



# STATE OF COLORADO

Department of Natural Resources

ORDER			****IMPORTANT****							
Number: POGG1,PDAA,20200002166			The order number and line number must appear on all							
<b>Date:</b> 8/27/19			invoices, packing slips, cartons, and correspondence.							
<b>Description:</b>			BILL TO	)						
PDAA 2500 WSRF PITKIN_ROBINSON			COLORADO WATER BOARD CONSERVATION							
DIVERSION_CO BASIN			1313 SHERMAN STREET, ROOM 718							
			DENVI	ER, CO 80203						
Effective Date	e: 09/01/19									
Expiration Da										
BUYER		S	SHIP TO	)						
Buyer:			COLORADO WATER BOARD CONSERVATION							
Email:			1313 SHERMAN STREET, ROOM 718							
VENDOR			DENVI	ER, CO 80203						
PITKIN COU	NTY									
	ty Commissioners									
530 E Main St				NG INSTRUCTIO	NIC					
Aspen, CO 81	611				NS					
~				y/Install Date:	-					
	Contact:		FOB: FOB Dest, Fr Allowed		eight					
Phone: VENDOR INS	TRUCTIONS				Allowed					
	INCETIONS									
EXTENDED D	ESCRIPTION									
Line Item	Commodity/Item Code	UOM (	)TY	Unit Cost	Total Cost	MSDS Req.				
1	G1000		0	0.00	\$45,000.00					
Description:	PDAA 2500 WSRF PITKIN BASIN	N_ROBINSON	DIVER	SION_CO						
Service From:	09/01/19	Servi	ce To:	01/31/21						
TERMS AND	CONDITIONS									
https://www.colorado.gov/pacific/osc/small-dollar-grant-award-terms-conditions										
	DOCUMEN	T TOTAL = \$	45 000	00						

Last Update: January 9, 2018



Water Supply Reserve Fund							
Exhibit A - Statement of Work							
Date: October 1, 2018							
Water Activity Name: Robinson Diversion Modification Project							
Grant Recipi	Pitkin County (Healthy Rivers)						
Funding Sou	rce:	Multiple (Pitkin County, Eagle County, GOCO, Colorado Water Plan Grant, Colorado River District Grant)					
	s). Include	<b>w:</b> (Please provide brief description of the proposed water activity (no more a description of the overall water activity and specifically what the WSRF					
The Robinson Roaring Fork F	Ditch Project River adjacen Ilder structur	t (Project) consists of a series of in-channel and bank improvements to the to the Robinson Ditch headgate. The improvements include modification of res, construction of an engineered riffle and modifications to the Robinson I headgate.					
and flow depth configuration o boaters. Project remainder of th	s that prever f the existing at improvement water surf	a change in water surface elevation greater than 2 feet, resulting in velocities of some fish species at certain life cycles from passing the structure. The g boulders creates a significant navigation hazard for commercial and private ents will halve the water surface drop across the structure and spread the ace elevation change upstream, creating several riffles. This will greatly reasing passage-ability for wider range of aquatic species.					
equipment mai woody debris, a	ntenance ac and rebuild c will be used	created by the project improvements will reduce annual in-channel, heavy- tivities to remove sediment accumulation, readjust boulders, remove large of push up dams to maintain water surface elevations at the headgate. for the purchase and transportation of boulders for the lower grade controls					
•	vements.						
		jectives of the project)					
Objectives:	(List the obj	jectives of the project) ch Diversion Modification Project:					



Provide a detailed description of each task using the following format:

#### Task 1 – Project Planning, Design and Permitting

Description of Task:

Task 1 focuses on the continued development of project design including hydraulic modeling. As part of this task the project team will complete construction plans and technical specifications. These construction documents will be used for the permitting process and for bidding and construction of the proposed improvements.

The project team will complete and apply for permits with the US Army Corps of Engineers, the State of Colorado and Eagle County.

Project planning will include coordination with project stakeholders and local, state and federal regulators.

Method/Procedure:

Standard engineering practices will be used to develop a design that meets the project's goals and objectives. Hydraulic models developed in HEC-RAS and SRH-2D will be used for information design decisions as it pertains to navigability, passage of aquatic species, channel and bank stability and flood conveyance.

Construction plans will be created using AutoCAD Civil 3D and will follow standard engineering practices.

Permit applications will be completed per the guidance of each respective regulatory agency.

Grantee Deliverable: (Describe the deliverable the grantee expects from this task)

Construction documents including plans, specifications and engineer's opinion of cost.

Approved permits for the project from the US Army Corps of Engineers, State of Colorado and Eagle County.

CWCB Deliverable: (Describe the deliverable the grantee will provide CWCB documenting the completion of this task)

Note this task is not included in the current grant ask all will paid for through other funding sources described in this application.

Electronic copies of:

Construction documents including plans, specifications and engineer's opinion of cost.

Approved permits for the project from the US Army Corps of Engineers, State of Colorado and Eagle County.

Last Update: January 9, 2018



# Tasks

Provide a detailed description of each task using the following format:

# Task 2 – Mobilization, Site Preparation, Construction Management

Description of Task:

Task 2 includes the mobilization of the construction contractor, preparation and maintenance of the site during construction and inspection and management of the project during construction.

The majority of this task will be performed by the construction contractor, including the installation and maintenance of erosion/sediment control Best Management Practices (BMP's) and care of water facilities such as coffer dams and dewatering pumps and filters.

The task also includes a series of inspections conducted by the Grantee or their representation to verify proper construction of the project per the construction plans and technical specifications developed as part of Task 1.

Method/Procedure:

Preparation and management of the project site during construction will utilize construction techniques and Best Management Practices that are consistent with industry standards and in compliance with federal, state and local regulations.

Regular inspections of the project during construction will be conducted.

Equipment to be utilized will include excavators, dump trucks, front-end loaders and miscellaneous smaller earth moving equipment.

Grantee Deliverable: (Describe the deliverable the grantee expects from this task)

The completed construction of the overall project as described in the project construction plans and specifications (to be developed as part of Task 1).

CWCB Deliverable: (Describe the deliverable the grantee will provide CWCB documenting the completion of this task)

Note this task is not included in the current grant ask and will paid for through other funding sources described in this application.

Contractor invoices related to the construction of this component of the overall project.



Provide a detailed description of each task using the following format:

## Task 3 – Upper Grade Control Structure

Description of Task:

Task 3 covers the materials, labor and equipment needed for construction of the Upper Grade Control Structure per the construction plans and technical specifications developed as part of Task 1.

The upper grade control structure will be built in the Roaring Fork River approximately 185 feet upstream of the existing boulder grade control structure for the purpose of channel stability and to maintain the pool elevation in the inlet channel of the Robinson Diversion system.

The structure includes approximately 425 tons of boulder and 175 cubic yards of alluvial backfill.

Method/Procedure:

Construction of the Upper Grade Control will utilize construction techniques and Best Management Practices that are consistent with industry standards and in compliance with federal, state and local regulations.

Equipment to be utilized will include excavators, dump trucks, front-end loaders and miscellaneous smaller earth moving equipment.

Grantee Deliverable: (Describe the deliverable the grantee expects from this task)

The completed construction of the Upper Grade Control Structure as described in the project construction plans and specifications (to be developed as part of Task 1).

CWCB Deliverable: (Describe the deliverable the grantee will provide CWCB documenting the completion of this task)

Note this task is not included in the current grant ask and will paid for through other funding sources described in this application.

Contractor invoices related to the construction of this component of the overall project. Photo documentation and as-built survey of the completed Upper Grade Control Structure.



Provide a detailed description of each task using the following format:

#### Task 4 – Engineered Riffle & Bank Improvements

Description of Task:

Task 4 covers the materials, labor and equipment needed for construction of the Engineered Riffle and Bank Improvements per the construction plans and technical specifications developed as part of Task 1.

The engineered riffle and bank improvements will be built on the Roaring Fork River to spread out changes in water surface elevation over a longer horizontal distance, improving navigation for commercial and private boaters and improving upstream passage for aquatic specifies in the river. As a secondary benefit, the riffle will provide additional habitat for resident and transient fish and macroinvertebrates.

Bank stability efforts will focus on existing banks through the project reach demonstration degradation and erosion.

The riffle and bank improvements include approximately 430 tons of boulder and 460 cubic yards of alluvial backfill.

Method/Procedure:

Construction of the Engineered Riffle and Bank Improvements will utilize construction techniques and Best Management Practices that are consistent with industry standards and in compliance with federal, state and local regulations.

Equipment to be utilized will include excavators, dump trucks, front-end loaders and miscellaneous smaller earth moving equipment.

Grantee Deliverable: (Describe the deliverable the grantee expects from this task)

The completed construction of the Engineered Riffle & Bank Improvements as described in the project construction plans and specifications (to be developed as part of Task 1).

CWCB Deliverable: (Describe the deliverable the grantee will provide CWCB documenting the completion of this task)

Note this task is not included in the current grant ask and will paid for through other funding sources described in this application.

Contractor invoices related to the construction of this component of the overall project. Photo documentation and as-built survey of the completed Engineered Riffle & Bank Improvements.



Provide a detailed description of each task using the following format:

#### Task 5 – Lower Grade Control Structure

Description of Task:

Task 5 covers the materials, labor and equipment needed for construction of the Lower Grade Control Structure per the construction plans and technical specifications developed as part of Task 1.

The lower grade control structure will be built in the Roaring Fork River at approximately the same location as the existing structure to maintain channel stability in this reach of the Roaring Fork River.

The structure includes approximately 1000 tons of boulder and 220 cubic yards of alluvial backfill. 625 tons of the boulder total will be existing boulders located on the site.

The total amount (\$45,000) included in this grant ask will be used for the purchase, transport and delivery of boulders for the lower grade control structure improvements. The boulders will be stored on site adjacent to the Robinson Diversion inlet channel on the north bank.

Method/Procedure:

Construction of the Lower Grade Control will utilize construction techniques and Best Management Practices that are consistent with industry standards and in compliance with federal, state and local regulations.

Equipment to be utilized will include excavators, dump trucks, front-end loaders and miscellaneous smaller earth moving equipment.

Grantee Deliverable: (Describe the deliverable the grantee expects from this task)

The completed construction of the Lower Grade Control Structure as described in the project construction plans and specifications (to be developed as part of Task 1).

CWCB Deliverable: (Describe the deliverable the grantee will provide CWCB documenting the completion of this task)

Contractor invoices related to the construction of this component of the overall project. Photo documentation and as-built survey of the completed Lower Grade Control Structure.



Provide a detailed description of each task using the following format:

#### Task 6 – Robinson Diversion Headgate Improvements

Description of Task:

Task 6 covers the materials, labor and equipment needed for construction of Robinson Diversion Headgate Improvements per the construction plans and technical specifications developed as part of Task 1.

The improvements will be made to the existing headgate and inlet channel to reduce the need for maintenance activities in the main channel of the Roaring Fork River and to improve system efficiency.

The improvements will likely include a new sluice gate structure to remove sediment from the inlet channel, 300 tons of boulder and 350 cubic yards of alluvial backfill.

Method/Procedure:

Construction of the Robinson Diversion Headgate Improvements will utilize construction techniques and Best Management Practices that are consistent with industry standards and in compliance with federal, state and local regulations.

Equipment to be utilized will include excavators, dump trucks, front-end loaders and miscellaneous smaller earth moving equipment.

Grantee Deliverable: (Describe the deliverable the grantee expects from this task)

The completed construction of the Robinson Diversion Headgate Improvements as described in the project construction plans and specifications (to be developed as part of Task 1).

CWCB Deliverable: (Describe the deliverable the grantee will provide CWCB documenting the completion of this task)

Note this task is not included in the current grant ask all will paid for through other funding sources described in this application.

Contractor invoices related to the construction of this component of the overall project. Photo documentation and as-built survey of the completed Robinson Diversion Headgate Improvements



# **Budget and Schedule**

**Exhibit B - Budget and Schedule:** This Statement of Work shall be accompanied by a combined <u>Budget</u> and <u>Schedule</u> 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.

# **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 <u>entire</u> 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 inkind 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: October 1, 2018

Water Activity Name: Robinson Ditch Diversion Modification Project

Grantee Name: Pitkin County

<u>Task No.<sup>(1)</sup></u>	<u>Description</u>	<u>Start Date<sup>(2)</sup></u>	End Date	<u>Matching Funds</u> (cash & in-kind) <sup>(3)</sup>	<u>WSRF Funds</u> (Basin & Statewide combined) <sup>(3)</sup>	<u>Total</u>
	Project Planning , Design & Permitting	Underway	January 2021	\$110,000		\$110,000
	Mobilization, Site Prep, Construction Mgt	May 2019	January 2021	\$230,000		\$230,000
	Upper Grade Control Structure	May 2019	January 2021	\$85,000		\$85,000
	Engineered Riffle & Bank Improvements	May 2019	January 2021	\$105,000		\$105,000
	Lower Grade Control Structure	September 2019	January 2021	\$95,000	\$45 <i>,</i> 000	\$140,000
	Robinson Diversion Headgate Improvements	October 2019	January 2021	\$130,000		\$130,000 \$0
						\$0 \$0
						\$0
						\$0
						\$0
						\$0
						\$0
			Total	· ,	\$45,000	\$800,000
	task that include costs for Grant Administration must pr for funding under \$100K - 45 Days from Board Approva				WSRF Grant contribu	ition towards that task
(3) Round valu	ies up to the nearest hundred dollars.					
<ul> <li>Additional d</li> </ul>	ocumentation providing a Detailed/Itemized Budget ma	ay be required for contrac	ting. Applicants are en	couraged to coordinate	with the CWCB Proje	ct Manager to determine
Reimbursem	ent eligibility commences upon the grantee's receipt of	a Notice to Proceed (NTP	?)			
The CWCB wil	pay the last 10% of the entire water activity budget wh	en the Final Report is con	npleted to the satisfact	ion of the CWCB staff pr	oject manager. Onc	e the Final Report has
<ul> <li>Additonally,</li> </ul>	the applicant shall provide a progress report every 6 m	onths, beginning from the	e date of contract execu	ition		

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

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