



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
Lauren Ris, Acting CWCB Director

TO: Colorado Water Conservation Board Members

FROM: Joshua Godwin, P.E., Project Manager
Kirk Russell, P.E., Finance Section Chief

DATE: July 19-20, 2023 Board Meeting

AGENDA ITEM: 13c. Change to Existing Project Loans
Amity Mutual Irrigation Company
Queen Reservoir Dam Rehabilitation

Staff Recommendation

Staff recommends the Board approve a loan not to exceed \$2,626,000 (\$2,600,000 for Project costs and \$26,000 for the 1% service fee) to the Amity Mutual Irrigation Company for costs related to the Queen Reservoir Dam Rehabilitation, from the Severance Perpetual Base Tax Fund. The loan term will remain 30 years at an interest rate of 3.10% per annum. This is an increase of \$1,282,700 (\$1,270,000 for Project costs and \$12,700 for the 1% service fee). Security for the loan shall be in compliance with CWCB Financial Policy #5.

Introduction/Background

The Amity Mutual Irrigation Company (Company) received approval of a \$1,343,300 CWCB loan (CT2021-2224) to finance the Queen Reservoir Dam Rehabilitation (Project) at the July 2020 CWCB Board Meeting. Since the loan approval in 2020, the Company has completed the engineering design, received State Engineer's Office, Dam Safety Branch approval of the Plans and Specifications, hired an engineer to manage the Project, solicited bids, and selected a contractor. During this time, the Company has not drawn funds from the approved loan and has covered the extra Project-related costs by drawing down cash reserves in an effort to avoid increasing costs to shareholders prior to the beginning of the Project. The contractor's bid exceeded the original estimate and the Company is requesting a loan increase. See the attached Data Sheet and the original board memo dated July 2020.



Project Update

After the July 2020 approval of the original Project loan request, the Company instructed the engineer to proceed with the engineering design of the Queen Reservoir Dam. The recent pandemic had resulted in delays and unexpected cost increases to the Project. RJH Consultants completed their design and the Company received Dam Safety's approval of the Plans and Specifications on June 14th, 2022. A Request for Proposals (RFP) was advertised for the Project in the Spring of 2023 and a single bid was received and accepted by the Company. The bid prices were 70% greater than the original Project estimates at the 2020 board meeting. The selected contractor has agreed to honor the proposed bid until the Company has secured additional funds. An updated Project cost estimate is provided in Table 1.

TABLE 1: UPDATED PROJECT COST ESTIMATE

Tasks	Original	Current
Construction		
General Site	\$233,000	\$277,000
Earthwork	\$242,000	\$246,000
Piping and Gate Vault	\$225,000	\$910,000
Outlet Works	\$105,000	\$425,000
Intake Structure	\$295,000	\$80,000
Project Management/Engineering	\$230,000	\$260,000
Contingency (15%)		\$402,000
TOTAL	\$1,330,000¹	\$2,600,000

¹. "Original" cost is an estimate provided by the engineer prior to receipt of a bid. "Current" cost is what was provided by the contractor. Categories in "Current" were compiled from a list of line items provided in the contractor's bid.

Permitting: The Company does not anticipate obtaining additional permits for this Project. The Dam Safety Branch has approved the rehabilitation plans.

Schedule: Project construction will begin in Fall of 2023 and is expected to be complete by the end of 2023.

Financial Analysis

Table 2 provides a summary of the Project's financial aspects. The loan term shall remain 30 years. The interest rate shall remain a blended agricultural and commercial interest rate of 3.60% per annum (Share ownership is 50.5% agricultural and 49.5% commercial) as approved at the July 2020 Board Meeting. Because the reservoir is restricted, the interest rate is reduced by 0.5% to 3.10% for a 30-year term. In addition, the original approval included a contract condition that allowed an interest rate reduction if the 49.5% commercial ownership portion of the loan was paid for at project completion.

TABLE 2: UPDATED FINANCIAL SUMMARY

Project Item	Original Loan	Increased Loan
Project Cost	\$1,330,000	\$2,600,000
CWCB Loan Amount	\$1,330,000	\$2,600,000
CWCB Loan Amount (Including 1% Service Fee)	\$1,343,300	\$2,262,000
CWCB Annual Loan Payment	\$69,423	\$135,714
CWCB Annual Loan Obligation (1 st Ten Years)	\$76,365	\$149,285
Number of Shareholders	115	115
Number of Shares	34,633	34,633
Annual Loan Obligation per Share	\$2.20	\$4.31
Current Assessment per Share	\$34.00	\$34.00
Future Assessment per Share	\$34.00	\$41.87
Cost per AF of total recovered storage (35,657 AF)	\$37/AF	\$73/AF

Creditworthiness: The Company has \$75,914 in existing debt in the form of a CWCB loan (C150099) for the Neenoshe Reservoir Dam Rehabilitation project. The Neenoshe project was substantially completed in 2004, the loan is in good standing, and is on schedule to be fully paid off in 2028. Over the last 30 years, shareholder assessments for the Company have increased gradually from \$12.00 per share in 1990 to \$34.00 per share in March of 2020, where they are at present. The most recent increases to the assessments occurred in March 2017 from \$23.00 to \$31.00 per share and in March 2020 from \$31.00 to \$34.00 per share.

Lender	Original Balance	Current Balance	Annual Payment	Maturity Date	Collateral
C150099	\$360,000	\$75,914	\$17,778	2028	Pledge of Assessments and Neenoshe Dam
Total		\$75,914	\$17,778		

The financial ratios in Table 3 show that the Company's expenses have exceeded their revenue over the past three years. This is in part due to the Project's engineering costs leading up to construction. To cover the one-time engineering costs of the Project, the Company elected to use cash reserves and money held in Certificates of Deposit, rather than by raising assessments or drawing on the loan. The Company anticipates another increase to shareholder assessments.

TABLE 3: UPDATED FINANCIAL RATIOS

Financial Ratio	Past Years	Future w/ Project
Operating Ratio (revenues/expenses) weak: <100% average: 100% - 120% strong: >120%	98% ¹ (weak) \$1.28M/\$1.31M	100% (average) \$1.45M/\$1.45M
Debt Service Coverage Ratio (revenues-expenses)/debt service weak: <100% average: 100% - 120% strong: >120%	<0% ¹ (weak) (\$1.28M-\$1.29M) \$17.8K	100% (average) (\$1.45M-\$1.28M) \$167K
Cash Reserves to Current Expenses weak: <50% average: 50% - 100% strong: >100%	15% (weak) \$197K/\$1.31M	14% (weak) \$197K/\$1.45M
Annual Operating Cost per Acre-Foot (44,474 AF) weak: >\$20 average: \$10 - \$20 strong: <\$10	\$29.46 (weak) \$1.31M/44,474AF	\$32.60 (weak) \$1.45M/44,474AF

¹: Ratio from the recent three years are low because the Company chose to pay for engineering costs related to Queen Reservoir Dam through Cash Reserves rather than raise assessments.

Collateral: Security for this loan will remain a pledge of assessment revenues backed by a rate covenant and the Project itself, (Queen Reservoir Dam and outlet works). This security is in compliance with the CWCB Financial Policy #5 (Collateral).

cc: Josh Reinert, Superintendent, Amity Mutual Irrigation Company
 Glenn Wilson, President, Amity Mutual Irrigation Company
 Jennifer Mele, Colorado Attorney General's Office
 Attachments: Data Sheet and Original Board Memo (July 2020)



COLORADO

Colorado Water
Conservation Board
Department of Natural Resources

Queen Reservoir Dam Rehabilitation

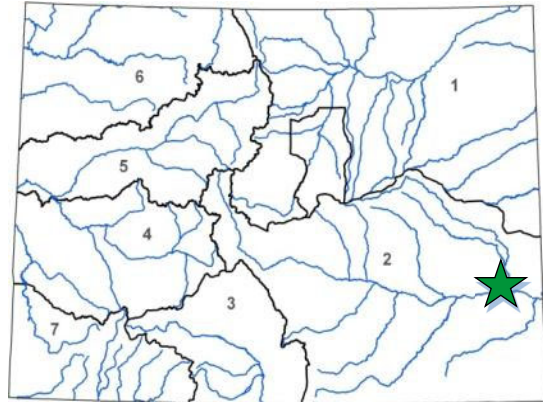
Amity Mutual Irrigation Company

July 2023 Board Meeting

(Increase)

L O A N D E T A I L S	
Project Cost:	\$2,600,000 ⁽¹⁾
CWCB Loan (with 1% Service Fee):	\$2,626,000 ⁽¹⁾
Loan Term and Interest Rate:	30 Years @ 3.10% ⁽²⁾
Funding Source:	Severance Tax Perpetual Base Fund
B O R R O W E R T Y P E	
Agriculture	Municipal Commercial
50.5%	0% Low - 0% Mid - 0% High 49.5%
P R O J E C T D E T A I L S	
Project Type:	Reservoir Rehabilitation
Average Annual Diversions:	44,474 AF
Storage Preserved:	35,657 AF

- 1 Project was increased from \$1,330,000 (\$1,343,000 cost with 1% service fee).
- 2 Rate may be lowered if loan contract conditions met.



L O C A T I O N	
County:	Kiowa
Water Source:	Arkansas River
Drainage Basin:	Arkansas
Division: 2	District: 67

The Amity Mutual Irrigation Company was formed in 1936 as a nonprofit corporation by the shareholders of the Arkansas Valley Sugar Beet and Irrigated Land Company who originally constructed the reservoir in the late 1890s. The Great Plain Reservoir system has a total storage decree for 265,552 AF. The Company owns and operates the Amity Great Plain Reservoir System, which includes the 35,657 AF Queen Reservoir. This system serves 115 shareholders and irrigates 34,682 acres of land in Prowers County between the Town of Wiley and the Kansas border. The primary crops grown include alfalfa hay, corn, milo and wheat. Irrigating these crops provides a vital economic resource to the shareholders.

The dam was originally constructed in the late 1890s with documented seepage and erosion concerns at the outlet works since 1985. In July 2017, Colorado Dam Safety issued a storage restriction after an excavation above the outlet works found a void measuring several feet. This project will mitigate dam safety concerns and restore full operation of the reservoir to the Company by removing and replacing the entire outlet works. The loan includes engineering and construction of the project. Construction is expected to begin in the fall of 2023 and finish by end of 2023.



Downstream Outlet Works

