

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

Bill Ritter, Jr.
Governor

FROM: Kirk Russell, P.E.
Tim Feehan, P.E., Chief
Finance Section

Mike King
DNR Executive Director

Jennifer L. Gimbel
CWCB Director

DATE: July 9, 2010

SUBJECT: **Agenda Item 8b, July 20-21, 2010 Board Meeting**
Finance Section – New Project Loans
Grand River Ditch Company – Grand River Ditch Pipeline Project

Introduction

The Grand River Ditch Company (Company) is applying for a CWCB loan for the Grand River Ditch Pipeline Project (Project). The Project is necessary in order to repair and protect the ditch along the Colorado River near its diversion point. The total Project cost, including engineering and construction, is estimated at \$538,000. The Borrower is eligible to receive funding assistance from Natural Resources Conservation Service (NRCS) and has applied for Colorado River – Basin Roundtable grant funding. The remaining project cost 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 a loan, not to exceed \$543,380 (\$538,000 for project costs and \$5,380 for the 1% Loan Service Fee) for engineering and construction costs, to the Grand River Ditch Company from the Construction Fund for the Grand River Ditch Pipeline Project. Following construction, the staff further recommends the loan be amended to an amount not to exceed \$443,380 (\$438,000 for the remaining balance of the Project and \$5,380 for the Loan Service Fee). The loan terms shall be 30 years at a blended interest rate of 4.2% per annum. Security for the loan shall be in compliance with CWCB Financial Policy #5.

Additional Contract Condition – all additional grant funds obtained for the purpose of this Project shall be applied to the balance of the final Project cost.

Background

The Company annually collects, diverts and delivers 50 cfs or about 14,500 AF of water from direct flow rights in the Colorado River (River). The Ditch distributes water to Company shareholders in an area between New Castle and Rifle.

The Ditch is located north of the River and within the I-70 and Colorado River corridor in central Garfield County. During the spring of 2009, a portion of the Ditch was severely damaged during high River flows. The Company desires to install a pipeline to permanently fix this section of the Ditch.

During the spring of 2010, approximately 60 feet of a retaining wall that protects the Ditch from the River collapsed due to an extended high-water season. This particular section of the Ditch has about ¼ mile of various types of riprap material that was installed nearly 100 years old. The River will likely continue to encroach on the Ditch and cause it to fail again. The pipeline will also prevent ditch seepage and saturation of the bank between the Ditch and the River.

Loan Feasibility Study

The Loan Feasibility Study, titled “Feasibility of Piping a Section of the Grand River Ditch” dated May 2010, was prepared by Dennis Davidson, Bookcliff Conservation District. The study includes preliminary engineering design and construction cost estimates prepared by Mike Kishimoto. The study was prepared in accordance with the CWCB guidelines.

Borrower - Grand River Ditch Company

The Grand River Ditch Company is a non-profit Colorado mutual ditch company, founded in 1917 and has 270 shares and 148 shareholders. The Company has an elected Board of Directors that manage the day-to-day business and operation of the Ditch. The Company is made up of 29% agricultural, 13% commercial and 58% middle income municipal type shareholders.

The Company’s bylaws indicate the Board of Directors may enter into a loan contract with CWCB and has the power to sell stock for non-payment of annual assessments. The Company’s annual meeting is held in the January.

Water Rights

Grand River Ditch is also known as the Cactus Valley Ditch or Lower Cactus Valley Ditch. Water for the Ditch is supplied by a direct diversion from the Colorado River delivered through an open ditch. The Company’s water rights are dated 1889 for 50 cfs, Ditch Number 82-A Priority No. 142-B in Water District 39. The Ditch is approximately 14 miles long. It starts about 3 miles west of New Castle, Colorado, on the north side of the Colorado River and ends about a mile east of Rifle, Colorado. The Ditch typically runs between May 1st and October 1st. The water is primarily used for pasture irrigation and outside watering of 5 to 10 acre residences. A small portion of the rights are used for augmentation.

Project Description

The Project will allow the Grand River Ditch Company to continue providing irrigation water to shareholders while minimizing the occurrence of future failures of their diversion structure. Three alternatives were considered:

Alternative No. 1 - No-action was considered unacceptable because it would mean the Grand River Ditch Company could not deliver water to its shareholders.

Alternative No. 2 - Reconstruct the rock work in the river was ruled out because of the potential risk that rock work will fail in high water and will continue to seep and cause ditch failure.

Alternative No. 3 (Selected) - Install pipeline and protective rock in the river was selected because it is considered to be the least costly reliable approach. This alternative involves the purchase and installation of 1,320 ft of twin 48- inch diameter parallel pipes. Final engineering may determine a reduction in pipe size. Structural concrete, earthwork and rock riprap will also be needed. The Garfield County Office of the NRCS is preparing engineering design for the Project.

Project Cost Estimate

Mobilization	\$5,000
Earthwork to banks	\$20,000
Concrete Headwall 10 CY	\$15,000
48" Pipe (2) 1320 ft	\$240,000
Install Pipe	\$95,000
Rock Rip Rap	\$75,000
Engineering	\$68,000
Contingencies/permits	<u>\$20,000</u>
Total	\$538,000

The NRCS expects final design to be completed by September 2010 and construction to begin October 2010.

Financial Analysis

Table 1 shows a summary of the funding sources for the Project. The total estimated cost of the Project is \$538,000. An initial loan phase (during construction) amount is based on 100% of the estimated total Project cost (allowed per Policy #11). The loan will be reduced to \$438,000 or less after the Project is complete and the Borrower receives funds from the NRCS. The Company has applied to the Colorado River Basin Roundtable for two WSRA grants. The Company received approval for \$25,000 from the Basin Fund and \$175,000 from the Statewide Fund at the July BRT meeting. These WSRA grant requests will be considered at the July CWCB meeting. CWCB Staff has not included these grants in the financial analysis.

Table 1. Project Funding Sources

Funding Source	Grant/Other	Loan
Initial Loan Phase		
CWCB Loan		\$538,000
Total (\$538,000)	\$0	\$538,000
Post Construction Phase		
Borrower (NRCS-Cost Share)*	\$100,000	
CWCB Loan		\$438,000
Total (\$538,000)	\$100,000	\$438,000

* Received from NRCS after construction is complete

Table 2 shows a summary of the financial aspects of the Project.

Table 2. Financial Summary of Project

PROJECT/LOAN		
Total Project Cost		\$538,000
Initial Loan (100% of Project Cost)		\$538,000
Other Funding Assistance		\$100,000
Balance of Borrower's Obligation (81%)		\$438,000
1% Service Charge (Based on the total Project Cost)		\$5,380
Long Term Loan Amount (Post-construction)		\$443,380
Annual Loan Payment Amount (based on post-construction amount)		\$26,270
CWCB Loan Obligation (including 10% debt reserve funding)		\$28,900
Annual Loan Payment per AF (using 14,500 AF)		\$2.00/AF
Assessments	Before*	After
Assessments per share (270 shares)	\$150/share	\$200/share

* Current assessments are higher than necessary due to major ditch repair work needed in recent years

Creditworthiness: The Company has no existing debt. The Company has assessed members \$150 annually since 2008 and will begin assessing its members approximately \$200/share in 2011 to cover the debt service. The Company has existed since 1917 and has a pre-1922 water right on the Colorado River. Shares in the Company have been selling for \$2,500 per ¼ share in recent years.

Table 3 shows the Financial Ratios for the Company.

Table 3. Financial Ratios

Financial Ratio	Past Years	Future
Operating Ratio (revenues/expenses) weak: <100% - average: 100% - 120% - strong: >120%	140% (Strong) \$56K/40K	100% (Average) \$69K/69K
Debt Service Coverage Ratio (revenues-expenses)/debt service weak: <100% - average: 100% - 120% - strong: >120%	N/A (No Debt)	100% (Average) \$69-40/29K
Cash Reserves to Current Expenses weak: <50% - average: 50% - 100% - strong: >100%	53% (Strong) \$21K/40K	30% (Average) \$21K/69K
Annual Operating Cost per Acre-Foot (14,500 AF) weak: >\$20 - average: \$10 - \$20 - strong: <\$10	\$2.76/AF (Strong) \$40K/14.5K	\$4.75/AF (Strong) \$69K/14.5K

Collateral - Security for the loan shall be a pledge of the Company's assessment revenues and a security interest in a portion of the Company's water rights in the amount of the long term loan. This is in compliance with CWCB Financial Policy #5 (Collateral).

Staff Recommendation

Staff recommends the Board approve a loan, not to exceed \$543,380 (\$538,000 for project costs and \$5,380 for the 1% Loan Service Fee) for engineering and construction costs, to the Grand River Ditch Company from the Construction Fund for the Grand River Ditch Pipeline Project. Following construction, the staff further recommends the loan be amended to an amount not to exceed \$443,380 (\$438,000 for the remaining balance of the Project and \$5,380 for the Loan Service Fee). The loan terms shall be 30 years at a blended interest rate of 4.2% per annum. Security for the loan shall be in compliance with CWCB Financial Policy #5.

Additional Contract Condition – all additional grant funds obtained for the purpose of this Project shall be applied to the balance of the final Project cost.

cc: Nella Barker, Secretary/Treasurer
 Susan Schneider, AGO

Attachment: Water Project Loan Program – Project Data Sheet

Water Project Loan Program - Project Data

Borrower: Grand River Ditch Company

County: Garfield

Project Name: Grand River Ditch Pipeline

Project Type: Ditch Rehabilitation

Drainage Basin: Colorado River

Water Source: Colorado River

Total Project Cost: \$538,000

Funding Source: Construction Fund

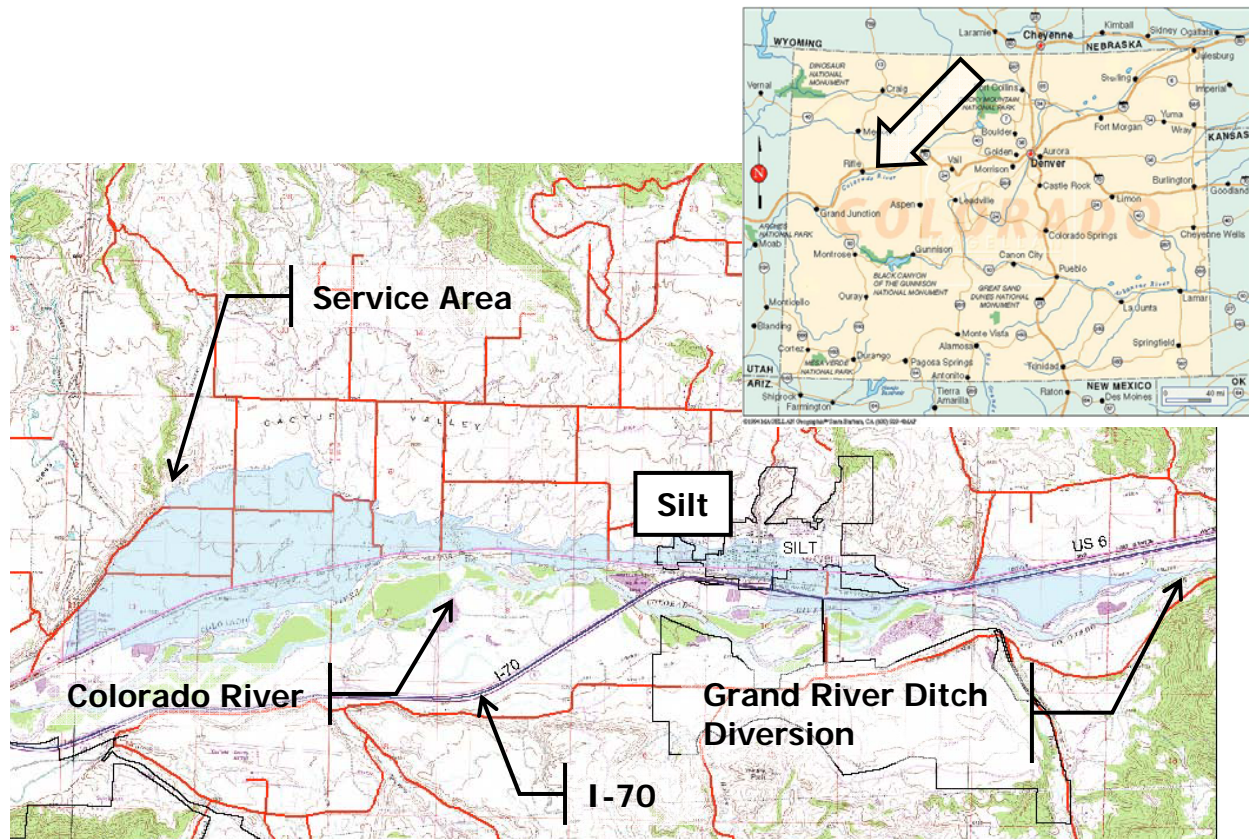
Type of Borrower: Blended
(Ag, Mid-Muni, Commercial)

Aver. Diversion: 14,500 AF

CWCB Loan: \$543,380 (incl. 1% loan fee)

Interest Rate: 4.20% **Term:** 30 years

The Grand River Ditch Company (Company) operates the Grand River Ditch by providing direct flow irrigation water from the Colorado River. The ditch is 14 miles long and runs on the north side of the river from three miles west of New Castle to about a mile east of Rifle. In the spring of 2010, a retaining wall that protects the ditch from the river collapsed. The Company plans to repair the ditch by piping the damaged section, and by installing riprap and rock jetties in the river. Construction is expected to begin October 2010. NRCS has provided design engineering services for the Project. The Company has been approved for a \$100,000 grant from the USDA Farm Service Agency Emergency Conservation Program for this Project. Applications for additional grants have been made to the local Basin Roundtable WSRA. CWCB loan funding will allow for an initial loan for 100% of construction costs which will be reduced by the grant dollars received. The remaining balance will become a 30-year CWCB Loan.



Location Map