STATE OF COLORADO

Colorado Water Conservation Board
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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: December 16, 2013

SUBJECT: **Agenda Item 3b, December 19, 2013 Telephonic Board Meeting**
Finance – Emergency Loans
Culver Lateral Ditch Company – Emergency Culver Mahoney Ditch Repair

Introduction

The Culver Lateral Ditch Company (Company) is applying for an Emergency Loan for the Emergency Culver Mahoney 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 Culver Mahoney 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 $150,000. See attached Project Data Sheet for a location map and Project summary.

Staff Recommendation

Staff recommends the Board approve a loan not to exceed $151,500 ($150,000 for Project cost and $1,500 for the 1% service fee) to the Culver Lateral Ditch Company for 100% of engineering and construction costs related to the Emergency Culver Mahoney 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 2.30% 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 1,200 irrigated acres in unincorporated Larimer County between Berthoud and Lyons. The irrigated areas under this ditch consist of agricultural farming and irrigation on residential lots of 5 acres or less (municipal). The Culver Mahoney Ditch diversion structure is located on the Little Thompson River just downstream of the canyon mouth.

During the 2013 flood, the diversion dam, headgate structure, sand gates, measurement flume, and recording structure were damaged. Additionally, the first 1,500 feet of ditch was destroyed as it effectively became a part of the Little Thompson River. The next 1,800 feet of ditch was filled with sediment.

Loan Feasibility Study

Thomas Dea, P.E. of TZA Water Engineers, prepared the Loan Feasibility Study titled "*Emergency Loan Application and Feasibility Study*," dated December 2, 2013. The study includes an alternative analysis and preliminary engineering cost estimates. The feasibility study was prepared in accordance with the CWCB guidelines.

Borrower – Culver Lateral Ditch Company

The Company is a mutual ditch company that was established in 1920. The Company's office is located in Longmont. It operates as a nonprofit corporation and is in good standing with the Colorado Secretary of State. The Company has issued 202 shares of stock and has 91 shareholders. The Company's revenues are primarily derived from assessments charged on shares of stock owned by the stockholders.

The Company's Articles of Incorporation (1920) authorize borrowing money and providing security for the repair and maintenance of corporate property. The Articles of Incorporation and By-laws (1921) provide that the Company may take measures to enforce assessments, including the suspension of water deliveries and the placing of liens and eventual foreclosure on 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
Culver Mahoney Ditch	19.5 cfs	4/15/1867	5/28/1883
Culver Mahoney Ditch	19.5 cfs	4/30/1875	5/28/1883

Average annual diversions of the Company are 1,200 AF.

Project Description

The goal of this project is to restore the condition of the Culver Mahoney Ditch to pre-flood conditions or better. The Company has retained the engineering services of TZA Water Engineers.

Alternative 1 – Do Nothing: This alternative is considered unacceptable. The damage has rendered the ditch inoperable. Failure to repair the ditch will prevent the Company from diverting its water rights which could result in the abandonment of the water rights and ditch.

Alternative 2 – Rebuilding Collaboratively with Improvements: Collaboration opportunities with other ditch companies have not been identified. The Company plans to collaborate with Northern

Colorado Water Conservancy District (NCWCD) where applicable. NCWCD is doing river restoration work in the area in order to protect some of its facilities. NCWCD has already rough cut and re-channeled the Company's damaged ditch in the area between the headgate and NCWCD's river crossing.

Selected Alternative 3 – Reconstruct the Culver Mahoney Ditch to Pre-Flood Conditions: This alternative will repair the damaged Culver Mahoney Ditch infrastructure in or near the same location as historically documented. The complete extent of damages is not yet known as the diversion dam is buried, and the headworks structure is partially buried, but it is expected that much of the existing concrete infrastructure can be reused while the measurement structures will be replaced. The Company will clean up the ditch section NCWCD restored as well as the additional 1,800 feet of ditch that experienced heavy sedimentation. Any part of the ditch system that is rebuilt will be designed to improve operational functionality of the ditch and associated water conveyance structures.

The estimated engineering and construction cost of this Alternative is $150,000 and is further broken down in Table 2. The Company has applied for a CWCB/NCWCD grant and will use any grant funds received to lower the borrowed principal.

TABLE 2: PROJECT COST SUMMARY

Task	Cost
Engineering Design	$15,000
Permitting	$2,000
Construction	$120,000
Subtotal	$137,000
Contingency (10%)	$13,000
Total	$150,000

Schedule: Engineering design is underway and construction is expected to commence in December 2013 and be completed by May 2014.

Collaboration: The borrower is encouraged to consider rebuilding a river diversion system that enhances consumptive and nonconsumptive uses of water within 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 diversion until such time that a multi-beneficial structure can be designed and constructed.

Financial Analysis

Table 3 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 2.30% with the principal amortized over 27 years (Ownership: 41% Agriculture, 59% Mid Municipal). 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	$150,000
CWCB Loan Amount (100% of total Project cost)	$150,000
CWCB Loan Amount (Including 1% Service Fee)	$151,500
CWCB Annual Loan Payment	$7,595
CWCB Loan Obligation (Including 10% Reserve)	$8,354
Number of Shares	202
Annual Cost Per Share for Loan	$41
Current Assessment per Share	$60
Future Assessment per Share	$101

Creditworthiness: The Company has no existing debt.

TABLE 4: FINANCIAL RATIOS

Financial Ratio	Past 3 Years	Future w/ Project
Operating Ratio (revenues/expenses) weak: <100% - average: 100% - 120% - strong: >120%	116% (Average) $12.5K/$10.8K	109% (Average) $20.8K/$19.1K
Debt Service Coverage Ratio (revenues-expenses)/debt service weak: <100% - average: 100% - 120% - strong: >120%	No Existing Debt	120% (Average) $20.8K-$10.8K $8.3K
Cash Reserves to Current Expenses weak: <50% - average: 50% - 100% - strong: >100%	107% (Strong) $11.6K/$10.8K	61% (Average) $11.6K/$19.1K
Annual Operating Cost per Acre-Foot (1,200 AF) weak: >$20 - average: $10 - $20 - strong: <$10	$9 (Strong) $10.8K/1.2K AF	$16 (Average) $19.1K/1.2K AF

Collateral: As security for the loan, the Company will pledge its assessment revenues backed by a rate covenant and the Project itself (Culver diversion, headgate, and measurement structures). This is in compliance with the CWCB Financial Policy #5 (Collateral).

cc: Jim Nankervis, President, Culver Lateral Ditch 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

C150390

Borrower: Culver Lateral Ditch Company

County: Boulder/Larimer

Project Name: Culver Mahoney Ditch Repair

Project Type: Ditch Rehabilitation

Drainage Basin/ District: South Platte / 4

Water Source: Little Thompson River

Total Project Cost: $150,000

Funding Source: Severance Tax PBF

Type of Borrower: Blended

Average Annual Diversion: 1,200 AF

CWCB Loan: $151,500
(with 1% service fee)

Interest Rate: 2.30% **Term:** 30-years
(41% Ag, 59% Mid)

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 Culver Mahoney Ditch. During the flood, the diversion dam, headgate structure, sand gates, measurement flume, and recording structure were damaged. Additionally, the first 1,500 feet of ditch was destroyed as it effectively became a part of the Little Thompson River. The next 1,800 feet of ditch was filled with sediment. The purpose of the Project is to repair the diversion structure and ditch to allow the Company to divert its decreed water rights.