



COLORADO

**Colorado Water
Conservation Board**

Department of Natural Resources

1313 Sherman Street, Room 718
Denver, CO 80203

April 21, 2016

Purgatoire River Water Conservancy District
Mr. Jeris Danielson, Manager
314 West Main Street
Trinidad, CO 81082

RE: Notice to Proceed – WSRA Grant – **POGG1 2016-774** - Ditch Infrastructure Repair Project in
the Arkansas River Basin

Dear Jeris,

This letter is to inform you that the purchase order (PO) to assist in the above WSRA grant project was approved on April 21, 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 May 31, 2017. An additional 30 days has been added to the PO end date for final bill purposes. 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 **60 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 Derek Johnson, Project Manager at 303-866-3441 x3254 or at derek.johnson@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: Attachments





STATE OF COLORADO
Department of Natural Resources

ORDER		** IMPORTANT **				
Number: POGG1 PDAA 20160000000000000774		The order number and line number must appear on all invoices, packing slips, cartons and correspondence				
Date: 03/17/16						
Description: WSRA GRANT PDAA 2500 Purgatorie Water Conservancy District		BILL TO COLORADO WATER BOARD CONSERVATION 1313 SHERMAN STREET, ROOM 718 DENVER, CO 80203				
Effective Date: 05/01/16 Expiration Date: 05/31/17						
BUYER		SHIP TO				
Buyer:		COLORADO WATER BOARD CONSERVATION				
Email:		1313 SHERMAN STREET, ROOM 718 DENVER, CO 80203				
VENDOR		SHIPPING INSTRUCTIONS				
PURGATOIRE RIVER WTR CONSRVNCY DIST 314 W MAIN ST TRINIDAD, CO 81082-2622		Delivery/Install Date:				
Contact: .		F.O.B: FOB Dest, Freight Allowed				
Phone: 7198467285		VENDOR INSTRUCTIONS:				
Line Item	Commodity/Item Code	UOM	QTY	Unit Cost	Total Cost	MSDS Req.
1	G1000		0	0.00	\$30,000.00	<input type="checkbox"/>
Description: WSRA GRANT PDAA 2500 Purgatorie Water Conservancy District						
Service From: 05/01/16 Service To: 05/31/17						
Line Item	Commodity/Item Code	UOM	QTY	Unit Cost	Total Cost	MSDS Req.
2	G1000		0	0.00	\$60,000.00	<input type="checkbox"/>
Description: WSRA GRANT PDAA 2500 Purgatorie Water Conservancy District						
Service From: 05/01/16 Service To: 05/31/17						
TERMS AND CONDITIONS						
https://www.colorado.gov/osc/purchase-order-terms-conditions						
DOCUMENT TOTAL = \$90,000.00						

Exhibit A
Statement of Work

WATER ACTIVITY NAME – Ditch Infrastructure Repair Project

GRANT RECIPIENT – Purgatoire River Water Conservancy District

FUNDING SOURCE - WSRA Basin and Statewide Grant Funds

INTRODUCTION AND BACKGROUND

Provide a brief description of the project. (Please limit to **no more than 200 words**; this will be used to inform reviewers and the public about your proposal)

This project encompasses several irrigation canal infrastructure repair projects located in the Purgatoire River Conservancy District (PRWCD). They are all located in Las Animas County, one of the poorest counties in the State of Colorado. None of the small ditch companies represented by these projects have the funds available to complete the necessary repairs that will ensure compact compliance and prevent water losses that have gradually grown to a critical mass. PRWCD pays the Bureau of Reclamation annual fees based on amount of water diverted. An estimated 10% of water that could be diverted may be lost each year; an average of 5,000 acre-feet per year. The projects address crumbling infrastructure and stream bank erosion. Safety and flooding issues are addressed as well. Water conservation and increased efficiency will result, and approximately 1,000 linear feet of Purgatoire River bank erosion will be restored.

OBJECTIVES

Multiple objectives are met by completing these projects, including:

- Aging Infrastructure Replaced – as listed in the Basin Implementation Plan IPPs
- Conservation/Efficiency - water savings averaging 5,000 acre-feet in an average year
- River Restoration - 1,000 linear feet of Purgatoire River bank restored
- Watershed Health - flood mitigation and prevention
- Compact Compliance – accuracy of measurement, water loss prevention
- Safety – degraded infrastructure has created dangerous operational issues

TASKS

Provide a detailed description of each task using the following format

TASK 1 – PICKETWIRE DITCH HEADGATE

Description of Task

Debris from upstream is lodging against the headgate and in the opening. There is no safe way to clean out the debris. This project will resolve safety issues, improve maintenance access, reduce debris collection and erosion, and improve water control.

Method/Procedure

- Surface mount ladders will be installed leading down to the headgates.
- A trash rack will be installed to divert and reduce debris collection.

- A catwalk will be installed on the trash rack to improve safety and maintenance access.
- A concrete wall will be installed along the railroad rail to control erosion and limit debris accumulation.
- A concrete floor will be installed ahead of the gate structure to control erosion and stabilize the outlet works.
- New gate seals will be installed to improve water control.
- Fencing, access gates, handrails, catwalks, and signage will be constructed to improve safety and decrease public access.

Deliverable

The completed project will be documented with photographs and a written report.

TASK 2 – CHILILI DITCH

Description of Task

The Chilili Ditch is a small ditch, seven miles long, with a diversion right of 7.0 cfs. The ditch has degraded over the years, occasionally preventing the flow of water to reach its end destination. Obstacles include overgrowth of trees and willows, variation of ditch depth and width, leaky pipes and culverts. There is a reach approximately 700-feet long where the ditch lies in a very narrow location between a bluff and highway on one side and train tracks on the other. Runoff and flooding problems are exacerbated by very limited accessibility. This project will repair the ditch, and prevent flooding.

Method/Procedure

- A 450-foot length of piping will be replaced and extended another 300 feet.
- New debris screens will be installed on the culverts.

Deliverable

The completed project will be documented with photographs and a written report.

TASK 3 – BACA DITCH SIPHON

Description of Task

The Powell Arroyo Ditch Siphon delivers water to the headgates of three ditch companies. Previous erosion control measures have deteriorated and begun to fail. This project will provide erosion protection for the sluice/siphon in the form of rip rap and concrete.

Method/Procedure

- Existing rip rap will be re-installed and grouted with concrete.

Deliverable

The completed project will be documented with photographs and a written report.

TASKS 4/5 – ENLARGED SOUTHSIDE IRRIGATION DITCH REPAIRS

Description of Task

The Purgatoire River has eroded the bank beyond the wing wall of the diversion structure. The erosion is working its way back to the Southside Ditch and threatens loss of the Ditch embankment. In addition, the ditch takes a sharp turn to cross under railroad tracks, causing erosion and debris to accumulate on

the outside of the bend. This project will repair river bank erosion and erosion that threatens the railroad bank and culvert entrances.

Method/Procedure

- Sediment will be removed and used to backfill the eroded area.
- The eroded area will then be armored with rock riprap.
- A concrete floor, headwall and wingwalls will be installed at four culverts that pass under railroad tracks.

Deliverable

The completed project will be documented with photographs and a written report.

TASK 6 – EL MORO HEADGATE

Description of Task

The headgate does not completely shut off the water. This project will correct the issue.

Method/Procedure

- Gate seals will be replaced.

Deliverable

The completed project will be documented with photographs and a written report.

TASKS 7/8 – NEW JOHN FLOOD DITCH

Description of Task

A metal flume crosses the Lietzendorfer Arroyo. Supports are in good condition, but the flume has rusted and is leaking. At the headgate, the diversion cannot be shut off completely. This project will repair the flume and headgate operator.

Method/Procedure

- Flume will be relined with metal.
- Concrete wall and railing will be rebuilt at headgate, so that the gate can be screwed down to successfully shut off the diversion.

Deliverable

The completed project will be documented with photographs and a written report.

REPORTING AND FINAL DELIVERABLE

Reporting

The Applicants shall provide the CWCB a final progress report. The progress report shall describe the completion 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 those issues.

Final Deliverable

At completion of the Project, the applicant shall provide the CWCB an opportunity for a site visit and, if appropriate, a meeting with interested agencies. The final report will include “before and after” photographs and a summary of the construction and project management activities.

BUDGET

Provide a detailed budget by task including number of hours and rates for labor and unit costs for other direct costs (i.e. mileage, \$/unit of material for construction, etc.).

Anticipated budget tables for the Project are provided below. These tasks correspond to those identified above.

Purgatoire Ditch Infrastructure Repair Project	Cash (or Loan)	In-kind	Total
Purgatoire River Water Conservancy District	\$100,000	-	\$100,000
Picketwire Ditch Company	\$4,640	-	\$4,640
Enlarged Southside Irrigation Ditch Co.	\$13,420	-	\$13,420
Chilili Ditch Company	\$7,870	-	\$7,870
Baca Ditch Company	\$2,350	-	\$2,350
New John Flood Ditch Co.	\$4,030	-	\$4,030
El Moro - Hoehne Pipeline Assoc. Ditch	\$190	-	\$190
Sub-total matching funds	\$132,500	\$0	\$132,500
Arkansas Basin Account	\$30,000	-	\$30,000
WSRA Statewide Account	\$60,000	-	\$60,000
Total*	\$222,500	\$0	\$222,500
*Project budget detail below			

Purgatoire River Water Conservancy District - Ditch Infrastructure Repair Project
Engineer's Estimate of Probable Costs

TASK	USE OF FUNDS	UNITS	QUANTITY	UNIT COST	AMOUNT
1	PICKETWIRE DITCH HEADGATE				
	Water diversion and dewatering	LS	1.0	\$ 1,500	\$ 1,500.00
	Excavation and preparatory work	LS	1.0	\$ 500	\$ 500.00
	Railroad rail grid tie backs	EA	5.0	\$ 150.00	\$ 750.00
	Riprap/Grid infill grout	CY	8.0	\$ 125.00	\$ 1,000.00
	Concrete wall on north side upstream of gates	CY	6.2	\$ 450.00	\$ 2,790.00
	Ladder rungs	EA	8.0	\$ 39.00	\$ 312.00
	Inlet sill slab on grade	CY	7.4	\$ 200.00	\$ 1,480.00
	Catwalk and Trash Deflector framing	LB	1,266.2	\$ 3.25	\$ 4,115.15
	Catwalk deck	LB	306.0	\$ 2.50	\$ 765.00
	2-Rail handrails	LF	100.0	\$ 66.30	\$ 6,630.00
	3-Rail handrails	LF	20.0	\$ 87.25	\$ 1,745.00
	Timber lagging (4x12)	BF	240.0	\$ 2.55	\$ 612.00
	Miscellaneous-anchors, steel, fabrications, etc.	LS	1.0	\$ 500.00	\$ 500.00
	New gate seals	EA	2.0	\$ 1,000.00	\$ 2,000.00
	Surface mount metal ladder	EA	1.0	\$ 300.00	\$ 300.00
			SUB TOTAL		\$ 25,000.00
2	CHILILI DITCH				
	Remove deteriorated culvert and prep trench	LF	450.0	\$ 4.00	\$ 1,800.00
	Haul off debris	CY	270.0	\$ 7.00	\$ 1,890.00
	Excavate and reshape existing ditch for new culvert	LF	300.0	\$ 3.00	\$ 900.00
	Furnish and install 24" diameter HDPE pipe	LF	750.0	\$ 41.25	\$ 30,937.50
	Furnish and deliver backfill material	CY	535.0	\$ 6.00	\$ 3,210.00
	Backfill and compact trench	CY	535.0	\$ 6.25	\$ 3,343.75
	Trash screen	EA	1.0	\$ 300.00	\$ 300.00
			SUB TOTAL		\$ 42,380.00
3	BACA DITCH SIPHON PROTECTION				
	Preparatory work	LS	1.0	\$ 1,000.00	\$ 1,000.00
	Furnish and deliver rock riprap	T	167.0	\$ 30.00	\$ 5,010.00
	Place rock riprap	CY	93.0	\$ 36.50	\$ 3,394.50
	Furnish and pour concrete grout	CY	18.6	\$ 175.00	\$ 3,255.00
			SUB TOTAL		\$ 12,660.00
4	ENLARGED SOUTHSIDE IRRIGATION DITCH DIVERSION EROSION REPAIR & DEBRIS REMOVAL				
	Improve road in and re-route River flows	LS	1.0	\$ 3,000.00	\$ 3,000.00
	Excavate sediment deposit	CY	267.0	\$ 3.00	\$ 801.00
	Place and compact excavated material	CY	267.0	\$ 4.00	\$ 1,068.00
	Furnish and deliver rock riprap	T	500.0	\$ 30.00	\$ 15,000.00
	Place rock riprap	CY	280.0	\$ 36.50	\$ 10,220.00
	Site restoration	LS	1.0	\$ 1,000.00	\$ 1,000.00
			SUB TOTAL		\$ 31,090.00

TASK	USE OF FUNDS	UNITS	QUANTITY	UNIT COST	AMOUNT
5	ENLARGED SOUTHSIDE IRRIGATION DITCH RAILROAD CROSSING				
	Improve road to site	SY	2,400.0	\$ 1.70	\$ 4,080.00
	Excavate, clean and prep around culverts	LS	1.0	\$ 5,600.00	\$ 5,600.00
	Reinforced conc. retaining wall headwall & wing walls	CY	42.0	\$ 650.00	\$ 27,300.00
	Inlet sill slab on grade	CY	12.0	\$ 275.00	\$ 3,300.00
	Backfill and compaction	CY	76.0	\$ 12.00	\$ 912.00
			SUB TOTAL		\$ 41,190.00
6	EL MORO - HOEHNE PIPELINE ASSOC. HEADGATE				
	Remove division plate	LS	1.0	\$ 100.00	\$ 100.00
	Remove and repair gate and reset	LS	1.0	\$ 750.00	\$ 750.00
	Replace and reset division plate	LS	1.0	\$ 150.00	\$ 150.00
			SUB TOTAL		\$ 1,000.00
7	NEW JOHN FLOOD DITCH HEADGATE				
	Demolition	LS	1.0	\$ 300.00	\$ 300.00
	Excavation and prepare site	LS	1.0	\$ 500.00	\$ 500.00
	Reinforced concrete retaining wall headwall	CY	5.1	\$ 450.00	\$ 2,295.00
	Canal invert concrete slab on grade	CY	0.9	\$ 275.00	\$ 247.50
	Ground surface/operator concrete slab on grade	CY	1.8	\$ 275.00	\$ 495.00
	Ladder rungs	EA	6.0	\$ 39.00	\$ 234.00
	2-Rail handrails	LF	8.0	\$ 66.30	\$ 530.40
	Repair and remount operator	LS	1.0	\$ 1,200.00	\$ 1,200.00
			SUB TOTAL		\$ 5,800.00
8	NEW JOHN FLOOD DITCH LIETZENDORFER ARROYO FLUME				
	Furnish, shape and weld in 3/16-inch steel plating	SF	2,160.0	\$ 7.35	\$ 15,880.00
			SUB TOTAL		\$ 15,880.00
	SUB TOTAL OF ESTIMATED CONSTRUCTION COSTS				\$ 175,000.00
	Other Costs				
	Contingency @ 10%				\$ 17,500.00
	Engineering				\$ 30,000.00
	TOTAL ESTIMATE FOR DITCH INFRASTRUCTURE REPAIR PROJECT				\$ 222,500.00

SCHEDULE **

Provide a project schedule including key milestones for each task and the completion dates or time period from the Notice to Proceed (NTP). This dating method allows flexibility in the event of potential delays from the procurement process. Sample schedules are provided below. Please note that these schedules are examples and will need to be adapted to fit each individual application.

Task	Timeline	Start Date	Finish Date
1	Picketwire Ditch Headgate	Upon NTP	NTP + 365 Days
2	Chilili Ditch	Upon NTP	NTP + 365 Days
3	Baca Ditch Siphon Protection	Upon NTP	NTP + 365 Days
4	Enlarged Southside Irrigation Ditch Diversion Erosion Repair and Debris Removal	Upon NTP	NTP + 365 Days
5	Enlarged Southside Irrigation Ditch Railroad Crossing	Upon NTP	NTP + 365 Days
6	El Moro Headgate	Upon NTP	NTP + 365 Days
7	New John Flood Ditch Headgate	Upon NTP	NTP + 365 Days
8	New John Flood Ditch Lietzendorfer Arroyo Flume	Upon NTP	NTP + 365 Days

** Work will be performed after irrigation season has passed; Fall and Winter 2016/2017.

PAYMENT

Payment will be made based on actual expenditures and invoicing by the applicant. Invoices from any other entity (i.e. subcontractors) cannot be processed by the State. The request for payment must include a description of the work accomplished by major task, and estimate of the percent completion for individual tasks and the entire water activity in relation to the percentage of budget spent, identification of any major issues and proposed or implemented corrective actions. The last 5 percent of the entire water activity budget will be withheld until final project/water activity documentation is completed. All products, data and information developed as a result of this grant must be provided to the CWCB in hard copy and electronic format as part of the project documentation. This information will in turn be made widely available to Basin Roundtables and the general public and help promote the development of a common technical platform.

Appendix 2

Insurance Requirements

NOTE: The following insurance requirements taken from the standard contract apply to WSRA projects that exceed \$25,000 in accordance with the policies of the State Controller's Office. Proof of insurance as stated below is necessary prior to the execution of a contract.

13. INSURANCE

Grantee and its Sub-grantees shall obtain and maintain insurance as specified in this section at all times during the term of this Grant: All policies evidencing the insurance coverage required hereunder shall be issued by insurance companies satisfactory to Grantee and the State.

A. Grantee

i. Public Entities

If Grantee is a "public entity" within the meaning of the Colorado Governmental Immunity Act, CRS §24-10-101, et seq., as amended (the "GIA"), then Grantee shall maintain at all times during the term of this Grant such liability insurance, by commercial policy or self-insurance, as is necessary to meet its liabilities under the GIA. Grantee shall show proof of such insurance satisfactory to the State, if requested by the State. Grantee shall require each Grant with Sub-grantees that are public entities, providing Goods or Services hereunder, to include the insurance requirements necessary to meet Sub-grantee's liabilities under the GIA.

ii. Non-Public Entities

If Grantee is not a "public entity" within the meaning of the GIA, Grantee shall obtain and maintain during the term of this Grant insurance coverage and policies meeting the same requirements set forth in **§13(B)** with respect to sub-Grantees that are not "public entities".

B. Sub-Grantees

Grantee shall require each Grant with Sub-grantees, other than those that are public entities, providing Goods or Services in connection with this Grant, to include insurance requirements substantially similar to the following:

i. Worker's Compensation

Worker's Compensation Insurance as required by State statute, and Employer's Liability Insurance covering all of Grantee and Sub-grantee employees acting within the course and scope of their employment.

ii. General Liability

Commercial General Liability Insurance written on ISO occurrence form CG 00 01 10/93 or equivalent, covering premises operations, fire damage, independent Grantees, products and completed operations, blanket Grantual liability, personal injury, and advertising liability with minimum limits as follows: **(a)** \$1,000,000 each occurrence; **(b)** \$1,000,000 general aggregate; **(c)** \$1,000,000 products and completed operations aggregate; and **(d)** \$50,000 any one fire. If any aggregate limit is reduced below \$1,000,000 because of claims made or paid, Sub-grantee shall immediately obtain additional insurance to restore the full aggregate limit and furnish to Grantee a certificate or other document satisfactory to Grantee showing compliance with this provision.

iii. Automobile Liability

Automobile Liability Insurance covering any auto (including owned, hired and non-owned autos) with a minimum limit of \$1,000,000 each accident combined single limit.

iv. Additional Insured

Grantee and the State shall be named as additional insured on the Commercial General Liability and Automobile Liability Insurance policies (leases and construction Grants require additional insured coverage for completed operations on endorsements CG 2010 11/85, CG 2037, or equivalent).

v. Primacy of Coverage

Coverage required of Grantee and Sub-grantees shall be primary over any insurance or self-insurance program carried by Grantee or the State.

vi. Cancellation

The above insurance policies shall include provisions preventing cancellation or non-renewal without at least 45 days prior notice to the Grantee and the State by certified mail.

vii. Subrogation Waiver

All insurance policies in any way related to this Grant and secured and maintained by Grantee or its Sub-grantees as required herein shall include clauses stating that each carrier shall waive all rights of recovery, under subrogation or otherwise, against Grantee or the State, its agencies, institutions, organizations, officers, agents, employees, and volunteers.

C. Certificates

Grantee and all Sub-grantees shall provide certificates showing insurance coverage required hereunder to the State within seven business days of the Effective Date of this Grant. No later than 15 days prior to the expiration date of any such coverage, Grantee and each Sub-grantee shall deliver to the State or Grantee certificates of insurance evidencing renewals thereof. In addition, upon request by the State at any other time during the term of this Grant or any sub-grant, Grantee and each Sub-grantee shall, within 10 days of such request, supply to the State evidence satisfactory to the State of compliance with the provisions of this **§13**.

Appendix 3

Water Supply Reserve Account Standard Contract Information

NOTE: The standard contract is required for WSRA projects that exceed \$100,000. (Projects under this amount will normally be funded through a purchase order process.) Applicants are encouraged to review the standard contract to understand the terms and conditions required by the State in the event a WSRA grant is awarded. Significant changes to the standard contract require approval of the State Controller's Office and often prolong the contracting process.

It should also be noted that grant funds to be used for the purchase of real property (e.g. water rights, land, conservation easements, etc.) will require additional review and approval. In such cases applicants should expect the grant contracting process to take approximately 3 to 6 months from the date of CWCB approval.

The standard contract is available here under the header "Additional Resources" on the right side:

<http://cwcb.state.co.us/LoansGrants/water-supply-reserve-account-grants/Pages/BasinWaterSupplyReserveAccountGrants.aspx>

Appendix 4

W-9 Form

NOTE: A completed W-9 form is required for all WSRA projects prior execution of a contract or purchase order. Please submit this form with the completed application.