Water Supply Reserve Fund Water Activity Summary Sheet March 11-12, 2020 Agenda Item 23(f)

**Applicant & Grantee:** Garfield County School District No. 16

Water Activity Name: Diamond Ditch Piping Project
Water Activity Purpose: Multi-Purpose/Implementation

County: Garfield

Drainage Basin: Colorado

Water Source: Parachute Creek

**Amount Requested:** \$25,000 Colorado Basin Account

**Matching Funds:** Applicant Match = \$148,000

• 592% of the Basin Account request (meets 25% min)

# **Staff Recommendation:**

Staff recommends approval of up to \$25,000 from the Colorado Basin Account to help fund the project: Diamond Ditch Piping Project.

Water Activity Summary: WSRF Funds, if approved will assist Garfield County School District No. 16 replace an open ditch delivery system sourced from Parachute Creek with approximately 2,000 feet of 24-inch ADS pipe. The existing system is approximately 6,000 feet long and has been mostly piped except for the first 2,000 feet which has significant conveyance losses, estimated at 20% of diversion. These losses impact the ability of the ditch users to receive irrigation water needed particularly at the athletic fields at Grand Valley High School. Additional, the ditch work will address significant hazards to the ditch from sheer the 30 feet earthen embankments looming above the ditch and undercutting of the ditch embankment by Parachute Creek. NRCS is providing in-kind ditch pipeline and grading design for the project. The requested WSRF Grant funds will be used for construction of the pipeline and embankment grading, including materials costs and contractor fees. Diamond Ditch is utilized by five others including hay irrigators, soon to be greenhouse agricultural production and three residences. Recently there has been as much as 38 acres of irrigation under the ditch.

**Discussion:** This effort will assist the Colorado Basin Roundtable meet the Goals and Measurable Outcomes to *Secure Safe Drinking Water* supplies as described in their Basin Implementation Plan. This effort also assists Colorado's Water Plan by taking actions to conserve irrigation water as indicated in Section 6.3.5.

**Issues/Additional Needs:** Prior to entering into a grant contract with the state, the applicant must submit all letters of matching commitment, otherwise there are no additional issues or needs.

**Eligibility Requirements:** The application meets requirements of all eligibility components.

**Evaluation Criteria:** Staff has determined this activity satisfies the Evaluation Criteria.

| Funding Sources/Match                  | Cash      | In-kind  | Total     | <u>Status</u> |
|--|-----------|----------|-----------|---------------|
| Garfield County School District No. 16 | \$125,000 | \$3,000  | \$128,000 | Secured       |
| NRCS                                   | \$0       | \$15,000 | \$15,000  | Pending       |
| Bookcliff Conservation District        | \$5,000   | \$0      | \$5,000   | Pending       |
| Sub-total                              | \$130,000 | \$18,000 | \$148,000 | _             |
| WSRF Colorado Basin Account            | \$25,000  | \$0      | \$25,000  | Secured       |
| <b>Total Project Costs</b>             | \$155,000 | \$18,000 | \$173,000 |               |

CWCB Project Manager: Craig Godbout

# THE COLORADO BASIN ROUNDTABLE C/O P.O. BOX 1120 GLENWOOD SPRINGS, COLORADO 81602

December 18, 2019

Megan Holcomb Colorado Water Conservation Board Water Supply Planning Section 1313 Sherman Street Denver CO

#### Dear Megan:

The Colorado Basin Roundtable voted unanimously at its Nov. 25, 2019 meeting to support Garfield County School District 16 Diamond Ditch project with \$25,000 from the CBRT WSRF Basin Fund. The original request was \$50,000 but the Roundtable reduced the funding due to the demand on its Basin funding reserve.

The Diamond Ditch Piping Project will replace an open-ditch delivery system sourced from Parachute Creek, a tributary to the Colorado River, with approximately 2,000 feet of 24-inch ADS pipe. The existing open-ditch system is approximately 6,000 feet long and has been mostly piped except for the first 2,000 feet which has significant conveyance losses, estimated at 20% of diversions. These high losses through the first 2,000 feet impact the ability of the ditch users to receive the irrigation water needed particularly at the athletic fields at Grand Valley High School. Additionally, the ditch work in the first 2,000 feet will address significant hazards to the ditch from sheer 30' earthen embanks looming above the ditch and undercutting of the ditch embankment by Parachute Creek.

This project to improve the efficiency of water delivery, reduce losses and improve safety comports with tenants of the Colorado Water Plan and the Basin Implementation Plan.

Sincerely yours,

Jim Pokrandt

Chair, Colorado Basin Roundtable



## **Colorado Water Conservation Board**

# Water Supply Reserve Fund Grant Application

# Instructions

All WSRF grant applications shall conform to the current 2016 WSRF Criteria and Guidelines.

To receive funding from the WSRF, a proposed water activity must be approved by a Roundtable(s) **AND** the Colorado Water Conservation Board (CWCB). The process for Roundtable consideration and recommendation is outlined in the 2016 WSRF Criteria and Guidelines. The CWCB meets bimonthly according to the schedule on page 2 of this application.

If you have questions, please contact the current CWCB staff Roundtable liaison:

Arkansas Gunnison | North Platte | Colorado | Metro | Rio Grande | South Platte | Yampa/White Southwest

Ben Wade Craig Godbout Megan Holcomb

<u>ben.wade@state.co.us</u> <u>craig.godbout@state.co.us</u> <u>megan.holcomb@state.co.us</u> 303-866-3441 x3238 303-866-3441 x3210 303-866-3441 x3222

|       | WSRF Submittal Checklist (Required)   |  |  |
|-------|---|--|--|
| Х     | I acknowledge this request was recommended for CWCB approval by the sponsoring roundtable.        |  |  |
| Х     | I acknowledge I have read and understand the 2016 WSRF Criteria and Guidelines.                   |  |  |
| Х     | I acknowledge the Grantee will be able to contract with CWCB using the Standard Contract. (1)     |  |  |
| Appli | cation Documents  |  |  |
| Х     | Exhibit A: Statement of Work <sup>(2)</sup> (Word – see Template)                                 |  |  |
| Х     | Exhibit B: Budget & Schedule <sup>(2)</sup> (Excel Spreadsheet – see Template)                    |  |  |
|       | Letters of Matching and/or Pending 3 <sup>rd</sup> Party Commitments <sup>(2)</sup>               |  |  |
| Х     | Map <sup>(2)</sup>  |  |  |
| Х     | Photos/Drawings/Reports   |  |  |
|       | Letters of Support  |  |  |
| Cont  | racting Documents <sup>(3)</sup>  |  |  |
|       | Detailed/Itemized Budget <sup>(3)</sup> (Excel Spreadsheet – see Template)                        |  |  |
|       | Certificate of Insurance <sup>(4)</sup> (General, Auto, & Workers' Comp.)                         |  |  |
|       | Certificate of Good Standing <sup>(4)</sup>   |  |  |
| Х     | W-9 Form <sup>(4)</sup>   |  |  |
|       | Independent Contractor Form <sup>(4)</sup> (If applicant is individual, not company/organization) |  |  |
|       | Electronic Funds Transfer (ETF) Form <sup>(4)</sup>   |  |  |

<sup>(1)</sup> Click "Grant Agreements". For reference only/do not fill out or submit/required for contracting

<sup>(2)</sup> Required with application if applicable.

<sup>(3)</sup> Additional documentation providing a Detailed/Itemized Budget maybe required for contracting. Applicants are encouraged to coordinate with the CWCB Project Manager to determine specifics.



(4) Required for contracting. While optional at the time of this application, submission can expedite

contracting upon CWCB Board approval.

| Schedule     |                             |                              |  |  |
|--------------|-----------------------------|------------------------------|--|--|
| CWCB Meeting | Application Submittal Dates | Type of Request              |  |  |
| January      | December 1                  | Basin Account; BIP           |  |  |
| March        | February 1                  | Basin/Statewide Account; BIP |  |  |
| May          | April 1                     | Basin Account; BIP           |  |  |
| July         | June 1                      | Basin Account; BIP           |  |  |
| September    | August 1                    | Basin/Statewide Account; BIP |  |  |
| November     | October 1                   | Basin Account/BIP            |  |  |

| Desired Timeline                |            |  |
|---------------------------------|------------|--|
| Desired CWCB Hearing Month:     | March 2020 |  |
| Desired Notice to Proceed Date: | April 2020 |  |

| Water Activity Summary                         |                                    |   |     |      |    |
|--|------------------------------------|---|-----|------|----|
| Name of Applicant                              | Garfield County School District 16 |   |     |      |    |
| Name of Water Activity                         | Diamond Ditch Piping Project       |   |     |      |    |
| Approving Roundtable                           | e(s)                               | Basin Account Request(s) <sup>(1)</sup> |     |      |    |
| Colorado Basin Roundtable                      |                                    |   | \$  | 25,0 | 00 |
|  |                                    |   |     |      |    |
|  |                                    |   |     |      |    |
|  |                                    |   |     |      |    |
|  |                                    |   |     |      |    |
|  |                                    |   |     |      |    |
|  |                                    |   |     |      |    |
|  |                                    |   |     |      |    |
|  |                                    |   |     |      |    |
| Basin Account Request Subtotal                 |                                    |   | \$  | 25,0 | 00 |
| Statewide Account Request <sup>(1)</sup>       |                                    |   | \$  |      | 0  |
| Total WSRF Funds Requested (Basin & Statewide) |                                    |   | \$  | 25,0 | 00 |
| Total Project Costs                            |                                    |   | \$1 | 73,0 | 00 |

<sup>(1)</sup> Please indicate the amount recommended for approval by the Roundtable(s)



|  | Grantee and Applicant Information                                    |
|--|--|
| Name of Grantee(s)                               | Garfield County School District No. 16                               |
| Mailing Address                                  | PO Box 68, Parachute, CO 81635                                       |
| FEIN   | 84-6001236   |
| Grantee's Organization<br>Contact <sup>(1)</sup> | John Martinez  |
| Position/Title                                   | Director of Maintenance  |
| Email  | jmartinez@garfiled16.org   |
| Phone  | 970-285-5701 ext. 5131   |
| Grant Management<br>Contact <sup>(2)</sup>       | Rose Belden  |
| Position/Title                                   | Garfield County School District No. 16 Director of Business Services |
| Email  | RBelden@garfield16.org   |
| Phone  | 970-285-5701 ext. 5114   |
| Name of Applicant (if different than grantee)    |  |
| Mailing Address                                  |  |
| Position/Title                                   |  |
| Email  |  |
| Phone  |  |

<sup>(1)</sup> Person with signatory authority

(2) Person responsible for creating reimbursement invoices (Invoice for Services) and corresponding with CWCB staff.

# **Description of Grantee**

Provide a brief description of the grantee's organization (100 words or less).

Garfield County School District is a public K-12 educational district located in central Garfield County serving the Parachute, Battlement Mesa and Rulison communities.

|   | Type of Eligible Entity (check one)   |  |  |  |
|---|---|--|--|--|
|   | <b>Public (Government):</b> municipalities, enterprises, counties, and State of Colorado agencies. Federal agencies are encouraged to work with local entities. Federal agencies are eligible, but only if they can make a compelling case for why a local partner cannot be the grant recipient. |  |  |  |
| Х | <b>Public (Districts):</b> authorities, Title 32/special districts (conservancy, conservation, and irrigation districts), and water activity enterprises  |  |  |  |
|   | Private Incorporated: mutual ditch companies, homeowners associations, corporations   |  |  |  |
|   | <b>Private Individuals, Partnerships, and Sole Proprietors:</b> are eligible for funding from the Basin Accounts but not for funding from the Statewide Account.  |  |  |  |
|   | Non-governmental organizations: broadly, any organization that is not part of the government  |  |  |  |
|   | Covered Entity: as defined in Section 37-60-126 Colorado Revised Statutes   |  |  |  |



| Type of Water Activity (check one) |                |  |
|------------------------------------|----------------|--|
|                                    | Study          |  |
| Х                                  | Implementation |  |

| Category of Water Activity (check all that apply) |                                |          |  |
|---|--------------------------------|----------|--|
|   | Nonconsumptive (Environmental) |          |  |
|   | Nonconsumptive (Recreational)  |          |  |
| Х   | Agricultural                   |          |  |
| Х   | Municipal/Industrial           |          |  |
|   | Needs Assessment               |          |  |
| Х   | Education & Outreach           |          |  |
|   | Other                          | Explain: |  |

| Location of Water Activity   |                 |  |  |
|--|-----------------|--|--|
| Please provide the general county and coordinates of the proposed activity below in <b>decimal degrees</b> . The Applicant shall also provide, in Exhibit C, a site map if applicable. |                 |  |  |
| County/Counties  | Garfield County |  |  |
| Latitude   | 39.456480       |  |  |
| Longitude -108.064712  |                 |  |  |

# **Water Activity Overview**

Please provide a summary of the proposed water activity (200 words or less). Include a description of the activity and what the WSRF funding will be used for specifically (e.g. studies, permitting, construction). Provide a description of the water supply source to be utilized or the water body affected by the activity. Include details such as acres under irrigation, types of crops irrigated, number of residential and commercial taps, length of ditch improvements, length of pipe installed, area of habitat improvements. If this project addresses multiple purposes or spans multiple basins, please explain. The Applicant shall also provide, in Exhibit A, a detailed Statement of Work, Budget, and Schedule.

The Diamond Ditch Piping Project will replace an open-ditch delivery system sourced from Parachute Creek, a tributary to the Colorado River, with approximately 2,000 feet of 24-inch ADS pipe. The existing open-ditch system is approximately 6,000 feet long and has been mostly piped except for the first 2,000 feet which has significant conveyance losses, estimated at 20% of diversions. These high losses through the first 2,000 feet impact the ability of the ditch users to receive the irrigation water needed particularly at the athletic fields at Grand Valley High School. Additionally, the ditch work in the first 2,000 feet will address significant hazards to the ditch from sheer 30' earthen embanks looming above the ditch and undercutting of the ditch embankment by Parachute Creek. The NRCS is providing in-kind ditch piping and grading design for the project. The requested funds will only be used for construction of the pipeline and embankment grading, including material costs and contractor fees. Diamond Ditch is utilized by five others including hay irrigators, soon to be greenhouse agricultural production and three residences. Recently there has been as much as 38 acres of irrigation.



| Last opadio. 2/10/2020   |  |   |  |  |
|--|--|---|--|--|
| Measurable Results   |  |   |  |  |
| To catalog measurable res  | To catalog measurable results achieved with WSRF funds please provide any of the following values. |   |  |  |
|  | New S  | torage Created (acre-feet)  |  |  |
|  |  | nnual Water Supplies Developed or Conserved (acre-feet), mptive or Nonconsumptive |  |  |
|  | Existin  | g Storage Preserved or Enhanced (acre-feet)                                       |  |  |
|  | Length of Stream Restored or Protected (linear feet)   |   |  |  |
| ~200 AF/year (assuming average of 3 cfs diverted and estimated 20% loss) | Efficiency Savings (indicate acre-feet/year OR dollars/year)                                       |   |  |  |
|  | Area of Restored or Preserved Habitat (acres)  |   |  |  |
| 2,000 Feet<br>(33% of the Ditch)   | Length of Pipe/Canal Built or Improved   |   |  |  |
|  | Other  | Explain:  |  |  |



# **Water Activity Justification**

Provide a description of how this water activity supports the goals of <u>Colorado's Water Plan</u>, the most recent <u>Statewide Water Supply Initiative</u>, and the respective <u>Roundtable Basin Implementation Plan and Education Action Plan</u> (1). The Applicant is required to reference specific needs, goals, themes, or Identified Projects and Processes (IPPs), including citations (e.g. document, chapters, sections, or page numbers).

For applications that include a request for funds from the Statewide Account, the proposed water activity shall be evaluated based upon how well the proposal conforms to Colorado's Water Plan criteria for state support (CWP, Section 9.4, pp. 9-43 to 9-44;) (Also listed pp. 4-5 in 2016 WSRF Criteria and Guidelines).

This project is needed to improve efficiency of an existing raw water irrigation conveyance system supplying irrigation water mainly for Grand Valley High School athletic fields but also for neighboring residential lots, agriculture parcels as well as supplying water to Oil & Gas industry related parcels. This project will reduce diversions of unconsumed water in the Colorado Basin, and reduce selenium levels to improve water quality downstream. The existing system conserves energy by providing raw water irrigation for School District and homeowners' use instead of potable water being pumped, treated, and then used for irrigation.

Piping the Diamond Ditch will improve the efficiency of water delivery and eliminate losses due to evaporation and seepage from the ditch, aligning with Sections 6.3.4, 6.3.5, and 10.3 of the Colorado Water Plan (CWP), as well as the Colorado Basin Implementation Plan (CO BIP), Statewide Water Supply Initiative (SWSI) and the Middle Colorado Watershed Council (MCWC) 2016 Watershed Plan goals. This effort aims to reach a high level of active and passive conservation and is a multi-beneficial project through coordination with shared water uses, including the School District, Puckett Land Company, agriculture business, homeowners, and the City.

#### **CWP**

Section 6 of the CWP lists action items and goals for agricultural water efficiency, conservation and viability in Section 6. Specifically, Section 6.3.4 describes actions to conserve irrigation water consumption (both directly consumed and unconsumed). This project will replace an open-ditch delivery system with a pipeline, which is one of the methods that 6.3.4 specifically mentions as a method for reducing diversions of unconsumed water.

Section 6.3.5 of the CWP describes the nexus of water conservation and energy conservation. The School District's use of raw water irrigation also conserves energy by reducing the amount of water that would alternatively be pumped from the Colorado River or pumped and treated if served by a municipal potable water treatment plant.

Section 10.3 of the CWP identified critical actions for "encouraging ditch-wide and regional planning to explore system-wide conservation and efficiency opportunities." The primary purpose of this project aligns with these critical actions and the desire to encourage high levels of conservation across the Colorado River Basin.

### CO BIP

The proposed project aligns with the CO BIP themes identified in Section 2.4 (page 43) and more specifically, the Middle Colorado Region priority themes discussed in Section 3 (page 111).

Theme 1 identifies the need to Protect and Restore Healthy Streams, Rivers, Lake and Riparian Areas and particularly identifies unmet instream flows and degraded aquatic environmental habitat. This proposed project builds on recent efforts that replaced the Diamond Ditch headgate and will allow the Diamond Ditch to operate more efficiently and reduce diversion demands providing additional flows in Parachute Creek. Decreasing seepage loss in the Diamond Ditch will also support efforts to reduce high salinity return flows to the Colorado River another top theme for the Middle Colorado Region.



**Theme 3** focuses on the need to secure growing water demand to <u>Secure Safe Drinking Water</u> supplies. Continued raw water irrigation along the Diamond Ditch users extends the ability of the local water providers by reducing the peak service summer demands that water treatment plants are designed to meet.

**Theme 4** identifies the Basin's desire to Encourage a High Level of Basinwide Conservation. This basin theme identifies agricultural and municipal conservation efforts should be to reach a high level of active and passive conservation targets. The Diamond Ditch Piping Project directly addresses this Basin priority in regards to both agricultural and municipal demands.

#### **SWSI 2010**

SWSI identified an existing Colorado River Basin Agricultural shortage of 100,000 AFY and a predicted M&I/SSI Shortage of 48,000 AFY. SWSI Section 8 identifies recommendations to move forward to meet Colorado's water supply needs and identified the following which the District aims to meet with this project:

- 1. Actively encourage projects to address multiple purposes, including municipal, industrial, environmental, agricultural.
- 5. Support meeting Colorado's nonconsumptive water needs.
- 8. Evaluate multi-purpose projects or packages of projects to develop new water supplies for use on the West Slope and Front Range.

### MCWC 2016 Watershed Plan

In the 2016 Watershed Plan Chapter 5 identifies the organization's top 8 goals. Goal 3 is identified as "promote smart, efficient water use and conservation." Piping the Diamond Ditch is in line with this guiding goal of the watershed council.

(1) Access Basin Implementation Plans or Education Action Plans from Basin drop down menu.

# **Matching Requirements: Basin Account Requests**

**Basin (only) Account** grant requests require a 25% match (cash and/or in-kind) from the Applicant or 3<sup>rd</sup> party and shall be accompanied by a **letter of commitment** as described in the 2016 WSRF Criteria and Guidelines (submitted on the contributing entity's letterhead). Attach additional sheet if necessary

| and Guidelines (submitted on the contributing entity's letternead). Attach additional sheet if necessary.      |  |  |
|--|--|--|
| Contributing Entity  | Amount and Form of Match (note cash or in-kind)    |  |
| Bookcliff Conservation District Cost Share Grant   | \$ 5,000 cash (Application submitted on 9/13/2019) |  |
| NRCS Design  | \$15,000 in-kind                                   |  |
| Garfield School District No. 16  | \$125,000 cash                                     |  |
| Garfield School District No. 16  | \$ 3,000 in-kind                                   |  |
|  |  |  |
| Total Match  | \$148,000  |  |
| If you requested a Waiver to the Basin Account matching requirements, indicate the percentage you wish waived. |  |  |

# **Matching Requirements: Statewide Account Requests**

**Statewide Account** grant requests require a 50% match as described in the 2016 WSRF Criteria and Guidelines. A minimum of 10% match shall be from Basin Account funds (cash only). A minimum of 10% match shall be provided by the applicant or 3rd party (cash, in-kind, or combination). The remaining 30% of the required match may be provided from any other source (Basin, applicant, or 3<sup>rd</sup> party) and shall be accompanied by a **letter of commitment**. Attach additional sheet if necessary.



| Contributing Entity  | Amount and Form of Match (note cash or in-kind): |  |  |  |
|--|--|--|--|--|
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Total Match  | \$   |  |  |  |
| If you requested a Waiver to the Statewide Account matching, indicate % you wish waived. (Max 50% reduction of requirement). |  |  |  |  |

# **Related Studies**

Please provide a list of any related studies, including if the water activity is complementary to or assists in the implementation of other CWCB programs.

Garfield County School District No. 16 rebuilt the Diamond Ditch headgate in 2016 with their own funds. The headgate was rebuilt with precast concrete and operabale slidegates for a total cost of approximately \$40,000.

## **Previous CWCB Grants**

List all previous or current CWCB grants (including WSRF) awarded to both the Applicant and Grantee. Include: 1) Applicant name; 2) Water activity name; 3) Approving RT(s); 4) CWCB board meeting date; 5) Contract number or purchase order

Garfield County School District No. 16 has not applied for a WSRF grant before.

# Tax Payer Bill of Rights

The Tax Payer Bill of Rights (TABOR) may limit the amount of grant money an entity can receive. Please describe any relevant TABOR issues that may affect the applicant.

The District has been De-Bruced and will not be limited in grant funding from the WSRF.



| Colorado Water Conservation Board |   |  |  |  |  |  |
|-----------------------------------|---|--|--|--|--|--|
| Water Supply Reserve Fund         |   |  |  |  |  |  |
| Exhibit A - Statement of Work     |   |  |  |  |  |  |
| Date:                             | February 20, 2019   |  |  |  |  |  |
| Water Activity Name:              | Diamond Ditch Piping Project  |  |  |  |  |  |
| Grant Recipient:                  | Garfield County School District 16                                  |  |  |  |  |  |
| Funding Source:                   | Water Supply Reserve Fund - Colorado Basin Roundtable Basin Account |  |  |  |  |  |

**Water Activity Overview:** (Please provide brief description of the proposed water activity (no more than 200 words). Include a description of the overall water activity and specifically what the WSRF funding will be used for.

The Diamond Ditch Piping Project will replace an open-ditch delivery system sourced from Parachute Creek, a tributary to the Colorado River, with approximately 2,000 feet of 24-inch ADS pipe. The existing open-ditch system is approximately 6,000 feet long and has been mostly piped except for the first 2,000 feet which has significant conveyance losses, estimated at 20% of diversions. These high losses through the first 2,000 feet impact the ability of the ditch users to receive the irrigation water needed particularly at the athletic fields at Grand Valley High School. Additionally, the ditch work in the first 2,000 feet will also address significant hazards to the ditch from sheer 30' earthen embanks looming above the ditch and undercutting of the ditch embankment by Parachute Creek. The NRCS is providing in-kind ditch piping and grading design for the project. The requested funds will only be used for construction of the pipeline and embankment grading, including material costs and contractor fees.

The NRCS is providing in-kind ditch piping design for the project. The funds requested from the WSRF Basin Account will only be used for construction of the pipeline, including material costs and contractor fees.

# **Objectives:** (List the objectives of the project)

- The project aims to improve the efficiency of water delivery in the Diamond Ditch by eliminating evaporation and seepage losses along the piped section of the Ditch.
- Ensure the viability of raw water irrigation from the Diamond Ditch, especially for tail users which otherwise struggle to receive enough irrigation water due to high losses. A goal of raw water irrigation is to reduce the peak summer demands on the water treatment plant, which reduces the amount of water that must be pumped and treated from the Colorado River and extends the ability of the water treatment plant by reducing the peak demand for which the plant must be designed.
- Stabilization section of ditch with threatening steep 30' high earthen embankment above the ditch by cutting into the embankment and removing soil to a gentler slope.
- Re-align a short section of the Diamond Ditch away from the existing undercutting of the ditch bench caused by Parachute Creek.
- Another objective is to work with regional partners to develop a multi-use beneficial project serving needs for domestic (homeowners), industrial (Puckett Land Company), commercial (greenhouse grow facility), and municipal users (the School District and the Town of Parachute backup irrigation supply).
- In conjunction with the recent replacement of the Diamond Ditch headgate, this project aims to reduce diversions of unconsumed water (including ditch losses and evaporation), thus providing additional flows in Parachute Creek.
- This project also aims to inspire and encourage other Western Slope communities to implement water conservation and ditch efficiencies.



#### **Tasks**

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

#### Task 1 – Project Management

#### Description of Task:

Task 1 Cost are not a part of the Water Supply Reserve Fund grant request. Services provided by School District 16 will ensure the project is on schedule and on budget and to address any impacts to the proposed plan.

## Task 2 - Design

### Description of Task:

Task 2 costs are not a part of the Water Supply Reserve Fund grant request. NRCS is providing in-kind ditch piping design for the project. The system will be designed to be gravity-fed from the Diamond Ditch headgate, mostly following the current ditch alignment. The design will include details for the reshaping and layback of the steep bank section, and the alignment for installing approximately 2,000 linear feet of pipeline (currently planned to be 24-inch diameter ADS Irrigation Piping with three 60-inch diameter irrigation manholes).

#### Method/Procedure:

Project management services provided by School District 16 will ensure the project is on schedule and on budget and to address any impacts to the proposed plan.

Develop design drawings for pipeline alignment, including the reshaping and layback of the steep bank section.

Design shall incorporate all applicable local or state regulations for non-potable water delivery. Coordinate on-site reconnaissance as needed (such as survey and geotechnical investigations). Work with the Town of Parachute and Garfield County on all permitting and notification requirements.

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

NRCS will provide a final plan set for construction, including plan and profile design drawings.

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

- Final 100% construction ready design.
- 6-month project status reports as required by CWCB. The status reports will 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.



### **Tasks**

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

#### **Task 3 - Construction**

# Description of Task:

The selected contractor will construct the pipeline per the final plans and specifications provided by the NRCS. On-site construction inspections will occur to ensure the quality and implementation of the design and permit requirements.

#### Method/Procedure:

- Project management services to ensure the project is on schedule and on budget and to address any impacts to the proposed plan.
- Reshape and layback steep bank section. Cut material will be spread onsite and over new pipeline.
- Install approximately 2,000 linear feet of pipeline, which is currently planned to be 24-inch diameter ADS Irrigation Piping, or as detailed in the final design.
- Install three 60-inch diameter irrigation manholes, or as detailed in the final design.
- Coordinate construction with Diamond Ditch users, and any others as needed.

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

Constructed pipeline as designed in Task 1.

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

- 6-month project status reports as required by CWCB. The status reports will 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.
- A final project report summarizing the project accomplishments, which will include the following elements as required in the final deliverable to the CWCB:
- 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.
- o Includes photographs, summaries of meetings and engineering reports/designs.



### **Budget and Schedule**

**Exhibit B - Budget and Schedule:** This Statement of Work shall be accompanied by a combined <u>Budget and 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 entire 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 Water Conservation Board**

#### Water Supply Reserve Fund

#### **EXHIBIT B - BUDGET AND SCHEDULE - Direct & Indirect (Administrative) Costs**

Date: 2-19-2020

Water Activity Name: Diamond Ditch Piping

Grantee Name: Garfield County School District 16

| Task No. (1) | <u>Description</u> | <u>Start Date<sup>(2)</sup></u> | End Date | Matching Funds<br>(cash & in-kind) <sup>(3)</sup> | WSRF Funds<br>(Basin &<br>Statewide<br>combined) <sup>(3)</sup> | <u>Total</u> |
|--------------|--------------------|---------------------------------|----------|---|---|--------------|
| 1            | Project Management | 5/1/2020                        | 5/1/2021 | \$8,000   | \$0   | \$8,000      |
| 2            | Design             | 5/1/2020                        | 5/1/2021 | \$25,000  | \$0   | \$25,000     |
| 3            | Construction       | 5/1/2020                        | 5/1/2021 | \$ 125,000  | \$ 25,000   | \$150,000    |
|              |                    |                                 |          |   |   | \$0          |
|              |                    |                                 |          |   |   | \$0          |
|              |                    |                                 |          |   |   | \$0          |
| Total        |                    |                                 |          | \$148,000   | \$25,000  | \$173,000    |

<sup>(1)</sup> The single task that include costs for Grant Administration must provide a labor breakdown (see Indirect Costs tab below) where the total WSRF Grant contribution towards that task does not exceed 15% of the total WSRF Grant amount.

The CWCB will pay the last 10% of the entire water activity budget when the Final Report is completed to the satisfaction of the CWCB staff project manager. Once the Final Report has been accepted, the final payment has been issued, the water activity and purchase order (PO) or contract will be closed without any futher payment. Any entity that fails to complete a satisfactory Final Report and submit to the CWCB with 90 days of the expiration of the PO or contract may be denied consideration for future funding of any type from the CWCB.

<sup>(2)</sup> Start Date for funding under \$100K - 45 Days from Board Approval; Start Date for funding over \$100K - 90 Days from Board Approval.

<sup>(3)</sup> Round values up to the nearest hundred dollars.

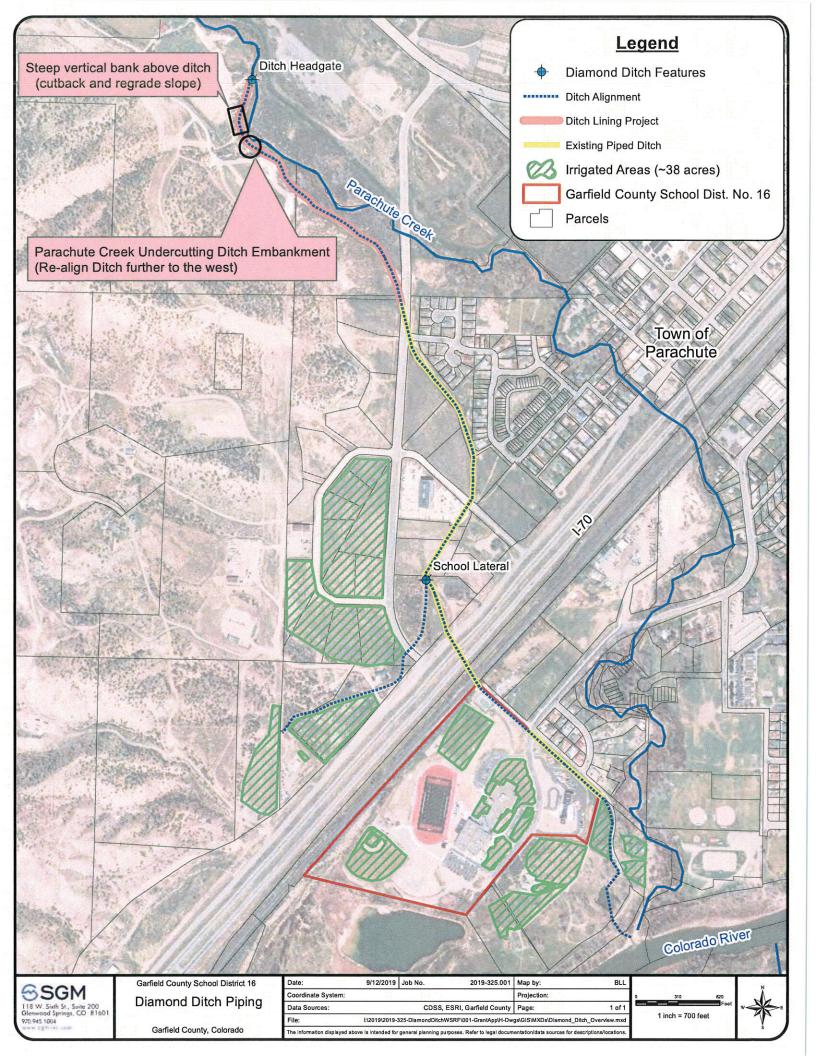
<sup>•</sup> Additional documentation providing a Detailed/Itemized Budget may be required for contracting. Applicants are encouraged to coordinate with the CWCB Project Manager to determine specifics.

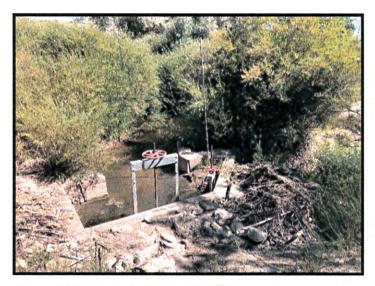
Reimbursement eligibility commences upon the grantee's receipt of a Notice to Proceed (NTP)

<sup>•</sup> NTP will not be accepted as a start date. Project activities may commence as soon as the grantee enters contract and receives formal signed State Agreement.

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

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





Diamond Ditch Headgate. Replaced in 2016



Parachute Creek undercutting nearing Diamond Ditch embankment. Ditch to be re-aligned away from creek.



Diamond Ditch Headgate Bypass in foreground and Parachute Creek in background



Steep bank overhaning (shown on right) Diamond Ditch alignment (located in willows shown on the left). Ditch maintenance has been deemed hazardous due to threatening sheer slope.

