

1313 Sherman Street, Room 718 Denver, CO 80203

January 27, 2016

Eagle County Conservation District Attn: Audra Meyers, District Manager P.O. Box 360 Eagle, CO 81631

#### RE: NOTICE TO PROCEED - WSRA GRANT – POGG1 2016-673 IRRIGATION ASSET IRRIGATION ASSET INVENTORY PROGRAM

Dear Audra,

This letter is to inform you that the purchase order to assist in the above WSRA grant project was approved on January 27, 2016.

With the executed PO, you are now able to proceed with the project and invoice the State of Colorado for costs incurred through January 31, 2017 according to the schedule in Exhibit A.

Please provide the project name, contract number, and basin when corresponding with or invoicing the State of Colorado 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 by the project manager. I wish you much success in your project.

If you have any questions or concerns regarding the project, please contact me. You can contact Dori Vigil at 303-866-3441 ext. 3250 for invoicing and payment disbursement questions.

Sincerely,

//s//

Brent Newman Program Manager Water Supply Planning Section O 303.866.3441 x3222 | C 303.681.8420 1313 Sherman Street, Suite 723, Denver, CO 80203 Brent.newman@state.co.us www.cwcb.state.co.us www.coloradowaterplan.com

Attachments





# STATE OF COLORADO Department of Natural Resources

ORDER   Number: POGG1 PDAA 2016000000000000673   Date: 01/27/16	** IMPORTANT ** The order number and line number must appear on all invoices, packing slips, cartons and correspondence							
Description:	BILL TO							
PDAA 2500 WSRA IRRIGATION ASSET INVENTORY								
PRO CO BASIN	1313 SHERMAN STREET, ROOM 718							
Effective Date: 01/27/16 Expiration Date: 01/31/17	DENVER, CO 80203							
BUYER	SHIP TO							
Buyer:	COLORADO WATER BOARD CONSERVATION							
Email:	1313 SHERMAN STREET, ROOM 718							
VENDOR	DENVER, CO 80203							
EAGLE COUNTY CONSERVATION DISTRICT	SHIPPING INSTRUCTIONS							
PO BOX 360	Delivery/Install Date:							
EAGLE, CO 81631	F.O.B:							
Contact: .	VENDOR INSTRUCTIONS:							
Phone: .								
Line Item Commodity/Item Code UOM QTY	Unit Cost Total Cost MSDS Req.							
1 G1000 0	0.00 \$54,300.00							
Description: PDAA 2500 WSRA IRRIGATION ASSET I	NVENTORY PRO CO BASIN							
Service From: 01/27/16 Service To: 01/31/17								
TERMS AND CONDITIONS								
https://www.colorado.gov/osc/purchase-order-terms-conditions								
DOCUMENT TOTAL = \$54,300.00								

**WATER ACTIVITY NAME** – Eagle County Conservation District Irrigation Asset Inventory Program

# **GRANT RECIPIENT** – Eagle County Conservation District (ECCD)

FUNDING SOURCE - Eagle County Conservation District, Colorado Basin Roundtable

# **INTRODUCTION AND BACKGROUND -**

Currently, the Natural Resources Conservation Service (NRCS) provides technical assistance to the member soil conservation districts for agricultural infrastructure improvements, including the ECCD. These services are typically provided on an as-needed basis and most often are the result of an emergency (flooding, blow out, structural failures, etc.). The ECCD identified a need to understand the condition of the existing agricultural infrastructure in an effort to offer necessary improvements before emergency situations (failure) occur. This project proposes to develop a program to assess the condition of the agricultural infrastructure within the ECCD's boundaries, ultimately assigning a "conditional ranking" to irrigation system infrastructure to assist with the prioritization of improvements and funding needs. The Irrigation Asset Inventory Program was included in the Colorado River Basin Implementation Plan as a top regional project to support agriculture in the Eagle River and State Bridge regions both of which are covered by the ECCD.

The inventory and assessment process will evaluate all ditch related structures from the diversion structure to the last lateral. The inventory will photo document the existing condition of the structures along with a brief editorial summary and condition assessment. Ditch system structures to be evaluated include: diversion structure, headgate and wingwalls, return headgate and ditch, measuring structure, ditch condition throughout length of ditch, culverts, and lateral headgates as available. Environmental (non-consumptive) attributes will also be documented near the diversion structure and as identified by the ditch owner. Environmental attributes to be identified include riparian areas and condition, fish habitat and barriers, erosive prone areas, dechannelized flows.

The agricultural community is concerned about the privacy of their ditch infrastructure and operational information. The ECCD feels they have the support they need to successfully accomplish this mission within the geographical diversity of the ECCD and current good relations with community agricultural owners regardless of this concern. However, it is pivotal that assurances be given to ensure that specific ditch information is kept only with the ECCD and consultant within the realms possible with State funding. Without privacy assurances the program is likely to fail to get the support needed to be successful. It is the goal of the ECCD to provide ditch specific information only to each respective ditch owner while pursuing regional partners for ditch projects only with the permission of the ditch owners. The ECCD board members unanimously support this project and have committed to advocating and exemplifying the project process.

The following provides a summary of the tasks identified to implement this project, including the respective deliverables.

## **TASK 1 – Project Planning & Coordination**

#### Description of Task

Develop and publish program marketing material to the agricultural community within the ECCD boundaries to obtain input, buy-in and participation in the program. Three public meetings will be held to promote the project and answer questions from participants and community members.

The ECCD and consultant will work to identify the areas where there are irrigation systems of concern. SGM will coordinate with irrigation system owner(s) to obtain access and as available a tour with the system operators. Field staff will work with irrigation system owners to develop as much mapping as possible using available online information from aerial photography, county, and Colorado Decision Support System data to identify existing system issues, ditch alignments, headgate locations and other system features.

ECCD and consultant will develop a set of project ranking criteria to be used in determining data collection fields. Data collection fields, terms and definitions will be coordinated with the ECCD to allow for thorough and efficient data collection and prioritization of needed projects. Data management techniques and process will be developed and agreed upon by the ECCD and partnering organizations. Training of field staff for consistency and proper evaluation of irrigation system components will also be necessary.

## Deliverables

- Project Coordination
- Three (3) public information meetings with ECCD regional ditch owners
- ECCD and consultant to identify specific regions for program initial inventories
- ECCD and consultant to develop list of attributes and ranking criteria for inventories (develop data dictionary)
- Hire seasonal staff and train to conduct program inventories

## **TASK 2 – Interviews and Inventories**

## Description of Task

Coordinate and collect field data including staff visit to project area to interview owners and/or operators, GPS and document irrigation system and nearby river system conditions. There will be approximately twenty five (25) irrigation systems and surrounding river/stream systems inventoried.

Ditch owners and operators will be initially interviewed to discuss ditch concerns, needs and particular operations important to the ditch. Interviews will be documented and summarized for the Ditch Summary Report to record the institutional knowledge of the ditch operations for future ditch operators.

Field data will include, at a minimum, the following information: Location and condition ("1" – no concerns; "2" – minor structure issues; "3" – major structure concerns); ditch structures (dimensions, material, type, shape); stream conditions (erosion conditions, vegetation, channelized flow, fish habitat, fish barriers) above and below diversion structures and headgates.

# **Deliverables**

• Interview and inventory 25 ditch owners and correlating ditch systems

# TASK 3 – Data Processing & Mapping

# Description of Task

Develop a basemap that includes the alignments and locations of ECCD irrigation and stream systems along with the identified projects to be prioritized. The database will allow for easy and consistent ranking of projects through the developed ranking criteria. The resulting ECCD basemap and associated database will be used by the ECCD as an operations map for prioritizing district funding and projects.

# Deliverables

- Map of surveyed ditches for ECCD use and presentation to Colorado Basin Roundtable
- Ditch specific maps for use only in Ditch Summary Reports
- Digitized ditch structure inventories, potential projects and non-consumptive partnering opportunities
- Prioritization of top ditch projects from ditch owners interview and inventory

# **TASK 4 – Project Prioritization & Ditch Reports**

## Description of Task

Identify top concerns for ECCD staff to address. Project ranking criteria will be applied to the data to identify a list of needs. Additional reports will be developed to highlight each of the irrigation systems and stream systems where data was collected. These reports will be developed for ECCD and irrigation system owner(s) reference to address future problems or planning and designing needs.

## Deliverables

- Ditch Summary Reports provided to each of the participating ditch owners
- Top ECCD prioritized projects
- Identification of multi-beneficial project components within top ECCD prioritized project list
- Identification of potential regional partners

## **BUDGET** -

The prepared budget for the program is outlined below. The total program budget is \$65,500 of which ECCD has provided matching funds of \$5,000 and a minimum of 150 hours of in-kind services valued at \$3,000. Additionally, the NRCS has committed to providing 40 hours of program oversight and engineering valued at \$3,200. The total committed matching funds are \$11,200 or approximately 17.1% of the total budget. The total amount requested to be cover by the Colorado Basin Round Table Account is \$54,300. See Attachment A for detailed budget.

Total Costs								
Budget Item Description	Labor	Other Direct Costs	Matching Funds (If Applicable)	Total Project Costs				
Task 1 – Project Planning & Coordination	290		\$5,000	\$21,565				
Task 2 – Interviews & Inventories	250	\$6,790		\$25,025				
Task 3 – Data Processing & Mapping	155			\$11,725				
Task 4 – Project Prioritization & Ditch Reports	90			\$7,185				
In-Kind Contributions			\$6,200					
Total Costs:	785	\$6,790	\$11,200	\$65,500				

#### **SCHEDULE**

The proposed project schedule for each task and the completion dates or time period from the Notice to Proceed (NTP) is provided below. The program is expected to take 10-12 months from NTP.

Estimated Project Schedule December 2015 - November 2016		2016	- 2016	1 2016	2016	2016	2017
Tasks	Nov-Dec	Jan-Feb	Mar-Apr	May-Jun	Jul-Aug	Sep-Oct	Dec-Jan
Task 1 - Project Planning & Coordination	Х	Х	Х	Х			
Task 2 – Interviews & Inventories				Х	Х	Х	
Task 3 - Data Processing & Mapping				Х	Х	Х	
Task 4 - Project Prioritization & Ditch Reports						х	Х

	QA/QC - Senior	Senior	Project Manager/	GIS	Design	NRCS	ECCD	Labor	Direct Costs	
Labor Classification	Engineer II	Engineer I	Engineer II	Analyst	Technician	Engineers	Board	Hours	(Equip/Travel)	Total Cost
Rates	\$ 165.00	\$ 135.00	\$ 110.00	\$110.00	\$ 75.00	\$ 80.00	\$20.00			
Task 1 - Project Planning & Coordination		20	59	25	91	15	80	290		\$ 21,565
Task 2 - Field Data Collection		6	15	20	149	20	40	250	\$ 6,790	\$ 25,025
Task 3 - Data Processing & Mapping		5	16	9	100	5	20	130		\$ 11,725
Task 4 - Project Prioritization and Ditch Reports	2	7	11		60		10	80		\$ 7,185
Project Totals	2	38	101	54	400	40	150	750		\$ 65,500

Attachment A