# Water Supply Reserve Account – Grant and Loan Program Water Activity Summary Sheet

### **Request for Change of Fiscal Agent**

September 21-22, 2016 Agenda Item 19(t)

**Current Applicant & Fiscal Agent:** Purgatoire River Water Conservancy District

**Proposed Fiscal Agent:** Huerfano County Water Conservancy District

Water Activity Name: Ditch Infrastructure Repair Project

Water Activity Purpose: Agricultural

**County:** Las Animas

**Drainage Basin:** Arkansas

Water Source: Purgatoire River

Amount Requested/Source of Funds: \$30,000 Arkansas Basin Account

\$60,000 Statewide Account \$90,000 Total Grant Request

**Matching Funds:** Basin Account Match (\$30,000) = 33% of total grant

request (meets 5% min);

Applicant/ $3^{rd}$  Party Match (\$132,500) = 147% of total

grant request (meets 25% min);

Basin Account & Applicant Match (\$162,500) = 180% of

total grant amount

(refer to Funding Summary/Matching Funds section)

#### **Staff Recommendation:**

Staff recommends approval of in Change of Fiscal Agent from Purgatoire River Water Conservancy District to the Huerfano County Water Conservancy District for the project titled: Ditch Infrastructure Repair Project.

**Water Activity Summary:** WSRA funds, if approved, will be expended to perform critical repairs needed throughout the irrigation system downstream from Trinidad Dam. Each of the individual ditch companies completed its own assessment of needs, which the District compiled into a master project list, comprising eight components:

#### 1. Picketwire Ditch - Headgate

Debris carried down the Purgatoire River lodges against this headgate, interfering with and blocking its opening. There is currently no safe way for the superintendent to clean this out, other than to hang on the rail revetments and clear debris by hand.

The solution at this location will include:

- Improve safety by installing surface mount ladders down to the headgates
- Reduce debris collection by installing a trash rack to divert large floatables coming down the Purgatoire River

- Improve safety and maintenance access by building a catwalk on the trash rack
- Control erosion and limit debris lodging by installing a concrete wall along the railroad rail and riprap revetment
- Control erosion and help stabilize the outlet works by installing a new concrete floor ahead of the gate structure
- Improve water control by installing new gate seals
- Improve safety and decrease public access by constructing fencing, two access gates, handrails, catwalks, and signage.

#### 2. Chilili Ditch – Ditch Piping

The Chilili Ditch is a senior ditch on the River, with a diversion right of 7 cfs. The ditch is seven miles long, approximately 60 percent running parallel to the BNSF Railroad tracks. There exists a reach, approximately 700-feet long, wherein the ditch is narrowly constrained between a bluff and the railroad tracks. The ditch receives highway runoff and runoff from the bluff, which causes it to overtop, resulting in damage to the ditch bank, and flooding and washing of debris onto the railroad tracks. The very limited accessibility exacerbates problems with repair and maintenance. Approximately 450-feet of the ditch was previously put into a metal pipe culvert, but has now deteriorated and failed at various locations.

The Project will replace approximately 450 feet of existing metal culvert, extending it an additional 300 feet to provide protection for the full reach where a breach could damage the railroad embankment. This improvement would provide the added benefit of reduced maintenance costs, and reduced water losses. Included in the construction will be the installation of new debris screens.

#### 3. Baca Ditch - Siphon Protection

The section of concern is an inverted siphon which carries water for the Baca, El Moro, and Picketwire Ditches under the Powell Arroyo drainage. Measures in place to control head cutting in the arroyo, consisting of railroad rails and rock-filled wire baskets, are deteriorating and allowing fines to wash through, and threaten the long term viability of the structure.

The planned approach for this repair is to buttress the existing revetment by constructing grouted rock riprap across the arroyo channel, providing energy dissipation as water flows over the top of the rocks.

4. Enlarged Southside Irrigation Ditch - Diversion Erosion Repair and Debris Removal At this location, the Purgatoire River has eroded the bank beyond the wing wall of the diversion structure, working its way back to the Southside Ditch and threatening the loss of the ditch embankment. Sediment continues to build up on the opposite side of the river, directing current toward the area, causing further erosion.

The plan of work for this area includes the removal of the area of built up sediment, using the excavated/dredged material to backfill the eroded area, followed by armoring the eroded area with rock riprap.

5. Enlarged Southside Irrigation Ditch - Railroad Crossing
At this location the ditch parallels the railroad tracks and then makes an abrupt turn to the right to cross under the railroad embankment via four 60-inch culverts. The abrupt change in

direction is causing erosion and debris accumulation on the outside of the bend, eroding the bank, railroad grade, and the entrance to the culverts.

The proposed work at this location is to construct a concrete headwall and wing walls for the culverts, including a concrete floor at the entrance to the culvert entrance. This chosen option carries the added benefit of improved flow and culvert hydraulics.

# 6. El Moro - Hoehne Pipeline Association – Headgate Repair The headgate at this location no longer functions correctly, failing to completely close water flow. It is believed that replacement of the gate seals will solve the problem.

#### 7. New John Flood Ditch – Headgate Replacement

At the headgate where the diversions are made from the Picketwire Ditch, the headgate diversion cannot be completely shut off because the gate operator moves upward as the gate is screwed down. This means that water is lost from the shareholders of the Picketwire Ditch without providing benefit to the New John Flood Ditch. The concrete headwalls and slab to which the slide gate and operator are attached are in such poor condition that it is no longer possible to set new or additional anchors. Therefore, replacement is the only option to restore the operation of this headgate structure.

#### 8. New John Flood Ditch - Lietzendorfer Arroyo Flume

A significant amount of water is being lost from an open channel flume, which conveys water across the Lietzendorfer Arroyo, from areas where the flume's metal plates have rusted out or welds have broken. The ditch company has been maintaining this structure over time by welding patches over holes as they develop, but due to deterioration of the base metal to where it is very thin, this is no longer a viable plan of maintenance. Since the flume's support structure is in good condition, it is not necessary to replace the entire structure. The plan is to weld new metal plate lining in-place over the existing lining.

**Discussion:** This project aligns with Goals and Measurable Outcomes described in the Arkansas Basin Implementation Plan. Projects related to this WSRA Grant are included in the Appendix 5.2-A Arkansas Basin Implementation Plan per the following table:

Arkansas Basin ID (ARK-2015-)	Project Title	Project Proponent	
0517	Trinidad Project Infrastructure Upgrade	Purgatoire River Water Conservancy District	
0520	Baca-Picketwire Headgate Improvement	Purgatoire Watershed Partnership	
0522	Chilili Ditch Diversion and Improvement	Chilili Ditch Co., Purgatoire Watershed Partnership	
0521	Powell Arroyo Siphon Protection Structure	Baca Ditch Co.	
0518	El Moro - Hoehne Pipeline Association Water Line Replacement	El Moro - Hoehne Pipeline Association	

This project also aligns with Colorado's Water Plan, *Section 10.3 – Critical Goals and Actions*, item D. - Agriculture, serving to maintain agricultural viability, and supporting agricultural conservation and efficiency.

**Issues/Additional Needs:** No issues or additional needs have been identified.

**Threshold and Evaluation Criteria:** The application meets all four Threshold Criteria.

**Tier 1-3 Evaluation Criteria:** This activity has been reviewed and evaluated and has staff determined that it satisfies the Evaluation Criteria. Please refer to the WSRA Application for applicant's detailed response.

#### **Funding Summary/Matching Funds:**

Funding Source	<u>Cash</u>	<u>In-kind</u>	<b>Total</b>
Purgatoire River Water Conservancy	\$100,000	\$0	\$100,000
District	Ψ100,000	ΨΟ	Ψ100,000
Picketwire Ditch Company	\$4,640	\$0	\$4,640
Enlarged Southside Irrigation Ditch Co.	\$13,420	\$0	\$13,420
Chilili Ditch Company	\$7,870	\$0	\$7,870
Baca Ditch Company	\$2,350	\$0	\$2,350
New John Flood Ditch Co.	\$4,030	\$0	\$4,030
El Moro - Hoehne Pipeline Association	\$190	\$0	\$190
Sub-total matching funds	\$132,500	\$0	\$132,500
WSRA Arkansas Basin Account	\$30,000	n/a	\$30,000
WSRA Statewide Account	\$60,000	n/a	\$60,000
Total Project Costs	\$222,500	<b>\$0</b>	\$222,500

The applicant has provided a Basin Roundtable Letter indicating recommendation of the Basin and Statewide grant amounts. It should be duly noted that the applicant's required cash matching should be \$132,500, not \$121,500 as stated in the Basin Roundtable Letter.

#### **CWCB Project Manager:** Derek Johnson

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 will help promote the development of a common technical platform. In accordance with the revised WSRA Criteria and Guidelines, staff would like to highlight additional reporting and final deliverable requirements. The specific requirements are provided below.

**Reporting:** The applicant shall provide the CWCB a progress report every 6 months, beginning from the date of the executed contract. The progress report shall describe the completion or partial completion of the tasks identified in the scope of work including a description of any major issues that have occurred, any corrective action taken to address these issues, and copies of construction progress meeting minutes.

**Final Deliverable:** At completion of the project, the applicant shall provide the CWCB a final report that summarizes the project and documents how the project was completed. This report shall contain photographs, summaries of meetings, and engineering reports/designs.

**Engineering:** All engineering work (as defined in the Engineers Practice Act (§12-25-102(10) C.R.S.)) performed under this grant shall be performed by or under the responsible charge of professional engineer licensed by the State of Colorado to practice Engineering.

#### ARKANSAS BASIN ROUNDTABLE

August 10, 2016

Craig Godbout
Program Manager
Colorado Water Conservation Board
Water Supply Planning Section
1313 Sherman Street, Suite 718
Denver CO 80203

Re:

WSRA grant - POGG1 2016-774 - PRWCD - Ditch Infrastructure Repair Project in the Arkansas

River Basin

Dear Craig

At today's regular meeting the Roundtable, pursuant to a request from the Purgatoire River Water Conservancy District (PRWCD), acted unanimously to recommend that the fiscal agent for the captioned grant be changed to the Huerfano County Water Conservancy District (HCWCD) and that, within the existing budget, \$3,000 be allocated to administration.

Consequently, the Roundtable respectfully requests that CWCB at its next meeting, September, 2016, approve a change of fiscal agent for this grant contract from PRWCD to HCWCD and adjust the budget.

From the discussion at the Roundtable and before its Executive Committee, you know that this project is in furtherance of the Colorado Water Plan and that project construction is to begin in November. As a result, the Roundtable would appreciate deliberate speed in making this change.

As the Roundtable's Vice Chairman, I am providing this approval letter to avoid even the appearance of a conflict of interest since our Chair, Sandy White, is also Chair of the proposed new fiscal agent.

Sincerely,

Terry R. Book

Vice Chair

Copy via email:

PRWCD HCWCD

**ABRT Executive Committee** 

#### PURGATOIRE RIVER WATER CONSERVANCY DISTRICT

3590 EAST MAIN STREET, SUITE 3 TRINIDAD, COLORADO 81082

(719) 846-7285

August 18, 2016

Mr. Sandy White Chairman Huerfano County Water Conservancy District P.O. Box 442 La Veta, CO 81055

Re: Purgatoire River Water Conservancy District request that the Huerfano County Water Conservancy District serve as its fiscal agent

Dear Sandy,

The Purgatoire River Water Conservancy District (PRWCD) voted, on August 16, 2016, to request that the Huerfano River Water Conservancy District (HCWCD) serve as its fiscal agent for purposes of administering funds associated with Colorado Water Conservation Board WSRA Grant — POGGI 2016-774. This grant was approved on April 21, 2016 and is valid until May 31, 2017. Due to issues associated with TABOR the PRWCD is unable to administer these grant funds. This grant consists of two line items of \$30,000 and \$60,000 for a total of \$90,000.

The purpose of this grant is to assist the individual ditch companies within the PRWCD fund necessary infrastructure repairs to their ditch structures.

The grant approval letter from the Colorado Water Conservation Board is attached including an amended proposed budget for this total infrastructure repair project. This budget includes a line item for an anticipated administrative fee payable to the HCWCD for grant administrative services of \$3,000.

The PRWCD respectfully requests that the HCWCD place this request on its regular August board meeting agenda for discussion and approval.

Sincerely,

Ralph Gagliardi

President, Purgatoire River Water Conservancy District

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## **HUERFANO COUNTY WATER CONSERVANCY DISTRICT**

August 22, 2016

Craig Godbout Program Manager Colorado Water Conservation Board Water Supply Planning Section 1313 Sherman Street, Suite 718 Denver CO 80203

Re:

WSRA grant – POGG1 2016-774 – PRWCD – Ditch Infrastructure Repair Project in the Arkansas River Basin

Dear Craig

At today's regular meeting this District's board, pursuant to a request from the Purgatoire River Water Conservancy District (PRWCD), acted unanimously to request that the fiscal agent be changed to the Huerfano County Water Conservancy District (HCWCD), with a budget amendment to reallocate \$3,000 for "administration," and to accept the responsibilities of the fiscal agent under the captioned grant.

This District was formed by court decree in 1971 under the provisions of the Water Conservancy Act, Title 37, Colorado Revised Statutes, and has been "de-Bruced" by action of its voters.

Sincerely,

Michael D. (Sandy) While

President

Copy via email:

PRWCD

HCWCD Board Members ABRT Executive Committee