



## 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, 2018 Board Meeting

**AGENDA ITEM:** 23a. Water Project Loans  
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 Central Colorado Water Conservancy District (CCWCD), acting by and through a water activity enterprise, 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: Well Augmentation Subdistrict (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 \$2,250,000 is being sought by CCWCD to cover its 15% 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 \$2,272,500 (\$2,250,000 for Project costs and \$22,500 for the 1% loan service fee) to the Central Colorado Water Conservancy District, acting by and through a water activity enterprise, 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 GMS and WAS 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.

By statute, CCWCD has authority to issue water delivery allotment contracts to meet any water demand within its district. To date, CCWCD has contracted to deliver relatively small amounts of water because its priority and focus has been development of water supplies for GMS and WAS.

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 – Central Colorado Water Conservancy District**

CCWCD was created by the Weld County District Court on September 15, 1965, pursuant to the "Water Conservancy Act," § 37-45-101, C.R.S., with the principal purpose of providing for the conservation of water resources for the greatest beneficial use of water within the CCWCD's boundaries. CCWCD is controlled by a 15-member Board of Directors.

Sources of revenues for CCWCD include ad valorem taxes and is therefore subject to Colorado Constitution Article X Section 20 (TABOR) requirements. CCWCD has a water activity enterprise which receives 10% or less of its revenues from taxes, and therefore qualifies as an enterprise under TABOR, exempting the water activity enterprise from TABOR requirements. Revenues of the water activity enterprise primarily come from assessments paid by GMS and WAS for the use of CCWCD's water rights and infrastructure.

### **Water Rights**

CCWCD maintains a vast water rights portfolio including 41 water right decrees and 5 pending water right decrees. However, a majority of these water rights have junior priorities. CCWCD has relied on numerous leases, primarily from municipal water providers. Currently 15,000 AF per year is leased by CCWCD, but all current leases will expire within the next eight years.

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. CCWCD owns 15% of the Project, and therefore expects the Project to add 2,100 AF to CCWCD's lease available water supply.

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

**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. CCWCD 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
CCWCD Specific Financial Summary	
CWCB Loan Amount (Including 1% Service Fee)	\$2,272,500
CWCB Annual Loan Payment	\$98,012
CWCB Annual Loan Obligation (1 <sup>st</sup> Ten Years)	\$107,814
Annual Loan Obligation per Annual Developed Water Supply (2,100 AF)	\$51/AF

**Creditworthiness:** This loan request will be financed by and through CCWCD's water activity enterprise, which has no debt. The CCWCD Government Fund has approximately \$60 million in general obligation debt, including a \$30 million CWCB loan for the Chatfield Reallocation Project. The general obligation debt is back by a voter approved mill levy and is not a part of the water activity enterprise.

**TABLE 4: FINANCIAL RATIOS (CCWCD WATER ACTIVITY ENTERPRISE)**

Financial Ratio	Past Years	Future w/ Project
Operating Ratio (revenues/expenses) Weak: <100% - average: 100% - 120% - strong: >120%	703% (strong) \$492K/\$70K	276% (strong) \$492K/\$178K
Debt Service Coverage Ratio (revenues-expenses)/debt service Weak: <100% - average: 100% - 120% - strong: >120%	NA	391% (strong) (\$492K-\$70K) \$108K
Cash Reserves to Current Expenses Weak: <50% - average: 50% - 100% - strong: >100%	1957% (strong) \$1.37M/\$70K	770% (strong) \$1.37M/\$178K

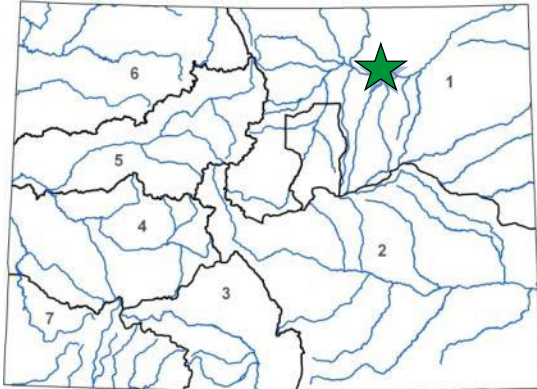
**Collateral:** Security for this loan will be a pledge of water activity enterprise revenues back by a rate covenant as evidenced by annual financial reporting. This security is in compliance with CWCB Financial Policy #5 (Collateral).

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



L O A N   D E T A I L S	
Project Cost:	\$18,164,000
CWCB Loan (with Service Fee):	\$2,272,500
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:	2,100 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.

