

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

Applicant & Grantee: Redlands Water and Power Company
Water Activity Name: Pumpline Replacement Project
Water Activity Purpose: Multi-Purpose - Implementation
County: Mesa
Drainage Basin: Gunnison
Water Source: Colorado River
Amount Requested: \$50,000 Gunnison Basin Account
\$75,000 Statewide Account
\$125,000 Total Request

Matching Funds: Basin Account Match = \$50,000
• 67% of the statewide request (meets 10% min)
Applicant Match (cash & in-kind) = \$325,279
• 433% of the statewide request (meets 10% min)
Total Match (Basin & Applicant) = \$375,279
• 500% of the statewide request (meets 50% min)

Staff Recommendation:
Staff recommends approval of up to \$50,000 from the Gunnison Basin Account and up to \$75,000 from the Statewide Account to help fund the project: Pumpline Replacement Project.

Water Activity Summary: WSRF Funds, if approved will assist the Redlands Water and Power Company's efforts to continue to pump irrigation water to the bench lands high above the Colorado and Gunnison Rivers, RWPC must replace their existing pumpline, which provides irrigation water for residential lawns and gardens, orchards, vineyards, alfalfa fields, and pasture grass. The Project is phase one of a much larger project that will modernize RWPC's entire Pump Station No. 1 (originally constructed in 1917). The Project will replace the pre-2007 sections of the existing pumpline with 100 feet of new 48-inch steel pipe, and 900 feet of 48-inch HDPE pipe. The entire Project is within RWPC property with portions of the pumpline (a 900-foot section) to be installed beneath a dirt maintenance road owned by RWPC. The Project will also include a parallel 12-inch HDPE pipeline with turnouts for users that receive water directly from the pumpline. The parallel line will prevent the systemwide shutdowns that currently occur when unplanned/emergency maintenance is required on the pumpline turnouts.

Discussion: This effort will assist the Gunnison Basin Roundtable meet their Goals and Measurable Outcomes as identified in the Gunnison Basin Implementation Plan: *Protect existing water uses in the Gunnison Basin; Improve agricultural water supplies to reduce shortages; Quantify and protect environmental and recreational water uses; Describe and encourage the beneficial relationship between agricultural and environmental recreational water uses; Restore, maintain, and modernize*

critical water infrastructure, including hydropower. Additionally this effort will assist Colorado's Water Plan meet the Critical Goals and Actions of; *Meet Colorado's Water Gaps, and Protect and Develop Compact Entitlements and Manage Risks*

Issues/Additional Needs: None

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	Status
Redlands Water & power Company	\$170,000	\$155,279	\$325,279	Secured
Sub-total	\$170,000	\$155,279	\$325,279	
WSRF Gunnison Basin Account	\$50,000	\$0	\$50,000	Secured
Sub-total	\$220,000	\$155,279	\$375,279	
WSRF Statewide Account	\$75,000	n/a	\$75,000	
Total Project Costs	\$295,000	\$155,279	\$450,279	

CWCB Project Manager: Craig Godbout

September 23, 2019

Colorado Water Conservation Board

Atten. Craig Godbout

1313 Sherman Street

Denver, CO 80203

Re: Redlands Water and Power Co. Water Supply Reserve Fund Grant Application

Dear Mr. Godbout and Members of the Colorado Water Conservation District Board,

I am writing to advise you that the Gunnison Basin Roundtable has approved the application filed by the Redlands Water and Power Company for a Water Supply Reserve Fund grant with a minor revision to the dollars requested. Redlands Water and Power Company is seeking to replace a major pipeline that is integral to their irrigation water delivery system.

The request was for \$75,000 in Basin funds and \$50,000 in State funds for this project. However, after consultation with the applicant, the Roundtable approved \$50,000 in Basin funds and \$75,000 in Statewide funds.

This project is part of a larger system improvement program to upgrade the Redlands system, and is identified as a Tier 1 project in the Gunnison Basin Implementation Plan. The Redlands infrastructure was built in the early 1900's and provides service to over 4000 people within its service area. The proposed pipeline project will improve irrigation efficiency and support agricultural and domestic water use.

We request your support for the grant application with the noted revision. If we can answer any questions please let us know. Thank you for your consideration.

Regards,

Kathleen Curry

Kathleen Curry, Chair
Gunnison Basin Roundtable
54542 US Highway 50
Gunnison, CO 81230
kathleencurry@montrose.net
Cell 970-209-5537



Last Update: July 31, 2018

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

Ben Wade
ben.wade@state.co.us
303-866-3441 x3238

Gunnison | North Platte | South Platte | Yampa/White

Craig Godbout
craig.godbout@state.co.us
303-866-3441 x3210

Colorado | Metro | Rio Grande | Southwest

Megan Holcomb
megan.holcomb@state.co.us
303-866-3441 x3222

WSRF Submittal Checklist (Required)

✓	I acknowledge this request was recommended for CWCB approval by the sponsoring roundtable.
✓	I acknowledge I have read and understand the 2016 WSRF Criteria and Guidelines .
✓	I acknowledge the Grantee will be able to contract with CWCB using the Standard Contract . ⁽¹⁾
Application Documents	
✓	Exhibit A: Statement of Work ⁽²⁾ (<i>Word – see Template</i>)
✓	Exhibit B: Budget & Schedule ⁽²⁾ (<i>Excel Spreadsheet – see Template</i>)
N/A	Letters of Matching and/or Pending 3 rd Party Commitments ⁽²⁾
✓	Map ⁽²⁾ (<i>Attachment A – RWPC Pumpline Replacement Project Location Map</i>)
✓	Photos/Drawings/Reports (<i>Attachment D – RWPC Pumpline Preliminary Design Exhibit</i>)
N/A	Letters of Support
Contracting Documents ⁽³⁾	
✓	Detailed/Itemized Budget ⁽³⁾ (<i>Excel Spreadsheet – see Template</i>) (<i>Attachment B – Cost Estimate</i>)
N/A	Certificate of Insurance ⁽⁴⁾ (<i>General, Auto, & Workers' Comp.</i>)
N/A	Certificate of Good Standing ⁽⁴⁾
N/A	W-9 Form ⁽⁴⁾
N/A	Independent Contractor Form ⁽⁴⁾ (<i>If applicant is individual, not company/organization</i>)
N/A	Electronic Funds Transfer (ETF) Form ⁽⁴⁾

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

(2) Required with application if applicable.

(3) 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.

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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:	November 1, 2020

Water Activity Summary		
Name of Applicant	Redlands Water and Power Company (RWPC)	
Name of Water Activity	RWPC Pumpline Replacement Project (The Project)	
Approving Roundtable(s)	Basin Account Request(s) ⁽¹⁾	
Gunnison Basin Roundtable	\$50,000	
Basin Account Request Subtotal	\$50,000	
Statewide Account Request ⁽¹⁾	\$75,000	
Total WSRF Funds Requested (Basin & Statewide)	\$125,000	
Total Project Costs	\$450,279	

(1) Please indicate the amount recommended for approval by the Roundtable(s)



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Grantee and Applicant Information	
Name of Grantee(s)	Redlands Water and Power Company
Mailing Address	2216 South Broadway Grand Junction, CO 81507
FEIN	84-0301010
Grantee's Organization Contact ⁽¹⁾	Kyle Vanderberg
Position/Title	Superintendent
Email	redlandswp@fastmail.com
Phone	(970) 243-2173
Grant Management Contact ⁽²⁾	Nick Emmendorfer
Position/Title	Project Engineer / Project Manager
Email	nemmendorfer@jub.com
Phone	(970) 208-8508
Name of Applicant (if different than grantee)	Same as grantee
Mailing Address	N/A
Position/Title	N/A
Email	N/A
Phone	N/A

(1) 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).
<p>The Redlands Water and Power Company (RWPC) is a small irrigation and power provider located between Grand Junction and Fruita, Colorado in an area known as the Redlands, which is bordered to the south by the Colorado National Monument. RWPC, established in 1905, diverts about 610,000 ac-ft of water (flowrates between 750-850 cfs) from the Gunnison River each year to produce power and serve approximately 1,100 shareholders on roughly 1,966 acres of agricultural and residential land in the Redlands area. The majority of the water diverted is used to produce power within RWPC's hydroelectric facility; non-consumptive power water is returned to the Colorado River. Approximately 60 cfs is utilized for irrigation purposes for use on residential lawns and gardens and agriculture.</p>

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Type of Eligible Entity (check one)	
	Public (Government): 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.
	Public (Districts): authorities, Title 32/special districts (conservancy, conservation, and irrigation districts), and water activity enterprises
X	Private Incorporated: mutual ditch companies, homeowners associations, corporations
	Private Individuals, Partnerships, and Sole Proprietors: 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
X	Implementation

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

Location of Water Activity	
Please provide the general county and coordinates of the proposed activity below in decimal degrees . The Applicant shall also provide, in Exhibit C, a site map if applicable.	
County/Counties	Mesa County
Latitude	39.0671 N
Longitude	108.5932 W

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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.

In order to continue to pump irrigation water to the bench lands high above the Colorado and Gunnison Rivers, RWPC must replace their existing pumpline, which provides irrigation water for residential lawns and gardens, orchards, vineyards, alfalfa fields, and pasture grass. The Project is phase one of a much larger project that will modernize RWPC's entire Pump Station No. 1 (originally constructed in 1917). RWPC recently completed a feasibility study in June 2019, which identifies the proposed pumpline replacement as the highest priority phase of the Pump Station No. 1 rehabilitation. Originally installed in 1944, significant maintenance by RWPC has extended the life of the pumpline over the past 70 years. In 2007, approximately 525 feet of the upper end of the pumpline was replaced with new 48-inch steel pipe. After years of patching caused the pipe to become too thin to repair, RWPC completely replaced sections of the pumpline to avoid loss of irrigation water for the entire community, including churches, schools, parks, and a city-owned golf course. Sections under Highway 340 (Broadway) were also replaced in 2007. The pumpline continues to deteriorate due to age, corrosion, and rust, and RWPC has expended countless man hours and equipment patching up leaking sections of the pumpline in order to continue delivering water to shareholders. RWPC's operations staff are concerned that if a major failure were to occur within the pump station or pumpline, it would have devastating effects for thousands of residents and highly productive agriculture lands, greatly affecting the economy of the area.

The Project will replace the pre-2007 sections of the existing pumpline with 100 feet of new 48-inch steel pipe, and 900 feet of 48-inch HDPE pipe. The entire Project is within RWPC property with portions of the pumpline (a 900-foot section) to be installed beneath a dirt maintenance road owned by RWPC. The Project will also include a parallel 12-inch HDPE pipeline with turnouts for users that receive water directly from the pumpline. The parallel line will prevent the systemwide shutdowns that currently occur when unplanned/emergency maintenance is required on the pumpline turnouts. For a map outlining the project location, see [Attachment A](#).



Image 1 – Pumpline alignment under dirt maintenance road owned by RWPC

WSRF Funds will be used to assist in project construction.

RWPC diverts 750-850 cfs of water from the Gunnison Basin approximately 2.4 miles upstream of the confluence with the Colorado River. Approximately 60 to 70 cfs is used for irrigation water, a small percentage of which is used to irrigate lowland farms prior to Pump Station No. 1. Pump Station No. 1 pumps the remaining irrigation water to the bench lands of the Redlands area. The total system provides water to 1,966 acres through approximately 550 turnouts. The remaining water (approximately 690 cfs), used for generating power, is returned to the Colorado River. RWPC Water rights are as follows:



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Water Activity Overview		
Appropriation Dates	Net Absolute	Decreed Uses
7/31/1905	670	Irrigation, Commercial
6/26/1941	80	Irrigation, Commercial, Domestic, Stock
10/1/1994	100	Power Generation

Measurable Results		
To catalog measurable results achieved with WSRF funds please provide any of the following values.		
N/A	New Storage Created (acre-feet)	
N/A	New Annual Water Supplies Developed or Conserved (acre-feet), Consumptive or Nonconsumptive	
N/A	Existing Storage Preserved or Enhanced (acre-feet)	
N/A	Length of Stream Restored or Protected (linear feet)	
N/A	Efficiency Savings (indicate acre-feet/year OR dollars/year)	
N/A	Area of Restored or Preserved Habitat (acres)	
1,000 feet	Length of Pipe/Canal Built or Improved	
Irrigation water reliability and security for the Redlands community.	Other	Explain: The number one measurable result achieved for the Project will be reliable and resilient irrigation water delivery infrastructure, serving the agricultural and residential acres on the bench lands for the Redlands community in Grand Junction, Colorado. A major failure of the pumpline system would result in immediate water loss for 8,685 residents. The users draw water directly from the canals, so pumpline reliability and security is critical to a continuous supply of irrigation water. Further, this pumpline project is phase 1 of a larger Pump Station No. 1 rehabilitation and is the beginning of a process to rehabilitate, improve, and modernize the RWPC infrastructure, which controls 670 cfs of a 1905 appropriation at the lower end of the Gunnison River basin. Loss of the infrastructure necessary to exercise this water right would have far-reaching negative consequences not only to the Gunnison River basin, but to the entire state of Colorado and the larger Colorado River basin.

Water Activity Justification
Provide a description of how this water activity supports the goals of Colorado's Water Plan , the most recent Statewide Water Supply Initiative , and the respective Roundtable Basin Implementation Plan and Education Action Plan ⁽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).



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Water Activity Justification

Colorado's Water Plan

The Project supports the following Colorado's Water Plan goal (Section 10.3: Critical Goals and Actions) in the following ways:

A. Supply-Demand Gap

- *Meet Colorado's Water Gaps*
 - The Project helps to meet a Colorado water gap through improvement and rehabilitation of critical supply infrastructure. The proposed pumpline replacement will be the first of many phases that will restore RWPC Pump Station No.1 infrastructure that is critical to supplying irrigation water for the Redlands community of Grand Junction, Colorado. The pump station that serves this area was constructed in 1917. This aging infrastructure risks failure, and it is RWPC's top priority to modernize its pumping infrastructure to ensure the long-term reliability and security of their system. This pumpline project is a first step and part of much larger and overarching infrastructure rehabilitation project that the RWPC board and staff are actively engaged in exploring. The goal of the RWPC is to modernize and improve their infrastructure, and in doing so, seek opportunities to partner with other organizations and stakeholders on the Gunnison River to find areas of multiple benefit for the shareholders, environmental interests such as endangered fish concerns, recreational uses, and more importantly, the continued generation of clean, renewable hydro-electric power. Critical to compact compliance issues, this project is helping to provide resiliency to a large non-consumptive water right that calls significant water to the Grand Valley and subsequently to the state line of Colorado.
- *Protect and Develop Compact Entitlements and Manage Risks*
 - The Project is integrally tied to the non-consumptive (power) portion of the RWPC water right. Replacing the pumpline and completing future phases that will replace Pump Station No. 1 and other related infrastructure will secure this water right and create water reliability and security for Redlands, allowing greater amounts of water to be returned to the Colorado River. The non-consumptive use of water is important to avoiding a Colorado River Compact deficit. Additionally, the power right and the associated power plant owned and operated by RWPC could someday be an important part of a Gunnison basin plan to address a potential compact deficit. It is imperative to the state of Colorado that the irrigation right utilized and valued by the shareholders of RWPC continues to be delivered so that the value of maintaining the power right can continue alongside the irrigation right.

Gunnison Basin Implementation Plan

The proposed Redlands Pumpline Replacement Project is found on Page 8, Table 7, Item 25, of the Gunnison Basin Implementation Plan, called "Redlands Pump Modernization and Hydropower Optimization Project." This Project supports basin goals numbers 1, 3, 5, 7, and 8 (Page 28) in the following ways:

Goal 1 (Primary Basin Goal) – Protect existing water uses in the Gunnison Basin

- To maintain existing irrigation water uses, it is important that RWPC continues beneficial use of its historical water rights. The Project will help to fulfill this goal by replacing aging infrastructure. This Project is the first phase to modernize RWPC's Pump Station No. 1 and its related infrastructure. This includes installing SCADA technology and flow meters to turnouts to help monitor and document water use.



Image 2 – Pump Station No. 1 in foreground and pumpline in background



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Water Activity Justification

Goal 3 – Improve agricultural water supplies to reduce shortages

- Replacing the RWPC pumpline will begin to reduce the risk of irrigation water shortages or water delivery failure.

Goal 5 – Quantify and protect environmental and recreational water uses

- RWPC owns a senior right on the Gunnison River and is the only major diversion downstream of Delta, Colorado. Since RWPC is near the lower end of the river, this water right is critical to maintaining flows in the Gunnison River, which is important for the recovery of the endangered fish of the Colorado River Basin. Replacing the existing pumpline is the first phase of a line of projects that will create water reliability and security for Redlands and protect RWPC's water rights.

Goal 7 – Describe and encourage the beneficial relationship between agricultural and environmental recreational water uses

- RWPC works cooperatively with the U.S. Fish and Wildlife Service to maintain a fish passage and fish screen for endangered fish. Improved water delivery infrastructure will protect existing water rights and continue to assist in this relationship.

Goal 8 – Restore, maintain, and modernize critical water infrastructure, including hydropower

- The Project will fulfill this goal by installing new, modernized pumpline infrastructure that is critical to serving the Redlands irrigation water users. Water is pumped using electricity generated by RWPC's hydroelectric facility.

Statewide Water Supply Initiative (SWSI)

The Project supports SWSI goals, found under Section 8 – Recommendations of the SWSI 2010, in the following ways:

- *Actively encourage projects to address multiple purposes, including agricultural, recreational, risk management, and compact compliance needs*
 - The Project addresses agricultural, recreational, and risk management needs, and potentially assists in long-term compact compliance. The water rights maintained by RWPC are important to supplying (pumping) irrigation water to the bench lands in the Redlands area. These water rights and the nonconsumptive (power) water rights used in the hydroelectric facility help maintain flows that support recreational water users, including hiking and white water rafting on the stretch of river between Delta and Grand Junction, as well as the Colorado River immediately downstream of Grand Junction. Further, the tailrace from the power plant runs through a recreational and wildlife area and provides aesthetic and habitat resources to the community. Due to the age and condition of the pumpline, risk of failure is high, requiring RWPC to develop projects that will provide water reliability and security.
 - It is difficult to qualify and/or quantify the importance of the RWPC water rights to Colorado River compact compliance. However, if the RWPC water rights did not exist, significant amounts of water would not be called to the lower reaches of the basin to be used for non-consumptive purposes.
 - RWPC water rights also ensure the recovery of the endangered fish of the Colorado River Basin through its non-consumptive water use. After power generation, more than 600 cfs is returned to the Colorado River.
- *Identify and utilize existing and new funding opportunities to assist in implementing projects and methods to meet Colorado's nonconsumptive water supply needs*
 - The Project will rely on CWCB WSRF Funds to complete the proposed pumpline replacement,



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Water Activity Justification

matched with RWPC cash/in-kind contribution. Additionally, RWPC is currently exploring utilizing USDA (PL-566, but not RCPP) funds for future infrastructure improvements. This funding source has not been recently utilized to any great extent within the state of Colorado and has the potential to be an impactful source of federal grant funds.

- *Develop and support risk management strategies so that Colorado can fully use its compact and decree entitlements to best balance Colorado's diverse water needs*
 - The Project addresses strategies to support Colorado's diverse water needs by protecting Gunnison River water rights that are necessary to avoiding a Colorado River compact deficit. Additionally, the water rights owned by RWPC combine both consumptive and non-consumptive rights and hydro-electric generation.

RWPC Pump Station No. 1 Replacement Feasibility Study

The Project is identified as the highest priority in RWPC's Pump Station No. 1 Replacement Feasibility Study completed in June 2019, on Page 2 of the Executive Summary; and pumpline replacement details are found on Pages 5-7.

A cost estimate for the pumpline replacement can be found in *Attachment B*, and the applicable feasibility study pages mentioned above can be found in *Attachment C*. RWPC's full Pump Station No. 1 Replacement Feasibility Study is available upon request.

(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 3rd 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.

Contributing Entity	Amount and Form of Match (note cash or in-kind)
Total Match	\$
If you requested a Waiver to the Basin Account matching requirements, indicate the percentage you wish waived.	



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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 3rd 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):
Redlands Water and Power Company	\$170,000 (Cash)
Redlands Water and Power Company	\$155,279 (In-kind)
Gunnison Basin Round Table Account	\$50,000 (Cash)
Total Match	\$375,279
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 complimentary to or assists in the implementation of other CWCB programs.

RWPC recently completed their Pump Station No. 1 Replacement Feasibility Study in June 2019, which was done to investigate the feasibility of the replacement or rehabilitation of Pump Station No. 1. This feasibility study identifies the proposed Project as the highest priority, known as phase one of the overall Pump Station No. 1 Replacement. This study was funded by WSRF funds, as explained below under "Previous CWCB Grants, Loans or Other Funding." *Attachment C* contains pages from the feasibility study related to the proposed pumpline replacement.

The Project is also documented in RWPC's Water Management Plan.

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



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Previous CWCB Grants

RWPC received a grant from WSRF Basin and Statewide Accounts to complete their Pump Station No. 1 Replacement Feasibility Study.

Applicant: Redlands Water and Power Company (RWPC)

Water Activity Name: Pumping Plant Modernization Feasibility Study

Approving RT(s): Approved by Gunnison Basin Roundtable on December 4, 2017; Letter of Support to CWCB dated January 17, 2018

CWCB Board Meeting Date: March 21-22, 2018 CWCB Board Meeting, Agenda Item 25(a)7

Contract Number or Purchase Order: POGG1, PDAA, 201900002040

Percentage of Other CWCB Funding for your Overall Project: WSRF Basin and Statewide Funds combined - \$63,000; Matching Funds (RWPC) - \$12,000. Total Project Cost - \$75,000.

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.

RWPC is a private company not subject to TABOR limitations.



Last Update: January 9, 2018

Colorado Water Conservation Board	
Water Supply Reserve Fund	
<u>Exhibit A - Statement of Work</u>	
Date:	08/01/2019
Water Activity Name:	RWPC Pumphline Replacement Project (The Project)
Grant Recipient:	Redlands Water and Power Company (RWPC)
Funding Source:	WSRF Basin and Statewide Accounts
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.)	
<p>RWPC has maintained its pumphline since it was installed in 1944, and has replaced significant portions of the pumphline at its own expense. However, the remaining unreplaced section of the pumphline has far outlived its design life and deteriorates due to age, corrosion, and rust. RWPC expends countless man hours and equipment patching up leaking sections of pumphline to maintain deliveries. To continue to pump irrigation water to the Redlands community of Grand Junction and Mesa County, RWPC must replace their existing pumphline, which provides irrigation water for thousands of residents, including residential lawns/gardens and agricultural lands.</p> <p>The Project will replace pre-2007 sections of the existing pumphline with 100 feet of 48-inch steel pipe, and 900 feet of 48-inch HDPE pipe. The entire project is within RWPC property with portions of the pumphline (a 900-foot section) installed beneath RWPC's dirt maintenance road. The Project will also include a parallel 12-inch HDPE pipeline with turnouts for users that receive water directly from the pumphline. See <i>Attachment A – RWPC Pumphline Replacement Project Location Map and Attachment D – Pumphline Preliminary Design Exhibit</i>.</p> <p>WSRF funds will be used for project construction. A cost estimate for the pumphline replacement is found in <i>Attachment B</i>.</p>	
Objectives: (List the objectives of the project)	



Image 1 – Existing 48-inch steel pipe

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The Project offers the following objectives/benefits:

1. Modernized water delivery (pumpline) system that will provide long-term irrigation water delivery reliability and security for 8,685 residents/farmers living on the Redlands bench lands.
2. Reduce risk of a failing pumpline that continues to deteriorate due to age, corrosion and rust, and on which countless man hours have been expended to patch up compromised sections of the pipeline that leak and disrupt the flow of irrigation deliveries.
3. Reduce rising costs and frequency of repairs as outdated equipment is replaced with modernized equipment.
4. Protect existing RWPC water rights on the Gunnison River, including recreational water users who rely on flows maintained by RWPC in the section of river between Delta and Grand Junction.

Tasks

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

Task 1 – Engineering (\$30,000)

Description of Task:

Task 1: Engineering – The 2019 Feasibility Study provided conceptual design. Task 1 will develop final design, preparation of all bid documents, and completion of any necessary bid related tasks. Task 1 will be entirely covered by matching funds.

Method/Procedure:

Pumpline modeling will be performed using standard engineering practices to ensure the design material and capacity is sufficient. Specifications will be written in accordance with modeled requirements and will be written in standard Engineers Joint Contract Documents Committee (EJCDC) format. Plan drawings will be developed in accordance with generally accepted industry standards and provide sufficient detail such that the pumpline can be constructed according to engineered design.

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

A completed set of stamped drawings and specifications ready for advertised bid requests will be delivered. RWPC will utilize invitation to bid, to call for sealed bids. Deliverables will be shared with the Colorado Water Conservation Board.

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

A completed set of industry acceptable drawings will be stamped and sealed by a Colorado registered professional engineer. A set of accompanying specifications will also be stamped and sealed by a Colorado registered professional engineer (Grantee deliverables shall be shared with CWCB).

Task 2 – Construction (\$405,279)



Last Update: January 9, 2018

Description of Task:
<p>Task 2: Construction – estimated construction to begin in November 2020. RWPC is requesting \$125,000 in WSRF funds (\$50,000 from Basin Account; \$75,000 from Statewide Account) to help with construction.</p> <p>Construction includes:</p> <ul style="list-style-type: none">-Mobilization-Pipe and pipe fitting installation-Parallel feeder line and turnouts-Replacement of the steel pipe over the power canal and concrete supports-Imported bedding and foundation material-Inline thrust blocks-Removal and disposal of existing pipe
Method/Procedure:
<p>The contractor will install the pumpline in accordance with the engineered plans and specifications. Construction activities will be performed to provide minimal disturbance to neighbors and other stakeholders (the width of the maintenance road over the pumpline makes disruption unlikely). Construction means and methods will be managed by a construction engineer (Task 3).</p>
Grantee Deliverable: (Describe the deliverable the grantee expects from this task)
<p>The construction task will result in a fully operable and properly installed pumpline for Redlands Water and Power Company. Construction will include proper disposal of existing infrastructure and site restoration consistent with existing conditions.</p>
CWCB Deliverable: (Describe the deliverable the grantee will provide CWCB documenting the completion of this task)
<p>CWCB Deliverable shall be the grantee deliverable from this task. Additionally, grantee shall provide proof of paid invoices for materials and services rendered, as required by the grant terms and conditions.</p>
Task 3 – Construction Management (\$15,000)
Description of Task:
<p>Task 3: Construction Management – construction engineer will oversee construction to ensure construction products, means, and methods are consistent with those specified in the design. Photo logs of construction progress, progress reports, and as-built drawings from the engineer will provide record of the Project. This portion of the Project will be entirely covered by matching funds.</p>
Method/Procedure:
<p>The engineer will reference the plans and specifications and ensure that construction is consistent with the plans. Should unforeseen circumstances be encountered, the on-site construction manager will coordinate with the design engineer to ensure any design changes are safe and acceptable.</p>
Grantee Deliverable: (Describe the deliverable the grantee expects from this task)

Last Update: January 9, 2018

Progress reports will be delivered to RWPC, and as required, to CWCB. Photos will accompany progress reports. As-built drawings will be provided.

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

Construction photos, progress reports, as-built drawings (Grantee deliverable shall be shared with CWCB).

Budget and Schedule

Exhibit B - Budget and Schedule: This Statement of Work shall be accompanied by a combined [Budget and Schedule](#) that reflects the Tasks identified in the Statement of Work and shall be submitted to CWCB in excel format. **A separate excel formatted Budget is required for engineering costs to include rate and unit costs. See Attachment B – Cost Estimate**

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 in-kind 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

Last Update: January 9, 2018

Reporting Requirements

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.

Last Update: July 31, 2018



COLORADO

Colorado Water
Conservation Board

Department of Natural Resources

Colorado Water Conservation Board

Water Supply Reserve Fund

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

Date: 7/17/2019

Water Activity Name: Pumpline Replacement Project

Grantee Name: Redlands Water and Power Company (RWPC)

<u>Task No.</u> ⁽¹⁾	<u>Description</u>	<u>Start Date</u> ⁽²⁾	<u>End Date</u>	<u>Matching Funds</u> (cash & in-kind) ⁽³⁾	<u>WSRF Funds</u> (Basin & Statewide combined) ⁽³⁾	<u>Total</u>
1	Engineering	10/1/2019	11/1/2020	\$30,000	\$0	\$30,000
2	Construction	11/1/2020	4/1/2021	\$280,279	\$125,000	\$405,279
3	Construction Management	11/1/2020	5/30/2021	\$15,000	\$0	\$15,000
Total				\$325,279	\$125,000	\$450,279

(1) 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.

(3) Round values up to the nearest hundred dollars.

• 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.

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 further 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.

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

