



COLORADO

Colorado Water Conservation Board

Department of Natural Resources

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TO: Colorado Water Conservation Board Members

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

DATE: September 19-20, 2018 Board Meeting

AGENDA ITEM: 23b. Water Project Loans
Well Augmentation Subdistrict of Central Colorado Water Conservancy District -
Walker Recharge

Agenda Items 23a, 23b, & 23c are loan requests by three related entities for the same project. For convenience, text in blue is identical in all three memos.

Agenda No.	Entity/Borrower	Ownership	Requested Loan
23a	Central Colorado Water Conservancy District	15%	\$2,250,000
23b	Well Augmentation Subdistrict of Central Colorado Water Conservancy District	20%	\$3,000,000
23c	Groundwater Management Subdistrict of Central Colorado Water Conservancy District	65%	\$9,750,000

Introduction

The Well Augmentation Subdistrict (WAS) of Central Colorado Water Conservancy District (CCWCD) is applying for a loan for the Walker Recharge (Project). The Project is a water supply retiming effort using the alluvial aquifer of the South Platte River. Retimed water supplies will be used as augmentation credits by CCWCD and its two subdistricts: WAS and Groundwater Management Subdistrict (GMS). The total Project cost is estimated to be \$18,164,000. Funding from each entity will be in proportion to its ownership in the Project. All combined, CCWCD, GMS, & WAS are seeking a total of \$15 million in CWCB loans for this Project, of which \$3,000,000 is being sought by WAS to cover its 20% cost share. See attached Project Data Sheet for a location map and Project summary.

If approved, this loan request will go through the 2019 CWCB Projects Bill because CCWCD and its two subdistricts (GMS & WAS) are closely related entities, and the combined loan request is over \$10 million dollars.

Staff Recommendation

Staff recommends the Board request the General Assembly to authorize a loan for \$3,030,000 (\$3,000,000 for Project costs and \$30,000 for the 1% loan service fee) to the Well Augmentation Subdistrict of Central Colorado Water Conservancy District for the Walker Recharge Project in the 2019 CWCB Project Bill, from the Severance Tax Perpetual Base Fund. The loan terms shall be 30 years at the agricultural rate of 1.75% per annum. Security for the loan shall be in compliance with CWCB Financial Policy #5.

Additionally, Staff recommends the following contract condition:

1. Disbursal of loan funds shall be contingent on CCWCD and GMS either executing its respective Walker Recharge CWCB loan contract, or providing evidence of other funding or financing to fully cover its Project cost share.



Background

CCWCD was formed in 1965 to develop, manage, and protect water resources in northeast Colorado. Over 750 square miles in Adams, Weld, and Morgan Counties are included in CCWCD boundaries, which include approximately 210,000 acres of irrigated agricultural lands. Within CCWCD are two subdistricts: GMS formed in 1973 and WAS formed in 2004. Both subdistricts are separate legal entities with distinct legal boundaries and each provide augmentation water for different alluvial groundwater wells under separate decreed plans for augmentation.

WAS was formed to develop a permanent augmentation plan for well owners who were previously members of the Groundwater Appropriators of the South Platte (GASP). WAS extends over the same broad area as the CCWCD boundaries, but is limited to only the land specifically identified in individual contracts with its members. There are currently 275 wells contracted for coverage in the WAS augmentation plan, covering approximately 78 square miles. Some of those wells represent supplemental groundwater for the members, but for others, the wells are their sole source of water. WAS issues an annual pumping quota to its member wells. The quota is a percentage of each member's contracted augmentation supply amount and is an allocation of overall augmentation supplies. The quota for the year is heavily dependent on the amount of water recharged in prior years, and the amount of available water in storage at the beginning of each irrigation season. For the first seven years of operation, the pumping quota was zero percent as all augmentation water was needed to replace on-going out-of-priority depletions resulting from well pumping prior to 2006. The quota has recently ranged from 35% to 60% due to WAS's efforts in increasing its augmentation water supplies.

CCWCD, GMS, & WAS have existing demands for water supplies that exceed water availability and are continually looking for ways to provide additional replacement water to meet demands. Recharge operations are a primary way for CCWCD, GMS, & WAS to generate additional replacement water. By building recharge ponds, CCWCD, GMS, & WAS can use the alluvial aquifer of the South Platte River in order to retine its water supply. Retimed water supplies can be used as augmentation credits in plans for augmentation operated by GMS and WAS, and can be leased by CCWCD to water users within its district, including leasing credits to GMS & WAS.

Existing Water Plan Grant: CCWCD received approval of a \$750,000 CWCB Water Plan Grant out of the Supply & Demand Gap category at the November 2017 CWCB Board Meeting for this Project. These funds are matched with a \$750,000 Bureau of Reclamation grant and will provide for initial funding of the Project. The Water Plan Grant contract has not yet been signed as it is pending a final scope and budget.

Loan Feasibility Study

Ed Armbruster, P.E., with White Sands Water Engineers, Inc., prepared the Loan Feasibility Study titled, "CWCB Loan Feasibility Study, Walker Recharge Project," dated July 2018. The feasibility study was prepared in accordance with CWCB guidelines and includes an alternative analysis and construction costs estimates. The same feasibility study is used for CCWCD, GMS, & WAS. Audited financial statements of CCWCD, GMS, & WAS were provided by Anton Collins Mitchell, LLP.

Borrower - Well Augmentation Subdistrict of Central Colorado Water Conservancy District

WAS is a special district created by the Weld County District Court on January 8, 2004, pursuant to the "Water Conservancy Act," § 37-45-101, C.R.S. It has the power to acquire and sell water rights, construct and operate facilities, exercise eminent domain, levy taxes, and contract with other agencies. WAS is governed by the same 15-member Board of Directors as its parent district, CCWCD. Revenues of WAS are derived from member assessments and property taxes. In 2004, voters elected to

“de-Bruce” WAS, allowing it to keep and use revenues that otherwise would have been returned to taxpayers under TABOR.

All members of the WAS Augmentation Plan have a legal contract with WAS to provide augmentation services. Contracts are reviewed and renewed annually. Contracts may be deleted from the plan with a majority vote from the Board of Directors for reasons including failure to pay assessments or violating policies regarding over-pumping or meter tampering.

Water Rights

The WAS augmentation plan (Division 1 Water Court Case No. 03CW099) was signed in 2008. The portfolio of WAS water rights consists of changed senior direct flow, junior storage, recharge and exchange rights that have been decreed or are pending adjudication. The WAS Augmentation Plan currently has contracts totaling approximately 15,000 AF in terms of volume of consumptive use.

CCWCD, GMS, & WAS jointly filed an application for water rights and for approval of plan of augmentation for the Walker Recharge Project (Division 1 Water Court Case No. 16CW3202) on December 30, 2016. The court application includes surface water rights for three diversions, groundwater rights for four well fields and one existing well, numerous recharge structures, and a plan for augmentation. The plan for augmentation would allow diversions from the included water rights as well as other water rights owned or otherwise controlled by CCWCD, GMS, or WAS to be delivered to the recharge ponds to generate accretions to the South Platte River.

Project Description

The purpose of the Project is to develop a water supply that can be used by CCWCD, GMS, & WAS in order to increase irrigation opportunities for agricultural production within its service area by providing augmentation credits that can be used to increase the well pumping quotas of GMS and WAS, and to increase water leasing opportunities of CCWCD.

The Walker Property is located in Weld and Morgan Counties between the towns of Orchard and Wiggins and was identified for as a location for a recharge operation. Recharge ponds will be constructed on the Walker Property and on neighboring properties through easement agreements. This Project is one of many that may be developed by CCWCD, GMS & WAS and pursuing this Project does not eliminate the need to pursue recharge opportunities at other locations in the future.

Alternative 1 - No Action: Under this alternative, CCWCD, GMS, & WAS would only rely on existing infrastructure and water rights to provide water supplies to constituent members. Since supplies of water available for use is less than augmentation needs of the districts, this alternative is unacceptable.

Alternative 2 - Reduced Scale Project (Phase 1 Only): This alternative would only develop Phase 1 of the Project. A scaled down version of the Project would be less total cost as it would include fewer diversions, smaller pipelines and pump stations, and fewer recharge ponds. However, it is the engineer’s opinion that the reduction in cost would not be proportional to the reduction in project yield. As there are substantial economies of scale associated with developing the large scale project, a reduced scale project would result in an overall higher cost per acre-foot of developed water supply.

Selected Alternative 3 - Full Scale Project (Phase 1 and 2): This alternative will construct Phase 1 and 2 facilities as described below. Final design will determine the exact location and size of facilities but overall, its anticipated that CCWCD, GMS, & WAS combined will divert up to 50 cfs from the South Platte and 50 cfs from the alluvial aquifer into approximately 330 acres of recharge ponds up to five miles from the South Platte River.

- Phase 1 - The first phase of construction will include the development of one well field, one surface water diversion structure, approximately 7,500 feet of trunk line pipeline, and two recharge ponds.
- Phase 2 - The second phase of construction will include an additional surface water diversion structure, a conveyance pipeline under the South Platte River, and pipelines to deliver water to additional recharge sites.

Development of Phase 1 and 2 will result in an average annual yield of approximately 14,000 AF. WAS owns 20% of the Project, and therefore expects the Project to add 2,800 AF per year to its augmentation plan, potentially allowing for a quota increase of 18%.

Additional future phases and partnerships are also envisioned for the Project and may include development of additional well fields, surface diversion structures, pipeline networks, and additional recharge sites. The Town of Wiggins, Orphan Wells of Wiggins, Riverside Irrigation District, Bijou Irrigation Company, Weldon Valley Ditch Company, and several local dairy operations that have need for additional augmentation supplies have expressed interest in partnering with future phases. For the purpose of this loan request, it is assumed that CCWCD, GMS & WAS will be the Project's only financial partners.

The total Project cost is estimated to be \$18,164,000 as shown in Table 2.

TABLE 2: ESTIMATED PROJECT COST

Tasks	Cost
Land Acquisition (Completed)	\$666,000
Preliminary Engineering Investigations (In Progress)	\$850,000
Phase 1 Construction	
<i>Northside Infrastructure/ Recharge Pond</i>	<i>\$160,000</i>
<i>Southside Wells, pumps, manifold, controls</i>	<i>\$2,533,000</i>
<i>Pipelines</i>	<i>\$2,367,000</i>
<u><i>Empire Recharge Pond</i></u>	<u><i>\$176,000</i></u>
Phase 1 Construction Total	\$5,236,000
Phase 2	
<i>Weldon Valley Ditch Pump Station</i>	<i>\$2,897,500</i>
<i>Weldon Valley Ditch Bypass Structure</i>	<i>\$364,000</i>
<i>Pipelines</i>	<i>\$2,844,000</i>
<i>Bore Under South Platte River</i>	<i>\$1,570,000</i>
<u><i>Recharge Ponds along CR U</i></u>	<u><i>\$962,500</i></u>
Phase 2 Construction Total	\$8,638,000
Engineering/Permitting (10% Construction Cost)	\$1,387,000
Contingency (10% Construction Cost)	\$1,387,000
TOTAL	\$18,164,000

Permitting: Permitting and easement requirements will be determined during final design.

Schedule: The Walker Property was purchased in 2016 and preliminary engineering for Phase 1 has been completed. A design-build delivery arrangement for Phase 1 will be entered into by early 2019 and it is expected to be completed within three to four years. Phase 2 is also expected to take three to four years to complete, though it may begin prior to the completion of Phase 1.

Financial Analysis

Table 3 provides a summary of the Project's financial aspects. WAS qualifies for the agricultural interest rate of 1.75% for a 30-year term.

TABLE 3: FINANCIAL SUMMARY

Project Wide Financial Summary	
Project Cost	\$18,164,000
CCWCD, GMS, & WAS Previous Cash Contributions	\$1,416,000
CCWCD, GMS, & WAS Future Cash Contributions	\$248,000
Bureau of Reclamation Grant	\$750,000
CWCB Water Plan Grant (November 2017)	\$750,000
CCWCD - CWCB Loan Amount	\$2,250,000
WAS - CWCB Loan Amount	\$3,000,000
GMS - CWCB Loan Amount	\$9,750,000
WAS Specific Financial Summary	
CWCB Loan Amount (Including 1% Service Fee)	\$3,030,000
CWCB Annual Loan Payment	\$130,683
CWCB Annual Loan Obligation (1 st Ten Years)	\$143,751
Number of Wells	275
Current Annual Assessment per Contracted AF (15,000 AF)	\$64
Annual Loan Obligation per Annual Developed Water Supply (2,800 AF)	\$51/AF

Creditworthiness: WAS has \$13,572,369 in existing long-term debt as summarized in Table 4. Additionally, WAS has been approved for an \$2,367,440 CWCB loan for the Shores Lakes Pond C Infrastructure Improvement Project at CWCB's January 2018 Board Meeting. That project has yet to begin. All loans are in good standing.

Voters approved WAS to issue up to \$39 million in bonds for water development and water rights acquisition in the November 2004 election. That ballot measure also approved a 9 mill property tax to service a maximum annual debt payment of \$2,885,000. Including this new loan request, WAS will have issued approximately \$22 million out of the approved debt limit of \$39 million, and will have a total debt service of \$1,117,740 (including CWCB's 10% reserve requirement payment). As of 2017, property under WAS has an assessed valuation of \$299,926,727. At 9 mills, WAS has the ability to collect up to \$2,699,340 which is sufficient to cover the total future debt service.

TABLE 4: EXISTING DEBT

Lender	Original Balance	Current Balance	Annual Payment ¹	Maturity Date	Collateral
CWCB (C150194)	\$14,934,612	\$11,962,802	\$713,541	2040	Pledge of tax revenues
CWCB (CT2015-060)	\$1,651,905	\$1,609,567	\$71,246	2047	Pledge of tax revenues, water rights purchased with loan
Subtotal (Existing Debt)	\$16,586,517	\$13,572,369	\$784,757		
<i>CWCB (CT2016-2851) (Shores Lakes Pond C)</i>	<i>\$2,367,440</i>	<i>In Progress</i>	<i>Up to \$100,687</i>	Not Yet in Repayment	Pledge of tax revenues
Total	\$18,953,957	\$15,939,809²	\$885,444²		

¹ Does not include 10% Debt Service Reserve Payment Obligation

² Assumes Loan CT2016-2851 is disbursed in full

TABLE 5: FINANCIAL RATIOS

Financial Ratio	Past Years	Future w/ Project
Operating Ratio (revenues/expenses) <div> <div>weak: <100%</div> <div>average: 100% - 120%</div> <div>strong: >120%</div> </div>	124% (strong) \$3.81M/\$3.14M	121% (strong) \$3.81M/\$3.47M
Debt Service Coverage Ratio (revenues-expenses)/debt service <div> <div>Weak: <100%</div> <div>average: 100% - 120%</div> <div>strong: >120%</div> </div>	186% (strong) (\$3.81M-\$2.36M) \$0.78M	131% (strong) (\$3.81M-\$2.36M) \$1.11 M
Cash Reserves to Current Expenses <div> <div>Weak: <50%</div> <div>average: 50% - 100%</div> <div>strong: >100%</div> </div>	219% (strong) \$6.88M/\$3.14M	197% (strong) \$6.82M/\$3.47M

Collateral: Security for this loan will be a pledge of the revenues from WAS's existing 9 mill property tax revenue. This security is in compliance with CWCB Financial Policy #5 (Collateral).

cc: Randy Ray, Executive Director, Central Colorado Water Conservancy District
Jennifer Mele, Colorado Attorney General's Office

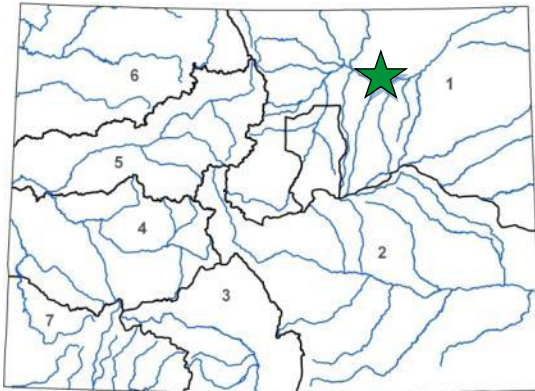
Attachment: Water Project Loan Program - Project Data Sheet



Walker Recharge

Well Augmentation Subdistrict of Central Colorado Water Conservancy District September 2018 Board Meeting

L O A N D E T A I L S	
Project Cost:	\$18,164,000
CWCB Loan (with Service Fee):	\$3,030,000
Loan Term and Interest Rate:	30 years @ 1.75%
Funding Source:	Severance Tax PBF
B O R R O W E R T Y P E	
Agriculture	Municipal
100%	0 % Low - 0% Mid -0% High
Commercial	0%
P R O J E C T D E T A I L S	
Project Type:	Augmentation Facility
Annual Yield:	2,800 AF



L O C A T I O N	
County:	Weld & Morgan
Water Source:	South Platte River
Drainage Basin:	South Platte
Division:	1
District:	1

The Central Colorado Water Conservancy District (CCWCD) was formed in 1965 to develop, manage, and protect water resources in northeast Colorado. CCWCD includes approximately 210,000 acres of irrigated agricultural lands. CCWCD has two subdistrict each with its own augmentation plan: The Groundwater

Management Subdistrict (GMS), formed in 1973, and the Well Augmentation Subdistrict (WAS), formed in 2004. CCWCD, GMS, & WAS have partnered together to build and the Walker Recharge Project.

The Walker Recharge Project will be located in Weld and Morgan Counties between the towns of Orchard and Wiggins. CCWCD, GMS, & WAS jointly filed an application for water rights and for approval of plan of augmentation for the Walker Recharge site (Division 1 Water Court Case No. 16CW3202) on December 30, 2016. The court application includes surface water rights for three diversions, groundwater rights for four well fields and one existing well, numerous recharge structures, and a plan for augmentation. The plan for augmentation would allow diversions from the included water rights as well as other water rights owned or otherwise controlled by CCWCD, GMS, or WAS to be delivered to the recharge ponds to generate accretions to the South Platte River.

Construction is expected to generally occur in two phases, each taking three to four years. When finished, recharge credits will be used by GMS and WAS to increase the well pumping quota issued under the respective augmentation plans. CCWCD will use its recharge credits to increase the amount of water leased to GMS, WAS, and other water users within the CCWCD boundaries.

