COLORADO
Colorado Water Conservation Board
Department of Natural Resources

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Dan Gibbs, DNR Executive Director
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TO: Colorado Water Conservation Board Members

FROM: Zachary Salin, P.E., Project Manager
Kirk Russell, P.E., Finance Section Chief

DATE: July 17-18, 2024 Board Meeting

AGENDA ITEMS: 18b. Water Project Loans
High Line Canal Company - Rocky Ford High Line Canal Diversion Rehabilitation
18c. WSRF Grant
High Line Canal Company - Rocky Ford High Line Canal Diversion Final Design

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Staff Recommendation for the Loan (18b)
Staff recommends the Board approve a loan not to exceed $4,160,190 ($4,119,000 for Project costs and $41,190 for the 1% service fee) to the High Line Canal Company, for costs associated with the Rocky Ford High Line Canal Diversion Rehabilitation, from the Severance Tax Perpetual Base Fund. The loan term shall be 30 years at an interest rate of 2.05% per annum. Security for the loan shall be in compliance with CWCB Financial Policy #5.

Staff Recommendation for the WSRF Grant (18c)
Staff recommends approval of a total WSRF Grant amount of up to $112,000 (up to $97,000 from the Statewide Fund and $15,000 from the Arkansas Basin Fund) to the High Line Canal Company for costs related to the Rocky Ford High Line Canal Diversion Final Design.

Introduction
The High Line Canal Company (Company), is applying for a CWCB blended interest rate loan for the Rocky Ford High Line Canal Diversion Rehabilitation (Project) for diversion structure replacement and modernization of the canal diversion structure and headgate. The loan for $4,160,190 ($4,119,000 for Project costs and $41,190 for the 1% service fee) will construct a new roller-compacted concrete diversion structure and intake. The Company is also applying for a WSRF grant for $112,000 for the final design. The total cost for both components is $4,231,000. See attached Project Data Sheets for a location map and Project summary.

Borrower – High Line Canal Company

The Company is a mutual ditch company that was incorporated in 1889. The Company's 2,250 shares provide irrigation water to 203 shareholders on approximately 22,300 acres of land. The Company operates within Pueblo and Otero counties. The irrigation water diverted from the Arkansas River by the Company flows through the Rocky Ford High Line Canal and is primarily used for alfalfa, corn, and sorghum, as well as other crops.

The Company derives its revenue from shareholder assessments which are used for canal repairs, operation, and maintenance. The 5-member Board of Directors act as the governing body of the Company and has the power to incur indebtedness, to enforce the payment of all assessments, and to pay bills. Assessments are set by the Company shareholders to meet the anticipated financial obligations of the Company and are billed annually on a pro rata per share basis. Failure to pay the annual share assessment may result in a lien on the shares or forfeiture of the shares, which may be resold by the Company. The Company is in good standing with the Colorado Secretary of State.

Background

The original diversion structure which is located southeast of the town of Boone on the Arkansas River was constructed in the late 1800s, requires continual maintenance, and limits the Company's ability to control headwater elevations for diversion. Significant seepage is occurring below the structure, and there is no current means to minimize sediment flow into the Company's diversion canal.

The Company diverts water through the Rocky Ford High Line Canal to their shareholders for the purpose of agricultural irrigation. The diversion structure was constructed in the late 1800s and has degraded due to the age of the structure and recent flooding on the Arkansas River. The diversions at the existing structure rely on high river flows or, if not available, maintenance of a temporary diversion berm to divert water into their canal. This has resulted in limited control over hydraulic head at the diversion, increased sediment migration into the canal, and reduced operational reliability.

The Project will replace the existing diversion structure and canal headgate thereby allowing the Company to continue to provide irrigation water to shareholders. Improvements will also help to minimize delivery interruptions and maintenance requirements. Funding from the WSRF Grant will be used to develop the final design and engineering, as well as contractor bidding/selection and permitting for the Project.

The Project previously received a WSRF Arkansas Basin Grant of $78,625, which was approved at the May 2023 board meeting for the Feasibility Study supporting this Loan application. The Company is also developing a Technical Assistance grant through the Federal Technical Assistance Grant Program.

Loan Feasibility Study

Paul P. Perri, P.E. of W.W. Wheeler & Associates, Inc. prepared the Loan Feasibility Study, titled "Feasibility Study – Rocky Ford High Line Canal Arkansas River Diversion Rehabilitation" dated June 2024. The Feasibility Study and Alternatives Analysis Report for the Project was performed under the May 2023 WSRF Grant of $78,625. The feasibility study was prepared in accordance with CWCB guidelines and includes preliminary engineering, an analysis of alternatives, and a cost estimate. Financial statements prepared by the Company's accounting firm, McPherson, Goodrich, Paolucci & Mihelich (MGPM) for fiscal years 2020, 2021, 2022, and 2023 were provided by the Company.

Water Rights

The water rights owned by the Company and associated with the Project as stated in the Feasibility Study are listed in Table 1.

TABLE 1: WATER RIGHTS ASSOCIATED WITH PROJECT

Associated Structure Name	Case No.	Appropriation Date	Adjudication Date	Flow (cfs)
Excelsior Ditch	CA9530	12/31/1861	03/23/1896	40
Enterprise Ditch	CA2535	09/21/1867	03/23/1896	0.6
Ballow Hill Ditch	N/A	07/01/1869	03/23/1896	16
Las Animas Consolidated	W0065	03/07/1884	04/08/1905	32.5
Ballow Hill Ditch	N/A	06/03/1885	03/23/1896	30
Allen Ditch	CA2535	03/11/1886	03/23/1896	2
Rocky Ford Highline	CA2535	01/06/1890	03/23/1896	418
Excelsior Ditch	CA9532	01/06/1890	03/23/1896	40
Allen Ditch	CA2535	12/31/1890	03/23/1896	2.5
SECWCD Non-Project RF High Line Exchange	06CW0008	06/01/2003	12/31/2006	50
Super Ditch RFH Exchange*	10CW0004	11/18/2009	12/31/2010	32

* Other appropriation dates for Case No. 10CW0004 include 2012 and 2018.

Project Description
The purpose of the Project is replacement of the Company's diversion dam and canal headgate structures.

Alternative 1 – No Action: The Company does not have a fully functional, permanent diversion structure and is dependent on either high river flows, or physical access into the Arkansas River to maintain a temporary diversion berm. This alternative would result in continued operation with reduced reliability, as well as limited control over sediment migration and hydraulic head. For these reasons this alternative was not selected.

Alternative 2 – Structural Concrete Wall Diversion: This alternative would entail construction of a six-foot-high and thee-foot-thick structural concrete cantilever wall extending across the width of the river. This alternative would provide sufficient hydraulic control for diversion purposes but would cost an estimated $4,260,000, which is $29,000 more to construct compared to Alternative 3. Construction of a structural concrete diversion would be slower and less durable than other alternatives. For these reasons, this alternative was not selected.

Selected Alternative 3 – Roller-Compacted Concrete Diversion Dam: Construction of this alternative would provide equivalent hydraulic control to Alternative 2 at a lower cost. This alternative would employ a roller-compacted concrete (RCC) batch plant near the Project site to continuously batch the concrete for the project. Portions of the structure, including the upstream approach, crest, and steps would receive additional structural concrete facing. The RCC structure can be constructed more quickly and with less risk of future damage by large debris during flood events than Alternative 2. The Project cost, including Final Design, is estimated at $4,231,000 and is shown in Table 2.

TABLE 2: ESTIMATED PROJECT COSTS

Tasks	Cost
Task 1 - Design	
Design Engineering & Permitting	$150,000
Task 2 - Construction Engineering	
Construction Engineering Services	$160,000
Task 3 - Construction	
Mobilization	$390,000
Site Preparation, Temporary Diversion, Demolition	$155,000
Excavation & Dewatering	$94,000
RCC Plant and RCC Concrete	$800,000
Structural & Leveling Concrete	$444,000
Construction & Other Materials	$1,388,000
Contingency (~20%)	$650,000
TOTAL	**$4,231,000**

Permitting: Company has identified several permitting requirements for the Project, including coordination with the Dam Safety Branch of the State Engineer's Office for designation as a 'Non-Jurisdictional Dam', a Floodplain Development Permit from Pueblo County, a Fugitive Particulate Air Pollution Emission Notice/Control Plan Permit and Stormwater Discharges Associated with Construction Activity Permit from Colorado Department of Public Health and Environment, and a Nationwide 404 Permit (Maintenance) from U.S. Army Corps of Engineers (USACE). Under the Nationwide 404 Maintenance Permit from USACE, the Project is expected to be exempt from National Environmental Policy Act compliance.

Schedule: Design for the Project is expected to occur in late fall of 2024. Contractor selection, mobilization, and Project construction is planned to begin in the fall of 2025 and is expected to be complete by irrigation season in the spring of 2026.

Financial Analysis

Table 3 provides a summary of the Project's financial aspects. The Company qualifies for a blended interest rate of 2.05% for a 30-year term (Ownership: 98.8% Agricultural, 1% Mid-Income Municipal, 0.2% Low-Income Municipal). The Company currently charges an annual assessment of $375 per share, with an additional $45 assessment per share in the event the Board determines additional funds are needed to mee the Company's obligations. The Board of Directors plans to approve an additional annual per share assessment to meet the projected financial obligations for repayment of this proposed loan.

TABLE 3: FINANCIAL SUMMARY

Project Cost	$4,231,000
WSRF Grant	$112,000
CWCB Loan Amount	$4,119,000
CWCB Loan Amount (Including 1% Service Fee)	$4,160,190
CWCB Annual Loan Payment	$187,032
CWCB Annual Loan Obligation (1st Ten Years)	$205,735
Company Shares	2,250
Current Annual Assessment per Share*	$375
Optional Additional Annual Assessment per Share*	$45
Annual Loan Obligation per Share	$91

Creditworthiness: The Company has one existing CWCB loan (C150208) which is for the replacement of the Smith Arroyo siphon. The Company has a good repayment history and is in good standing with CWCB. The existing CWCB loan is in repayment, with a maturity date of 2026 as detailed in Table 4 below. Financial ratios for the Company are shown in Table 5.

TABLE 4: EXISTING DEBT

Lender	Original Balance	Current Balance	Annual Payment	Maturity Date	Collateral
CWCB C150208	$458,540	$82,434.51	$28,723.90	2026	100% interest in the Smith Arroyo Siphon on the Rocky Ford High Line Canal
	Total	$82,434.51	$28,723.90		

TABLE 5: FINANCIAL RATIOS

Financial Ratio	Past Years	Future w/ Project
Operating Ratio (revenues/expenses) weak: <100% | typical: 100% - 120% | strong: >120%	118% (typical) $847K/$712K	114% (typical) $1.05M/$918K
Debt Service Coverage Ratio (revenues-expenses)/debt service weak: <100% | typical: 100% - 125% | strong: >125%	565% (strong) ($847K-$683K) $29K	157% (strong) ($1.05M -$683K) $235K
Cash Reserves to Current Expenses weak: <50% | typical: 50% - 100% | strong: >100%	38% (weak) $272K/$712K	30% (weak) $272K/$918K
Annual Operating Cost per Acre-Foot (82,000 AF) weak: >$24 | typical: $3 - $24 | strong: <$3	$8.68 (typical) $712K/82K	$11.19 (typical) $918K/82K

Collateral: Security for this loan will be a pledge of the assessment revenues backed by an assessment covenant, as well as the Project itself, including all access, easements, rights, and appurtenances associated therewith. This security is in compliance with the CWCB Financial Policy #5 (Collateral).

cc: Chris Tomky, President of Board of Directors, High Line Canal Company
Jennifer Mele, Colorado Attorney General's Office

Attachments:
Water Project Loan Program – Project Data Sheet
Water Supply Reserve Fund Program – Project Data Sheet

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Colorado Water Conservation Board
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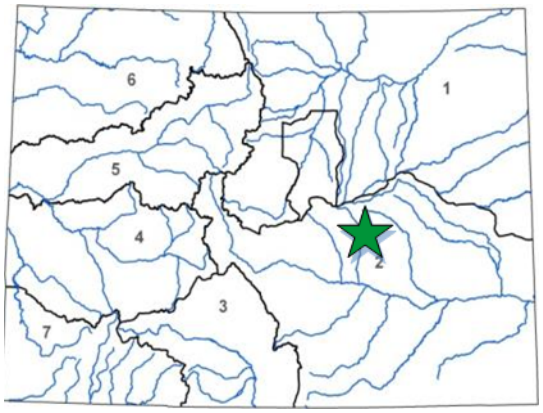
Rocky Ford High Line Canal Diversion Rehabilitation

High Line Canal Company
July 2024 Board Meeting

LOAN DETAILS	
Project Cost:	$4,231,000
CWCB Loan (with 1% Service Fee):	$4,160,190
Loan Term and Interest Rate:	30 Yrs @ 2.05%
Funding Source:	Construction Fund

BORROWER TYPE		
Agriculture	*Municipal*	*Commercial*
98.8%	0.2% Low - 1% Mid - 0% High	0%

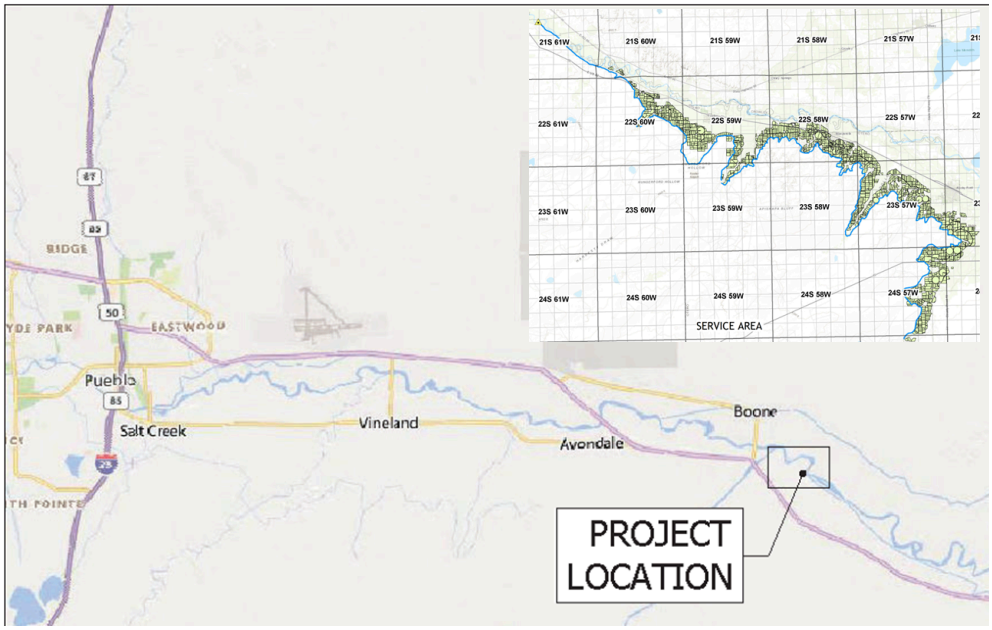
PROJECT DETAILS	
Project Type:	Diversion Structure Replacement
Average Annual Diversions:	82,066 AF



The High Line Canal Company (Company) is a mutual canal company that was incorporated in 1889. The Company diverts water from the Arkansas River using their diversion structure and canal headgate, which provides water to the Company's 203 shareholders who use the water to irrigate approximately 22,300 acres of land primarily planted for alfalfa, corn, and sorghum.

LOCATION	
County:	Pueblo, Otero
Water Source:	Arkansas
Drainage Basin:	Arkansas
Division: 2	*District: 17*

The Rocky Ford High Line Canal Diversion Rehabilitation Project (Project) will replace the Company's existing diversion structure and canal headgate thereby improving the Company's ability to efficiently provide irrigation water to shareholders. These improvements will also help to minimize delivery interruptions and maintenance requirements. Loan funding will be used to develop the final design and engineering, as well as bid and construct the Project. In addition to the loan, the Company is also seeking approval for a WSRF grant at this July Board meeting. Construction is expected to begin in the fall of 2024 and to be completed in the spring of 2025.



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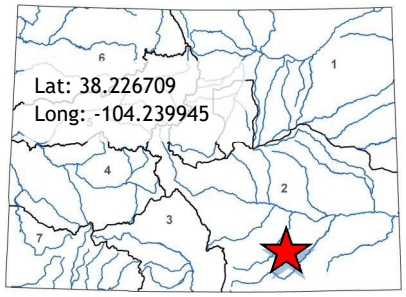
Rocky Ford High Line Canal Diversion Final Design
High Line Canal Company
July 2024 Board Meeting

Water Supply Reserve Grant Application

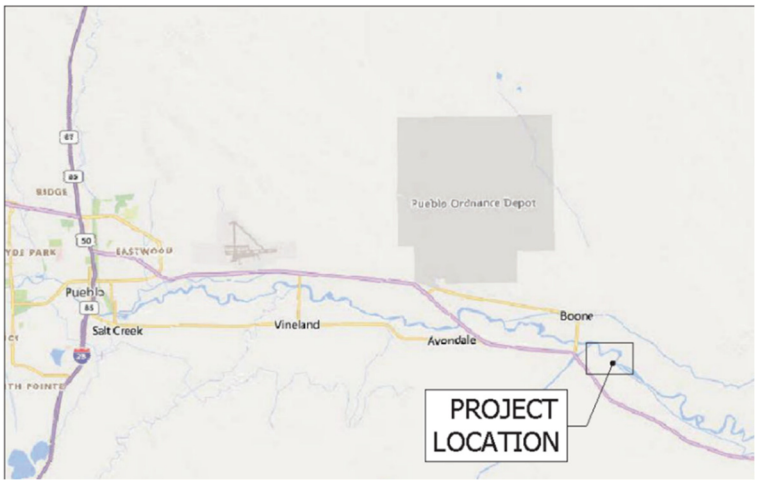


LOCATION	
County/Counties:	***Pueblo, Otero***
Drainage Basin:	***Arkansas***

DETAILS	
Total Project Cost:	$4,231,000
Total WSRF Grant Request:	$112,000
Arkansas Basin Account Request:	$15,000
Statewide Account Request:	$97,000
Recommended Amount:	$112,000
Other CWCB Funding:	$4,119,000 (Loan)
Other Funding Amount:	$0
Applicant Match:	$4,119,000
Project Type(s): Construction	
Water Use Type: Agriculture	
Statewide Category: Aging Infrastructure	
Measurable Result: New RCC Diversion Structure	

The High Line Canal (Company) is a mutual canal company that was incorporated in 1889. The Company provides irrigation water to 203 agricultural shareholders on approximately 22,300 acres of land. The irrigation water is primarily used for alfalfa, corn, and sorghum.

The Project will replace the existing diversion structure and modernize the canal headgate thereby improving the Company's ability to efficiently provide irrigation water to shareholders. Improvements will also help to minimize delivery interruptions and maintenance requirements. WSRF Grant funding will be used to develop final design and engineering of the Project, which is expected to be performed starting in the fall of 2024 through the spring of 2025. The requested WSRF Grant funding is approximately 2.6% of the total Project cost.



Issues/Additional Needs: If WSRF Grant funding is not approved, the Loan amount will need to be increased to cover the full cost of the Project.

Funding Recommendation: Staff recommends approving funding through the Water Supply Reserve Fund in the amount of $112,000.