



COLORADO

**Colorado Water
Conservation Board**

Department of Natural Resources

1313 Sherman Street, Room 718
Denver, CO 80203

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

Jared Polis, Governor
Dan Gibbs, DNR Executive Director
Rebecca Mitchell, CWCB Director

TO: Colorado Water Conservation Board Members

FROM: Cole Bedford, P.E., Project Manager
Kirk Russell, P.E., Finance Section Chief

DATE: September 20-21, 2022 Board Meeting

AGENDA ITEM: 10e. Water Project Loans
North Poudre Irrigation Company - Park Creek Expansion Project

Staff Recommendation

Staff recommends the Board approve a loan not to exceed \$6,544,800 (\$6,480,000 for project costs and \$64,800 for the 1% service fee) to the North Poudre Irrigation Company for costs related to the Park Creek Expansion Project, from the Severance Tax Perpetual Base Fund. The loan term will be 30 years at an interest rate of 2.55% per annum. Security for the loan shall be in compliance with CWCB Financial Policy #5.

Introduction

The North Poudre Irrigation Company (Company) is applying for a loan for the Park Creek Expansion (Project). The Company, located in Larimer County, owns and operates Park Creek Reservoir, which has a storage capacity of about 5,025 AF. Because the reservoir's storage decree is 8,217 AF, the Company proposes to increase its physical capacity by about 3,000 AF to make full use of the water rights decreed for storage in the reservoir. The increase will require rehabilitation of the Park Creek dam, construction of a parapet wall, and other modifications to the reservoir shoreline and spillway. In addition to this loan, the Project will be paid for by a \$100,000 CWCB Water Plan Grant, if approved at this Board meeting. The total Project cost is estimated to be \$6,580,000. See attached Project Data Sheet for a location map and Project summary.



Borrower - North Poudre Irrigation Company

The North Poudre Irrigation Company is a mutual ditch company headquartered in Wellington, Colorado. The Company operates and maintains 200 miles of ditches and 21 storage reservoirs for the benefit of approximately 570 shareholders. About three-quarters of the shares are held by municipal water entities and the remaining one-quarter are held by agricultural producers and commercial interests. The Company is directed by a five member board elected to three years terms by a majority vote of shareholders. The board has the ability to approve all bonds and execute contracts. A majority vote of the shareholders is required to increase assessments. The company is currently in good standing with the Secretary of State’s office.

Background

Park Creek Dam is an earthfill dam constructed in the late 1960s and completed in 1970. It is an on-stream reservoir on Park Creek. Most of the water it stores, however, is supplied by the Livermore Canal, which diverts off the North Fork of the Cache la Poudre River. The current decreed storage right is about 3,000 AF more than the actual physical capacity of the reservoir. Increased storage at Park Creek Reservoir would improve water management for agricultural use, increase water storage capacity when water is physically available, and provide additional drought carryover water storage. It is believed that increasing the storage to the full decreed right will increase the end-of-summer water availability by about 30 days.

Loan Feasibility Study

Jack G. Byers, P.E., with The Byers Group LLC., and Tara Schutter, P.E., with Tessara Water, Inc. prepared the Loan Feasibility Study titled, “Park Creek Dam and Reservoir Feasibility Study for Water Storage Expansion” dated June 2022. The feasibility study is in accordance with CWCB guidelines and includes an analysis of alternatives, estimated costs, and financial statements.

Water Rights

The Company diverts about 65,000 AF per year into its large and interconnected supply system. The Park Creek Reservoir represents only one portion of the larger system. Water associated with Park Creek Reservoir is delivered through Livermore Ditch and runoff from the Park Creek watershed. The reservoir storage rights include the original Park Creek Reservoir right and various transfers from other reservoirs. These rights are detailed in Table 1.

TABLE 1: WATER RIGHTS

Name	Amount (AF)	Appropriation Date	Adjudication Date	Case No.
Park Creek Reservoir	7,105 ¹	11/15/1958	12/31/1970	W-202
Transfers from other Reservoirs	657.6	1884-1906		W0559
City of Fort Collins Southside Ditch (Warren Lake)	454.8	07/27/1908	04/22/1922	05CW323

¹Originally 7,320 AF, 92CW128 abandoned 215 AF

Project Description

The purpose of this Project is to expand the capacity of the Park Creek Reservoir to make full use of its decreed storage right.

Alternative 1 - No Action: Taking no action would leave the reservoir’s capacity well below its decreed right. This would not meet the Project purpose and subject Company shareholders to an earlier than necessary water shutoff each summer.

Alternative 2 - Increased Fill to Raise the Dam Crest: This alternative would involve raising the crest of the Park Creek Dam by increasing the fill on both its upstream and downstream sides. While this would increase the storage capacity of the reservoir, it would also increase the footprint of the dam and require a 404 permit from the Corps of Engineers. It would also involve a significant effort to haul fill material, resulting in a Project costing over \$25 million. Because of the permitting complications and high costs associated with this alternative, it was not selected.

Selected Alternative 3 - Parapet Wall to Raise the Dam Crest: This alternative will produce 3,000 AF of new storage. It will not require a significant change to the dam footprint, so will not require permitting by the USACE Section 404. The Company started reviewing design options in March 2021. A preliminary design has already been completed which calls for construction of a parapet wall on the dam crest and other peripheral improvements to raise the normal storage elevation by 10-feet. The estimated cost is \$6,580,000 and is shown in Table 2.

TABLE 2: ESTIMATED PROJECT COST

Tasks	Cost
Engineering, Legal, and Contingency	\$1,380,000
Surveying and Earthwork	\$2,900,000
Parapet Wall Design and Construction	\$2,300,000
TOTAL	\$6,580,000

Permitting: The Dam Safety Branch of the Division of Water Resources has been involved during the preliminary design phases of the project. The design plans and specifications will need to be approved before construction can begin. Furthermore, it is believed that no federal 404 permit will be required, but the Corps of Engineers is currently reviewing. Other local permits will be secured by the contractor.

Schedule: While some work including clearing and grubbing of the reservoir shoreline may be completed in the fall the 2022, the bulk of the work is expected to take place late in 2023 through 2024. The dam outlet works will be functional throughout the construction period, so the construction can be ongoing through the 2024 irrigation season.

Financial Analysis

Table 3 provides a summary of the Project’s financial aspects. The Company qualifies for a blended interest rate of 2.55% for a 30-year loan (Ownership: 19% Agricultural, 12% Low-Income Municipal, 60% Middle-Income Municipal, 7% High-Income Municipal, and 2% Commercial). All interest rate evaluations are per CWCB Financial Policy #7 (Lending Rate Determination).

TABLE 3: FINANCIAL SUMMARY

Project Cost	\$6,580,000
Water Plan Grant (Pending)	\$100,000
CWCB Loan Amount	\$6,480,000
CWCB Loan Amount (Including 1% Service Fee)	\$6,544,800
CWCB Annual Loan Payment	\$314,783
CWCB Annual Loan Obligation (1 st Ten Years)	\$346,261
Number of Shares	10,000
Current Assessment per Share	\$180.00
Annual Loan Obligation per Share	\$34.63
Future Assessment per Share (Estimated)	\$214.63

Creditworthiness: The Company has \$5,370,292 in long-term debt and a combined annual payment of \$404,496. The North Poudre Irrigation Company has eight active loans all of which are with CWCB and currently in good standing. They are detailed in Table 4.

TABLE 4: EXISTING DEBT

Lender	Original Balance	Current Balance	Annual Payment	Maturity Date	Collateral
CWCB (CT2017-1402)	\$1,451,673	\$1,271,738	\$67,066	7/1/2047	Undivided 100% Interest in Reservoir #4
CWCB (CT2015-003)	\$2,189,758	\$1,922,064	\$102,540	5/1/2047	Undivided 100% Interest in Reservoir #4
CWCB (C153496)	\$404,502	\$133,152	\$23,574	5/1/2029	Undivided 100% Interest in Fossil Creek Dam and Reservoir
CWCB (C153572)	\$340,551	\$141,067	\$19,847	5/1/2031	Undivided 100% Interest in Fossil Creek Dam and Reservoir
CWCB (C153637)	\$1,761,096	\$730,588	\$64,378	5/1/2035	Undivided 100% Interest in North Poudre Reservoirs #5 and #6
CWCB (C153449)	\$1,152,909	\$238,257	\$67,192	5/1/2026	Undivided 100% Interest in Fossil Creek Dam and Reservoir
CWCB (CT2017-3641)	\$726,214	\$642,301	\$38,363	8/1/2044	Undivided 100% Interest in Reservoir #10
CWCB (CT2015-024/C150368)	\$418,586	\$291,127	\$21,536	11/1/2038	Fossil Creek Reservoir Inlet Diversion Structure Assessment
TOTAL		\$5,370,294	\$404,496		

TABLE 5: FINANCIAL RATIOS

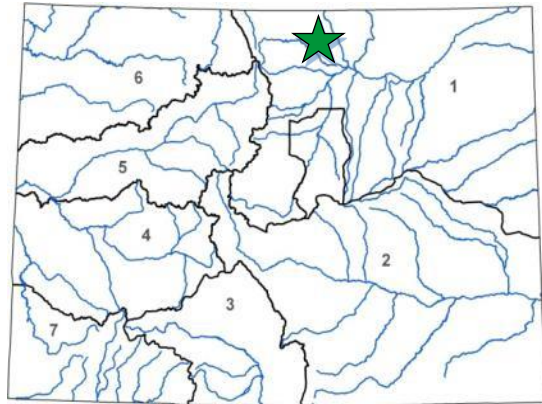
Financial Ratio	Past Years	Future w/ Project
Operating Ratio (revenues/expenses) weak: <100% average: 100% - 120% strong: >120%	154% (strong) \$4.3M/\$2.8M	134% (strong) \$4.3M/\$3.2M
Debt Service Coverage Ratio (revenues-expenses)/debt service weak: <100% average: 100% - 120% strong: >120%	475% (strong) <u>\$4.3M-\$2.4M</u> \$0.4M	238% (strong) <u>(\$4.3M-\$2.4M)</u> \$0.8M
Current Assets to Current Expenses weak: <50% average: 50% - 100% strong: >100%	136% (strong) \$3.8M/\$2.8M	119% (strong) \$3.8M/3.2M
Annual Operating Cost per Acre-Foot (65,000 AF) weak: >\$20 average: \$10 - \$20 strong: <\$10	\$43.07 (weak) \$2.8M/ .065M AF	\$49.23 (weak) \$3.2M/ .065M AF

Collateral: Security for this loan will be a pledge of assessment revenues backed by an assessment covenant and the project itself; 100% undivided interest in Park Creek Reservoir. This security is in compliance with the CWCB financial Policy #5 (Collateral).

cc: Tad Moen, General Manager, North Poudre Irrigation Company
 Jennifer Mele, Colorado Attorney General's Office

Attachments: Water Project Loan Program - Project Data Sheet

L O A N D E T A I L S		
Project Cost:	\$6,580,000	
Water Plan Grant	\$100,000	
CWCB Loan (with 1% Service Fee):	\$6,544,800	
Loan Term and Interest Rate:	30 Yrs @ 2.55%	
Funding Source:	Severance Tax Perpetual Base Fund	
B O R R O W E R T Y P E		
Agriculture	Municipal	Commercial
19%	12% Low - 60% Mid - 7% High	2%
P R O J E C T D E T A I L S		
Project Type:	Reservoir Enlargement	
Storage Created:	3,000 AF	
Average Annual Diversions:	65,000 AF	



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

The North Poudre Irrigation Company (Company) is a mutual ditch company that was incorporated in 1901. The Company provides water to 250,000 residents and 23,000 acres of agricultural land in north-central Colorado through a system of 21 reservoirs and 200 miles of canals, ditches and laterals.

The project will be funded in conjunction with a Water Plan Grant (Water Storage and Supply) and will rehabilitate and enlarge the existing dam. The enlargement will consist of installing a parapet wall along the length of the existing dam crest, and a 10 foot buttressed concrete overflow weir in the spillway thereby raising the normal water storage level by 10 feet. The loan and grant will fund the complete project. Construction is expected to begin in the fall of 2022 and be completed before the 2024 irrigation season.

