COLORADO
Colorado Water Conservation Board
Department of Natural Resources

1313 Sherman Street
Denver, CO 80203

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

John Hickenlooper, Governor

Mike King, DNR Executive Director

James Eklund, CWCB Director

TO: Colorado Water Conservation Board Members

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

DATE: November 19-20, 2014 Board Meeting

AGENDA ITEM: 27c. Water Project Loans
Platte Valley Irrigation Company – Sand Hill Lake Outlet Works Rehabilitation Project

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Introduction

The Platte Valley Irrigation Company (Company) is applying for a loan for the Sand Hill Lake Outlet Works Rehabilitation Project (Project). The purpose of the Project is to rehabilitate the Sand Hill Lake outlet, and to repair the dam section damaged from a sink hole that developed in January 2014. The total Project cost is estimated to be $820,000. The Company is requesting a loan from CWCB for 90% of the Project Cost. See attached Project Data Sheet for a location map and Project summary.

Staff Recommendation

Staff recommends the Board approve a loan not to exceed $745,380 ($738,000 for Project costs and $7,380 for the 1% service fee) to the Platte Valley Irrigation Company for engineering and construction costs related to the Sand Hill Lake Outlet Works Rehabilitation Project from the Severance Tax Perpetual Base Fund, up to the approved loan amount. The loan terms shall be 30 years at the agricultural interest rate of 2.0% per annum. Security for the loan shall be in compliance with CWCB Financial Policy #5.

Background

The Platte Valley Irrigation Company (Company) is located in Weld County and provides raw water for the irrigation of approximately 14,800 acres of agricultural land extending from Platteville to approximately 28 miles north and east along Highway 85. The stock ownership of the Company is 100% agricultural. Crops grown in the service area include corn, beets, alfalfa hay, potatoes, and grains including oats, wheat, and barley.

The Company diverts water for irrigation from the South Platte River near Platteville from a headgate jointly owned with Farmers Reservoir and Irrigation Company. Water is transported from the jointly owned Platte Valley Canal for approximately 10 miles until the Company's water is diverted into the Evans No. 2 Ditch.

The Company uses Sand Hill Lake (aka Coal Ridge Waste Dam) to store and deliver Colorado-Big Thompson (C-BT) water to users under its ditch, as well as to deliver C-BT water for the Northern Colorado Water Conservancy District as part of the South Platte Supply Canal. Additionally, the Lupton Meadows Ditch Company uses Sand Hill Lake to store its water which is released through a separate outlet structure. C-BT water released from Sand Hill Lake is transported directly to the South Platte River, approximately 1 mile upstream of the Platte Valley Canal.

In spring of 2013, the outlet gate's shaft separated from the Company's outlet gate prompting temporary repairs until permanent repairs could be made after irrigation season. In January 2014 while the Company was attempting repairs to the gate's shaft, a sink hole developed in the dam around the outlet structure. The SEO was immediately notified and emergency procedures, including having personnel at the site 24 hours per day until the Lake was safely drained, were implemented. Engineers with Frachetti Engineering and Brierley and Associates were engaged to design the repairs. Construction was put out to bid and Aslan Construction was the selected contractor.

Loan Feasibility Study

The Platte Valley Irrigation Company staff, including Donna Coble and Tami Sullivan, with assistance from Cort Nickel, P.E. of Frachetti Engineering, Inc., prepared the Loan Feasibility Study, titled "Feasibility of Rehabilitation of the Outlet Works at Sand Hill Lake," dated September 2014. The study includes an alternative analysis and construction cost. The feasibility study was prepared in accordance with the CWCB guidelines.

Borrower – Platte Valley Irrigation Company

The Company is a mutual ditch company and was incorporated in 1883. The Company's office is located in Greeley. It operates as a nonprofit corporation and is in good standing with the Colorado Secretary of State. The Company has issued 344 shares of stock, owned by 91 shareholders. Additionally the Company owns 3,088 units of C-BT water used by 44 shareholders. The Company's revenues are primarily derived from assessments charged on shares of stock owned by the stockholders plus income from oil and gas leases.

The Company's By-laws (2007) provide the five-member Board of Directors with authority to levy assessments to meet the necessary expenses of operation and maintenance of the Company, and to enforce unpaid assessments by ceasing water deliveries and eventually by selling the outstanding stock. The Board of Directors has the authority to exercise corporate powers of the Company and have general control and supervision over the property, affairs, and management of the Company. Additionally, the By-laws require that all shares of stock pay their pro-rata assessment for the cost for maintenance, repair, or improvement of Sand Hill Lake, whether or not the beneficial use of C-BT water is transferred by the stockholder.

Water Rights

The water rights of the Company include:

TABLE 1: WATER RIGHTS

Name	Amount	Appropriation Date	Adjudication Date	Water Court Case No.
Evans No 2 Ditch	177.07 CFS	10/5/1871	4/28/1883	CA6009
Platte Valley Reservoir No 1 *(Conditional)*	300 AF	10/29/2002	12/31/2002	02CW0236
Colorado-Big Thompson	3,088 Units	-	-	-

The Company does not have a water storage right for its direct flow irrigation water in Sand Hill Lake. However, pursuant to its agreements with both Northern and with the Lupton Meadows Ditch Company, the Company has the right to store up to 400 AF of C-BT water.

Project Description

The goal of this Project is to rehabilitate the Sand Hill Lake outlet and repair the dam section damaged from a sink hole so that the Company, the Lupton Meadows Ditch Company, and Northern Colorado Water Conservancy District can regain use of the reservoir prior to the 2014 irrigation season.

Alternative 1 – Do Nothing: This alternative was considered unacceptable as it would result in the loss of the reservoir for all users.

Alternative 2 – Complete Rebuild and Replacement: This alternative was considered unacceptable as the engineering and construction cost would prove prohibitive, especially with the high cost associated with new RCP pipe. Additionally, the anticipated timing delays due to a complete dam rebuild would likely have left the reservoir unusable during the 2014 irrigation season.

Selected Alternative 3 – Rehabilitation: This alternative was selected because it was found to be cost effective, and most importantly, would allow for a May 30, 2014 Project completion date so the three separate entities that use Sand Hill Lake could regain its use during the irrigation season. This alternative rehabilitated the outlet works by relocating the slide gate into the reservoir to the front end of the outlet pipe and slip-lining the existing RCP outlet pipe. The existing outlet structure that housed the damaged headgate was demolished and the dam was built back up to SEO specifications.

Due to the emergency nature of the Project, engineering and construction proceeded before a loan from CWCB could be obtained. The SEO's Dam Safety Branch oversaw the Project from the initial dam failure response to construction and has provided its construction inspection reports to CWCB staff. Actual construction costs to date are $809,600. Additional work prior to the 2015 irrigation season, such as re-seeding, is expected. The total Project cost is $820,000 as shown in Table 2.

TABLE 2: CONSTRUCTION COST

Task	Cost
Engineering	$183,500
Construction	$626,100
Contingency	$10,400
Total	$820,000

Schedule: Work was completed and the SEO issued a temporary approval to store water on May 31, 2014. The SEO provided its final acceptance of construction letter on July 14, 2014.

Financial Analysis

The Company qualifies for an agricultural interest rate of 2.0% for a 30-year term. The Company provided emergency funds from its capital improvements account which was created by the sale of

some of the C-BT units held by the Company in anticipation of the future Platte Valley Reservoir No. 1 project. Shareholders agreed to temporarily use this account to provide immediate Project funding, provided the Company seek repayment of the funds for the Project and pay back the capital improvement account so that all shareholders share in the Project cost according to their pro-rata share ownership. The Board determined that a loan from the CWCB is the most fiscally responsible method for repayment of the funds. Table 3 provides a summary of the Project's financial aspects.

TABLE 3: FINANCIAL SUMMARY

Total Project Cost	$820,000
Borrowers Contribution	$82,000
CWCB Loan Amount	$738,000
CWCB Loan Amount (Including 1% Service Fee)	$745,380
CWCB Annual Loan Payment	$33,281
CWCB Annual Loan Obligation (1st Ten Years)	$36,609
Number of Shares	344
Annual Loan Obligation per Share	$106
Current Assessment per Share	$500/share
Future Assessment per Share	$600/share
Cost of Project per AF of Storage (400 AF)	$2,050/AF

Creditworthiness: The Company has no existing debt. The Company was previously approved for a CWCB loan in 2006 for the Platte Valley Reservoir No. 1 project. Loan funds were disbursed for engineering but ultimately construction did not move forward as construction cost became too prohibitive. The Company paid in full the loan balance of $189,393 in May 2014.

TABLE 4: FINANCIAL RATIOS

Financial Ratio	Past 3 Years	Future w/ Project
Operating Ratio (revenues/expenses) weak: <100% - average: 100% - 120% - strong: >120%	115% (Average) $545K/$472K	114% (Average) $579K/$509K
Debt Service Coverage Ratio (revenues-expenses)/debt service weak: <100% - average: 100% - 120% - strong: >120%	N/A	290% (Strong) ($579K-$472K) $37K
Cash Reserves to Current Expenses weak: <50% - average: 50% - 100% - strong: >100%	78% (Average) $366K/$472K	56% (Average) $284K/$509K
Annual Operating Cost per Acre-Foot (27,898 AF) weak: >$20 - average: $10 - $20 - strong: <$10	$17 (Average) $472K/28K AF	$18 (Average) $509K/28K AF

Collateral: Security for this loan will be a pledge of the Company's assessment revenues backed by an assessment covenant, and the Project itself (outlet structure). This is in compliance with the CWCB Financial Policy #5 (Collateral).

cc: Kevin Schmidt, President, Platte Valley Irrigation Company
Susan Schneider/Jennifer Mele, Colorado Attorney General's Office

Attachment: Water Project Loan Program – Project Data Sheet

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Sand Hill Lake Outlet Works Rehabilitation

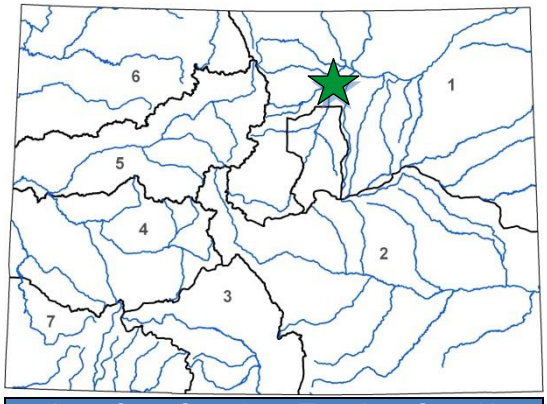
Platte Valley Irrigation Company

November 2014 Board Meeting

LOAN DETAILS	
Project Cost:	$820,000
CWCB Loan (with Service Fee):	$745,380
Loan Term and Interest Rate:	30 Years @ 2.0%
Funding Source:	Severance Tax Perpetual Base Fund

BORROWER TYPE		
Agriculture	*Municipal*	*Commercial*
100%	0% Low - 0% Mid - 0% High	0%

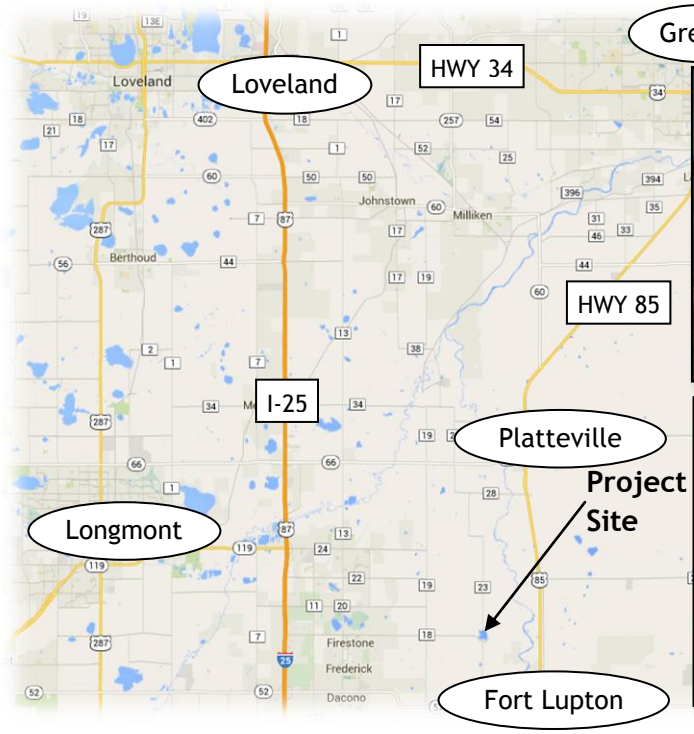
PROJECT DETAILS	
Project Type:	Reservoir Rehabilitation
Average Annual Diversion:	27,900 AF
Restored Water Supply Storage:	400 AF



LOCATION			
County:	Weld		
Water Source:	South Platte River, C-BT		
Drainage Basin:	South Platte		
Division:	1	*District:*	2

The Platte Valley Irrigation Company provides raw water for the irrigation of approximately 14,800 acres of agricultural land extending from Platteville to approximately 28 miles east along Highway 85.

In January 2014, the Company was in the process of replacing the 48" gate in the outlet of Sand Hill Reservoir. During construction a sink hole developed in the dam around the outlet structure, prompting an emergency response from the Company and the SEO's Dam Safety Branch. The Project team, in close coordination with the SEO, developed a project approach for the completion of the rehabilitation of the outlet structure. The Project was completed in May 2014 and the SEO issued an acceptance of construction in July 2014. Due to the emergency nature of the Project, and the need to get the reservoir back online for the irrigation season, the Company temporarily funded the Project using cash funds previously raised for an upcoming reservoir construction project. The Company is seeking this CWCB loan to provide final Project financing.




Valve Operator House


Slip-lined and Grouted Outlet Pipe