



**COLORADO**  
**Colorado Water Conservation Board**  
Department of Natural Resources

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Jared Polis, Governor  
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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 23-34, 2023 Board Meeting

**AGENDA ITEM:** 15a. Change to Existing Loan  
Special Improvement District No. 5 of the Rio Grande Water Conservation District  
Saguache Pipeline Project

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### Staff Recommendation

Staff recommends the Board approve a loan not to exceed \$6,080,200 (\$6,020,000 for Project costs and \$60,200 for the 1% service fee) to the Special Improvement District No. 5 of the Rio Grande Water Conservation District, acting by and through its water activity enterprise, for costs associated with the Saguache Pipeline, from the Construction Fund. The loan term will remain 30 years at an interest rate of 1.20% per annum. This is an increase of \$1,187,760 (\$1,176,000 for Project costs and \$11,760 for the 1% service fee). Security for the loan shall be in compliance with CWCB Financial Policy #5.

### Introduction/Background

The Special Improvement District No. 5 of the Rio Grande Water Conservation District (Subdistrict No. 5) received approval of a \$4,892,440 CWCB loan (CT2021-3846) to finance the Saguache Pipeline (Project) at the March 2021 CWCB Board Meeting. Under the Rules Governing the Withdrawal of Groundwater in Water Division 3, Subdistrict No. 5 must provide a sufficient water source to replace stream depletions on Saguache Creek due to groundwater well withdrawals. In order to replace these depletions, Subdistrict No. 5 originally intended to construct a 3-mile long pipeline to connect three groundwater wells to Saguache Creek. After further analysis, Subdistrict No. 5 has decided to instead purchase properties closer to Saguache Creek, construct two new wells, and install a much shorter pipeline. The new project scope addresses the same basic need to replace stream depletions on Saguache Creek, but while the up-front cost is higher, the long-term operating costs will be lower. The total Project cost is now estimated to be \$6,020,000. See the attached Project Data Sheet for a location map and a Project Summary and the original board memo dated March 2021.



**Project Update**

After the March 2021 approval of the original Project loan request, Subdistrict No. 5 discovered that a section of county road necessary for the pipeline alignment did not have an easement across private lands. Subsequent discussions with Saguache County indicated that the process of securing a 1041 permit for the crossing would, at a minimum, significantly delay the Project. In response, Subdistrict No. 5 purchased the Hazard Ranch, a property immediately adjacent to Saguache Creek. The water rights associated with the three wells contemplated in the original project scope will be changed to locations on the Hazard Ranch, eliminating the need for a long pipeline or a 1041 permit. An updated Project cost estimate is provided in Table 1.

**TABLE 1: UPDATED PROJECT COST ESTIMATE**

Tasks	Original	Current
Engineering/Project Management/Legal/Contingency	\$355,000	\$446,000
Augmentation Wells	\$0	\$421,000
Pipelines	\$2,290,000	\$95,000
Pumps, Pumping Stations, Electrical, Flow Meters, Erosion Control, and Control Systems	\$174,000	\$308,000
CDOT Highway Crossing Pipe Bore	\$75,000	\$0
Hazard Ranch Water and Land Purchase	\$0	\$2,800,000
North Star Water and Land Purchase	\$1,950,000	\$1,950,000
<b>TOTAL</b>	<b>\$4,844,000</b>	<b>\$6,020,000</b>

**Permitting:** Subdistrict No. 5 plans to temporarily change the water use from irrigation to augmentation through the Substitute Water Supply Plan process for the first couple of years. After this time, Subdistrict No. 5 plans to obtain a water right through water court for well augmentation use. A purchase agreement between Subdistrict No. 5 and the North Star owner has not been finalized, but is underway.

**Schedule:** The water and land purchases associated with this project will occur as soon as funding is available. Subdistrict No. 5 anticipates construction starting by the spring of 2023.

**Financial Analysis**

Table 2 provides a summary of the Project’s financial aspects. The loan term shall remain 30 years. The interest rate shall remain a blended interest rate of 1.20% per annum (Ownership: 98.3% Agricultural, 1.7% Commercial) as approved at the March 2021 Board Meeting.

**TABLE 2: UPDATED FINANCIAL SUMMARY**

Project Item	Original Loan	Increased Loan
Project Cost	\$4,844,000	\$6,020,000
CWCB Loan Amount	\$4,844,000	\$6,020,000
CWCB Loan Amount (Including 1% Service Fee)	\$4,892,440	\$6,080,200
CWCB Annual Loan Payment	\$195,160	\$242,539
CWCB Annual Loan Obligation (1 <sup>st</sup> Ten Years)	\$214,676	\$266,793
Average Annual Acre-Foot Pumped	38,300	38,300
Current Average Fee per Acre-Foot	\$27.82	\$27.82
Annual Loan Obligation per Acre-Foot Pumped	\$5.61	\$6.97
Future Average Fee per Acre-Foot (Estimate)	\$27.82 <sup>1</sup>	\$29.18 <sup>1</sup>

<sup>1</sup>Rates were previously set to adequately cover the original loan repayment obligation and only need to be adjusted to cover the increased obligation of \$52,117 (\$266,793 - \$214,676).

**Creditworthiness:** In May 2022, Subdistrict No. 5 acquired Hazard Ranch. The price for this purchase was \$2.8M. Subdistrict No. 5 obtained a 3-year bridge loan with an adjustable interest rate starting at 7% from the seller. A portion of the CWCB Water Projects Loan will be used to pay down the outstanding balance. Subdistrict No. 5 has no other existing debt.

**TABLE 3: UPDATED FINANCIAL RATIOS**

Financial Ratio	Past Years	Future w/ Project	Future w/ Increase
Operating Ratio (revenues/expenses) weak: <100%   average: 100% - 120%   strong: >120%	N/A	110% (average) \$444K/\$402K	100% (average) \$454K/\$454K
Debt Service Coverage Ratio (revenues-expenses)/debt service weak: <100%   average: 100% - 120%   strong: >120%	N/A	119% (average) (\$444K-\$188K) \$215K	100% (average) (\$454K-\$187K) \$267K
Cash Reserves to Current Expenses weak: <50%   average: 50% - 100%   strong: >100%	N/A	11% (weak) \$43K/\$402K	9% (weak) \$43K/\$454K

**Collateral:** Security for this loan will remain a pledge of Subdistrict No. 5 assessment revenues. 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

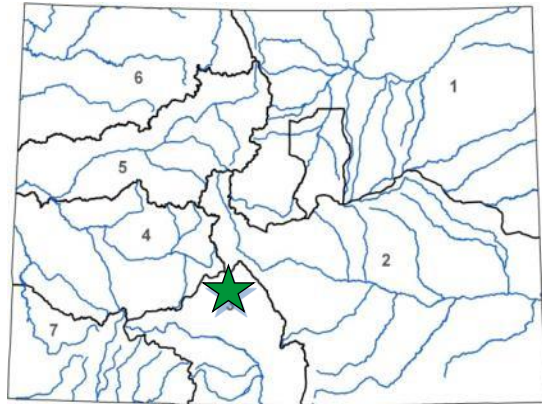
Attachments: Water Project Loan Program - Project Data Sheet  
Original Board Memo (March 2021)



(Increase)

**Saguache Pipeline Project**  
**Special Improvement District No. 5**  
**Of the Rio Grande Water Conservation District**  
 March 2021 Board Meeting

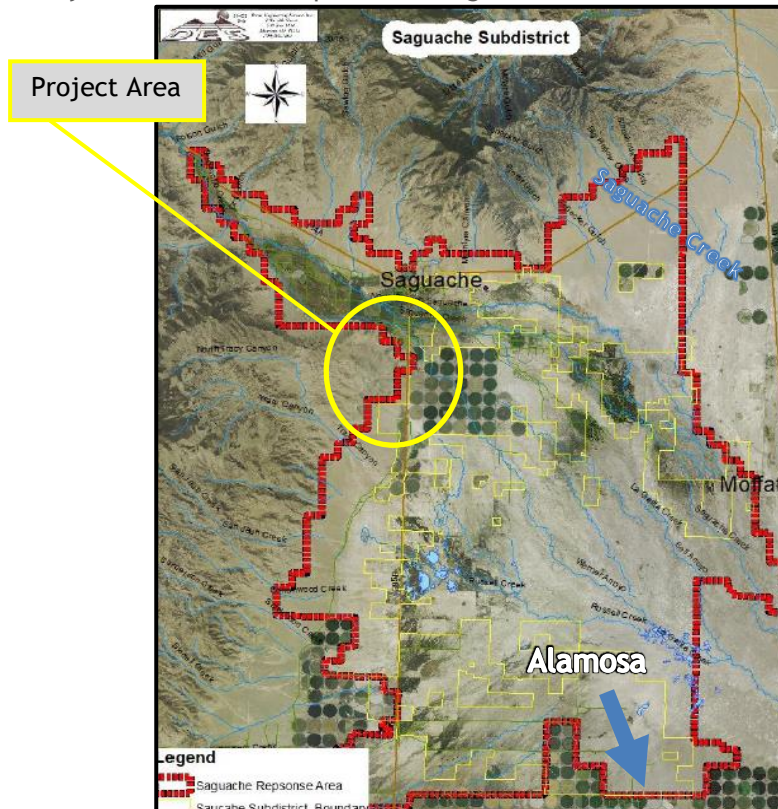
L O A N   D E T A I L S	
Project Cost:	\$6,020,000
CWCB Loan (with 1% Service Fee):	\$6,080,200
Loan Term and Interest Rate:	30 years @ 1.20%
Funding Source:	Construction Fund
B O R R O W E R   T Y P E	
Agriculture	Municipal      Commercial
98.3%	0% Low - 0% Mid - 0% High      1.7%
P R O J E C T   D E T A I L S	
Project Type:	Pipeline
Average Annual Withdrawals:	33,400 AF



The Rio Grande Water Conservation District (Subdistrict No. 5) was established in 2017 to address the needs of its water users and to aid 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.

L O C A T I O N	
County:	Saguache
Water Source:	Saguache Creek
Drainage Basin:	Rio Grande
Division:	3      District: 26

Subdistrict No. 5 currently consists of 181 wells, and will owe its first depletions on March 15, 2021. Subdistrict No. 5 serves members who primarily farm grass hay, grass pasture, and alfalfa. The Project includes purchase of three sprinkler quarter sections, and construction of a pump station, a control system, and approximately 3.5 miles of pipeline in order to pump the lands historical consumptive use water from the confined aquifer to Saguache Creek. This will allow the Subdistrict No. 5 to protect existing wells and continue groundwater withdrawals for irrigation within its boundary. Construction is expected to begin in March 2021.





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**TO:** Colorado Water Conservation Board Members

**FROM:** Rachel Pittinger, P.E., Project Manager  
Kirk Russell, P.E., Finance Section Chief

**DATE:** March 10-11, 2021 Board Meeting (**Updated March 12, 2021**)

**AGENDA ITEM:** 19a. Water Project Loans  
Rio Grande Water Conservation District Subdistrict No. 5 - Saguache Pipeline

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**Staff Recommendation for Loan (Board approved Staff Recommendation March 11, 2021)**

Staff recommends the Board approve a loan not to exceed \$4,892,440 (\$4,844,000 for Project costs and \$48,440 for the 1% service fee) to the Rio Grande Water Conservation District Subdistrict No. 5, acting by and through its water activity enterprise, for costs associated with the Saguache Pipeline, from the Construction Fund. The loan term will be 30 years at an interest rate of 1.20% per annum. Security for the loan shall be in compliance with CWCB Financial Policy #5.

Additionally, staff recommends the following loan contract conditions:

1. Obtain an executable purchase agreement between the District and the well owner and submit to CWCB a copy of the agreement before any disbursement of loan funds occur.
2. Submit to CWCB needed Project easement agreements before pipeline or Project components are constructed.

**Introduction**

The Rio Grande Water Conservation District (District) Subdistrict No. 5, acting by and through its water activity enterprise, is applying for a CWCB blended interest rate loan for the Saguache Pipeline (Project). The Project also includes the purchase of three wells that will be used to deliver water in the pipeline. The Project is located in the northwesterly portion of the San Luis Valley in Saguache County, near Saguache. Under the Rules Governing the Withdrawal of Groundwater in Water Division 3, the rules will have a direct impact on the future use of groundwater in the District. Starting March 15, 2021, Subdistrict No. 5 must provide a sufficient water source to replace stream depletions from groundwater withdrawals. If Subdistrict No. 5 is unable to replace stream depletions, then nearly 200 irrigation wells may be forced to shut off until the depletions are remedied. The Project cost is estimated at \$4,844,000. The District's Subdistrict No. 5 is requesting a loan for 100% of Project costs. See attached Project Data Sheet for a location map and Project summary.



### **Borrower - Rio Grande Water Conservation District Subdistrict No. 5**

The District is within the San Luis Valley that encompasses about 3,200 square miles of land in southern Colorado including Alamosa, Rio Grande, Conejos and portions of Saguache and Mineral Counties within the Rio Grande River basin.

The District was created by the Colorado General Assembly and formed in 1967. The District was created to protect, enhance, and develop water resources in the Rio Grande River basin. The District is a corporate body and a political subdivision. The District is authorized to levy an ad valorem tax on all real property located within the District, collect fees assessments and surcharges. In addition, the District is also authorized to contract with Federal, State and local agencies, and individuals. Under section 37-48-108 C.R.S., the District is authorized to form Special Improvement Districts, or "Subdistricts", which address specific needs and purposes for groups of water users in the District.

Subdistrict No. 5 of the District was established by the Saguache County District Court on December 18, 2017, in Case 2017CV30015. The overall purpose of this Subdistrict No. 5 is to provide a community-oriented water management alternative to individual augmentation plans or state-imposed regulations limiting the use of wells in Water Division No. 3. Additionally, to provide a mechanism through which a group of well users in Subdistrict No. 5 can work collaboratively to develop and implement a system of self-regulation using economic-based incentives and other management tools that promote responsible groundwater management and that remedies the injury to senior surface water rights that result from groundwater use from wells within Subdistrict No. 5. The Subdistrict No. 5 currently consists of 181 wells that withdraw an average of 33,400 acre-feet (AF) of groundwater. There are additional well owners who have stated their intent to contract with the Subdistrict No. 5 and they will also rely on the Subdistrict No. 5 to remedy their injurious stream depletions. The fees assessed by the Subdistrict No. 5 are a per well Administrative Fee and a per acre-foot Groundwater Withdrawal Fee. There is a 5-member Board of Managers. A Board of Manager must be a landowner or a full-time employee of a landowner charged with the management and operation of farming, ranching or other activities on land that involves the beneficial use of water from a well within Subdistrict No. 5. As determined by the Board of Managers, the enterprise will be responsible for its allocation of Subdistrict No. 5 debts, other financial obligations, revenue bond, or other evidences of indebtedness as shown in bond or contract covenants, documentation of evidence of indebtedness, budget, or resolution of Subdistrict No. 5.

### **Background**

Members of the Subdistrict No. 5 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 or unreasonably interfere with the state's ability to fulfill its obligations under the Rio Grande Compact. In order to remedy the injury or interference, the State Engineer has promulgated Groundwater Rules that will have a direct impact on the future use of groundwater within Subdistrict No. 5. 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 and Annual Replacement Plan. The Subdistrict No. 5 Annual Replacement Plan must demonstrate there is a sufficient source of replacement water available to replace injurious stream depletions resulting from groundwater withdrawals. This Subdistrict No. 5 plans to remedy stream depletions which may occur to San Luis



Creek and the Rio Grande as a result of the groundwater withdrawals from wells within Subdistrict No. 5.

The proposed water source for the Project will come from three separate irrigation wells which have historically irrigated acres under center pivot sprinklers. The irrigation under the center pivots will cease, acres will be dried up, and the historical consumptive use from the center pivots will be used to remedy depletions from the Subdistrict No. 5 wells. The crops under the irrigated ground which will be dried up have been in an alfalfa and small grain rotation for the last 20 years. It is anticipated that each irrigated area under the center pivots will yield an annual average historical consumptive use of  $\pm 250$  AF per pivot. The total annual amount of 750 AF is expected to be available to remedy depletions to Saguache Creek.

Ultimately, the District intends to proceed in Water Court to obtain a water right and change the wells use to augmentation. In the near-term, the District will prepare a Substitute Water Supply Plan. The Subdistrict No. 5 has been working toward solutions for compliance by a March 15, 2021 date for over two years. Solutions and alternate solutions to this Project have been considered and discussed within Subdistrict No. 5 and the division engineer.

#### Loan Feasibility Study

Mr. Chris Ivers, District's Program Manager, with assistance from Mr. Clinton Phillips, P.E., Davis Engineering Services, Inc. prepared the Loan Feasibility Study titled, "Loan Feasibility Study for Saguache Pipeline," dated February 2021. 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 District and were prepared by Wall, Smith, Bateman Inc., CPA. An appraisal will be provided by Subdistrict No. 5 for the three wells and well appurtenances included in this Project.

#### Water Rights

Three separate wells that historically irrigated three quarter sections will be purchased by Subdistrict No. 5. Each of the quarter sections are irrigated using groundwater wells through a sprinkler. The wells associated with the Project are shown in Table 1.

TABLE 1: WELLS ASSOCIATED WITH PROJECT

Name	WDID	Permit Approval Date
Permit No. 20210-R	2605690	July 30, 1975
Permit No. 20228-R	2605685	July 30, 1975
Permit No. 18450-F	2605057	August 21, 1975

#### Project Description

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

**Alternative 1 - No Action:** This alternative would result in curtailment of approximately 200 groundwater irrigation wells throughout the entire Subdistrict No. 5 area. The economic impact would be devastating to the area, so this alternative is not desired.

**Alternative 2 - Surface Water Rights Purchase and Well Injury Payment Agreements:** The majority of surface water rights along Saguache Creek are under conservation easements which do not allow the

use of the surface water rights to be changed to augmentation through water court. Subdistrict No. 5 has limited options available for purchasing surface water rights. As a part to this alternative, a Well Injury Payment Agreement was analyzed. This agreement would allow the water right owner and Subdistrict No. 5 to determine together a fair compensation for depletions. The Subdistrict No. 5 has made several attempts and effort to discuss a Well Injury Payment Agreement, but this alternative was not selected because of the lack of endorsement in the community surrounding this idea.

**Selected Alternative 3 - Saguache Pipeline:** This alternative considers the use of augmentation wells that will pump water directly to Saguache Creek through a pipeline. The augmentation wells will pump the historical consumptive use from irrigated land. The pipeline will consist of approximately 3.5 miles (17,000 feet) of pipe buried approximately 5 feet deep. Three of the existing irrigation wells will be piped to a junction point and delivered to a pumping station, and then piped to Saguache Creek. The Project is estimated at \$4,844,000 and is shown in Table 1.

**TABLE 2: ESTIMATED PROJECT COSTS**

Tasks	Cost
3 Irrigation wells	\$1,200,000
10" Pipeline, 2,700 lineal feet	\$150,000
15" Pipeline, 7,850 lineal feet	\$625,750
18" Pipeline, 16,800 lineal feet	\$1,512,000
CDOT Highway Crossing pipe bore	\$125,000
Pumping Station and Control System	\$240,000
<b>Subtotal</b>	<b>\$4,440,750</b>
Engineering/Project Management/Legal Contingency	\$485,000
<b>TOTAL</b>	<b>\$4,844,000</b>

**Permitting:** Subdistrict No. 5 plans to temporarily change the water use from irrigation to augmentation through the Substitute Water Supply Plan process for the first couple of years. After this time, Subdistrict No. 5 plans to obtain a water right through water court for well augmentation use. County easement approval will be required to install the pipeline within the county road right-of-way. Subdistrict No. 5 is currently working with the county to obtain easements for the Project. A Colorado Department of Transportation Utility permit will be obtained for a pipe bore. A purchase agreement between Subdistrict No. 5 and the well owner has not been finalized, but is underway.

**Schedule:** Subdistrict No. 5 owe their first depletions on March 15, 2021 and construction is anticipated to begin spring of 2021.

**Financial Analysis**

Table 3 provides a summary of the Project’s financial aspects. The Subdistrict No. 5 qualifies for a blended interest rate of 1.20% for a 30-year term (Ownership: 98.3% Agricultural, 1.7% Commercial).



**TABLE 3: FINANCIAL SUMMARY**

Project Cost	\$4,844,000
CWCB Loan Amount	\$4,844,000
CWCB Loan Amount (Including 1% Service Fee)	\$4,892,440
CWCB Annual Loan Payment	\$195,160
CWCB Annual Loan Obligation (1 <sup>st</sup> Ten Years)	\$214,676
Approximate Number of Irrigated Acres for 3 center pivots (Acre)	375
Estimated Historical Consumptive Use for 3 center pivots (AF)	750
Current Average Administrative Assessment per well	\$485
Current Average Groundwater Assessment per AF	\$12.08
Estimated Future Administrative Assessment per well	\$485
Estimated Future Groundwater Assessment per AF	\$12.08

**Creditworthiness:** The Subdistrict No. 5 has no debt. Based on the current irrigation practice, the average Groundwater Withdrawal assessment per AF is \$12.08 and the average Administrative assessment is \$485/well.

**TABLE 4: FINANCIAL RATIOS**

Financial Ratio	Past Years	Future <sup>1</sup> w/ Project
Operating Ratio (revenues/expenses) weak: <100%   average: 100% - 120%   strong: >120%	n/a	110% (average) \$444K/\$402K
Debt Service Coverage Ratio (revenues-expenses)/debt service weak: <100%   average: 100% - 120%   strong: >120%	n/a	119% (average) <u>(\$444K-\$188K)</u> \$215K
Cash Reserves to Current Expenses weak: <50%   average: 50% - 100%   strong: >100%	n/a	11% (weak) <sup>2</sup> \$43K/\$402K

<sup>1</sup> Ratios are based on the Subdistrict No. 5 budget for 2021.

<sup>2</sup> Table 4 assumes excess revenues will become cash reserves.

**Collateral:** Security for this loan will be a pledge of the Subdistrict No. 5 assessment revenues. This security is in compliance with the CWCB Financial Policy #5 (Collateral).

cc: Chris Ivers, Program Manager, Rio Grande Water Conservation District Subdistrict No. 5  
 Jennifer Mele, Colorado Attorney General's Office

Attachments: Water Project Loan Program - Project Data Sheet