COLORADO
Colorado Water Conservation Board
Department of Natural Resources

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TO: Colorado Water Conservation Board Members

FROM: Zachary Salin, P.E., Project Manager
Kirk Russell, P.E., Finance Section Chief

DATE: July 16-17, 2025 Board Meeting

AGENDA ITEM: 7b. Water Project Loans
Water Supply and Storage Company
Canal Check Structure Automation - Phase 1

Staff Recommendation

Staff recommends the Board approve a loan not to exceed $2,590,650 ($2,565,000 for project costs and $25,650 for the 1% service fee) to the Water Supply and Storage Company, for costs related to the Canal Check Structure Automation - Phase 1, from the Construction Fund. The loan term will be 30 years at an interest rate of 3.55% per annum. Security for the loan shall be in compliance with CWCB Financial Policy #5.

Introduction

The Water Supply and Storage Company (Company) is applying for a blended interest rate loan for the Larimer County Canal Check Structure Automation - Phase 1 (Project). This Project will include engineering, design and construction of automated check structures at three locations along the Larimer County Canal (Canal). These check structures are needed due to changes in the water surface elevation in the Canal caused by the removal of municipal-owned shares of water from the system, potentially leading to an inability to divert at laterals on the Canal. Total cost for the Project is estimated at $2,565,000. See attached Project Data Sheet for a location map and Project summary.

Borrower – Water Supply and Storage Company
The Water Supply and Storage Company is located in Larimer County and provides irrigation water to farmland as well as water to several municipalities in Larimer and Weld Counties, including the City of Fort Collins, the City of Greeley, the City of Thornton, East Larimer County Water District, the Fort Collins/Loveland Water District, and the North Weld County Water District within the Cache la Poudre Basin in Water Division 1. The Company owns and operates several reservoirs and over 100 miles of ditches, laterals, and tunnels. The Canal serves customers irrigating approximately 45,000 acres of land. The Company is a nonprofit mutual ditch company registered and in good standing with the Colorado Secretary of State. There are currently 128 shareholders who own the 600 shares of stock in the Company.

The Company has a nine-member Board of Directors which has the power to set annual assessments, incur indebtedness and sign contracts on behalf of the Company, curtail water deliveries to shareholders that fail to pay their assessments. Four of the Board members are selected by the City of Thornton, and the remaining five members are elected by the Company's shareholders. Members of the Board are not required to be shareholders in the Company.

Background
Operation of the Canal is increasingly challenged by structural deficiencies and shifts in regional water use, namely due to municipal-owned shares that were previously leased to agricultural users being converted from irrigation to municipal use through Water Court. This is anticipated to significantly lower water surface elevations along the Canal. This change threatens the ability of several lateral headgates to deliver the full water allotment to agricultural shareholders who rely on this system for crop irrigation.

Field assessments and hydraulic modeling completed by Schnabel Engineering in 2025 along with ongoing observations by the Company have identified three critical sites (structure IDs: LCC-2A, LCC-4E, and LCC-4O) where inadequate check structures are already limiting water deliveries. Without timely upgrades, continued changes in hydraulic head at these locations will further disrupt service, jeopardizing shareholder allocations and threatening crop production.

The Company is pursuing the installation of automated check structures at these three sites to restore reliable water delivery, improve system resilience, and reduce long-term maintenance and labor costs. This Project is part of a capital improvement plan initiated by the Company to improve and update their canal infrastructure over the next 10 years to protect water deliveries to agricultural shareholders.

Loan Feasibility Study
Eric Westlind, the Company's General Manager, along with Brianna Crotty, P.E., of Schnabel Engineering prepared the Loan Feasibility Study titled, "Water Supply & Storage Company LCC-2A, LCC-4E, & LCC-4O Feasibility Study" dated May 2025. The feasibility study was prepared in accordance with CWCB guidelines and includes preliminary engineering, an analysis of alternatives and costs. The Company provided audited financial statements for calendar years 2020 through 2024.

Water Rights
The Company reports that they own an extensive portfolio of direct flow, storage, and transbasin water rights associated with this Project. A selection of significant rights are shown in Table 1.

TABLE 1: WATER RIGHTS ASSOCIATED WITH THE PROJECT

Name (WDID)	Amount	Appropriation Date	Adjudication Date	Case No.
Grand River Ditch (5104601)	524.6 cfs	09/01/1890	08/11/1960	CA0112
Chambers Lake Reservoir (0303679)	3,080.0 AF	07/12/1882	10/12/1886	03CW0422, 07CW0190, 11CW0265
Long Draw Reservoir (0303676)	4,201.0 AF	06/05/1922	12/18/1945	03CW0422, 07CW0190, 11CW0265
Larimer County Canal (0300911)	463.0 cfs	04/25/1881	04/11/1882	03CW0421, 03CW0422, 07CW0190

Based on information provided by the Colorado Department of Water Resources, the Company delivers approximately 63,000 AF of water annually to shareholders. The Project will facilitate continued deliveries to agricultural shareholders and operation of the Canal.

Project Description
The purpose of this Project is to control the water surface elevation at key locations along the Canal for the purpose of diverting adequate water at its lateral headgates.

Alternative 1 – No Action: Taking no action would result in lower water surface elevations in the Canal (currently estimated as a 2.0-2.5 feet decrease). Lower water surface elevations are expected to make diversions at lateral headgates unworkable, which would result in many of the Company's agricultural shareholders unable to use some or all of their water. Accordingly, this option was not selected.

Alternative 2 – Install Manually-Operated Stoplog Structures: Hydraulic control of the water surface elevations along a ditch or canal can be achieved by installation of stoplog structures which rely on the insertion or removal of check boards. Because stoplog structures require manual operation by the Company's personnel they are generally set once a day to a static position and pass a variable amount of water due to diurnal variation in the water surface elevation. Additionally, stoplog structures pose a safety risk to personnel who are operating the structure during periods of flood. Accordingly, this option was not selected.

Selected Alternative 3 – Construct Automated Check Structures: The proposed Project to automate Canal structures LCC-2A, LCC-4E, and LCC-4O would install new automated check gate structures as well as components such as solar-power and telemetry, with SCADA integration also planned for LCC-4O. Design for the automated check structures will include designs for the foundation and superstructure, gate sizing, etc. The designs will be engineered to ensure long-term operation, including potential future changes in the Canal water surface elevation.

TABLE 2: ESTIMATED PROJECT COST

Description	Cost
Design	$198,000
Construction Engineering	$97,000
Construction	$1,470,000
Automated Gates	$351,000
Contingency (~20% of Construction Costs)	$423,000
Survey & Geotechnical	$26,000
TOTAL	**$2,565,000**

Permitting: No permits are Necessary for the Project given that the Company either owns the Project sites or has prescriptive easements for them. The Company submitted a letter from the U.S. Army Corps of Engineers with a jurisdictional determination confirming that a Section 404 Clean Water Act permit is not required for the Project.

Schedule: The design phase of the project is underway and expected to last until approximately the fall of 2025, with contractor bidding and award of the contract completed by the end of the fall of 2025. Project construction is planned to occur in the irrigation off-season between October 2025 and April 2026. Following the completion of the Project construction, field observation and project documentation is expected to occur through spring of 2026.

Financial Analysis

Table 3 provides a summary of the Project's financial aspects. The Company qualifies for a blended interest rate of 3.55% (approximately 25% agricultural, 8%/17%/49% low, middle, and high-income municipal, and <1% commercial) for a 30-year term. All interest rate evaluations are per CWCB Financial Policy #7 (Lending Rate Determination). In addition to income from annual assessments, the Company also earns income from recreational leases, Company shares leased to members, oil & gas royalties, free river water sales to oil & gas. In addition to annual per-share assessments levied on the Company's shareholders, the Company plans to institute a special assessment for loan repayment which would be paid only by the Company's municipal pool of shareholders.

TABLE 3: FINANCIAL SUMMARY

Item	Cost
Project Cost	$2,565,000
CWCB Loan Amount	$2,565,000
CWCB Loan Amount (Including 1% Service Fee)	$2,590,650
CWCB Annual Loan Payment	$141,741
CWCB Annual Loan Obligation (1st Ten Years)	$155,915
Number of Shares	600
Current Annual Assessment per Share	$3,400
Number of Municipal Shares	436
Est. Future Annual Loan Obligation per Municipal Share*	$358

* CWCB understands that the loan repayment costs will be paid exclusively by the Company's Municipal ownership pool.

Creditworthiness: The Company currently has one loan in repayment with CWCB. The Company owns 67% of the Tunnel Water Company (TWC), which has a total of six loans with CWCB (C150065 matures 12/2032, C150052 matures 12/2032, CT2016-2001 matures 02/2049, CT2021-3927 matures 06/2052, CT2021-3928 matures 05/2051, and CT2019-3706 which will Substantially Complete in November of this year and matures 11/2056). The Company's annual expense for their portion of TWC's annual loan repayment obligations is approximately $895,062. Details of the Company's debt are provided in Table 4. The Company is in good standing with the CWCB and has a good repayment history. Financial ratios for the Company are shown in Table 5.

TABLE 4: EXISTING DEBT

Lender	Original Balance	Current Balance	Annual Payment	Maturity Date	Collateral
CWCB (C150281)	$704,503.91	$445,929	$39,270	4/1/2040	Pledge of assessment revenues backed by a rate covenant.

TABLE 5: FINANCIAL RATIOS

Financial Ratio	Past Years	Future w/ Project
Operating Ratio (revenues/expenses) weak: <100% | typical: 100% - 120% | strong: >120%	130% (strong) $4.00M/$3.07M	124% (strong) $4.00M/$3.23M
Debt Service Coverage Ratio (revenues-expenses)/debt service weak: <100% | typical: 100% - 125% | strong: >125%	2,477% (strong) ($4.00M-$3.03M) $39K	498% (strong) ($4.00M-$3.03M) $195K
Cash Reserves to Current Expenses weak: <50% | typical: 50% - 100% | strong: >100%	47% (weak) $1.44M/$3.07M	45% (weak) $1.44M/$3.23M
Annual Cost per Acre-Foot (63,000 AF) weak: >$24 | typical: $3 - $24 | strong: <$3	$48.80 (weak)	$51.28 (weak)

Collateral: Security for this loan will be a pledge of assessment revenues backed by an assessment covenant and the Project itself (the new LCC-2A, LCC-4E, and LCC-4O check structures) including all access, easements, rights, and appurtenances associated therewith. This security is in compliance with the CWCB Financial Policy #5 (Collateral).

cc: Eric Westlind, General Manager, Water Supply and Storage Company
Jennifer Mele, Colorado Attorney General's Office

Attachments: Water Project Loan Program – Project Data Sheet

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Canal Check Structure Automation - Phase 1

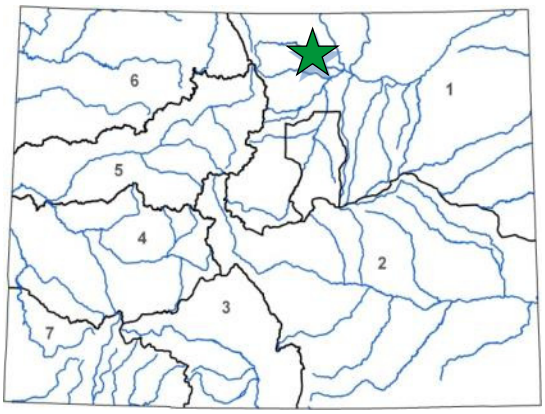
Water Supply and Storage Company

July 2025 Board Meeting

LOAN DETAILS	
Project Cost:	$2,565,000
CWCB Loan (with 1% Service Fee):	$2,590,650
Loan Term and Interest Rate:	30 Yrs @ 3.55%
Funding Source:	Construction Fund

BORROWER TYPE		
Agriculture	*Municipal*	*Commercial*
25%	8% Low - 17% Mid - 49% High	<1%

PROJECT DETAILS	
Project Type:	Ditch System Improvements
Average Annual Delivery:	63,000 AF



LOCATION			
County:	Larimer, Weld		
Water Source:	Cache La Poudre		
Drainage Basin:	South Platte		
Division:	1	*District:*	3

The Water Supply and Storage Company (Company) is a mutual ditch company primarily serving irrigators in the Cache la Poudre Basin across Larimer and Weld Counties. The Company manages an extensive network of over 100 miles of ditches, laterals, and tunnels, distributing water sourced from the Poudre, Colorado, Michigan, and Laramie Rivers and has 128 shareholders. While originally focused on agricultural irrigation, over 60% of Company's shares have shifted to municipal ownership, necessitating infrastructure changes to maintain water delivery to the remaining agricultural users.

The project addresses the critical need for infrastructure upgrades at three high-priority sites along the Larimer County Canal due to projected changes in the canal water surface elevation related to municipal share flows. The purpose of these upgrades is to restore reliable water delivery, improve system resilience, and reduce long-term maintenance and labor costs for operation of the canal. The proposed solution involves installing three automated gate structures. These provide real-time water level control, reduced labor, and improved accuracy over traditional approaches. Construction is expected to start in the fall of 2025 and be completed by the spring of 2026.