



**COLORADO**

**Colorado Water  
Conservation Board**

Department of Natural Resources

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**TO:** Colorado Water Conservation Board Members

**FROM:** Jonathan Hernandez, P.E., Project Manager  
Kirk Russell, P.E., Finance Section Chief

**DATE:** November 15-16, 2017 Board Meeting

**AGENDA ITEM:** 20a. Change to Existing Loans  
North Poudre Irrigation Company – Mountain Supply Reservoir No. 10 Repairs

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### Introduction

The North Poudre Irrigation Company (Company) received approval of a \$499,950 CWCB loan (Contract number CT2017-3641) to finance the Mountain Supply Reservoir No. 10 Repairs (Project) at the March 2017 Board Meeting. The purpose of the Project is to restore full function of the reservoir, including removing the existing State Engineer's Office (SEO) storage restriction. After completing final design and receiving construction bids, the Company is requesting a loan increase of \$300,000 to fully fund the Project. See the attached Project Data Sheet for a location map and a Project summary, and the original loan request Board Memo.

### Staff Recommendation

Staff recommends the Board approve a loan increase of \$303,000 (\$300,000 for Project costs and \$3,000 for the 1% service fee), for a total loan not to exceed \$802,950 (\$795,000 for Project costs and \$7,950 for the 1% service fee) to the North Poudre Irrigation Company for costs related to the Mountain Supply Reservoir No. 10 Repairs Project, from the Severance Tax Perpetual Base Fund. The loan terms shall remain 30 years at a blended interest rate of 2.50% per annum. Security for the loan shall be in compliance with CWCB Financial Policy #5.



## Background

The Company's service area encompasses approximately 28,000 irrigated acres in Larimer County north of Fort Collins near Wellington, and includes service to 14 communities and municipal water providers that own Company shares. The Company operates 22 storage reservoirs, 5 flood control dams, and approximately 200 miles of ditches. Irrigated acreage within the service area supports production of corn, sugar beets, soybeans, hay, and feed crops.

Mountain Supply Reservoir No. 10 (Reservoir), owned and operated by the Company, was constructed in 1905, and a major rehabilitation of the dam was completed in 1973. The Company has a storage decree of 344 AF for the Reservoir. The Reservoir is off-stream and has a drainage basin of approximately 0.14 square miles.

In August 2015, the Reservoir's outlet works experienced a failure in the corrugated metal pipe (CMP) outlet. The Reservoir was drained and a full storage restriction was imposed by the Dam Safety Branch of the State Engineer's Office (SEO). The Company made temporary emergency repairs in 2016 and was given temporary approval to store up to 80 AF by the SEO.

The purpose of this Project is to make permanent repairs as necessary to allow full storage in the Reservoir. The Project components are: (1) repair the outlet works including construction of a new inlet gate tower and walkway, and lining the length of the outlet conduit using a cured-in-place pipe (CIPP) liner; (2) remove silt from the reservoir bottom and install a new spillway control wall to achieve the ability to store the full decreed storage amount of 344 AF; and (3) repair 500 feet of 30-inch inlet works by installing a CIPP liner in the existing inlet pipe from the Upper 10 Ditch to the reservoir, as well as replacing the inlet works and installing a new energy dissipation structure.

## Water Rights

The Company's 22 reservoirs have a combined 220,000 acre-feet of storage, which are used for a variety of trades and exchanges to deliver water within the Company's service area. Mountain Supply Reservoir No. 10 (also known as Railroad Reservoir No. 3) has the decreed water rights shown in Table 1 below.

TABLE 1: IMPACTED WATER RIGHTS

Name	Amount	Appropriation Date	Adjudication Date	Water Court Case No.
Mountain Supply Res 10	344 AF	5/15/1905	4/22/1922	CA2031

Average annual diversions of the entire Company are 44,400 acre-feet. Approximately 600 AF of water is delivered annually to shareholders under the Reservoir.

## Project Update

Tessara Water, LLC completed the engineering design for the Project. The SEO approved engineering design in September 2017. Bids were received from two construction firms on October 12, 2017 for \$637,250 and \$660,550. The Company reviewed both bids, found both contractors to be qualified and capable, and is actively in the process of issuing a notice of award to the low bidder (Zak Dirt Inc.).

The Company is seeking an increase to its loan amount to fully fund construction activities. In addition to covering the higher than estimated construction cost, the Company is seeking funds to cover the original repairs which allowed the temporary storage of 80 AF (repairs which were overseen and approved by the SEO), the addition of roadbase which was not originally part of the project, and the installation of a Parshall flume and outlet drain which was an additional item requested by the SEO.

Table 2 provides the updated construction cost.

**TABLE 2: PROJECT COSTS**

Task	Original	Current
Design	\$89,00	\$89,000
Emergency Repairs	Not Included	\$24,000
Roadbase	Not Included	\$25,000
Parshall Flume and Outlet Drain	Not Included	\$9,000
Construction	\$356,400	\$637,250
Contingency	\$49,6000	\$10,750
Total	\$495,000	\$795,000

### Financial Analysis

Table 3 provides a summary of the Project's financial aspects. The term of the loan will remain at 30 years at a blended interest rate of 2.50% (Ownership: 26% agriculture, 73% mid municipal, 1% commercial).

**TABLE 3: FINANCIAL SUMMARY**

	Original	Current
Total Project Cost	\$495,000	\$795,000
CWCB Loan Amount (100%)	\$495,000	\$795,000
CWCB Loan Amount (Including 1% Service Fee)	\$499,950	\$802,950
CWCB Annual Loan Payment	\$23,886	\$38,363
CWCB Annual Loan Obligation (including 10% Reserve)	\$26,275	\$42,199
Annual Loan Obligation per share (10,000 Shares)	\$2.63	\$4.22
Current Assessment per share	\$210	\$210
Future Assessment per share	\$210	\$210
Annual Loan Obligation per AF deliveries (600 AF)	\$43.79	\$70.33
Project cost per AF recovered (264 AF)	\$1,894	\$3,011

**Creditworthiness:** The Company has \$7,134,600 in existing debt made up of 11 CWCB loans. All loans are in good standing and are summarized in Table 4. CWCB loans CT2015-003, CT2017-1402, CT2015-024 are recent debts whose first annual payments have not yet been due.

In anticipation of the recent multiple construction projects, the Company has been steadily increasing its annual assessments from less than \$100/share before 2009, to \$130/share in 2014, and then to \$200/share for 2015 and 2016. For 2017 the assessments were set to \$210/share. The Company has been successful in collecting the increased assessments and does not anticipate an additional increase in assessments due to this loan increase.

TABLE 4: EXISTING DEBT

Lender	Original Balance	Current Balance	Annual Payment	Maturity Date	Collateral
CWCB (C153833)	\$500,000	\$69,545	\$36,889	9/1/2019	Undivided 100% Interest in North Poudre Reservoirs #5 & #6
CWCB (C153385)	\$1,331,704	\$449,086	\$77,612	5/1/2024	Undivided 100% Interest Fossil Creek Dam and Reservoir
CWCB (C150013)	\$623,778	\$276,055	\$46,061	5/1/2024	Undivided 100% Interest Fossil Creek Dam and Reservoir
CWCB (C153449)	\$1,152,909	\$477,580	\$67,192	5/1/2026	Undivided 100% Interest Fossil Creek Dam and Reservoir
CWCB (C150170)	\$735,280	\$425,935	\$50,572	2/1/2027	Undivided 100% Interest North Poudre Res #1 (Miner's Lake)
CWCB (C153496)	\$404,502	\$206,389	\$23,574	5/1/2029	Undivided 100% Interest Fossil Creek Dam and Reservoir
CWCB (C153572)	\$340,551	\$196,455	\$19,847	5/1/2031	Undivided 100% Interest Fossil Creek Dam and Reservoir
CWCB (C153637)	\$1,761,096	\$965,160	\$64,378	5/1/2035	Undivided 100% Interest in North Poudre Reservoirs #5 & #6
CWCB (CT2015-003)	\$2,189,758	\$2,189,758	\$102,540	5/1/2047	Undivided 100% Interest in North Poudre Reservoir #4
CWCB (CT2017-1402)	\$1,451,673	\$1,451,673	\$67,066	7/1/2047	Undivided 100% Interest in North Poudre Reservoir #4
CWCB (CT2015-024)	\$846,220	\$426,964	\$44,220	11/1/2045	Fossil Creek Res Inlet Diversion Dam
<b>Total</b>		<b>\$7,134,600</b>	<b>\$599,951</b>		

TABLE 5: FINANCIAL RATIOS

Financial Ratio	Past 2 Years	Future w/ Project
Operating Ratio (revenues/expenses) weak: <100% - average: 100% - 120% - strong: >120%	119% (Average) \$3.09M/\$2.60M	109% (average) \$3.10M/\$2.85M
Debt Service Coverage Ratio (revenues-expenses)/debt service weak: <100% - average: 100% - 120% - strong: >120%	226% (strong) (\$3.09M-\$2.21M) \$0.39M <sup>1</sup>	139% (strong) (\$3.10M-\$2.21M) \$0.64M
Cash Reserves to Current Expenses weak: <50% - average: 50% - 100% - strong: >100%	32% (weak) \$0.82M/\$2.60M	29% (weak) \$0.82M/\$2.85M
Annual Operating Cost per Acre-Foot (44,400 AF) weak: >\$20 - average: \$10 - \$20 - strong: <\$10	\$59 (weak) \$2.60M/44.4K AF	\$64 (weak) \$2.85M/44.4K AF

<sup>1</sup> Debt Service of past two years does not include annual payments of CT2015-003, CT2017-1402, or CT2015-024 as the first payments have not yet been due.

**Collateral:** Security for this loan will remain a pledge of assessment revenues, backed by a rate covenant, and an undivided 100% interest in Reservoir No. 10 Dam and Reservoir. This is in compliance with 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



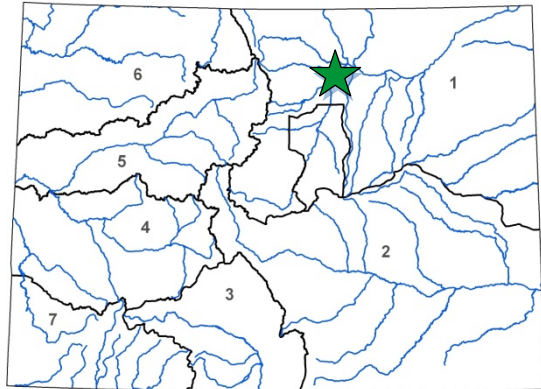
## Mountain Supply Reservoir No. 10 Repairs

North Poudre Irrigation Company

November 2017 Board Meeting

(Loan Increase)

L O A N   D E T A I L S	
Project Cost:	\$795,000
CWCB Loan (with Service Fee):	\$802,950
Loan Term and Interest Rate:	30 years @ 2.50%
Funding Source:	Severance Tax Perpetual Base Fund
B O R R O W E R   T Y P E	
Agriculture	Municipal
26%	0% Low - 73% Mid - 0% High
	Commercial
	1%
P R O J E C T   D E T A I L S	
Project Type:	Reservoir Rehabilitation
Average Annual Delivery:	44,400 AF
Storage Maintained:	344 AF
Storage Recovered:	264 AF



L O C A T I O N	
County:	Larimer
Water Source:	Cache la Poudre River
Drainage Basin:	South Platte River
Division:	1
District:	3

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Bids were opened on October 12, 2017. The Company is seeking an increase to its loan amount as the bids exceeded the original budget. Construction is planned to begin in November 2017, and be completed before the start of the 2018 irrigation season.

