

STATE OF COLORADO

Colorado Water Conservation Board

Department of Natural Resources

1313 Sherman Street, Room 721

Denver, Colorado 80203

Phone: (303) 866-3441

Fax: (303) 866-4474

www.cwcb.state.co.us



TO: Colorado Water Conservation Board Members

FROM: Kirk Russell, P.E., Chief
Finance & Administration Section

DATE: July 3, 2013

SUBJECT: **Agenda Item 25a, July May 16-17, 2013 Board Meeting**
Finance – New Water Project Loans
East Mesa Water Company – Ditch Piping Project

John W. Hickenlooper
Governor

Mike King
DNR Executive Director

James Eklund
CWCB Director

Introduction

The East Mesa Water Company (Company) is applying for a CWCB loan for the Ditch Piping Project (Project). The Project will remove the threat of a tunnel collapse and ensure the delivery of irrigation water to its ranching shareholders. The total Project cost is estimated at \$550,000. The Company is eligible to receive assistance from Natural Resources Conservation Service (NRCS). The remaining balance of project costs will become a 30-year CWCB loan. See attached Project Data Sheet for a location map and Project summary.

Staff Recommendation

Staff recommends the Board approve an initial loan, not to exceed \$555,500 (\$550,000 for project costs and \$5,500 for the 1% Loan Service Fee) for project costs, to the East Mesa Water Company from the Construction Fund for the Ditch Piping Project. Following construction and receipt of the NRCS funds, staff further recommends the loan be amended to an amount not to exceed \$255,500 (\$250,000 for project costs and \$5,500 for the 1% Loan Service Fee) with loan terms of 30 years at an agricultural interest rate of 1.75% per annum. Security for the loan shall be in compliance with CWCB Financial Policy #5.

Contract Conditions will include:

- 1) All additional grant funds obtained for the purpose of this Project shall be submitted to CWCB to be applied to the balance of the loan within thirty (30) calendar days after receipt of said funds.
- 2) An NRCS contract shall be executed by the East Mesa Water Company prior to disbursal of CWCB loan funds.

Background

This Company is located in the Crystal River Valley in the western portion of Pitkin County, Colorado. It owns, maintains and operates the East Mesa Ditch system for the benefit of the shareholders by providing irrigation water rights diverted out of the Crystal River. About, one mile down ditch from the river diversion, the ditch enters a 650-foot long rock tunnel that is collapsing. The Company desires to protect its shareholders from a tunnel failure and avoid the chance of losing the ability to deliver water. The earthen ditch also loses as much as 35% of the water due to seepage through the course and rocky soil along the nine mile ditch route. The Company is working with the NRCS to install the pipeline to solve these problems. The ditch piping alignment will be rerouted to avoid the tunnel and will prevent water loss due to ditch seepage.

The Company's service area is 740 acres and is known locally as East Mesa of the Crystal River located about three miles south of Carbondale, Colorado. The Company serves 12 users including private landowners and a very small homeowners association. Irrigated acreage within the service area is primarily used for cattle ranching, nursery trees, and to grow hay and forage crops. The hay crop is used as cattle and horse feed, or is sold.

Loan Feasibility Study

The Loan Feasibility Study, titled "Feasibility of Piping a Section of the East Mesa Water Company", dated May 1, 2013, was prepared by Dennis Davidson. The study includes preliminary engineering design and construction cost estimates prepared by Mike Kishimoto, NRCS, Garfield County Office. The study was prepared in accordance with the CWCB guidelines.

Borrower – East Mesa Water Company

The Company was incorporated in 1895 as a mutual ditch company. The Crystal River East Mesa Ditch Company changed its name to the East Mesa Water Company in 2010 due to conflicting names registered with the Secretary of State's office. The Company continues to operate as a mutual ditch company and is in good standing. The Company has 1,000 shares and 12 shareholders. The Company has an elected Board of Directors that manages the day-to-day business and operation of the ditch.

The Company's bylaws require a 100% shareholder approval for the Company to take on debt. The Board of Directors has the power to sell stock for non-payment of annual assessments.

Water Rights

The Company's water comes from a direct diversion from the Crystal River delivered via the East Mesa Ditch. The diversion from the river is located nine miles south of the intersection of highway 82 and 133 on the east side of the River. Total Water Rights are 41.8 CFS as follows:

- 31.8 CFS direct flow irrigation right in the East Mesa Ditch on the Crystal River, decreed in Civil Action No. 990, District Court, Garfield County, with an adjudication date of December 12, 1902, and an appropriation date of August 10, 1894.
- 10.0 CFS direct flow irrigation, domestic and "other beneficial use" water right in the East Mesa Ditch on the Crystal River, decreed in Civil Action No. 4033, District Court, Garfield County, with an adjudication date of October 24, 1952, and an appropriation date of May 1, 1942.

The Ditch usually runs from early May until about the middle of October and has an annual diversion of about 9,669 AF.

Project Description

The Project involves the installation of 1,450 feet of 42-inch high density polyethylene (HDPE) pipe on a new alignment to avoid the use of the 100-year old ditch tunnel which has the potential to collapse each irrigation season.

The Company along with the assistance of NRCS evaluated the concept of boring/piping of the existing tunnel and found it to be cost prohibitive. The only feasible option remaining was to realign the ditch around the tunnel area as an inverted siphon. A couple alignments were considered and negotiations with the Town of Carbondale regarding access easements are underway.

The design will be performed by the Glenwood Springs NRCS office Colorado State NRCS Engineer and Staff. The design will include concrete structures and rock riprap. A breakdown of the Project cost estimate is provided in Table 1.

**Table 1.
Project Cost Estimate**

Mobilization	\$5,000
Earthwork/Rip Rap	\$10,000
Concrete Inlet Structure	\$10,000
1,450LF of 42-inch HDPE Pipe	\$200,000
Installation of Pipe	\$275,000
10% Contingencies/Permits/Easements	\$50,000
Total	\$550,000

The NRCS is expected to complete the final design by mid-October 2013. Construction is expected to begin November 2013 and to be completed before water is turned on in May 2014.

Financial Analysis

Table 2 shows a summary of potential funding sources for the Project in addition to the CWCB loan and Company cash reserves. The loan will be reduced to \$255,500 after the Project is completed and the Borrower receives funds from other sources.

Table 2. Potential Funding Sources

Funding Source	Amount	Decision Dates
NRCS Design Services	In Kind	Approved
CWCB Loan	\$550,000/\$255,500	July 2013
Colorado River District	\$50,000	April 2014
Colorado River BRT *	\$25,000	April 2014
NRCS Cost Share **	\$300,000	July 2013

* If Project is delayed to the fall of 2014 the Company plans to apply for BRT funds.

** Funding received from NRCS will be disbursed after construction is complete.

Table 3 shows a summary of the financial aspects of the Project. The Company qualifies for an Agricultural interest rate of 1.75% for a 30 year term.

Table 3. Financial Summary of Project

PROJECT/LOAN		
Total Project Cost		\$550,000
NRCS Grant Funding		\$300,000
Initial CWCB Loan Amount		\$550,000
Initial Loan Amount with 1% Service Fee		\$555,500
Amended Loan amount with 1% Service Fee		\$255,500
CWCB Annual Loan Payment		\$11,020
CWCB Loan Obligation (including 10% debt reserve funding)		\$12,122
Project Cost per AF Delivered (using 9,669AF)		\$26/AF
Assessments		Before After
Assessments per share (1,000 shares)		\$15/share \$27share

Creditworthiness: The Company has no existing debt.

Table 4 shows the Financial Ratios for the Company.

Table 4. Financial Ratios

Financial Ratio	Past Years	Future
Operating Ratio (revenues/expenses) weak: <100% - average: 100% - 120% - strong: >120%	163% (Strong) \$15K/9.3K	127% (Strong) \$27K/21K
Debt Service Coverage Ratio (revenues-expenses)/debt service weak: <100% - average: 100% - 120% - strong: >120%	N/A (No Debt)	148% (Strong) \$27-9.3K/12K
Cash Reserves to Current Expenses weak: <50% - average: 50% - 100% - strong: >100%	5% (Weak) \$0.5K/9.3K	2% (Weak) \$0.5K/21K
Annual Operating Cost per Acre-Foot (9,669AF) weak: >\$20 - average: \$10 - \$20 - strong: <\$10	\$0.96/AF (Strong) \$9.3K/9,669AF	\$2.21/AF (Strong) \$81K/4,480AF

Collateral - Security for the loan shall be a pledge of the Company's assessment revenues backed by a rate covenant and the Project itself (1,450 feet of installed pipeline and associated access rights). This is in compliance with CWCB Financial Policy #5 (Collateral).

cc: Marty Nieslanik, President, East Mesa Water Company
 Susan Schneider/Jennifer Mele, Colorado Attorney General's Office

Attachment: Water Project Loan Program – Project Data Sheet

CWCB Water Project Loan Program Project Data Sheet

Borrower: East Mesa Water Company

County: Pitkin, Garfield

Project Name: Ditch Piping Project

Project Type: Ditch Rehabilitation

Drainage Basin/District: Colorado/38

Water Source: Crystal River

Total Project Cost: \$550,000

Funding Source: Construction Fund, NRCS

Type of Borrower: Agricultural

Average Annual Diversion: 9,669AF

CWCB Loan: \$555,500 (initial loan)
\$255,500 (long term - post construction loan w/service fee)

Interest Rate: 1.75% **Term:** 30yr

This Company is located in the Crystal River Valley in the western portion of Pitkin County and provides irrigation water diverted out of the Crystal River. The earthen ditch enters a 650 foot long rock tunnel that is collapsing. The Company is working with the NRCS to realign the ditch to avoid the tunnel by putting the ditch into a new 1,450 foot HDPE pipe. The Company serves 12 shareholders and is primarily used to grow hay and forage crops for cattle ranching. The Company is approved for grant funding from NRCS and construction is anticipated to occur in the fall of 2013.

