

# STATE OF COLORADO

---

## Colorado Water Conservation Board

### Department of Natural Resources

1313 Sherman Street, Room 721

Denver, Colorado 80203

Phone: (303) 866-3441

Fax: (303) 866-4474

www.cwcb.state.co.us



---

John W. Hickenlooper  
Governor

Mike King  
DNR Executive Director

James Eklund  
CWCB Director

TO: Colorado Water Conservation Board Members

FROM: Jonathan Hernandez, P.E., Project Manager  
Kirk Russell, P.E., Chief  
Finance and Administration Section

DATE: November 13, 2013

SUBJECT: **Agenda Item 31e, November 19-20, 2013 Board Meeting**  
**Finance – Emergency Loans**  
**Butte Irrigating and Milling Company – Emergency Berm Repair**

---

### Introduction

The Butte Irrigating and Milling Company (Company) is applying for an Emergency Loan for the Emergency Berm 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. Portions of the ditch were silted in and the flood eventually breached a berm upstream of the Company's diversion point, causing the post-flood river to bypass the diversion structure. The purpose of the Project is to clean out the ditch channel and repair the berm in order to allow the Company to divert its decreed water rights. The total Project cost is estimated to be \$275,000. See attached Project Data Sheet for a location map and project summary.

### Staff Recommendation

Staff recommends the Board approve a loan not to exceed \$277,750 (\$275,000 for Project cost and \$2,750 for the 1% service fee) to the Butte Irrigating and Milling Company for 100% of engineering and construction costs related to the Emergency Berm Repair Project from the Severance Tax Perpetual Base Fund, up to the approved loan amount. The loan terms shall be 3 years of no interest followed by 27 years at a blended interest rate of 2.30% per annum. Security for the loan shall be in compliance with CWCB Financial Policy #5.

Additionally, staff 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) days after receipt of said funds.

## Background

The Company serves approximately 1,700 irrigated acres in Boulder. Its Butte Mill Ditch diverts from South Boulder Creek between Valmont Road and the confluence with Boulder Creek. 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, including the Butte Mill Ditch.

The Butte Mill Ditch was appropriated in 1865 and currently serves 35 shareholders. In addition to irrigation water for farms and ranches, the water is also used to irrigate City of Boulder's Open Space and Mountain Parks.

During the 2013 flood, South Boulder Creek breached a berm approximately 100 feet in length, causing the stream to entirely by-pass the Company's Butte Mill Ditch diversion structure. The new alignment flows into a nearby pond (old gravel pit) and meadow before discharging into Boulder Creek. The approximately 1/3 mile pre-flood channel from the breach down to the pre-flood confluence no longer receives water. The pre-flood channel is well established with a low flow channel and healthy canopy.

## Loan Feasibility Study

John Ellis, President of The Butte Irrigating and Milling Company, with assistance from Olsson Associates, prepared the Loan Feasibility Study titled "*Emergency Loan Application and Feasibility Study*," dated October 31, 2013. The study includes an alternative analysis and preliminary engineering cost estimates. The study was prepared in accordance with the CWCBC guidelines.

## Borrower – The Butte Irrigating and Milling Company

The Company is a mutual ditch company that incorporated in 1880. The Company's office is located in Boulder. It operates as a nonprofit corporation and is in good standing with the Colorado Secretary of State. The Company has issued 42 shares of stock. The Company's revenues are primarily derived from assessments charged on shares of stock owned by the stockholders.

The Company's by-laws (2009) authorize the Board of Directors to manage the business and affairs of the Company and to authorize assessment or other funding for repairs, alterations, or additions to the ditch system. The Board has the authority to take measures to enforce assessments, including the suspension of water deliveries and the eventual sale of delinquent shares.

## Water Rights

The water right(s) impacted by this project include:

**TABLE 1: IMPACTED WATER RIGHTS**

Name	Amount	Appropriation Date	Adjudication Date
Butte Mill Ditch	110.86	3/1/1865	6/2/1882

Average annual diversions of the Company are 1,177 AF.

## Project Description

The goal of this project is to restore the operation of the Butte Mill Ditch to allow the Company to divert its decreed water rights.

Alternative 1 – Do Nothing: This alternative is considered unacceptable. Post-flood, the Company's point of diversion receives no water and South Boulder Creek is destructively flowing through

private land. This alternative would prevent the Company from diverting its water rights, leading to possible abandonment of the water rights and ditch.

Selected Alternative 2 – Rebuilding Collaboratively with Improvements: The Stream Task Force visited this site on October 23 and recommended the stream be relocated into its pre-flood channel. The Stream Task Force also suggested rebuilding the berm with a spillway feature and additional reinforcement such as a rubber liner. These improvements are anticipated to be included in the final design. On the Butte Mill Ditch, repair to the ditch including the cleaning of the ditch where significant silt and debris were deposited by the flood will be completed as well.

The projected cost is estimated at \$275,000. The Company has applied for a CWCB/Northern WSRA grant and will use any grant funds received to reduce this loan's principal. The estimated engineering and construction cost of Alternative 2 is broken down in Table 2.

**TABLE 2: PROJECT COST SUMMARY**

Task	Cost
Engineering	\$25,000
Permitting	\$25,000
Construction	\$200,000
Subtotal	\$250,000
Contingency (10%)	\$25,000
Total	\$275,000

**Collaboration:** The borrower is encouraged to consider rebuilding a river diversion system that enhances consumptive and non-consumptive 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 2013 and be completed by April 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 a blended interest rate of 2.30% with the principal amortized over 27 years (Ownership: 48% Agriculture, 51% Mid Municipal, 1% Commercial). Staff is recommending an exemption to Financial Policy #11 to allow for up to 100% funding of eligible Project cost.

**TABLE 3: FINANCIAL SUMMARY**

Total Project Cost	\$275,000
CWCB Loan Amount	\$275,000
CWCB Loan Amount (Including 1% Service Fee)	\$277,750
CWCB Annual Loan Payment	\$13,924
CWCB Loan Obligation (Including 10% Reserve)	\$15,316
Number of Shares	42
Annual Cost Per Share for Loan	\$365
Current Assessment per Share	\$140
Future Assessment per Share	\$505

**Creditworthiness:** The Company has no existing debt.

**TABLE 4: FINANCIAL RATIOS**

Financial Ratio	Past 2 Years	Future w/ Project
Operating Ratio (revenues/expenses) weak: <100% - average: 100% - 120% - strong: >120%	128% (Strong) \$7.8K/\$6.1K	108% (Average) \$23.1K/\$21.4K
Debt Service Coverage Ratio (revenues-expenses)/debt service weak: <100% - average: 100% - 120% - strong: >120%	No Existing Debt	111% (Average) <u>\$23.1K-\$6.1K</u> \$15.3K
Cash Reserves to Current Expenses weak: <50% - average: 50% - 100% - strong: >100%	213% (Strong) \$13K/\$6.1K	61% (Average) \$13K/\$21.4K
Annual Operating Cost per Acre-Foot (1,177 AF) weak: >\$20 - average: \$10 - \$20 - strong: <\$10	\$5 (Strong) \$6.1K/1,177 AF	\$18 (Average) \$21.4K/1,177AF

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

cc: John Ellis, President, Butte Irrigating and Milling 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**

**C150382**

**Borrower:** Butte Irrigating & Milling Company    **County:** Boulder

**Project Name:** Emergency Berm Repair

**Project Type:** Ditch Rehabilitation

**Drainage Basin/ District:** South Platte / 6

**Water Source:** Boulder Creek

**Total Project Cost:** \$275,000

**Funding Source:** Severance Tax PBF

**Type of Borrower:** Blended

**Average Annual Diversion:** 1,177 AF

**CWCB Loan:** \$277,750  
(with 1% service fee)

**Interest Rate:** 2.30% **Term:** 30-years  
(48% Ag, 51% Mid-Muni, 1% Commercial)

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 including the Company's Butte Mill Ditch. Portions of the ditch were silted in and the flood eventually breached a berm upstream of the Company's diversion point, causing the post-flood river to bypass the diversion structure. The purpose of the Project is to repair this berm and clean out the ditch channel to allow the Company to divert its decreed water rights.

