



COLORADO

**Colorado Water
Conservation Board**

Department of Natural Resources

1313 Sherman Street, Room 718
Denver, CO 80203

May 16, 2016

Western Slope Conservation Center
Attn: Alex Johnson, Director
P.O. Box 1612
Paonia, CO 81428

RE: Notice to Proceed – WSRA Grant – **POGG1 2016-780** – Gunnison Environmental/Recreation & Irrigation Infrastructure Assessment Planning River Basin

Dear Alex,

This letter is to inform you that the purchase order (PO) to assist in the above WSRA grant project was approved on May 13, 2016. The attachments will serve as your original grant contracting documents.

With the executed PO, you are now able to proceed with the project and invoice the State of Colorado for costs incurred through December 31, 2017. Please provide the project name, PO number, and basin when corresponding with or invoicing for your project. 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.

If an extension to the project is necessary, a formal letter of request must be submitted to the project manager along with a proposed completion date **30 days** prior to the current expiration date. There will be no prior notice from the CWCB grant manager informing the grantee that the project is approaching its deadline, therefore the grantee must monitor the completion progress accordingly.

If you have any questions or concerns regarding the project, please contact Chris Sturm, Project Manager at 303-866-3441 x3236 or at chris.sturm@state.co.us. You can contact me at 303-866-3441 ext. 3250 for 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 / cwcb.state.co.us

cc: Chris Sturm, Project Manager
Trout Unlimited, Inc.

Attachments





STATE OF COLORADO
Department of Natural Resources

ORDER		** IMPORTANT **				
Number: POGG1 PDAA 20160000000000000780		The order number and line number must appear on all invoices, packing slips, cartons and correspondence				
Date: 05/12/16						
Description: WSRA GRANT PDAA 2500 Trout Unlimited & Western Slope CC		BILL TO COLORADO WATER BOARD CONSERVATION 1313 SHERMAN STREET, ROOM 718 DENVER, CO 80203				
Effective Date: 05/15/16 Expiration Date: 12/31/17						
BUYER		SHIP TO				
Buyer:		COLORADO WATER BOARD CONSERVATION				
Email:		1313 SHERMAN STREET, ROOM 718 DENVER, CO 80203				
VENDOR		SHIPPING INSTRUCTIONS				
WESTERN SLOPE CONSERVATION CENTER PO BOX 1612 PAONIA, CO 81428-8112		Delivery/Install Date:				
Contact: .		F.O.B: FOB Dest, Freight Allowed				
Phone: .		VENDOR INSTRUCTIONS:				
Line Item	Commodity/Item Code	UOM	QTY	Unit Cost	Total Cost	MSDS Req.
1	G1000		0	0.00	\$27,000.00	<input type="checkbox"/>
Description: WSRA GRANT PDAA 2500 NF Enviro/Rec Irrigation Infrac						
Service From: 05/15/16 Service To: 12/31/17						
Line Item	Commodity/Item Code	UOM	QTY	Unit Cost	Total Cost	MSDS Req.
2	G1000		0	0.00	\$30,000.00	<input type="checkbox"/>
Description: WSRA GRANT PDAA 2500 NF Enviro/Rec Irrig Infrac						
Service From: 05/15/16 Service To: 12/31/17						
Line Item	Commodity/Item Code	UOM	QTY	Unit Cost	Total Cost	MSDS Req.
3	G1000		0	0.00	\$27,500.00	<input type="checkbox"/>
Description: Co Watershed Restoration Grant- NF Enviro & Rec Irrig Infrac						
Service From: 05/15/16 Service To: 12/31/17						
TERMS AND CONDITIONS						
https://www.colorado.gov/osc/purchase-order-terms-conditions						
DOCUMENT TOTAL = \$84,500.00						

Scope of Work

Grantee: Trout Unlimited

Primary Contact: Cary Denison, 125 Colorado Ave. Suite D. Montrose, CO 81403 Phone: 970-596-3291

Project Name: North Fork Integrated Water Management Plan and Assessment

Grant Request Amount: \$27,500

Funding Source: Stream Management Plan Grant

Introduction and Background

The North Fork of the Gunnison is a major tributary to the Gunnison River that provides irrigation water for agricultural producers from the small town of Somerset to Rogers Mesa, west of Hotchkiss. Upstream of major diversions, the North Fork supports a healthy fishery and at periods of high flow the river can support recreation as well. Unfortunately, the river is heavily impacted by diversions for agriculture, leaving the river dry or seriously impaired through the middle of the watershed during the height of the irrigation season. Simultaneously, ditch and canal companies struggle to maintain and effectively use their infrastructure, much of it out-of-date and in need of repairs. While some irrigation infrastructure, including delivery canals, have been upgraded to address salinity issues, most canals have not changed in the past 100 years.

In a collaborative effort to better understand the watershed, assess irrigation infrastructure needs, and address water supply along with environmental flow needs, Trout Unlimited (TU), Western Slope Conservation Center (WSCC), and the North Fork Water Conservancy District (NFWCD) have joined forces on the creation of a Stream Management Plan (SMP). The proposed SMP will build upon previous modeling, engineering, assessments, and master planning efforts that have been completed by individual irrigation companies and conservation organizations including Trout Unlimited. The planning process will rely heavily on feedback from irrigators and water users throughout the watershed to identify projects and determine feasibility. The partners intend for the plan to serve as a valley-wide planning resource that can be used to address structural and supply issues irrigation water users face while improving flows and habitat in the North Fork. Creation of this SMP will provide the opportunity for a wide range of water users to collaborate on projects that will improve both consumptive and non-consumptive needs.

This project will complete two tier one projects identified in the Gunnison Basin IPP list.

Initiation of the proposed North Fork Integrated Water Management Plan and Assessment is subject to the successful application for funding from the CWCB SMP and Water Supply Reserve Account (WSRA) funding programs, as well as the approval of the board of directors of the NFWCD and WSCC.

Project Objectives

1. Reduce administrative and physical water shortages
2. Improve watershed health
3. Identify important values related to water for a variety of water users in the North Fork
4. Identify and rank important irrigation infrastructure projects
5. Create realistic flow and environmental targets and goals

6. Protect existing uses and values
7. Establish flow targets for varying runoff regimes
8. Establish ranked inventory of non-consumptive and consumptive projects associated with the North Fork of the Gunnison
9. Create productive dialogue amongst all water users about water resource management in the North Fork

Tasks

Each of the following tasks will build on previous studies and analysis related to irrigation infrastructure and watershed health. To reduce time and cost project proponents will encourage and assist contractor to use previously gathered data to complete each of the following tasks.

1. Environmental and Recreation Needs Assessment

Description of Task

Within this task, project proponents and contractors will analyze the overall health of the watershed. This assessment and inventory will compile data related to specifics about the health and ecological function of various sections of the river.

Method/Procedure

The contractor will divide the river into segments based on reach, flow, irrigation demands and general health. Within each segment the contractor will complete field assessments that evaluate status of vegetative habitat, instream habitat, lateral and vertical stream stability, sediment deposition, noxious and invasive weed, with depth analysis and other applicable analysis. Each segment will be analyzed using R2 Cross methodology to determine minimum stream flow requirements. This data will be evaluated against aerial imagery and previous watershed assessment to highlight major changes or trends within each reach. The contractor will perform a series of interviews with water users and residents to capture values, concerns and interests related to recreation in and health of the watershed.

Deliverable

This task will produce maps of each segment of the river that highlight major characteristics and points of concern. A narrative of each segment including the characteristics and impairments will be coupled with the map. The results of the R2 Cross study along with flow recommendations for a range of hydrologic conditions for each reach will be included in this section of the report. Based on the interview processes a list of environmental goals and concerns will be compiled.

2. Irrigation Infrastructure Inventory and Assessment

Description of Task

Under this task, project partners and contractors will assess and each of the major irrigation ditches and canals along the North Fork within the stretch from Paonia Reservoir to the confluence with the Gunnison River. The analysis will evaluate current condition, operations, demand and

water shortages, recent improvements and level of planning and engineering completed for each ditch.

Method/Procedure

This task will be accomplished through evaluation of aerial imagery, diversion records, water rights information, on-site investigations, and interviews with water users and managers. Each ditch will be analyzed by its crop demand to water supply ratio and by the efficiency with which it delivers water and the presumed efficiency of water application. Transit loss information will be calculated based on soil types and comparisons to transit loss of other area irrigation structures. Vital personnel such as ditch managers and staff along with water users will be interviewed on each ditch and canal. Return flow and current water management information will be gathered. Analysis and information gathering will vary from between diversions depending on the size and perceived needs of each diversion.

Deliverable

A summary of each diversion will be created that will provide a map of each point of diversion along with important infrastructure or deficiencies, and points of return flow. This summary will include information about the efficiency of the ditch, points of concern, goals of the ditch company and water users, and previous planning and improvement efforts.

3. Information Synthesis

Description of Task

This task will include combining and comparing the information from the environmental/recreation and irrigation assessments to highlight important overlaps for areas of possible improvement.

Method/Procedure

Each segment from the environmental and recreation analysis will be overlapped with diversion and return flow information from the irrigation infrastructure assessment. Flow target information will be combined with status quo diversion information as a baseline for improvements. Target flows by segment and available hydrology will then be evaluated based on information from the irrigation infrastructure analysis.

Deliverable

This task will provide mapped and highlighted area of the river system that are impaired and affected by a diversion or water use that can be implemented to improve water management for all users.

4. Watershed Planning and Recommendations

Description of Task

This task will focus on synthesizing deliverables from previous tasks into a usable plan that will identify projects and processes to address deficiencies in the irrigation infrastructure and river health and function.

Method/Procedure

The data collected in previous tasks will be synthesized into a report that will include segment maps as well as specific information about irrigation and non-consumptive demands and projects that can meet those demands. This report will also provide recommendations based on opportunities, overlap of needs and project feasibility.

Deliverable

This task will produce a planning document for the water users of the North Fork that will assist in future water project planning. More specifically this task will create a list of recommendations driven by data from the analysis that will explain in detail what projects and actions will protect and improve water resources and values for multiple users in the North Fork of the Gunnison River.

5. Project Management and Administration

Description of Task

Overseeing day to day operations and progress related to the project while administering support and financial oversight.

Method/Procedure

Project management team will include staff from WSCC, TU, and NFWCD who will jointly select and hire contractors, based on a competitive selection process, to complete the tasks related to the project. Selected contractor will respond directly the management team who will make decisions related to completion and success of the project.

Deliverable

Project managers will provide the CWCB with status and final reports including the findings of the Stream Management Plan.

Budget and Timeline

Task	Description	Target Start Date	Target Completion Date	CWCB WSRA Fund	CWCB Stream Management Plan	Other Funding Cash/Source	In-Kind Contribution/ Source	Total
1	Environmental/Recreation Needs Assessment	May, 2016	September, 2016	15,000	8,000	10,000/ WSCC	2,000/ TU, WSCC	30,000
2	Irrigation Infrastructure	April,	September	20,000	8,000	5,000/	2,000/	35,000

	Inventory and Assessment	2016	, 2016			NFWCD	TU,NFWCD	
3	Information Synthesis	September, 2016	November , 2016	5,000	4,000	1,500/ TU	1,000/ NFWCD, WSCC, TU	11,000
4	Watershed Planning and Recommendations	November, 2016	December , 2016	12,000	5,000	2,000/ NFWCD,W SCC,TU	1,000 NFWCD, WSCC, TU	20,000
5	Project Management and Administration	April, 2016	January 2017	5,000	2,500	0	13,500/ NFWCD,WSCC, TU	13,500
	TOTALS			\$57,000	\$27,500	\$19,000	\$19,500	\$123,000