COLORADO
Colorado Water Conservation Board
Department of Natural Resources
1313 Sherman Street, Room 718
Denver, CO 80203

Southwest – Town of Silverton Water Supply/Storage Investigation
POGG1 2019-2811

April 9, 2019

Town of Silverton
Attn: John Sites, Public Works Director
1360 Greene Street
Silverton, CO 81433

Dear Grantee:

We are pleased to inform you that the Colorado Department of Natural Resources, Colorado Water Conservation Board (CWCB) has approved your grant request for funding pursuant to the WSRF Grant Program ("Program"). This letter authorizes you to proceed with the Water Supply/Storage Investigation Project ("Project") in accordance with the terms of this Grant Award Letter.

Attached to this letter are the terms and conditions of your Grant. Please review these terms and conditions, as they are requirements of this Grant to which you, Town of Silverton, agree by accepting the Grant Funds.

The WSRF Criteria & Guidelines can be located on our website for additional information. If you have any questions or concerns regarding the project, please contact Megan Holcomb, Project Manager at 303-866-3441 or at Megan.Holcomb@state.co.us. Please send the 6-month progress reports and invoices directly to the Project Manager and cc me at Dori.vigil@state.co.us.

Thank you.

Sincerely,

//s//

Doriann Vigil
Program Assistant II
O 303-866-3441 ext. 3250
1313 Sherman Street, Rm. 719, Denver, CO 80203
Dori.vigil@state.co.us / cwcb.state.co.com

cc: SGM – Louis Meyer, P.E.

STATE OF COLORADO

Department of Natural Resources

ORDER

Number: POGG1,PDAA,201900002811

Date: 4/9/19

Description:

PDAA WSRF 2500 TWN SILVERTON_SUPPLY/ STORAGE INVESTIGATION

Effective Date: 04/15/19

Expiration Date: 05/31/20

*****IMPORTANT*****

The order number and line number must appear on all invoices, packing slips, cartons, and correspondence.

BILL TO

COLORADO WATER BOARD CONSERVATION
1313 SHERMAN STREET, ROOM 718
DENVER, CO 80203

BUYER

Buyer:

Email:

VENDOR

TOWN OF SILVERTON
PO BOX 250
SILVERTON, CO 81433-0250

Contact: .

Phone: .

SHIP TO

COLORADO WATER BOARD CONSERVATION
1313 SHERMAN STREET, ROOM 718
DENVER, CO 80203

SHIPPING INSTRUCTIONS

Delivery/Install Date: -

FOB: FOB Dest, Freight Allowed

VENDOR INSTRUCTIONS

EXTENDED DESCRIPTION

Line Item	Commodity/Item Code	UOM	QTY	Unit Cost	Total Cost	MSDS Req.
1	G1000		0	0.00	$25,000.00	☐

Description: PDAA WSRF 2500 TWN SILVERTON_SUPPLY/STORAGE INVESTIGATION

Service From: 04/15/19 Service To: 05/31/20

TERMS AND CONDITIONS

https://www.colorado.gov/pacific/osc/small-dollar-grant-award-terms-conditions

DOCUMENT TOTAL = $25,000.00

Last Update: January 9, 2018

Colorado Water Conservation Board	
Water Supply Reserve Fund	
Exhibit A - Statement of Work	
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:

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.

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.

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.

Objectives:

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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:

Task 1 - (Name) Existing Water Infrastructure and Water Rights Review

Description of Task:

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.

Method/Procedure:

1. Site visits to the existing Boulder Creek and Bear Creek water supply intakes.
2. Characterization of the Boulder and Bear Creek watersheds
3. 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)

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)
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:
Task 2 - (Name) Existing and Future Water Demands
Description of Task: Identify the existing and future average day, maximum day, peak hour and annual average water demands
1. Identify the existing and future average day, maximum day, peak hour and annual average water demands 2. Identify trends to predict future water demands 3. Create a common water demand metric for EQR's or SFE's
Method/Procedure:
1. Review existing water plant and service meter demands 2. Review any and all existing water reports that characterize water use or demographics. 3. Review existing and future population and land use demographics 4. 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's 7. Determine the use per EQR or SFE's.
Grantee Deliverable: (Describe the deliverable the grantee expects from this task)
1. Chapters of the final report or 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)
1. Chapters of the final report or 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:
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:
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 Write final report
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 excel format. A separate excel formatted 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.

Last Update: July 31, 2018

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 Revew	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	May 31, 2020	$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	May 31, 2020	$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 futher 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.

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