Name of Grantee: The Watershed Center

Name of Water Project: Flow Monitoring and Engagement at Gold Lake and Left Hand Park

Funding Sources:

- St. Vrain and Left Hand Water Conservancy District \$60,625 (Pending)
- Left Hand Ditch Company \$7,500 (In-Kind)
- Colorado Water Conservation Board Water Plan Grant \$ 66,075 (This Request)

Project Summary:

Using water efficiently is becoming increasingly important as water demand is growing in Colorado and beyond. Water is needed for a variety of beneficial uses including support of the St. Vrain Watershed's ecological attributes. Yet lack of precise flow measurement in the St. Vrain Watershed limits quantitative tracking of water use accountability. This project will improve flow measurement through better stream gauging, measurement devices, and telemetry. These devices record flow and provide quantitative data about the amount of water available in ditch and stream systems. This project will install measurement devices in five new headwaters locations to improve tracking of water flowing into ditch canals and Left Hand Creek. Multiple benefits of precise flow measurement include (1) protecting local water rights, (2) improving water administration for beneficial uses, and (3) optimizing water management to mitigate climate uncertainty. Notably, the headwaters location of these devices supports improved water accounting downstream. Further, this project will engage community members by developing and sharing project outreach materials that describe what information is gathered and how it relates to water management. Finally, this project is founded on collaboration with a partnership between the Watershed Center, a non-profit watershed collaborative, and the Left Hand Ditch Company.

Budget:

Descriptions below include (1) purchase and installation (including minor site grading and restoration) of water measurement data loggers and associated telemetry and (2) project oversight, management, and outreach by Left Hand Ditch Company and Watershed Center staff.

Description	Total Cost	
Task 1: Gold Lake		
Task 1A: Inlet Flow Measurement and Telemetry	692 440	
Task 1B: Outlet Flow Measurement, Telemetry, and Lake Level	\$83,440	
Task 1C: Project Management and Stakeholder Engagement		
Task 2: Lefthand Park		
Task 2A: Outlet Flow Measurement, Telemetry, and Lake Level	\$43,260	
Task 2C: Project Management and Community Engagement		
Grand Total	\$121,750	

Funding Request and Match Amount:

	Total Project Cost	CWCB Water Plan Grant Funding Request (This Request)	Total Match (In-Kind + Cash)	Left Hand Ditch Company (In-Kind)	St. Vrain and Left Hand Water Conservancy District (Cash, Pending)
Project Total	\$121,750	\$66,075.00	\$68,125.00	\$7,500.00	\$60,625.00

Funding Request and Match Amount:

The project timeline is one year from date of award with work planned to occur during mid to late summer 2023.





Colorado Water Conservation Board

Water Plan Grant - Statement of Work - Exhibit A

Statement Of Work				
Date:	December 1, 2022			
Name of Grantee:	The Watershed Center			
Name of Water Project:	Flow Monitoring and Engagement at Gold Lake and Left Hand Park			
Funding Source:	St. Vrain and Left Hand Water Conservancy District (Pending) Left Hand Ditch Company (In-Kind) Colorado Water Conservation Board Water Plan Grant (This Request)			

Water Project Overview:

Using water efficiently is becoming increasingly important as water demand is growing in Colorado and beyond. Water is needed for a variety of beneficial uses including support of the St. Vrain Watershed's ecological attributes. Yet lack of precise flow measurement in the St. Vrain Watershed limits quantitative tracking of water use accountability. This project will improve flow measurement through better stream gauging, measurement devices, and telemetry. These devices record flow and provide quantitative data about the amount of water available in ditch and stream systems. This project will install measurement devices in five new headwaters locations to improve tracking of water flowing into ditch canals and Left Hand Creek. Multiple benefits of precise flow measurement include (1) protecting local water rights, (2) improving water administration for beneficial uses, and (3) optimizing water management to mitigate climate uncertainty. Notably, the headwaters location of these devices supports improved water accounting downstream. Further, this project will engage community members by developing and sharing project outreach materials that describe what information is gathered and how it relates to water management. Finally, this project is founded on collaboration with a partnership between the Watershed Center, a non-profit watershed collaborative, and the Left Hand Ditch Company.

Project Objectives:

- 1. Support multiple beneficial uses of water in the St. Vrain Watershed by installing and operating flow measurement devices at three locations (five devices total) in/near the headwaters of Left Hand Creek.
- 2. Educate and engage the public in Colorado water management by sharing flow information collected by flow measurement devices with the public.



Tasks

Task 1 - Gold Lake

Description of Task:

Work on this task involves community engagement and implementation of flow monitoring equipment at Gold Lake Reservoir as described below:

Task 1A: Inlet Flow Measurement and Telemetry: Flow measurement and telemetry equipment will be purchased and installed at the Gold Lake Inlet (from James Creek). Work includes minor site excavation for access and site restoration (re-vegetation and grading).

Task 1B: Outlet Flow Measurement, Telemetry, and Lake Level: Flow measurement and telemetry equipment will be purchased and installed at the Gold Lake Outlet (flows to Left Hand Creek through filler canal). Work includes minor site excavation for access and site restoration (re-vegetation and grading).

Task 1C: Project Management and Community Engagement: Work includes project management and oversight including procurement, contractor oversight, grant progress reporting, and invoicing. Work also includes developing and distributing a mailer to one project-adjacent neighborhoods describing what information is being collected, where it can be publically accessed, and how the information relates to water management in Colorado.

Method/Procedure:

- Left Hand Ditch Company will lead purchase and installation of flow monitoring equipment including hiring and managing contractors.
- The Watershed Center will lead grant management and reporting, as well as development and distribution of outreach materials.

Deliverable:

Photos showing installed flow monitoring equipment, copy of outreach mailer, link to website where flowing monitoring data is publically accessible.

Tasks

Task 2 - Left Hand Park

Description of Task:

Work on this task involves community engagement and implementation of flow monitoring equipment at Left Hand Park Reservoir as described below:

Task 2A: Outlet Flow Measurement, Telemetry, and Lake Level: Flow measurement and telemetry equipment will be purchased and installed at the Left Hand Park Outlet (flows directly into Left Hand Creek, filled vial snowmelt and precipitation). Work includes minor site excavation for access and site restoration (revegetation and grading).

Task 1C: Project Management and Community Engagement: Work includes project management and oversight including procurement, contractor oversight, grant progress reporting, and invoicing. Work also includes developing and distributing a mailer to two project-adjacent neighborhoods describing what information is being collected, where it can be publically accessed, and how the information relates to water management in Colorado.



Method/Procedure:

- Left Hand Ditch Company will lead purchase and installation of flow monitoring equipment including hiring and managing contractors.
- The Watershed Center will lead grant management and reporting, as well as development and distribution of outreach materials.

Deliverable:

Photos showing installed flow monitoring equipment, copy of outreach mailer, link to website where flowing monitoring data is publically accessible.

Repeat for Task 3, Task 4, Task 5, etc.

Budget and Schedule

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

Reporting Requirements

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



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

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

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

Payment

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

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

Performance Measures

Performance measures for this contract shall include the following:

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