

# STATE OF COLORADO

## Colorado Water Conservation Board Department of Natural Resources

1313 Sherman Street, Room 721  
Denver, Colorado 80203  
Phone: (303) 866-3441  
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www.cwcb.state.co.us



November 21, 2013

Consolidated Home Supply Ditch & Reservoir Company  
Attn: Minerva Lee, President  
P.O. Box 1548  
Berthoud, CO 80513

John W. Hickenlooper  
Governor

Mike King  
DNR Executive Director

James Eklund  
CWCB Director

Re: Emergency George Rist Ditch Repair  
Contract Number C150380

Ms. Lee:

I am pleased to inform you that on November 20<sup>th</sup>, 2013, the Colorado Water Conservation Board approved your loan request for the Emergency George Rist Ditch Repair as described in the application and approved Loan Feasibility Study titled "*Emergency Loan Application and Feasibility Study*", dated October 31<sup>st</sup>, 2013. The Board approved a loan not to exceed \$448,440 (\$444,000 for project costs and \$4,440 for the 1% Loan Service Fee). The loan terms shall be three years of no interest followed by 27 years at a blended interest rate of 1.95% per annum.

I have attached a copy of the updated Board memo dated November 21<sup>st</sup>, 2013, that includes the Board's approval.

After the Board approves a loan there are a few steps that remain in the loan process including:

- A) Contracting: An approved contract must be in place before funds can be disbursed. Peg Mason will contact you to initiate the loan contracting process for this project. When all of the contract conditions are met and the contract is executed the Company may request loan funds to cover eligible project expenses. You can reach Peg at (303) 866-3441 x3227.
- B) Design/Construction: You must adhere to the CWCB Design and Construction Administration Procedures. Mike Serlet, P.E. will contact you for this phase of the process and will work with you on the disbursements of your loan funds. You can reach Mike at (303) 656-3720.

Collaboration: The Borrower is encouraged to consider rebuilding a river diversion system which improves the consumptive and nonconsumptive uses of the river corridor. Examples include improved fish passage, improved rafting/boating navigation, and possible shared ownership/use of a single diversion structure where possible. If needed, loan funds may be

used for the construction of temporary diversions until such time that a multi-beneficial structure can be designed and constructed.

On behalf of the Board, I would like to thank you for your interest in a loan from the Colorado Water Conservation Board.

Sincerely,

A handwritten signature in blue ink, appearing to read "Kirk Russell", is written over the word "Sincerely,".

Kirk Russell, P.E., Chief  
Finance & Administration Section  
Colorado Water Conservation Board

Attachment: Updated Board Memo

E-mail Copy (Including Attachments)

Diane Hoppe, CWCB Board Member – South Platte River Basin  
CWCB Finance Section Staff

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John W. Hickenlooper  
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CWCB Director

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 (Updated November 21, 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**

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### 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 (Board approved staff recommendation on November 20, 2013)

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

