



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: November 16-17, 2022 Board Meeting

AGENDA ITEM: 6a. Water Project Loans
Special Improvement District No. 3 of the Rio Grande Water Conservation District
Alpha Hay Farms Augmentation

Staff Recommendation

Staff recommends the Board approve a loan not to exceed \$2,580,550 (\$2,555,000 for project costs and \$25,550 for the 1% service fee) to the Special Improvement District No. 3 of the Rio Grande Water Conservation District, operating by and through its water activity enterprise, for costs related to the Alpha Hay Farms Augmentation Project, from the Severance Tax Perpetual Base Fund. The loan term will be 30 years at an interest rate of 2.50% per annum. Security for the loan shall be in compliance with CWCB Financial Policy #5.

Introduction

The Special Improvement District No. 3 of the Rio Grande Water Conservation District (Subdistrict No. 3) is applying for a loan for the Alpha Hay Farms Augmentation (Project). Under its Plan of Water Management approved by the State Engineer, Subdistrict No. 3 is required to replace stream depletions on the Conejos River and Rio Grande caused by groundwater pumping from wells. In order to replace a portion of those depletions, four irrigated circles and their associated water rights will be purchased from Alpha Hay Farms. Approximately half of the purchase will be made by Subdistrict No. 3 and the remainder will be made by the Groundwater Management Subdistrict of the Trinchera Water Conservancy District (Groundwater Management Subdistrict). The surface water rights will be changed from an irrigation use to an augmentation use. In addition, Subdistrict No. 3 will construct a pipeline connecting a groundwater well on the property to the Heads Mill & Irrigation Ditch. The total Project cost is estimated at \$5,158,575. See attached Project Data Sheet for a location map and Project summary.



Borrower - Subdistrict District No. 3

The Special Improvement District No. 3 of the Rio Grande Water Conservation District was formed in 2017. It is required to replace stream depletions caused by groundwater well pumping on the Conejos River and Rio Grande. There are 166 wells under Subdistrict No. 3's jurisdiction. To fund operations, Subdistrict No. 3 assesses members an administrative fee on a per well basis and a groundwater withdrawal fee on a per acre-foot basis. The groundwater withdrawal fees differ depending on whether the water is used for sprinkler irrigation, flood irrigation, municipal, or other uses. Subdistrict No. 3 is governed by a 7-member Board of Managers, which has the authority to incur debts and set fee rates.

Background

Pumping from the groundwater wells under Subdistrict No. 3's Plan of Water Management causes a depletion each month of up to 340 AF on the Conejos River and of up to 50 AF on the Rio Grande. Subdistrict No. 3 has historically been able to compensate surface water rights holders through agreements known as forbearance agreements, however these are becoming prohibitively expensive. Subdistrict No. 3 needs to secure sources of augmentation water to directly replace depletions on the Conejos River and Rio Grande.

Alpha Hay Farms consists of fifteen quarter-section, center-pivot irrigated fields immediately south of the Conejos River near Antonito, Colorado. Four of these, which are closest to the river are known by their numbered designations: #11, #12, #13, and #14. These fields have typically been rotated between alfalfa and small grain crops. Water is provided to the four fields from both surface water diverted from the Conejos River and a single groundwater well on Field #12. If irrigation were ceased on the four fields, the water could be used instead for augmentation to replace depletions on the Conejos River and the Rio Grande.

Loan Feasibility Study

Amber Pacheco, Program Manager, with assistance from Clinton Phillips, P.E., Davis Engineering Services, Inc. prepared the Loan Feasibility Study titled, "Loan Feasibility Study for Alpha Hay Farm, LLC, Irrigated Land Purchase," dated October 2022. 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 the Subdistrict and were prepared by Wall, Smith, Bateman and Associates, CPA.

Water Rights

Subdistrict No. 3 currently encompasses 166 wells that have historically consumed an average of 30,000 AF per year. Subdistrict No. 3 is required to replace stream depletions caused by pumping from these wells which can be up to 340 AF on the Conejos River and up to 50 AF on the Rio Grande per month. The Alpha Hay Farms property includes four irrigated fields, which have historically consumed 1,093 AF per year. Subdistrict No. 3 will purchase two of the four fields, which represent an estimated 523 AF for use to replace injurious stream depletions. The rights associated with this water are shown in Table 1.

TABLE 1: WATER RIGHTS

Source Name	Rate or Volume	Adjudication Date	Appropriation Date	Water Court Case No.
Heads Mill & Irrigation Ditch	2.35 cfs	10/22/1883	06/01/1855	Division 22 Historic Decree ¹
J.F. Chacon No. 2 Ditch	6.155 cfs	10/22/1883	10/15/1877	00CW0011 ¹
Groundwater Well	2,500 gpm	05/14/1969		W0490

¹Alpha Hay Farms utilizes only a portion of the total water rights associated with these cases. The remainder are used on other nearby properties.

Project Description

The purpose of this Project is to progress towards the total replacement of stream depletions due to groundwater pumping in Subdistrict No. 3 and the continued ability to utilize groundwater for irrigation, commercial, and other critical uses.

Alternative 1 - No Action: Taking no action would result in the inability of Subdistrict No. 3 to replace injurious stream depletions and the possible curtailment of pumping from 166 groundwater wells. Because this alternative would result in a significant economic impact to those relying on groundwater in Subdistrict No. 3, it was not selected.

Alternative 2 - Additional Agreements with Surface Water Rights Holders: Forbearance agreements are contracts to compensate surface water right holders for an injurious stream depletion with an asset other than wet water. Most frequently, forbearance agreements consist of a cash payment, however the cost of these payments per acre-foot has been increasing and are becoming unaffordable for Subdistrict No. 3. Furthermore, many of the agreements are made on an annual basis, which make them uncertain from one year to the next. Because of the high cost of additional forbearance agreements and their long-term unreliability, this alternative was not selected.

Selected Alternative 3 - Alpha Hay Farms Augmentation Project: This alternative involves the purchase of the Alpha Hay Farms property and its associated water rights. Subdistrict No. 3 will purchase Fields #11 and #12 and the Groundwater Management Subdistrict will purchase Fields #13 and #14. Subdistrict No. 3 will be able to utilize the surface water rights to replace stream depletions by diverting the water through an augmentation station and then returning it back to the Conejos River. Subdistrict No. 3 will also construct an 18" augmentation pipeline connecting the groundwater well on Field #12 to the Heads Mill & Irrigation Ditch 5,000 feet away. This alternative will meet a portion of Subdistrict No. 3's replacement needs and will be a reliable source year over year. The estimated cost of this alternative is \$5,158,575 as shown in Table 2.

TABLE 2: ESTIMATED PROJECT COST

Tasks	Total Cost	Subdistrict No. 3	Groundwater Management Subdistrict
Land Purchase Price	\$4,600,000	\$2,187,210	\$2,412,790
18" Augmentation Pipeline	\$300,000	\$300,000	-
Other Augmentation Infrastructure	\$50,000	\$50,000	-
Legal and Engineering	\$81,575	\$76,000	\$5,575
Construction Contingency	\$127,000	\$127,000	-
TOTAL	\$5,158,575	\$2,740,210	\$2,418,365

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 will be needed on the Project.

Schedule: Subdistrict No. 3, along with the Groundwater Management Subdistrict, currently have a first option to purchase the Alpha Hay Farms property. The option will be exercised before June 2023 when it expires. The pipeline component of the project will be bid and a contractor selected immediately afterwards. Construction will be completed before the end of 2023.

Financial Analysis

Table 3 provides a summary of the Project's financial aspects. Subdistrict No. 3 qualifies for a blended interest rate of 2.50% for a 30-year loan (Ownership: 70% Agricultural, 15% Low-Income Municipal, and 15% Commercial). All interest rate evaluations are per CWCB Financial Policy #7 (Lending Rate Determination).

TABLE 3: FINANCIAL SUMMARY

Project Cost	\$5,158,575
Subdistrict No. 3 Contribution	\$2,740,210
CWCB Loan Amount	\$2,555,000
CWCB Loan Amount (Including 1% Service Fee)	\$2,580,550
CWCB Annual Loan Payment	\$123,293
CWCB Annual Loan Obligation (1 st Ten Years)	\$135,622
Average Annual Acre-Feet Pumped	30,000
Current Average Fee per Acre-Foot (Sprinkler Irrigation, Flood Irrigation, Etc.)	\$25.27 ¹
Annual Loan Obligation per Acre-Foot Pumped	\$4.54
Future Average Fee per Acre-Foot (Estimate)	\$29.81

¹Based on FY 2021. 25,911 acre-feet were pumped from Subdistrict No. 3 wells and \$654,662 in groundwater withdrawal fees were collected ($25,911/654,662 = 25.27$).

Creditworthiness: Subdistrict No. 3 currently carries \$216,055 in debt from a land purchase made in 2021. There is a payment agreement between Subdistrict No. 3 and the seller of the land. The details of the note are shown in Table 4. Financial Ratios are shown in Table 5.

TABLE 4: EXISTING DEBT

Lender	Original Balance	Current Balance	Annual Payment	Maturity Date	Collateral
Seller of Land	\$237,500	\$216,055	\$33,096	2031	Purchased Land

TABLE 5: FINANCIAL RATIOS

Financial Ratio	Past Years	Future w/ Project
Operating Ratio (revenues/expenses) weak: <100% average: 100% - 120% strong: >120%	311% (strong) \$700K/\$225K	194% (strong) \$700K/\$361K
Debt Service Coverage Ratio (revenues-expenses)/debt service weak: <100% average: 100% - 120% strong: >120%	1,593% (strong) <u>\$700K-\$192K</u> \$33K	301% (strong) <u>\$700K-\$192K</u> \$169K
Cash Reserves to Current Expenses weak: <50% average: 50% - 100% strong: >100%	667% (strong) \$1.5M/\$225K	416% (strong) \$1.5M/\$361K
Annual Operating Cost per Acre-Foot (30,000 AF) weak: >\$20 average: \$10 - \$20 strong: <\$10	\$7.50 (strong) \$225K/30K AF	\$12.03 (average) \$361K/30K 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: Amber Pacheco, Program Manager, Special Improvement District No. 3 of the Rio Grande Water Conservation District
Jennifer Mele, Colorado Attorney General's Office

Attachments: Water Project Loan Program - Project Data Sheet

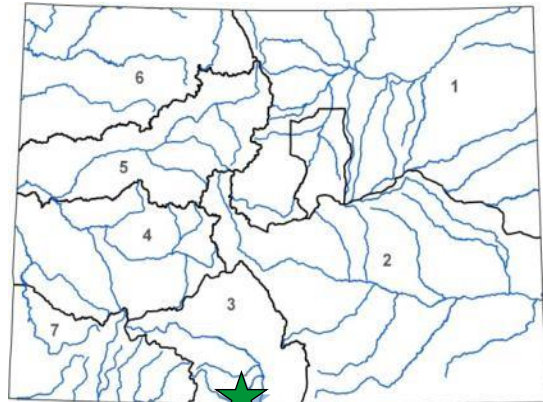


Alpha Hay Farms Augmentation

Special Improvement District No. 3 of the RGWCD

November 2022 Board Meeting

L O A N D E T A I L S	
Project Cost:	\$5,158,575
CWCB Loan (with 1% Service Fee):	\$2,580,550
Loan Term and Interest Rate:	30 Yrs @ 2.50%
Funding Source:	Severance Tax Perpetual Base Fund
B O R R O W E R T Y P E	
Agriculture	Municipal Commercial
70%	15% Low - 0% Mid - 0% High 15%
P R O J E C T D E T A I L S	
Project Type:	Water Rights Purchase
Average Annual Withdrawals:	30,000 AF



The Special Improvement District No. 3 of the Rio Grande Water Conservation District (Subdistrict No. 3) was established in 2017 to provide well owners in the Conejos Response Area a system to promote responsible groundwater management and remedy injuries to surface water rights from groundwater use in its service area. The Subdistrict currently consists of 166 wells, with additional well owners expressing an intent to contract for coverage.

L O C A T I O N	
County:	Conejos
Water Source:	Conejos River, Groundwater
Drainage Basin:	Rio Grande
Division:	3 District: 22

The project will include the purchase of land and associated water rights for two center-pivot irrigation circles northeast of Alamosa, the construction of pipeline and/or augmentation stations, and necessary measurement devices. The water right purchase will include 433.91 AF of surface water and 89 AF of groundwater consumptive use to replace depletions to the Conejos River and the Rio Grande. Currently, the water is leased by agreement with the landowner, Alpha Hays Farms, LLC. and is in an approved Substitute Water Supply Plan. The purchase will be made in the spring of 2023 with project bidding and construction occurring soon after.

