# STATE OF COLORADO

# **Colorado Water Conservation Board Department of Natural Resources**

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TO: Colorado Water Conservation Board Members

FROM: Ryan Edwards, P.E., Project Manager

Kirk Russell, P.E., Chief

Finance & Administration Section

DATE: January 18, 2013

SUBJECT: Agenda Item 15b, January 28-29, 2013 Board Meeting

Finance – New Construction Fund and Severance Tax Trust Fund Perpetual

**Base Account Loans** 

Twenty Two Road Lateral Company - Twenty Two Road Lateral Ditch

**Replacement Project** 

#### Introduction

The Twenty Two Road Lateral Company (Company) is applying for a loan for the Twenty Two Road Lateral Ditch Replacement Project (Project). The purpose of the project is to replace the weathered open channel ditch known as Twenty Two Road Lateral (Lateral) with a buried irrigation pipeline; thereby increasing its efficiency, reducing salt loading and maintenance costs, and alleviating safety concerns. The total project is estimated to cost \$532,875. The Company has been approved to receive \$398,970 in funding from NRCS and will use cash reserves to minimize the loan amount. See the attached Project Data Sheet for a location map and project summary.

#### **Staff Recommendation**

Staff recommends the Board approve an initial loan not to exceed \$517,848 (\$512,720 for Project costs and \$5,128 for the 1% Loan Service Fee) to the Twenty Two Road Lateral Company, for the Twenty Two Road Lateral Ditch Replacement Project, from the Construction Fund. Following construction and receipt of the NRCS funds, staff further recommends the loan be amended to an amount not to exceed \$118,878 (\$113,750 for project costs and \$5,128 for the 1% Loan Service Fee) with loan terms of 30 years at a blended rate of 2.35% per annum. Security for the loan shall be in compliance with the CWCB Financial Policy #5.

#### **Background**

The Company, located in Mesa County on the northwest side of Grand Junction, utilizes the Lateral to deliver irrigation water to its members. The primarily concrete panel-lined ditch has been in place since 1973 when it was constructed to replace an older, faltering earthen ditch. Maintenance has become a growing nuisance due to cracks and gaps in the concrete lining that have formed over time, reducing the efficiency of water delivery and leading to ditch washouts. Flooding occurs routinely due to trash blown into the ditch, collecting at and plugging trash racks along road/driveway culvert crossings. Lastly, recent residential and industrial growth in the vicinity of the ditch has increased safety concerns for pedestrian and vehicular traffic as the ditch hugs the side of the road by only a few feet at various stretches. In order to provide a long-term solution to these issues the Company elected to apply for NRCS grant funding and a CWCB loan to aid in financing the replacement of the ditch with a buried pipeline.

The USDA/NRCS administers the Colorado River Basin Salinity Control Program by providing construction cost sharing and technical assistance using the USDA's Environmental Quality Incentives Program (EQIP). NRCS is managing the planning, design, and field engineering services for this project. Qualifying ditch owners that install more efficient irrigation systems, that reduce salt loadings, are eligible for funding. On September 10, 2012, the Company executed a \$398,970 funding contract with NRCS for this Project.

#### **Loan Feasibility Study**

A loan feasibility study titled "Feasibility of Replacement of the Twenty Two Road Lateral's Open Ditch with Buried PVC Pipe," dated June 2011, and addendums dated September 20, 2012 and December 30, 2012, were prepared by Charles Blount, Treasurer of the Twenty Two Road Lateral Company. Technical assistance and engineering was provided by Louie Hartbauer, P.E. from the NRCS Grand Junction field office. The study was prepared in accordance with CWCB guidelines with the project cost based on a contractor bid.

#### Twenty-Two Road Lateral Company

The Lateral has existed as a group of irrigators since well before 1972 and the Company is a nonprofit corporation registered with the State of Colorado since December 1, 2010. The source of the water, the Grand Valley Irrigation Company (GVIC) main line, has been in existence since 1882. The 38 members of the Company own a total of 284 active shares of GVIC.

The Company delivers water from GVIC to a service area of 284 acres located in Mesa County and in the City of Grand Junction. The Company's facilities include 13,000 LF of concrete panel-lined open ditch, 300 LF of unlined ditch, 1,750 LF plastic irrigation pipe, and an assortment of culvert crossings at roads and driveways. On average, the company delivers approximately 1,334 AF of water annually to its members.

The Company is governed by a three-member board of directors assigned to manage the operation and maintenance of the Lateral. The Company generates revenue through annual share assessments. The Board has the authority to determine the assessment rates; however, member approval of rate changes is required. The board has the power to set special assessments as it deems necessary for the continued operation of the lateral, file a lien against the property of delinquent water users, terminate service for unpaid assessments, and enter into a debt agreement.

## Water Rights

The Lateral is an open ditch and delivers water primarily for the irrigation of pastures, residential landscapes and gardens. The water is diverted from Headgate 377 of the main line of the GVIC canal system at a rate of 3.36 cfs. The ultimate source of the water is the Colorado River where GVIC has a diversion structure on the north bank, near Highway 6 in Palisade.

# **Project Description**

The Company analyzed two alternatives prior to electing to replace the existing open channel ditch with irrigation pipe (Alternative No. 2). This alternative will provide a long-term solution to address reliability and safety concerns while offering a more efficient system with lower maintenance costs. The two alternatives considered included the following:

Alternative No. 1 - No Action: This alternative is not favorable as it would result in continued deterioration of the concrete lining. The effects would be an ever increasing maintenance burden, decreased efficiency in water delivery, increased probability of future washouts, leakage and ongoing flooding/safety concerns.

Selected Alternative No. 2 – Replace the concrete lined ditch with irrigation pipe: This alternative involves the removal of approximately 13,000 LF of concrete panel-lined open ditch and the installation of 16,200 LF of plastic irrigation pipe, ranging from 3 to 18 inches in diameter, and appropriate appurtenances, including flow meters and valves. NRCS is offering in-kind services for technical assistance, engineering design and construction administration.

In December 2012 NRCS completed the final engineering design and the Company bid the Project. Eight bids were received and the Company selected a low bid of \$532,875 from Mountain Region Construction. Pending loan approval, construction is expected to begin in early February 2013 and is anticipated to take three months to complete. All easements and rights-of-way have been secured; however detailed coordination with Mesa County, City of Grand Junction and various utility providers will be necessary at all road crossings. Table 1 is a summary of total Project costs.

TABLE 1: TOTAL PROJECT COST SUMMARY

Task	Cost
Engineering Design & Permitting (provided by NRCS)	\$0
Construction and Contingency	\$532,875
Construction Management (provided by NRCS)	\$0
Total	\$532,875

## **Financial Analysis**

The Company qualifies for a blended interest rate of 2.35% (67% low-income municipal, 30% agricultural and 3% commercial) for a 30-year term. Table 2 provides a summary of the financial criteria of the loan request.

**TABLE 2: PROJECT FINANCIAL SUMMARY** 

Total Project Cost	\$532,875
Borrower Contribution	\$20,155
NRCS Grant Funding	\$398,970
CWCB Loan Amount*	\$113,750
CWCB Loan Amount (including 1% Service Fee)	\$118,878
CWCB Annual Loan Payment	\$5,567
CWCB Loan Obligation (including 10% debt reserve funding)	\$6,123
Number of Lateral Members	38
Number of Active GVIC Shares on the Lateral	284

<sup>\*</sup> The CWCB Loan Amount of \$113,750 is based on a post construction principal payment of \$398,970 as a result of NRCS grant funding.

#### Creditworthiness:

The Company has no outstanding debt service and an executed agreement with NRCS for \$398,970 for funding the Project. Revenues for the Company have historically been generated from the collection of Lateral assessments, used to cover the expense of delivering water from the GVIC main line to its members. The Company will set Lateral assessments sufficient to cover the increased operating expenses resulting from this Project.

Table 3 provides financial ratios for the Company's average historic performance over the past three years.

**TABLE 3: FINANCIAL RATIOS** 

Financial Ratio	Past 3 Years	Future w/ Project**
Operating Ratio (operating revenues/operating expenses)  weak: <100% - average: 100% - 120% - strong: >120%	163% (strong) \$2.6K/\$1.6K	105% (average) \$10.7K/\$10.2K
Debt Service Coverage Ratio (total eligible revenues-operating expenses)/total debt service weak: <100% - average: 100% - 120% - strong: >120%	No Existing Debt	108% (average) (\$10.7K-\$4.1K)/\$6.1K
Cash Reserves to Current Expenses  weak: <50% - average: 50% - 100% - strong: >100%	425% (strong) \$6.8K/\$1.6K	67% (average) \$26.9K/\$10.2K
Annual Operating Cost per Acre-Foot (based on 1,334 AF)  weak: >\$20 - average: \$10 - \$20 - strong: <\$10	\$1.20 (strong) \$1.6K/1,334 AF	\$7.65 (strong) \$10.2K/1,334 AF

*Collateral*: As security for the loan, the Company will pledge assessment revenues backed by a rate covenant, 182 GVIC shares owned by the Company, and the project itself (approximately 16,200 LF of plastic irrigation pipe, ranging from 3 to 18 inches in diameter, and appurtenances, including flow meters and valves). This is in compliance with the CWCB Financial Policy #5 (Collateral).

# Additional Contract Requirement:

1) Within thirty (30) working days after receipt of the cost share portion reimbursement from the NRCS, the Company shall submit to the CWCB an amount equal to the reimbursement. The NRCS reimbursement will be applied to the outstanding principal loan balance, and the Loan Contract shall be amended to the reduced loan amount.

cc: Glen Younger, President, Twenty Two Road Lateral Company Susan Schneider, AGO Peter Johnson, AGO

Attachment: Water Project Loan Program – Project Data Sheet

# **CWCB Water Project Loan Program**

# **Project Data Sheet**

**Borrower:** Twenty Two Road Lateral Company County: Mesa

Project Name: 22 Road Lateral Ditch Replacement Project Type: Ditch Rehabilitation

**Drainage Basin:** Colorado / District 72 **Water Source:** Colorado River (via GVIC)

**Total Project Cost:** \$532,875 **Funding Source:** Construction Fund,

NRCS (\$398,970)

**Type of Borrower:** Blended **Avg. Annual Diversion:** 1,334 AF

**CWCB Loan:** \$512,720 (\$517,848 w/ 1% service fee) **Interest Rate:** 2.35% **Term:** 30 years Long Term \$113,750 (\$118,878 w/ 1% service fee)

The Twenty Two Road Lateral Company uses the Twenty Two Road Lateral to deliver water to its members for the purpose of irrigating pastures, residential landscapes and gardens. The Lateral is a weathered concrete lined open channel. Cracks and gaps in the concrete lining have resulted in ever growing maintenance costs while reducing the efficiency of the Lateral. The Company is requesting a CWCB loan in conjunction with a \$398,970 NRCS grant, through the Colorado River Basin Salinity Control Program, to remove 13,000 LF of deteriorated concrete panel-lined channel and install 16,200 LF of plastic irrigation pipe, ranging from 3 to 18 inches in diameter. By piping the Lateral the District will reduce its annual maintenance expenses while increasing the reliability and efficiency of its deliveries.

