COLORADO
Colorado Water Conservation Board
Department of Natural Resources

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TO: Colorado Water Conservation Board Members

FROM: Joshua Godwin, P.E., Project Manager
Kirk Russell, P.E., Finance Section Chief

DATE: September 20-21, 2023 Board Meeting

AGENDA ITEM: 7b. Water Project Loans
East Mesa Water Company
East Mesa Emergency Ditch Repair

Staff Recommendation

Staff recommends the Board approve a loan not to exceed $418,140 ($414,000 for project costs and $4,140 for the 1% service fee) to the East Mesa Water Company for costs related to the East Mesa Emergency Ditch Repair, from the Severance Tax Perpetual Base Fund. The loan term will be 30 years at an interest rate of 1.90% per annum. Security for the loan shall be in compliance with CWCB Financial Policy #5.

Introduction

The East Mesa Water Company (Company) is applying for a loan at a blended interest rate to finance the East Mesa Emergency Ditch Repair (Project) along the East Mesa Ditch system (Ditch). In early September, two sinkholes collapsed under the Ditch and cut off water to downstream users. The Project will repair the Ditch in time to supply stock water to the shareholders' grazing cattle when needed in late October. The total Project cost is estimated to be $414,000.

Because of the emergency nature of the Project, this loan request is undergoing an expedited Board approval process. However, prior to the disbursal of any loan funds, all of the standard Water Projects Loan Program review and risk assessment processes will be applied. The Company is an existing borrower of good standing and the Project is needed for shareholders to maintain revenues for the repayment of the existing loan.

See attached Project Data Sheet for a location map and Project summary.

Borrower – East Mesa Water Company
The East Mesa Water Company - originally named the Crystal River East Mesa Ditch Company - is a mutual ditch company that was established in 1895. The Company's name was changed to the East Mesa Water Company in 2010 due to conflicting names registered with the Secretary of State's Office. The Company operates the Ditch in the Crystal River Valley within Garfield and Pitkin Counties - south of Carbondale - and has 1,000 shares with 12 shareholders. The Ditch services 740 acres with irrigation water to grow nursery trees, hay, and forage crops, as well as supply stock water for cattle ranching and domestic water for a small homeowners association. The Company's bylaws require a 66% shareholder approval for the Company to take on debt for capital improvement projects. The Company's elected Board of Directors manage day-to-day operations and has the power to sell stock for non-payment of annual assessments. The Company is formed as a non-profit and is in good standing with the Colorado Secretary of State's Office.

Background
On Wednesday September 6th 2023, two side-by-side sinkholes - with depths of approximately 30 feet - were discovered to have opened up beneath the Ditch - leaving 34% (250 acres) of the farm and ranchland irrigated by the Ditch without water. On Friday September 8th, the Company board and shareholders met onsite with CWCB staff along with Colorado River Water Conservation District (CRWCD) staff, local engineers, surveyors, and geophysicists to discuss options to quickly repair the Ditch for permanent use without incurring significant operation and maintenance costs. Since this area does have a history of sinkholes - to prevent concerns with the viability of repairs, any chosen alternative will include geophysics along the pipeline alignment to avoid construction over unknown sinkholes.

Several of the shareholders rely on water in the Ditch after October to supply stock water to their grazing cattle. If the flow in the ditch is not re-established in time, then it will likely end ranching for those affected parties. Outside of the needed stock water, downstream users will still need the ditch repaired prior to the beginning of the 2024 irrigation season.

Loan Feasibility Study
Paul C. Currier, P.E., with Water Resource Consultants, LLC, prepared the Loan Feasibility Study titled, "Emergency Repairs, East Mesa Ditch", dated September 15, 2023. The feasibility study is adequate to make a loan recommendation. Additional engineering and analysis is needed to meet CWCB guidelines The Study includes an analysis of alternatives, estimated costs, and financial statements prepared by the East Mesa Water Company.

Water Rights
The Company operates under water rights as shown in Table 1.

TABLE 1: PROJECT WATER RIGHTS

Name	Amount (cfs)	Appropriation Date	Adjudication Date	Case No.
Crystal River	31.8	08/10/1894	12/12/1902	CA990
	10.0	05/01/1942	10/24/1952	CA4033

Project Description
The Purpose of this Project is to repair the ditch before the end of October for winter stock water use and for the 2024 irrigation season.

Alternative 1 – No Action: Taking no action is the least expensive option. However, if the ditch remains unrepaired past the end of October, then there will be no winter stock water for the ranchers' cattle. If the ditch remains unrepaired at the beginning of the 2024 irrigation season, then 34% of the land irrigated by the Ditch will be without water. For these reasons, this alternative was not chosen.

Alternative 2 – Construct Pipeline Adjacent to Road: This alternative would be to construct an HDPE pipeline to move the ditch west away from known sinkholes and align it adjacent to an existing dirt road. This alternative requires 1,000 feet more pipe than the chosen alternative and will not guarantee that sinkholes are avoided; therefore geophysics would still be necessary. The cost is estimated at $600,000 - greater than the chosen alternative. For these reasons, this alternative was not chosen.

Selected Alternative 3 – Construct Pipeline Siphon Away from Sinkholes: This alternative would be to construct a pipeline siphon with 30" HDPE approximately 100 yards west of the two recent sinkholes, using geophysics to guide the alignment. The total estimated cost of this alternative is $414,000 as shown in Table 2.

TABLE 2: ESTIMATED PROJECT COST

Tasks	Cost
30" HDPE Pipe	$187.500
Earthwork	$45,000
Inlet, Outlet, and Trash Rack	$25,000
Geophysics, Engineering, and Surveying	$47,000
Carbonate Drainage	$15,000
Construction Management	$25,500
Contingency (20%)	$69,000
TOTAL	**$414,000**

Permitting: No permitting is required for the Project.

Schedule: The Company expects to begin and end construction within October.

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 loan (Ownership: 99% Agriculture and 1% Middle-Income Municipal). All interest rate evaluations are per CWCB Financial Policy #7 (Lending Rate Determination). The Company is also in the process of applying for an emergency grant from the CRWCD. If they are successful, then the loan authorization will likely exceed the actual necessary loan funds and the Company may not need this full loan funding.

TABLE 3: FINANCIAL SUMMARY

Project Cost	$414,000
CWCB Loan Amount	$414,000
CWCB Loan Amount (Including 1% Service Fee)	$418,140
CWCB Annual Loan Payment	$18,414
CWCB Annual Loan Obligation (1st Ten Years)	$20,255
Number of Shares	1,000
Current Assessment per Share	$50.00
Annual Loan Obligation per Share	$20.26
Future Assessment per Share	$85.46

Creditworthiness: The Company has $287,304 in existing debt in the form of a CWCB loan (CT2015-0141) for the East Mesa Ditch Piping Project that was approved by the Board July 2023. The loan is in good standing and is scheduled to be paid off in 2045. Prior to the CWCB funded piping project, assessments were $15/share. And between 2016 to 2023, assessments rose from $25/share to $50/share.

TABLE 4: EXISTING DEBT

Lender	Original Balance	Current Balance	Annual Payment	Maturity Date	Collateral
CWCB (CT2015-0141)	$725,670	$287,304	$15,847	2045	Assessment Revenues and Project

TABLE 5: FINANCIAL RATIOS

Financial Ratio	Past Years	Future w/ Project
Operating Ratio (revenues/expenses) weak: <100% | average: 100% - 120% | strong: >120%	76% (weak) $48.3K/$63.5K	100% (average) $83.8K/$83.8K
Debt Service Coverage Ratio (revenues-expenses)/debt service weak: <100% | average: 100% - 120% | strong: >120%	3.8% (weak) ($48.3K-$47.7K) $15.8K	100% (average) ($83.8K-$47.7K) $36.1K
Cash Reserves to Current Expenses weak: <50% | average: 50% - 100% | strong: >100%	20.5% (weak) $13K/$63.5K	15.5% (weak) $13K/$83.8K
Annual Operating Cost per Acre-Foot (9,669 AF) weak: >$20 | average: $10 - $20 | strong: <$10	$6.57 (strong) $63.5K/9,669	$8.67 (strong) $83.8K/9,669

Collateral: Security for this loan will be a pledge of assessment revenues backed by an assessment covenant and the Project itself (the East Mesa Ditch pipeline). This security is in compliance with the CWCB financial Policy #5 (Collateral).

cc: Richard McIntyre, Senior Director, East Mesa Ditch Company
Jennifer Mele, Colorado Attorney General's Office

Attachments: Water Project Loan Program – Project Data Sheet

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East Mesa Emergency Ditch Repair

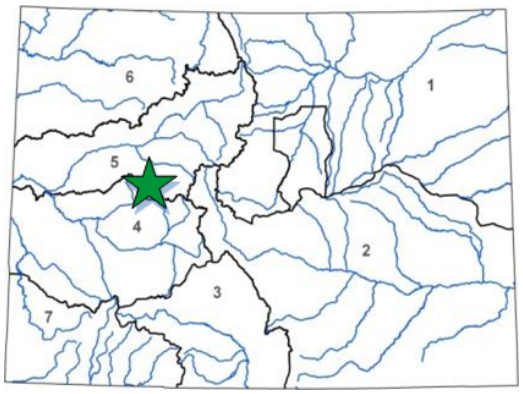
East Mesa Water Company

September 2023 Board Meeting

LOAN DETAILS	
Project Cost:	$414,000
CWCB Loan (with 1% Service Fee):	$418,140
Loan Term and Interest Rate:	30 Yrs @ 1.90%
Funding Source:	Severance Tax Perpetual Base Fund

BORROWER TYPE		
Agriculture	*Municipal*	*Commercial*
99%	0% Low - 1% Mid - 0% High	0%

PROJECT DETAILS	
Project Type:	Ditch Piping
Average Annual Diversions:	9,669 AF



LOCATION	
County:	Garfield
Water Source:	Crystal River
Drainage Basin:	Colorado
Division: 5	*District:* 38

The East Mesa Water Company (Company) provides irrigation water to approximately 740 acres for 12 shareholders. Irrigated acreage within the Company's service area is primarily used for cattle ranching, and to grow hay and forage crops.

In early September, a portion of the lower ditch collapsed into a sinkhole, leaving about a third of the Company's service area without access to irrigation or stock water. Repairs are needed immediately to allow for one last stock water run for cattle returning to the property. The Project will include relocating the ditch away from the sinkhole based on an upcoming geophysics analysis, and piping it to protect against any future sinkhole development. With the relocation of the ditch, the piped section will include a siphon and is estimated to be about 1,500 linear feet in length. This Project is also exploring emergency funding from the Colorado River Water Conservation District. Construction is expected to begin in the early October of 2023 and will be completed within a month.