



COLORADO
Colorado Water Conservation Board
Department of Natural Resources

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TO: Colorado Water Conservation Board Members

FROM: Cole Bedford, P.E., Project Manager
Kirk Russell, P.E., Finance Section Chief

DATE: January 23-24, 2023 Board Meeting (**Updated January 25, 2023**)

AGENDA ITEM: 14c. Water Project Loans
Special Improvement District No. 4 of the Rio Grande Water Conservation District
Peachwood Farms Augmentation and Aquifer Sustainability Project.

Staff Recommendation (Board approved Staff Recommendation January 24, 2023)

Staff recommends the Board approve a loan not to exceed \$3,490,560 (\$3,456,000 for project costs and \$34,560 for the 1% service fee) to the Special Improvement District No. 4 of the Rio Grande Water Conservation District, operating by and through its water activity enterprise, for costs related to the Peachwood Farms Augmentation and Aquifer Sustainability Project, from the Severance Tax Perpetual Base Fund. The loan term will be 40 years at an interest rate of 2.10% per annum. Security for the loan shall be in compliance with CWCB Financial Policy #5.

Introduction

The Special Improvement District No. 4 of the Rio Grande Water Conservation District (Subdistrict No. 4) is applying for a blended interest rate loan for the Peachwood Farms Augmentation and Aquifer Sustainability Project (Project). Peachwood Farms is a 1,900 acre irrigated farm in the northern San Luis Valley. The Project will consist of the purchase of Peachwood Farms and its associated water rights, as well as the construction of augmentation infrastructure. The result of the Project will be to replace injurious stream depletions on San Luis Creek caused by groundwater pumping and establish a sustainable year-over-year use of the aquifers underlying Subdistrict No. 4. The sustainability component of the Project involves executing the first ever groundwater conservation easement in Colorado. The total Project cost is estimated to be \$3,456,000. See attached Project Data Sheet for a location map and Project summary.



Borrower - Special Improvement District No. 4 of the Rio Grande Water Conservation District

The Special Improvement District No. 4 of the Rio Grande Water Conservation District was formed in 2017. The purpose of Subdistrict No. 4 is to provide a community-oriented groundwater management alternative to individual augmentation plans or state-imposed regulations in the northern San Luis Valley. Subdistrict No. 4 has two objectives: to replace stream depletions caused by groundwater pumping and to achieve sustainable use of the confined aquifer. There are 160 wells under Subdistrict No. 4's jurisdiction. To fund operations, Subdistrict No. 4 assesses members an administrative fee on a per well basis and a groundwater withdrawal fee on a per AF basis. Subdistrict No. 4 is governed by a five-member Board of Managers, which has the authority to incur debts and set fee rates.

Background

The 160 groundwater wells within Subdistrict No. 4's jurisdiction draw an average of 11,400 AF of water each year from the aquifers. These withdrawals cause a reduction of surface flow in San Luis Creek of up to 460 AF. Subdistrict No. 4 well withdrawals also exceed the sustainability limits in the Division of Water Resources, Division 3 Groundwater Rules by an average of 1,500 AF each year. Peachwood Farms is one of the largest groundwater users in Subdistrict No. 4. Historically, its 13 wells have withdrawn 1,700 AF each year to irrigate alfalfa and small-grain crops.

Starting in 2021, Subdistrict No. 4 partnered with Colorado Open Lands to develop a purchase agreement with the Peachwood Farms owner and a plan for managing the associated water rights. For the confined aquifer sustainability component, Colorado Open Lands developed a first-of-its-kind "groundwater conservation easement." This innovative easement ensures that the pumping previously irrigating Peachwood Farms' fields can be ceased without water right abandonment or appropriation by others. On November 8, 2022, Colorado Open Lands and the Peachwood Farms owner signed an easement agreement restricting the majority of Peachwood Farms' well water rights. CWCB Water Plan Grants contributed about \$296,000 to both the development of the groundwater conservation easement concept and the execution of the Peachwood Farms easement agreement.

Also on November 8, Subdistrict No. 4 and the Peachwood Farms owner agreed to the sale and purchase of Peachwood Farms for \$2.6M. The purchase includes the physical property, the well water rights not restricted by the groundwater conservation easement, and two surface water rights. This purchase represents the majority of the loan request; however, Subdistrict No. 4 also intends to construct augmentation infrastructure necessary to replace stream depletions on San Luis Creek.

Loan Feasibility Study

Chris Ivers, Subdistrict No. 4 Program Manager, with assistance from Clinton Phillips, P.E., Davis Engineering Service, Inc. prepared the Loan Feasibility Study titled, "Loan Feasibility Study for San Luis Creek Subdistrict Peachwood Farm Water Rights Purchase." The feasibility study was prepared in accordance with CWCB guidelines and includes preliminary engineering, an analysis of alternatives, and costs. Audited financial statements were provided by Subdistrict No. 4 and were prepared by Wall, Smith, Bateman and Associates, CPA.

Water Rights

Peachwood Farms' fields have historically been irrigated by thirteen groundwater wells, each of which are limited to 180 AF for a total right of 2,160 AF per year. The groundwater conservation easement restricted the use of all but 450 AF of this right in order to preserve the confined aquifer. Subdistrict No. 4 intends to transfer the unrestricted 450 AF from an irrigation use to an augmentation use to replace stream depletions on San Luis Creek. There are also two surface water rights associated with the Peachwood Farms property. The water rights are shown in Table 1.

TABLE 1: WATER RIGHTS

Name	Amount	Appropriation Date	Adjudication Date	Case No.
Tobler	1.4 cfs	2/15/1873	3/28/1890	CA0671
Tobler Rominger	10.0 cfs	6/15/1873	3/28/1890	3/28/1890
13 Groundwater Wells	2,160 AF/year ¹	2/18/1947 - 3/3/1968		90CW037 W3202

¹Maximum; Actual average use has been 1,700 AF/year.

Project Description

The purpose of this Project is to progress towards the total replacement of stream depletions on San Luis Creek due to groundwater pumping and to establish sustainable pumping levels from the confined aquifer.

Alternative 1 - No Action: Taking no action would result in the inability of Subdistrict No. 4 to replace injurious stream depletions and continued unsustainable use of the confined aquifer, possibly causing the curtailment of pumping from 160 groundwater wells. Because this alternative would result in a significant economic impact to those relying on groundwater in Subdistrict No. 4, it was not selected.

Alternative 2 - Well Injury Payments: Until now, Subdistrict No. 4 has executed agreements with surface water rights holders called well injury payments. These payments compensate for water rights injuries caused by well pumping as an alternative to physically replacing stream depletions with water. While this has been cost effective, the agreements are made on an annual basis, which make them uncertain from one year to the next. Furthermore, these agreements do nothing to address the sustainability issues associated with the confined aquifer. Because of long-term unreliability of well injury payments and their inability to address the confined aquifer overuse, this alternative was not selected.

Selected Alternative 3 - Peachwood Farms Augmentation and Aquifer Sustainability Project: This alternative involves the purchase of Peachwood Farms and its associated water rights as well as construction of augmentation infrastructure. Subdistrict No. 4 will complete the purchase of Peachwood Farms for \$2.6M. The groundwater conservation easement will remain in place leaving 450 AF of groundwater right for augmentation. In order to fully utilize the augmentation water, Subdistrict No. 4 will construct two augmentation wells and two pipelines to physically connect them to San Luis Creek. Additional equipment will also be needed to efficiently control and monitor the flow of water from the augmentation wells and through the pipelines. This alternative achieves both components of the Project purpose. The estimated cost of this alternative is \$3,456,000 as shown in Table 2.

TABLE 2: ESTIMATED PROJECT COST

Tasks	Cost
Engineering and Legal	\$96,000
Peachwood Farm Purchase	\$2,600,000
Augmentation Wells (x2)	\$300,000
10" Pipeline from Well #1 to Stream	\$70,000
10" Pipeline from Well #2 to Stream	\$200,000
Control Equipment	\$30,000
Contingency	\$160,000
TOTAL	\$3,456,000

Permitting: The water rights associated with the Project have historically been used for irrigation and will need to be changed to an augmentation use. A temporary change will be secured first via a Substitute Water Supply Plan followed by a permanent change through a water court case. No other authorizations or permits will be needed on the Project.

Schedule: Subdistrict No. 4 intends to complete the purchase of Peachwood Farms in April 2023. Bid documents for the augmentation wells, pipelines, and control equipment will be complete in February 2023. Depending on the availability of contractors, construction will take place during the summer months.

Financial Analysis

Table 3 provides a summary of the Project’s financial aspects. Subdistrict No. 4 qualifies for a blended interest rate of 1.85% for a 30-year loan (Ownership: 87% Agricultural, 13% Low-Income Municipal). Because Subdistrict No. 4 is requesting a 40-year loan, the interest rate is increased by 0.25% for a final rate of 2.10%. All interest rate evaluations are per CWCB Financial Policy #7 (Lending Rate Determination).

TABLE 3: FINANCIAL SUMMARY

Project Cost	\$3,456,000
CWCB Loan Amount	\$3,456,000
CWCB Loan Amount (Including 1% Service Fee)	\$3,490,560
CWCB Annual Loan Payment	\$129,848
CWCB Annual Loan Obligation (1 st Ten Years)	\$142,833
Average Annual Acre-Feet Pumped	11,400
Current Average Fee per Acre-Foot	\$31.72
Annual Loan Obligation per Acre-Foot Pumped	\$12.53
Future Average Fee per Acre-Foot (Estimate)	\$31.72 ¹

¹Assessments have already been set in anticipation of the loan repayment.

TABLE 4: FINANCIAL RATIOS

Financial Ratio	Past Years	Future w/ Project
Operating Ratio (revenues/expenses) weak: <100% average: 100% - 120% strong: >120%	243% (average) \$243K/\$100K	100% (average) \$243K/\$243K
Debt Service Coverage Ratio (revenues-expenses)/debt service weak: <100% average: 100% - 120% strong: >120%	N/A	100% (average) (\$243K-\$100K) \$143K
Cash Reserves to Current Expenses weak: <50% average: 50% - 100% strong: >100%	220% (strong) \$220K/\$100K	91% (average) \$220K/\$243K
Annual Operating Cost per Acre-Foot (11,400 AF) weak: >\$20 average: \$10 - \$20 strong: <\$10	\$8.77 (strong) \$100K/11.4K AF	\$21.31 (weak) \$243K/11.4K AF

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

cc: Chris Ivers, Program Manager, Rio Grande Water Conservation District
Jennifer Mele, Colorado Attorney General's Office

Attachments: Water Project Loan Program - Project Data Sheet

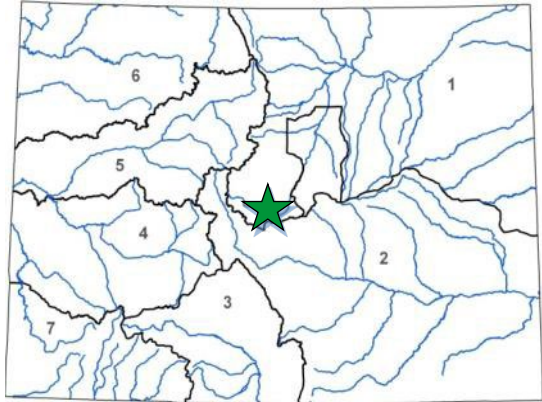


Peachwood Farms Augmentation & Sustainability

Special Improvement District No. 4 of the Rio Grande Water Conservation District

January 2023 Board Meeting

L O A N D E T A I L S	
Project Cost:	\$3,456,000
CWCB Loan (with 1% Service Fee):	\$3,490,560
Loan Term and Interest Rate:	40 Yrs @ 2.10%
Funding Source:	Severance Tax Perpetual Base Fund
B O R R O W E R T Y P E	
Agriculture	Municipal Commercial
87%	13% Low - 0% Mid - 0% High 0%
P R O J E C T D E T A I L S	
Project Type:	Water Rights Purchase
Average Annual Withdrawals:	11,400 AF



Subdistrict No. 4 of the Rio Grande Water Conservation District was created in 2017 to provide a community-oriented water management alternative to aid in compliance with the Rules Governing the Withdrawal of Groundwater in Water Division No. 3, thereby remedying injury to senior surface water rights resulting from groundwater use in the San Luis Creek Response Area. Currently, the Subdistrict consists of 160 wells, with land use dominated by irrigated agriculture of small grains and alfalfa.

L O C A T I O N	
County:	Saguache
Water Source:	San Luis Creek; Groundwater
Drainage Basin:	Rio Grande
Division:	3 District: 25

The project will purchase 13 irrigation wells and two irrigation ditches through a collaborative approach with Colorado Open Lands and the current landowner. It will involve a groundwater conservation easement to address groundwater sustainability concerns, and surface water rights to address injury to senior water rights. In addition to the purchase, the project will design and construct two pipelines from two fields to the stream, a new augmentation well, and a control system. Water rights from the purchase will be temporarily changed via a substitute water supply plan to assess operation suitability for a few years, and then formally through water court. Purchase of the water rights is scheduled to occur in April 2023 with construction occurring sometime in 2023.

