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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., Finance Section Chief

DATE: September 11-12, 2014 Board Meeting

**AGENDA ITEM:** 6a. Water Project Loans

Sterling Irrigation Company - Emergency Sterling Ditch Rehabilitation Project

#### Introduction

The Sterling Irrigation Company (Company) is applying for a loan for the Emergency Sterling Ditch Rehabilitation 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 Company's ditch received significant damage as a result of this flood as well as the following spring 2014 snowmelt runoff. The purpose of the Project is to repair the ditch and allow the Company to divert its decreed water rights. The total Project cost is \$123,260. The Company is requesting a loan from CWCB for approximately 80% of the Project Cost. See attached Project Data Sheet for a location map and Project summary.

## Staff Recommendation

Staff recommends the Board approve a loan not to exceed \$101,000 (\$100,000 for Project cost and \$1,000 for the 1% service fee) to the Sterling Irrigation Company, for engineering and construction cost related to the Emergency Sterling Ditch Rehabilitation Project from the Severance Tax Perpetual Base Fund, up to the approved loan amount. The loan terms shall be 10 years at the agricultural interest rate of 1.50% per annum. Security for the loan shall be in compliance with CWCB Financial Policy #5.



#### **Background**

The Sterling Irrigation Company (Company) operates the Sterling No. 1 Ditch for the benefit of its shareholders by providing irrigation water through an existing diversion and ditch system off the South Platte River, just upstream of Sterling in Logan County. Approximately 7,400 acres are irrigated by the Company's 77 shareholders.

Citing concerns of the ability of its aging diversion and headgate structure to withstand a flood event, the Company obtained a loan through the CWCB in 1998 to rebuild its diversion and headgate structure. That project was successfully completed in 2000.

During the unprecedented flood of September 2013 in the tributaries of the South Platte River, a significant number of diversion structures and dams along the river corridor were damaged. Although the Company's newly rebuilt diversion and headgate structure withstood the flooding with minimal damage, a large amount of sediment was deposited in the ditch when floodwaters overtopped the structures and ditch banks. The Company funded the ditch clean out efforts with its cash reserves and was hopeful an emergency loan would not be required. However, during the subsequent spring 2014 snowmelt runoff, the river again rose depositing additional sediment in the ditch and, due to an already weakened ditch bank and river shore, breached the ditch bank in two locations. Together, these two events have made a loan necessary.

## Loan Feasibility Study

Katherine Seetch, Secretary and Treasurer of the Sterling Irrigation Company, prepared the Loan Feasibility Study, titled "Emergency Loan Application and Feasibility Study," dated July 29, 2014. The study includes an alternative analysis and construction cost. The feasibility study was prepared in accordance with the CWCB guidelines.

### **Borrower - Sterling Irrigation Company**

The Company is a mutual ditch company and was incorporated in 1915. The Company's office is located in Sterling. It operates as a nonprofit corporation and is in good standing with the Colorado Secretary of State. The Company has issued 1290 shares of stock, owned by 77 shareholders. The Company's revenues are primarily derived from assessments charged on shares of stock owned by the stockholders.

The Company's By-laws (2000) provide the six-member Board of Directors with authority to levy assessments to meet the necessary expenses of operation and maintenance of the Company, and to enforce unpaid assessments by ceasing water deliveries and eventually by selling the outstanding stock. The By-laws require shareholder's approval to incur more than \$30,000 in debt. The Company held a special shareholders meeting on July 7, 2014 and obtained a shareholders resolution authorizing the Company to incur this loan debt.

### Water Rights

The water rights impacted by this project include:

**TABLE 1: IMPACTED WATER RIGHTS** 

Name	Amount	Appropriation Date	Adjudication Date	Water Court Case No.
Sterling Irr Co Ditch 1	113.9 AF	7/15/1873	11/15/1894	CA0304

On average, annual diversions of the Company are 21,364 AF.

# **Project Description**

The goal of this Project is to bring the ditch into operational condition, to restore water deliveries, and to remove accumulated sediment upstream of the diversion structure.

Alternative 1 - Do Nothing: This alternative was considered unacceptable. Failure to bring the ditch into operating condition would prevent approximately 7,400 acres on 77 farms from receiving irrigation water.

Alternative 2 - Rebuilding Collaboratively: The Company did not identify any collaboration opportunities with other water rights holders. Damage was specific to the Company's ditch system, though the removal of accumulated sediment upstream of the diversion structure will help the upstream landowner by lessening the rate of stream bank erosion occurring at that location.

Selected Alternative 3 - Reconstruct to Pre-Flood Conditions: This alternative will remove the sediment from the ditch channel, repair the ditch breaches, and remove sediment in the river channel just upstream of the diversion structure. The first Phase was the immediate clean out following the September 2013 flood event and the second Phase was the clean out and breach repair following the spring 2014 snowmelt runoff. The total Project cost was \$123,260 as shown in Table 2.

TaskCostPhase 1 - September 2013 Flood Repairs\$46,435Phase 2 - Spring 2014 Snowmelt Event Repairs\$76,825Total\$123,260

**TABLE 2: Construction Cost** 

Schedule: Phase 1 was completed by February 2014. Phase 2 was completed by May 2014.

### Financial Analysis

The Company qualifies for an agricultural interest rate of 1.50% for a 10-year term (reduced from a 2.0% rate per CWCB Loan Policy #7). The Company depleted its cash reserves to provide upfront Project funding. This loan will enable the Company to maintain its cash reserve account at an acceptable operating level (91% of current expenses). As an existing CWCB borrower, it is in CWCB's interest for the Company to maintain acceptable financial ratios. Table 3 provides a summary of the Project's financial aspects.

**TABLE 3: FINANCIAL SUMMARY** 

Total Project Cost	\$123,260
Borrowers Contribution	\$23,260
CWCB Loan Amount	\$100,000
CWCB Loan Amount (Including 1% Service Fee)	\$101,000
CWCB Annual Loan Payment	\$10,664
CWCB Annual Loan Obligation (1st Ten Years)	\$11,730
Number of Shares	1290
Annual Loan Obligation per Share	\$9.10
Current Assessment per Share	\$105/share
Future Assessment per Share	\$115/share

*Creditworthiness*: The Company has \$212,103 in existing debt as summarized in Table 4. The CWCB Loan was for the rehabilitation of the Company's diversion and headgate structure in 2000. That loan is in good standing.

**TABLE 4: EXISTING DEBT** 

Lender	Original Balance	Current Balance	Annual Payment	Maturity Date	Collateral
CWCB (C150024)	\$318,583	\$212,103	\$17,869	2030	Assessment Revenues

**TABLE 5: FINANCIAL RATIOS** 

Financial Ratio	Past 3 Years	Future w/ Project
Operating Ratio (revenues/expenses)  weak: <100% - average: 100% - 120% - strong: >120%	124% (Strong) \$133K/\$107K	123% (Strong) \$146K/\$119K
Debt Service Coverage Ratio (revenues-expenses)/debt service  weak: <100% - average: 100% - 120% - strong: >120%	244% (Strong) (\$133K-\$89K) \$18K	190% (Strong) (\$146K-\$89K) \$30K
Cash Reserves to Current Expenses    weak: <50%   - average: 50% - 100%   - strong: >100%	122% (Strong) \$131K/\$107K	91% (Average) \$108K/\$119K
Annual Operating Cost per Acre-Foot (21,364 AF)  weak: >\$20 - average: \$10 - \$20 - strong: <\$10	\$5.00 (Strong) \$107K/21.3KAF	\$5.60 (Strong) \$119K/21.3K AF

*Collateral:* Security for this loan will be a pledge of the Company's assessment revenues backed by an assessment covenant, and the diversion and headgate structure. This is in compliance with the CWCB Financial Policy #5 (Collateral).

cc: Katherine Seetch, Secretary/Treasurer, Sterling Irrigation Company Susan Schneider/Jennifer Mele, Colorado Attorney General's Office

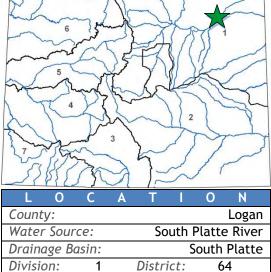
Attachment: Water Project Loan Program - Project Data Sheet



# **Emergency Sterling Ditch Rehabilitation Project**

Sterling Irrigation Company September 2014 Board Meeting

LOAN DETAILS
Project Cost: \$123,250
CWCB Loan (with Service Fee): \$101,000
Loan Term and Interest Rate: 10 Years @ 1.50%
Funding Source: Severance Tax Perpetual Base Fund
B O R R O W E R T Y P E
Agriculture Municipal Commercial
100% 0% Low - 0% Mid - 0% High 0%
PROJECT DETAILS
Project Type: Ditch Rehabilitation
Average Annual Diversion: 21,360 AF



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 ditch. Floodwaters entered the ditch resulting in breaches and significant sedimentation. Construction crews repaired

the breaches and removed sand from the channel enabling the Company to divert its water right during the 2014 irrigation season, irrigating approximately 7,400 acres. No additional flood related repairs are expected to occur.

