

# STATE OF COLORADO

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## Colorado Water Conservation Board

### Department of Natural Resources

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CWCB Director

TO: Colorado Water Conservation Board Members

FROM: Anna Mauss, P.E., Project Manager  
Kirk Russell, P.E., Chief  
Finance and Administration Section

DATE: November 13, 2013

SUBJECT: **Agenda Item 31a, November 19-20, 2013 Board Meeting**  
**Finance – Emergency Loans**  
**Union Ditch Company – Emergency Union Ditch Repair**

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### Introduction

The Union Ditch Company (Company) is applying for an Emergency Loan for the Emergency Union 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 repair the ditch to allow the Company to deliver water to shareholders. The total Project cost is estimated to be \$200,000. See attached Project Data Sheet for a location map and project summary.

### Staff Recommendation

Staff recommends the Board approve a loan not to exceed \$202,000 (\$200,000 for project cost and \$2,000 for the 1% service fee) to the Union Ditch Company for 100% of engineering and construction costs related to the Emergency Union 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 1.80% 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.

## Background

The Union Ditch diverts water from the South Platte River just downstream of the confluence of the South Platte River and the St. Vrain River. The 14 mile, earthen ditch provides irrigation water to approximately 60 farms in the LaSalle area, and also serves as a bypass around the Latham Ditch dry-up point on the South Platte River, as a delivery system for Section No. 3 Ditch (Godfrey Bottom Ditch) to deliver its decreed water to its ditch during low river flows, and for augmentation. The diversion headworks were rehabilitated in 2002.

Typical flows are 100 cfs; the maximum ditch capacity is 195 cfs. Following the recent flood, the river washed out around the diversion structure, there were several sections of the ditch washed out, a breach in one location, and the ditch was filled with sand and other debris.

## Loan Feasibility Study

Donna Coble, the Company Secretary, prepared the Loan Feasibility Study titled “*Emergency Loan Application and Feasibility Study*,” dated November 2013. The study includes an alternative analysis and cost estimates. It did not include engineering design; however the CWCB will require that the Company hire an engineer to assist with structural elements of the Project. The study was prepared in accordance with the CWCB guidelines.

## Borrower – Union Ditch Company

The Company is nonprofit ditch company, established in 1874. It is in good standing with the Colorado Secretary of State. The Company has 53 shareholders that own 250 shares of stock. The Company’s income comes from assessment revenues, filling charges for Latham Reservoir, running fees for Big Bend Ditch water, augmentation use of the ditch, drainage fees, crossing fees, and water leases.

The Company’s by-laws state that shareholders set assessments at the Company’s annual meeting. If the shareholders fail to set an assessment, the board of directors may levy an assessment. If assessments are unpaid, water delivery can be curtailed and the delinquent shares sold.

## Water Rights

The water rights impacted by this project include:

**TABLE 1: IMPACTED WATER RIGHTS**

Name	Amount	Appropriation Date	Adjudication Date
Union Ditch Company	100 cfs	11/5/1874	4/28/1883
Union Ditch Company	84.03 cfs	11/2/1881	4/28/1883
Union Ditch Transfer Decree from Big Bend Ditch	4 cfs	9/26/1873	4/28/1883
Union Feeder No. 1	20 cfs	7/15/1893	8/2/1918

Average annual yield of these water rights is 25,391 AF.

## Project Description

The goal of this project is to return the ditch to its pre-flood condition.

Alternative 1 – Do Nothing: This alternative is considered unacceptable because the ditch is unable to deliver water to shareholders in its current condition.

**Alternative 2 – Rebuilding Collaboratively with Improvements:** No improvements are being made. The ditch will be returned to its original condition.

**Selected Alternative 3 – Repair Sections of Ditch to Pre-Flood Conditions:** The tasks to be completed to return the ditch to its pre-flood conditions include:

1. Repair and armor the stream banks of the South Platte River in the immediate vicinity of the Union ditch diversion structure with riprap and dirt;
2. Put the headgate control building back on a concrete pad;
3. Ditch cleaning and ditch bank restoration;
4. Repair breach at Hwy 394 with riprap and dirt;
5. Repair the emergency spillway area with riprap and dirt; and,
6. Repair the ditch around the bypass structure with riprap and dirt.

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

The estimated construction cost of the selected Alternative is \$200,000 (as provided by Company President, Gary Alles) and is further broken down as follows:

**TABLE 2: PROJECT COST SUMMARY**

Task	Cost
1 – Stream Banks	\$25,000
2- Headgate Control Building	\$25,000
3 – Ditch Cleaning	\$50,000
4 – Ditch Breach Hwy 394	\$25,000
5 – Emergency Spillway	\$50,000
6 – Bypass Structure Area	\$25,000
Total	\$200,000

**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:** Project construction began in October 2013. Project completion is expected to occur by December 31, 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 1.80% with the principal amortized over 27-years (Ownership: 94% Agricultural and 6% Middle-Income Municipal). 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	\$200,000
CWCB Loan Amount (100% of total Project cost)	\$200,000
CWCB Loan Amount (Including 1% Service Fee)	\$202,000
CWCB Annual Loan Payment	\$9,512
CWCB Loan Obligation (Including 10% Reserve)	\$10,463
Number of Shares	250
Annual Cost Per Share for Loan (Including 10% Reserve)	\$41.85
Current Assessment per Share	\$475
Future Assessment per Share	\$585

**Creditworthiness:** The Company has an existing \$312,595 loan with the CWCB (under construction) with a disbursement balance of \$99,070 for the Union Ditch Recharge Project. The loan is not yet in repayment. The collateral on the loan is a pledge of assessment revenues and the Union Ditch diversion structure.

**TABLE 4: FINANCIAL RATIOS**

Financial Ratio	Past 2 Years	Future w/ Project
Operating Ratio (revenues/expenses) weak: <100% - average: 100% - 120% - strong: >120%	111% (Average) \$133K/\$120K	100%* (Average) \$146K/\$146K
Debt Service Coverage Ratio (revenues-expenses)/debt service weak: <100% - average: 100% - 120% - strong: >120%	N/A (Ex. CWCB loan not in repayment)	100% (Average) \$146K - \$26K \$120K
Cash Reserves to Current Expenses weak: <50% - average: 50% - 100% - strong: >100%	91% (Average) \$109K/\$120K	75% (Average) \$109K/\$146K
Annual Operating Cost per Acre-Foot (25,391 AF) weak: >\$20 - average: \$10 - \$20 - strong: <\$10	\$4.73 (Strong) \$120K/25,391 AF	\$5.75 (Strong) \$146K/25,391 AF

\*Assumes a new assessment of \$585/share.

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

cc: Donna Coble , Secretary, Union 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**

**C150381**

**Borrower:** Union Ditch Company

**County:** Weld

**Project Name:** Emergency Union Ditch Repair

**Project Type:** Ditch Rehabilitation

**Drainage Basin/ District:** South Platte / 2

**Water Source:** South Platte River

**Total Project Cost:** \$200,000

**Funding Source:** Severance Tax PBF

**Type of Borrower:** Blended

**Average Annual Diversion:** 25,391 AF

**CWCB Loan:** \$202,000  
(with 1% service fee)

**Interest Rate:** 1.80% **Term:** 30-years  
(94% Ag, 6% Middle Income)

The Union Ditch diverts water from the South Platte River just downstream of the confluence with the St.Vrain River. The earthen ditch provides irrigation water to approximately 60 farms in the LaSalle area, and also serves as a bypass around the Latham Ditch dry-up point on the South Platte River. Repair to the Ditch include: steam bank armoring near the structure, headgate control building repair, cleaning and ditch bank restoration, Hwy 394 riprap work, emergency spillway area work, and ditch work around the bypass structure.

