### STATE OF COLORADO

# **Colorado Water Conservation Board Department of Natural Resources**

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TO: Colorado Water Conservation Board Members

FROM: Anna Mauss, P.E., Project Manager

Kirk Russell, P.E., Chief

Finance and Administration Section

DATE: October 18, 2013

SUBJECT: Agenda Item 8a, October 21, 2013 Special Board Meeting

**Finance – Emergency Loans** 

**Highland Ditch Company – Emergency Highland Ditch System Repairs** 

#### Introduction

The Highland Ditch Company (Company) is applying for an Emergency Loan for the Emergency Highland Ditch System Repairs 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 purpose of this Project is to repair the Company's main diversion structure, headgate, SCADA system, and inlet and outlet of Foothills Reservoir. The Company's total Project cost is estimated to be \$1,980,000. See attached Project Data Sheet for a location map and project summary.

#### **Staff Recommendation**

Staff recommends the Board approve a loan not to exceed \$1,999,800 (\$1,980,000 for project cost and \$19,800 for the 1% service fee) to the Highland Ditch Company for 100% of engineering and construction costs related to the Emergency Highland Ditch System Repairs Project from the Severance Tax Perpetual Base Fund, up to the approved loan amount. The loan terms shall be three 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.

Staff additionally 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) calendar days after receipt of said funds.

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#### **Background**

The Company diverts water off of the St. Vrain. Its main diversion structure was old but in very good and working condition before the September 2013 flood. The flood event destroyed the Company's main diversion, automatic headgate, SCADA system, house, nine acres of property and the inlet and outlet of the Foothills Reservoir. Additionally, miles of silt and debris were deposited within the Company's system.

The Company's main diversion is a concrete dam extending across the St. Vrain River, near the Town of Lyons. During water delivery season, and on a daily basis, the Company can divert up to 347.6 cfs. The ditch is a significant irrigation ditch as it provides water to approximately 300 farm headgates and 12 major laterals, servicing 35,000 acres.

#### **Loan Feasibility Study**

Jill Baty, the Company Secretary, along with Tara Schutter, P.E., Tessara Water LLC, prepared the Loan Feasibility Study titled "*Emergency Loan Application and Feasibility Study*," dated October 2013. The study includes an alternative analysis and preliminary engineering design and cost estimates. The study was prepared in accordance with the CWCB guidelines.

#### **Borrower – Highland Ditch Company**

The Company is a mutual ditch and reservoir company, established in 1874. It is in good standing with the Colorado Secretary of State. There are 363 shareholders that own 725.5 shares of stock. The Company's revenues are generated by assessments charged on shares of stock owned by the stockholders, reservoir leases, and royalties.

The Company's by-laws state that the Board has the power to contract for indebtedness and to set annual assessments. The Board can also sell shares for failure to pay assessments.

#### Water Rights

The water rights impacted by this project include:

**Water Court** Adjudication **Appropriation** Name Case **Date** Date Amount Highland Ditch Company's 11/30/1871 1645 6/2/1882 205.46 cfs Original Appropriation Highland Ditch Company's 4th 1645 6/1/1878 6/2/1882 23.57 AF Enlargement Highland Ditch Company's 5<sup>th</sup> 1645 9/20/1902 3/13/1907 95.0 AF Enlargement Highland Ditch Company's 6<sup>th</sup> 1645 6/1/1878 6/2/1882 23.57 AF Enlargement

TABLE 1: IMPACTED WATER RIGHTS

The Company reports that average annual diversion into the Company's system is 38,000 AF.

#### **Project Description**

The Company hired a professional engineer to help with assessments and design services. The damage assessment is currently ongoing.

Alternatives considered were:

Alternative 1 – Do Nothing: This alternative is considered unacceptable. Without the structures, the Company is unable to divert its water rights thereby leading to abandonment of the rights.

Alternative 2 – Rebuilding Collaboratively with Improvements: This alternative is still being evaluated.

Selected Alternative 3 – Repair Ditch System to Pre-Flood Conditions: The Company, with technical assistance from its engineer, has identified three main projects: repair the main diversion, repair the automatic headgate and SCADA system, and repair Foothills Reservoir inlet and outlet.

Due to the agricultural exemption, this alternative is believed to be exempt from the Clean Water Act and therefore a U.S. Army Corps of Engineers permit will not be required.

The estimated engineering and construction cost of the selected alternative is \$1,980,000.

 Task
 Cost

 Design & Permitting
 \$125,000

 Construction
 \$1,800,000

 Silt & Debris Removal
 \$55,000

 Total
 \$1,980,000

**TABLE 2: PROJECT COST SUMMARY** 

Note: Contingencies were built into each task's estimates

**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.

*Schedule:* The Company needs to start diverting water in January of 2014, so it intends to complete construction between October and December of 2013.

#### **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 1.95% with the principal amortized over 27-years (Ownership: 86% Agriculture, 6% Middle-Income Municipal, 6.5% High-Income Municipal, and 1.5% Commercial). Staff is recommending an exemption to Financial Policy #11 to allow for 100% funding of eligible Project costs.

**TABLE 3: FINANCIAL SUMMARY** 

Total Project Cost	\$1,980,000
CWCB Loan Amount (100% of total Project cost)	\$1,980,000
CWCB Loan Amount (Including 1% Service Fee)	\$1,999,800
CWCB Annual Loan Payment	\$95,971
CWCB Loan Obligation (Including 10% Reserve)	\$105,568
Number of Shares	725.5
Annual Cost Per Share for Loan (with Reserve Account)	\$146
Current Assessment per Share	\$125
Future Assessment per Share	\$271

Creditworthiness: The Company has one loan with the CWCB as summarized below:

**TABLE 4: EXISTING DEBT** 

Lender	Original Balance	Current Balance	Annual Payment	Maturity Date	Collateral
CWCB	\$545,400	\$374,385	\$34,165	2036	Assessment Revenues

**TABLE 5: FINANCIAL RATIOS** 

Financial Ratio	Past 2 Years	Future w/ Project
Operating Ratio (revenues/expenses)  weak: <100% - average: 100% - 120% - strong: >120%	122% (Strong) \$825K/\$677K	118% (Average) \$920K/\$782K
Debt Service Coverage Ratio (revenues-expenses)/debt service weak: <100% - average: 100% - 120% - strong: >120%	538% (Strong) \$825K-\$642K \$34K	199% (Strong) \$920K-\$642K \$140K
Cash Reserves to Current Expenses  weak: <50% - average: 50% - 100% - strong: >100%	133% (Strong) \$899K/\$677K	115% (Strong) \$899K/\$782K
Annual Operating Cost per Acre-Foot (38,000 AF)  weak: >\$20 - average: \$10 - \$20 - strong: <\$10	\$17.82 (Average) \$677K/38K AF	\$20.58 (Weak) \$782K/38K AF

*Collateral*: As security for the loan, the Company will pledge its assessment revenues backed by a rate covenant and the Project itself (the Highland Ditch Company Diversion Structure). This is in compliance with the CWCB Financial Policy #5 (Collateral).

cc: Jill Baty, Board Secretary, Highland Ditch Company Susan Schneider/Jennifer Mele, Colorado's Attorney General Office

Attachment: Water Project Loan Program – Project Data Sheet

## CWCB Water Project Loan Program Project Data Sheet

**Borrower:** Highland Ditch Company County: Boulder

Project Name: Highland Ditch System Project Type: Ditch Rehabilitation

Repairs

**Drainage Basin/ District:** South Platte / 5 **Water Source:** St. Vrain Creek

**Total Project Cost:** \$1,980,000 **Funding Source:** Severance Tax PBF

**Type of Borrower:** Blended **Average Annual Diversion:** 38,000 AF

**CWCB Loan:** \$1,999,800 **Interest Rate:** 1.95% **Term:** 30-years

(with 1% service fee) (86% Ag, 6% Mid, 6% High, 2% 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. The purpose of this Project is to repair the Company's system to allow the delivery of water to shareholders. The scope of work includes: repairing of the main diversion structure, headgate, SCADA system, and inlet and outlet of Foothills Reservoir.

