



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

Robert Randall, Interim 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: May 18-19, 2016 Board Meeting

CONSENT AGENDA ITEM: 5b - Change to Existing Loans
Greeley and Loveland Irrigation Company – Irrigation System Improvements

Introduction (This is for information only and no action is necessary)

The Greeley and Loveland Irrigation Company (Company) has an existing CWCB loan approval for \$3,745,080 to finance its Irrigation System Improvements (Project). The purpose of the Project is to meet the State Engineer's Office Dam Safety Branch requirements, improve water management efficiencies, reduce high maintenance costs, and prevent continued outlet deterioration at Horseshoe Lake and Boyd Lake. Both the Horseshoe Lake and Boyd Lake projects as they were presented in the original Board Memo have been successfully completed. The loan remains open with a balance available to loan of \$176,788.96 resulting from unused contingency.

Lake Loveland is a part of the same integrated irrigation system as Horseshoe Lake and Boyd Lake. Water stored in Lake Loveland is released to Horseshoe Lake where it is then released into Boyd Lake. The Company is requesting the ability to use remaining funds from its Irrigation System Improvements Project to cover cost associated with recent dredging efforts at Lake Loveland

Discussion

Simultaneous with its Irrigation System Improvements Project, the Company was involved in cleaning sand and silt from Lake Loveland to improve its water management efficiencies and regain storage lost from the sedimentation. Enough material was deposited at the inlet of Lake Loveland during the September 2013 flood and 2014 and 2015 spring runoffs that the Company's ability to move water into Lake Loveland, and thus into Horseshoe Lake and Boyd Lake as well, was in jeopardy. FEMA estimated the amount of the material deposited was 6,600 CY immediately after the flood. After the two subsequent irrigation seasons it was estimated the amount of material deposited had increased to approximately 10,000 CY.

The dredging project was bid in Fall 2015 and Coulson Excavating was the selected contractor. Work occurred from February through March of 2016. A before and after survey completed by Michael DeDecker, PLS of Tait & Associates documents the actual amount of material removed was 24,821 CY, bringing the construction cost to approximately \$250,000. The Company had planned to cash fund the Lake Loveland project until the actual quantity of material removed more than doubled its estimates. The Company has requested that the Lake Loveland work be considered as an irrigation system improvement connected to Horseshoe Lake and Boyd Lake and thus apply the unused contingency funds from the Irrigation System Improvements loan towards the Lake Loveland construction cost. The Company is not requesting an increase to the total loan amount.



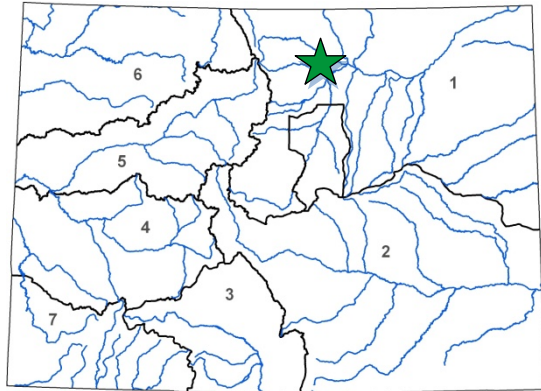
The Company hired NoCo Engineering to develop the construction and bid documents, and hired Tait & Associates to survey and determine the actual quantity of material removed. After a bid process, Coulson Excavating was awarded the contract and supplied the same level of insurance as is required by CWCB loan contracts. CWCB staff was aware of the concurrent Lake Loveland Project and at various times received updates on the status of the project. Staff supports the request to use the the Irrigations System Project's unused contingency toward the Lake Loveland project. The work improves water management efficiencies at Horseshoe Lake and Boyd Lake due to the integrated system, thereby meeting the original goal of the loan.

cc: Ron Brinkman, General Manager, Greeley and Loveland Irrigation Company
Susan Schneider/Jennifer Mele, Colorado Attorney General's Office

Attachment: Water Project Loan Program – Project Data Sheet



L O A N D E T A I L S	
Project Cost:	\$4,120,000
CWCB Loan (with Service Fee):	\$3,745,080
Loan Term and Interest Rate:	30 Years @ 2.15%
Funding Source:	Construction Fund
B O R R O W E R T Y P E	
Agriculture	Municipal
34%	53% Low - 12% Mid - <1% High
	<1%
P R O J E C T D E T A I L S	
Project Type:	Reservoir Rehabilitation
Average Annual Delivery:	45,000 AF
Storage Preserved:	56,986 AF



L O C A T I O N	
County:	Larimer
Water Source:	Big Thompson River
Drainage Basin:	South Platte
Division:	1
District:	4

The Greeley and Loveland Irrigation Company (Company) is a mutual ditch company established in 1900. Together with the Seven Lakes Reservoir Company they own and operate nine reservoirs and control the Greeley and Loveland Canal.

Boyd Lake, owned by the Company, is the largest reservoir in the irrigation system and has a surface area of 1,750 acres with a storage capacity of 48,871 acre-feet. The Boyd Lake project will replace the high-level reservoir inlet and outlet from the Greeley and Loveland Irrigation Canal so that the Company can discharge water into Boyd Lake for storage during low reservoir levels, or discharge water back into the canal for deliveries during high reservoir levels. This project was completed in May 2015

Horseshoe Lake, owned by Seven Lakes, has a surface area of 650 acres and a storage capacity of 8,115 acre-feet. The Horseshoe Lake project will increase the conveyance capability from Horseshoe Lake into Boyd Lake to 1,100 cfs, at higher reservoir levels, so the Company and Seven Lakes can more efficiently provide irrigation water to shareholders. This project was completed in March 2016.

Lake Loveland, owned by the Company, had a significant amount of sand and silt deposited during the September 2013 flood and subsequent irrigation seasons. In order to ensure water could continue to flow into the lake, and therefore into Horseshoe Lake and Boyd Lake as well, construction crews removed 24,821 CY of material adjacent to the lake's inlet. This project was completed in March 2016.

