

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 *KRR*
Finance Section *JK*

DATE: May 9, 2014

SUBJECT: **Agenda Item 35b, May 21-22, 2014 Board Meeting**
Emergency Loans
Louden Irrigating Canal and Reservoir Company – Emergency Diversion
Structure and Ditch Repair

Introduction

The Loudon Irrigating Canal and Reservoir Company (Company) is applying for a loan for the Emergency Diversion Structure and 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 diversion structure and 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 their decreed water rights. The total Project cost is estimated to be \$215,000. The Company is requesting a loan from CWCB for approximately 75% of the Project Cost. See attached Project Data Sheet for a location map and project summary.

Staff Recommendation

Staff recommends the Board approve a loan not to exceed \$161,600 (\$160,000 for Project cost and \$1,600 for the 1% service fee) to the Loudon Irrigating Canal and Reservoir Company for engineering and construction costs related to the Emergency Diversion Structure and Ditch Repair Project from the Severance Tax Perpetual Base Fund, up to the approved loan amount. The loan terms shall be 30 years at the blended interest rate of 2.70%. Security for the loan shall be in compliance with CWCB Financial Policy #5.

Background

The Company serves approximately 2,180 irrigated acres in Larimer County near Loveland. Its diversion structure is located on the Big Thompson River just east of the canyon mouth and west of Loveland. In addition to agricultural users, the Cities of Loveland, Fort Collins, Windsor, and Greeley own Company shares. In total, there are 180 shareholders who irrigate farms, ranches, public parks, and golf courses. The Company's diversion structure consists of a concrete dam across the river connected to a concrete headgate structure with a sand gate and three headgates that regulate flow diverted into its ditch.

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 river diversion. The ditch was diverting water as the September storm started. As the flood progressed, the headgates could not be safely reached for operations. Water overtopped the headgate structure by at least 4 feet resulting in damage to the headgate and ditch system. The first 3,000 feet of the ditch were totally filled with silt and debris. The ditch breached back to the river in two places, and undercutting caused slides that threatened the ditch. Upon post-flood inspection, the concrete headgate structure and dam remained structurally sound though debris removal and backfilling of undercut areas are required. While the concrete headgate structure remains usable, the steel headgates were damaged but are salvageable to allow the Company to use them for the 2014 irrigation season.

Loan Feasibility Study

Dale Leach, President of the Loudon Irrigating Canal & Reservoir Company, with assistance from Walter Niccoli, P.E. with Telesto Solutions Inc., prepared the Loan Feasibility Study, titled "*Emergency Loan Application and Feasibility Study*," dated March 31, 2014. Telesto's As-Constructed Report titled "*Louden Irrigation Canal 2013 Flood Repair*" was included as an attachment to the feasibility study. The study was prepared in accordance with the CWCB guidelines.

Borrower – Loudon Irrigating Canal and Reservoir Company

The Company is a mutual ditch and reservoir company and was incorporated in 1878. The Company's office is located in Fort Collins. It operates as a nonprofit corporation and is in good standing with the Colorado Secretary of State. The Company has issued 600 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 (2003) provide the Board of Directors with the authority to exercise the corporate powers of the company, and the general supervision over the company affairs. Assessments are set annually and are levied through a shareholder majority vote. The Board has the authority to sell stock upon which any assessment remains due and unpaid for a period of one year. At the February 2014 Annual Shareholders Meeting, the Company was authorized through a shareholder resolution to enter into a loan contract with CWCB for this Project, and to levy and collect assessments in an amount sufficient to pay the associated debt service.

Water Rights

The water rights impacted by this project include:

TABLE 1: IMPACTED DIRECT FLOW WATER RIGHTS

Name	Amount (CFS)	Appropriation Date	Adjudication Date
Louden Ditch	7	11/10/1861	5/28/1883
Louden Ditch	40	10/1/1871	5/28/1883
Louden Ditch	123	11/1/1877	5/28/1883

TABLE 2: IMPACTED STORAGE WATER RIGHTS

Name	Amount (AF)	Appropriation Date	Adjudication Date
Donath Reservoir	1,148.8	2/24/1883	5/28/1883
Rist Benson Reservoir	373.8	4/26/1903	6/29/1916
Rist Benson Reservoir	117.6	12/31/1930	11/14/1939

On average, annual diversions of the Loudon Ditch are 8,000 AF.

Project Description

The goal of this project is to restore the condition of the diversion dam and ditch to pre-flood conditions or better. The Company has retained the services of Telesto Solutions, who is the Company's primary engineer.

Alternative 1 – No Action: This alternative is considered unacceptable. Failure to complete the restoration of the ditch would result in no future water diversions.

Alternative 2 – Rebuilding Collaboratively: The Company did not identify any collaboration opportunities with other water right holders. Primary damage was specific to the Company's ditch system.

Selected Alternative 3 – Rebuild with Improvements: The selected alternative is to reconstruct the Company's system to allow water diversions and improve the headgates. This will be done in two phases. Phase 1 includes cleaning and rebuilding the ditch and service road, and salvaging the existing headgates to ensure general operation for the 2014 irrigation season. Phase 2 will replace the existing headgates with gates that are safer, more accurate, and capable of remote operation.

The company has an agriculture exemption from the Corps of Engineers. The estimated engineering and construction cost of this Alternative is \$215,000 and is further broken down in Table 3:

TABLE 3: PROJECT COST SUMMARY

Task	Cost
Engineering	\$35,000
Phase One - Ditch Rebuild	\$115,000
Phase Two - Headgates	\$65,000
Total	\$215,000

Schedule: After the flood, the Company immediately surveyed the post-damaged flood, retained Telesto Solutions for the Project, and began Phase 1. By November 2013, the trash and debris was removed, the ditch was reconstructed, and the diversion structure was cleaned and repaired as necessary to be brought into a functional condition. The replacing of the headgates is expected to occur between the 2014 and 2015 irrigation season.

Financial Analysis

The Company qualifies for a blended interest rate of 2.70% for a 30-year term (Ownership: 25% Agriculture, <1% Low Municipal, 61% Mid Municipal, 8% High Municipal, 6% Commercial). Table 4 provides a summary of the Project's financial aspects.

TABLE 4: FINANCIAL SUMMARY

Total Project Cost	\$215,000
Borrower's Responsibility	\$55,000
CWCB Loan Amount	\$160,000
CWCB Loan Amount (Including 1% Service Fee)	\$161,600
CWCB Annual Loan Payment	\$7,928
CWCB Annual Loan Obligation (incl. 10% debt reserve)	\$8,721
Number of Shares	600
Total Project Cost per Acre Foot (8,000 AF)	\$27/AF
Annual Loan Obligation per Share (First 10 Years)	\$14.50
Current Assessment per Share	\$270/share
Future Assessment per Share	\$285/share

Creditworthiness: The Company has \$282,359 in existing debt as summarized in Table 5. The Western States Bank loan was a bridge loan that provided immediate financing for Phase 1 of the Project. The loan will be paid off with the proceeds of this CWCB loan and thus its debt service is not included in Table 6. CWCB Loan C150268, approved at the July 2008 Board meeting, is in good standing.

TABLE 5: EXISTING DEBT

Lender	Original Balance	Current Balance	Annual Payment	Maturity Date	Collateral
Western States Bank	\$100,000	\$100,000	\$14,300	2020	Assessment Revenues
CWCB (C150268)	\$189,843	\$182,359	\$10,322	2042	Assessment Revenues

TABLE 6: FINANCIAL RATIOS

Financial Ratio	Past 2 Years	Future w/ Project
Operating Ratio (revenues/expenses) weak: <100% - average: 100% - 120% - strong: >120%	104% (Average) \$187K/\$180K	104% (Average) \$196K/\$189K
Debt Service Coverage Ratio (revenues-expenses)/debt service weak: <100% - average: 100% - 120% - strong: >120%	170% (Strong) <u>\$187K-\$170K</u> \$10K	137% (Strong) <u>\$196K-\$170K</u> \$19K
Cash Reserves to Current Expenses weak: <50% - average: 50% - 100% - strong: >100%	31% (weak) \$56K/\$180K	1% (weak) \$1K/\$189K
Annual Operating Cost per Acre-Foot (8,000 AF) weak: >\$20 - average: \$10 - \$20 - strong: <\$10	\$22.50 (Weak) \$180K/8K AF	\$23.60 (Weak) \$189K/8K AF

Collateral: Security for this loan will be a pledge of the Company's assessment revenues backed by an assessment covenant, and the Project itself (diversion and headgate structure). This is in compliance with the CWCB Financial Policy #5 (Collateral).

cc: Dale Leach, President, Loudon Irrigating Canal 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**

C150398

Borrower: Louden Irrigating Canal
and Reservoir Company

County: Larimer

Project Name: Emergency Diversion Structure
and Ditch Repair

Project Type: Ditch Rehabilitation

Drainage Basin/ District: South Platte / 4

Water Source: Big Thompson River

Total Project Cost: \$215,000

Funding Source: Severance Tax PBF

Type of Borrower: Blended

Average Annual Diversion: 8,000 AF

CWCB Loan: \$161,600
(with 1% service fee)

Interest Rate: 2.70% **Term:** 30-years
(25% Ag, <1% Low, 61% Mid, 8% High, 6% 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 river diversion. The ditch was diverting water as the September storm started. As the flood progressed, the headgates could not be safely reached for operations. Water overtopped the headgate structure by at least 4 feet resulting in damage to the headgate and ditch system. The first 3,000 feet of the ditch were totally filled with silt and debris. The ditch breached back to the river in two places and undercutting caused slides that threatened the ditch. Phase 1 will clean and rebuild the ditch and service road, and salvage the existing headgates to ensure general operation for the 2014 irrigation season. Phase 2 will replace the existing headgates with gates that are safer, more accurate, and capable of remote operation.

