

STATE OF COLORADO

Colorado Water Conservation Board Department of Natural Resources

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TO: Colorado Water Conservation Board Members

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

DATE: September 2, 2011

SUBJECT: **Agenda Item 20b, September 13-14, 2011 Board Meeting**
Finance Section – New Project Loans
The Jackson Ditch Company – Check Dam Rehabilitation Project

John W. Hickenlooper
Governor

Mike King
DNR Executive Director

Jennifer L. Gimbel
CWCB Director

Introduction

The Jackson Ditch Company (Company) is applying for a loan for the Check Dam Rehabilitation Project (Project). The purpose of the Project is to rehabilitate the concrete check dam structure upstream of the Jackson Ditch (Ditch) diversion head gate, restoring the Company's ability to divert its most senior water rights during times of low flow. The loan request is for approximately 90% of the estimated \$90,000 total cost of the project. See the attached Project Data Sheet for a location map and project summary.

Staff Recommendation

Staff recommends the Board approve a loan, from the Construction Fund, not to exceed \$81,810 (\$81,000 for project costs and \$810 for the 1% Loan Service Fee) to The Jackson Ditch Company for the Check Dam Rehabilitation Project. The loan terms shall be 30 years at a blended interest rate of 3.60% per annum. Security for the loan shall be in compliance with the CWCB Financial Policy #5.

Background

Approximately five miles northwest of Fort Collins, the Cache la Poudre River splits and flows around an island located nearly 700 feet upstream of the Jackson Ditch head gate. During periods of low flows the Company must utilize the check dam structure to secure its most senior water rights. The check dam, located between the upstream tip of the island and the west river bank, diverts flows to the east side of the island towards the Company's diversion head gate. Using the structure to reroute river flows enables the Company to divert water that would otherwise travel west, around the island, bypassing the diversion gate. The check dam was originally constructed out of wood approximately 100 years ago, and was replaced with a concrete structure in the 1960's.

That structure has fallen into disrepair, and over the past decade the Company has had to make temporary repairs routinely to keep it operational. This Project involves permanent improvements designed to restore the structure's reliability for years to come and provide shareholders with a more dependable supply of water.

Loan Feasibility Study

The loan feasibility study titled "Feasibility Study The Jackson Ditch Company Main Head Gate Check Structure Rehabilitation Project", dated July 2011, was prepared by Dennis Harmon, General Manager of the The Jackson Ditch Company. Technical assistance was provided by John Andrew, Ph.D., P.E. from Andek Consulting. The study was prepared in accordance with the CWCBC guidelines, and includes preliminary engineering and a cost estimate used to establish total project cost.

The Jackson Ditch Company

The Company, located in Fort Collins, Colorado, is a Colorado mutual ditch corporation founded in 1894. The Company diverts water from the Cache la Poudre River to the Ditch where it delivers water, primarily for agricultural irrigation, to its 73 shareholders, totaling 24 shares. The Company's facilities include the check dam and diversion head gate along the Cache la Poudre River, and approximately 8.7 miles of earthen ditch. The average annual diversion through the Ditch is 5,500 acre-feet (AF).

The Company is governed by a five-member board of directors with the power to terminate water deliveries on unpaid assessments and to sell stock to pay delinquent assessments. Shareholders must approve changes in assessments at annual or special meetings and shareholder approval is required for the Company to take on debt.

The Water Supply & Storage Company (WSSC) provides general management services to the Company, including day-to-day operations in addition to financial, accounting and tax support. The Company reimburses WSSC for out-of-pocket costs for services and shares in payroll and administrative costs.

Water Rights

The Project does not require any additional water rights beyond the Company's current portfolio. The primary water source for the Ditch is direct flow water rights from the Cache la Poudre River, with an absolute decree of 50.92 cfs. Additionally, the Company owns a 50 cfs conditional flow right per case number 86CW0402. The Company's absolute water rights are summarized in the following table:

TABLE 1: PROJECT WATER RIGHTS

Case Number	Adjudication Date	Appropriation Date	Amount (cfs)	Use
87CW0332	April 11, 1882	June 10, 1861	11.67	all beneficial use
CA0320	April 11, 1882	October 21, 1870	14.42	irrigation
87CW0332	April 11, 1882	September 15, 1873	12.13	all beneficial use
87CW0332	April 11, 1882	July 15, 1879	12.70	all beneficial use
TOTAL			50.92	

Project Description

The Company's primary objective is achieving a reliable, long-term, low maintenance check dam structure. It is assumed that full replacement of the existing check dam will be necessary; however, if it is possible to utilize the existing foundation they will consider rehabilitation as an option. In order to properly assess the condition of the existing foundation, the contractor will dewater the riverbed around the structure prior to construction. An engineer will then perform an assessment and provide a recommendation for rehabilitating or full replacement of the check dam. The engineering documents and cost estimate have been prepared under the assumption that a full replacement will be required; however, if rehabilitation is deemed a feasible and more cost effective alternative the plans will be revised accordingly.

Alternative No. 1 – No Action: Ignoring the issue is not a favorable alternative because the Company will not be able to divert its most senior water rights during low flow conditions.

Selected Alternative No. 2 – Full Replacement of Check Dam: This alternative would require demolition and removal of the entire structure, including the foundation system, and is expected to be the most expensive alternative. The total project estimate is based on this alternative.

Alternative No. 3 – Rehabilitation of Check Dam: This alternative assumes the engineering analysis determines that the foundation is in satisfactory condition and that rehabilitation can be performed more cost effectively than full replacement while still achieving a long-term solution.

The following table provides a summary of project costs based on full replacement:

TABLE 2: TOTAL PROJECT COST SUMMARY

Task	Cost
Engineering	\$3,000
Construction	\$75,000
Contingency (15%)	\$12,000
Total	\$90,000

Final engineering documents are scheduled for completion the first week in September and the Company believes all required easement issues have been addressed. Bidding is scheduled to begin in late September, pending loan approval, with construction targeted for winter 2011/2012.

Financial Analysis

The Company qualifies for a blended (55% agricultural, 37% middle-income municipal, 6% high-income municipal, and 2% commercial) interest rate of 3.60% for a 30-year term. Table 3 provides a summary of the financial criteria of the loan request.

TABLE 3: PROJECT FINANCIAL SUMMARY

Total Project Cost	\$90,000
Company Contribution	\$9,000
CWCB Loan Amount (90% of total Project cost)	\$81,000
CWCB Loan Amount (including 1% Service Fee)	\$81,810
CWCB Annual Loan Payment	\$4,504
CWCB Loan Obligation (including 10% debt reserve funding)	\$4,954
Number of Shares	24
Current Assessment per Share	\$2,275
Cost of Project per AF (5,500 AF)	\$16

Creditworthiness:

Operating revenues for the Company are generated by annual shareholder assessments, currently set at \$2,275 per share, which have exceeded operating expenses by an average of \$7,000 annually over the past three years. The Company has no outstanding debt and sufficient cash reserves to cover the Company's portion of the total project cost. The surplus from current assessments is sufficient to cover the CWCB loan obligation; however, it is anticipated that shareholders will approve an assessment increase at the annual shareholder meeting in January 2012 in order to offset the debt service incurred by this loan.

TABLE 4: FINANCIAL RATIOS

Financial Ratio	2008-2010	Future w/ Project
Operating Ratio (revenues/ expenses) weak: <100% - average: 100% - 120% - strong: >120%	115% (average) \$54.7K/\$47.5K	115% (average) \$54.7K/\$47.5K
Debt Service Coverage Ratio (revenues - expenses)/total debt service weak: <100% - average: 100% - 120% - strong: >120%	No Current Debt (strong)	144% (strong) (\$54.7K-\$47.5K)/\$5.0K
Cash Reserves to Current Expenses weak: <50% - average: 50% - 100% - strong: >100%	68% (average) \$32.4K/\$47.5K	45% (weak) \$23.4K/\$52.4K
Annual Operating Cost per Acre-Foot (based on 5,500 AF) weak: >\$20 - average: \$10 - \$20 - strong: <\$10	\$8.64 (strong) \$47.5K/5,500	\$9.53 (strong) \$52.4K/5,500

Collateral: As security for the loan, the Company will pledge assessment revenues backed by a rate covenant. 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 \$81,810 (\$81,000 for project costs and \$810 for the 1% Loan Service Fee) to The Jackson Ditch Company for the Check Dam Rehabilitation Project. The loan terms shall be 30 years at a blended interest rate of 3.60% per annum. Security for the loan shall be in compliance with the CWCB Financial Policy #5.

cc: Dennis Harmon, General Manager, The Jackson Ditch Company
Susan Schneider, AGO
Peter Johnson, AGO

Attachment: Water Project Loan Program – Project Data Sheet

CWCB Construction Loan Program Project Data Sheet

Borrower: The Jackson Ditch Company

County: Larimer

Project Name: Check Dam Rehabilitation

Project Type: Ditch Rehabilitation

Drainage Basin: South Platte River, District 3

Water Source: Cache la Poudre River

Total Project Cost: \$90,000

Funding Sources: Construction Fund

Type of Borrower: Blended Agricultural,
Municipal & Commercial

Details: Avg. 5,500 AF diverted annually

Loan Amount: \$81,810 (Including 1% fee)

Interest Rate: 3.60%

Term: 30 years

The Jackson Ditch Company is requesting a CWCB loan for rehabilitation of its check dam structure on the Cache la Poudre River. The river splits and flows around an island just upstream of the Company's diversion headgate. When flows are particularly low the structure is utilized to convey flows to the east side of the island where they can be diverted through the headgate. The concrete check dam has been in place since the 1960's, but has recently fallen into disrepair, preventing the Company from diverting its most senior water rights at times. The project will provide a long-term, low maintenance solution for restoring the ability to deliver water to shareholders during times of extreme river conditions. Construction is planned for the winter of 2011/2012.

