

SPECIAL IMPROVEMENT DISTRICT No. 1 OF THE
RIO GRANDE WATER CONSERVATION DISTRICT

ANNUAL REPLACEMENT PLAN
2025 PLAN YEAR

Prepared

April 15, 2025

By

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2015CW3024 – Rules Governing the Withdrawal of Groundwater in Water Division No. 3 (the Rio Grande Basin) and Establishing Criteria for the Beginning and End of the Irrigation Season in Water Division No. 3 for All Irrigation Water Rights

Rule 11. Subdistrict’s Proposed ARP

11.1 By April 15th of each year, a Subdistrict with an approved Groundwater Management Plan must submit to the State and Division Engineers a proposed ARP that includes the following:

11.1.1 A database of all Wells to be covered by the ARP, which will be updated annually. The database of Subdistrict Wells will be provided in hard copy or electronic format, at the reasonable discretion of the State and Division Engineers and will include:

- 11.1.1.1 The structure identification number (WDID)
- 11.1.1.2 If no structure identification number has been assigned to a Subdistrict Well, the Subdistrict will furnish the following information: (See language in Rules court document).
- 11.1.1.3 A separate list of Subdistrict Wells with Plans for Augmentation
- 11.1.1.4 The total combined projected annual diversion for all Subdistrict Wells
- 11.1.1.5 The expected method(s) of irrigation, the combined projected number of acres irrigated by Wells included in the ARP, and the total projected acreage by each irrigation method
- 11.1.1.6 For non-irrigation Subdistrict Wells, a calculation of all projected withdrawals and projected Net Groundwater Consumptive Use
- 11.1.1.7 Any other data the Subdistrict deems necessary to support its projected Stream Depletions
- 11.1.1.8 Any other information required by the State and Division Engineers and reasonably necessary to evaluate the proposed ARP

11.1.2 The Subdistrict will submit projected Stream Depletions from the Wells covered by an ARP, in time, location, and amount based on the applicable Response Functions under Rule 7.3, along with the Response Functions or approved alternative methodology that complies with Rules 7.5 and 7.6.

11.1.3 The Subdistrict will submit a detailed description of how Injurious Stream Depletions from groundwater withdrawals by Wells included in the ARP will be replaced or Remedied, including:

- 11.1.3.1 The source, sufficiency, availability, and amounts of replacement water the Subdistrict will use to replace Injurious Stream Depletions during the term of the ARP and the Subdistrict’s plan to replace or Remedy Injurious Stream Depletions occurring after the term of the ARP

11.1.4 The Subdistrict will also list and provide copies of any voluntary contractual arrangements among water users, water user associations, water conservancy districts, Subdistricts, and/or the Rio Grande Water Conservation District pursuant to which:

- 11.1.4.1 Water is added to the stream system to assist in meeting the Rio Grande Compact delivery schedules
- 11.1.4.2 Water is added to the stream system to replace or Remedy Injurious Stream Depletions resulting from the use of underground water
- 11.1.4.3 Subject to section 37-92-501(4)(a)(I)-(III), C.R.S., injury to senior surface water rights resulting from the use of underground water is Remedied by means other than by providing water to replace Injurious Stream Depletions

3. Information to document progress towards achieving and maintaining a Sustainable Water Supply, including:

- 11.1.5.1 Water levels, pressure levels, and/or groundwater withdrawals as appropriate
- 11.1.5.2 A listing of any irrigated acres proposed to be fallowed, whether those acres are temporarily or permanently fallowed, and the water rights associated with those proposed fallowed irrigated acres
- 11.1.5.3 A listing of water rights proposed to be temporarily or permanently retired and historical operations of each water right
- 11.1.5.4 Other proposed actions to be taken as applicable

Appendices

- Appendix A** Tabulation of Subdistrict Wells
- Appendix B** List of Augmentation Wells, Links and Map
- Appendix C** NRCS Forecasts, 10 Day Forecast DWR, Compact
- Appendix D** Projected Recharge Credits
- Appendix E** Ditches and Pro Rata Shares
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- Appendix J** Unconfined and Confined Groundwater Levels in Wells within Subdistrict No. 1, Well Location Map
- Appendix K** Hydraulic Divide Maps with Groundwater Contours, Flow Vectors
- Appendix L** List of Sustainability Programs in Subdistrict No. 1 by Legal Location & Map
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- Appendix O** Great Sand Dunes National Park Forbearance
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Abbreviations

ARP	Annual Replacement Plan
CPW	Colorado Parks and Wildlife
CREP	Conservation Reserve Enhancement Program
Divide	Hydraulic Divide
DWR	Division of Water Resources
Farm Unit	The lands and wells under the control and management of an Owner and/or Operator and treated as a single unit
Irrigation Year	The time period during the year when diversions for irrigation use may legally occur, usually April 1 through November 1
NRCS	United States Department of Agriculture, Natural Resources Conservation Service
Plan Year	The ARP year for the period May 1, 2025 through April 30, 2026
PWM	Plan of Water Management for Subdistrict No. 1
Rio Grande Index Gage	Stream Gage located on the Rio Grande near Del Norte (USGS 08220000)
RGCWUA	Rio Grande Canal Water Users Association
RGDSS	Rio Grande Decision Support System
RGWCD	Rio Grande Water Conservation District
Rule or Rules	Rules Governing the Withdrawal of Groundwater in Water Division No. 3 (the Rio Grande Basin) and Establishing Criteria for the Beginning and End of the Irrigation Season in Water Division No. 3 for All Irrigation Water Rights (2015CW3024)
SEO	State Engineer's Office
Subdistrict No. 1	Special Improvement District No. 1 of the Rio Grande Water Conservation District
Subdistrict Well(s)	Wells Irrigating Subdistrict No. 1 land
SWC	Surface Water Credit
SWSP	Substitute Water Supply Plan
WDID	Water District Structure Identification Number
GSDNPS	Great Sand Dunes National Park Service

INTRODUCTION

The purpose of this report is to satisfy the requirements for an ARP for the Plan Year under the provisions of the PWM for Subdistrict No. 1 decreed by the Division No. 3 Water Court in Case Nos. 2006CV64 and 2007CW52 on May 27, 2010, and upheld by the Colorado Supreme Court on December 19, 2011. Further, the ARP has been drafted in accordance with the requirements of the State Engineer, PWM, and the pertinent court decrees.

As required by the referenced decrees, this report includes information needed by the Subdistrict No. 1 staff and the RGDSS modeling team for calculating stream depletions attributable to Subdistrict Wells and information to assess progress toward other PWM objectives. This ARP includes a series of tables created by Subdistrict No. 1 staff and the RGDSS modeling team tabulating stream replacement quantities and locations resulting from Subdistrict No. 1 well groundwater withdrawals and a water portfolio to be used to replace such stream depletions.

Further, this report describes a plan to remedy injurious stream depletions caused by the withdrawal of groundwater from Subdistrict Wells. This ARP includes details of the water portfolio to be used to remedy injurious depletions identified by the DWR and supporting information as required by the rulings and decree in Case Nos. 2006CV64 and 2007CW52.

This ARP is submitted in compliance with the Subdistrict No. 1 PWM and applies only to wells operating under the Subdistrict No. 1 PWM and ARP. Other Subdistricts will file separate ARPs and will operate those wells under those ARPs.

11.1.1 DATABASE OF ALL WELLS TO BE COVERED BY THE ARP

1.0 STRUCTURE IDENTIFICATION NUMBER (WDID)

A comprehensive listing of wells included in the ARP. The list identifies wells the subdistrict is including in the ARP and is necessary for DWR to identify which wells are permitted to continue operating in accordance with the above referenced court decrees and any current or future well regulations promulgated by the DWR. Further, the list of wells is a necessary input to the RGDSS Groundwater Model.

Appendix A is the most current tabulation of the WDID and the groundwater withdrawals of each Subdistrict Well.

Seven wells were contracted into Subdistrict No. 1 for the 2025 ARP, and all were added to the Subdistrict Well List by Participation Contract. Of these seven wells, three were added to the 2025 Subdistrict Well List in 2025, and four of the contracted wells were already on the Subdistrict Well List but were set to expire at the end of 2024. There are no wells to be removed from the 2024 list for the 2025 list. The total number of wells on the 2025 ARP Well List is 3,617. For the list of new well inclusions, see **Appendix P**.

Table 1.0
Subdistrict No.1 Annual Well List Update

2024 Number of Wells	2025 Number of Wells	New 2025 Wells (WDID)	Removed 2024 Wells
3,614	3617	<u>Explanation</u> : Seven wells were contracted into the 2025 ARP.	WDID (s):

2.0 OTHER WELL IDENTIFICATION INFORMATION

The database of wells the Subdistrict has accepted as part of this ARP was satisfied under 1.1.

3.0 GREAT SAND DUNES NATIONAL PARK SERVICE (NPS)

The NPS Wells (WDIDs 3505620, 3505052, 3505053) lie outside the Subdistrict No.1 Response Area, but inside the RGDSS Model Domain in an area for which no RGDSS Response Function was developed. Under Rule 7.5, the NPS provided a Glover analysis and an engineering report as an alternative to determine stream depletions in time, place and number of depletions caused by NPS wells. The reports were reviewed by Division of Water Resources and determined acceptable and reliable methods of estimating stream depletions. On January 14, 2021 the state engineer approved the sustainability metric for future ground water withdrawals by NPS. See annually updated **Appendix O**.

4.0 SUBDISTRICT WELLS WITH PLANS FOR AUGMENTATION

The Subdistrict Wells include some wells that are also part of a decreed plan for augmentation. The augmentation plans vary in their conditions, but they associate surface rights with Subdistrict Wells and other wells in administration of the respective plan. They are included in the list for fee determination and if any portion of their legally decreed pumping is not covered by their individual plans for augmentation it is subject to Subdistrict No. 1 fees and Subdistrict No. 1 will replace injurious depletions caused by the non-augmented groundwater withdrawals as part of this ARP. Some wells in this list had independent water rights prior to becoming included in a plan for augmentation.

The Plan of Augmentation decreed in Case No. 96CW38, commonly referred to as the Crites Augmentation Plan, will not be in operation for the 2025 ARP year. The well associated with this Plan of Augmentation, identified by WDID 2007036, will not be operated during 2025. Additionally, this well will not be used as a Subdistrict No. 1 well as part of the 2025 ARP. However, the surface water rights associated with Case No. 96CW38 will continue to be recharged. These surface water supplies will be recharged and applied to offset groundwater withdrawals within the farm unit to which the surface water shares are allocated.

The Plan of Augmentation decreed in Case No. 82CW0017, commonly referred to as the SRS Augmentation Plan, will not be in operation for the 2025 ARP year. The wells associated with this Plan of Augmentation, identified by WDIDs 2008188, 2008189, 2008190, 2008191, and 2008192, will be operated during 2025 under Subdistrict No.1 ARP. Additionally, these wells are to be used as Subdistrict No. 1 wells as part of the 2025 ARP. The surface water rights associated with Case No. 82CW0017 will continue to be recharged. These surface water supplies will be recharged and applied to offset groundwater withdrawals within the farm unit to which the surface water shares are allocated.

The Plan of Augmentation decreed in Case No. 99CW0025, commonly referred to as the Bradley Augmentation Plan, will not be in operation for the 2025 ARP year. The wells associated with this Plan of Augmentation, identified by WDIDs 2010235 and 2013884, will not be operated during 2025. These wells are included in Subdistrict No. 1 well list for the 2025 ARP. However, the surface water rights associated with Case No. 99CW0025 will continue to be recharged. These surface water supplies will be recharged and applied to offset groundwater withdrawals within the farm unit to which the surface water shares are allocated.

Appendix B contains the list of augmentation wells, their status of coverage and operation, description of their decrees and a map of the fields associated with those plans for augmentation.

5.0 TOTAL COMBINED PROJECTED ANNUAL DIVERSION FOR ALL SUBDISTRICT WELLS

For Subdistrict Wells listed in this ARP, DWR reported metered groundwater withdrawals as of April 1, 2025, for the previous Irrigation Year was 175,819-acre feet. Based on projected Subdistrict No. 1 operations, weather predictions and antecedent conditions, it is anticipated that 2025 ARP well groundwater withdrawals will be 205,000-acre feet.

6.0 EXPECTED METHODS OF IRRIGATION, THE COMBINED PROJECTED NUMBER OF ACRES IRRIGATED AND THE TOTAL PROJECTED ACREAGE BY EACH IRRIGATION METHOD

As in the previous ARP, it is projected that the vast majority of metered well groundwater withdrawals in the current Irrigation Year will be used for irrigation through center pivot sprinklers. Only a small percentage of groundwater withdrawals, if any, will be applied through flood irrigation.

Each irrigation season, the RGWCD conducts a field survey of the irrigated acreage on the Valley floor within the RGWCD boundaries to record crop types grown by field. Table 2.0 is the summary of “irrigated acres, cropping patterns and irrigation methods” on parcels that are part of this ARP’s Subdistrict Farm Units. The data was derived from the irrigated agriculture field survey by spatially “capturing” any fields that lie within any of the landowner parcels that are part of the Farm Units. The crop information and acreage from the irrigated agriculture shapefile attribute tables was compiled and is shown in Table 2.0.

Table 2.0
Cropping Patterns within Subdistrict No. 1 for Previous Irrigation Year

Crop Type	Total Acres	Sprinkler	LEPA	Flood
Alfalfa	21,062			
Barley	28,082			
Canola	2,000			
Carrots	1,232			
Corn	253			
Cover Crop	18,346			
CREP	10,169			
Fallow	25,706			
Grain	1,313			
Grass Hay/ Pasture	1,048			
Hemp	5			
Lettuce	1,543			
Oats	1,329			
Potatoes	51,115			
Quinoa	73			
Sudan Grass Hay	462			
Triticale	174			
Vegetables	239			
Spinach				
Total	164,151			

The RGWCD Field Survey is done at one point in the growing season. If crops are mixed or observed at an immature stage, it is likely to get clumped into a large category like grain, vegetables, or green manure.

Subdistrict No. 1 wells irrigated approximately 128,276 acres during the previous Irrigation Year when crop types “Fallowed” and “CREP” are excluded from the total. See Table 6.1

7.0 NON-IRRIGATION SUBDISTRICT WELLS – CALCULATION OF ALL PROJECTED WITHDRAWALS AND PROJECTED NET GROUNDWATER CONSUMPTIVE USE

Included in the ARP Well List are a number of wells with beneficial uses other than irrigation. The Subdistrict utilized information provided by DWR to calculate the consumptive use rates used in the RGDSS Model to calculate stream impacts and returns. Beneficial uses include primarily potato washing, commercial, domestic (subdivision) and fish. A spreadsheet was prepared by the Subdistrict to calculate the composite Consumptive Use Ratio that is a necessary input in the Response Functions. A spreadsheet of the calculation prepared for use in the 2025 ARP is submitted with this ARP.

8.0 GREAT SAND DUNES NATIONAL PARK SERVICE- NON-IRRIGATION WELL PROJECTIONS

The wells located on the GSDNP estimated pumping projection for 2025 equals 8.88-acre feet. With the Consumptive Use percentage at 10% the estimated depletion to Medano Creek equals 0.89 AF. See **Appendix O** for more information.

9.0 OTHER DATA NECESSARY TO SUPPORT THE PROJECTED STREAM DEPLETIONS

The ARP Well List included with this ARP provides a WDID for all wells the Subdistrict has accepted as part of this ARP and, therefore, no additional well identification information is required by Rule 11.1.1.

10.0 OTHER INFORMATION REQUIRED BY THE STATE AND DIVISION ENGINEERS AND REASONABLY NECESSARY TO EVALUATE THE PROPOSED ARP

FARM UNIT DATA

Information collected for Subdistrict No. 1 Farm Units included identification of the wells and surface rights allocated to the irrigated fields on the lands comprising of each Farm Unit. A summary of the ditches and pro rata shares of surface water allocated to fields in this ARP’s Farm Units is included in **Appendix E**. This represents the “surface water source” for Subdistrict No. 1.

The groundwater source is represented by the database of Subdistrict Wells described in Section 1.0, above, and found in **Appendix A**. The groundwater amount or the diversions (in acre-feet) for each Subdistrict Well during the previous Irrigation Year are included for each WDID in that Appendix.

A. TOTAL DIVERSIONS BY DITCH

Table 2.1 shows the ditch service areas that have diversions in Subdistrict No. 1. The diversions shown are total irrigation water for the ditch for the previous Irrigation Year, but only a portion is delivered within Subdistrict No. 1.

Table 2.1
Ditch Service Areas with Diversions in Subdistrict
No. 1 Total Ditch Diversions 2025 Irrigation Year

WDID	DITCH NAME	Diversions in ac.-ft	Subdistrict Year
2000546	BILLINGS D	5,514.84	2024
2000556	BUTLER IRR D	1,342.21	2024
2000627	EXCELSIOR D	26,652.27	2024
2000631	FARMERS UNION CNL	18,440.10	2024
2000699	KANE CALLAN D	2,718.00	2024
2000736	MCDONALD D	6,311.30	2024
2000798	PRAIRIE D	10,932.60	2024
2000812	RIO GRANDE CNL	132,322.10	2024
2000814	RIO GRANDE D 2	1,394.18	2024
2000829	SAN LUIS VALLEY CNL	13,093.80	2024
2000833	SCHUCH SCHMIDT D	1,077.60	2024
2700502	BIEDELL D NO 10	2,833.37	2024
2700503	BIEDELL D NO 2	89.26	2024
2700518	GREEN D NO 1	323.71	2024
2700522	HOME D NO 1	3,677.75	2024
2700523	JOHNNIE SMITH D NO 1	0.00	2024
2700533	MCLEOD D NO 3	100.03	2024
2700537	MOODY AND HEAD D	0.00	2024
2700538	OMNIBUS D	2,473.07	2024
2700543	ROCKY HILL SEPG OVFL D	79.34	2024
2700545	SHOWN D	747.24	2024
2700551	WHITE D	0.00	2024
2700553	WILSON D NO 4	0.00	2024
2700684	LA MAGOTE D NO 2	0.00	2024
2700714	MCLEOD D NO 4 & 5	294.07	2024

Notes: New structure (2700714) replaced (2700534) McLeod No 4 and (2700535) McLeod No 5

a. DITCHES AND PRO RATA SHARES

The known pro-rata surface water allocated to Subdistrict No. 1 Farm Units is shown in **Appendix E**.

b. SURFACE WATER CREDIT

The amount of SWC exchanged between Farm Units for the 2024 fees was 22,993.62 acre-feet. This number may change during the 2024 fee appeal process.

The surface water exchanged for 2025 is not available until June and is not included in this

report.

e. HYDRAULIC DIVIDE STUDY

The hydraulic divide is a shallow groundwater divide, that when present, separates the closed basin in the San Luis Valley from the remainder of the Rio Grande Basin. The hydraulic divide has been historically mapped generally paralleling and lying northerly of the Rio Grande $\pm\frac{1}{2}$ to ± 2 miles through the reach from near Del Norte to Alamosa. The hydraulic divide extends northwest of Del Norte to the Continental Divide and from Alamosa northeast to the basin divide along the Sangre de Cristo Mountains. Recent water level measurements in wells along the north side of the Rio Grande indicate that the hydraulic divide has retreated south to the Rio Grande or very near the river. A goal of the Plan of Water Management is to recover and re-establish the hydraulic divide northerly of the river which is likely to reduce depletions to the Rio Grande from well pumping within Subdistrict No. 1.

The groundwater flow vectors do not provide evidence of a well-defined divide with the possible exception of an area between Monte Vista and Alamosa where there is some evidence for a few miles. The interpreted location of the divide is shown on the maps prepared from the 2024 groundwater measurements. The approximate divide location in the area between Del Norte and the 7-Mile Plaza is uncertain due to the perched river condition, so it is shown as a dotted line on the maps included in **Appendix K**.

f. OTHER

The following information needed to evaluate the 2025 ARP was provided as a supplement to the ARP:

1. Resolution from RGWCD approving the Subdistrict 2025 ARP.
2. Response Function spreadsheet supporting the calculations submitted in the ARP.
3. The list of Subdistrict Wells included in the 2025 ARP in spreadsheet format matching the list presented in Appendix A.
4. Resolution from RGWCD to allow the Subdistrict to allocate Closed Basin Project water in the 2025 ARP

11.1.2 PROJECTED STREAM DEPLETIONS FROM THE WELLS COVERED BY THE ARP BASED ON THE APPLICABLE RESPONSE FUNCTION OR APPROVED ALTERNATIVE METHOD

The purpose of this section of this ARP is to present data showing projected 2025 depletions to the Rio Grande resulting from Subdistrict Well groundwater withdrawals. Depletions are calculated by a Response Function spreadsheet that outputs total depletions for the Plan Year and a breakdown of monthly depletions for three reaches of the Rio Grande. The DWR directed Subdistrict No. 1 to use the current 6P98 Response Function for calculating projected stream depletions for this ARP.

Forecasted calendar year flow through the Rio Grande Index Gage was a benchmark used to make depletion projections. From this forecast, estimates of total well pumping, canal

diversions and annual recharge credit were prepared. This information is utilized in the Response Function spreadsheets to provide a calculation of projected depletions caused by Subdistrict Well groundwater withdrawals.

c. 2025 STREAM FLOW FORECAST – RIO GRANDE

As required in the PWM, **Appendix C**, a copy of the April 1st, 2025 NRCS forecast for stream flows of the Rio Grande Basin in Colorado is required for the estimate of recharge in Subdistrict No. 1 that offsets groundwater consumption based upon hydrologic conditions for the current Plan Year. In addition to the NRCS forecast, the Division No. 3 Division Engineer’s estimate of the annual flow of the Rio Grande Index Gage identified in the March 31st, 2025 Rio Grande Compact Ten-Day Report is required to assist in projecting hydrologic conditions of the Rio Grande for the current Plan Year.

Table 3.0
2025 Rio Grande River Estimated Annual Flow

Forecast Source	Analysis Date	Apr-Sep Forecast (acre-feet)	% of 30 yr. Average	Total Annual Estimated Flow outside of Apr-Sept (acre-feet)	Total Annual Estimated Flow (acre-feet)
		(1)	(2)	(3)	
DWR	March 31st, 2025	310,000	64.5	80,000	390,000
NRCS	April 1st, 2025	310,000	64.5		

- (1) projected 50% exceedance streamflow at the Rio Grande near Del Norte gaging station
- (2) NRCS 30-year median of 480,000 acre-feet used for this calculation
- (3) January through march and October through December

Data collected from the Division No. 3 Engineer’s Rio Grande Compact Ten-Day Report on April 1st, 2025 projected annual flow will be the basis for estimating recharge in Subdistrict No. 1 that offsets groundwater consumption in the 2025 ARP.

Data contained in the Division No. 3 Engineer’s Rio Grande Compact Ten-Day Report indicates that 80,000 acre-feet is added to the April – September Division No. 3 forecast to obtain the total Rio Grande River basin projected annual flow. Table 3.0 includes the forecasted flows for the referenced river and the forecast for total projected annual flow during the 2025 calendar year.

A copy of the NRCS Forecast and Division No. 3 Division Engineer’s Rio Grande Compact Ten-Day Report is attached in **Appendix C**.

d. 2025 STREAM FLOW FORECAST – CONEJOS RIVER

Based on the same forecast documents referenced above, the Division No. 3 Division Engineer’s April 1st, 2025 forecasts for the Conejos River for the period April – September and the annual values are tabulated below. The NRCS forecast and the Division No. 3 Division Engineer’s Rio Grande Compact Ten-Day Report for the Conejos River Basin in Colorado is included in **Appendix C**.

Data contained in the Division No. 3 Engineer’s Rio Grande Compact Ten-Day Report indicates that 26,100 acre-feet is added to the April – September Division No. 3 forecast to obtain the total Conejos River basin projected annual flow. Table 3.1 includes the forecasted flows for the referenced rivers and the forecast for total projected annual flow during the 2025 calendar year.

Table 3.1
2025 Conejos River Estimated Annual Flow

Forecast Point	Period	Forecast (acre-feet)	% of 30 yr. Average	Estimated Flow outside of Apr-Sept (acre-feet)	Total Annual Estimated Flow (acre-feet)
NRCS 4-1-2025		(1)	(2)	(3)	
Conejos R. near Mogote	Apr-Sep	87,000		-	-
San Antonio R. at Ortiz	Apr-Sep	2,000		-	-
Los Pinos R. near Ortiz	Apr-Sep	29,000		-	-
DWR 3-31-2025					
Conejos R. near Mogote	Apr-Sep	121,000		26,100	
San Antonio R. at Ortiz	Apr-Sep	3,900			
Los Pinos R. near Ortiz	Apr-Sep	29,000			
Total					

- (1) projected 50% exceedance streamflow at the gaging station
- (2) NRCS 30-year medians of 168,000 acre-feet for Conejos, 9,600 acre-feet for San Antonio & 61,000 acre-feet for Los Pinos are used for this calculation
- (3) January through March and October through December

e. PROJECTED ANNUAL RECHARGE CREDIT

Recharge credit is available to four canals/ditches that divert from the Rio Grande into Subdistrict No. 1 in accordance with their respective decrees. This recharge credit is used as an offset to gross groundwater consumption in accordance with the respective decrees and the method used to calculate depletions to surface streams. Further, it was necessary to reduce the totals by the consumptive use attributable to surface water used directly through sprinklers and flood irrigation, projecting that the current Irrigation Year water usage will be similar to that measured for the previous ARP. The following information in Table 3.2 was obtained from irrigators during the previous year was used as estimates of surface water use:

Table 3.2
Calculated Projected Recharge Decree Credits for Subdistrict No. 1
During Current Irrigation Year
(Units in acre-feet)

	Rio Grande Canal	San Luis Valley I.D.	Prairie Ditch	SLV Canal	Totals
Total Consumable	71,264.38	7,977.26	5,633.62	7,607.00	92,482.26
% Within Subdistrict No. 1	93.98%	100%	99.20%	80.87%	
Total Consumable Within Subdistrict No. 1	66,974.27	7,977.26	5,588.55	6,151.78	86,691.86
Surface Water Through Sprinklers @83%	-2,449.93	-12.51	-188.91	-120.08	-2,771.43
Surface Water Used for Flood @60%	-253.34	0	0	0	-253.34
Totals	64,271.00	7,964.75	5,399.64	6,031.70	83,667.09

To provide a reasonable method for predicting probable recharge credit quantities for 2025, trend lines

were developed for each canal/ditch by plotting historical annual river flows and corresponding recharge credits. Regression trend lines were developed for each of the four canals/ditches and resulting equations describing the trend lines. A full description of the analysis and data used to prepare the trend lines is included in **Appendix D**.

Therefore, the projected consumable recharge credit under the four recharge decrees for the current Irrigation Year is 83,667.09 ac-ft.

4. PROJECTED PLAN YEAR STREAM DEPLETIONS

Response Function No.1 6P98V1.1 was used for calculation for projection calculations. Projections of groundwater pumping of **205,000** ac-ft and recharge that offsets groundwater pumping of **83,667.09** ac-ft was entered into the Estimated Net Groundwater Consumptive Use table of the Response Function.

Table 3.3
Estimated Net Groundwater Consumptive Use
(Units in acre-feet)

Year	Subdistrict No.1 Total					Recharge that Offsets Groundwater					Net Groundwater Consumptive Use
	Irrigation Pumping to Center Pivots	Irrigation Pumping to Flood Irrigation	Other Pumping	Other Consumptive Use Ratio	Groundwater Consumption	Recharge Source 1	Recharge Source 2	Recharge Source 3	Recharge Source 4	Total	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
2012	261,494	71	3,347	64%	219,235	54,870	6,748	4,795	3,620	70,034	149,201
2013	231,238	1,136	3,703	61%	194,867	84,919	5,477	4,227	4,782	99,404	95,463
2014	238,674	1,400	2,573	52%	200,275	110,566	28,596	14,133	12,777	166,072	34,203
2015	206,953	1,536	3,209	49%	174,254	122,980	34,685	15,139	15,608	188,412	-14,158
2016	237,891	1,635	3,174	52%	200,072	125,562	32,064	12,873	14,396	184,894	15,179
2017	237,594	1,786	3,016	45%	199,625	138,112	31,813	15,292	16,043	201,260	-1,636
2018	264,820	2,167	2,883	48%	222,490	42,895	2,136	1,924	2,140	49,096	173,394
2019	213,494	1,937	2,962	52%	179,907	132,121	45,852	22,196	22,619	222,788	-42,881
2020	245,348	796	2,837	45%	205,381	58,838	10,230	5,879	5,467	80,413	124,968
2021	209,420	139	2,769	51%	175,324	79,486	11,330	6,748	7,906	105,470	69,854
2022	206,700	28	2,648	45%	172,764	89,232	7,501	1,813	4,841	103,387	69,377
2023	220,745	18	2,759	43%	184,421	116,902	42,670	19,789	20,760	200,122	-15,701
2024	172,173	510	3,136	48%	144,723	100,135	10,717	8,858	8,617	128,328	16,395
2025	205,000	1,000	3,100	51%	172,331	64,271	7,965	5,400	6,032	83,667	88,664
Avg.	233,705	1,004	3,064	51%	196,163	95,744	19,986	10,142	10,556	136,428	59,735

Explanation of Columns for Table 2.3.

- (1) Calendar Year
- (2) Determined from metered groundwater pumping
- (3) Determined from metered groundwater pumping
- (4) Determined from metered groundwater pumping
- (5) Weighted Average of CU of all wells included in the "Other" wells list
- (6) Calculated as $(0.83 \times \text{Col 2}) + (0.60 \times \text{Col 3}) + (\text{Col 4} \times \text{Col 5})$
(0.83 and 0.60 are the consumptive use ratios of total pumping associated with sprinkler irrigation practices, respectively)
- (7) – (10) Determined from analysis of historical diversions and recharge decrees (W-3979, W-3980, 96CW0045, and 96CW0046)
- (11) Calculated as Col 7 + Col 8 + Col 9 + Col 10
- (12) Calculated as Col 6 – Col 11

How wells that are added or deleted affect historical pumping figures:

- * Any wells that are added to the ARP must add their 2010 through present pumping to the Subd1 historical pumping
- * Any wells that are deleted from the ARP will have their historical pumping included in Subd1's pumping until the year that the wells are dropped
- * If any wells that were deleted from a previous ARP list are added back in, any historical pumping from the years they were out will have to be included in Subd1's pumping

The projected Net Groundwater Consumptive Use for the Plan Year is **88,664** acre-feet as shown in Table 3.3.

As noted in Table 3.4, the Net Groundwater Consumptive Use, derived in Table 3.3, is input into Column 3 in in the row for the Plan Year. The projected calculated annual stream depletions resulting from Subdistrict Well groundwater withdrawals for the respective reaches of the Rio Grande and the total are shown in Columns 4 through 7.

Table 3.4
Estimated Historical and Projected Net Stream Depletions from
Subdistrict Well Groundwater Withdrawals
 (Units in acre-feet)

Year	Rio Grande near Del Norte Stream Gage (Apr-Sep)	Net Groundwater Consumptive Use (Jan-Dec)	Annual Net Stream Depletions (May-Apr) ^{a)}			
			Rio Grande Del Norte-Excelsior	Rio Grande Excelsior-Chicago	Rio Grande Chicago-State Line	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1970	561,150	101,275	225	341	-116	450
1971	389,397	135,541	420	714	-169	965
1972	373,031	169,393	619	1,069	-223	1,465
1973	755,509	38,851	479	878	-91	1,266
1974	270,942	220,567	2,366	1,325	-285	3,406
1975	730,848	23,753	2,294	1,028	-137	3,185
1976	512,997	65,760	2,016	938	-164	2,790
1977	163,635	240,127	3,825	1,513	-347	4,991
1978	340,660	155,492	3,828	1,627	-328	5,127
1979	886,617	11,835	3,093	1,222	-153	4,162
1980	672,668	63,873	2,726	1,100	-189	3,637
1981	310,945	170,010	2,681	1,423	-300	3,804
1982	572,474	36,314	2,286	1,211	-156	3,341
1983	578,510	32,273	2,031	994	-138	2,887
1984	652,637	40,219	1,869	902	-137	2,634
1985	864,564	2,568	1,648	717	-87	2,278
1986	865,371	-37,341	-90	669	16	595
1987	907,650	109,992	43	858	-115	786
1988	346,087	177,158	593	1,246	-226	1,613
1989	407,389	169,478	883	1,485	-243	2,125
1990	424,033	88,971	886	1,371	-166	2,091

1991	529,567	46,509	826	1,117	-117	1,826
1992	415,482	67,128	861	1,040	-136	1,765
1993	577,831	-21,380	-193	847	-6	648
1994	444,629	100,660	-115	924	-117	692
1995	734,492	-68,610	-2,899	893	140	-1,866
1996	313,441	205,238	-960	1,265	-111	194
1997	781,596	-1,949	-462	906	9	453
1998	466,821	112,457	-70	1,003	-122	811
1999	799,489	-50,972	-2,204	916	110	-1,178
2000	312,094	213,180	-208	1,325	-142	975
2001	655,233	65,822	415	1,184	-91	1,508
2002	96,717	322,490	3,276	1,932	-378	4,830
2003	261,300	234,308	5,234	2,191	-388	7,037
2004	431,675	126,966	4,837	1,967	-322	6,482
2005	682,540	70,356	4,059	1,661	-234	5,486
2006	411,656	119,657	3,660	1,626	-273	5,013
2007	593,239	23,116	3,064	1,311	-155	4,220
2008	623,333	49,201	2,700	1,148	-166	3,682
2009	513,058	-4,448	2,119	911	-90	2,940
2010	453,063	76,286	2,013	968	-166	2,815
2011	415,287	162,632	2,119	1,319	-267	3,171
2012	328,465	149,201	2,108	1,520	-265	3,363
2013	344,522	95,463	1,995	1,428	-211	3,212
2014	518,731	34,203	1,805	1,157	-138	2,824
2015	555,832	-14,158	1,072	900	-58	1,914
2016	565,968	15,179	861	737	-65	1,533
2017	574,029	-1,636	807	572	-45	1,334
2018	212,225	173,394	1,193	1,038	-241	1,990
2019	855,755	-42,881	-768	911	37	180
2020	307,808	124,968	-673	986	-109	204
2021	381,197	69,854	-326	956	-82	548
2022	359,222	69,377	-252	912	-89	571
2023	639,603	-15,701	-965	710	23	-232
2024	404,543	16,395	-838	559	1	-278
2025	310,000	88,664	-425	727	-93	209
2026			-370	563	-8	185
2027			-287	400	-6	107
2028			-212	301	-6	83
2029			-149	232	-5	78
2030			-127	186	-3	56
2031			-126	155	-1	28
2032			-125	133	0	8
2033			-117	114	0	-3
2034			-92	91	0	-1
2035			-53	68	0	15
2036			-43	54	0	11
2037			-42	36	1	-5
2038			-32	24	1	-7
2039			38	16	-1	53
2040			11	9	1	21
2041			-1	4	1	4
2042			-1	4	1	4
2043			-1	4	1	4
2044			-1	4	1	4
Avg 2001-	458,977	100,740	2,698	1,415	-213	3900

2015						
Avg 2001-2010	472,181	108,375	3,138	1,490	-226	4,401
Post Plan Depletion			-1,671	2,427	-22	734

a) Estimated net stream depletions shown in this table are greater than the stream depletions that potentially cause injury to surface water rights.

Explanation of Columns

- (1) Year
- (2) Rio Grande near Del Norte Gage streamflow in acre-feet for the NRCS streamflow forecast period of April through September.
- (3) Net Groundwater Consumptive Use (NetGWCU) for January through December. NetGWCU values for 2001 through 2010 were taken from the RGDSS Groundwater Model output. NetGWCU values for 2011 through 2024 were calculated using well meter data, diversion data, and irrigated acreage information. NetGWCU data for 2025 was estimated from 2024 well meter data and projected diversions based on the projected Rio Grande streamflow from the April 5, 2025 Rio Grande Compact DWR Ten-Day Report.
- (4) Net Stream Depletions in the Rio Grande Del Norte to Excelsior Ditch reach for the plan year (May through April) in ac-ft.
- (5) Net Stream Depletions in the Rio Grande Excelsior Ditch to Chicago Ditch reach for the plan year (May through April) in ac-ft.
- (6) Net Stream Depletions in the Rio Grande Chicago Ditch to the State Line reach for the plan year (May through April) in ac-ft.
- (7) Total Net Stream Depletions columns (4 + 5 + 6) in ac-ft
- (8) Data for years 2041-2044 were taken from Table 4 in the 6P98 Response Function Spreadsheet

Table 3.5 below is an output from the Table 2.6 Response Function spreadsheet that provides the annual total depletions into monthly replacement obligations for the three impacted reaches of the Rio Grande. This table lists the Plan Year stream depletions.

Table 3.5
Subdistrict No. 1 Monthly Net Stream Depletions for the Plan Year
 (Units in acre-feet)

Stream Reach	Response Area No.1 Response Area Total												Total
	2025						2026						
	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Rio Grande Del Norte-Excelsior	-62.0	-57.9	-44.2	-30.9	-28.0	-31.4	-32.5	-30.7	-23.2	-22.3	-29.8	-31.8	-424.8
Rio Grande Excelsior-Chicago	53.8	43.6	33.2	36.4	36.2	48.4	75.5	79.8	81.7	77.6	88.1	72.7	727.0
Rio Grande Chicago-State Line	-1.0	-10.3	-18.1	-10.2	-3.7	-14.7	-1.8	3.3	-1.8	-7.9	-11.0	-15.8	-92.9
Total	-9.3	-24.5	-29.1	-4.7	4.4	2.3	41.2	52.4	56.7	47.5	47.4	25.1	209.3

Explanation of Columns

- (1) Stream reach
- (2) - (13) Monthly Net Stream Depletions in acre-feet
- (14) Total Plan Year Net Stream Depletions in acre-feet

As indicated in the lower right-hand corner of Table 3.5, the estimated total net depletions that will impact the Rio Grande during the Plan Year due to both past pumping and the projected Irrigation Year pumping using Table 2.6 of the 6P98 Response Function is **209.3** acre-feet. The locations of the net depletions and monthly quantities are tabulated in Table 3.5.

According to the RGDSS Groundwater Model, if Subdistrict wells ceased all groundwater withdrawals today, there would be a continuing depletion to the river for approximately 19 years. Based on

calculations from the RGDSS Model 6P98 Response Functions, Table 3.6 illustrates that total post-plan net stream depletion are anticipated to be **734** acre-feet..

Table 3.6
Subdistrict No. 1 Post-Plan Net Stream Depletions
 (Units in acre-feet)

Years (May-Apr)	Rio Grande Del Norte-Excelsior	Rio Grande Excelsior-Chicago	Rio Grande Chicago-State Line	Total
2026-2045	-1,671	2,427	-22	734

11.1.3 DESCRIPTION OF HOW INJURIOUS STREAM DEPLETIONS FROM GROUNDWATER WITHDRAWALS BY WELLS INCLUDED IN THE ARP WILL BE REPLACED OR REMEDIED

1. AMOUNTS AND SOURCES OF REPLACEMENT WATER FOR PLAN YEAR

Table 4.0 shows the amounts and sources of replacement water carried over from the previous Plan Year and sources that have been acquired by Subdistrict No. 1 since 2012 that will be available to remedy injurious depletions. Sections 4.1 through 4.11 further explain the water quantities and sources.

Table 4.0
Amounts and Sources of Replacement Water Acquired by Subdistrict No. 1

Sec	In Storage -- Water Right(s) Name	Beginning Balance as of 5/1/2024 (AF)	Anticipated Balance as of 5/1/2025 (AF)	Water Previously Controlled by:	Decree/SWSP	Current Location
4.1	Williams Creek Squaw Pass TM	134.8	134.8	Navajo Development	CA73, CA308, W1869-78 & SWSP 5346	Rio Grande Reservoir
4.2	Williams Creek Squaw Pass TM-SLVID	56.5	56.5	SLV Irrigation District	CA73, CA308, W1869-78 SWSPs 5346 & 5506	Rio Grande Reservoir
4.3	SD#1 SLVID Tabor	45.1	45.1	SLV Irrigation District	5346, 5506	Rio Grande Reservoir
4.4	Piedra River TM, Piedra Water Rights	500.0	500.0	Colorado Parks and Wildlife	W-3549 5346, 5506	Rio Grande Reservoir
4.5	Pine River Weminuche Pass TM	1,000.0	1,000.0	SLV Water Conservancy District	CA 1248-B, 84CW62, 94CW6 SWSPs 5346 & 5506	Rio Grande Reservoir
4.6	Treasure Pass Trans-Basin Diversion	730.76	730.76	Evelyn Underwood & Patti Cook	CA 0308 5346,5506	Rio Grande Reservoir

4.6	Treasure Pass Trans-Basin Diversion	50.7	50.7	Sid Klecker	CA 0308 5346, 5506	Rio Grande Reservoir
4.7	SMRC 2012 Leases of 1,279.8 shares in RG Canal @ 0.944 af/share	1,252.11	793.61	Santa Maria Reservoir Co	2013CW3002 SWSP 5491	Rio Grande, Santa Maria & Continental Reservoirs
4.7	SMRC 2013 Leases of 3235.8 shares in RG Canal @ 0.72 af/share	2,328.8	2,328.8	Santa Maria Reservoir Co	2013CW3002 SWSP 5491	Rio Grande, Santa Maria & Continental Reservoirs
4.7	SMRC 2014 Leases of 3320.8 shares in RG Canal @ 1.288 af/share	4,278.2	4,278.2	Santa Maria Reservoir Co	2013CW3002 SWSP 5491	Rio Grande, Santa Maria & Continental Reservoirs
4.7	SMRC 2015 Leases of 3095.8 shares in RG Canal @ 1.86 af/share	3,568.2	3,568.2	Santa Maria Reservoir Co	2013CW3002 SWSP 5491	Rio Grande, Santa Maria & Continental Reservoirs
4.7	SMRC 2016 Leases of 1645 shares in RG Canal @ 0.968 af/share	533.59	533.59	Santa Maria Reservoir Co	2013CW3002 SWSP 5491	Rio Grande, Santa Maria & Continental Reservoirs
4.8	2022-SWSP Water Exchange (SMRC for TM)	49.3	49.3	Mammoth Land Holdings, LLC	SWSP 6164	Continental Reservoir
	In Storage – Total Replacement Water (acre-feet)	14,834.76	14,069.56			
4.9	On Call – Irrigation Season Forbearance Agreements	Contract	Expected Yield	Source of Diversion	SWSP	Special Contract Conditions
	Rio Grande Canal	900		Rio Grande		
	San Luis Valley Canal	400		Rio Grande		
	Commonwealth Irrigation Company	500		Rio Grande		
	Centennial Ditch Company	No ac-ft limit		Rio Grande		Replace up to 10 Calendar days of combined, injurious stream depletions
	Excelsior Ditch Company	1,000		Rio Grande		
	Monte Vista Canal	300		Rio Grande		
	Prairie Ditch Company	100		Rio Grande		
	San Luis Valley Irrigation District	1,000		Rio Grande		
	Rio Grande Lariat Ditch Company	500		Rio Grande		

	On Call -- Irrigation Season – Total Water Available (acre-feet)	4,700	200-800			
4.10	On Call – Non-Irrigation Season	Total RG Allocation (all Subdistricts) (AF)	Projected Yield Subdistrict # 1 (AF)	Source of Diversion	SWSP	Current Location
	Closed Basin Project Allocation	4,560	245.2	RGWCD		Closed Basin Project
	On Call -- Non-Irrigation Season – Total Water Available (acre-feet)		245.2			
4.11	Great Sand Dunes National Park Service Forbearance Agreements	Source of Diversion	Contract Years	Water Rights	Case #	Total Amount to Divert/Store
	Great Sand Dunes National Park	Little Spring Creek & Big Spring Creek	2023-2025	Hull Ditch, Los Ojos Ditch, South Ditch No. 1 & No.2	03/26/1895	23.04 cfs
	The Nature Conservancy	Little Spring Creek & Big Spring Creek	2025	Hull Ditch, Los Ojos Ditch, South Ditch No. 1 & No.2	03/26/1895	60.25 cfs
	Colorado Parks and Wildlife	Little Spring Creek & Big Spring Creek	2023-2025	San Luis Lakes & Head Lake	W3962, W3963, & 95CW40	Absolute: 10,600 AF Conditional: 817.5
	Rio Grande Water Conservation District	Little Spring Creek & Big Spring Creek	2023-2025	San Luis Lakes	95CW40	Absolute: 1,205 AF Conditional: 817.5 AF

2. OPERATION OF THE 2025 ANNUAL REPLACEMENT PLAN

The Subdistrict’s replacement water that is currently in storage will be released from Rio Grande Reservoir, Santa Maria/Continental or other reservoirs, located in the Upper Rio Grande at the direction of the Division 3 Engineer, based on the RGDSS Model 6P98 Response Functions, to remedy injurious stream depletions on the Rio Grande during the Plan Year. All Plan Year injurious depletions calculated to occur by the Response Functions will be replaced in the time, location and amount that they occur, beginning on the first day of the Plan Year. These releases of water will be performed under the provisions of section 37-87-103, C.R.S.

It may be necessary for the Subdistrict to make a request to the Division No. 3 Division Engineer to allow a portion of the production of the CBP during the non-wintertime months (April-October) be used to offset the Subdistrict’s wintertime depletions (November-March). It is anticipated this scenario will only occur when the total depletions for all RGWCD Subdistricts combined in any one or more months during the winter are greater than the production of the CBP in those months. The total CBP allocation

approved to cover wintertime depletions for the Subdistrict must not be exceeded.

It may also be necessary for the Subdistrict to make a request to replace wintertime depletions (November-March) with reservoir releases and will be released from storage per the recommendation of the Division No. 3 Engineer.

Sections 37-80-120, 37-83-104, and 37-83-106, C.R.S., allow for exchanges to occur between reservoirs without a decree and if recognized by the Division Engineer. Appropriate accounting between the Division Engineer's Office and Subdistrict No. 1 will occur on a regular and routine basis if these exchanges occur. Any reservoir exchanges done during the Plan Year will be documented and reported in the subsequent Annual Report. The Division Engineer's Office will be notified in advance of any reservoir exchanges.

As shown above, Subdistrict No. 1 has implemented Forbearance Agreements with major canals located on the main stem of the Rio Grande for the Plan Year. Upon its sole discretion, Subdistrict No. 1 will exercise these agreements if conditions exist which could save an approximate 200-800 acre-feet of replacement water during the Plan Year.

Based upon climate projections and historical diversion patterns for the Plan Year, if operated, the agreement with the ditches is predicted to result in a reduction of approximately 200-800 acre-feet to the amount of water Subdistrict No. 1 would otherwise have to supply to the Rio Grande-Del Norte reach.

The forbearance agreements may be operated at the discretion of the Subdistrict.

Special Improvement Subdistrict No. 1 of the Rio Grande Water Conservation District staff have presented the Board of Directors of the Centennial Ditch Company with a request to allow the Centennial Ditch to be used as a carrier for replacement water under Subdistrict No. 1's Annual Operating Plan. a request to allow the Centennial Ditch to be used as a carrier for replacement water under Subdistrict Annual Operating Plans.

The reason for this request is there can be times when there is a dry reach in the Rio Grande when the Excelsior Ditch is sweeping the river. This may occur when the Excelsior Ditch is the calling priority on the Rio Grande and there is no Rio Grande Compact call.

Under these conditions, the Rio Grande may be dry below the Excelsior Ditch headgate. In this circumstance it would be difficult for Subdistrict No. 1 to meet its replacement obligations under the Annual Operating Plan to replace injurious depletions below the Excelsior Ditch and extending to the Lobatos gaging station with releases from upstream reservoirs.

If the Centennial Ditch allows Subdistrict No. 1 to convey water through the ditch, around the dry reach below the Excelsior and back into the Rio Grande, Subdistrict No. 1 can replace injurious depletions without the high losses that would occur trying to force water through the dry reach.

The most current RGDSS 6P98 Model Runs and Response Functions do not predict depletions caused by the withdrawal of groundwater by Subdistrict Wells to streams other than the Rio Grande in amounts above the minimum threshold established by the Water Court, Water Division No. 3 in Case Nos.

2006CV64 and 2007CW52. Therefore, Subdistrict No. 1 is not required to make replacements to any stream other than the Rio Grande.

At times when there is no requirement to deliver water to the Lobatos Gage to meet the requirements of the Rio Grande Compact, no water will be delivered to the lower reach of the Rio Grande for remedy of injurious stream depletions.

The projections for the Plan Year show accretions occurring at certain periods on the Rio Grande. The Subdistrict will make a specific written request to the Division Engineer before applying these accretions to other reaches on the Rio Grande to remedy injurious depletions.

As described in Table 4.1, the Board of Managers of Subdistrict No. 1 has acquired multiple years' worth of depletion replacement water that is currently in storage and available for release, which is well over the amount needed to cover the current total calculated post-plan stream depletions to the Rio Grande. The Board of Managers will continue to work diligently towards obtaining permanent and/or renewable supplies to remedy future depletions caused by present or future Subdistrict Well groundwater withdrawals.

Subdistrict No. 1 does not believe that a financial guarantee agreement provided by the Rio Grande Water Conservation District is necessary to assure that all post-plan depletions will be remedied if Subdistrict No. 1 were to fail or otherwise be unable to replace injurious post-plan depletions.

As specified in this ARP, nine (9) ditches within Stream Reaches No. 1 and No. 2 on the Rio Grande have entered into forbearance agreements with Subdistrict No. 1 to remedy depletions during the Plan Year, if needed. Some of these same ditches have been approached to consider permanent forbearance agreements for the future. See **Appendix H**. Subdistrict No. 1 also has four Forbearance Agreements to remedy injurious depletions from the Great Sand Dunes National Park wells, 3505620, 3505052, 3505053. See **Appendix O**.

If Subdistrict No. 1 Annual Replacement Plan were to be denied by the State Engineer, the individual well owners of the former Subdistrict No. 1 would have to obtain plans for augmentation or take other measures to comply with present or future rules and regulations governing groundwater withdrawals. In the interim, Subdistrict No. 1 would provide water to remedy injurious post-plan depletions.

At times when there is a monthly, negative depletion in a stream reach, Subdistrict No. 1 make a request to the Division No. 3 Division Engineer to allow Subdistrict No. 1 to aggregate negative depletion amounts in one reach, either upstream or downstream, against a positive depletion in another reach, when the opportunity exists under the protocol of DWR. Subdistrict No.1 also requests with prior approval from the Division Engineer, the Subdistrict may release water held in reservoir storage for temporary storage in the unconfined aquifer. Also, with a request to the Division No. 3 Division Engineer allow Subdistrict No. 1 to aggregate a monthly, positive depletion with a negative depletion of another Subdistrict to offset the positive daily depletion Subdistrict would otherwise have to replace or remedy when the opportunity exists under the protocol of DWR. A Memo of Understanding would be required and approved by the Board of Managers before this offset could be allowed between subdistricts.

3. ANTICIPATED FUNDING FOR PLAN YEAR

The Subdistrict assesses three different fees on those well owners within the boundaries of the Subdistrict that are benefited from the activities of Subdistrict No. 1. The fees are as follows:

- a. Administrative Fee: This revenue is used to offset the cost of administering the PWM and ARP.
- b. CREP Fee: This revenue provides the required match to the federal funds that are paid by the USDA directly to those groundwater irrigators that have been approved for the CREP program.
- c. Variable Fee: This fee is charged per acre-foot of groundwater withdrawn, called the Water Value, and may be offset in whole or part by SWC in a Farm Unit. The Water Value is set every year by the Board of Managers in an amount necessary to purchase replacement water or take other actions to remedy injurious depletions from Subdistrict Wells and to fund certain additional programs with the purpose of reducing groundwater consumption within Subdistrict No. 1.

The fees are set by the Board of Managers and certified to the three counties, Alamosa, Rio Grande and Saguache, which collect these fees on their tax rolls. For the 2024 irrigation season, the Administrative Fee was set at \$3.50 per irrigated acre, the CREP Fee was set at \$3.25 per irrigated acre and the Water Value was set at \$150 per acre-foot of groundwater withdrawn, as offset by SWC, if any.

Table 5.0
2024 Subdistrict No.1 Assessments

Fee Type	Amount of 2024 Assessments
Administrative Fees	\$576,873.72
Conservation Reserve Enhancement Program Fees	\$535,663.72
Variable Fees	\$5,256,656.88

11.1.4 CONTRACTUAL ARRANGEMENTS AMONG WATER USERS, WATER USER ASSOCIATIONS, WATER CONSERVANCY DISTRICTS, SUBDISTRICTS, AND/OR THE RIO GRANDE WATER CONSERVATION DISTRICT

1. FORBEARANCE AGREEMENTS

Several ditches have entered into a Forbearance Agreement with Subdistrict No.1 for the 2025 Irrigation Season. Pursuant to section 37-92-501(4)(b)(I)(B), C.R.S., Subdistrict No. 1 has reached agreement with each ditch whereby injury to their water rights resulting from the use of groundwater by Subdistrict Wells may be remedied by means other than providing water to replace stream depletions, when the ditch is the calling right on the Rio Grande. Copies of the forbearance agreements are included in **Appendix H**. The expected yield of these agreements is as shown above in the table of replacement sources.

Great Sand Dunes Forbearance

Copies of Forbearance agreements to remedy depletions from the three Great Sand Dunes National Park wells are included in **Appendix O**.

2. CLOSED BASIN PROJECT PRODUCTION

According to the Division No. 3 Engineer's Rio Grande Compact Ten-Day Report on March 31st, 2025, the projected production of the project delivered to the Rio Grande is 7,600 acre-feet during the calendar year 2025. The division of the Closed Basin Project production in accordance with agreements with Conejos River and Rio Grande water users' organizations and special districts is 60% to the Rio Grande and 40% to the Conejos River over the long term, with provisions for adjustments in the division during individual years. Pursuant to the Resolution Regarding Allocation of the Yield of the Closed Basin Project, the management and allocation of the Rio Grande's share of the Project's usable yield is made by the Rio Grande Water User's Association in consultation with the San Luis Valley Water Conservancy District. At a meeting of the Rio Grande Water User's Association Board of Directors on March 31st, 2025, the Board of Directors passed a motion to specifically allocate up to 4,560 acre-feet of the Rio Grande's share of the usable yield of the Closed Basin Project to replace the stream depletions under this ARP and in conjunction with the other operating Subdistricts. Similarly, the Board of Directors of the San Luis Valley Water Conservancy District agreed to the allocation as stated in their letter to the Rio Grande Water Conservation District on April 11th, 2025. The projected amount of the CBP production needed by Subdistrict No. 1 under this ARP is shown above in Table 4.1. See **Appendix I** for a copy of the letters.

It may be necessary for the Subdistrict to make a request to the Division No. 3 Division Engineer to allow a portion of the production of the CBP during the non-wintertime months (April-October) be used to offset the Subdistrict's wintertime depletions (November-March). It is anticipated this scenario will only occur when the total depletions for all RGWCD Subdistricts combined in any one or more months during the winter are greater than the production of the CBP in those months. The total CBP allocation approved to cover wintertime depletions for the Subdistrict must not be exceeded. It may also be necessary for the Subdistrict to make a request to replace wintertime depletions (November-March) with reservoir releases and will be released per recommendation of the Division No. 3 Engineer.

11.1.5 DOCUMENTATION OF PROGRESS TOWARDS ACHIEVING AND MAINTAINING A SUSTAINABLE WATER SUPPLY

1. WATER LEVELS, PRESSURE LEVELS, AND/OR GROUNDWATER WITHDRAWALS

a. UNCONFINED AQUIFER CHANGE IN STORAGE VOLUMES.

A tabulation of groundwater levels measured in unconfined and confined wells both within the boundaries of Subdistrict No. 1 and the study area for the Change in Unconfined Aquifer Storage– West Central San Luis Valley are provided in Appendix J. This tabulation includes measured values for each of the wells obtained during the previous 12-months. A map showing the location of each well is also included in Appendix J.

One of the primary goals of Subdistrict No. 1 is to cause groundwater levels in the unconfined aquifer to recover within the Subdistrict No.1 boundary to a level that will maintain a sustainable irrigation supply for Subdistrict No.1 wells. The PWM includes a required objective of recovering groundwater levels to the extent necessary to achieve unconfined aquifer storage levels between 200,000 and 400,000 acre-feet below the storage level that existed on January 1, 1976.

The change in unconfined aquifer storage based on measurements from January 1976 through February 26, 2025 was -1,263,314 acre-feet on an accumulated month basis.

As described in the PWM, the accumulated 5-year running average of the annual average of the monthly change through December 1, 2024 was -1,231,043 acre-feet. As previously noted, the goal in the PWM is to achieve a recovery and maintain storage at a level between -200,000 and -400,000 acre-feet. The December 1, 2024 five year running average storage value is 831,043 acre-feet below the lowest goal level.

b. PROJECTIONS OF UNCONFINED AQUIFER CHANGE IN STORAGE VOLUMES

The current 5-year rolling average unconfined aquifer level is -1,231,043 ac.-ft. Assuming recovery must be met by the year 2031, the recovery amount needed to reach the lower target level of - 400,000 ac.-ft. each year would be +197,738 ac.-ft. The graph below shows the current aquifer levels and recovery amount needed to meet the lower level described above. The chart below shows the levels of unconfined aquifer storage since the beginning of the study and, beginning in February 2025, the required projected recovery to meet the lower target.

Figure 6.1
2025 Projections of Unconfined Aquifer Storage

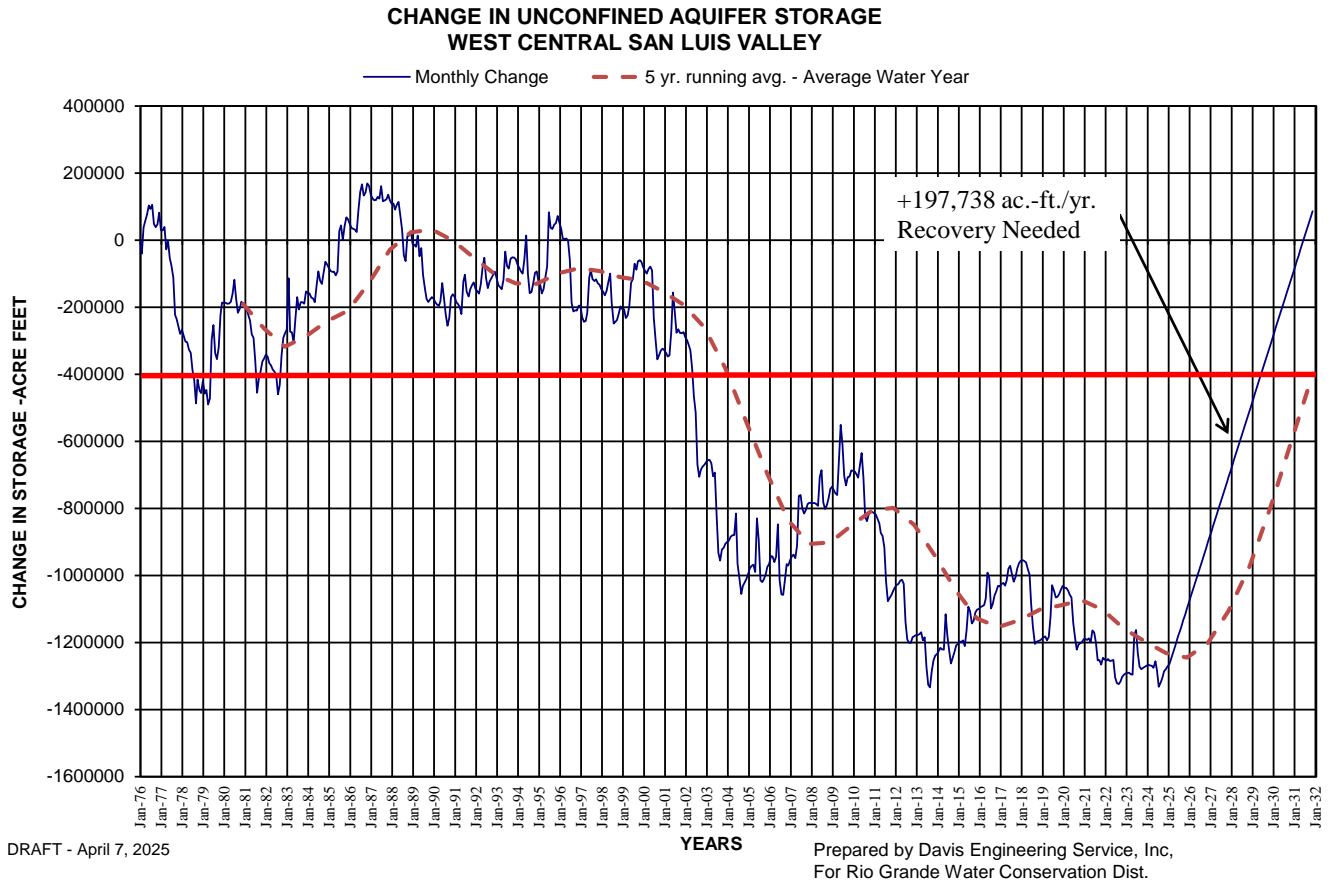


Figure 6.2
Charts Showing Change in Unconfined Aquifer Storage

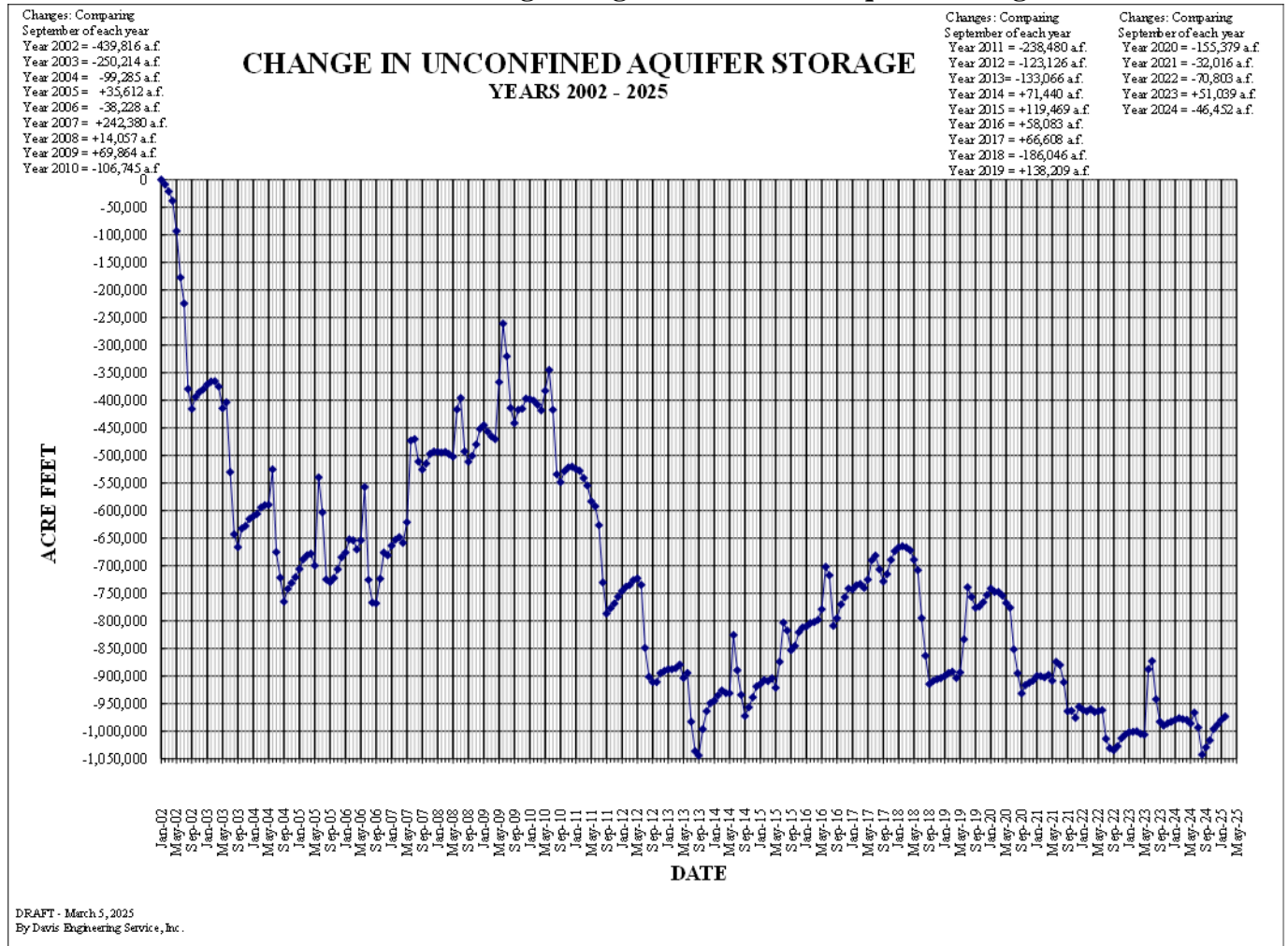
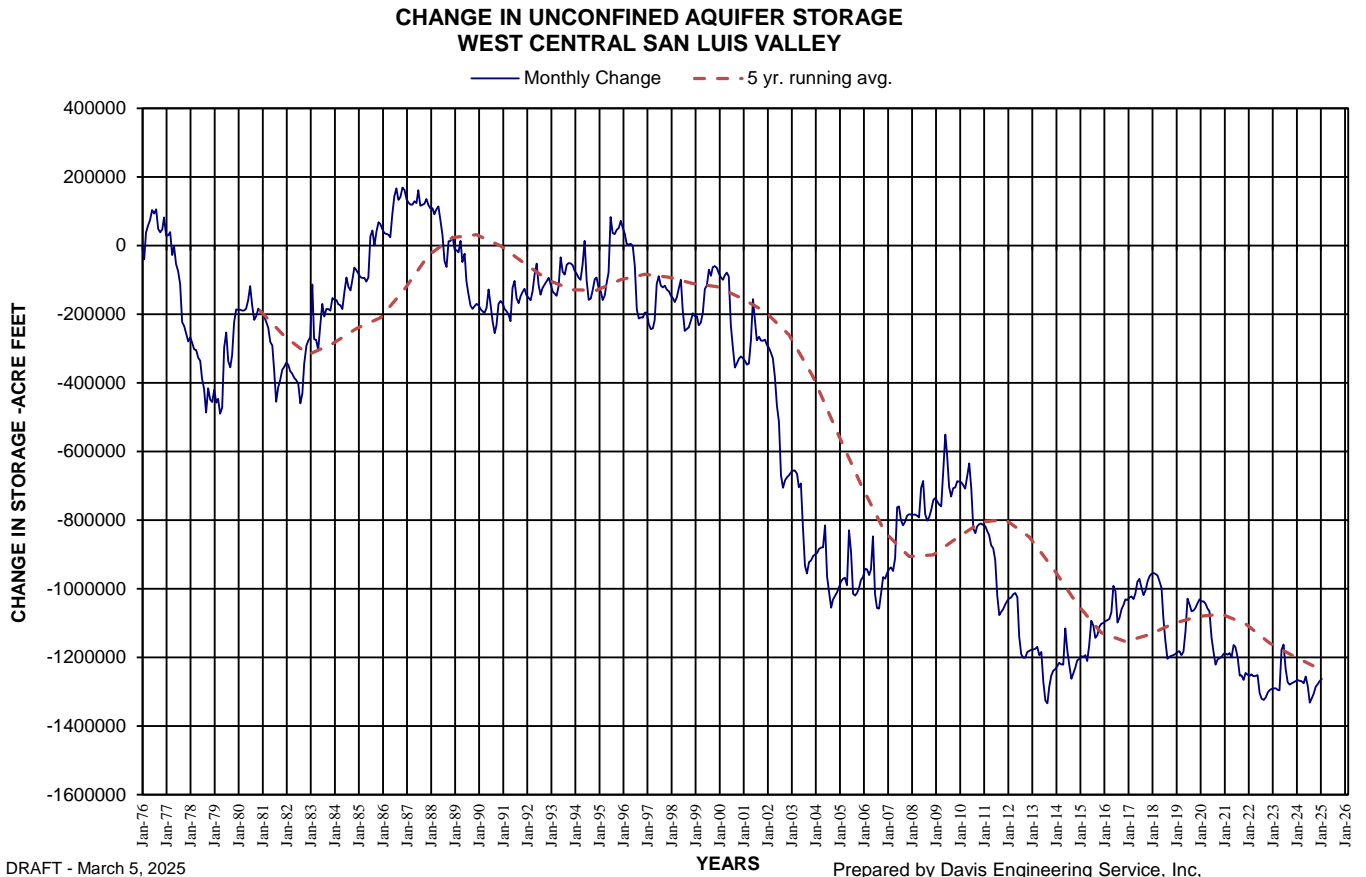


Figure 6.3
Change in Unconfined Aquifer Storage



DRAFT - March 5, 2025
 Data through February 26, 2025

Prepared by Davis Engineering Service, Inc,
 For Rio Grande Water Conservation Dist.

2. LISTING OF IRRIGATED ACRES PROPOSED TO BE TEMPORARILY OR PERMANENTLY FALLOWED AND ASSOCIATED WATER RIGHTS

a. 2025 CONTRACTED CONSERVATION RESERVE ENHANCEMENT PROGRAM LANDS

Section III, Part D of the PWM concerns the “Restoration of Groundwater Levels and Groundwater Storage”. The PWM states: “It is anticipated that to achieve sufficient reduction of well withdrawals to accomplish the Unconfined Aquifer storage goal, dry-up of approximately 40,000 acres of land previously irrigated during calendar year 2000 will be required.”

RGWCD Staff continue to compile irrigated acreage coverage for the year 2000 by digitizing past RGWCD irrigated cropland census maps for the area within the Subdistrict’s boundary. This information will serve as a basis to determine the previously irrigated lands in the year 2000 that have been fallowed as part of the PWM through the CREP, other Federal conservation programs or Subdistrict No. 1 programs. The RGWCD has urged voluntary dry-up since the early 2000s. Across the Valley, producers have voluntarily altered farming practices by removing corner systems and end guns from their sprinklers and other actions to reduce acreage and water consumption.

As of April 15, 2025, Subdistrict No. 1 has finalized FSA CRP-1 Contracts, see Table 6.0, for **4,332.54** acres in Permanent Water Retirement and **6,547.01** acres in 15 Year Water Retirement terms for a total of **10,879.55** acres reducing water consumption by approximately 14,213.3 acre-feet per year. The Subdistrict No. 1 Rio Grande CREP signup is ongoing. A map and legal descriptions for these CREP parcels is included in **Appendix L**.

Table 6.0
Rio Grande River CREP Enrollment (in acres)

Year	Permanent	Temporary	Total
2014	918.6	1,049.9	1,968.5
2015	680.36	1,206.56	1,887
2016	1,164	751.22	1,915.2
2017	0	479.72	479.7
2018	241.78	1,509.98	1,751.8
2019	0	597	597
2020	604.64	120	724.6
2021	600.22	0	600.2
2022	0	100	100
2023	0	484.56	484.56
2024	122.94	248.07	371.01
TOTAL	4,332.54	6,547.01	10,879.55

b. TEMPORARY LAND RETIREMENT-FALLOW

Subdistrict No. 1 acting through its Water Activity Enterprise agreed to compensate a Contractor at the rates stated in contract, in return for no groundwater or surface water irrigation use on a parcel of irrigated land for each year the contract is in effect. This program allows for flexibility to producer rotating which field is fallowed and requires a cover crop to help prevent soil erosion and different options for amount of time the land is set aside.

Table 6.1
2025 Subdistrict No.1 One Year Fallow Contracts

Contracts	Irrigated Acres	5 Year Average Diversion	Estimated Reduction
80	9,600	13,245	12,300

Additional information is provided in **Appendix L**.

In 2025, Subdistrict No. 1 Board of Managers acting through its Water Activity Enterprise agreed to open a one-year ranked fallow program. This program allows for producers to bid on which field is fallowed and a ranking calculation was developed using a 5-year average diversion and the offered price by the Contractor. A resolution to open the program was signed on January 14th, 2025 after being approved by the Subdistrict No. 1 Board of Managers. At an Annual Meeting on March 4th, 2025, eighty (80) applications for fallow were accepted. This program looks to reduce irrigation on approximately 9,600 acres with the anticipated amount of reduced groundwater withdrawal being approximately 12,300 acre-feet.

c. WELL PURCHASE PROGRAM

The Board of Managers, at the January 14th, 2025 meeting, chose to offer the Well Purchase Program (WPP) for 2025 and received 10 bids. At the March 4th, 2025 meeting, the Board of Managers reviewed those 10 bids, and 3 were accepted. The WPP seeks to purchase groundwater rights. Wells to be purchased are based on a ranking system that combines annual diversions, asking price, acres, and aquifer to create a score. The lowest score indicates the well is most beneficial to the subdistrict to purchase and retire. The following is a summary of wells purchased through the WPP up to 2025:

- 1) In 2021, a total of 19 wells were purchased through the WPP, retiring 1,375 acres from pumping, with a total 10-year average of 1,766.49 acre-feet of groundwater pumping retired.
- 2) In 2022, a total of 16 wells were purchased through the WPP retiring 1149 acres from pumping with a total 10-year average of 1009.48-acre feet of groundwater pumping retired.

- 3) In 2023, a total of 15 wells were purchased through the WPP retiring 1303 acres from pumping with a total 10-year average of 1650.81 -acre feet of groundwater pumping retired.
- 4) In 2024 the subdistrict incentivized the Senate Bill 22-028 THE GROUNDWATER COMPLIANCE AND SUSTAINABILITY FUND, instead of offering a WPP. The details of the Senate Bill are outline below in section d.
- 5) In 2025, a total of 4 wells are to be purchased retiring 570.4 acres, with a total 10-year average diversion of 730.11 acre feet of groundwater pumping retired.

Map & List of well purchases can be referenced in **Appendix L**.

d. SENATE BILL 22-028 THE GROUNDWATER COMPLIANCE AND SUSTAINABILITY FUND (C.R.S. § 37-60-134)

In accordance with the provisions of CRS § 37-60-134, also referred to as SB22 - 028, the following requirements must be met in order to access funds made available by this law. The Board of Directors of the RGWCD, in collaboration with the Colorado Water Conservation Board (“CWCB”) and the state engineer, may establish eligibility and application criteria for disbursement of money from the fund. The board of directors shall post on its website any criteria established pursuant to this subsection. CWCB shall disburse money from the fund based on recommendations from the board of directors of the RGWCD, which recommendation must first be approved by the state engineer. Any disbursement of these funds must support a verifiable reduction in groundwater withdrawals from non-exempt wells that are subject to aquifer sustainability requirements as outlined in the State’s Rules and Regulations for Groundwater Withdrawals in Colorado Water Division No. 3 (“Regulations”). The verified reduction in groundwater withdrawals may occur within any response area within Water Division No. 3 which has aquifer sustainability requirements.

The initial requirement for participation in the Program is that a participating well owner must have irrigated the submitted tract of land with the well(s) for five (5) years out of the period 2013 to 2022, inclusive, by pumping a minimum of fifty (50) acre-feet in each of the five (5) years. A WITHDRAWAL PAYMENT will be made to the participating well owner for each participating well, or participating wells, utilized on the submitted tract of land at a compensation rate of \$3,000.00 per acre-foot of groundwater withdrawn based on the average withdrawals of the five (5) highest years reported to the Colorado Division of Water Resources during the period from 2013 to 2022, inclusive. To qualify, wells must have at least five (5) years of reported withdrawals at a minimum rate of fifty (50) acre-feet per year for each of the five (5) years. There is a TOTAL PAYMENT cap, for each quarter section of \$650,000.00 which will be calculated as the sum of the payment described in Paragraphs 3.1 Because the purpose of this Program is to support a verifiable reduction in groundwater withdrawals, eligibility does not extend to groundwater withdrawals on land that has surface water decreed for irrigation of that land and proper irrigation depends on the surface water recharged to the groundwater system pursuant to a recharge decree or plan of management or plan of augmentation thereby creating a quantified recharge

credit.

In 2023, \$30 million was allocated to the Rio Grande Basin to target areas within the basin that have a sustainability requirement. The enrollment was not limited to Subdistrict No. 1, and any subdistrict that had sustainability requirements in their plans of water management could enroll. With limited enrollment in the first round in Subdistrict No. 1, Subdistrict No.1 decided to add an incentive of \$1,250.00 to the acre-foot average being paid with the Senate Bill funding. With that said, as the date of this report, a total of 21 applications have been entered into this program. These applications into SB22-028 are estimated to reduce pumping on approximately 3,316 acres and reduces approximately 6,177 acre-feet of groundwater withdrawals annually.

Map & List of well purchases can be referenced in **Appendix L**.

For Preventive Planting Insurance programs within the Subdistrict also partially retired groundwater use on approximately 4,650.70 acres in the previous Plan Year.

3. LISTING OF SURFACE WATER RIGHTS PROPOSED TO BE TEMPORARILY OR PERMANENTLY RETIRED AND HISTORICAL OPERATIONS OF EACH WATER RIGHT.

Based on total head-gate diversions for the Rio Grande Canal (59.5 Shares), SLV Canal (1000 shares) and Farmers Union (948 share acres) during the irrigation season the Subdistrict with their combined 2,007.5 shares of surface water diverted approximately 2,729 acre-feet towards recharge to the unconfined aquifer on the White, McConnell, Lacy and West Medano Ranch properties during the irrigation season in 2024. Subdistrict No. 1 did not use the wells located on these parcels for any purpose in 2024. A map identifying the locations of the permanent land purchases acquired by the Rio Grande Water Conservation District for Subdistrict No. 1 is included in **Appendix M**.

4. OTHER PROPOSED ACTIONS TO BE TAKEN AS APPLICABLE

The Board of Managers of Subdistrict No. 1 and the Subdistrict members remain keenly aware of the PWM deadlines to achieve and maintain sustainability of the unconfined aquifer. In previous years, despite average to below average precipitation and runoff, the unconfined aquifer was making a steady recovery. However, the historic low precipitation and runoff that occurred in 2018 & 2020, in addition to the ongoing and historic multi-decade drought, resulted in a reduction in unconfined aquifer levels. This has been and remains a cause of concern for the Board of Managers of Subdistrict No. 1, but they remain committed to restoring and maintaining a sustainable unconfined aquifer.

Subdistrict No. 1 is somewhat limited in its ability to reduce pumping; the Subdistrict does not have regulatory or police powers over groundwater withdrawals – the only tool the Subdistrict has is to incentivize reduced groundwater withdrawals and increase conservation. In support of these ongoing actions, Subdistrict No. 1 was able to amend its previous PWM to allow an increase in the Water Value, and the Board of Managers increased the Water Value for groundwater withdrawals beginning in 2019. This increase in Subdistrict No. 1's revenue allows

the Subdistrict to provide additional incentives towards short- and long-term conservation. The Board of Managers continues to solicit input from interested stakeholders and work on new and innovative conservation measures, while continuing to fund existing programs.

Examples of past conservation measures are: purchasing wells, informing constituents of aquifer level through a monthly email publication; public forums to provide education on sustainability, aquifer conditions and programs offered through the Subdistrict; online surveys to solicit input on conservation ideas; expanded options on fallow program to increase enrollment; and, mailing out end of year water report by farm to raise water use awareness, with customized calculation on what a 10% cut back would look like on a field by field basis.

The Board of Managers and Subdistrict members are currently set for trial in January 2026 to amend and restate the current approved PWM, with the intent to balance water imported into the Subdistrict against groundwater pumping and rely upon natural inflow into the aquifer system to recover the unconfined aquifer. As the Subdistrict can neither predict nor control future hydrologic cycles, it is not known how long aquifer recovery will take. In the event that pumping exceeds imported water, the Subdistrict will continue working to assure aquifer sustainability in the only way they have available – by charging an over pumping fee which is used to fund conservation programs for Subdistrict members. Subdistrict No.1 expects to see once again recovery in the unconfined aquifer and continue doing everything within its limited authority to complete its charge under the PWM.

Annual Replacement Plan Appendices
2025 Plan Year

Prepared

April 15, 2025

By

Rio Grande Water Conservation District
8900 Independence Way
Alamosa, CO 81101

And In Consultation With

Davis Engineering Services, Inc.
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Alamosa, CO 81101

Appendix A

Subdistrict No.1 Well List

A comprehensive listing of wells included in the ARP is necessary for DWR to identify which wells are permitted to continue operating in accordance with the above referenced court decrees and any future well regulations promulgated by the DWR. Further, the list of wells is a necessary input to the RGDSS Groundwater Model.

The following language was copied from the 06CV64 and 07CW52 Decree and describes the evolving nature of the Subdistrict No.1 Well list:

“The Subdistrict No. 1, in cooperation with the Division of Water Resources, prepared a list of Subdistrict Wells by category. Appendix 3 states, and the testimony at trial was clear, that the data accumulated for the Subdistrict No. 1 Well Database comes from several sources and this is the first such comprehensive collection of well information pertaining to Subdistrict No. 1. Accordingly, the well database is ‘considered a draft and will continue to be updated.’”

“The Subdistrict must report each Plan Year’s updated Subdistrict Well Database to the State and Division Engineers as a part of the approval of any Annual Replacement Plan and must incorporate all of the changes to the Subdistrict Well Database.”

Appendix A is the most current tabulation of the Water District Identification Number (WDID) and the irrigation well pumping of each Subdistrict No.1 well. The WDIDs of the wells added to and removed from the 2024 Subdistrict No.1 Well list is noted in section 1.0 and noted at the end of Appendix A.

Each year, as producers report information for their farm units and additional data is accumulated from other sources regarding well use and ownership, the Subdistrict Well list is updated. Requests for Farm Unit updates will be mailed out before the end of April 2024. Any reported corrections regarding wells are incorporated into the Subdistrict No. 1 Well list through a contract process at the March annual meeting. All wells added or removed from the Subdistrict Well list is referenced in section 1.0.

**Appendix F
History & Documentation of Purchase**

4.1 WILLIAMS CREEK SQUAW PASS TRANSBASIN DIVERSION CURRENTLY HELD IN RIO GRANDE RESERVOIR

This trans-basin water was stored under the decree held by Navajo Development Company in Rio Grande Reservoir. Subdistrict No. 1 controls 122.70 acre-feet of this Squaw Pass trans-basin water. Subdistrict No. 1 purchased the right to use the first 1,000 acre-feet of water from Navajo Development Co., owned by John H. Parker II in early March 2012. This water was carried over into 2013. A Substitute Water Supply Plan has been approved by the State Engineer for the additional uses of augmentation and recharge for this water. See Appendix F for documentation of purchase.

WILLIAMS CREEK SQUAW PASS-Navajo	
YEAR PURCHASED	AMOUNT (AF)
August 2012	1,000
August 2012	300
July 2013	350
December 2014	481.31
December 2015	453.00
TOTAL	1,584.31

4.2 WILLIAMS CREEK SQUAW PASS TRANSBASIN DIVERSION STORED IN RIO GRANDE RESERVOIR

This 56.49 acre-feet of trans-basin water is held by San Luis Valley Irrigation District in Rio Grande Reservoir. Subdistrict No. 1 purchased the right to use this water from the San Luis Valley Irrigation District in February 2013. A Substitute Water Supply Plan has been approved by the State Engineer for the additional uses of augmentation and recharge for this water. See Appendix F for documentation of purchase.

WILLIAMS CREEK SQUAW PASS - SLV Irrigation District	
YEAR PURCHASED	AMOUNT (AF)
February 2014	56.49
TOTAL	56.49

4.3 PINE RIVER WEMINUCHE PASS DITCH TRANSBASIN DIVERSION HELD IN RIO GRANDE RESERVOIR

This trans-basin water was owned and controlled by the San Luis Valley Water Conservancy District and is currently held in Rio Grande Reservoir. A Substitute Water Supply Plan has been approved by the State Engineer for the additional uses of augmentation and recharge for this water. See Appendix F for documentation of purchase.

PINE RIVER WEMINUCHE PASS DITCH	
YEAR PURCHASED	AMOUNT (AF)
April 2014	500
April 2015	500
TOTAL	1,000

4.4 TABOR DITCH NO. 2 TRANSBASIN DIVERSION HELD IN RIO GRANDE RESERVOIR

This trans-basin water is stored under decrees held by the CPW in Rio Grande Reservoir. The Tabor Ditch No. 2 and the Tabor Ditch No. 2 Enlargement, decreed by the District Court, in and for Montrose County in the Matter of the Adjudication of Priorities for Water Rights in Water District No. 62, in the State of Colorado, Case No. CA6981 (March 30, 1960). Such water rights were subsequently changed through a decree entered on December 29, 1979, in Case No. W-3549 in the District Court for Hinsdale County. A Substitute Water Supply Plan has been approved by the State Engineer for the subsequent use of this water for augmentation and recharge. See Appendix F for documentation of purchase.

TABOR DITCH NO. 2	
YEAR PURCHASED	AMOUNT (AF)
February 2013	60.53
February 2014	50.48
TOTAL	111.01

4.5 TREASURE PASS DIVERSION DITCH AND FEEDER LATERALS DIRECT FLOW WATER STORED IN RIO GRANDE RESERVOIR

This trans-basin water originates in Water Division No. 7 and is currently used in Water Division No. 3. Under the previously approved Substitute Water Supply Plan, the amount of water was measured and recorded as the water brought from the Colorado River Basin into the Rio Grande Basin. When the water reached the confluence with the Rio Grande, the water was exchanged into and stored in Rio Grande Reservoir, less appropriate transit losses. This diversion and exchange operated for 2013, 2014, and 2015 until December 31, 2015, and all water stored under the exchange for all years remain as property and under the control of Subdistrict No. 1. See Appendix F for documentation of purchase.

4.6 TREASURE PASS DIVERSION DITCH AND FEEDER LATERALS DIRECT FLOW WATER STORED IN RIO GRANDE RESERVOIR

This fully consumable water was purchased in March 2014 from the Klecker Ranch owned by Sid and Jan Klecker and is currently held in Rio Grande Reservoir. See Appendix F for documentation of purchase. This trans-basin water originates in Water Division No. 7 and is currently used in Water Division No. 3. A Substitute Water Supply Plan has been approved by the State Engineer for the subsequent use of this water for augmentation and recharge.

PINE RIVER WEMINUCHE PASS DITCH	
YEAR PURCHASED	AMOUNT (AF)
March 2014	100
April 2013	730.76
TOTAL	830.76

4.7 PIEDRA WATER RIGHTS STORED IN RIO GRANDE RESERVOIR

This trans-basin water is stored under decrees held by CPW in Rio Grande Reservoir. It originates in Water Division No. 7 and is decreed to the South River Peak Ditch, the South River Peak Ditch Enlargement, the Don La Font Ditch No. 1, the Don La Font Ditch No. 2 and the Don La Font Ditch No. 2 Enlargement (collectively “Piedra Water Rights”). This water was leased from CPW in June of 2014. This water will be subsequently released to replace injurious depletions under the direction of the Division Engineer for Water Division No. 3 to meet the requirements of the Subdistrict No. 1 ARP. A Substitute Water Supply Plan has been approved by the State Engineer for the subsequent use of this water for augmentation and recharge. See Appendix F for documentation of purchase.

PIEDRA	
YEAR PURCHASED	AMOUNT (AF)
JUNE 2014	500
TOTAL	500

4.8 SANTA MARIA RESERVOIR COMPANY SHARES

There is a remaining balance of 11,502.4 acre-feet of fully consumable water from the original 18,159.14 acre-feet of Santa Maria Reservoir Company water leased by Subdistrict No. 1. This water is in storage in Santa Maria Reservoir, Continental Reservoir and Rio Grande Reservoir and was accumulated from 2011 through 2019 storage seasons. **See Appendix G.**

The Subdistrict will use the above listed water in this ARP plus the consumable water derived from leases of SMRC shares in the current Plan Year.

The Subdistrict does not hold any leases for 2025.

The Santa Maria Reservoir Company filed an application with the Division 3 Water Court, Case No. 2013CW3002 to, among other things, add augmentation and recharge as additional uses under their current decrees. While the 2013CW3002 case was pending, the Santa Maria Reservoir Company filed annual requests for a Substitute Water Supply Plan to allow use of the water as requested in its application. The State Engineer approved each request. On June 1, 2018, the Water Court approved the Santa Maria Reservoir Company’s Application and issued a Decree that, among other things, approved the use of water derived from the Santa Maria Reservoir Company shares for augmentation and recharge, subject to certain terms and conditions. Although an appeal to the Colorado Supreme Court of the Water is pending, the Water Court’s Decree has not been stayed and no SWSP is necessary for this ARP as any use of this water will be done in compliance with the June 1, 2018 Decree.

Appendices

- Appendix A** Tabulation of Subdistrict Wells
- Appendix B** List of Augmentation Wells, Links and Map
- Appendix C** NRCS Forecasts, 10 Day Forecast DWR, Compact
- Appendix D** Projected Recharge Credits
- Appendix E** Ditches and Pro Rata Shares
- Appendix F** History & Documentation of Purchase
- Appendix G** Santa Maria Leases
- Appendix H** Forbearance Agreements
- Appendix I** Closed Basin Project Letters
- Appendix J** Unconfined and Confined Groundwater Levels in Wells within Subdistrict No. 1, Well Location Map
- Appendix K** Hydraulic Divide Maps with Groundwater Contours, Flow Vectors
- Appendix L** Lists of Current CREP, Fallow Parcels, Well Purchase Program & Senate Bill 22-028 in Subdistrict No. 1 by Legal Location & Maps
- Appendix M** Map of Permanent Land Purchases for Subdistrict No. 1
- Appendix N** Centennial Ditch Company Resolution
- Appendix O** Great Sand Dunes National Park Forbearance
- Appendix P** List of Contract Wells