



COLORADO

**Colorado Water
Conservation Board**

Department of Natural Resources

1313 Sherman Street
Denver, CO 80203

P (303) 866-3441
F (303) 866-4474

John 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., Finance Section Chief

DATE: November 18-19, 2015 Board Meeting

AGENDA ITEM: 8a - Change to Existing Loans
Lake Canal Reservoir Company - North Gray Reservoir Rehabilitation

Introduction

The Lake Canal Reservoir Company (Company) received approval of an \$116,625 CWCB loan (CT2015-042) at the September 2011 Board Meeting to finance the North Gray Reservoir Rehabilitation (Project). The purpose of the Project is to remove the storage restriction imposed by the State Engineer's Office Dam Safety Branch by replacing the existing spillway. As a result of final design and further investigation, the scope of the Project increased to include modifications to North Gray Reservoir's outlet and the interconnect structure between North and South Gray Reservoirs. Bids were received in September 2015 and the Company is requesting a loan increase for approximately 60% of the updated Project Cost, estimated to be \$334,750. See attached Project Data Sheet for a location map and Project summary.

Staff Recommendation

Staff recommends the Board approve a loan increase of \$87,673 (\$86,805 for Project cost and \$868 for the 1% Loan Service Fee), for a total loan not to exceed \$204,298 (\$202,275 for Project cost and \$2,023 for the 1% Loan Service Fee) to the Lake Canal Reservoir Company for Project costs related to the North Gray Reservoir Rehabilitation Project, from the Construction Fund. The loan terms shall remain 30 years at a blended restricted reservoir interest rate of 2.10% per annum. Security for the loan shall be in compliance with CWCB Financial Policy #5.



Background

The Company operates storage reservoirs known as North Gray Reservoir and South Gray Reservoir located in Larimer County. The Company previously operated Gray Reservoir No. 3 but that reservoir was intentionally breached in 2011 and its water rights were transferred into North and South Gray Reservoirs. The service area includes approximately 5,200 acres of irrigated farm land in Larimer and Weld Counties in Colorado. The Company has issued 160 shares of stock owned by 43 stockholders. Water stored in the North and South Gray Reservoirs is released into Boxelder Creek and then diverted into the Lake Canal Ditch. The ditch is owned by the Lake Canal Company which is a separate company from the Lake Canal Reservoir Company.

The Company sought this loan in September 2011 in response to a storage restriction placed on North Gray Reservoir by the State Engineer's Office Dam Safety Branch (SEO). The reason for the storage restriction was the existing spillway conduit is undersized and in failing condition.

Water Rights

The water rights owned by the Company are as follows:

TABLE 1: IMPACTED WATER RIGHTS

Name	Amount (AF)	Appropriation Date	Adjudication Date	Case No
North Gray Res	135	4/1/1882	12/9/1904	CA1591
North Gray Res	140	11/1/1902	12/9/1904	CA1591
North Gray Res	57	11/15/1904	4/22/1922	CA2031
South Gray Res	275	4/1/1882	12/9/1904	CA1591
South Gray Res	236	11/1/1902	12/9/1904	CA1591
South Gray Res	222	11/16/1904	4/22/1922	CA2031
Gray Res 3	111	11/14/1904	4/22/1922	02CW244(CA2031)

Average annual diversions of the Company are 1,120 AF.

Project Update

The original Project scope was limited to abandoning the existing spillway and constructing a new spillway between North and South Gray Reservoirs. During final design, a video inspection of the North Gray Reservoir outlet, which runs alongside the existing spillway conduit and discharges directly to Boxelder Creek, was also found to be in poor condition and in need of replacement. In coordination with Boxelder Basin Regional Stormwater Authority's (Stormwater Authority) East Side Detention Facility flood control project, it was determined to abandon the outlet altogether, and use the existing interconnect between North and South Gray Reservoir to serve as North Gray Reservoir's permanent outlet. Water can be released to Boxelder Creek through South Gray's outlet where it will be measured. A subsequent video inspection of the interconnect structure found that conduit to be in poor condition and in need of replacement as well. As the poor condition of the outlet and interconnect presented a new dam safety concern, the Company determined to add the abandonment of the outlet and the replacement of the interconnect structure to the Project scope so it can be completed at the same time as the original spillway project. The successful completion of this expanded Project will be sufficient to lift the current SEO storage restriction.

Four contractors submitted bids for the Project on September 14, 2015 and the Company determined the low bidder (Dietzler Construction) was acceptable. Final design is pending SEO approval, and this is expected to be received in November 2015 as comments received in October 2015 were relatively minor in nature.

TABLE 2: PROJECT COST SUMMARY

Task	Original Cost ¹	Updated Cost
Engineering	\$27,000	\$73,375
Construction	\$84,300	\$236,375
Contingency	\$17,000	\$25,000
Total	\$128,300	\$334,750

¹Original Cost based on 2011 construction costs and did not include outlet and interconnect scope.

Schedule: Construction began in November 2015 on the abandonment of the outlet and spillway. Timely removal of the outlet and spillway is important because of the coordination with the Stormwater Authority on this task. Construction on the new spillway and interconnect structure will commence after the design has received final SEO approval, anticipated for November 2015. Total construction is expected to last two months.

Financial Analysis

Table 3 provides a summary of the Project's financial aspects. The Company's blended interest rate of 2.10% for a 30-year term (Ownership: 86% Agricultural, 8% Mid Municipal, 6% Commercial) will remain as per the terms of the original contract. The original approval included an interest rate reduction from 3.10% to 2.10% in accordance with the CWCB Financial Policy # 7 (Lending Rate Determination) that was in place at that time for restricted reservoirs.

TABLE 3: FINANCIAL SUMMARY

	Original Approval	Current Request
Total Project Cost	\$128,300	\$334,750
Borrowers Contribution	\$12,830	\$49,175
Stormwater Authority's Contribution	N/A	\$83,300
CWCB Loan Amount	\$115,470	\$202,275
CWCB Loan Amount (Including 1% Service Fee)	\$116,625	\$204,298
CWCB Annual Loan Payment	\$5,280	\$9,248
CWCB Loan Obligation (Including 10% Reserve)	\$5,808	\$10,173
Number of Shares	160	160
Annual Loan Obligation Per Share	\$36/share	\$64/share
Current Assessment per Share	\$350/share	\$350/share
Future Assessment per Share	\$386/share	\$350/share
Project Cost per AF to Restore 75 AF	\$1,711/AF	\$4,463/AF

Creditworthiness: The Company has \$318,088 in existing long-term debt made up of one CWCB loan for the South Gray Reservoir Rehabilitation & Gray No. 3 Breach Project. That project was substantially completed in 2012 and the loan is in good standing. In October 2015, the Company paid off CWCB Loan C153300 three years early. C153300 was a 40-year loan for the Gray Lake Reservoir Ditch Rehabilitation Project and was obtained in 1978.

TABLE 4: EXISTING DEBT

Lender	Original Balance	Current Balance	Annual Payment	Maturity Date	Collateral
CWCB (C150299)	\$347,615	\$318,088	\$20,488	2042	Assessment Revenues

TABLE 6: FINANCIAL RATIOS

<i>Financial Ratio</i>	<i>Past 3 Years¹</i>	<i>Future w/ Project</i>
Operating Ratio (revenues/expenses) weak: <100% - average: 100% - 120% - strong: >120%	124% (Strong) \$124K/\$100K	119% (Good) \$124/\$104K
Debt Service Coverage Ratio (revenues-expenses)/debt service weak: <100% - average: 100% - 120% - strong: >120%	189% (Strong) \$124K-\$73K \$27K	165% (Strong) \$124-\$73K \$31K
Cash Reserves to Current Expenses weak: <50% - average: 50% - 100% - strong: >100%	87% (Average) \$87K/\$100K	37% (Weak) \$38K/\$104K
Annual Operating Cost per Acre-Foot (1,120 AF) weak: >\$20 - average: \$10 - \$20 - strong: <\$10	\$89 (Weak) \$100K/1.12K AF	\$93 (Weak) \$104/1.12K AF

¹Includes the annual payment of CWCB Loan C153300 in the amount of \$6,920. This loan was paid off in October 2015 and is thus not included in the "Future w/ Project" ratios.

Collateral: Security for the loan will remain a pledge of assessment revenues backed by an assessment covenant and an undivided 100% interest in North Gray Reservoir. This is in compliance with CWCB Financial Policy #5 (Collateral).

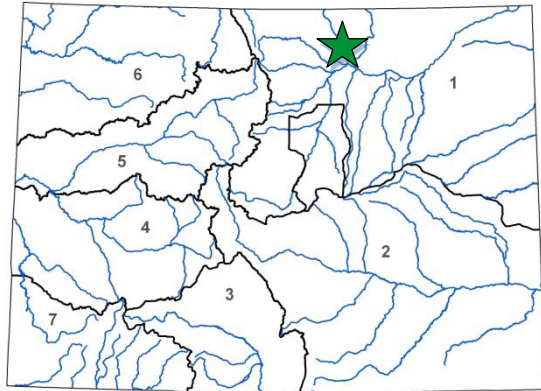
cc: Rosanna Harris, Secretary/Treasurer, Lake Canal and Reservoir Company
Susan Schneider/Jennifer Mele, Colorado Attorney General's Office

Attachment: Water Project Loan Program - Project Data Sheet



(Loan Increase)

L O A N D E T A I L S	
Project Cost:	\$334,750
CWCB Loan (with Service Fee):	\$204,298
Loan Term and Interest Rate:	30 Years @ 2.10%
Funding Source:	Construction Fund
B O R R O W E R T Y P E	
Agriculture	Municipal
86%	0% Low - 8% Mid - 0% High
	Commercial
	6%
P R O J E C T D E T A I L S	
Project Type:	Reservoir Rehabilitation
Average Annual Delivery:	1,120 AF
Preserved Storage:	75 AF



L O C A T I O N	
County:	Larimer and Weld
Water Source:	Boxelder Creek
Drainage Basin:	South Platte
Division:	1
District:	3

The Lake Canal Reservoir Company obtained a CWCB loan to construct a new spillway on North Gray Reservoir. The reservoir is currently under a storage restriction by the Office of the State Engineer (SEO). The existing spillway is a corrugated metal pipe that has corroded through.

The Project scope has increased due to additional video inspection of existing structures and in coordination with the Boxelder Basin Regional Stormwater Authority's (Stormwater Authority) East Side Detention Facility (ESDF) flood control project. During final design, a video inspection of North Gray Reservoir's existing outlet and the interconnect between North and South Gray Reservoirs showed both structures are in need of repair. As this presented a new dam safety concern, the Company determined to add the abandonment of the existing outlet and the replacement of the interconnect structure to the Project scope so it can be completed at the same time as the original spillway project. The successful completion of this expanded Project will be sufficient to lift the current SEO storage restriction. Bids were received in September 2015 and the Company is requesting this loan increase in response to the updated Project cost.

