is closed, and the choices we make to close it. With increased efforts on conservation, storage, land use, alternative transfer methods, and reuse, Colorado can close its gap, balance its water values, and address the effects of climate change on water resources.

Silverton’s goal of securing a safe and reliable water supply is a small step toward meeting the municipal water supply and demand gap.

9. The Executive Summary of Colorado’s Water Plan States:

Colorado must also develop additional storage to meet growing needs and face the changing climate. Tomorrow’s storage projects will increase the capacity of existing reservoirs, address a diverse set of needs, and involve more partners. New storage projects will be increasingly innovative, and will rely on technologies such as aquifer storage and recharge. In addition, water managers will need to be more agile in responding to changing conditions, so that storage can be more rapidly added to Colorado’s water portfolio while maintaining strong environmental health. To do this, we must address a broken permitting system that currently produces uncertainty and fosters mistrust among all stakeholders.

10. Silverton’s effort to investigate storage as a hedge against drought, climate change and natural hazards complies with the effort to develop more storage. Many of the storage sites will be on federal lands and thus require regulatory permitting. This is an opportunity to collaborate with many different entities to achieve storage high in the basin which can help water users in the entire Animas River Basin.

11. Theme C of the Southwest Basin Roundtable Basin Implementation Plan states:



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Measurable Results

Meet M&I Water Needs. This project is a step in meeting that need.

12. Section 6.5.3 of Colorado's Water Plan states:

Colorado's Water Plan sets a measurable objective of attaining 400,000 acre-feet of water storage in order to manage and share conserved water and the yield of IPPs by 2050. This objective equates to an 80 percent success rate for these planned projects. [Silverton's goal of developing raw water storage meets this measurable objective.](#)

(1) Access Basin Implementation Plans or Education Action Plans from Basin drop down menu.

Matching Requirements: Basin Account Requests

Basin (only) Account grant requests require a 25% match (cash and/or in-kind) from the Applicant or 3rd party and shall be accompanied by a **letter of commitment** as described in the 2016 WSRF Criteria and Guidelines (submitted on the contributing entity's letterhead). Attach additional sheet if necessary.

Contributing Entity	Amount and Form of Match (note cash or in-kind)
Town of Silverton	\$12,500
Southwestern Water Conservation District	Application submitted for \$12,500 and decision pending.
Total Match	\$25,000
If you requested a Waiver to the Basin Account matching requirements, indicate the percentage you wish waived.	

Related Studies

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

- 1.) Town of Silverton Infrastructure Engineering Services, SGM May 2017
- 2.) John Sites Data for Molas Lake and Ditch Decree
- 3.) 2015 Kaiser Report
- 4.) Silverton Water Rights Portfolio
- 5.) Harris Water Engineering Report

Previous CWCB Grants

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

None

Tax Payer Bill of Rights

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

Silverton has no Tabor requirements relative to this grant request.



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<u>Colorado Water Conservation Board</u>	
Water Supply Reserve Fund	
<u>Exhibit A - Statement of Work</u>	
Date:	December 13, 2018
Water Activity Name:	Town of Silverton Water Security Engineering Study Grant Application
Grant Recipient:	Town of Silverton
Funding Source:	WSRA, SWCD grant (submitted) and Town Match
Water Activity Overview: (Please provide brief description of the proposed water activity (no more than 200 words). Include a description of the overall water activity and specifically what the WSRF funding will be used for.)	
<p>This application requests funding for a water resources study for the Town of Silverton (Town) to study alternatives and improvements to the Town's current Bear and Boulder Creek water supplies which are at risk from physical hazards, a changing climate and legal water rights administration from an extended and unprecedented drought.</p> <p>The current supplies are at risk from extended droughts, fires, mud and debris flows, avalanche slides, rock fall hazards and a changing climate. The drought of 2018 and changing temperatures have changed the surface water hydrographs to earlier peak runoff cycles resulting in lower flows later in the season. The mud and debris flow from the aftermath of the 416 Fire demonstrated the potential risk to the Boulder and Bear Creek surface supplies. The Gold King Mine Spill in August of 2015 resulted in an increased awareness of the vulnerability of headwater tributaries from mining activity. Both sources have legal water rights vulnerable to an administrative curtailment during an extended drought period from calls placed by senior downstream water rights holders in the Animas River valley.</p> <p>This study and resultant report will identify redundant new sources of surface and groundwater supplies and feasible locations for source water storage. Storage will allow for water security from the multiple natural hazards to the Towns supply. The study will identify all feasible alternatives and provide cost estimates and implementation schedules and strategies.</p>	
Objectives: (List the objectives of the project)	



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1. Identify a more secure, redundant, safe, reliable, drinking water supply for the Town of Silverton.
2. Identify a water supply and/or raw water storage that will be reliable during extended drought periods.
3. Identify water supplies and augmentation storage that will reduce the risk of administrative curtailment when calls are placed by senior water right holders in the Animas River watershed during drought conditions.
4. Identify drinking water sources that have water quality sources that are not subjected to the environmental impacts of historic mining sites and acid mine drainage.
5. Identify drinking water sources that are not vulnerable to impacts from climate change.
6. Create an engineering report which addresses all of the above issues along with the recommended alternative that will best address the goals of achieving a reliable safe long term water supply.
7. Recommend an implementation plan including, costs, schedule, funding sources, impacts to service and tap fees, and regulatory issues for the recommended alternative.

Tasks
Provide a detailed description of each task using the following format:
<u>Task 1 - (Name) Existing Water Infrastructure and Water Rights Review</u>
Description of Task:
<p>This engineering report will first characterize the Town of Silverton's existing physical and legal water supplies from Bear and Boulder Creek. The characterization will be from the source watershed to the Town's existing Water Treatment Plant. The water supply will be characterized for age, physical availability, legal water rights, compliance with CDPHE Primary Drinking Water Regulations, and Potable Water Design Criteria, and finally Colorado Municipal water system industry standards and best management practices.</p>
Method/Procedure:
<ol style="list-style-type: none">1. Site visits to the existing Boulder Creek and Bear Creek water supply intakes.2. Characterization of the Boulder and Bear Creek watersheds3. Legal property ownership in the vicinity of the intakes and transmission pipelines.4. Prepare data request for all water related master plans, water right portfolio's, watershed descriptions, water quantity and quality data, drawings, CDPHE correspondence, water enterprise fund accounting budgets.5. Conduct staff interviews and meetings with Town Water Rights Attorney.6. Prepare GIS mapping for the existing water supply infrastructure and watersheds
Grantee Deliverable: (Describe the deliverable the grantee expects from this task)
<ol style="list-style-type: none">1. All of the Town of Silverton's water supply infrastructure and water rights portfolio will be assembled into the first of several chapters of the final engineering report. If a specific deliverable is required prior to the preparation of the final report this task could take the form of a stand alone white paper.2. GIS mapping will be created specifically for the Town's raw water system, including water rights. All existing reports, portfolio's, data, water quantity and quality data will be embedded into the



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Tasks
GIS mapping as smart data.
CWCB Deliverable: (Describe the deliverable the grantee will provide CWCB documenting the completion of this task)
<ol style="list-style-type: none">1. This deliverable will either take the form of the first of several chapters of the final report or the form of a stand alone white paper.2. This deliverable will provide a GIS map with embedded smart data characterizing the Town's existing water supply infrastructure and source watershed information.

Tasks
Provide a detailed description of each task using the following format:
<u>Task 2 - (Name) Existing and Future Water Demands</u>
Description of Task: Identify the existing and future average day, maximum day, peak hour and annual average water demands
<ol style="list-style-type: none">1. Identify the existing and future average day, maximum day, peak hour and annual average water demands2. Identify trends to predict future water demands3. Create a common water demand metric for EQR's or SFE's
Method/Procedure:
<ol style="list-style-type: none">1. Review existing water plant and service meter demands2. Review any and all existing water reports that characterize water use or demographics.3. Review existing and future population and land use demographics4. Review any Town planning documents including zoning maps, comprehensive plans, population studies and, tourism impacts and census studies.5. Calculate the existing average day, maximum day, peak hour and annual average water demands.6. Determine the number of residential and commercial EQR's or SFE's7. Determine the use per EQR or SFE's.
Grantee Deliverable: (Describe the deliverable the grantee expects from this task)
<ol style="list-style-type: none">1. Chapters of the final report or <ol style="list-style-type: none">2. White paper characterizing existing and future water demands
CWCB Deliverable: (Describe the deliverable the grantee will provide CWCB documenting the completion of this task)
<ol style="list-style-type: none">1. Chapters of the final report or <ol style="list-style-type: none">2. White paper characterizing existing and future water demands

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Tasks	
Provide a detailed description of each task using the following format:	
Task 3 - (Name) Identify New Water Supply Alternatives	
Description of Task:	
	<ol style="list-style-type: none"> 1. Perform a reconnaissance level analysis of additional surface Water Supplies including physical availability, water quality, and legal water rights 2. Identify potential water storage reservoir sites upstream of Silverton in the Animas, Cement and Mineral Creek Tributaries 3. Analyze Molas Lake as an augmentation reservoir 4. Analyze Highland Mary Lake, Howardsville and Chandy Gulch for reservoir sites 5. Contact the Team working on the superfund site work if there may be some collaboration on site reclamation and the development of a reservoir site. 6. Analyze the use of existing Town Wells for new alluvial wells for water quantity and quality issues. 7. Create a ranking matrix with qualitative and quantitative criteria to rank all alternatives 8. Provide a recommendation of the leading alternative(s) along with cost estimates and project implementation plan. 9. Hold Public Meetings 10. Write final report
Method/Procedure:	
	<ol style="list-style-type: none"> 1. Perform a reconnaissance level analysis of additional surface Water Supplies including physical availability, water quality, and legal water rights 2. Identify potential water storage reservoir sites upstream of Silverton in the Animas, Cement and Mineral Creek Tributaries 3. Analyze Molas Lake as an augmentation reservoir 4. Analyze Highland Mary Lake, Howardsville and Chandy Gulch for reservoir sites 5. Contact the Team working on the superfund site work if there may be some collaboration on site reclamation and the development of a reservoir site. 6. Analyze the use of existing Town Wells for new alluvial wells for water quantity and quality issues. 7. Create a ranking matrix with qualitative and quantitative criteria to rank all alternatives 8. Provide a recommendation of the leading alternative(s) along with cost estimates and project implementation plan. 9. Hold Public Meetings <p>Write final report</p>
Grantee Deliverable: (Describe the deliverable the grantee expects from this task)	
Final Report	
CWCB Deliverable: (Describe the deliverable the grantee will provide CWCB documenting the completion of this task)	
Final Report	

Budget and Schedule
Exhibit B - 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 <u>excel format</u> . A separate <u>excel formatted</u> Budget is required for engineering costs to include rate and unit costs.

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Reporting Requirements

Progress Reports: The grantee 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. The CWCB may withhold reimbursement until satisfactory progress reports have been submitted.

Final Report: At completion of the project, the grantee shall provide the CWCB a Final Report on the grantee'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.

Payments

Payment will be made based on actual expenditures, must include invoices for all work completed and must be on grantee's letterhead. 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.

The CWCB will pay the last 10% of the entire water activity 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 water activity and purchase order or contract will be closed without any further payment. Any entity that fails to complete a satisfactory Final Report and submit to CWCB within 90 days of the expiration of a purchase order or contract may be denied consideration for future funding of any type from CWCB.

Performance Requirements

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

(b) Accountability: Per the 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 the 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 Supply Reserve Fund****EXHIBIT B - BUDGET AND SCHEDULE - Direct & Indirect (Administrative) Costs****Date: November 28, 2018****Water Activity Name: Town of Silverton Water Supply and Storage investigation****Grantee Name: Town of Silverton**

Task No. ⁽¹⁾	Description	Start Date ⁽²⁾	End Date	Matching Funds (cash & in-kind) ⁽³⁾	WSRF Funds (Basin & Statewide combined) ⁽³⁾	Total
1	Existing water infrastructure and Water Rights Review	July 2019	August 2019	\$3,172	\$3,172	\$6,344
2	Identify Existing and Future Water Demands	July 2019	August 2019	\$1,514	\$1,514	\$3,028
3	Identify New Water Supply Options	August 2019	September 2019	\$7,530	\$7,530	\$15,060
4	Prioritize Recommended Option	September 2019	October 2019	\$1,954	\$1,954	\$3,908
5	Prepare Report	October 2019	November 2019	\$5,816	\$5,816	\$11,632
6	Assist facilitation of Public Meetings	May 2019	November 2019	\$1,912	\$1,912	\$3,824
7	Project Management	May 2019	November 2019	\$2,828	\$2,828	\$5,656
						\$0
						\$0
						\$0
						\$0
						\$0
						\$0
Total				\$24,726	\$24,726	\$49,452

(1) The single task that include costs for Grant Administration must provide a labor breakdown (see Indirect Costs tab below) where the total WSRF Grant contribution towards that task does not exceed 15% of the total WSRF Grant amount.

(2) Start Date for funding under \$100K - 45 Days from Board Approval; Start Date for funding over \$100K - 90 Days from Board Approval.

(3) Round values up to the nearest hundred dollars.

• Additional documentation providing a Detailed/Itemized Budget may be required for contracting. Applicants are encouraged to coordinate with the CWCB Project Manager to determine specifics.

• Reimbursement eligibility commences upon the grantee's receipt of a Notice to Proceed (NTP)

• NTP will not be accepted as a start date. Project activities may commence as soon as the grantee enters contract and receives formal signed State Agreement.

The CWCB will pay the last 10% of the entire water activity budget when the Final Report is completed to the satisfaction of the CWCB staff project manager. Once the Final Report has been accepted, the final payment has been issued, the water activity and purchase order (PO) or contract will be closed without any further payment. Any entity that fails to complete a satisfactory Final Report and submit to the CWCB with 90 days of the expiration of the PO or contract may be denied consideration for future funding of any type from the CWCB.

• Additionally, the applicant shall provide a progress report every 6 months, beginning from the date of contract execution

• Standard contracting procedures dictate that the Expiration Date of the contract shall be 5 years from the Effective Date.



THE SOUTHWESTERN WATER CONSERVATION DISTRICT

Developing and Conserving the Waters of the
SAN JUAN AND DOLORES RIVERS AND THEIR TRIBUTARIES
IN SOUTHWESTERN COLORADO
West Building – 841 East Second Avenue
DURANGO, COLORADO 81301
(970) 247-1302

February 22, 2019

John Sites
Town of Silverton
PO Box 250
Silverton, CO 81433

Re: 2019 Town of Silverton Water Security/Supply Engineering Study

Dear Mr. Sites:

Thank you for the application for financial assistance and for Louis Meyer's presentation to the Southwestern Water Conservation District Board of Directors on February 12 meeting.

After discussing the merits of the application, the Board voted to approve the grant in the full amount of \$12,500. Enclosed with this letter is a *Document of Understanding* that outlines the conditions of the grant. Please review, sign, and return it at your earliest convenience.

We ask that the Town of Silverton request the funds when the money is needed in 2019. There is a *Request for Release of Funds* form enclosed that also needs to be signed and sent to our office (or lauras@swwcd.org).

If you have any questions, please contact the District office at (970) 247-1302.

Best Regards,

Bruce Whitehead
Executive Director



THE SOUTHWESTERN WATER CONSERVATION DISTRICT

Developing and Conserving the Waters of the
SAN JUAN AND DOLORES RIVERS AND THEIR TRIBUTARIES
IN SOUTHWESTERN COLORADO

Financial Assistance Document of Understanding

Name: John Sites
Organization: Town of Silverton
Project: 2019 Water Supply/Security Engineering Study

The following conditions apply to your request for financial assistance:

- 1) The grant funds will be used only for the purposes described in the application.
- 2) A final written report, including a description of work completed and a detailed accounting of the use of funds, will be due to Southwestern Water Conservation District within three (3) months of the final expenditure or by December 31, 2019, whichever occurs first.
- 3) Funding will be requested when it is needed in 2019. Upon the District's receipt of the *Request for Release of Funds* form, the grant will be made available.

My signature indicates that I understand and agree to the conditions as outlined above.

Signature

Date

If you have updated contact information, please include it below. Otherwise, you may leave this portion of the form blank.

Address

City, State, Zip Code

Phone

Fax

Email



THE SOUTHWESTERN WATER CONSERVATION DISTRICT

Developing and Conserving the Waters of the
SAN JUAN AND DOLORES RIVERS AND THEIR TRIBUTARIES
IN SOUTHWESTERN COLORADO

Financial Assistance Request for Release of Funds

Date _____

Organization _____

Project _____

Contact Person _____

I, the undersigned, do hereby request the release of funds in the amount of \$ _____.

By signing this document, I assure Southwestern Water Conservation District that the funds are needed at this time and will only be used for the specific purpose and amount indicated in my application.

I understand that if the project is under budget, there is an expectation that grant funding will be returned to SWCD in the proportion the project was under budget.

I understand that if the intended use of grant funds changes, board approval will be necessary. I also understand that the District may require additional documentation regarding the use of the funds at its discretion.

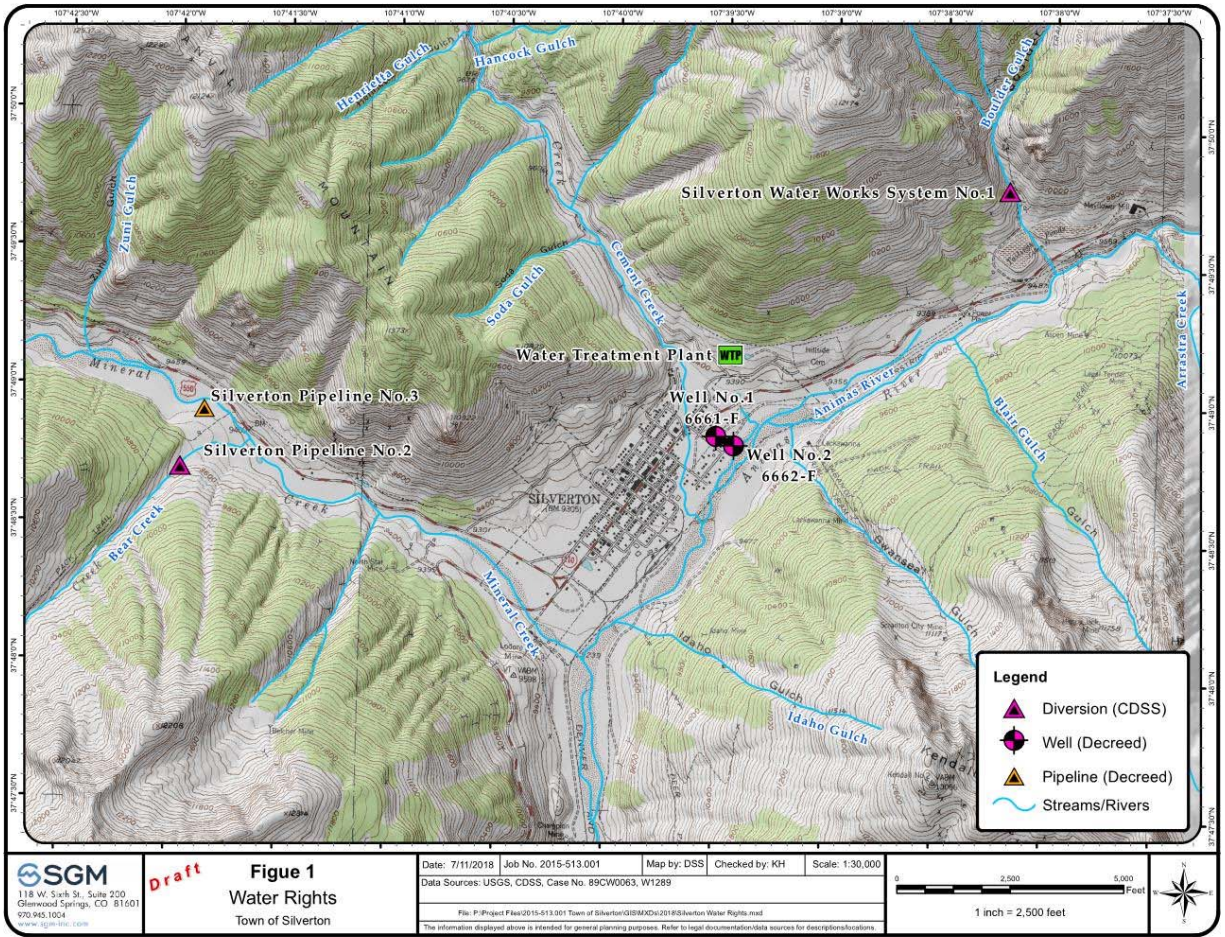
I acknowledge the District's requirement for a final written report, including a description of work completed and a detailed accounting of the use of funds.

Printed Name

Signature

Date

Please mail this request to SWCD, 841 E. 2nd Ave., Durango, CO 81301 or e-mail lauras@swwcd.org.

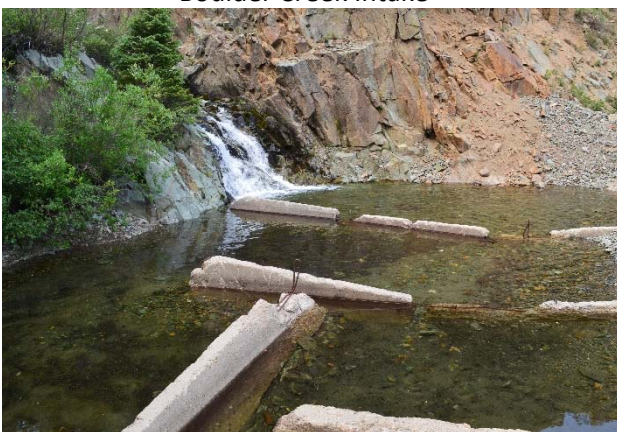




Boulder Creek Intake



Boulder Creek Intake



Boulder Creek Intake



Low Level of Molas Lake



Low Level of Molas Lake



Transmission Pipeline



Bear Creek Transmission Pipe
across Mineral Creek



Low Level Bear Creek 2018



Bear Creek Intake