COLORADO
Colorado Water Conservation Board
Department of Natural Resources

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TO: Colorado Water Conservation Board Members

FROM: Cole Bedford, P.E., Project Manager
Kirk Russell, P.E., Finance Section Chief

DATE: May 20, 2020

AGENDA ITEM: 11c. Water Project Loans
Redlands Water and Power Company – Pumpline Replacement Project

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Staff Recommendation:

Staff recommends the Board approve a loan not to exceed $641,350 ($635,000 for Project costs and $6,350 for the 1% service fee) to the Redlands Water and Power Company for costs related to the Pumpline Replacement Project, from the Severance Tax Perpetual Base Fund. The loan terms shall be 20 years at a reduced blended interest rate of 1.65% per annum. Security for the loan shall be in compliance with CWCB Financial Policy #5.

Introduction:

The Redlands Water and Power Company (Company) is applying for a loan for the Pumpline Replacement (Project). The Company is located in the Grand Valley near Grand Junction where it diverts approximately 800 cfs from the Gunnison River into their Redlands Power Canal. The Canal conveys the diverted flows to their hydroelectric facility and adjoining pump station. Most of the diverted flows continue down the hydroelectric facility's tailrace, but approximately 60 cfs passes through the pump station and a 48 inch concrete-lined steel pipe known as the "pumpline" to the First Lift Ditch which serves 2,000 acres of residential and agricultural property. This pumpline is the subject of the Project. Originally installed in 1944, it has deteriorated, requires frequent repair, and the risk of failure presents a significant safety hazard. Approximately 550 feet of the upper end of the pumpline was replaced in 2007 and the remaining 1000 feet will now be replaced. The estimated cost of the project is $860,000 which will be covered by a WSRF grant (POGG1 2020-2970), a contribution from the Company and this loan. See attached Project Data Sheet for a location map and Project summary.

Borrower – Redlands Water and Power Company
The Company is an irrigation and power provider for the Redlands area of the Grand Valley of Colorado. It was established in 1905 and is a nonprofit corporation. The Company generates power via its hydroelectric facility, the electricity from which is used to power the pump station and any excess is sold to Xcel Energy. The Company also serves as an irrigation water provider for which it issues shares per its Articles of Incorporation. At present there are 5,759 shares held by 1,089 shareholders. The shareholders own 1,970 acres of land which is served from approximately 600 system headgates. 72% of the land is residential, 26% agricutural pasture grass, and 2% orchards and vinyards. Loan contract terms may be accepted by a majority vote of the Board.

Background:
The Company conducted a review of operations in 2014-2015 which culminated in the "Redlands Water and Power Company Water Management Plan." The plan identified the urgent need for pumpline repair or replacement and suggested a completion date of 2018 for this work due to frequent repair, maintenance, and risk of failure. More recently, repair or replacement of the pumpline was recommended in the "Pump Station No.1 Replacement Feasibility Study" (J-U-B Engineers, 2019) as an initial phase of the more comprehensive Pump Station No.1 Rehabilitation/Replacement Project. That project is a Tier 1 priority project in the Gunnison Basin Implementation Plan.

Loan Feasibility Study:
J-U-B Engineers Inc. prepared the Loan Feasibility Study titled "Feasibility of the Redlands Water and Power Company Pumpline Replacement Project" dated April 2020. The feasibility study was prepared in accordance with CWCB guidelines and includes an analysis of alternatives, preliminary engineering design, and construction cost estimates**.**

Water Rights:
The Company relies entirely on surface water diversions from its diversion on the Gunnison River. It holds three water rights. The senior two rights are decreed for irrigation and power purposes and the junior right for power generation only.

TABLE 1: WATER RIGHTS

Name	Amount (cfs)	Appropriation Date	Adjudication Date	Water Court Case No.
Redlands Water and Power Co.	670	07/22/1905	07/22/1912	CA1927
Redlands Water and Power Co.	80	06/26/1941	07/21/1959	CA8303
Redlands Water and Power Co.	100	10/01/1994	12/31/1994	96CW0158

Project Description:
The Purpose of the Project is ensure the Company's continued ability to lift water from the Redlands Power Canal to the First Lift Ditch by replacing the Pumpline between them. The following alternatives were analyzed:

Alternative 1 – No Action: This alternative was considered unacceptable because the existing threat of failure of the pumpline presents a safety hazard and would result in increased maintenance costs over time. Furthermore, because this portion of the system has no redundancy a failure in the pumpline would result in a complete water outage for the service area.

Alternative 2 – Rehabilitation: This alternative would involve installing a liner through the pumpline and other minor repairs. Discussions with contractors indicated that only straight sections of pipe could be lined, requiring some replacement in curved sections. Several contractor estimates suggested the cost of this alternative was around $897,000. While this alternative would achieve the project purpose if implemented, it was not selected because of the cost and the likelihood of a long shutdown period during construction.

Selected Alternative 3 – Replacement: This alternative was selected as the preferred alternative as it achieves the project purpose and does so at a relatively low cost. This alternative will replace the existing pumpline in a parallel alignment with steel and HDPE pipe.

The cost estimate of this alternative is $860,000 as shown in Table 2.

TABLE 2: ESTIMATED PROJECT COST

Task	Total
Engineering	$45,000
RWPC Supplied Pipe and Pipe Coating	$125,000
Mobilization	$25,000
Install 48" HDPE Pipe and Fittings	$121,000
Install 48" Steel Pipe and Fittings	$241,000
Other (Thrust Blocks, Backfill, Small Pipe and Appurtenances, Meters, etc.)	$196,000
Contingency	$107,000
TOTAL	**$860,000**

Permitting: All permitting requirements have been met.

Schedule: Engineering design is currently in final review. Final acceptance of the design and specifications are planned to occur in July 2020. During July and August, a contractor will be selected and owner furnished project materials secured in the months before October. Construction is expected to take place between October and December 2020.

Financial Analysis:
Table 3 provides a summary of the Project's financial aspects. The Company qualifies for a blended interest rate of 1.90% for a 30-year term (Ownership: 28% agricultural, 72% mid-income municipal, 0% commercial). The Company is applying for a 20-year term; therefore, the interest rate is decreased by 0.25% for a final blended interest rate of 1.65%. The Company has been approved for a $125,000 WSRF Grant and is contributing $100,000 in cash funds.

TABLE 3: FINANCIAL SUMMARY

Total Project Cost	$860,000
WSRF Grant	$125,000
Company Cash	$100,000
CWCB Loan Amount	$635,000
CWCB Loan Amount (Including 1% Service Fee)	$641,350
CWCB Annual Loan Payment	$37,910
CWCB Annual Loan Obligation (1st Ten Years)	$41,701
Number of Shares	5,759
Annual Loan Obligation per Share	$7
Current Assessment per Share	$195
Proposed Future Assessment per Share	$200

Creditworthiness: The Company has no existing debt. The Company has made slight increases to assessments in recent years; from $180 to $185 in 2018, to $190 in 2019, and to $195 in 2020.

TABLE 4: FINANCIAL RATIOS

Financial Ratio	Prior Years	Future w/ Project
Operating Ratio (revenues/expenses) weak: <100% - average: 100% - 120% - strong: >120%	110% (average) $1.37M/$1.25M	128% (strong) $1.69M/1.32M
Debt Service Coverage Ratio (revenues-expenses)/debt service weak: <100% - average: 100% - 120% - strong: >120%	N/A	925% (strong) $1.69M-$1.32M $0.04M
Cash Reserves to Current Expenses weak: <50% - average: 50% - 100% - strong: >100%	72% (average) $0.90M/$1.25M	68% (average) $0.90M/$1.32M
Annual Operating Cost per Acre-Foot (558,800 AF) weak: >$20 - average: $10 - $20 - strong: <$10	$2.23 (strong) $1.25M/0.56M AF	$2.36 (strong) $1.32M/0.56M AF

Collateral: Security for this loan will be a pledge of assessment revenues and the project itself (pumpline). This security is in compliance with the CWCB financial Policy #5 (Collateral).

cc: Kyle Vanderberg, Manager/Superintendent, Redlands Water and Power Company
Jennifer Mele, Colorado Attorney General's Office

Attachment: Water Project Loan Program – Project Data Sheet

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Pumpline Replacement Project

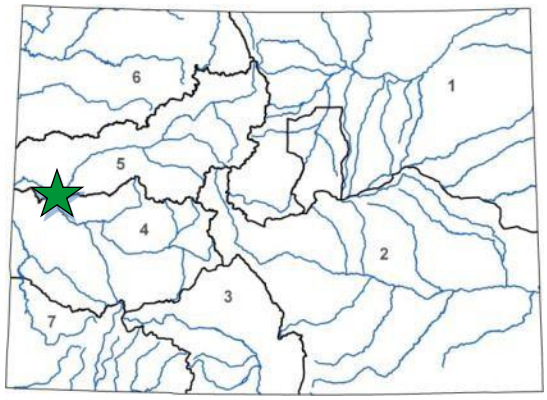
Redlands Water and Power Company

May 2020 Board Meeting

LOAN DETAILS	
Project Cost:	$860,000
CWCB Loan (with Service Fee):	$641,350
Loan Term and Interest Rate:	20 years @ 1.65%
Funding Source:	*Severace Tax Perpetual Base Fund*

BORROWER TYPE		
Agriculture	*Municipal*	*Commercial*
28%	0% Low - 72% Mid - 0% High	0%

PROJECT DETAILS	
Project Type:	Pipeline Replacement
Average Annual Diversions:	558,800 AF



LOCATION			
County:			Mesa
Water Source:			Gunnison River
Drainage Basin:			Gunnison
Division:	4	*District:*	42

The Redlands Water and Power Company (Company) is a non-profit corporation formed in 1905 to provide irrigation water and power to 1,970 acres of the Redlands area in the Grand Valley for residential landscaping, pasture grass, orchards and vineyards. Shareholders are predominantly located on bench lands above the Colorado and Gunnison Rivers, requiring most of the irrigation water to be pumped uphill to them. The Company system diverts approximately 800 cfs of water from the Gunnison River to its pumping plant and hydroelectric facility via the Redlands Power Canal. Of this water, approximately 60 cfs is pumped through a 48" concrete-lined steel pipe (Pumpline) to users, while the remaining water is run through the hydroelectric facility to power the pumping plant. Any extra electricity is sold to Xcel Energy as an additional revenue stream for the Company.

The current pumpline was constructed in 1944 and experiences leaks that require frequent repair. The Company replaced a portion of the pumpline in 2017, and will replace the remaining pipe with this project. This project will provide water security for shareholders since a pumpline failure would result in the majority of the service area not receiving irrigation water. The project will be funded with a loan, a previously approved WSRF grant of $125,000, and cash reserves. Material acquisition is expected to occur over the summer with construction in the fall of 2020.