



**COLORADO**

**Colorado Water  
Conservation Board**

Department of Natural Resources

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**TO:** Colorado Water Conservation Board Members

**FROM:** Joshua Godwin, P.E., Project Manager  
Kirk Russell, P.E., Finance Section Chief

**DATE:** March 13-14, 2024 Board Meeting

**AGENDA ITEM:** 6a. Water Project Loans  
Trinchera Groundwater Management Subdistrict  
Water Rights Purchase

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#### **Staff Recommendation for Loan**

Staff recommends the Board approve a loan not to exceed \$2,323,000 (\$2,300,000 for Project costs and \$23,000 for the 1% service fee) to the Groundwater Management Subdistrict of the Trinchera Water Conservancy District, acting by and through its water activity enterprise, for costs associated with the Water Rights Purchase, from the Construction Base Fund. The loan term shall be 30 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 Groundwater Management Subdistrict of the Trinchera Water Conservancy District (Subdistrict), is applying for a CWCB blended interest rate loan for a Water Rights Purchase (Project). The Subdistrict must provide a sufficient water source to replace stream depletions from groundwater withdrawals and maintain sustainable use of the unconfined aquifer. If the Subdistrict is unable to replace stream depletions, then all of the Subdistrict's 179 wells may be forced to shut off until the depletions are remedied. The Subdistrict entered into agreement in 2022 to lease and subsequently purchase 10 unconfined wells and associated water rights. The Project is the purchase of these 10 wells and associated water rights in the unconfined aquifer that will be used to deliver water to the Rio Grande via the Augmentation Pipeline that was funded by a CWCB loan that was approved by the Board at the November 2021 meeting and constructed in 2022. The Project cost is \$2,500,000 of which \$200,000 was paid by the Subdistrict once the lease and purchase agreement was signed. The Subdistrict is requesting a loan for 100% of the remaining \$2,300,000 Project costs. See attached Project Data Sheet for a location map and Project summary.



### **Borrower - Groundwater Management Subdistrict of the Trinchera Water Conservancy District**

The Subdistrict is within the San Luis Valley that encompasses about 3,200 square miles of land in southern Colorado including Rio Grande River, Conejos River, and Trinchera Creek within the Rio Grande basin.

The Trinchera Water Conservancy District (District) operates within the northern portion of Costilla County known as the Trinchera Creek Drainage. The District was formed by decree of the District Court in 1968. The Board of Directors are appointed by the District Judge for Costilla County. The Subdistrict was established within the District for the purpose of conserving and stabilizing the water supply and groundwater storage within the District.

The Subdistrict was organized September 3, 2008 by the District Court for Costilla County. The District Court for Water Division No. 3 confirmed the ability of the Subdistrict to pursue a Ground Water Management Plan. In February of 2017, the Subdistrict established a water activity enterprise to be known as the Trinchera Groundwater Management Subdistrict Water Activity Enterprise. The Subdistrict's revenue is primarily from assessments. The 5-member Board of Directors of the Subdistrict act as the governing body of the Enterprise and has the power to borrow and commit to repayment of funds. Assessments are billed - per well and water used in the previous year - and collected with Costilla County's annual property taxes. Failure to pay results in a lien on the landowner's property.

### **Background**

The groundwater wells within the Subdistrict are required to replace injurious depletions to the Rio Grande, Conejos River, and Trinchera Creek. The depletions to Trinchera Creek have been addressed through the use of forbearance and no call agreements with the surface water right holders on Trinchera Creek. The Subdistrict continues to look for reliable sources of replacement water to replace the 3,109 AF of average depletions occurring on the Rio Grande and Conejos Rivers. The total historic consumptive use associated with all of the irrigation wells is 24,888 AF. A dry-up of wells will be used to provide replacement water for the Rio Grande and Conejos Rivers.

Members of the Subdistrict are landowners within the District who rely on groundwater for all or part of their commercial, industrial and/or irrigated agricultural practices within the area defined by the Rio Grande Decision Support System (RGDSS) Groundwater Model and the Rules Governing the Withdrawal of Groundwater in Water Division 3, District Court, Water Division No. 3, Decree 15CW3024. The RGDSS Groundwater Model has calculated stream depletions occurring to surface water streams caused by wells withdrawing water from the groundwater system that may cause injury to senior surface water rights. The State Engineer has promulgated Groundwater Rules that will have a direct impact on the future use of groundwater within the Subdistrict. Under the Groundwater Rules, non-exempt wells can only continue groundwater withdrawals if they have either: an individual Plan for Augmentation; a Substitute Water Supply Plan; or their well is included in a Groundwater Management Plan with an Annual Replacement Plan. The Subdistrict's Annual Replacement Plan must demonstrate there is a sufficient source of replacement water available to replace injurious stream depletions resulting from groundwater withdrawals.

On March 15th, 2022, the Subdistrict entered into a lease and contingent purchase agreement with the owner of 10 wells and their respective water rights to cease irrigating and instead provide replacement water for annual depletions with the option to purchase these wells before the contract expires April 30th, 2025. The total historic consumptive use of the ten wells is 985 AF. Five of the 10 wells are connected to an augmentation pipeline and will be a physical supply of augmentation as well as a historical source of consumptive use. The other 5 wells may be connected to the pipeline in the future

for a physical source should the need arise and are currently serving as source of historic consumptive use. The Augmentation Pipeline was funded via a CWCB loan approved by the Board at the November 2021 board meeting and was constructed in 2022.

The Subdistrict has been using these water rights for augmentation under a Substitute Water Supply Plan (SWSP) since 2022 and will apply for a permanent change in water court after closing this year and before the end of 2026.

#### Loan Feasibility Study

Jason Lorenz, P.E., Agro Engineering, Inc. prepared the Loan Feasibility Study titled, “Feasibility of Trinchera Unconfined Augmentation Well Purchase,” dated September 2023. The feasibility study was prepared in accordance with CWCB guidelines and includes preliminary engineering, an analysis of alternatives, and costs. Financial statements were prepared and provided by the Subdistrict.

#### Water Rights

The wells associated with the Water Rights Purchase are listed in Table 1. Five of the wells are already connected to the Augmentation Pipeline constructed in 2022 and are available for physical augmentation supplies. In total, the historic consumptive use for all wells is 985 AF.

**TABLE 1: WELLS ASSOCIATED WITH PROJECT**

| Name                  | WDID    | Decree                 |
|-----------------------|---------|------------------------|
| Permit No. 18652-F*   | 3505022 | W3272 Well No. 26      |
| Permit No. 46210-F*   | 3505621 | 10CW0008 Well No. 21-R |
| Permit No. 46211-F*   | 3505606 | 10CW0008 Well No. 21-S |
| Permit No. 18647-F*   | 3505016 | W3272 Well No. 20      |
| Permit No. 18649-F    | 3505020 | W3272 Well No. 24      |
| Permit No. 45647-F    | 3505587 | 10CW0008 Well No. 27-S |
| Permit No. 46309-F    | 3505604 | 10CW0008 Well No. 3-S  |
| Permit No. 18653-F-R  | 3505588 | 10CW0008 well No. 27-R |
| Permit No. 46262-R-R  | 3505631 | 10CW0008 Well No 3-R   |
| Permit No. 18651-F-R* | 3505593 | 10CW0008 Well No. 25-R |

\* Wells that are currently connected to the Augmentation Pipeline and able to provide physical supplies.

#### Project Description

The purpose of the Project is to provide a reliable water source to replace stream depletions resulting from groundwater withdrawals and comply with the State Engineer’s Office Rules in Water Division No. 3.

**Alternative 1 - No Action:** This alternative would result in an unreliable supply of replacement water that would result in the Subdistrict wells being forced to cease pumping, when sources of replacement water available are insufficient to replace depletions. The economic impact would be devastating to the area, so this is not the preferred alternative.

**Alternative 2 - Surface Water Rights Purchase and Forbearance Agreements:** The Subdistrict has not found surface water rights for sale with enough historical consumptive use to fully replace the depletions to the Rio Grande and Conejos Rivers. Also surface water rights are dependent on stream flows and the amount of water available fluctuates from year to year placing some uncertainty on how much water will be available in a given year relative to the replacement need. The timing of the

water right coming into priority may not match the timing of depletions to the streams. To address the fluctuation of supply and timing, storage must also be procured. The Subdistrict continues to evaluate surface water rights as they become available and suitable for replacement of Subdistrict depletions. To date, the amount of consumptive use available is not sufficient to replace depletions.

Forbearance agreements are contracts to pay the surface water right holder for injury occurring from depletions. Forbearance is an unreliable source as it is controlled by streamflow and the resulting calling right. If it is not a ditch forbearing with the Subdistrict, then it is not available as a replacement source on that day. Additionally, forbearance costs have dramatically increased with the demand for water making this an infeasible alternative to rely on.

**Selected Alternative 3 - Purchase of 10 Unconfined Wells:** The Subdistrict has constructed a pipeline for delivery of augmentation water from these wells and has operated under a lease and purchase agreement for the past two years. The purchase of these wells would supply the largest single source of augmentation water owned by the Subdistrict to date. These wells would be a reliable supply for the replacement of one third of the Subdistricts depletions. The wells are physically capable of operating at full capacity and with no need to rehabilitate in the foreseeable future. The Project cost is set through a signed agreement at \$2,500,000 and is shown in Table 2.

TABLE 2: PROJECT COSTS

| Tasks                        | Cost               |
|------------------------------|--------------------|
| Lease and Purchase Agreement | \$200,000*         |
| Purchase of Water Rights     | \$2,300,000        |
| <b>TOTAL</b>                 | <b>\$2,500,000</b> |

\* Paid by the Subdistrict at the signing of the lease and purchase agreement in March of 2022..

**Permitting:** The wells listed in Table 1 are permitted through the Division of Water Resources. The Subdistrict obtained and has continued to operate under an SWSP for the 10 wells following the signing of the lease and purchase agreement in 2022. Following the closing of the agreement, the Subdistrict will apply for a change case through the water court process.

**Schedule:** The depletions began being replaced using these wells for the 2022 Annual Replacement Plan on May 1st 2022 through the Augmentation Pipeline. The Subdistrict has an existing contract with the owner of the wells to purchase before the expiration date of April 30th, 2025 and plans to do so when funding is available.

### Financial Analysis

Table 3 provides a summary of the Project's financial aspects. The Subdistrict qualifies for a blended interest rate of 2.10% for a 30-year term (Ownership: 98% Agricultural, 1% Low-Income Municipal, 1% Commercial). The Subdistrict charges a \$500 per well assessment in addition to a variable fee rate - charged per AF used of consumption allocation<sup>1</sup> - that is set annually by the board of directors to meet the financial obligations of the Subdistrict.

1. In an effort to maintain a sustainable aquifer and to meet the requirement of stream depletions, the Subdistrict sets a total consumption allocation to be shared pro rata by the members. Members that exceed their allocation are subject 10 times the variable fee rate for the amount exceeded.

**TABLE 3: FINANCIAL SUMMARY**

|  |             |
|--|-------------|
| Project Cost   | \$2,500,000 |
| CWCB Loan Amount   | \$2,300,000 |
| CWCB Loan Amount (Including 1% Service Fee)                | \$2,323,000 |
| CWCB Annual Loan Payment                                   | \$105,153   |
| CWCB Annual Loan Obligation (1 <sup>st</sup> Ten Years)    | \$115,668   |
| Administrative Assessment per Well                         | \$500       |
| Current Variable Assessment per AF                         | \$30.36     |
| Variable Assessment per AF to Cover Annual Loan Repayment* | \$8.84      |

\* Based on 2023's consumption allocation of 13,080 AF.

**Creditworthiness:** The Subdistrict has two existing CWCB loans: the first loan (CT 2022-3040) is for the construction of the Augmentation Pipeline that has yet to be substantially completed and the second loan (CT 2023-2846) is for joint purchase - in collaboration with the Special Improvement District No. 3 of the Rio Grande Water Conservation District - of the Alpha Hay Farms water rights. Both are detailed in Table 4 below. Financial ratios are shown in Table 5.

**TABLE 4: EXISTING DEBT**

| Lender            | Original Balance | Current Balance    | Annual Payment   | Maturity Date | Collateral |
|-------------------|------------------|--------------------|------------------|---------------|------------|
| CWCB CT2022-3040* | \$841,624        | \$841,624          | \$38,005         | 2054          | Revenues   |
| CWCB CT2023-2846  | \$2,251,290      | \$2,251,290        | \$101,907        | 2053          | Revenues   |
| <b>Total</b>      |                  | <b>\$3,092,914</b> | <b>\$139,912</b> |               |            |

\* This loan has not been substantially completed, but additional disbursements are unlikely. Values are based on current disbursements and are applied to the "Future w/ Project" column in Table 5.

**TABLE 5: FINANCIAL RATIOS**

| Financial Ratio   | Past Years   | Future w/ Project                                     |
|---|--|---|
| Operating Ratio (revenues/expenses)<br>weak: <100%   typical: 100% - 120%   strong: >120%                             | 125%<br>(strong)<br>\$525K/\$420K                    | 100%<br>(typical)<br>\$577K/\$577K                    |
| Debt Service Coverage Ratio<br>(revenues-expenses)/debt service<br>weak: <100%   typical: 100% - 125%   strong: >125% | 203%<br>(strong)<br><u>(\$525K-\$318K)</u><br>\$102K | 100%<br>(typical)<br><u>(\$577K-\$318K)</u><br>\$259K |
| Cash Reserves to Current Expenses<br>weak: <50%   typical: 50% - 100%   strong: >100%                                 | 256%<br>(strong)<br>\$1.074M/\$420K                  | 186%<br>(strong)<br>\$1.074M/\$577K                   |

**Collateral:** Security for this loan will be a pledge of the revenues backed by a rate covenant, as well as the Project itself (water rights associated with the 10 wells listed in Table 1). This security is in compliance with the CWCB Financial Policy #5 (Collateral).

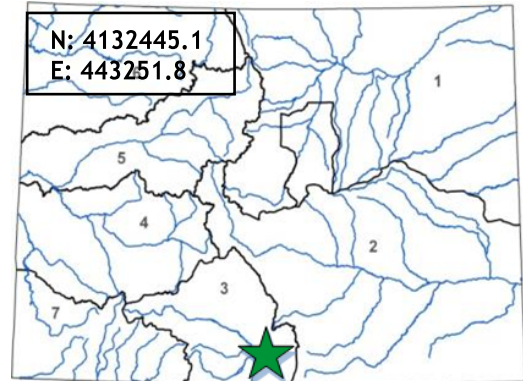
cc: Monty Smith, President, Trinchera Groundwater Management Subdistrict  
Judy Lopez, Project Director, Trinchera Groundwater Management Subdistrict  
Jennifer Mele, Colorado Attorney General's Office

Attachments: Water Project Loan Program - Project Data Sheet





| LOAN DETAILS - DRAFT             |                              |
|----------------------------------|------------------------------|
| Project Cost:                    | \$2,500,000                  |
| CWCB Loan (with 1% Service Fee): | \$2,323,000                  |
| Loan Term and Interest Rate:     | 30 Yrs @ 2.10%               |
| Funding Source:                  | Construction Fund            |
| BORROWER TYPE                    |                              |
| Agriculture                      | Municipal Commercial         |
| 98%                              | 1% Low - 0% Mid - 0% High 1% |
| PROJECT DETAILS                  |                              |
| Project Type:                    | Water Rights Purchase        |
| Average Annual Diversions:       | 24,888 AF                    |



The Trinchera Groundwater Management Subdistrict of the Trinchera Water Conservancy District (Subdistrict), was formed in 2018 in order to pursue a Ground Water Management Plan. The Subdistrict consists of 179 wells in both confined and unconfined aquifers.

| LOCATION        |              |
|-----------------|--------------|
| County:         | Costilla     |
| Water Source:   | Rio Grande   |
| Drainage Basin: | Rio Grande   |
| Division: 3     | District: 35 |

The Project is to purchase the water rights associated with 10 unconfined wells near the confluence of Trinchera Creek and the Rio Grande. The wells will be used as a source of historical consumption of 985 AF, with half also being used as a physical supply of water, and half as a potential future physical supply of water. This project is a follow up to a CWCB loan approved in November 2021 to the Subdistrict that funded an augmentation pipeline from irrigation wells - in this purchase - to the Rio Grande. This water is used to offset stream depletions by Subdistrict members. Of these wells, 5 are already connected to the pipeline. The closing date of the lease purchase agreement is scheduled for April 2025.

