COLORADO
Colorado Water Conservation Board
Department of Natural Resources

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TO: Colorado Water Conservation Board Members

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

DATE: January 23-24, 2023 Board Meeting **(Updated January 25, 2023)**

AGENDA ITEM: 14d. Water Project Loans
Platte Valley Irrigation Company
Platte Valley Reservoir No. 1 Construction

Staff Recommendation (Board approved Staff Recommendation January 24, 2023)
Staff recommends the Board approve a loan not to exceed $4,545,000 ($4,500,000 for project costs and $45,000 for the 1% service fee) to the Platte Valley Irrigation Company for costs related to the construction of Platte Valley Reservoir No. 1, from the Severance Tax Perpetual Base Fund. The loan term will be 30 years at an interest rate of 1.85% per annum. Security for the loan shall be in compliance with CWCB Financial Policy #5.

Introduction
The Platte Valley Irrigation Company (Company) is applying for a blended interest rate loan for the construction of Platte Valley Reservoir No.1 (Project) to cover approximately 70% of the costs; the rest will be covered by the Company's capital improvement fund. The Company operates and maintains the Evans No. 2 Ditch (Ditch) whose diversion from the South Platte River is near Fort Lupton, Colorado. Daily water level fluctuations in diverted flows from the South Platte currently have a negative impact on the Company's water users, especially by preventing those located near the end of the Ditch from receiving their full water right. The Company intends to construct an irrigation equalization Reservoir to mitigate these fluctuations. The total Project cost is estimated to be $6,503,000. See attached Project Data Sheet for a location map and Project summary.

Borrower – Platte Valley Irrigation Company

The Platte Valley Irrigation Company is a mutual ditch company established in 1883. The Company operates and maintains the Evans Ditch No 2 (Ditch) for the benefit of agricultural and municipal shareholders and jointly owns/maintains – with Farmers Reservoir and Irrigation Company (FRICO) - the Platte Valley Canal headgate and subsequent 10 miles prior to the bifurcation. Additionally, the Company owns 2,513 units of CB-T water. From these two sources, the Company supplies 79 shareholders in a service area with 14,832 acres of irrigated farmland. Corn, alfalfa, and grain are the primary crops grown in the service area. They have no storage or equalization reservoirs along their irrigation system. The Company is directed by a five member board elected annually by a majority vote of shareholders. The Board is authorized to make necessary contracts including authorizing indebtedness. In the event that a shareholder fails to pay their annual assessment, their stock shall be sold to the highest bidder after having been duly advertised. The Company is in good standing with the Colorado Secretary of State's Office.

Background

Daily fluctuations in diverted flows from the South Platte frequently prevent Company water users at the end of the Ditch from receiving their allotment of water. Therefore, the Company has a need for an equalizer reservoir on the ditch to allow for more efficient management of the water diverted. The Company has performed six studies since 2004 to address the daily fluctuation issues and determine the best approach to resolving them. This farmland that was purchased in 2006 allows for gravity flow into and out of the reservoir and its size has been determined large enough to address the daily fluctuations seen by the end of the Ditch. Infrastructure related to the equalization reservoir will also provide for more accurate measurement of the irrigation diversions into the reservoir and released from the reservoir in support of the irrigation demands associated with the water users.

Loan Feasibility Study

Aaron Hansen, P.E., with Anderson Consulting Engineers, Inc. prepared the Loan Feasibility Study titled, Feasibility Study for Platte Valley Reservoir No. 1, dated December 1, 2022 with assistance from a CWCB Feasibility Study Grant. The feasibility study is in accordance with CWCB guidelines and includes an analysis of alternatives, estimated costs, and financial statements prepared by Tim Chavies & Associates, Inc.

Water Rights

The Company operates under water rights as shown in Table 1 and has a decree to store in Platte Valley Reservoir No. 1. The Company diverts an average of 27,898 AF per year.

TABLE 1: PROJECT WATER RIGHTS

Name	Amount	Appropriation Date	Adjudication Date	Case No.
Evans Ditch No. 2	177.07 cfs	10/05/1871	04/28/1883	6009
Platte Valley Reservoir No. 1	300 AF	10/29/2002	07/21/2006	02CW236

Project Description

The purpose of this Project is to mitigate impacts of daily fluctuations and provide a more consistent water source for users.

Alternative 1 – No Action: Taking no action is the least expensive option. However, this does not address the issue of variations in daily flows that impact the Company's water users, especially for those near the end of the Ditch. For this reason, it was not selected.

Alternative 2 – Construction of a Smaller Reservoir: This alternative would construct a 166 AF reservoir that would encompass 38 acres. This size would mitigate inefficiencies caused by daily fluctuations and would cost an estimated $3,042,000 in today's dollars, but is not as beneficial as the selected alternative.

Selected Alternative 3 – Construction of Platte Valley Reservoir No. 1: This alternative would construct a 232 AF equalization reservoir near the FRICO canal and the Evans No. 2 Ditch bifurcation off of the Platte Valley Canal. The proposed project facilities include a new reservoir, dam embankment, reservoir inlet/bifurcation structure located on the FRICO ditch, reservoir outlet works, emergency spillway, and measurement structures at the reservoir inlet and outlet. This alternative makes more efficient use of the land needed for the reservoir's construction with a surface area of 40 acres. The total estimated cost of this alternative is $6,503,000 as shown in Table 2.

TABLE 2: ESTIMATED PROJECT COST

Tasks	Cost
Mobilization and Site Work	$703,000
Earthwork	$3,650,000
Infrastructure	$1,850,000
Engineering and Surveying	$300,000
TOTAL	**$6,503,000**

Permitting: No permits are anticipated on the Project.

Schedule: The Company intends to undertake the Project during the spring of 2023. Bidding will occur as soon as CWCB funding is secured and it is expected that a contractor would be awarded the Project by summer of 2023. The Project will likely be completed in early 2024.

Financial Analysis

Table 3 provides a summary of the Project's financial aspects. The majority of Company stock ownership remains as agriculture, with only 27 of the 344 shares listed as non-agriculture, all shares continue to be used for agriculture. The Company qualifies for a blended interest rate of 1.85% for a 30-year loan (Ownership: 92% Agricultural and 8% Middle-Income Municipal). All interest rate evaluations are per CWCB Financial Policy #7 (Lending Rate Determination).

TABLE 3: FINANCIAL SUMMARY

Project Cost	$6,503,000
CWCB Loan Amount	$4,500,000
CWCB Loan Amount (Including 1% Service Fee)	$4,545,000
CWCB Annual Loan Payment	$198,772
CWCB Annual Loan Obligation (1st Ten Years)	$218,649
Number of Shares	344
Current Assessment per Share	$650
Annual Loan Obligation per Share	$637
Future Assessment per Share (Estimate)	$650*

*Already priced to pay annual loan payments

Creditworthiness: The Company received a $738,000 CWCB loan (CT2015-139) in November of 2014 for the rehabilitation of the Sand Hill Lakes Outlet works. That loan was paid off in December of 2022.

TABLE 4: FINANCIAL RATIOS

Financial Ratio	Past Years	Future w/ Project*
Operating Ratio (revenues/expenses) weak: <100% | average: 100% - 120% | strong: >120%	107% (average) $808K/$756K	101% (average) $808K/$799K
Debt Service Coverage Ratio (revenues-expenses)/debt service weak: <100% | average: 100% - 120% | strong: >120%	130% (strong) ($808K-$581K) $175K	104% (average) ($808K-$581K) $218K
Cash Reserves to Current Expenses weak: <50% | average: 50% - 100% | strong: >100%	342% (strong) $2,589K/$756K	74% (average) $589K/$799K
Annual Operating Cost per Acre-Foot (27,898 AF) weak: >$20 | average: $10 - $20 | strong: <$10	$27.10 (weak) $756K/27,898 AF	$28.64 (weak) $799K/27,898 AF

* CWCB loan CT2015-139 was paid in full in December 2022.

Collateral: Security for this loan will be a pledge of assessment revenues backed by an assessment covenant and the Project itself (including the reservoir and inlet/outlet structures), as well as, the parcel of land that Platte Valley Reservoir No. 1 is constructed on. This security is in compliance with the CWCB financial Policy #5 (Collateral).

cc: Tami Sullivan, Secretary, Platte Valley Irrigation Company
Jennifer Mele, Colorado Attorney General's Office

Attachments: Water Project Loan Program – Project Data Sheet

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Platte Valley Reservoir No. 1

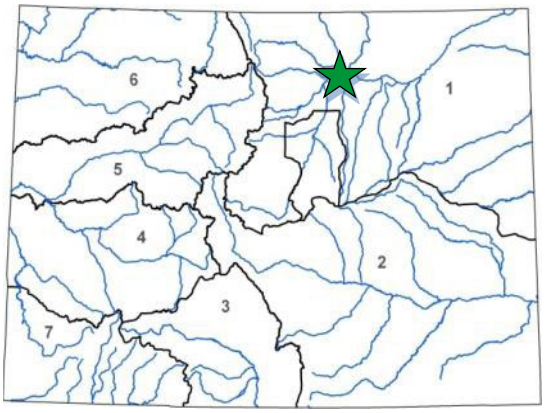
Platte Valley Irrigation Company

January 2023 Board Meeting

LOAN DETAILS	
Project Cost:	$6,503,000
CWCB Loan (with 1% Service Fee):	$4,545,000
Loan Term and Interest Rate:	30 Yrs @ 1.85%
Funding Source:	Severance Tax PBF

BORROWER TYPE		
Agriculture	*Municipal*	*Commercial*
92%	0% Low - 8% Mid - 0% High	0%

PROJECT DETAILS	
Project Type:	Reservoir New
Storage Created:	232 AF
Average Annual Diversions:	27,898 AF



LOCATION			
County:			Weld
Water Source:			South Platte
Drainage Basin:			South Platte
Division:	1	*District:*	2

The Platte Valley Irrigation Company was incorporated in 1883 and currently diverts irrigation water from the South Platte via the Platte Valley Canal, which the Company jointly owns with Farmers Reservoir and Irrigation Company (FRICO) until it bifurcates into the Evans No. 2 Ditch (PVIC Canal) owned by the Company and the FRICO Canal. Additionally, the Company owns 2,513 units of CB-T water. From these two sources, the Company supplies 79 shareholders in a service area with 14,832 acres of irrigated farmland. Corn, alfalfa, and grain are the primary crops grown in the service area.

The project will construct a new equalization reservoir at the upstream end of the PVIC Canal to help mitigate the impacts of diurnal fluctuations in the system, particularly for users near the end of the canal and will also provide additional storage during free river conditions. The loan will pay for construction of the reservoir, including a bifurcation structure and reservoir inlet works, a dam embankment, outlet works, and an emergency spillway. Construction is expected to begin in mid 2023, and finish in early 2024.