



COLORADO
Colorado Water Conservation Board
Department of Natural Resources

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TO: Colorado Water Conservation Board Members

FROM: Matthew Stearns, P.E., Project Manager
Kirk Russell, P.E., Finance Section Chief

DATE: September 18-19, 2019 Board Meeting

AGENDA ITEM: 20a. Water Project Loans
Cedar Mesa Ditch Company - Lower Cedar Mesa Ditch Piping

Introduction

The Cedar Mesa Ditch Company (Company) is applying for a loan for the Lower Cedar Mesa Ditch Piping (Project). The Cedar Mesa Ditch (Ditch) is 12 miles long and delivers Company and shareholders water for irrigation in Delta County. The purpose of the Project is to reduce water loss, and salt and selenium leaching by converting 3.5 miles of open ditch to piped ditch. The ditch section at the lowest end runs through rural farmland and experiences significant seepage. Piping the ditch will also improve maintenance and public safety. The total Project cost is estimated to be \$1,346,000, and will also be funded with grant funding from the Natural Resource Conservation Service (NRCS). The Company is requesting a loan for the entire Project cost; however, the final loan amount is expected to be approximately \$300,000 after NRCS reimbursements are applied to the principal balance. See attached Project Data Sheet for a location map and Project summary.

Staff Recommendation

Staff recommends the Board approve a loan not to exceed \$1,359,460 (\$1,346,000 for Project costs and \$13,460 for the 1% service fee) to the Cedar Mesa Ditch Company for costs related to the Ditch Piping Project, from the Severance Tax Perpetual Base Fund. Following construction and the receipt of the NRCS funds, staff further recommends the loan be amended to the remaining loan balance plus the 1% service fee. The loan terms shall be 30 years at an agricultural interest rate of 1.55% per annum. Security for the loan shall be in compliance with CWCB Financial Policy #5.

Additional contract condition: Prior to substantial completion of the Project loan contract, the Company shall submit to the CWCB an amount equal to the reimbursements from the NRCS.



Borrower - Cedar Mesa Ditch Company

The Company organized in 1898 as a nonprofit corporation and is in good standing with the Colorado Secretary of State. Its 5-member Board of Directors exercises the general supervision over the affairs of the Company. The Company has 58 shareholders owning 403 shares of stock. The total annual diversions average 6,000 AF per year.

Revenues are primarily generated through assessments from shareholders. Miscellaneous income is derived from transfer fees. Assessments upon shares of stock are set by a majority vote of the stockholders present either at the annual meeting, or at a special meeting of the stockholders called for that purpose. To enforce assessments, the Board of Directors has authority to assess interest on delinquent assessments and can sell stock that is delinquent by 30 days.

Background

The Company owns and operates the Cedar Mesa Ditch, which diverts water from Surface Creek and carries water for approximately 12 miles to shareholders. The Ditch serves 1,043 acres of farms, including orchards, hay, and cattle. Shareholders also have the ability to move other privately owned water from reservoirs via the Ditch.

The Ditch is subject to significant seepage in the lower 3.5 mile section, as it is located in an area of Mancos shale that is known to contribute significant salinity and selenium within the Colorado River System. Therefore, piping the Ditch will not only reduce water loss and maintenance costs, it will also reduce salt loading in the Colorado River System by 800 tons per year as estimated by NRCS.

The Company will use loan funding from the CWCB along with grant funding from the NRCS Grant program known as Environmental Quality Incentive Program (EQIP) that provides funding to individual farms to improve irrigation systems, including upstream, off-farm property. Three farmers that are members of the Company will participate in the EQIP grant program on behalf of the Company.

Loan Feasibility Study

Robert Gallegos, P.E., with Robert I Gallegos P.E. LLC, prepared the Loan Feasibility Study titled, "Feasibility of Piping Lower Cedar Mesa Ditch," dated August 2019. The feasibility study was prepared in accordance with CWCB guidelines and includes an analysis of alternatives, preliminary engineering design, and construction cost estimates. Financial statements were provided by the Cedar Mesa Ditch Company.

Water Rights

The Company owns water rights totaling 52.08 cfs shown in Table 1. The source of water is Surface Creek.

TABLE 1: WATER RIGHTS IN CEDAR MESA DITCH COMPANY

Name	Amount	Appropriation Date	Adjudication Date	Water Court Case No.
Cedar Mesa Ditch	10.00 CFS	9/15/1894	9/28/1907	CA0457
Cedar Mesa Ditch	16.08 CFS	9/15/1894	6/23/1914	CA0617
Cedar Mesa Ditch	2.00 CFS	9/15/1894	3/20/1954	CA3503
Cedar Mesa Ditch	24.00 CFS	12/31/1894	12/31/1998	98CW0030

Project Description

The objective of the Project is to address a section of the Cedar Mesa Ditch that has significant seepage issues and to reduce salt and selenium leaching. The following alternatives were analyzed by the engineer and the Company:

Alternative 1 - No Action: This alternative is considered unacceptable because water loss is affecting the economic viability of agriculture along the ditch.

Alternative 2 - Pressurized Pipe System: This alternative would pipe the lower portion of the Cedar Mesa Ditch with a pressurized piping system required by the Bureau of Reclamation (BOR) salinity program. The Project was estimated to cost \$2,200,000, with \$800,000 to be borne by the Company after grants. This alternative was dismissed as being too expensive. Additionally, the Company and their engineer did not believe a pressurized system was warranted since the current placement of head gates already provides most of the farms with a pressurized system.

Selected Alternative 3 - Unpressurized Pipe System: This alternative will pipe the lower portion of the Cedar Mesa Ditch with an unpressurized piping system utilizing the NRCS EQIP program. That section runs through Mancos shale, which is prone to the seepage. The option will improve the Company's stewardship of diverted water, will improve maintenance and public safety, and will significantly reduce salt and selenium leaching from the Ditch.

The engineering analysis determined that 80 psi plastic irrigation pipe (PIP) and high-density polyethylene (HDPE) pipe ranging in size from 15 to 24 inches will pass the required flow and fit within the existing ditch footprint. Leading to the decision to move forward with construction is that the Company has secured an in-kind donation of an estimated 1,500 truckloads of nearby fill dirt valued at \$150,000.

The construction cost estimate of this alternative is \$1,346,000, which will be fully funded with the CWCB loan and the NRCS EQIP grant. The Company has also obtained an in-kind NRCS grant for engineering design and construction inspection costs.

Permitting: All work will occur within the existing 50-foot wide ditch easement. The county has agreed to permit the Company to cross county roads in six places. No additional permits are anticipated for this Project.

Schedule: Construction will start in the fall of 2019. The Project will be phased as needed with NRCS and construction seasons, with construction completion anticipated by 2022.

Financial Analysis

Table 2 provides a summary of the Project's financial aspects. The Company qualifies for an agricultural interest rate of 1.55% for a 30-year term.

The Company anticipates receiving NRCS grant funds of \$1,046,000, with the remaining \$300,000 of Project cost coming from the CWCB loan. The service fee will be applied on the total amount disbursed, and NRCS funds will reduce the final loan amount. The Company will cover any costs that exceed the estimated Project cost.

TABLE 2: FINANCIAL SUMMARY

	Estimated w/o NRCS Funds	Estimated w/ NRCS Funds
Total Project Cost	\$1,346,000	\$1,346,000
CWCB Loan Amount	\$1,346,000	\$300,000
CWCB Loan Amount (Including 1% Service Fee)	\$1,359,460	\$313,460
CWCB Annual Loan Payment	\$57,009	\$13,145
CWCB Annual Loan Obligation (1 st Ten Years)	\$62,710	\$14,460
Number of Members	58	58
Number of Shares	403	403
Annual Loan Obligation per member	\$1,081/member	\$249/member
Current Assessment per member (2019)	\$325/member	\$325/member
Current Assessment per share (2019)	\$55/share	\$55/share

Creditworthiness: The Company has no outstanding debt.

The Company raises revenue by a combination of per-member and per-share assessments. Between 2016 and 2019, the per-member assessment was raised from \$75 to \$325. A per-share assessment was also raised from \$40 to \$55. For repayment of the loan, the Company has chosen a per-member assessment increase to cover the debt.

TABLE 3: FINANCIAL RATIOS

Financial Ratio ⁽¹⁾	Prior Years	Future ⁽²⁾ w/ Project (\$1.359M Loan)	Future w/ Project & NRCS Funds
Operating Ratio (revenues/expenses) Weak: <100% - average: 100% - 120% - strong: >120%	254% (strong) \$43.9K/\$17.3K	100% (average) \$80.2K/\$80.0K	138% (strong) \$43.9K/\$31.8K
Debt Service Coverage Ratio (revenues-expenses)/debt service Weak: <100% - average: 100% - 120% - strong: >120%	N/A	100% (average) (\$80.2K-\$17.3K) \$62.7K	183% (strong) (\$43.9K-\$17.3K) \$14.5K
Cash Reserves to Current Expenses Weak: <50% - average: 50% - 100% - strong: >100%	154% (strong) \$26.6k/\$17.3K	33% (weak) \$26.6K/\$80.0K	84% (average) \$26.6K/\$31.8K
Annual Operating Cost per Acre-Foot (6,000 AF) Weak: >\$20 - average: \$10 - \$20 - strong: <\$10	\$3 (strong) \$17.3K/6,000AF	\$13 (average) \$80.0K/6,000AF	\$5 (strong) \$31.8K/6,000AF

(1) Financial Ratios include an approved 2019 per-member assessment increase of \$225.

(2) Future w/ Project assumes an estimated \$625 increase in per-member assessments.

Collateral: Security for this loan will be a pledge of assessment revenues backed by a rate covenant, and the Project itself, including the pipeline. This security is in compliance with the CWCB Financial Policy #5 (Collateral).

cc: Erick Fritchman, President, Cedar Mesa Ditch Company
Jennifer Mele, Colorado Attorney General's Office

Attachment: Water Project Loan Program - Project Data Sheet

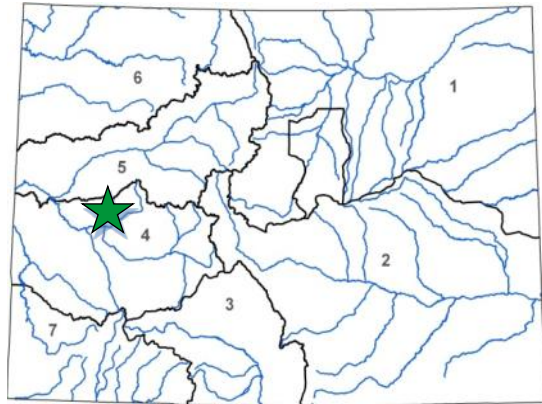


Lower Cedar Mesa Ditch Piping

Cedar Mesa Ditch Company

September 2019 Board Meeting

L O A N D E T A I L S	
Project Cost:	\$1,346,000
CWCB Loan (with 1% Service Fee):	\$1,359,460
Loan Term and Interest Rate:	30 years @ 1.55%
Funding Source:	Severance Tax PBA , NRCS EQIP
B O R R O W E R T Y P E	
Agriculture	Municipal Commercial
100%	0% Low - 0% Mid - 0% High 0%
P R O J E C T D E T A I L S	
Project Type:	Ditch Rehabilitation
Average Annual Diversions:	6,000 AF



L O C A T I O N	
County:	Delta
Water Source:	Surface Creek
Drainage Basin:	Gunnison
Division:	4 District: 40

The Cedar Mesa Ditch Company (Company) was organized in Delta County in 1898, and currently diverts irrigation water from Surface Creek to 1,043 acres via a 12-mile ditch. The Company serves shareholders who raise cattle, hay and fruit. The Project will pipe approximately 3.5 miles of the lower ditch section to reduce the average seepage by 720 acre-feet a year, and reduce salt leaching by approximately 800 tons per year.

The project will be funded in conjunction with a Natural Resource Conservation Service (NRCS) Environmental Quality Incentives Program (EQIP) grant. The grant is anticipated to pay approximately 70% of the project cost at completion. The loan will be used to cover all construction costs and after NRCS funding is received, the remaining loan amount is expected to be approximately \$300,000. Construction is expected to begin in October of 2019, and last two to three years.

