

STATE OF COLORADO

Colorado Water Conservation Board

Department of Natural Resources

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TO: Colorado Water Conservation Board Members

FROM: Jonathan Hernandez, P.E., Project Manager
Kirk Russell, P.E., Chief
Finance and Administration Section

DATE: November 13, 2013

SUBJECT: **Agenda Item 31d, November 19-20, 2013 Board Meeting**
Finance – Emergency Loans
Consolidated Home Supply Ditch and Reservoir Company – Emergency George Rist Ditch Repair

Introduction

The Consolidated Home Supply Ditch and Reservoir Company (Company) is applying for an Emergency Loan for the Emergency George Rist Ditch Repair Project (Project). During the unprecedented flood of September 2013 in the tributaries to the South Platte River, a significant number of diversion structures and dams along the river corridor were damaged. The Company's George Rist Ditch received significant damage as a result of this flood. The purpose of the Project is to repair the diversion structure and ditch to allow the Company to divert its decreed water rights. The total Project cost is estimated to be \$444,000. See attached Project Data Sheet for a location map and project summary.

Staff Recommendation

Staff recommends the Board approve a loan not to exceed \$448,440 (\$444,000 for Project cost and \$4,440 for the 1% service fee) to the Consolidated Home Supply Ditch and Reservoir Company for 100% of engineering and construction costs related to the Emergency George Rist Ditch Repair Project from the Severance Tax Perpetual Base Fund, up to the approved loan amount. The loan terms shall be 3 years of no interest followed by 27 years at a blended interest rate of 1.95% per annum. Security for the loan shall be in compliance with CWCB Financial Policy #5.

Additionally, staff recommends the following contract condition:

Any future 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) days after receipt of said funds.

Background

The Company serves approximately 15,000 irrigated acres in Larimer County near Loveland. Its George Rist Ditch is located on the Big Thompson River just downstream of the canyon mouth west of Loveland. During the unprecedented flood of September 2013 in the tributaries to the South Platte River, a significant number of diversion structures and dams along the river corridor were damaged, including the George Rist Ditch.

The George Rist Ditch was purchased by the Company in the late 1880's. The ditch serves its shareholders by delivering water to the Mariano Reservoir (aka Boedecker Lake). Additionally, the ditch is a carrier ditch for the Buckingham Irrigation Company delivering its water to the Rist Reservoir (aka Buckingham Lake).

During the 2013 flood, the diversion dam, headgate, measuring flume, stilling well and house, and access road was heavily damaged. Additionally, two sections of the ditch's embankment and bottom were completely washed out. At these locations additional erosion occurred adjacent to the breached areas outside of the ditch itself.

Loan Feasibility Study

Minerva Lee, President of The Consolidated Home Supply Ditch and Reservoir Company, with assistance from Deere & Ault Consultants, prepared the Loan Feasibility Study titled "*Emergency Loan Application and Feasibility Study*," dated October 2013. The study includes an alternative analysis and preliminary engineering cost estimates. Subsequently Deere & Ault provided its examination and proposed repair letter dated November 4, 2013. The feasibility study was prepared in accordance with the CWCB guidelines.

Borrower – Consolidated Home Supply Ditch & Reservoir Company

The Company is a mutual ditch and reservoir company that was established in 1882. The Company's office is located in Berthoud. It operates as a nonprofit corporation and is in good standing with the Colorado Secretary of State. The Company has issued 2,001 shares of stock. The Company's revenues are primarily derived from assessments charged on shares of stock owned by the stockholders.

The Company's by-laws (2001) authorize the Board of Directors to manage the business and affairs of the Company and to borrow money through a resolution of the directors. The Board has the authority to take measures to enforce assessments, including the suspension of water deliveries and the eventual sale or forfeiture of shares for failure to pay assessments.

Water Rights

The water rights impacted by this project include

TABLE 1: IMPACTED WATER RIGHTS

Name	Amount	Appropriation Date	Adjudication Date
George Rist Ditch	73.0 (cfs)	5/1/1873	5/28/1883
Rist Reservoir	120.0 (AF)	9/15/1874	5/28/1883
Mariano Reservoir	195.0 (cfs)	8/1/1888	3/22/1890
Mariano Reservoir (refill)	195 (cfs)	9/30/1907	11/14/1939
Rist Reservoir (enlargement)	394.0 (AF)	9/30/1911	11/14/1939

Average annual diversions of the Company are 22,000 AF.

Project Description

The goal of this project is to restore the condition of the George Rist Ditch to pre-flood conditions or better. The Company has retained the services of Deere & Ault Consultants, who has served as the Company's primary engineer for the last nine years.

Alternative 1 – Do Nothing: This alternative is considered unacceptable. The damage has rendered the ditch unsafe, and without this structure valuable reservoirs would be unable to receive water.

Alternative 2 – Rebuilding Collaboratively with Improvements: The George Rist Ditch already serves multiple users. Additional collaboration or stream improvements were not identified.

Selected Alternative 3 – Reconstruct the George Rist Ditch to Pre-Flood Conditions: This alternative consists of reconstructing the headworks and the breached ditch sections to pre-flood conditions. Construction activities will include ditch re-channelization, sediment and debris removal, placement of erosion protection, rebuilding the measuring flume house, installation of new flow measuring equipment, slope fill and stabilization of eroded banks, and repair activities on adjacent land. The company will apply for a Corps of Engineers authorization to work in the river under the agricultural exemption.

The Company plans to improve the flow recording devices by adding remote monitoring and operation capabilities. Improvements to the diversion structure will include replacing the old lever crank headgates with modern, fabricated slide gates and motor activated operators. Improvements to the ditch will include riprap armoring of the interior ditch side slopes to help reduce erosion along the reconstructed ditch sections.

The estimated engineering and construction cost of this Alternative is \$444,000 and is further broken down in Table 2. The Company has applied for a CWCB/Northern grant and will use any grant funds received to lower the borrowed principal.

TABLE 2: PROJECT COST SUMMARY

Task	Cost
Engineering & Permitting	\$44,000
Construction - Headworks	\$101,000
Construction – Breach Repairs	\$232,000
Subtotal	\$377,000
Contingency (20% of Construction)	\$67,000
Total	\$444,000

Schedule: Engineering design is expected to be completed in December 2013 with all essential repairs completed by April 2014.

Financial Analysis

Table 4 provides a summary of the Project's financial aspects. The first three years of the loan will be assessed a 0% interest rate. The remaining term of the loan will be assessed a blended interest rate of 1.95% with the principal amortized over 27 years (Ownership: 76% Agriculture, 23% Mid Municipal, <1% High Municipal, <1% Commercial). Staff is recommending an exemption to Financial Policy #11 to allow for 100% funding of eligible Project cost.

TABLE 3: FINANCIAL SUMMARY

Total Project Cost	\$444,000
CWCB Loan Amount (100% of total Project cost)	\$444,000
CWCB Loan Amount (Including 1% Service Fee)	\$448,440
CWCB Annual Loan Payment	\$21,521
CWCB Loan Obligation (Including 10% Reserve)	\$23,673
Number of Shares	2001
Annual Cost Per Share for Loan	\$12
Current Assessment per Share	\$163
Future Assessment per Share	\$222

Creditworthiness: The Company has two loans with a total of \$525,609 in existing debt. These loans are in good standing. Additionally, the Company was recently approved for a CWCB Emergency Loan for its Big Dam repairs on the Home Supply Ditch at the October 2013 Special Board Meeting.

TABLE 4: EXISTING DEBT

Lender	Original Balance	Current Balance	Annual Payment	Maturity Date	Collateral
USDA Rural Development	\$650,000	\$99,018	\$27,157	12/10/2015	Assessments
CWCB	\$533,000	\$426,591	\$29,024	3/1/2034	Mariano Reservoir and Dam; Assessments
CWCB (Pending)	\$1,616,000	Not Yet Disbursed	\$85,308	2044	Big Dam Diversion & Headgate, Assessments

TABLE 5: FINANCIAL RATIOS

Financial Ratio	Past 3 Years	Future w/ Project*
Operating Ratio (revenues/expenses) weak: <100% - average: 100% - 120% - strong: >120%	101% (Average) \$328K/\$324K	103% (Average) \$446K/\$433K
Debt Service Coverage Ratio (revenues-expenses)/debt service weak: <100% - average: 100% - 120% - strong: >120%	107% (Average) \$328K-\$268K \$56K	108% (Average) \$446K-\$268K \$165K
Cash Reserves to Current Expenses weak: <50% - average: 50% - 100% - strong: >100%	59% (Average) \$191K/\$324K	44% (Weak) \$191K/\$433K
Annual Operating Cost per Acre-Foot (22,000 AF) weak: >\$20 - average: \$10 - \$20 - strong: <\$10	\$15 (Average) \$324K/22K AF	\$20 (Average) \$433K/22K AF

* Includes new October 2013 Emergency Loan Debt

Collateral: As security for the loan, the Company will pledge its assessment revenues backed by a rate covenant and the George Rist Ditch diversion structure and headgate. This is in compliance with the CWCB Financial Policy #5 (Collateral).

cc: Minerva Lee, President, Consolidated Home Supply Ditch and Reservoir 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**

C150380

Borrower: Consolidated Home Supply Ditch
& Reservoir Company

County: Larimer

Project Name: George Rist Ditch Repair

Project Type: Ditch Rehabilitation

Drainage Basin/ District: South Platte / 4

Water Source: Big Thompson River

Total Project Cost: \$444,000

Funding Source: Severance Tax PBF

Type of Borrower: Blended

Average Annual Diversion: 22,000 AF

CWCB Loan: \$448,440
(with 1% service fee)

Interest Rate: 1.95% **Term:** 30-years
(76% Ag, 23% Mid, <1% High, <1% Com)

During the unprecedented flood of September 2013 in the tributaries to the South Platte River, a significant number of diversion structures and dams along the river corridor were damaged including the Company's George Rist ditch and diversion structure. During the flood, the diversion dam, headgate, measuring flume, stilling well and house, and access road was heavily damaged. Additionally, two sections of the ditch's embankment and bottom were completely washed out. The purpose of this project is to restore the George Rist Ditch to its pre-flood condition.

