

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. 3 OF THE RIO GRANDE WATER CONSERVATION DISTRICT

Dear Ms. Pacheco:

Thank you for your April 14, 2024 submission of the Special Improvement District No. 3'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,

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

cc: Division 3



Review, Findings, and Approval of Subdistrict No. 3's 2024 Annual Replacement Plan

Background

Special Improvement District No. 3 ("Subdistrict"), a political subdistrict of the Rio Grande Water Conservation District ("RGWCD"), formed through Conejos County District Court in Case 2016CV30021, 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. 2018CW3013.

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.

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 166 wells. No additional wells were added to the ARP Well List for 2024.

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 of 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 it is legally pumped. "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)

<u>Conejos Water Conservancy District (CWCD) Augmentation Certificate No. Com0020</u> The Subdistrict accepted a contract for a well, WDID 2205184, whose depletions are covered under an augmentation certificate through the CWCD's augmentation plan, 90CW0024. The well lies outside the RGDSS Model boundary, along the Conejos River near the town of Fox Creek. The Subdistrict will transfer augmentation water annually from one of its pools of water in storage to the CWCD under this contract, then the CWCD will pay depletions according to its plan. This well is considered a non-benefitted Subdistrict Well as defined in the Subdistrict's PWM and the pumping is not included in the Response Function calculations for the 2024 ARP.

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, total metered groundwater withdrawals per DWR records as of April 10, 2024, for the 2023 Water Administration Year were $\pm 26,955$ acre-feet. In 2021 and 2022, stream flows were very similar to the 2024 forecast and in that year, Subdistrict ARP Wells withdrew $\pm 25,836$ acre-feet and 25,112 acre-feet. Comparing to these similar years, the Subdistrict ARP Well groundwater withdrawals in 2024 are projected to be <u>26,400 acre-feet</u>.

Entered in Table 2.1 of the ARP									
2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
31,232	40,698	42,762	33,286	25,743	25,240	21,273	35,626	16,155	34,543

Subdistrict Well Metered Total Pumping (acre-feet)

2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
25,836	25,112	27,022							

Note: The pumping in 2023 was adjusted to match the Subdistrict's Response Function Table 1

The majority of metered groundwater withdrawals in the Plan Year will be used for irrigation through center pivot sprinklers, 64 percent. Approximately 9 percent of groundwater withdrawals will be applied to flood irrigation and 27 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 23,800 acres during the Plan Year, including 15,550 acres irrigated by center pivot sprinklers and 8,250 acres irrigated by flood application. The Subdistrict made this projection based on a review of the breakdown of acres within the Conejos Response Area under each irrigation type prepared by DWR for inclusion in the RGDSS Groundwater Model.

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 potato washing, commercial, domestic (subdivision), lawn irrigation 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. A spreadsheet version of the Response Functions used to prepare the tables included in this ARP.
- 2. A resolution from RGWCD approving the Subdistrict 2024 ARP.
- 3. The list of Subdistrict Wells included in the 2024 ARP in spreadsheet format matching the list presented in Appendix A
- 4. A resolution from RGWCD to allow the Subdistrict to allocate Closed Basin Project water in the 2024 ARP.
- 5. A spreadsheet showing the Subdistrict's breakdown of "Other" wells used to calculate the composite Consumptive Use Ratio in the Response Function.
- 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 to 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 nonirrigation 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, 2025 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 made by the Division Engineer are based upon guidance given 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 River (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 <u>158,600 acre-feet</u> for the Conejos, and the NRCS forecast (projected 50% exceedance) of <u>56,000 acre-feet</u> for the Los Pinos, and <u>9,500 acre-feet</u> for the San Antonio. This is not an acceptable choice 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 making these choices, 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 Forecast - Co	onejos River S	os River System, Rio Grande, Alamosa			
Conejos Stream Flow	Apr-Sep	% of	Estimated	Jan - Dec	
	Forecast	median	Additional	Forecast	
Analysis	(acre-feet)		(acre-feet)	(acre-feet)	
	(1)	(2)	(3)		
NRCS, "April 1 st 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%			
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 Conejos 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 Subdistrict included these instruction sheets with their ARP.

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 Conejos Response Area requires adjustments for both point source return flows and the stream ratios, as listed below.

- Conejos Response Area Reach 7 (San Antonio River) from the Town of Antonito.
- Conejos: 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 Antonito well(s) associated with the point source return flow. 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 <u>19,441 acre-feet</u>.

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, Alamosa River, and San Antonio 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 <u>3,413 acre-feet</u>, which includes accretions of 105.8 acre-feet on the San Antonio. The Response Functions calculated total stream depletions to the Conejos River are 2,951 acre-feet (including the accretions on the San Antonio), to the Alamosa River 87.7 acre-feet, and to the Rio Grande 480 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 19 years. Based on predictions from the Response Functions, Table 2.4 of the ARP shows there would be a total of <u>7,297 acre-feet</u> of Post-Plan Stream Depletions. This amounts to 5,275 acre-feet to the Conejos, 1,632 acre-feet to the Rio Grande, and 390 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 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.

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.

<u>On Call</u>: 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.

	Conejos River (acr	e-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			
6061	SLVWCD 84CW16 & 94CW62	726.7	1046.2	
6056	BLM Excess Augmentation Credits Stored in 2019	150.8		
6093	Taos Valley No 3 (Stored in 2019 & 2023)	116.0		
9364	Alpha Hay Farms (Stored in 2023)	433.9	509.6	
	Total In Storage	1,427.4		1,525
SWSP	In Season	,		,
6093	Taos Valley No. 3 (Contract 2,000 af)	2,000		0
9364	Alpha Hay Farms*	433.9		301.5 + 89
	Total In Season	2,433.9		390.5
*Note:	Alpha Hay Farms CU includes 301.5 af surface water (May - July) & 89 af groundwater			
	On Call	Limit	Expected Yield	DWR Expected Yield
WDID	Forbearance			
	Conejos River			
2200500	AD Archuleta - (10 yr, 2034) 3, 6	No limit		
2200501	Alamo Ditch - BLM - (5 yr, 2028) 3, 6	No limit		
2200501	Alamo Ditch - Willett Cattle - (10 yr, 2033)	No limit		
2200502	An Con Ditch P 42- (3 yr, 2027) 3, 6, 7	No limit		
2200504	Antonito Ditch - (3 yr, 2027) 3, 6, 7	No limit		
2200509	Ball Bros Overflow No 1 - (10 yr, 2023)	No limit		
2200510	Ball Bros Overflow No 2 - (10 yr, 2023)	No limit		
2200513	Bernardo Romero - (10 yr, 2033) 3, 6	No limit		
2200518	Branch Ditch - (10 yr. 2033) 3, 6	No limit		
2200519	Brazos Del Norte - (5 yr, 2028) 3, 6	No limit		
2200524	Canon Irrigating Ditch - (3 yr, 2027) 3, 6, 7	No limit		
2200531	Cordova Ditch - (3 yr. 2026)	NI 11 17		
2200531	Cordova Ditch - Espinoza and Sons (10 yr, 2033) 3, 6	No limit		
2200534	Del Puerticito - (5 year, 2028)	No limit		
2200535	East Bend Ditch - BLM - (5 yr, 2028) 3, 6	No limit		
2200539	El Serrito aka Cerrito - (10 yr, 2033) 3, 6	No limit		
		No limit		
	El Viejo - (10 yr. 2034) 3, 6			
2200541	Ephraim Canal - (10 yr, 2033) 3, 6	No limit		
2200541				

Subdistrict No. 3 Replacement Sources

2200548	Gabriel Martinez Ditch - (3 yr, 2026) 3, 6	No limit	
2200553	Guadalupe Main - (5 yr, 2028) 3, 6	No limit	
2200576	La Del Rio Ditch - (3 yr 2027) 3, 6	No limit	
	Lopez - Espinoza and Sons (10 yr. 3034) 3, 6, 7	No limit	
2200584	Los Ojos 1- BLM - (5 yr, 2028) 3, 6	No limit	
2200585	Los Ojos 2- BLM - (5 yr, 2028) 3, 6	No limit	
2200587	Los Sauces Ditch - (10 yr, 2033)	No limit	
2200588	Lovato Irrigation Ditch - Lucero (10 yr, 2033)	No limit	
	3, 6		
2200595	Manassa Ditch (Eastfield) - (10 yr, 2033) 3, 6	No limit	
2200593	Manassa No 3 - (10 yr, 2033) 3, 6	No limit	
2200596	Manassa Westfield - (10 yr, 2033) 3,6	No limit	
	Martinez - Espinoza and Sons (10 yr. 3034) 3,	No limit	
	6,7		
2200404	Mecitos Ditch aka Las Mesitas Ditch (10 yr,	No limit	
2200604	2033) 3, 6		
2200605	Mill Ditch - (10 yr, 2033) 3, 6	No limit	
2200591	Mogote Ditch (10 yr, 2034) 3, 6, 7	No limit	
2200608	New JB Romero D (10 yr, 2033) 3, 6	No limit	
2200609	Northeastern Consolidated Ditch (10 yr, 2034)	No limit	
	3, 6, 7		
2200611	Overflow Ditch - (5 yr, 2028) 3, 6	No limit	
2200616	Richfield Canal - (5 yr, 2028) 3, 6	No limit	
2200619	Romero Ditch - (10 yr, 2034) 3, 6, 7	No limit	
2200620	Sabine School Section Ditch - (10 yr. 2034) 3,	No limit	
	6, 7		
2200621	Salazar Ditch - (5 yr. 2028) 3, 6	No limit	
2200624	San Juan San Rafael Ditch (3 yr. 2027)	No limit	
2200627	Sanford Canal (10 yr, 2033) 3, 6	No limit	
2200631	Servietta Ditch (10 yr, 2034) 3, 6, 7	No limit	
2200636	Stover Ditch (10 yr. 2033) 3, 6	No limit	
2200651	Williams Stuart Co Irrigation D - (10 yr, 2033)	No limit	
2200031	Rio San Antonio		
2200664	Broyles Overflow No. 4 Ditch (10 yr. 2033)	No limit	
2200004			
2200537	Eight Mile Ditch (5 yr. 2028) 3, 6	No limit	
2200543	Florida Ditch (5 yr. 2028) 3, 6	No limit	
2200549	Galvis Ditch (10 yr. 2033) 3, 6	No limit	
2200570	Jaramillo Overflow No 2 Ditch (10 yr. 2033) 3,	No limit	
-	6	_	
2200589	Lovato Irrigation Ditch - BLM - (5 yr, 2028) 3, 6	No limit	
2200590	Maes Ditch (10 yr. 2034) 3, 6, 7	1,000	
2200597	Martinez Ditch (10 yr. 2033) 3, 6	No limit	
2200615	Punche Ditch (5 yr. 2028) 3, 6	No limit	1
2200617	Riedel Ditch (5 yr. 2028) 3, 6	No limit	1
2200618	Rincones Ditch (5 yr. 2028) 3, 6	No limit	
2200632	Sinecero Ditch (10 yr. 2033) 3, 6	No limit	1
2200633	Sisneros Ditch (10 yr. 2033) 3, 6	No limit	
2200635	Star Ditch (10 yr. 2033)	No limit	

2200639	Taos Valley Canal No. 3 / SLVIWO (3 yr. 2028)	No limit		
2200640	Teodoro No 1 Ditch (10 yr. 2033)	No limit		
	Rio Los Pinos			
2200586	Los Pinos Ditch (10 yr. 2033) 3, 6	No limit		
	Total On Call- Forbearance		1,519.5	Up to 1,370
	CBP Allocation- April 2024	3,198	938.1	
	Total On-Call Non-Irrigation Season		938.1	Up to 979*

*Note: Total of Non-irrigation season depletions on the Conejos from the Subdistrict's Response Function.

	Water Right Name	Submitted	Approved in	Remaining
		in	SWSP's	4/21/2024 &
		ARP		Approved for
		5/1/2024		2024 ARP
SWSP	In Storage			
n/a	SMRC- Monte Vista Canal purchased from SD 1	152.3		
n/a	SMRC- Rio Grande Canal purchased from SD 1	47.7		
6094	City of Creede 94CW31 & 07CW60- excess	4.5		
	augmentation credits			
6182	SLVWCD 84CW16 & 94CW62 (from RGWCD)	40.9		
6074	Taos Valley No 3 (stored in 2019 & 2023)	18.3 + 485.9		
	Total In Storage	749.6		841.5
	*Confirmation of balances in reservoirs is			
	pending.			
	On Call	Limit	Expected	DWR Expected
			Yield	Yield
WDID	Forbearance			
2000566	Centennial - (10 yr, 2033) 2, 3, 6	No limit		
2000623	Commonwealth-Empire (10 yr, 2033) 2, 3, 6	500		
2000627	Excelsior Ditch - (1 yr, 2025) 2, 3, 6	No limit		
2000753	Monte Vista Canal (10 yr, 2033) 3, 6	300		
2000812	Rio Grande Canal (1 yr, 2025)	150		
2000662	Rio Grande Canal- Hermanthal Ditch (2025)			
2001094	Rio Grande Canal- Scotch Ditch (2025)			
2001007	Rio Grande Canal- Bedel D (2025)			
2000624	Rio Grande Canal- Enterprise D (2025)			
2001094	Scotch Ditch (carried in Rio Grande Canal) -	No limit		
	(2033 from Kruse, Ellithorpe)			
2000624	Enterprise D (carried in Rio Grande Canal) -	No limit		
	(2033 from Kruse, Ellithorpe, Toews)			
2000631	SLV Irrigation District - Farmers Union (1 yr.	500		
		500 500		

Subdistrict No. 3 Replacement Sources Rio Grande (acre-feet)

2000811	Rio Grande Piedra Valley Ditch (5 yr, 2028) 2, 3, 6	No limit		
2000817	Rio Grande San Luis Ditch (3 yr, 2026) 2, 3, 6	No limit		
	Total On Call- Forbearance		189.2	Up to 160.0
	CBP Allocation- April 2024	4,100	221.8	
	Total On Call- Non-Irrigation Season		221.8	Up to 221.8

Subdistrict No. 3 Replacement Sources Alamosa River (acre-feet)

	Water Right Name	Submitted	Approved in	Remaining
		in	SWSP's	4/1/2024 &
		ARP		Approved for
		5/1/2024		2024 ARP
SWSP	In Storage			
6066	Expo, LLC	69.6	77.3	56
	Total In Storage	70		56
		Limit	Expected	DWR Expected
	On Call		Yield	Yield
WDID	Forbearance			
	Alamosa Creek Canal (Terrace Irrig) ** - (3 year	Up to 100		
2100503	ending 2025)	AF per SD		
	, ,	per year		
2100505	Alamosa Spring Creek Ditch - (10 year, 2033)	No limit		
	3, 6			
2100506	Arroya Ditch - (5 year, 2028) 3, 6	No limit		
2100510		No limit		
2100511	Clark Ditch - (3 yr. 2026) 3, 6	No limit		
2100513		No limit		
2100514		No limit		
2100520		No limit		
2100522	Empire Canal - (10 yr. 2034) 3, 6	No limit		
2100525	Flintham Ditch - (10 yr. 2034) 3, 6	No limit		
2100529	Gallegos Ditch 3 - (10 yr, 2033)	No limit		
2100526	Gabino Gallegos Ditch (10 yr, 2033) 3, 6	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 Overflow Ditch - (3 yr, 2027) 3, 6	No limit		
2100561	Miller Ditch - (10 yr, 2033)	No limit		
	Miller Ditch - Alamosa (10 yr 2034)	24		
2100564	Morganville (3 yr. 2026)	No limit		
2100570	Norland - (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)	Up to 100		
		AF per SD		
		per year		
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		80	Up to 75

**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. See Section 3.1 of this Approval Letter.

Water Rights Owned by the Rio Grande Water conservation District on Behalf of Subdistrict No. 3

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. Alpha Hay Farms Fields 11 & 12- Heads Mill & J.F. Chacon Water Rights, Well No. 1 in Case No. W0490

In May 2023, Subdistrict No. 3 acquired a portion of Alpha Hay Farms property located in Conejos County known as "Fields 11 and 12." The land came with senior surface water rights in the Heads Mill & Irrigation Ditch (2.27 c.f.s. of Priority No. 2) and the J.F. Chacon No. 2 (7.54 c.f.s. of Priority No. 44, 4.54 c.f.s. of Priority No. 49, 1.0 c.f.s. of Priority No. 97, and 1.0 c.f.s. of Priority No. 142), as well as groundwater rights in Well No. 1 (Case No. W-0490, Permit No. 88243-F, WDID 2205123), 5.57 c.f.s., 360 acre-feet per year, for irrigation up to 160 acres. The Subdistrict filed an SWSP 9364 for the Plan Year to temporarily change the water rights to add augmentation as a beneficial use.

2. Lupita Sandoval Property- El Coda Ditch Shares

In August 2021, Subdistrict No. 3 acquired property in Conejos County that is serviced by 72 El Coda Ditch shares from Ms. Lupita Sandoval. The El Coda Ditch is priority #3 on the Rio San Antonio with an adjudication of 25.16 c.f.s. and priority #178 with 51.77 c.f.s. The 72 shares amount to 4% of the total ditch diversions. The long-term goal of this purchase is to utilize this water right to replace injurious depletions to the Rio San Antonio system on an annual to permanent basis.

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. 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. 3 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 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 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 injury. 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 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 (Section 1 of 11.1.4 of the ARP)

On December 30, 2015, the SLVIWO filed an Application for a 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 (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 storing water in Cove Lake Reservoir, if rehabilitated, for subsequent release to the San Antonio River, by recharging the confined and unconfined aquifers via a groundwater recharge project, by 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.

Subdistrict No. 3 entered an agreement with the SLVIWO to lease up to 2,000 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.

Forbearance Agreements (Section 3 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 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 were 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 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 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

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 August 27, 2018, the Conejos Response Area five-year running average groundwater withdrawals are currently below the 1978-2000 average groundwater withdrawals for the Conejos Response Area of 33,400 acre feet.

The current five-year running average groundwater withdrawals for ARP Wells for the period 2019-2023 is $\pm 25,734$ acre-feet (using the Subdistrict's Response Function Table 1 figures). The previous five-year running average for ARP wells was $\pm 27,455$ acre-feet, decreasing by $\pm 1,721$ acre-feet for 2023. The current average lost 2018 from the calculation, a particularly high year of 35,626 acre-feet.

For comparison, the longer-term average 2011-2023 (13 years) of metered pumping for ARP wells is ±29,579 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 $\pm 26,400$ acre-feet in 2024 due to similar pumping in similar stream flow forecast years. This would produce an average (2020-2024) of 27,783 acre-feet, within the sustainability metric.

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

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 Response Area No. 3 for 2023 was -1.27 feet, for the third year in a row, lower than any year of record since 2015, the base year.

The Conejos River System Water Users Association has been collecting hydrostatic pressure data in the Subdistrict No. 3 Response Area and will provide the data to the DWR to continue to improve the understanding of sustainability.

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 has had several meetings with Subdistrict Members during the 2023 Plan Year to receive feedback, inform them, and to generally address how the Subdistrict plans on achieving and maintaining a sustainable confined aquifer within Subdistrict boundaries. The Subdistrict plans on implementing aquifer sustainability measures if a voluntary reduction in pumping by Subdistrict Members does not lead to a positive sustainability trend, including the possible implementation of a groundwater allocation program and/or a pumping reduction program.

The Subdistrict has also approved a resolution to provide incentives 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.
- 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 for the Subdistrict. 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

<u>The Subdistrict depletions for the Conejos River system for this ARP are 1,972 acre-feet</u> <u>during the irrigation season and 970 acre-feet during the non-irrigation season for a total</u> <u>of 2,951 acre-feet.</u>

• Irrigation Season: The Subdistrict has $\pm 1,525$ acre-feet in storage in Platoro Reservoir. Alpha Hay Farms SWSP should generate ± 390 acre-feet for a total of $\pm 1,915$ acre-feet. The Subdistrict indicates a yield $\pm 1,520$ acre-feet from forbearance agreements during the irrigation season and in April 2025. Accretions of ± 55 acre-feet from the San Antonio can reduce the depletions owed on the Conejos, but only when the live streams are connected and other criteria are met as noted above. The credit from this source is unreliable to the Subdistrict and therefore it is not considered for this analysis.

The submitted portfolio of water from storage and in-season yield from Alpha Hay Farms SWSP in the 2024 ARP Year indicates there would be a deficit of ± 57 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 in-season yield and potentially $\pm 1,370$ acre-feet from DWR forbearance analysis totals $\pm 3,285$ 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 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 the No.169.

- These agreements for ditches that are likely to be the calling rights on the Conejos for the 2024 irrigation season and April 2025, could possibly account for ±1,370 acre feet. This amounts to 69%, of the ±1,972 acre-feet of depletions owed.
- <u>Non-Irrigation Season</u>. The Subdistrict has 938 acre-feet of Closed Basin Project water available to pay non-irrigation season depletions and will likely use most of the San Antonio accretions.

<u>Rio Grande</u>

The Subdistrict depletions are ± 260 acre-feet during the irrigation season and ± 220 acre-feet during the non-irrigation season for a total of ± 480 acre-feet.

 Irrigation Season: The Subdistrict has ±842 acre-feet in storage in WD20 Reservoirs and indicates a yield of ±190 acre-feet from forbearance agreements during the 2024 irrigation season and in April 2025, totaling ±1,032 acre-feet.

The confirmed portfolio of water from storage in the 2024 ARP Year totals 842 acre-feet and indicates sufficient firm water to cover Injurious Stream Depletions in the unlikely event that no forbearance is available.

• <u>Non-Irrigation Season</u>: The Subdistrict has ±220 acre-feet of Closed Basin Project water available to pay non-irrigation season depletions.

<u>Alamosa River</u>

The Subdistrict depletions are 87.4 acre-feet during the irrigation season and 0.3 acre-feet during the non-irrigation season for a total of 87.7 acre-feet.

 Irrigation Season: The Subdistrict has ±56 acre-feet in storage in Terrace Reservoir and indicates a yield of ±80 acre-feet from forbearance agreements during the 2024 irrigation season and in April 2025, totaling ±136 acre-feet.

The confirmed portfolio of water from storage in the 2024 ARP Year indicates there would be a deficit of ± 31.4 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 ± 75 acre-feet from DWR forbearance analysis totals ± 131 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.

- These agreements for ditches that are likely to be the calling rights on the Alamosa for the 2024 irrigation season and April 2025, could possibly account for ±75 acre feet of the depletions owed. This amounts to 86%, of the total depletions owed.
- <u>Non-Irrigation Season</u>: 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.
- 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 Conejos River System 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 and the Subdistrict Coordinator (deborah.sarason@state.co.us), 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, the negative depletion amounts that the Response Function output generated on the San Antonio reflect the point-source return flow attributed to the Town of Antonito in the RGDSS Model. This negative depletion represented on the San Antonio affects the Conejos River depletions when both streams are live to their confluence. Should the stream systems become disconnected hydraulically during the ARP Year, aggregation of these negative depletion amounts for purposes of determining depletions owed on the Conejos will not be allowed. Further, aggregation will only be allowed when the San Antonio is a live stream from the sewer treatment discharge to the confluence of the Conejos, when there is flow from the bottom of Stream Reach 1 on the Conejos to the San Antonio confluence, and on days when actual water is being delivered to a ditch that is the calling right that day.
- 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 and 2023 ARP Years, 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 progressively less upon forbearance agreements to meet the requirements for mitigation of injurious stream depletions. The Subdistrict is actively pursuing permanent replacement sources to cover depletions in the event that the forbearance agreements are not sufficient. In the unlikely event that the forbearance yields are less than needed, 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 nonaugmented pumping associated with Subdistrict ARP Wells.
- 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,

Jasin 7. Ullmin

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

Exhibits:

- A: Table 2.6 for 2024 ARP Year
- 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