



May 1, 2024

Amber Pacheco, Deputy General Manager
Rio Grande Water Conservation District
8805 Independence Way
Alamosa, CO 81101

**RE: 2024 ANNUAL REPLACEMENT PLAN APPROVAL: SPECIAL
IMPROVEMENT SUBDISTRICT NO. 6 OF THE RIO GRANDE
WATER CONSERVATION DISTRICT**

Dear Ms. Pacheco:

Thank you for your April 14, 2024 submission of the Special Improvement District No. 6's proposed Annual Replacement Plan (ARP) for the 2024 Plan Year (**May 1, 2024 through April 30, 2025**).

My staff and I have reviewed the proposed ARP and its appendices, and it is hereby approved. A copy of this approval will be available on the DWR website at:

<https://dwr.colorado.gov/division-offices/division-3-office>

All information and data related to this approved ARP will be available on our website.

Enclosed, please find my approval of the 2024 ARP.

Very Sincerely,

Jason T. Ullmann, P.E.
State Engineer
Director of Division of Water Resources

cc: Division 3



Subdistrict No. 6 ARP Approval: Plan Year 2024

Review, Findings, and Approval of Subdistrict No. 6's 2024 Annual Replacement Plan

Background

Special Improvement District No. 6 (“Subdistrict”), a political subdistrict of the Rio Grande Water Conservation District (“RGWCD”), formed through Conejos County District Court in Case 2018CV30014, timely submitted its proposed Annual Replacement Plan (“ARP”) pursuant to its Plan of Water Management (“PWM”) approved by the State Engineer and noticed through Division No. 3 Water Court in Case No. 2019CW3011 on September 25, 2019.

The 2024 Plan Year ARP and its appendices were available for download through a link on the RGWCD website. The ARP, its appendices, and resolutions were provided to the State and Division Engineers on April 15, 2024. Copies of the ARP were made available for viewing at the State and Division Engineers’ offices. The ARP, its appendices, resolutions, the Subdistrict’s Response Functions, and this letter will be posted on DWR’s website. My staff and I have conducted this review of the ARP and comments thereon in accordance with the operational timelines specified in the Court approved 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 (“Rules”), Case 2015CW3024.

DWR Review

As set forth in the Rules, I must determine whether the ARP presents “sufficient evidence and engineering analysis to predict where and when Stream Depletions will occur and how the Subdistrict will replace or Remedy Injurious Stream Depletions to avoid injury to senior surface water rights.” (Rules 11.3). Also, “The ARP will include: a database of Subdistrict and Contract Wells that will be covered by the ARP; a projection of the groundwater withdrawals from Subdistrict and Contract Wells during the current Water Administration Year; a calculation of the projected stream depletions resulting from groundwater withdrawals from Subdistrict and Contract Wells; a forecast of the flows for Division No. 3 streams; detailed information regarding the methods that will be utilized to replace or remedy injurious stream depletions during the ARP Year, including any contractual agreements used for replacement or remedy of injurious stream depletions that will be in place; any information regarding the fallowing of Subdistrict Lands; information to document progress towards achieving and maintaining a Sustainable Water Supply; and, documentation that sufficient funds are or will be available to carry out the operation of the ARP.” (Subdistrict PWM, Section 6.1.2). Finally, I must review the ARP pursuant to the statutory mandates, constitutional requirements, rules and regulations adopted in Division No. 3, and any letters, comments, or other objections submitted by water users regarding the adequacy of the ARP. There were no letters, comments, or other objections submitted regarding the 2024 ARP.

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With the foregoing in mind, I turn to a review of the ARP. It would be unwieldy to include in my review every detail of the thorough ARP, so for the purpose of this letter, I incorporate it and its supplements by reference.

11.1.1 Database of All Wells to be Covered by the ARP

Structure Identification Number (WDID) (Section 1 of 11.1.1 of the ARP)

A comprehensive list of wells included in the ARP is necessary in order to allow DWR to verify which wells are authorized to operate in accordance with the ARP. To that end, the Subdistrict submitted the most current tabulation of the structure identification number (WDID) of each well included in the Subdistrict (see Appendix A of the ARP). The Subdistrict also supplied a spreadsheet to DWR of the list of Subdistrict Wells as a supplement to the 2024 ARP. Appendix A lists 541 wells, which includes 2 wells included by contract for 2024, WDIDs 2008022 & 2009649, for commercial use.

The Subdistrict listed a “New Well” in the 2023 ARP as a contract well, to be assigned a WDID and covered by the Subdistrict once an SWSP was approved. The well was conditionally approved for the 2023 ARP. The SWSP intended to move HCU from an existing Subdistrict well, WDID 2205146, to this well. SWSP 9397 will not be approved under its proposed plan, and the Subdistrict was notified when they submitted the 2023 Preliminary Water Report that the New Well is denied coverage under the Subdistrict’s ARP.

The contract wells accepted by the Subdistrict in 2024 are listed in Appendix B. Contract wells were reviewed for the terms of the contracts, associated permits and decrees for each well, and historical meter records. Any wells that are used for any beneficial uses not authorized by permit and/or decree for those structures cannot be covered by the 2024 ARP and the owners will be notified by separate correspondence.

Wells that have submitted an SWSP and started the process of changing an existing permitted/decreed use to a Non-Exempt use described in the participation contract can be conditionally accepted. These wells cannot be operated until the SWSP and/or decree is finalized and approved. Should an SWSP become invalid during the ARP Year or the change of use in a court case be denied, the well can no longer be covered by the ARP and the owners will be notified.

All wells accepted as contract wells for this ARP approval have permitted and/or decreed limits, and they will only be accepted for groundwater withdrawals up to those respective limits. If historical records indicate a pattern of exceedance of these limits in the past, owners of these wells may be notified by separate correspondence that their wells are being conditionally accepted, and that exceedance of the legal limits will not be covered under this ARP. The Subdistrict will be copied on all separate correspondence sent for these purposes.

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Other Well Identification Information (Section 2 of 11.1.1 of the ARP)

The requirement to provide the database of wells the Subdistrict has accepted as part of this ARP was satisfied under 11.1.1.1.

Subdistrict Wells with Plans for Augmentation (Section 3 of 11.1.1 of the ARP)

The ARP Well List includes some wells that are either fully or partially augmented by an approved plan for augmentation which is administered separately from the Subdistrict's PWM. These plans for augmentation associate surface rights with these Subdistrict Wells and other non-Subdistrict wells to remedy some portion or all of each well's injurious stream depletions. These wells are included in the Subdistrict's ARP Well List, and if any portion of their legally decreed groundwater withdrawals is not remedied by an individual plan for augmentation, it is subject to Subdistrict fees and the Subdistrict will remedy injurious stream depletions and post-plan injurious stream depletions attributable to the non-augmented portion of a well's total groundwater withdrawals as part of this ARP as long as the pumping is legal. "The Subdistrict and this Plan of Water Management or ARP cannot be used as a source of water for new or expanded consumptive use of groundwater which is not within the terms and conditions of a valid permit or decree which was in effect as of October 4, 2018, or for new or expanded plans for augmentation or other replacement plans without the approval of both the Court and the Subdistrict's Board of Managers." (PWM at 2.4.6)

San Luis Valley Water Conservancy District Augmentation Certificate No. 773

The ARP lists one well as a Subdistrict Well that is fully augmented for the existing uses through the SLVWCD. This well, WDID 2014260, Permit 77196-F was permitted and drilled under SLVWCD's augmentation plans as an expansion of use of Subdistrict Well WDID 2014260, Permit 45498-F. The owner joined the Subdistrict by petition when the Subdistrict was forming, not knowing their SLVWCD certificate covered all of their pumping. The Subdistrict retains this well on the well list as a non-benefitted well.

I have reviewed Appendix A, Appendix B, and Appendix C of the ARP and consulted with staff and, find it to be an accurate inventory of Subdistrict Wells that meets the requirements of Rule 11.1.1.

Total Combined Projected Annual Diversion for All Subdistrict Wells (Section 4 of 11.1.1 of the ARP)

For Subdistrict ARP Wells listed in this ARP, DWR total metered groundwater withdrawals per DWR records as of April 10, 2024 for the 2023 Water Administration Year were 91,158 acre-feet. Comparing to past years and considering operational changes anticipated from Subdistrict members for 2024, the Subdistrict determined the streamflow forecast on the Rio Grande and Alamosa River were most comparable to the 2021 actual flows so based the projection on the pumping from those years. ARP Well groundwater withdrawals in 2024 are projected to be **100,000 acre-feet**.

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Subdistrict Well Metered Pumping (acre-feet) Entered in Table 2.1 of the ARP

2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
118,020	113,309	110,239	93,641	86,604	83,097	75,444	116,057	70,227	106,378

2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
101,281	96,953	91,158							

The majority of metered groundwater withdrawals in the Plan Year will be used for irrigation through center pivot sprinklers, 70 percent. Approximately 5 percent of groundwater withdrawals will be applied to flood irrigation and 25 percent to other uses.

Expected Methods of Irrigation, the Combined Projected Number of Acres Irrigated and the Total Projected Acreage by Each Irrigation Method (Section 5 of 11.1.1 of the ARP)

Subdistrict ARP wells are projected to irrigate approximately 60,000 acres during the Plan Year, including 47,200 acres irrigated by center pivot sprinklers and 12,800 acres irrigated by flood application. The Subdistrict made this projection based on review of the breakdown of acres in the RGWCD's annual Irrigated Ag Census and information submitted with Participation or Inclusion Contracts.

Non-Irrigation Subdistrict Wells - Calculation of All Projected Withdrawals and Projected Net Groundwater Consumptive Use (Section 6 of 11.1.1 of the ARP)

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 municipal, domestic, commercial, industrial, and aquaculture. 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 2024 ARP was submitted as supplement to this ARP.

Other Data Necessary to Support the Projected Stream Depletions (Section 7 of 11.1.1 of the ARP)

No other data was provided.

Other Information Required by the State and Division Engineers and Reasonably Necessary to Evaluate the Proposed ARP (Section 8 of 11.1.1 of the ARP)

The supplemental information needed to evaluate the 2024 ARP and provided to the State Engineer included:

1. An electronic copy of the Response Functions used to prepare the tables included in

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this ARP.

2. The list of Subdistrict Wells included in the 2024 ARP in spreadsheet format matching the list presented in Appendix A
3. A spreadsheet showing the Subdistrict's breakdown of "Other" wells used to calculate the composite Consumptive Use Ratio in the Response Function.
4. A resolution from RGWCD approving the Subdistrict 2024 ARP.
5. A resolution from RGWCD to allow the Subdistrict to allocate Closed Basin Project water in the 2024 ARP.
6. A Forbearance Yield Analysis. This is a description of the Subdistrict's approach to estimate the probable yield of replacement sources for the various forbearance contracts with ditches under forbearance agreements. A copy of the spreadsheet used in the analysis was provided as supplement to the ARP.
7. Operational Requests to the Division Engineer for the 2024 ARP
 - The Subdistrict requests to aggregate depletions between Stream Reaches as part of the anticipated operation in 2024.
 - The Subdistrict requests to aggregate depletions with other Subdistricts during the 2024 ARP year.
 - The Subdistrict requests the Division Engineer allow a portion of the Closed Basin Project (CBP) production that is generated during the irrigation season be used to offset the Subdistrict's non-irrigation season depletions, though not to exceed the allocation approved by the CBP Operating Committee. This becomes necessary when the depletions owed for all RGWCD Subdistricts combined in any one or more months during the non-irrigation season are greater than the production of the Closed Basin Project production in those months.
 - The Subdistrict requests the Division Engineer allow aggregation of overpayment and underpayment of depletions among Subdistricts as determined by Response Function calculations made prior to March 1, 2024 using actual stream flows and actual metered groundwater withdrawals for the prior Water Administration Year.

11.1.2 Projected Stream Depletions from the Wells Covered by the ARP based on the Applicable Response Function or Approved Alternative Method

Section 2 of the ARP presents the data utilized to project stream depletions to the Conejos River, Alamosa River, and Rio Grande as a result of the Plan Year's groundwater withdrawals from Subdistrict ARP Wells. The Response Function outputs identify total projected stream depletions for the Plan Year, a breakdown of the monthly stream depletions for the Alamosa, two reaches on the Conejos, and three reaches on the Rio Grande, and a projection of the Post-Plan Stream Depletions calculated as a result of the predicted Plan Year groundwater withdrawals from Subdistrict ARP Wells. The Subdistrict used the current 6P98 Response Functions to calculate projected stream depletions for this ARP.

The April through September streamflow forecasts included in the ARP for the Rio Grande and Conejos systems are made by the Division Engineer and are based upon guidance given

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by forecasts from the United States Department of Agriculture’s Natural Resources Conservation Service (“NRCS”), the National Weather Service (NWS), and the National Center for Atmospheric Research (NCAR).

The NRCS streamflow statistics are calculated over a 30-year period and updated each decade, in agreement with World Meteorological Organization (WMO) standards. This 30-year reference period was chosen to characterize the current hydro climatology at each station. The current medians and averages have been updated to include data for the water years 1991-2020. The current year streamflow projection is compared to the 30-year reference period to determine the percent of “normal” streamflow. The NRCS forecasts were reported as percent of the median in this report.

The annual streamflow forecasts in Appendix D of the ARP include the NRCS April 1, 2024 forecasts, the April 5, 2024 Division Engineer’s Rio Grande Compact Ten Day Report for the Rio Grande, and the March 26, 2024 Division Engineer’s Rio Grande Compact Ten Day Report for the Conejos River basin.

2024 Stream Flow Forecast - Conejos, Rio Grande, and Alamosa Rivers (Section 1 of 11.1.2 of the ARP)

There were some differences between the NRCS and the Division Engineer’s forecasts as shown in the following table. The April - September flow the Subdistrict chose for use in the Response Functions for 2024 is a mix of the Ten Day forecast of **158,600 acre-feet** for the Conejos, and the NRCS forecast (projected 50% exceedance) of **56,000 acre-feet** for the Los Pinos, and **9,500 acre-feet** for the San Antonio. This is not an acceptable method for selecting a forecast to use for the Response Functions. The Conejos system should be considered as a whole and individual streams should not be selected from different forecast sources. If the Subdistrict has a reasonable explanation for using this method, it should be presented in the ARP.

The Subdistrict chose the NRCS forecast (projected 50% exceedance) for the Rio Grande at **445,000 acre-feet** and for the Alamosa at **60,000 acre-feet**.

Stream Flow Forecasts- Conejos River System, Rio Grande, Alamosa River

Conejos Stream Flow	Apr-Sep Forecast (acre-feet)	% of median	Estimated Additional (acre-feet)	Jan - Dec Forecast (acre-feet)
Analysis	(1)	(2)	(3)	
NRCS, “April 1st Forecast”				
Conejos River near Mogote	158,000	94%		
Los Pinos River near Ortiz	56,000	56%		
San Antonio River at Ortiz	9,500	99%		
TOTAL	223,500			
Division Engineer, Ten Day, 3/26/2024				
Conejos River near Mogote	158,600	94%		
Los Pinos River near Ortiz	65,300	107%		

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San Antonio River at Ortiz	7,000	73%		
TOTAL	230,900		29,100	260,000
Rio Grande Stream Flow Analysis				
NRCS, "April 1 st Forecast"	445,000	93%		
Division Engineer, Ten Day, 4/5/2024	445,000	93%	85,000	530,000
Alamosa River Stream Flow Analysis				
NRCS, "April 1 st Forecast"	60,000	98%		

- (1) projected 50% exceedance streamflow at the gaging station
- (2) NRCS 30-yr Average Flow: Conejos-168,000, Los Pinos-61,000, San Antonio-9,600, Rio Grande-480,000, Alamosa-61,000 (recently adjusted from Conejos-194,000, Los Pinos-73,000, San Antonio-15,600, Rio Grande-515,000, Alamosa-68,000)
- (3) January through March and October through December

Projected Plan Year Stream Depletions (Section 2 of 11.1.2 of the ARP)

Subdistrict staff predicted stream depletions caused by Subdistrict ARP Wells utilizing the Response Functions developed for the Alamosa La Jara Response Area under the RGDSS Groundwater Model Phase 6P98.

The Response Function spreadsheet was built to be used for the whole Response Area. Two instruction sheets were prepared by DWR for additional inputs to the Response Functions when there is a need to use it for individual or groups of wells. The instruction sheet, "How to Use the Application Workbook for a Subset (individual/group) of Wells" (9/23/2015), describes how to adjust the spreadsheet inputs to stream reaches that have been modeled with point source returns to streams. The instruction sheet, "How to Adjust the Application Workbook for use with a Subset of Wells" (10/15/2015), describes how to use the "Ratio Method" for Response Areas where it is necessary to apply this method.

The first step in using the current 6P98 Response Function is to input data for the whole Response Area, i.e., historical groundwater withdrawals for sprinkler irrigation, flood irrigation, "Other" pumping with corresponding "Other" consumptive use ratios for the years 2011 through 2023 and predicted values for 2024.

The Subdistrict has elected to use the Response Function spreadsheet for the subset of wells represented by the Subdistrict ARP Wells. The Alamosa La Jara Response Area requires adjustments for both point source return flows and the stream ratios, as listed below.

- Alamosa La Jara Response Area - Reach 3 (Rio Grande from Del Norte to Excelsior Ditch) from the City of Monte Vista.
- Alamosa La Jara Response Area - Reach 5 (Rio Grande from Chicago to State Line) from the City of Alamosa.
- Alamosa La Jara: Reach 1 Calculations Ratio, and Reach 6 Calculations Ratio,

Using the whole Response Area results, adjustments are made on appropriate pages of the Response Function spreadsheet. The Subdistrict ARP Wells do include the Town of Monte Vista and the Town of Alamosa wells associated with the point source return flow.

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Adjustments for the Ratio Method must be made for Reach 1: Conejos above Seledonia/Garcia and Reach 6: Alamosa River.

Once these preliminary steps are completed, the next step in calculating stream depletions using the Response Functions is updating Table 2.1 to derive the annual net groundwater consumptive use. The consumptive use ratios for sprinkler and flood irrigation used in the Model are standard factors of 83% and 60%, respectively. The consumptive use ratio for “Other” wells is specific to the uses of those wells and can vary widely. The “Other Consumptive Use Ratio” for the whole Response Area is a composite derived from the individual well withdrawals and consumptive uses.

The Subdistrict provided a spreadsheet of “Other” wells included in the Subdistrict ARP Well list as a supplement to the ARP. The spreadsheet shows the individual well groundwater withdrawals and consumptive use factors to explain how the composite ratios were determined for the subset wells represented in Table 2.1 of the ARP.

Historical ARP Well groundwater withdrawal values were entered in Table 2.1 for years 2011 through 2023. No adjustments were made by the Subdistrict for groundwater withdrawals of the subset wells for any years prior to 2011. Projected ARP Well groundwater withdrawal values were used for 2024. The Subdistrict has no Recharge that Offsets Groundwater for calculation of the Net Groundwater Consumptive Use. The projected Net Groundwater Consumptive Use for the Plan Year is **75,350 acre-feet**.

Following determination of the Net Groundwater Consumptive Use, the data was incorporated in the Response Functions Table 2.2 to calculate stream depletions for the Plan Year and projected into the future.

The Response Functions calculated stream depletions to the Conejos River, Rio Grande, and Alamosa River during the Plan Year, due to both past ARP Well groundwater withdrawals and the projected Plan Year ARP Well groundwater withdrawals. The total depletions are **±8,314 acre-feet**, which includes negative depletions of **±589 acre-feet** on Stream Reach 3 of the Rio Grande. The Response Functions’ calculated total stream depletions to the Conejos River are **±4,263 acre-feet**, to the Alamosa River **±514 acre-feet**, and to the Rio Grande **±3,538 acre-feet**. The locations of the stream depletions and monthly quantities are also tabulated in Table 2.3.

Post-Plan Stream Depletions are estimated to accrue to impacted streams for approximately 15 years. Based on predictions from the Response Functions, Table 2.4 of the ARP shows there would be a total of **±26,573 acre-feet** of Post-Plan Stream Depletions. This amounts to **±4,110 acre-feet** to the Conejos, **±20,135 acre-feet** to the Rio Grande, and **±2,328 acre-feet** to the Alamosa.

11.1.3 Description of How Injurious Stream Depletions from Groundwater Withdrawals by Wells Included in the ARP will be

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Replaced or Remedied

Amounts and Sources of Replacement Water for 2024 Plan Year (Section 1 of 11.1.3 of the ARP)

The Subdistrict has assembled a portfolio of water supplies for the replacement of Injurious Stream Depletions and remedies other than water. The ARP identifies the water rights, their availability and their amounts in Table 3.1 of the ARP. Applications for renewal of several SWSPs have been submitted or the Subdistrict has plans to submit them. Upon approval, these sources can be added for use under the 2024 ARP.

The adequacy of replacement sources for the ARP Year are dependent upon contracted amounts the Subdistrict has acquired as well as the availability of the source to pay depletions in place and time. For purposes of review of adequacy of replacement sources, there are three categories defined below, with examples described for each.

In Storage: Reservoir water in storage under the control of the Subdistrict. This water is available for release at the direction of the Subdistrict.

In Season: Ditch water that will become available to the Subdistrict when in priority during the irrigation season in the amount of depletion owed to streams daily by the Subdistrict. For some sources, water not used to pay daily depletions may be stored for Subdistrict use later.

On Call: Remedies, such as forbearance, that are available in the amount of depletion owed to streams daily by the Subdistrict, limited to when the forbearance ditch is the calling water right. I note that forbearance depends on climate and actual days when a ditch is the calling water right and the exact yield per year is indeterminate. It is also noted that the amount of forbearance water usable by the Subdistrict is limited by their depletions owed daily to streams. In addition, several Subdistricts are seeking forbearance agreements with the same ditches. DWR considers these potential competing agreements when evaluating forbearance as a replacement source.

This replacement water or remedy will be available to replace Injurious Stream Depletions as directed by the Division Engineer. A summary of the portfolio items is shown in the Replacement Sources tables on the following pages. I will approve up to the full amount itemized in the Replacement Sources tables and stated in the following sections for use in the 2024 ARP.

Subdistrict No. 6 Replacement Sources Conejos River (acre-feet)

	Water Right Name	Submitted in ARP	Approved in SWSP's	Remaining 4/1/2024 & Approved for 2024 ARP
SWSP	In Storage			
6182	SLVWCD 84CW16	12.2	110.7	
6182	SLVWCD 94CW62	110.7	110.7	

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6182	SLVWCD 14CW3011	103.8	103.8	
6163	BLM Excess Augmentation Credits 02CW38A	595.5		
	Richfield Canal (SWSP & CU Analysis pending) Assume 25% lost for release	150.0	0	
6074	Taos Valley No. 3	60.1		
	Total In Storage	972.2		812
	In Season	Limit	Expected Yield	DWR Expected Yield
SWSP	In Season			
6163	BLM Augmentation Water 2002CW38A No renewal request SWSP to store has been submitted. Until approval, water must be used directly & may not be stored.	900	450	300
6093	Taos Valley No 3 (Contract 3,000 af)	3,000	3,000	0
	Total In Season	3,900	3,450	300
	On Call	Limit	Expected Yield	DWR Expected Yield
WDID	Forbearance			
	Conejos River			
2200500	AD Archuleta - (10 yr. 2034)	No limit		
2200501	Alamo Ditch - BLM- (5 yr. 2028)	No limit		
2200501	Alamo Ditch - Willet Cattle - (3 yr. 2027)	No limit		
2200502	An Con Ditch - Willet Cattle (3 yr. 2027)	No limit		
2200504	Antonito Ditch - Willet Cattle (3 yr. 2027)	No limit		
2200509	Ball Bros 1 - (10 yr. 2027)	No limit		
2200510	Ball Bros 2 - (10 yr. 2027)	No limit		
2200513	Bernardo Romero - (10 yr. 2033)	No limit		
2200518	Branch - (10 yr. 2033)	No limit		
2200519	Brazos Del Norte - (5 yr. 2028)	No limit		
2200524	Canon Irrigating Ditch - (3 yr. 2027)	No limit		
2200531	Cordova Ditch - Espinoza and Sons (10 yr. 2034)	No limit		
2200534	Del Puerticito - (5 yr. 2028)	No limit		
2200535	East Bend Ditch - BLM - (5 yr. 2028)	No limit		
2200539	El Serrito aka Cerrito - (10 yr 2033)	No limit		
2200541	Ephraim Canal - (10 yr. 2033)	No limit		
	Fuerticitos Ditch - Espinoza and Sons (10 yr. 2034)	No limit		
2200548	Gabriel Martinez Ditch - (3 yr. 2026)	No limit		
2200553	Guadalupe Main - (5 yr. 2028)	No limit		
2200576	La Del Rio Ditch - (3 yr. 2027)	No limit		
	Lopez Ditch - Espinoza and Sons (10 yr. 2034)	No limit		
2200584	Los Ojos 1- BLM - (5 yr. 2028)	No limit		
2200585	Los Ojos 2- BLM - (5 yr. 2028)	No limit		
2200587	Los Sauces Ditch - (1 yr. 2025)	No limit		
2200589	Lovato - Lucero (10 yr. 2033)	No limit		
	Lovato Irrigation Ditch - BLM (5 yr. 2028)	No limit		
2200595	Manassa Ditch (Eastfield) - (10 yr. 2033)	No limit		

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2200593	Manassa No 3 - (10 yr. 2033)	No limit		
2200596	Manassa Westfield - (10 yr. 2033)	No limit		
	Martinez Ditch - Espinoza and Sons (10 yr. 2034)	No limit		
2200604	Mecitos Ditch - Las Mesitas - (10 yr. 2033)	No limit		
2200605	Mill Ditch - (10 yr. 2033)	No limit		
2200591	Mogote Ditch - (10 yr. 2033)	No limit		
2200608	New JB Romero - (10 yr. 2033)	No limit		
2200609	Northeastern Ditch - (10 yr. 2033)	No limit		
2200611	Overflow Ditch - Ken Salazar (5 yr. 2028)	No limit		
2200616	Richfield Canal - (5 yr. 2028)	No limit		
2200619	Romero Ditch - (10 yr. 2033)	No limit		
2200620	Sabine School Section Ditch - (10 yr. 2034) 3, 6, 7	No limit		
2200621	Salazar Ditch - (5 yr. 2028)	No limit		
2200624	San Juan San Rafael Ditch - (3 yr. 2027)	No limit		
2200627	Sanford Canal - (10 yr. 2033)	No limit		
2200631	Servietta Ditch - (10 yr. 2034) 3, 6, 7	No limit		
	Stover Ditch - (10 yr. 2033) 3, 6	No limit		
2200651	Williams Stuart Co Irrigation D - (3 yr. 2027) SD-6 only	No limit		
	Rio San Antonio			
2200664	Broyles Overflow No. 4 Ditch - (10 yr. 2033)	No limit		
2200537	Eight Mile Ditch - (5 yr. 2028)	No limit		
2200543	Florida Ditch - (5 yr. 2028)	1,000		
2200549	Galvis Ditch - (10 yr. 2033)	No limit		
2200570	Jaramillo Overflow No 2 Ditch - (10 yr. 2033)	No limit		
2200589	Lovato Irrigation Ditch (BLM) - (5 yr. 2028)	No limit		
2200590	Maes Ditch - (10 yr. 2034) and (5 yr. 2028)	No limit		
2200597	Martinez Ditch - (10 yr. 2033)	No limit		
2200615	Punche Ditch - (5 yr. 2028)	No limit		
2200617	Riedel Ditch - (5 yr. 2028)	No limit		
2200618	Rincones Ditch - (5 yr. 2028)	No limit		
2200632	Sinecero Ditch - (10 yr. 2033)	No limit		
2200633	Sisneros Ditch - (10 yr. 2033)	No limit		
2200635	Star Ditch - (10 yr. 2033)	No limit		
2200639	Taos Valley Canal No. 3 / SLVIWO - (3 yr. 2026)	No limit		
2200640	Teodoro No 1 Ditch - (10 yr. 2033)	No limit		
	Rio Los Pinos			
2200586	Los Pinos Ditch - (10 yr. 2033)	No limit		
	Total On Call- Forbearance		2,198	Up to 2,037*
	CBP Allocation (as of April 2024)	3,198	1,439	
	Total On-Call Non-Irrigation Season		1,439	

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Note: * DWR Analysis

Subdistrict No. 6 Replacement Sources Rio Grande (acre-feet)

	Water Right Name	Submitted in ARP	Approved in SWSP's	Remaining 5/1/2024 & Approved for 2024 ARP
SWSP	In Storage			
13CW3002	SMRC-MV (335 shares leased @ 0.873 af)	214.3		
13CW3002	SMRC-MV (205 shares leased @ 0.85 af)	127.7		
13CW3002	SMRC-MV (395 shares leased @ 1.036 af)	299.8		
13CW3002	SMRC-MV (400 shares leased @ 0.982 af)	287.8		
	Santa Maria Reservoir- purchased from Subdistrict No 1 in storage	825 + 0.6		
6182 (2020)	Williams Creek Squaw Pass Transbasin Diversion (W-1869-7)	426.3	426.3	
7265	CPW Tabor Ditch No 2 & Tabor Ditch No 2 Enlargement CA6981	302.0	352.0	
	CPW Tabor Ditch No 2 & Tabor Ditch No 2 Enlargement CA6981 No SWSP request has been submitted.	447.0		
6074	Taos Valley No. 3	539.0		
6182 (2021)	SLVWCD 14CW3011	89.1	89.1	
6235	City of Monte Vista Augmentation Credits	404.0		
	BLM Treasure Pass Ditch TM	143.7		
9377	Monte Vista Canal ATM Project	37.6		
	Total In Storage	4,144		1,762
	*Confirmation of balances in reservoirs is pending.			
SWSP	In Season			
	Twin Pines Ranch Water Rights SWSP request to be submitted	70.0		0
	BLM Treasure Pass Ditch TM	106.3		106.3
	Total In Season	176.3		106.3
	On Call	Limit	Expected Yield	DWR Expected Yield
WDID	Forbearance			
2000566	Centennial - (10 yr. 2033)	No limit		
2000623	Commonwealth-Empire - (10 yr. 2034)	500		
2000627	Excelsior Ditch - (1 yr. 2025)	No limit		
2000753	Monte Vista Canal - (10 yr. 2033)	300		
2000812	Rio Grande Canal - (1 yr. 2025)	900		
2000662	Rio Grande Canal- Hermanthal Ditch (1 yr. 2025)			
2001094	Rio Grande Canal- Scotch Ditch (1 yr. 2025)			

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2001007	Rio Grande Canal- Bedel D - (1 yr. 2025)			
2000624	Rio Grande Canal- Enterprise D (1 yr. 2025)			
2001094	Scotch Ditch (carried in Rio Grande Canal) - (2033 from Kruse and Ellithorpe)	No limit		
2000624	Enterprise D (carried in Rio Grande Canal) - (2033 from Kruse and Ellithorpe and Toews)	No limit		
2000816	Rio Grande Lariat Ditch - (10 yr. 2033)	500		
2000811	Rio Grande Piedra Valley Ditch - (5 yr. 2028)	No limit		
2000817	Rio Grande San Luis Ditch - (3 yr. 2026)	No limit		
2000631	Farmers Union Canal - (1 yr. 2025)	500		
	Total On Call- Forbearance		1,249	Up to 1,026*
	CBP Allocation (as of April 2023)	4,100	1,762.5	
	Total On Call- Non-Irrigation Season		1,763	Up to 1,763

Note: * DWR Analysis

Subdistrict No. 6 Replacement Sources Alamosa River (acre-feet)

	Water Right Name	Submitted in ARP 5/1/2024	Approved in SWSP's	Remaining 4/1/2024 & Approved for 2024 ARP
SWSP	In Storage			
6209	Terrace Irrigation Co 82CW97 excess aug credit	23.9	23.9	
6209	Terrace Irrigation Co 82CW97 excess aug credit No renewal request SWSP has been submitted.	18.6		
9377	Monte Vista Canal ATM Project-Terrace Main Canal Exchanged Water	85.0	150.0	
9486	Expo Excess Augmentation Water SWSP submitted 3/19/2024	22.0		
9441	Alamosa Creek Canal	30.3	30.3	
	Total In Storage	179.8		165
	In Season	Limit	Expected Yield	DWR Expected Yield
SWSP	In Season			
9441	Alamosa Creek Canal No renewal request SWSP has been submitted.	30.3	30.3	0
	Total In Season	30.3	30.3	0
	On Call	Limit	Expected Yield	DWR Expected Yield
WDID	Forbearance			
2100505	Alamosa Spring Creek Ditch - (10 yr 2033)	No limit		
2100506	Arroya Ditch - (5 yr. 2028)	No limit		
2100510	Capulin Ditch - (10 yr. 2033)	No limit		
2100511	Clark Ditch (3 yr. 2026)	No limit		
2100513	Cottonwood Ditch -(5 yr. 2028)	No limit		
2100514	Cristobal Rivera Ditch - (5 yr. 2029)	No limit		
2100520	El Viejo D - (10 yr. 2034)	No limit		

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2100522	Empire Canal - (10 yr. 2034)	No limit		
2100525	Flintham Ditch - (10 yr. 2034)	No limit		
2100529	Gallegos Ditch 3 - (10 yr. 2033)	No limit		
2100526	Gabino Gallegos Ditch - (10 yr. 2033)	No limit		
2100532	Garcia No 2 Ditch - (10 yr. 2033)	No limit		
2100539	Head Overflow No 5 Ditch - (10 yr. 2033)	No limit		
2100558	Lowland Ditch -(3 yr. 2027)	No limit		
2100561	Miller Ditch - (10 yr. 2033) + (10 yr at 24 AF)	No limit		
2100564	Morganville - (3 yr. 2026)	No limit		
2100570	Norland Ditch - (10 yr. 2033)	No limit		
2100571	North Alamosa Ditch - (10 yr. 2033)	No limit		
2100572	Ortiz Ditch - (10 yr. 2033)	No limit		
2100581	Ramona Ditch - (10 yr. 2033)	No limit		
2100591	San Jose Ditch No 1 - (10 yr, 2033)	No limit		
2100593	Scandinavian Canal - (10 yr. 2034)	No limit		
2100601	Terrace Irrigation Company ** 3 yr. 2025, Gabino Gallegos Ditch, Terrace Main Canal, Alamosa Creek Canal	100 AF		
2100600	TK Walsh Ditch - (10 yr. 2033)	No limit		
2100602	Union Ditch - (5 yr. 2028)	No limit		
2100606	Weist Ditch - (3 yr. 2026)	No limit		
	Total On Call- Forbearance		467.4	Up to 420*

***Note: All ditch rights of Terrace Irrigation Company are allowed to participate in a forbearance, however, Priority 110 for storage in Terrace Reservoir is excluded from participation.*

*Note: * DWR Analysis*

Water Rights Owned by the Rio Grande Water conservation District on Behalf of Subdistrict No. 6

The Subdistrict acquired lands and water rights that they plan to use as permanent sources of replacement water to pay depletions. The purchases are described below.

1. 10% of the Twin Pines Ranch Water Rights

Subdistrict No. 6 purchased 10% of Rocky Mountain High LLC’s ownership of the Twin Pines Ranch water rights on August 2, 2023, which is projected to generate 70 acre-feet of consumptive use and will be utilized in Subdistrict No. 6’s 2024 ARP Plan to replace injurious depletions. Unused consumptive use generated from the period May-October 2024, will be stored in a reservoir on the Rio Grande system for use in their 2024 Plan Year or future Plan Years if not released for use in the 2024 Plan Year. The Subdistrict expects that this water right may not be able to produce the full 70 acre-feet during the 2024 Plan Year, but reserves the right to utilize up to the full amount, less any applicable losses, for the benefit of the Subdistrict in the current Plan Year or future Plan Years. An SWSP has yet to be filed pursuant to section 37-92-308(4), C.R.S., for the purpose of approving the change of the water rights listed above to include requested uses for augmentation, exchange, storage by exchange in the Rio Grande, Continental, Beaver Reservoirs and/or other reservoirs within the Rio Grande system, by exchange, and subsequent release. Subdistrict No. 6 will only use this

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water source under an approved SWSP. See Appendix F for documentation of this purchase.

After Acquired Sources of Remedy (Section 2 of 11.1.3 of the ARP)

DWR recognizes the Subdistrict will continue to work to acquire additional sources of remedy and may, with approval from the Division Engineer, use those sources to remedy injury under this ARP.

Operation of the 2024 Annual Replacement Plan (Section 3 of 11.1.3 of the ARP)

The ARP states that the Subdistrict's replacement water will be released, including transit losses, from Platoro Reservoir, located in the Upper Conejos; Terrace Reservoir, located on the Alamosa River; and Rio Grande, Santa Maria, Continental, and Beaver Park Reservoirs, located in the Upper Rio Grande, at the direction of the Division 3 Engineer, to offset injurious stream depletions on the respective rivers during the Plan Year. This applies to the "In-Storage" water identified in the Replacement Sources tables on the previous pages. All Plan Year injurious stream depletions will be replaced in the time, location and amount that they occur, beginning May 1, 2024. The reaches, amounts and time that stream depletions are projected to occur are shown in Table 2.3 in the ARP. These releases of water from storage will be performed under the provisions contained in section 37-87-103, C.R.S.

The ARP notes that 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. 6 will occur on a regular and routine basis if these exchanges do occur. Any reservoir exchanges done in the Plan Year will be documented and reported in the 2024 Annual Report. The Division Engineer's Office will be notified in advance of any reservoir exchanges, and the exchanges must be documented and approved by the Division Engineer prior to them occurring.

The San Luis Valley Irrigation Well Owners, Inc. (SWSP 6074) provided an agreement to lease up to 500 acre-feet for Subdistrict No. 2, up to 2,000 acre-feet for Subdistrict No. 3, up to 3,000 acre-feet for Subdistrict No. 6 and up to 3,000 acre-feet for Trinchera Subdistrict of water and/or consumptive use credits from the water rights that are subject to the 2015CW3030 case.

In 2024, the Subdistrict entered into a lease agreement with Terrace Irrigation Company to lease the excess augmentation credits generated in 2023 under a plan for augmentation decreed in Case No. 1982CW97 (Water Division No. 3) for which the Terrace Irrigation Company holds title to a portion of. These excess augmentation credits are being stored in Terrace Reservoir and may be released during the Plan Year to remedy injurious stream depletions on the Alamosa River.

In 2024, the Subdistrict entered into a lease agreement with EXPO, LLC ("EXPO"), to lease 22.0 acre-feet of augmentation water to be stored in 2024 under a plan for augmentation

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decreed in Case No. 1982CW97 (Water Division No. 3), and later transferred to EXPO under Case No. 2014CW3027 and 2016CW3019, for which EXPO holds title to a portion of. This augmentation water is being stored in Terrace Reservoir and may be released during the Plan Year to remedy injurious stream depletions on the Alamosa River once the Subdistrict has received and approved SWSP from DWR.

The ARP provides documentation that the Subdistrict has implemented Forbearance Agreements with a number of ditches located on the Conejos River, the San Antonio River, the Los Pinos River, the Alamosa River, and the Rio Grande for the Plan Year. At times when the Conejos, the San Antonio and the Los Pinos are connected, the calling right can be on the San Antonio or the Los Pinos. The majority of the forbearance agreements allow the Subdistrict to exercise these agreements in its sole discretion.

The ARP provides an agreement with the Centennial Ditch in the Appendix. The resolution suggests an alternative for circumstances when replacement water needs to be carried below the Excelsior Ditch, but when the Rio Grande can be dry below the headgate. Instead, replacement water will be carried around that dry reach through the Centennial Ditch. The water will be measured and delivered directly to the Rio Grande at the point the Centennial Ditch can return water directly to the Rio Grande. That point is above any water right that may be injured while in priority. The Centennial Ditch must be adequate to efficiently deliver water around the dry stretch of river to the satisfaction of the Division Engineer prior to this being considered a viable option. The Centennial Ditch Company's water rights are senior enough to accomplish this carriage in any foreseeable situation (Priority Nos. 32 and 173).

The Response Functions did not predict stream depletions to streams other than the Conejos River, Alamosa River, and the Rio Grande in amounts above the minimum threshold to reliably predict impacts. Therefore, no replacements to any stream other than the Conejos, Alamosa, and Rio Grande will be made.

The ARP indicates that 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 replacement of Injurious Stream Depletions to the Rio Grande Compact from the Subdistrict. This is incorrect in that in virtually all conditions, replacement of injurious depletions is required to be made. The only instances where the Subdistrict is not required to replace these Stream Depletions are when there is an excess of 150,000 acre-feet of credit for Colorado or Elephant Butte Reservoir has spilled. In these instances, water passing the Lobatos Gage will not result in Compact credit to Colorado. In all other circumstances, the replacement of Injurious Stream Depletions to the Rio Grande Compact will result in credit being given to Colorado, either for the current year or for future years. DWR agrees that the Subdistrict may replace these Injurious Stream Depletions after the irrigation season or when Compact deliveries are being made.

The Rules require remedies sufficient to also remedy total Post-Plan Stream Depletions caused by current and past years' ARP Wells groundwater withdrawals that deplete the

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streams after the term of this ARP. Section 4.1.5 of the Subdistrict's PWM includes the provision, "the Subdistrict may continue to assess fees until all Post-Plan Injurious Stream Depletions caused by past groundwater withdrawals from Subdistrict Wells have been remedied." This allows the Subdistrict to provide a financial guarantee to assure that all Post-Plan Injurious Stream Depletions will be replaced or otherwise remedied if the Subdistrict were to fail or otherwise not be allowed to continue groundwater withdrawals.

If the Subdistrict were to fail, the individual well owners in the Subdistrict would have to obtain plans for augmentation or take other measures to comply with the Rules. Presumably, those plans would be required to replace Post-Plan Injurious Stream Depletions into the future. In the interim, the Subdistrict or the Rio Grande Water Conservation District will remedy Post-Plan Injurious Stream Depletions by supplying water or through agreements pursuant to which injury to water rights is remedied by means other than providing water to replace stream depletions.

Anticipated Funding for Plan Year (Section 4 of 11.1.3 of the ARP)

The Subdistrict submitted sufficient financial information to document the purchase and leases of replacement water for the 2024 Plan Year.

11.1.4 Contractual Arrangements among Water Users, Water User Associations, Water Conservancy Districts, Subdistricts, and/or the Rio Grande Water Conservation District

San Luis Valley Irrigation Well Owner's, Inc. (SLVIWO) - Case No. 2015CW3030

No information was provided regarding renewal of SLVIWO's SWSP 6093 although it is listed in the Subdistrict's table of replacement sources and the Subdistrict is named in the 2024 lease agreement.

On December 30, 2015, the SLVIWO filed an Application for Recharge Project and Rights of Substitution and Exchange. The SLVIWO is the owner of the water right and corresponding structures associated with the Taos Valley Canal No. 3. The original decree for the water rights decreed to the Taos Valley Canal No. 3 is the Decree of the Court entered in the Matter of the Adjudication of the Priority of Water Rights in the Conejos and San Antonio Rivers (Water District No. 88), District Court, Conejos County, Colorado (October 3, 1890). In 1975, SLVIWO filed an application for a plan for augmentation including exchange and to change the place and type of use of the Taos Valley No. 3 water right in Case No. W-3394 to include augmentation of any depletions caused by well users of the SLVIWO.

In Case No. 2015CW3030, SLVIWO seeks to utilize the Middlemist Water and the Zinn Water for augmentation by leaving the water in the San Antonio River as decreed in Case No. W-3394, by diverting water at the Taos Valley Canal No. 3 and potentially storing water in a rehabilitated Cove Lake Reservoir for subsequent release to the San Antonio River, by recharging the confined and unconfined aquifers via a groundwater recharge project, by

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delivering water to satisfy compact obligations, by substituting water delivered to satisfy the compact in exchange for depletions and water diverted at other structures during different times within a year and to divert and store the water in several reservoirs, either directly or via exchange, for later release to the San Antonio River, Conejos River and the Rio Grande for augmentation purposes.

The Subdistrict entered an agreement with the SLVIWO to lease up to 3,000 acre-feet for use in the 2024 ARP as shown above in the table of replacement sources. SWSP 6093 was filed pursuant to section 37-92-308(4), C.R.S. for the purpose of requesting a temporary approval of a change of the water rights listed above to include requested uses in Case No. 2015CW3030 including augmentation, exchange, storage by exchange in Platoro, Rio Grande, Continental, Beaver Reservoirs and/or other reservoirs within the Rio Grande or Conejos River systems, by exchange, and subsequent release, delivery of the water to satisfy compact obligations, by substituting water delivered to satisfy the compact in exchange for depletions and water diverted at other structures during different times within a year.

Colorado Parks & Wildlife Tabor Ditch No 2 Held in Rio Grande Reservoir

No information was provided regarding renewal of SWSP 7265.

Alamosa Creek Canal Lease Fallow- SWSP 9441 (Section 1 of 11.1.4 of the ARP)

During the 2023 Plan Year, Subdistrict No. 6 utilized augmentation credits generated through operation of a lease fallow project with an individual landowner via approved SWSP 9441. In the 2023 Plan Year, the fallow provided augmentation credits through temporary removal of irrigation water from lands irrigated through the Alamosa Creek Canal, Terrace Reservoir, and through irrigation wells completed in the confined aquifer. This project includes approximately 20 acres of temporary dry-up and generated 30.3 acre-feet of augmentation credit during the 2023 Plan Year. An SWSP will be filed with the State for approval before this Project will provide any replacement water. The Subdistrict will file a request to the Div. No. 3 Division Engineer for an after-acquired replacement source if an approved SWSP is received.

Bureau of Land Management Treasure Pass Ditch Transmountain Water Rights Held in Beaver Reservoir (Section 2 of 11.1.4 of the ARP)

The Fish and Wildlife Service (FWS) and Bureau of Land Management (BLM) are currently working on inter-agency agreements amongst themselves and other federal agencies to assist each other in meeting the requirements of the both the Groundwater Rules and the Subdistricts. For the 2024 Plan Year, BLM agreed to exchange 250.0 acre-feet of Treasure Pass Diversion Ditch transmountain water rights, currently stored in Beaver Reservoir to be used for the remedy of injurious depletions caused by ARP Wells. At the time of the filing of this report, only 143.7 acre-feet has been transferred to the Subdistrict. The remaining

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106.3 acre-feet will be transferred to the Subdistrict once it becomes available. Appendix F includes documentation for this transfer.

Monte Vista Canal Alternative Transfer Method/Lease Fallow Project- SWSP 9377 (Section 3 of 11.1.4 of the ARP)

During the 2022 Plan Year, Subdistrict No. 6 filed SWSP 9377 to temporarily change the use of water historically diverted from the Rio Grande River through the Monte Vista Canal (MVC) for irrigation of lands lying under said canal, and groundwater diverted through wells historically used to irrigate those same lands. SWSP 9377 was approved on March 31, 2023, with an approval period of March 31-April 20, 2023. The surface water and groundwater that were applied to the changed uses comprised of water supplies historically used for irrigation of certain parcels that were left fallow during the 2022 Plan Year. The filed SWSP is intended to function as an Alternative Transfer Method (ATM) demonstration project which focused on the generation of fully consumable water for replacement of stream depletions associated with Subdistrict No. 6 well pumping, but the consumptive use (CU) credits produced by this and similar projects could be used to replace any depletions to a stream segment to which they can be physically delivered directly or by exchange.

This project generated a total of 176.5 acre-feet of CU credits, of which 37.6 acre-feet were exchanged into storage in Rio Grande Reservoir and 138.9 acre-feet were exchanged into storage in Terrace Reservoir. Of these CU credits, all that were stored in Rio Grande Reservoir remain there, and 91.2 acre-feet remain in storage in Terrace Reservoir at the time this report was filed. See Appendix F for documentation of this project.

Forbearance Agreements (Section 4 of 11.1.4 of the ARP)

Pursuant to section 37-92-501(4)(b)(I)(B), C.R.S., the Subdistrict has reached agreement with a multitude of ditches whereby they accept that, subject to the specific provisions of the forbearance agreement, injury to their water rights resulting from the use of groundwater by ARP Wells may be remedied by means other than providing water to replace stream depletions, when they are the calling right on the Conejos River system, Alamosa River, or Rio Grande. The majority of these contracts with individual ditches were made for three-year terms.

The projected acre-feet of forbearance was based on an analysis of the number of days each ditch was the calling right in years of similar hydrologic conditions as those predicted in 2024. The years used for the analysis for the Rio Grande were 2021 and 2022. The analysis for the Alamosa was also 2021 and 2022. The average number of days each ditch was estimated to be the calling right was then multiplied by the average daily acre-feet of injurious stream depletions during the Plan Year, excluding months outside the irrigation season. The expected yields listed in Table 3.1 are intended to be a conservative estimate of their potential yield to show the Subdistrict's ability to remedy injurious stream depletions. The estimate for the Rio Grande Canal did not include days that "Special Water" priorities were the calling rights even though all or a portion of those rights are included in

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forbearance agreements with the Subdistrict for the Plan Year and may be utilized at the discretion of the Subdistrict.

To project the Conejos forbearance potential, the Subdistrict used call records from 2021 and 2022. The justification for this comparison between 2021/2022 and 2024 is that the soil moisture conditions, streamflow conditions, and long-range temperature outlook are projected to be very similar. The Subdistrict has confidence this is a reasonable way to project the amount of forbearance the Subdistrict anticipates they could conservatively expect to use for the 2024 Plan Year. Documentation for the estimated yield analysis of the various forbearance contracts was provided by the Subdistrict as a supplement to the ARP.

It is noted that the majority of these agreements allow the Subdistrict to remedy injurious stream depletions under the agreement or by providing water at the Subdistrict's sole discretion. Three of the agreements do not allow this flexibility, Ball Bros 1 & 2, Los Sauces, and William Stewart, so are "mandatory" forbearance agreements.

The Subdistrict made an agreement with the Guadalupe and Brazos Del Norte Ditches to store in Platoro Reservoir the amount of depletion owed daily when the Ditches are the calling priority. The stored water is to be released later by the Conejos Water Conservancy District at the discretion of the Ditches, and must be released within the same calendar year as it was stored. Exercise of this agreement is at the sole discretion of the Subdistrict. As stated in the agreement, any releases of this water will be in compliance with the legal and physical restrictions on such releases.

Closed Basin Project Production (Section 5 of 11.1.4 of the ARP)

According to the information provided in the ARP, the projected production of the Closed Basin Project delivered to the Rio Grande is 8,500 acre-feet during calendar year 2024. However, according to the Division Engineer's Ten Day Report sent April 22, 2024, the Closed Basin Project production has since been reduced to 7,500 acre-feet. The allocation of the Closed Basin Project production in accordance with agreements is 60% to the Rio Grande and 40% to the Conejos River basin over the long term with provision for adjustments in the allocation during individual years. The 2024 allocation of the Closed Basin Project production will be 61% to the Rio Grande and 39% to the Conejos River.

Per a letter from the Rio Grande Water Users Association dated March 14, 2024, the Board of Directors passed a motion to specifically allocate 4,100 acre-feet (1,800 in 2024 and 2,300 acre-feet in 2025) of the Rio Grande's share of the usable yield of the Closed Basin Project to replace the stream depletions under Subdistricts No. 1, No. 2, No. 3, No. 5 and No. 6. 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 10, 2024.

The Conejos Water Conservancy District Board notified RGWCD by letter dated April 4, 2024 to specifically allocate the Conejos River's share of the usable yield of the Closed Basin

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Project to replace the injurious stream depletions for the 2024 ARP for Subdistrict No. 3 & Subdistrict 6.

A copy of each letter reporting the approval was provided in Appendix H of the ARP. The resolution from RGWCD allowing the Subdistrict to use Closed Basin Project water in the 2024 ARP was provided as supplemental information.

11.1.5 Documentation of Progress towards Achieving and Maintaining a Sustainable Water Supply

Water Levels, Pressure Levels, and/or Groundwater Withdrawals (Section 1 of 11.1.5 the ARP)

Rule 8.1.7 of the Groundwater Rules includes provisions for meeting the requirements for achieving and maintaining a Sustainable Water Supply in the confined aquifer. Per the State Engineer's approval letter for the PWM, dated September 25, 2019, the Alamosa La Jara Response Area five-year running average groundwater withdrawals were below the 1978-2000 average groundwater withdrawals for the Alamosa La Jara Response Area of 113,740 acre-feet.

Subdistrict metered groundwater withdrawals account for approximately 99 percent of the total metered groundwater withdrawals annually over the period 2011-2023 in the Alamosa La Jara Response Area. The current five-year running average groundwater withdrawals for ARP Wells for the period 2019-2023 is 93,200 acre-feet. The previous five-year running average for ARP wells was 98,179 acre-feet using the pumping figures reported in Table 1 of the Response Function. The five-year running average groundwater withdrawals for ARP wells decreased in 2023 by 4,948 acre-feet, using DWR's groundwater meter records. The current average lost 2018 from the calculation, a particularly high year of 116,057 acre-feet.

For comparison, the longer-term average 2011-2023 (13 years) of metered pumping for ARP wells is $\pm 97,185$ acre-feet. As additional years are added to the period of metered pumping in Division 3, this average can be compared to the 1978-2000 (23 years) estimated groundwater withdrawals reported in the State Engineer's annual memorandum, "Five year Average Groundwater Withdrawals in Confined Aquifer Response Areas", published July 1, 2023.

The Subdistrict anticipates groundwater withdrawals of $\pm 100,000$ acre-feet in 2024 due to similar pumping in similar stream flow forecast years. This would produce an average (2020-2024) of 99,154 acre-feet, within the sustainability metric.

Based on the trends of both the Alamosa La Jara Response Area and the Subdistrict's five-year average, the Subdistrict will remain in compliance with the Sustainable Water Supply Requirement of the Rules.

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Included in Appendix K is the State Engineer's memo dated July 1, 2023, regarding the Composite Water Head for Confined Aquifer Response Area in Division 3: July 2023 Requirement of Division 3 Groundwater Rules Section 8.1.4. The Composite Water Head for the Alamosa-La Jara Response Area for 2023 was negative 1.62 feet, the second consecutive year of negative head below the base year of 2015, but a gain of 0.39 feet from 2022.

Listing of Irrigated Acres Proposed to be Temporarily or Permanently Fallowed and Associated Water Rights (Section 2 of 11.1.5 the ARP)

The Subdistrict is not currently pursuing fallowing of any irrigated lands within the boundaries of the Subdistrict.

Listing of Water Rights Proposed to be Temporarily or Permanently Retired and Historical Operations of Each Water Right (Section 3 of 11.1.5 the ARP)

No listing of retired water rights was submitted with this ARP.

Other Proposed Actions to be Taken as Applicable (Section 4 of 11.1.5 the ARP)

The Subdistrict is implementing a Pumping Reduction Program (PRP) for the 2024 irrigation season. The goal of the PRP is to compensate Subdistrict Members that reduce their groundwater withdrawals on Farm Unit basis to assist in maintaining the sustainability of the Confined Aquifer underlying Subdistrict No 6. At the time of the filing of this report, participating Subdistrict Members have committed to reducing their overall pumping by approximately 1,171 acre-feet. The PRP is being ran as a pilot program for the 2024 irrigation season and will likely only be implemented/utilized during years when the streamflow forecasts predict a well-below average streamflow for the upcoming forecast year.

The Subdistrict has also approved a resolution to add incentive to the RGWCD's Senate Bill 22-028 well purchase program by adding an additional \$500 per acre-foot payment to Subdistrict Members whose program applications are approved.

Findings:

Based on the information provided in the ARP and discussed above, I make the following findings:

1. The projected groundwater withdrawals are based upon the inventoried Subdistrict Wells, their historical pumping, and projected stream flows. The inventory of wells is consistent with the information in DWR's databases. The historical pumping associated with the Wells is based on diversion records on file with the DWR. The method implemented by the Subdistrict to project groundwater withdrawals for the ARP Wells for 2024 is consistent with historical pumping information and streamflow forecast from the Division Engineer's projection and the NRCS Forecast.

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2. Overall, the Subdistrict inputs to the Response Functions produced a calculation of depletions that DWR considers conservative such that the depletions are covered and no injury will occur.
3. Projected stream depletions are calculated based on Response Functions generated from RGDSS Groundwater Model runs. The Response Functions are based on the RGDSS Model version 6P98, which was approved by the PRT. The Subdistrict used the 6P98 Response Functions in determining stream depletions. The ARP Year depletion schedule is included as an Exhibit to this letter.
4. The comparison of CBP projected deliveries with all Subdistricts operating under 2024 ARPs indicates the CBP production, at least on an annual basis, is adequate to cover the Non-Irrigation season depletions for all the Subdistricts.
5. The ARP identifies the sources, availability, and amounts of replacement water and remedies that the Subdistrict will use to remedy Injurious Stream Depletions during the coming year and demonstrates the sufficiency of such water to remedy such Injurious Stream Depletions:

Conejos River

The Subdistrict depletions for the Conejos River system for this ARP are $\pm 2,824$ acre-feet during the irrigation season and $\pm 1,439$ acre-feet during the non-irrigation season for a total of $\pm 4,263$ acre-feet.

- Irrigation Season: The Subdistrict has ± 812 acre-feet in storage in Platoro Reservoir, expects to yield ± 450 acre-feet from BLM excess augmentation water “in season” for a total of $\pm 1,262$ acre-feet. The Subdistrict indicates a yield of $\pm 2,198$ acre-feet from forbearance agreements during the irrigation season and in April 2025, totaling $\pm 3,460$ acre-feet.

The submitted portfolio of water from storage and adjusted in-season yield in the 2024 ARP Year indicates there would be a deficit of $\pm 1,560$ acre-feet of firm water to cover Injurious Stream Depletions in the unlikely event that no forbearance is available. My staff reviewed the historical calls on the Conejos for the ditches expected to generate estimated forbearance during the ARP Year as summarized below. The portfolio of water from storage and potentially $\pm 2,037$ acre-feet from DWR forbearance analysis totals $\pm 3,300$ acre-feet and indicates sufficient water to cover Injurious Stream Depletions for the Plan Year.

DWR Analysis of Forbearance Yield

- DWR staff prepared an analysis using the current stream flow numbers and forecast flows for the irrigation season, which is projected to end on November 1st, 2024. The focus of the analysis was to determine which ditches might be the calling priorities throughout this period. A similar analysis was completed

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for the irrigation month of April 2025, using average conditions because a reliable 2025 winter forecast is not yet available. The Subdistrict has secured forbearance contracts with numerous ditches ranging from the No. 1 priorities through very junior water rights.

- These agreements for ditches that are likely to be the calling rights on the Conejos for the 2024 irrigation season and April of 2025 could possibly account for ± 2037 acre feet. This amounts to 72%, of the 2,824 acre-feet of depletions owed during that time.
- Non-Irrigation Season: The Subdistrict has $\pm 1,440$ acre-feet of Closed Basin Project water available to pay non-irrigation season depletions.

Rio Grande

The Subdistrict depletions on the Rio Grande are 1,775 acre-feet during the irrigation season and 1,763 acre-feet during the non-irrigation season for a total of 3,538 acre-feet.

- Irrigation Season: The Subdistrict has $\pm 1,762$ acre-feet in storage in Beaver, Rio Grande, Continental and Santa Maria Reservoirs and expects Treasure Pass to yield ± 106 acre-feet of in-season replacement water. The Subdistrict indicates a yield of $\pm 1,249$ acre-feet from forbearance agreements during the 2024 irrigation season and in April 2025, totaling $\pm 3,117$ acre-feet.

The confirmed portfolio of water from storage and the in-season yield in the 2024 ARP Year indicates sufficient firm water to cover Injurious Stream Depletions in the unlikely event that no forbearance is available.

- Non-irrigation Season: The Subdistrict has $\pm 1,763$ acre-feet of Closed Basin Project water allocated to pay non-irrigation season depletions.

Alamosa River

The Subdistrict depletions on the Alamosa are ± 507.1 acre-feet during the irrigation season and ± 6.4 acre-feet during the non-irrigation season for a total of ± 513.5 acre-feet.

- Irrigation Season: The Subdistrict has ± 165 acre-feet in storage in Terrace Reservoir and indicates a yield of ± 467 acre-feet from forbearance agreements during the 2024 irrigation season and in April 2025, totaling ± 632 acre-feet.

The submitted portfolio of water from storage in the 2024 ARP Year indicates there would be a deficit of ± 327 acre-feet of firm water to cover Injurious Stream Depletions in the unlikely event that no forbearance is available. My staff reviewed the historical calls on the Alamosa for the ditches expected to generate estimated forbearance during the ARP Year as summarized below. The portfolio of water from storage and potentially ± 420

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acre-feet from DWR forbearance analysis totals ± 585 acre-feet and indicates sufficient water to cover Injurious Stream Depletions for the Plan Year.

DWR Analysis of Forbearance Yield

- DWR staff prepared an analysis using the current stream flow numbers and forecasted flows for the irrigation season, which presumptively ends on November 1st, 2024. The focus of the analysis was to determine which ditches might be the calling priorities throughout this period. A similar analysis was completed for the irrigation month of April 2025, using average conditions because a reliable 2025 winter forecast is not yet available. The Subdistrict has secured forbearance contracts with numerous ditches ranging from the No. 1 priorities through very junior rights on the Alamosa River.
 - These agreements for ditches that are likely to be the calling rights on the Alamosa for the 2024 irrigation season and April of 2025 could possibly account for 420 acre feet of the depletions owed. This amounts to 83%, of the 507.1 acre-feet of depletions owed during that time.
- Non-Irrigation Season: The Subdistrict is not obligated to pay depletions on the Alamosa during the non-irrigation season at this time.
6. Section 4.1.5 of the Subdistrict's PWM includes the provision, "the Subdistrict may continue to assess fees until all Post-Plan Injurious Stream Depletions caused by past groundwater withdrawals from Subdistrict Wells have been remedied." This allows the Subdistrict to provide a financial guarantee to assure that all Post-Plan Injurious Stream Depletions will be replaced or otherwise remedied if the Subdistrict were to fail or otherwise not be allowed to continue groundwater withdrawals.
7. Upon approval of the Subdistrict's PWM, it was concluded the Subdistrict is already operating within the 5-year 1978-2000 average as amended by the CAS stipulation. In all future years the five-year running average of metered total withdrawals must not exceed the average annual withdrawals for the period of 1978 through 2000. The Subdistrict is in compliance with this metric.

The Subdistrict has presented sufficient evidence and engineering analysis to predict where and when Injurious Stream Depletions will occur and how they will replace those Injurious Stream Depletions to avoid injury to senior surface water rights under the following Terms and Conditions.

This ARP is hereby approved pursuant to the following Terms and Conditions:

1. This ARP shall be valid for the period of **May 1, 2024 through April 30, 2025**, unless otherwise revoked, modified, or superseded by me, a decree, or order of the court.

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2. The Subdistrict must replace or remedy the Injurious Stream Depletions resulting from Subdistrict ARP Well groundwater withdrawals.
3. Contract wells will be covered to the extent of their permitted/decreed uses.
4. Deliveries (including transit losses) of stored water made available for the replacement of Injurious Stream Depletions shall be determined by the Division Engineer pursuant to this ARP and associated decrees.
5. If the limit is reached for any particular forbearance agreement, then the Subdistrict will need to remedy Injurious Stream Depletions to that particular ditch or canal with another remedy. Storage under the forbearance agreement with the Guadalupe and Brazos Del Norte Ditches is only allowed upon prior approval of the Division Engineer.
6. The Division Engineer shall determine on an ongoing basis whether he can administer the operations under each forbearance agreement. If the Division Engineer cannot, then that operation shall cease. General Forbearance Protocols for the San Luis Valley River Systems for 2024 were prepared by the Division Engineer. A copy of the protocols is included with this letter.
7. The Subdistrict shall provide daily replacement water accounting (including, but not limited to diversions, depletions, replacement sources, and river calls) on a monthly basis. The accounting must be emailed to the Division Engineer (Craig.Cotten@state.co.us), the Water Commissioners (sam.riggenbach@state.co.us), rachel.rilling@state.co.us, tom.stewart@state.co.us, aaron.holman@state.co.us, travis.robinson@state.co.us the Subdistrict Coordinator (deborah.sarason@state.co.us), and the Water Accounting Operations Specialist (michelle.lanzoni@state.co.us) within 10 days after the end of the month for which the accounting applies. Accounting and reporting procedures are subject to approval and modification by the Division Engineer.
8. The Subdistrict must adhere to the terms and conditions of the SWSP(s) incorporated as part of the ARP. The use and inclusion of any new replacement water within the ARP is subject to SWSP approval or approved by the Water Division No. 3 Water Court for a change of water right. Prior to the use of any new replacement water, the State Engineer will evaluate for use as an amendment under this ARP.
9. Regarding the Subdistrict's request to aggregate depletions owed between stream reaches, much of the negative depletion amounts that the Response Function output generated on Stream Reach 3 of the Rio Grande reflect the point-source return flow attributed to the City of Alamosa in the RGDSS Model. This negative depletion represented affects the Rio Grande depletions when all three reaches are live to the State line. Should the Rio Grande stream reaches become disconnected hydraulically during the ARP Year, the Division Engineer shall determine if aggregation of these negative depletion amounts for purposes of determining depletions owed on Stream Reaches 1 and 2 of the Rio Grande is appropriate during those periods.

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10. Regarding the Subdistrict's request to aggregate depletions with other subdistricts, the Subdistrict may make requests for these types of changes formally to the Division Engineer, providing details of the request and documentation supporting the need to make a change to the approved ARP depletion schedule. The Division Engineer will consider such a request when it is made, under the protocol of DWR and in light of the conditions on the particular stream at the time and, if deemed appropriate, approve the request. The Subdistrict will not adopt any change until after approval by the Division Engineer.
11. In the event the CBP deliveries during the non-irrigation season months are not enough to remedy the total of the RGWCD Subdistricts non-irrigation season depletions, it is acceptable for the CBP deliveries during the irrigation season months be used to remedy the additional amount of non-irrigation season depletions. However, CBP deliveries may only be credited against non-irrigation season depletions that occur during the same calendar year and during the same ARP Year. In general, January through April CBP deliveries may be used to remedy January through March of the ARP Year depletions and May through December CBP deliveries may be used to remedy November and December ARP Year depletions. With the reduction in the Closed Basin Projects delivery to the Rio Grande down from 8,500 to 7,500 acre-feet as shown in the Division Engineer's Ten Day Report dated April 22nd, 2024, continuous monthly accounting to track the availability and timing of any deliveries, is required. Should the CBP deliveries fall short as happened in the 2022 ARP Year, it will be necessary for the Subdistrict to provide enough replacement water to remedy the shortage for the non-irrigation season depletions.
12. The Subdistrict is relying heavily upon forbearance agreements to meet the requirements for mitigation of injurious stream depletions. The Subdistrict is strongly encouraged to actively pursue permanent replacement sources to cover depletions in the event that the forbearance agreements are not sufficient. In the unlikely event that the various SWSPs submitted in March and April 2024 are not approved or if the forbearance agreements do not yield the amounts needed to cover depletions as expected during the 2024 ARP Year, the Subdistrict will invoke its "After Acquired Sources of Remedy" clause in the ARP and will acquire sufficient additional sources to satisfy the depletion schedule approved under this ARP. If the Subdistrict is unable to acquire sufficient additional sources, the Subdistrict will not be able to continue operation under this ARP.
13. All deliveries of replacement water shall be measured in a manner acceptable to the Division Engineer. The Subdistrict shall install and maintain measuring devices as required by the Division Engineer for operation of this approved ARP.
14. The Subdistrict must submit an Annual Review of its ARP pursuant to Rule 12.
15. The Subdistrict must replace or remedy all Injurious Stream Depletions caused by non-augmented pumping associated with Subdistrict ARP Wells.

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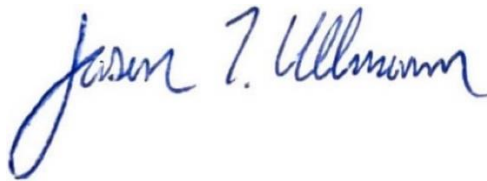
16. The Subdistrict must comply with the Rules, the Subdistrict PWM, and this ARP.

Approval of this ARP does not authorize any change, increase, or expanded use of any water right or permit. Any change, increase, or expansion of a water right or permit will need to comply with existing decrees and or permits, the Confined Aquifer New Use Rules, the Measurement Rules, the Rio Grande Basin Groundwater Use Rules, and may require approval of the Water Court.

The approval of this ARP is made with the understanding that if the ARP proves insufficient to remedy Injurious Stream Depletions, the State Engineer has the authority to invoke the retained jurisdiction of the Division No. 3 Water Court.

I want to thank you for your cooperation and compliance with this approved ARP and for your continued cooperation and compliance in the future. Your efforts are greatly appreciated. If you have any questions do not hesitate to contact any of my staff in Denver or Alamosa.

Sincerely,



Jason T. Ullmann, P.E.
State Engineer
Director of the Division of Water Resources

Exhibits:

- A: Subdistrict No. 6 2024 ARP Response Function Table 2.6**
- B: General Forbearance Protocols for the San Luis Valley River Systems for 2024**

ec: Craig Cotten, Division Engineer
Chad Wallace, Assistant Attorney General
David W. Robbins, Hill & Robbins
Peter Ampe, Hill & Robbins
Clinton Phillips, Davis Engineering Service, Inc.
DWR electronic notification lists
Division 3 Water Court