



**COLORADO**

**Colorado Water  
Conservation Board**

Department of Natural Resources

1313 Sherman Street, Room 718  
Denver, CO 80203

August 16, 2017

Grand Valley Irrigated Land Company  
Attn: Michael Holmes, President  
P.O. Box 1429  
Granby, CO 80446

RE: Notice to Proceed – WSRF Grant – POGG1 2018-228 Vail Ditch Water Management Improvement Project  
in the Colorado River Basin

Dear Michael,

This letter is to inform you that the grant request to assist in the above WSRF grant project has been approved. The attachments serve as your original contracting documents.

With the executed agreement, you are now able to proceed with the project and invoice the State of Colorado for costs incurred through June 30, 2018. Please provide the project name, POGG1 number, and basin when corresponding with or invoicing for your project along with back-up documentation of cost incurred for the WSRF portion of the grant according to the original scope of work. Upon receipt of your invoice(s), the State of Colorado will provide payment no later than 30 days after review and signed approval of the project manager.

Please refer to the current WSRF Criteria & Guidelines on our website for the six month progress report and final deliverable requirements in order to avoid a delay in payment. A 60-day advance notice is required in the event you are seeking an additional amendment to the term of this agreement. An official letter of request to the CWCB project manager briefly describing the need for the extension, updated insurance certificates (if applicable) and an updated schedule reflecting the specific tasks that require additional time to complete is required.

If you have any questions or concerns regarding the project, please contact Megan Holcomb, Project Manager at 303-866-3441 3222 or at [Megan.Holcomb@state.co.us](mailto:Megan.Holcomb@state.co.us). Please send the 6 month progress reports and invoices directly to Megan and cc me at [Dori.vigil@state.co.us](mailto:Dori.vigil@state.co.us).

You can contact me at 303-866-3441 ext. 3250 for additional invoicing and payment disbursement questions.

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](mailto:Dori.vigil@state.co.us) / [cwcb.state.co.com](http://cwcb.state.co.com)





STATE OF COLORADO  
Department of Natural Resources

<b>ORDER</b>		<b>** IMPORTANT **</b>				
Number: POGG1 PDAA 201800000228		The order number and line number must appear on all invoices, packing slips, cartons and correspondence				
Date: 08/10/17						
Description: PDAA 2500 WSRF Vail Ditch Wtr Improvement in CO Bain		<b>BILL TO</b> COLORADO WATER BOARD CONSERVATION 1313 SHERMAN STREET, ROOM 718 DENVER, CO 80203				
Effective Date: 08/10/17      Expiration Date: 06/30/18						
<b>BUYER</b>		<b>SHIP TO</b>				
Buyer:		COLORADO WATER BOARD CONSERVATION				
Email:		1313 SHERMAN STREET, ROOM 718 DENVER, CO 80203				
<b>VENDOR</b>		<b>SHIPPING INSTRUCTIONS</b>				
GRAND COUNTY IRRIGATED LAND COMPANY		Delivery/Install Date:				
PO BOX 1429		F.O.B: FOB Dest, Freight Allowed				
GRANBY, CO 80446		<b>VENDOR INSTRUCTIONS:</b>				
Contact: .						
Phone: .						
<b>Line Item</b>	<b>Commodity/Item Code</b>	<b>UOM</b>	<b>QTY</b>	<b>Unit Cost</b>	<b>Total Cost</b>	<b>MSDS Req.</b>
1	G1000		0	0.00	\$11,000.00	<input type="checkbox"/>
Description: PDAA 2500 WSRF VAIL DITCH WTR MGMT IMPROV CO BASIN						
Service From: 08/10/17      Service To: 06/30/18						
<b>TERMS AND CONDITIONS</b>						
<a href="https://www.colorado.gov/osc/purchase-order-terms-conditions">https://www.colorado.gov/osc/purchase-order-terms-conditions</a>						
<b>DOCUMENT TOTAL = \$11,000.00</b>						

## Statement of Work

March 13, 2017

WATER ACTIVITY NAME – Vail Ditch Flow Monitoring Improvements

GRANT RECIPIENT – Grand County Irrigated Land Company

FUNDING SOURCE – Water Supply Reserve Account

### INTRODUCTION AND BACKGROUND

Grand County Irrigated Land Company (GCILC) is a mutual ditch company, responsible for managing and distributing water to the approximately 50 shareholders on Granby Mesa. The ditch company maintains about 10 miles of ditch to convey water from Meadow Creek Reservoir to the mesa for irrigation of approximately 1,000 acres of agricultural land.

In 2010 the GCILC's Parshall flume in Strawberry Creek blew out during a high water event. The project will replace the damaged flume with a new one that will be designed to safely pass high flows of water. The damaged flume will be removed from the stream channel and the stream habitat will be restored above and below the flume. (Photos Exhibit B & Map Exhibit C)

The project will also include the procurement and installation of a stage discharge recorder (SDR) and telemetry system. The Parshall flumes located at Upper Vail Ditch and Strawberry Creek are both located in the Arapahoe National Forest and several miles from the nearest road and difficult to access other than hiking. The SDR and telemetry system will allow for cost effective continuous real time monitoring of the water released from the reservoir. Funding from the Water Supply Reserve Account (WSRA) will assist with purchasing and installing the system.

### OBJECTIVES

- Assure water released from Meadow Creek Reservoir is delivered to the shareholders
- Provide District 51 Water Commissioner with flow data
- SDR/Telemetry system will report real time continuous flows in Upper and Lower Vail Ditch to improve water management
- Restore habitat at flume site

## TASKS

### TASK 1- Pashall flume installation

#### Description of Task

The Natural Resource Conservation Service (NRCS) will provide the engineering/design support for setting the Parshall flume during the summer of 2017. After the irrigation season ends and Strawberry Creek flows recede in the fall, equipment will be mobilized and the flume will be installed after the damaged flume and wing walls are removed and the streambed is prepared. A side channel will be constructed adjacent to the flume designed to safely by pass high water events. After the work is completed, the impacted stream banks will be restored.

#### Method/Procedure

It is expected that a rubber tracked mini track hoe and a rubber tired skid steer will be used for the installation. Due to the remoteness of the site, all the materials will need to be delivered using the track hoe and skid steer, and a mobile cement mixer will be used to mix cement onsite. The flume will be installed according to the design specifications provided by the NRSC.

After the flume and by pass channel are constructed, the impacted stream banks will be restored and the stream morphology will be stabilized to assure both the habitat is restored and the flume will provide long term reliable data with minimal maintenance.

#### Deliverable

A final report will document the completed project.

### TASK 2 – Installation of the Staged Discharge Recorder/Telemetry System

#### Description of Task

A SDR will be paired with telemetry, at the new flume site in Strawberry Creek, and at the existing flume located in Upper Vail Ditch. This will record flow data that can be retrieved with a laptop or smart phone.

#### Method/Procedure

A stilling well will be constructed adjacent to the Parshall flume to provide an accurate measurement of the water level in the flume. The SDR will be set above the well and will continuously record the water levels that can be converted to cubic feet/second of flow, and transmitted through the telemetry system.

### Deliverable

A final report will document the completed project.

Flow data will be provided to the District 51 Water Commissioner.

### BUDGET

NO.	PROJECT COMPONENT	Units and days	
1:	Prefabricated Parshall Fume	1	\$5,000
2:	Concrete wing walls	4 walls	\$5,000
3:	Labor	4 personnel 4 days	\$3,000
4:	Equipment (including mob cost)	2 pieces for 4 days	\$3,000
5:	Stage Discharge Recorder/Telemetry system	2	\$7,000
	Total budget		\$23,000

### MATCHING FUNDS

Grand Co. Irrigated Land Co.	\$5,000
Grand Co. Mutual Ditch and Reservoir Co	\$5,000
NRCS In kind design support	\$2,000
Total Matching Funds	\$12,000

### SCHEDULE

The engineering and design of the flume will be conducted by the NRCS during the summer of 2017. In the fall, after irrigation season and Strawberry Creek has reached low flow conditions, the flume will be installed, the by pass channel constructed and the stream habitat will be restored. This is expected to take three to four days. After spring runoff in 2018, any additional restoration and maintenance will be preformed.

The SDR/Telemetry system will be installed at the Strawberry Creek flume upon completion of installation. The SDR/Telemetry system will be installed anytime after the equipment is purchased and delivered. Installation will require one to two days at each site.

**VAIL DITCH FLOW MONITORING IMPROVEMENTS  
BUDGET AND TIMELINE**

<b>Task</b>	<b>Description</b>	<b>Desired Start Date*</b>	<b>Target End Date</b>	<b>WSRF Funds</b>	<b>Matching Funds (Cash)</b>	<b>Matching Funds (In Kind)</b>	<b>Total</b>
1	Parshall Flume Installation	8/1/17	12/1/17	\$7,000	\$7,000	\$2,000	\$16,000
2	SDR/Telemetry System Installation	8/1/17	6/1/18	\$4,000	\$3,000		\$7,000
Totals				<b>\$11,000</b>	<b>\$10,000</b>	<b>\$2,000</b>	<b>\$23,000</b>