### 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: December 16, 2013

SUBJECT: Agenda Item 3a, December 19, 2013 Telephonic Board Meeting

**Finance – Emergency Loans** 

Haldi Ditch Company - Emergency Haldi Ditch Repair

#### Introduction

The Haldi Ditch Company (Company) is applying for an Emergency Loan for the Haldi 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 purpose of this Project is to armor the diversion structure and repair the ditch (pipeline) to allow the Company to deliver water to its members. The total Project cost is estimated to be \$343,000, but the \$50,000 loan is solely for the costs that are the responsibility of the Company. See attached Project Data Sheet for a location map and project summary.

#### **Staff Recommendation**

Staff recommends the Board approve a loan not to exceed \$50,500 (\$50,000 for project cost and \$500 for the 1% service fee) to the Haldi Ditch Company for 100% of engineering and construction costs related to the Emergency Haldi Ditch Repair 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 2.35% per annum. Security for the loan shall be in compliance with CWCB Financial Policy #5.

Staff additionally recommends the following contract conditions:

Any future grant funds obtained and/or Excel Energy contributions 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.

#### **Background**

The Haldi Ditch is located within the Left Hand Ditch Company's system and within the Left Hand Water District. The Haldi Ditch conveys Left Hand Ditch Company shares via a pipeline for irrigation users and as a raw water source for the Left Hand Water District's Spurgeon Water Treatment Plant and two Left Hand Water District reservoirs. It was originally an open channel ditch but was piped in 1982 to allow for easier maintenance and to ensure that Left Hand Water District had a year-round supply of raw water.

During the 2013 flood event, the Left Hand Creek left its bank immediately upstream of the Haldi Diversion scouring a new channel and disconnecting the creek from the diversion. In addition, the intake structure, sand trap and mechanical screen, measuring device (electronic mag-meter) and several hundred feet of pipe were filled with sand and other debris or otherwise damaged. The access road to the diversion and intake facilities was washed out completely. Approximately 160 linear feet of pipeline was exposed adjacent to the access road due to scouring.

#### **Loan Feasibility Study**

Christopher Smith, P.E., the General Manager of the Left Hand Water District, prepared the Loan Feasibility Study, titled "*Emergency Loan Application and Feasibility Study*," dated November 2013. The study includes an alternative analysis, preliminary engineering design and cost estimates. The study was prepared in accordance with the CWCB guidelines.

#### Borrower - Haldi Ditch Company

The Company is a nonprofit corporation, established on April 23, 1982. It is in good standing with the Colorado Secretary of State. The Company has 25 members. Members' interest in the Haldi Ditch is determined by the Left Hand Ditch Company shares owned and delivered through the ditch. Members pay an annual charge plus a fixed rate for water used.

The Company is governed by a five-member board of directors. The board is made up of two Left Hand Water District representatives and three Company members. The board establishes the annual charge and the fixed rate for water usage. A resolution of the board of directors is required to enter into loan contracts.

#### **Water Rights**

The water rights impacted by this project include:

**TABLE 1: IMPACTED WATER RIGHTS** 

Name (Water Court Case)	Amount	Appropriation Date	Adjudication Date
Left Hand Water District (98CW313)	660 AF	7/31/1989	1/25/2000
Left Hand Water District (87CW127)	1,727 AF	12/29/1989	6/5/1991
Spurgeon Reservoir (CA20716)	247 AF	2/23/1961	2/25/1971
Joder Reservoir (CA20716)	100 AF	12/16/1961	12/29/1971

On average, 3,000 AF is diverted through the ditch.

#### **Project Description**

The goal of this Project is to re-connect the creek to the diversion and restore access to the site.

Alternative 1 – Do Nothing: This alternative is considered unacceptable because 20,000 people rely on the intake for year-round water deliveries to the Spurgeon Water Treatment Plant and 350 acres of land are irrigated under the ditch.

Selected Alternative 2 – Rebuilding Collaboratively with Improvements - Haldi Intake Structure Repair: The Project is being led by the Left Hand Water District and is a collaborative project in that it addresses the needs of the Left Hand Water District, the Left Hand Ditch Company, Bill Rubin/Karen Conduff (the property owners downstream of the intake structure who own the access bridge over which the Company has an easement) and the Haldi Ditch Company. The repaired area around the diversion will provide a flood channel to minimize future damage.

The proposed project involves the construction of a grouted boulder drop structure to divert water back into the historic channel leading to the intake structure. The newly scoured channel downstream of the drop structure will remain as an overflow channel accepting future flood flows and diverting them past the diversion, intake structures and pipeline to prevent similar damage in a future flood. The historic channel and structures will be cleared of debris and repaired. The pipeline that was scoured and damaged will be removed and replaced with new ductile iron pipe. The access road will be restored to existing conditions and the diversion and stream bank will be armored.

The Company has received an exemption letter from the U.S. Army Corps of Engineers stating that a permit will not be required.

Engineering firm CH2M Hill has been contracted to perform the design, bidding and construction management services throughout the project. This loan application is solely for the costs which are the responsibility of the Company members and are broken down as follows:

Task	Cost	
Design	\$24,400	
Permitting	\$3,800	
Construction	\$270,000	
Contingency	\$44,800	
Total	\$343,000	

**TABLE 2: PROJECT COST SUMMARY** 

The Left Hand Water District is providing funding for \$293,000 of the Project cost. The \$50,000 loan is solely for the costs that are the responsibility of the Company.

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:* Construction is expected to begin in December of 2013 with completion by April of 2014.

#### **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 at a blended interest rate of 2.35% amortized over 27-years. Left Hand Water District has the right to 50% of the carrying capacity of the ditch. The remaining 50% is used by agricultural users; therefore the blended interest rate was established based on 50% agricultural and 50% high-income municipal interest rates. 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	\$343,000
Left Hand Water District Contribution	\$293,000
CWCB Loan Amount	\$50,000
CWCB Loan Amount (Including 1% Service Fee)	\$50,500
CWCB Annual Loan Payment	\$2,547
CWCB Loan Obligation (Including 10% Reserve)	\$2,802
Number of Members	25
Annual Cost Per Member for Loan (Including 10% Reserve)	\$112
Current Assessment per Share	\$25+ \$0.50 / AF of use
Future Assessment per Share	\$30+ \$2/AF of use

Creditworthiness: The Company has no existing debt service.

**TABLE 4: FINANCIAL RATIOS** 

Financial Ratio	Past 2 Years	Future w/ Project
Operating Ratio (revenues/expenses)  weak: <100% - average: 100% - 120% - strong: >120%	129% (Strong) \$2.2K/\$1.7K	149% (Strong) \$6.7K/\$4.5K
Debt Service Coverage Ratio (revenues-expenses)/debt service weak: <100% - average: 100% - 120% - strong: >120%	N/A	179% (Strong) <u>\$6.7K - \$1.7K</u> \$2.8K
Cash Reserves to Current Expenses  weak: <50% - average: 50% - 100% - strong: >100%	388% (Strong) \$6.6K/\$1.7K	147% (Strong) \$6.6K/\$4.5K
Annual Operating Cost per Acre-Foot (3,000 AF)  weak: >\$20 - average: \$10 - \$20 - strong: <\$10	\$0.57 (Strong) \$1.7K/3,000 AF	\$1.50 (Strong) \$4.5K/3,000 AF

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

cc: Christopher Smith, PE, Haldi Ditch Company member 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:** Haldi Ditch Company County: Boulder

**Drainage Basin/ District:** South Platte / 5 **Water Source:** Left Hand Creek

**Total Project Cost:** \$343,000 **Funding Source:** Severance Tax PBF

**Type of Borrower:** Agricultural/Municipal **Average Annual Diversion:** 3,000 AF

CWCB Loan: \$50,500 Interest Rate: 2.35% Term: 30-years

(with 1% service fee)

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