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

Robert Randall, DNR Executive Director

Rebecca Mitchell, CWCB Director

TO: Colorado Water Conservation Board Members

FROM: Rachel Pittinger, P.E., Project Manager
Kirk Russell, P.E., Finance Section Chief

DATE: July 18-19, 2018 Board Meeting

AGENDA ITEM: 20a. Water Project Loans
Chilcott Ditch Company – Chilcott Augmentation Station

Introduction

The Chilcott Ditch Company (Company) is applying for a loan for the Chilcott Augmentation Station (Project). The augmentation station is located on Fountain Creek near the City of Fountain. The purpose of the proposed Project is to repair the structural stability and discharge functionality of the Company's augmentation station so it may continue to deliver water to its shareholders. The Project cost is estimated at $500,000. The Company is seeking a loan for 100% of Project costs. See attached Project Data Sheet for a location map and Project summary.

Staff Recommendation for CWCB Loan

Staff recommends the Board approve a loan not to exceed $505,000 ($500,000 for Project costs and $5,000 for the 1% service fee) to the Chilcott Ditch Company for costs related to Chilcott Augmentation Station Project, from the Construction Fund. The loan terms shall be 20 years at a reduced middle-income interest rate of 2.55% per annum. Security for the loan shall be in compliance with CWCB Financial Policy #5.

Background

The Company, located in El Paso County, operates the Chilcott Ditch for the benefit of its shareholders by providing direct flow irrigation water. The ditch diverts from Fountain Creek, just north of the City of Fountain. Water travels through the Company's eight-mile-long ditch to 1,800 acres of land that is primarily used for soil conservation activities (i.e. dryland vegetation planting) and to an augmentation station that measures return flow to Fountain Creek on behalf of shareholders taking delivery of their pro-rata share through the augmentation station. Over time the streambank near the augmentation station has eroded and undercut the augmentation station flume. This has caused concern about the structural stability and discharge functionality of the augmentation station. The Company has concluded that the protection of the augmentation station is needed.

The Company also returns water (both Chilcott water as well as other water) directly to Fountain Creek via its augmentation station on behalf of its shareholders for augmentation or supplemental supply to their municipal or district service areas. Individual shareholders maintain shares for their pro-rata portion of Chilcott water rights, but in addition some shareholders maintain decrees for their specific uses separate and distinct from the water rights of the Company (i.e. other water) that is diverted by the Company, measured and then returned to Fountain Creek pursuant to individual carriage agreements between shareholders and the Company. The ditch courses in a southeasterly direction and terminates at the Company's Calhan Reservoir. A siphon structure is located approximately 3.3 miles downstream of the headgate where it crosses Jimmy Camp Creek.

Loan Feasibility Study

Brett Gracely, P.E., with Matrix Design Group prepared the Loan Feasibility Study titled, "Feasibility of the Chilcott Ditch Augmentation Station Outfall Embankment Armament," dated June 2018. The feasibility study was prepared in accordance with CWCB guidelines and includes an analysis of alternatives, preliminary engineering, and estimated engineering costs.

Borrower – Chilcott Ditch Company

The Company is a mutual ditch company and operates as a non-profit corporation registered in the state of Colorado. The Company is in good standing with the Colorado Secretary of State. There are currently 6 shareholders that own various amounts of the 105 shares of outstanding company stock. Currently, shareholders within the Company are entirely comprised of Special Districts, School Districts, Home Rule Cities (or enterprises thereof) or local governmental agencies within El Paso County. The Company has the power to set annual assessments to be paid by the shareholders, the power to curtail water deliveries to shareholders that fail to pay their assessments, and the power to offer stock for sale to pay back assessments. The Company's sources of revenue include share assessment and carriage agreement fees. The Company's average annual diversions are 4,961 AF per year.

Water Rights

The Company's water rights associated with the Project are shown in Table 1.

TABLE 1: WATER RIGHTS

Name	Amount	Appropriation Date	Adjudication Date	Water Court Case No.
Chilcott Ditch	27 cfs	3/21/1866	3/6/1882	2006CW119 (CA10146)
Chilcott Ditch	20.63 cfs	3/21/1874	3/6/1882	2006CW119 (CA10146)
Chilcott Ditch	30.95 cfs	12/18/1905	6/2/1919	2006CW119 (CA10146)

Project Description

The purpose of the Project is to stabilize the streambank, repair the augmentation station and replace the augmentation station waste gate sand line so the Company is able to continue operating the augmentation station.

Alternative 1 – No Action: This alternative was considered unacceptable since it means the Company must incur a great amount of risk and potential liability if the augmentation station fails.

Alternative 2 – Augmentation Station Relocation: This alternative was ruled out due to the immediate need of the existing augmentation station and the complicated and time intensive processes involved relocating the structure including adjusting the water rights and permitting.

Selected Alternative 3 – Bank Stabilization and Localized Reinforcement and Repair: This alternative involves a design for upstream bank stabilization and localized reinforcement to maintain structural stability and discharge functionality. This work includes the reconstruction of the sand discharge line. The Company will stabilize the embankment and reconstruct the outfall and sand discharge line considering a 100-yr flood recurrence interval and associated streamflow and water surface profile. The estimated cost for this alternative is $500,000 and is shown in Table 2.

The Company selected Alternative 3 because it believes it provides the necessary and immediate action required to protect the augmentation station and it is the least costly alternative.

TABLE 2: ESTIMATED PROJECT COST

Tasks	Cost
Data Collection and Evaluation	$20,000
Design and Construction Engineering	$45,000
Construction	$435,000
TOTAL	**$500,000**

Permitting: All easements and rights of way have been obtained. All necessary construction permits will be obtained by the Contractor after award of the construction contract and the Company expects to be exempt from 404 permitting by Statutory exemption, 33 CFR Section 323.4(a) 3. This will be confirmed with the Army Corps of Engineers.

Schedule: Final design and construction is expected to occur from August 2018 through March 2019. The Company plans to complete the repair work during the average flow conditions within this timeframe.

Financial Analysis

Table 3 provides a summary of the Project's financial aspects. The Company qualifies for a mid-income municipal interest rate of 2.80% for a 30-year term. The Company requested a 20-year term, therefore an additional 0.25% interest rate reduction will be applied per CWCB Financial Policy #7, bringing the interest rate to 2.55%.

TABLE 3: FINANCIAL SUMMARY

Project Cost	$500,000
CWCB Loan Amount	$500,000
CWCB Loan Amount (Including 1% Service Fee)	$505,000
CWCB Annual Loan Payment	$32,547
CWCB Annual Loan Obligation (1st Ten Years)	$35,802
Number of Shares	105
Assessment per Share	$1,000
Estimated Increase Assessment per Share	$30
Estimated Total Future Assessment per Share	$1,030
Annual Obligation per AF delivered (4,961AF)	$7.22/AF

Creditworthiness: The Company has $709,991 in existing debt as shown in Table 4. The Company has two existing loans with the CWCB that are all in good standing. Loan C150029 was for the rehabilitation of the Chilcott Ditch diversion dam and Loan CT2017-3188 was for the rehabilitation of the Chilcott Ditch Jimmy Camp Creek Siphon. The Company has increased and decreased assessments over the past years including 2015 assessment at $825/share, 2016 assessment at $1,450/share, 2017 assessment at $1,300/share and 2018 assessment at $1,000/share. The Company anticipates raising assessments $30/share for a total assessment of $1,030/share as a result of this Project.

TABLE 4: EXISTING DEBT

Lender	Original Balance	Current Balance	Annual Payment	Maturity Date	Collateral
CWCB C150029	$250,000	$144,368	$14,458	2030	Fountain Creek Diversion Structure and Assessments
CWCB CT2017-3188	$459,991	$459,991	$28,677	2037	Jimmy Camp Creek Siphon Structure Project and Assessments
TOTAL		$709,991	$43,135		

TABLE 5: FINANCIAL RATIOS

Financial Ratio	Prior Years	Future w/ Project
Operating Ratio (revenues/expenses) weak: <100% - average: 100% - 120% - strong: >120%	120% (average) $198K/$165K	100% (average) $201K/$201K
Debt Service Coverage Ratio (revenues-expenses)/debt service weak: <100% - average: 100% - 120% - strong: >120%	176% (strong) ($198K-$122K) $43K	100% (average) ($201K-$122K) $79K
Cash Reserves to Current Expenses weak: <50% - average: 50% - 100% - strong: >100%	58% (average) $96K/$165K	48% (weak) $96K/$201K
Annual Operating Cost per Acre-Foot (4,961 AF) weak: >$20 - average: $10 - $20 - strong: <$10	$33.25 (weak) $165K/4,961AF	$40.47 (weak) $201K/4,961AF

Collateral: Security for this loan will be a pledge of assessment revenues backed by a rate covenant and the Augmentation Station structure. This security is in compliance with the CWCB Financial Policy #5 (Collateral).

cc: Mr. Jessie Shaffer, Manager, Chilcott Ditch Company
Jennifer Mele, Colorado Attorney General's Office

Attachment: Water Project Loan Program – Project Data Sheet

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Chilcott Augmentation Station

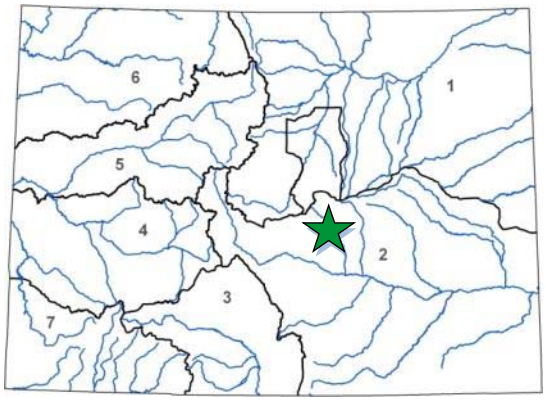
Chilcott Ditch Company

July 2018 Board Meeting

LOAN DETAILS	
Project Cost:	$500,000
CWCB Loan (with Service Fee):	$505,000
Loan Term and Interest Rate:	20 Years @ 2.55%
Funding Source:	Construction Fund

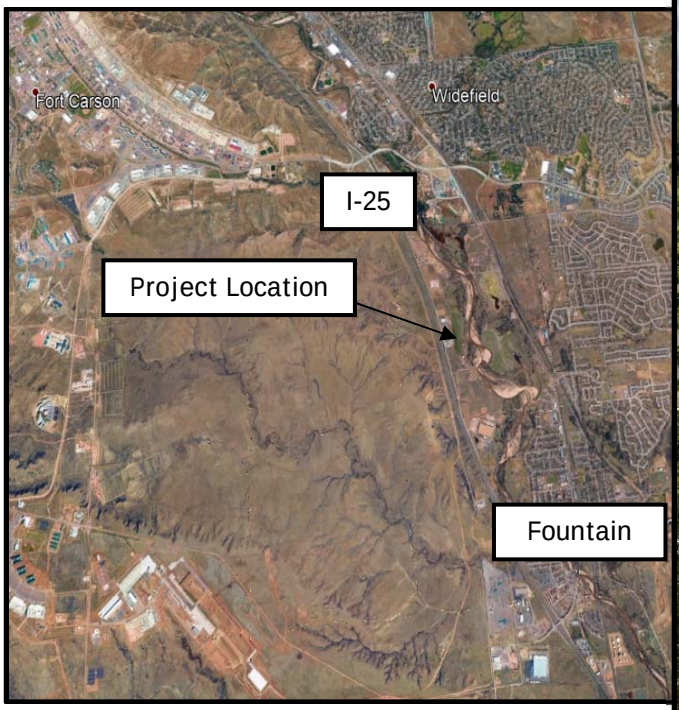
BORROWER TYPE		
Agriculture	*Municipal*	*Commercial*
0%	0% Low - 100% Mid -0% High	0%

PROJECT DETAILS	
Project Type:	Ditch Rehabilitation
Average Annual Diversions:	4,961 AF



LOCATION			
County:			El Paso
Water Source:			Fountain Creek
Drainage Basin:			Arkansas
Division:	2	*District:*	10

The Chilcott Ditch Company operates the Chilcott Ditch for the benefit of its shareholders by providing direct flow irrigation water. The ditch diverts from Fountain Creek, just north of the Town of Fountain, and water travels through the Company's eight-mile-long ditch to land under the ditch as well as to an augmentation station that measures return flow to Fountain Creek on behalf of shareholders taking delivery of their pro-rata share through the augmentation station. Over time the streambank near the augmentation station has eroded and undercut the augmentation station flume. This has caused concern about the structural stability and discharge functionality and operation of the augmentation station. The Company has concluded that the protection of the augmentation station is needed. The Company desires to stabilize the embankment and reconstruct the outfall and sand discharge line considering a 100-yr flood recurrence interval and associated streamflow and water surface profile. Construction is scheduled for the fall of 2018/winter of 2019.



Current streambank and outfall conditions