STATE OF COLORADO

Colorado Water Conservation Board
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TO: Colorado Water Conservation Board Members

FROM: Ryan Edwards, P.E.
Tim Feehan, P.E., Chief
Finance Section

DATE: July 1, 2011

SUBJECT: **Agenda Item 26a, July 12-13, 2011 Board Meeting**
Finance Section – New Project Loans
Last Chance Ditch Company – Ditch Headworks Replacement Project

Introduction

The Last Chance Ditch Company (Company) is applying for a loan for the Ditch Headworks Replacement Project (Project). The purpose of this project is to replace the dilapidated diversion headgate along St. Vrain Creek, thereby reducing a growing maintenance burden for the Company and eliminating the potential hazard should the structure fail. The loan request is for 90% of the estimated $204,000 total cost of the project. See the attached Project Data Sheet for a location map and a project summary.

Staff Recommendation

Staff recommends the Board approve a loan, from the Construction Fund, not to exceed $185,436 ($183,600 for project costs and $1,836 for a 1% Loan Service Fee) to the Last Chance Ditch Company for the Ditch Headworks Replacement Project. The loan terms shall be 30 years at a blended rate of 4.65% per annum. Security for the loan shall be in compliance with the CWCB Financial Policy #5.

Background

The Last Chance Ditch utilizes a concrete fixed weir dam and wooden headgate structure, originally constructed in the early 1900's, to divert ditch water from the St. Vrain River. The diversion dam is old, but still deemed reliable; however the headgate has been rehabilitated numerous times over the years and the annual maintenance and reliability has become a considerable concern. This project involves replacing the aged headgate structure with a new reinforced concrete headgate with dual steel gates and an overshot gate, thereby increasing efficiency and reliability, while alleviating stress on the existing diversion dam.

Loan Feasibility Study
The Loan feasibility study titled "Loan Feasibility of the Last Chance Ditch Company", dated April 2011, was prepared by AGPROfessionals, LLC, with assistance from Garrett Varra, Vice President of the Last Chance Ditch Company. The study was prepared in accordance with the CWCB guidelines and includes a preliminary engineering and a cost estimate used to establish the total project cost.

Last Chance Ditch Company
The Company is a mutual ditch company and non-profit corporation registered in the State of Colorado since April 15, 1872. The Company delivers water to shareholders located north of Colorado 119 and west of Interstate 25 via the Last Chance Ditch. There are 20 shares of the Company distributed amongst its 14 shareholders at a current annual assessment rate of $612 per share. On average, the Company diverts an estimated 9,257 AF of water per year for the irrigation of approximately 3,000 acres of agricultural land and to service three gravel operations.

The Company is governed by a five-member board of directors and has the power to terminate water deliveries on unpaid assessments, and to sell stock to pay back delinquent assessments. Shareholders have the power to set assessments at annual or special meetings. Shareholder approval is required for the Company to take on debt.

Water Rights
The Project does not require any additional water rights beyond the Company's existing portfolio. The water source for the Last Chance Ditch is direct flow water rights out of St. Vrain Creek with an absolute decree of 96.94 cfs; however, the average measured diversion rate is approximately 45 cfs. The Last Chance Ditch water rights are summarized in the following table:

TABLE 1: PROJECT WATER RIGHTS

Case	Appropriation Date	Adjudication Date	Type	Amount	Use
CA1622	March 15, 1872	June 2, 1882	Absolute	96.94 cfs	Irrigation

Project Description
The Company settled on an alternative (Alternative No. 3) that fully addresses safety concerns while providing a less maintenance intensive structure. The new structure will allow the Company to divert its full allotment of water when available without fear of a headgate failure. The various alternatives considered are as follows:

Alternative No. 1 – No Action: Ignoring the issue is not a favorable alternative because the headworks structure will continue to be a maintenance burden and potential safety hazard. Concern over a complete structure failure will exist until the worn structure has been replaced.

Alternative No. 2 – Replace the existing structure with a similar headgate: This alternative involves replacing the existing wooden headgate structure with a new concrete structure that includes dual headgates. This alternative is less expensive than Alternative No. 3; however it does nothing to address the stress on the existing dam.

Selected Alternative No. 3 – Replace the existing structure with a headgate and overshot gate: This alternative involves replacing the existing wooden headgate structure with a new concrete structure that includes dual headgates and an overshot gate. The overshot gate will allow water to be backed up, creating greater head for the delivery of ditch water during times of below average river flow, while offering a bypass for river flows that will relieve stress on the diversion dam. This option was selected because it met the immediate needs of replacing the deteriorating headgate structure with a more efficient and reliable structure that extends the life of the diversion dam.

In 2009 AGPROfessional, LLC prepared engineering drawings and specifications for the proposed project and an engineer's estimate of probable costs. In May 2011 they updated the estimate based on construction beginning in the Fall of 2011. The total project cost is estimated to be $204,000, as summarized on Table 2, and includes the following:

- Demolition of the existing wooden headgate, dewatering, bank stabilization and earthwork, including channel grading to accommodate a lower gate flowline.
- Construction of a new reinforced concrete headgate structure with dual gates and an overshot gate.

TABLE 2: TOTAL PROJECT COST SUMMARY

Task	Cost
Demolition and Earthwork	$60,000
Materials and Construction	$110,000
Engineering and Contingency	$34,000
Project Total	$204,000

The Company secured multiple contractor bids in September of 2010 but never awarded the project. Pending loan approval, the Company will rebid the project with the intent of beginning construction following the 2011 irrigation season. It is anticipated that construction will be complete no later than May of 2012.

Financial Analysis

Table 3 provides a summary of the financial criteria of the loan request. The Borrower qualifies for a blended (47% Agricultural, 2% middle-income municipal, and 51% commercial) interest rate of 4.65% for a 30-year term.

TABLE 3: PROJECT FINANCIAL SUMMARY

Total Project Cost	$204,000
CWCB Loan Amount (90% of total Project cost)	$183,600
CWCB Loan Amount (including 1% Service Fee)	$185,436
CWCB Annual Loan Payment	$11,586
CWCB Loan Obligation (including 10% debt reserve funding)	$12,745
Total Number of Shares	20
Current Assessment per Share	$612
Project Cost per Share (including 10% reserve)	$638

Creditworthiness:
Shareholder assessments have been on a steady increase since 2008 when the planning of this project began. The Company has no outstanding debt and sufficient cash reserves exist to cover the Company's 10% portion of the project cost; however, another increase in shareholder assessments is planned to offset the annual debt obligation.

TABLE 4: FINANCIAL RATIOS

Financial Ratio	Average for 2007, 2008, 2010	Future w/ Project
Operating Ratio (operating revenues/operating expenses) weak: <100% - average: 100% - 120% - strong: >120%	194% (strong) $16.3K/$8.4K	138% (strong) $29.1K/$21.1K
Debt Service Coverage Ratio (total eligible revenues-operating expenses)/total debt service weak: <100% - average: 100% - 120% - strong: >120%	No Current Debt (strong) ($16.3K-$8.4K)/$0K	163% (strong) ($29.1K-$8.4K)/$12.7K
Cash Reserves to Current Expenses weak: <50% - average: 50% - 100% - strong: >100%	420% (strong) $35.3K/$8.4K	71% (average) $14.9K/$21.1K
Annual Operating Cost per Acre-Foot (based on 9,257 AF) weak: >$20 - average: $10 - $20 - strong: <$10	$0.91 (strong) $8.4K/9,257	$2.28 (strong) $21.1K/9,257

Collateral: As security for the loan, the Company will pledge assessment revenues backed by a rate covenant and the water rights as listed in Table 1. This is in compliance with the CWCB Financial Policy #5 (Collateral).

Staff Recommendation

Staff recommends the Board approve a loan, from the Construction Fund, not to exceed $185,436 ($183,600 for project costs and $1,836 for a 1% Loan Service Fee) to the Last Chance Ditch Company for the Ditch Headworks Replacement Project. The loan terms shall be 30 years at a blended rate of 4.65% per annum. Security for the loan shall be in compliance with the CWCB Financial Policy #5.

cc: Garrett Varra, Vice President, Last Chance Ditch Company
Susan Schneider, AGO
Peter Johnson, AGO

Attachment: Water Project Loan Program – Project Data Sheet

Water Project Loan Program – Project Data Sheet

Borrower: Last Chance Ditch Company

County: Weld

Project Name: Ditch Headworks Replacement

Project Type: System Rehabilitation

Drainage Basin: South Platte, District 5

Water Source: St. Vrain Creek

Total Project Cost: $204,000

Funding Source: Construction Fund

Type of Borrower: Blended
(Agricultural, middle-income municipal, commercial)

Avg. Annual Diversion: 9,257 AF

CWCB Loan: $185,436 (w/ 1% service fee)

Interest Rate: 4.65% **Term:** 30 years

The Last Chance Ditch Company (Company) utilizes the Last Chance Ditch to supply water to its 14 shareholders for the purpose of irrigation and gravel company operations. The headworks of the ditch consist of a wooden structure with dual gates that have been in place since the early 1900's. The headgate has been rehabilitated numerous times over the years and the annual maintenance and reliability have become a growing concern. The Company is requesting a CWCB loan for the removal and replacement of the existing headworks with a reinforced concrete structure with dual headgates and an overshot gate. The Project will reduce the annual maintenance costs and increase the reliability of the structure.

Location Map