

SPECIAL IMPROVEMENT DISTRICT NO. 5 OF THE
RIO GRANDE WATER CONSERVATION DISTRICT

ANNUAL REPLACEMENT PLAN
2021 PLAN YEAR

Prepared

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By

Rio Grande Water Conservation District
8805 Independence Way
Alamosa, Colorado 81101

In consultation with

Davis Engineering Service, Inc.
P.O. Box 1840, 1314 11th Street
Alamosa, Colorado 81101

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

Rule 11 Subdistrict's Proposed ARP

11.1. A Subdistrict with an approved Groundwater Management Plan must submit to the State and Division Engineers a proposed ARP that includes the following:

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

11.1.1.1 The structure identification number (WDID)

11.1.1.2 If no structure identification number has been assigned to a Subdistrict Well, the Subdistrict will furnish the following information: (See language in Rules court document).

11.1.1.3 A separate list of Subdistrict Wells with Plans for Augmentation

11.1.1.4 The total combined projected annual diversion for all Subdistrict Wells

11.1.1.5 The expected method(s) of irrigation, the combined projected number of acres irrigated by Wells included in the ARP, and the total projected acreage by each irrigation method

11.1.1.6 For non-irrigation Subdistrict Wells, a calculation of all projected withdrawals and projected Net Groundwater Consumptive Use

11.1.1.7 Any other data the Subdistrict deems necessary to support its projected Stream Depletions

11.1.1.8 Any other information required by the State and Division Engineers and reasonably necessary to evaluate the proposed ARP

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

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

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

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

11.1.4.1 Water is added to the stream system to assist in meeting the Rio Grande Compact delivery schedules

11.1.4.2 Water is added to the stream system to replace or Remedy Injurious Stream Depletions resulting from the use of underground water

11.1.4.3 Subject to section 37-92-501(4)(a)(I)-(III), C.R.S., injury to senior surface water rights resulting from the use of underground water is Remedied by means other than by providing water to replace Injurious Stream Depletions

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

11.1.5.1 Water levels, pressure levels, and/or groundwater withdrawals as appropriate

11.1.5.2 A listing of any irrigated acres proposed to be fallowed, whether those acres are temporarily or permanently fallowed, and the water rights associated with those proposed fallowed irrigated acres

11.1.5.3 A listing of water rights proposed to be temporarily or permanently retired and historical operations of each water right

11.1.5.4 Other proposed actions to be taken as applicable

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Water Head

Abbreviations

ARP	Annual Replacement Plan
DWR	State of Colorado, Division of Water Resources
NRCS	Natural Resources Conservation Service
Plan Year	The period May 1, 2021 through April 30, 2022
PWM	Plan of Water Management
Response Functions	RFAApplication_F_Saguache_6P98_V1.1
RGDSS	Rio Grande Decision Support System
RGWCD	Rio Grande Water Conservation District
Rule or Rules	Rules Governing the Withdrawal of Groundwater in Water Division No. 3 (the Rio Grande Basin) and Establishing Criteria for the Beginning and End of the Irrigation Season in Water Division No. 3 for All Irrigation Water Rights (2015CW3024)
SEO	State Engineer's Office
Subdistrict No. 5	Special Improvement District No. 5 of the Rio Grande Water Conservation District
Subdistrict Wells	Wells Benefitting Subdistrict No. 5 lands
SWSP	Substitute Water Supply Plan
WDID	Water District Structure Identification Number

INTRODUCTION

The purpose of this report is to satisfy the requirements for an ARP for the Plan Year under the provisions of the PWM for Subdistrict No. 5, approved without objection on March 13, 2021. Further, the ARP has been prepared in accordance with the requirements of the State Engineer and the 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 (Groundwater Rules).

As required by the Groundwater Rules, this report includes information necessary for the State Engineer and Subdistrict No. 5 staff to project stream depletions attributable to Subdistrict No. 5 Wells and Contract Wells (ARP Wells), as those terms are defined in the PWM, and information to assess progress toward other PWM objectives. This ARP includes a series of tables prepared by Subdistrict No. 5 staff utilizing the most current version of the Response Functions to tabulate the location and quantities of stream depletions resulting from Subdistrict No. 5 ARP Well groundwater withdrawals.

This ARP describes a plan to replace or otherwise remedy injurious stream depletions caused by the withdrawal of groundwater from Subdistrict No. 5 ARP Wells and includes details of the portfolio to be used to replace or otherwise remedy those injurious stream depletions as identified by the DWR for the Plan Year.

11.1.1 DATABASE OF ALL WELLS TO BE COVERD BY THE ARP

1. STRUCTURE IDENTIFICATION NUMBER (WDID)

A comprehensive ARP Well List identifies the wells the Subdistrict is including in the ARP (“ARP Wells”) which are permitted to continue operating in accordance with the PWM and the Groundwater Rules. This ARP Well List is necessary for DWR to identify which wells the Subdistrict has included. Further, the ARP Well List is a required input into the RGDSS Groundwater Model and Response Functions.

Appendix A is the most current tabulation of the WDID for each well in the ARP Well List and the groundwater withdrawals of each ARP Well for the previous Water Administration Year. Each year, as Subdistrict Members report information for their farm plans, and additional data is accumulated from other sources regarding well use and ownership, the ARP Well List will be updated. Any reported changes are incorporated into the ARP Well List, if appropriate. Following the court’s approval of the Subdistrict, wells have been added, replaced or removed from the Subdistrict’s ARP Well List.

Appendix A lists 213 ARP Wells for 2021, the majority included in the Subdistrict by petition when the Subdistrict was formed December 18, 2017. The ARP Well List has been updated for 2021 to include an additional 33 wells which were added to the Subdistrict ARP Well List by Participation Contract or Inclusion Agreement. A table with further details about each well which has an approved Subdistrict Participation Contract or Inclusion Agreement is included as Appendix B.

2. OTHER WELL INDENTIFICATION INFORMATION

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

3. SUBDISTRICT WELLS WITH PLANS FOR AUGMENTATION

Subdistrict No. 5’s ARP Well List does not include any wells that are either fully or partially augmented by an approved plan for augmentation which is administered separately of Subdistrict No. 5’s PWM. The Town of Saguache has contracted with the Subdistrict to provide remedy for the Town’s injurious stream depletions occurring to the Rio Grande and San Luis Creek. The Town’s injurious depletions to Saguache Creek are fully augmented by Case No. 16CW3023. The two wells included as ARP Wells are WDIDs 2605121 and 2605968, Appendix C.

4. TOTAL PROJECTED ANNUAL DIVERSION FOR ALL SUBDISTRICT ARP WELLS

The 2020 Water Administration Year metered groundwater withdrawals reported to DWR as of April 8, 2021, for all wells included in the ARP Well List are **40,844** acre-feet.

Table 1.1
Historical Subdistrict ARP Well Metered Pumping
(units in acre-feet)

2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
45,667	42,924	37,873	39,006	35,384	37,424	36,918	44,082	31,819	40,844

The projection of 2021 ARP Well groundwater withdrawals was made by reviewing past years with actual stream flows most comparable to those being forecast for 2020. ARP Well groundwater withdrawals in those years were also reviewed. The stream flows and antecedent conditions in 2020 in the northern San Luis Valley were most comparable to the 2021 forecast and, in that year, Subdistrict ARP Wells withdrew an estimated 40,844 acre-feet. Using this comparison, the Subdistrict ARP Well groundwater withdrawals in 2021 are projected to be 40,844 acre-feet.

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

The majority of metered groundwater withdrawals in the Plan Year were used for flood irrigation, 62 percent. Approximately 37 percent and 1 percent of groundwater withdrawals from ARP Wells applied to center pivot sprinkler irrigation and other uses, respectively.

Wells included in the ARP Well List are projected to irrigate approximately 11,971 acres during the Plan Year. Of the total projected irrigated acres, it is estimated 7,852 acres will be irrigated by center pivot sprinklers and 4,119 acres will be irrigated by flood application in the Saguache Response Area. This estimate is made based on a review of the breakdown of acres in the Rio Grande Water Conservation District’s annual Irrigated Ag Census and a review of the wells being included by Participation Contracts or Inclusion Agreements.

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

Included in the ARP Well List are a number of wells with beneficial uses other than irrigation. The Subdistrict utilized information provided by DWR to calculate the consumptive use rates used in the RGDSS Model to calculate stream impacts and returns. Beneficial uses include municipal, domestic, commercial, industrial and fish. A spreadsheet was prepared by the Subdistrict to calculate the composite Consumptive Use Ratio that is a necessary input in the Response Functions. A spreadsheet of the calculation prepared for use in the 2020 ARP will be submitted with this ARP.

7. OTHER DATA NECESSARY TO SUPPORT THE PROJECTED STREAM DEPLETIONS

No additional data is being provided.

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

The Subdistrict will provide the DWR with an electronic copy of the Response Functions used in this ARP at the same time they submit the ARP for review and approval.

Additional supplemental information that is generally used by DWR in their evaluation of the ARP is also being included with the submission. The supplemental information being provided to the State Engineer includes:

1. Resolution from RGWCD approving the Subdistrict 2020 ARP.
2. The list of Subdistrict Wells included in the 2020 ARP in spreadsheet format matching the list presented in Appendix A
3. Spreadsheet of the Subdistrict's breakdown of "Other" wells used to calculate the composite Consumptive Use Ratio in the Response Functions.

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

The purpose of this section is to present the data utilized to project stream depletions to Saguache and San Luis Creeks and the Rio Grande as a result of the groundwater withdrawals from Subdistrict No. 5 ARP Wells for the Plan Year. The Response Functions' outputs identify total projected stream depletions for the Plan Year, a breakdown of the monthly stream depletions for the Plan Year for each of the reaches on Saguache and San Luis Creeks and 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 No. 5 ARP Wells. Subdistrict No. 5 was directed by DWR to use the current 6P98 Response Functions to calculate projected stream depletions for this ARP.

1. 2021 STREAM FLOW FORECASTS – SAGUACHE CREEK AND THE RIO GRANDE

The stream flows for Saguache Creek and the Rio Grande are used in the Response Function to determine stream depletions caused by ARP Wells. The NRCS's April 1, 2021 Water Supply Forecast for Saguache Creek and the Rio Grande are 25,000 and 365,000 acre-feet, respectively, from April to September. The April-September flows of Saguache Creek are also used to determine stream depletions to San Luis Creek. This information was utilized in the Response Functions to project stream depletions caused by groundwater withdrawals from Subdistrict ARP Wells for the Plan Year.

**Table 1.2
Stream Flow Forecasts**

Stream	Forecast Source	Analysis Date	Apr-Sep Forecast (acre-feet)	% of avg.	Chance of Exceedance
Saguache Creek	NRCS	Apr 1, 2021	25,000	78	50%
Rio Grande	NRCS	Apr 1, 2021	365,000	71	50%

A copy of the NRCS April 1, 2021 Forecast is attached as Appendix D.

2. PROJECTED PLAN YEAR STREAM DEPLETIONS

Subdistrict No. 5 staff were instructed by the State Engineer’s Office to predict stream depletions to the affected streams caused by groundwater withdrawals from ARP Wells utilizing the response functions developed for the Saguache Response Area under the RGDSS Groundwater Model Phase 6P98. For the Plan Year, stream depletions attributable to the groundwater withdrawals from ARP Wells were calculated using these Response Functions.

The Response Functions 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 a group 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. Both instruction sheets are included as Appendix E.

The first step in using the current 6P98 Response Functions 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 2021.

The Subdistrict elected to use the Response Functions spreadsheet for the subset of wells which are included in the ARP Well List. The Saguache Response Area requires adjustments for point source return flows and the stream ratios, as listed below.

- Saguache: Reach 1 Calculations Ratio and Reach 3 Calculations Ratio

Using the whole Response Area results, adjustments are made on appropriate pages of the Response Function spreadsheet. Adjustments for the Ratio Method were made for Reach 1: Saguache Creek and Reach 3: San Luis Creek.

The next step was to calculate stream depletions by updating the Response Functions table contained in Table 2.1 to derive the annual net groundwater consumptive use. The consumptive use ratios for sprinkler and flood irrigation used in the RGDSS 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 prepared a separate spreadsheet of “other” wells included in the Subdistrict ARP Well List to show the individual well groundwater withdrawals and consumptive use factors used to explain how the composite ratios were determined for the subset of wells represented in Table 2.1 of the ARP.

Historical groundwater withdrawal values for wells included in the ARP Well List were entered in Table 2.1 for years 2011 through 2020. Projected groundwater withdrawal values were used for 2021. The Subdistrict has several members with Rio Grande Canal Shares with Recharge that Offsets Groundwater for calculation of the Net Groundwater Consumptive Use. The total number of shares associated with ARP Wells is 238.5 shares, which is 3.34 percent of the total shares in the Rio Grande Canal. For 2021, 10 shares historically used in Subdistrict No. 5 were included by contract in Subdistrict No. 1. To provide a reasonable method for predicting probable recharge credit quantities for 2021, a trend line was developed for the Rio Grande Canal by plotting historical annual river flows and corresponding recharge credits. A Regression trend line was developed for the canal with the resulting equation describing the trend line, Appendix F. In 2021 the total consumable recharge credit is projected to be 80,656 acre-feet and each share of Rio Grande Canal is projected to be worth 11.28 acre-feet, after application of the 5 percent reduction for evapotranspiration outlined in Case W3979. In order to calculate the recharge available to offset groundwater withdrawals, Recharge Credit for shares which were applied directly to recharge was not reduced further, Recharge Credit for shares applied through flood irrigation was reduced 60 percent, and Recharge Credit for shares applied through sprinkler irrigation was reduced 83 percent. These calculations for 2021 are shown in Table 2.2 below, Historical calculations for years 2011-2020 are included as Appendix F.

Notes at the bottom of Table 2.1 provide a description of the calculations within this table.

Table 2.1
Estimated Net Groundwater Consumptive Use
(Units in acre-feet)

Year	ARP Well Groundwater Withdrawals					Recharge that Offsets Groundwater				Net Groundwater Consumptive Use
	Irrigation Withdrawals to Center Pivots	Irrigation Withdrawals to Flood Irrigation	Other Withdrawals	Other Consumptive Use Ratio	Groundwater Consumption	Recharge Source 1	Recharge Source 2	Other Recharge Offsets	Total	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
2011	16,694	28,887	86	13%	31,200	838	0	0	838	30,361
2012	15,338	27,517	69	14%	29,250	583	0	0	583	28,667
2013	14,157	23,301	415	13%	25,786	849	0	0	849	24,937
2014	14,132	24,511	363	13%	26,484	1,074	0	0	1,074	25,410
2015	13,048	21,927	410	13%	24,040	1,173	0	0	1,173	22,866
2016	15,199	21,470	755	13%	25,597	1,198	0	0	1,198	24,398
2017	12,901	23,263	755	13%	24,764	1,304	0	0	1,304	23,461
2018	15,086	27,461	1,535	16%	29,250	419	0	0	419	28,831
2019	11,594	19,373	852	30%	21,500	1,226	0	0	1,226	20,274
2020	16,438	23,985	422	51%	28,249	589	0	0	589	27,659

2021	16,438	23,985	422	51%	28,249	788	0	0	788	27,461
Avg	14,638	24,153	553	22%	26,761	913	0	0	913	25,848

Explanation of Columns

- (1) Calendar Year
- (2) Determined from metered groundwater withdrawals
- (3) Determined from metered groundwater withdrawals
- (4) Determined from metered groundwater withdrawals
- (5) Estimated based on operations metered in Col4
- (6) Calculated as $0.83 \times \text{Col2} + 0.60 \times \text{Col3} + \text{Col4} \times \text{Col5}$
(0.83 and 0.60 are the consumptive use ratios of total groundwater withdrawals associated with sprinkler and flood irrigation practices, respectively)
- (7) - (9) Not applicable to the Rio Grande Alluvial Response Area
- (10) Calculated as $\text{Col7} + \text{Col8} + \text{Col9}$
- (11) Calculated as $\text{Col6} - \text{Col10}$

Wells that are added or deleted to the ARP Well List affect historical groundwater withdrawals figures as follows:

- Any wells that are added to the ARP will have their historical groundwater withdrawals included
- Any wells that are deleted from the ARP will have their historical groundwater withdrawals included in the groundwater withdrawals until the year that the wells are deleted
- If any wells that were deleted from a previous ARP list are added back in, any historical groundwater withdrawals from the years they were not included will have to be included in the groundwater withdrawals

**Table 2.2
Calculated Recharge Decree Credits for Subdistrict No. 5 During 2020**

Total Consumable	80,658.63
% Within Sub No. 5	3.34%
Total Consumable Within Sub No. 5	2,694.00
Surface Water Through Sprinklers @83%	-1,296.69
Surface Water Used for Flood @60%	-609.12
Totals	788.19

The projected Net Groundwater Consumptive Use for the Plan Year is **27,461 acre-feet** as shown in Table 2.1.

The Net Groundwater Consumptive Use for 2021 derived in Table 2.1 above is then input into the Response Function table contained in Table 2.3 in Column 3 in the row for 2021 to calculate projected stream depletions for the current Plan Year and into the future. The projected annual stream depletions resulting from the groundwater withdrawals of the wells included in the ARP Well list for the respective reaches and the total are shown in Columns 4 through 7.

Table 2.3
Estimated Historical and Projected Net Stream Depletions from
Groundwater Withdrawals in Subdistrict No. 5
(Units in acre-feet)

Year	Saguache Creek near Saguache (Apr-Sep) (3)	Net Groundwater Consumptive Use (Jan- Dec)	Annual Net Stream Depletions (May-Apr) a)			
			Saguache Creek	Rio Grande Del Norte- Excelsior	San Luis Creek below Arthur Young and Kerber Creek	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1970	54,768	19,736	1,182	3	210	1,395
1971	23,383	22,880	258	20	185	463
1972	22,122	28,570	484	50	176	709
1973	45,059	16,766	1,316	70	232	1,618
1974	16,475	29,530	489	87	180	757
1975	39,192	17,721	1,533	109	250	1,893
1976	27,709	18,906	520	118	245	883
1977	12,714	30,189	269	142	182	593
1978	18,966	23,697	496	173	184	853
1979	46,767	24,172	1,591	188	265	2,043
1980	36,905	23,075	554	189	259	1,002
1981	13,833	28,556	479	202	211	892
1982	36,492	18,194	771	218	254	1,242
1983	50,337	20,376	1,612	215	231	2,058
1984	59,158	20,217	1,563	213	229	2,005
1985	55,074	19,774	1,572	210	229	2,011
1986	44,028	17,422	1,558	207	225	1,990
1987	67,461	25,612	1,319	205	226	1,749
1988	22,346	28,237	265	214	181	659
1989	20,759	28,355	468	234	208	910
1990	27,182	21,961	728	246	270	1,244
1991	28,418	21,944	721	248	272	1,241
1992	26,244	23,231	728	252	271	1,251
1993	37,099	17,983	529	250	247	1,025
1994	21,628	25,479	486	242	179	907
1995	48,385	15,217	1,348	245	236	1,829
1996	19,036	30,779	483	244	215	942
1997	34,547	22,416	761	254	285	1,300
1998	36,625	30,018	776	253	252	1,282
1999	46,358	20,357	1,373	247	242	1,862
2000	21,953	37,829	536	250	201	987
2001	39,690	30,247	1,517	259	267	2,044
2002	7,687	40,436	320	274	222	816
2003	16,142	30,167	329	305	222	856

2004	25,585	23,818	583	322	262	1,167
2005	29,294	22,336	673	328	307	1,308
2006	21,283	23,796	601	332	223	1,157
2007	39,634	22,093	1,914	328	313	2,554
2008	31,611	24,553	886	317	331	1,534
2009	30,123	19,427	866	316	318	1,500
2010	27,043	23,101	609	315	281	1,205
2011	20,719	30,361	299	319	197	815
2012	15,267	28,667	287	333	192	812
2013	19,646	24,937	498	346	223	1068
2014	35,942	25,410	812	344	267	1424
2015	47,499	22,866	1,700	330	249	2279
2016	47,628	24,398	1,706	309	251	2266
2017	40,692	23,461	1,474	296	253	2023
2018	11,761	28,831	539	298	201	1038
2019	50,913	20,274	1,505	302	258	2065
2020	16,713	27,659	298	296	201	796
2021	25,000	27,461	482	306	208	996
2022			694	292	252	1237
2023			613	263	221	1096
2024			534	238	192	964
2025			459	216	163	838
2026			381	196	135	712
2027			299	180	102	580
2028			217	161	74	452
2029			142	144	43	329
2030			54	126	10	189
2031			0	106	0	106
2032			0	88	0	88
2033			0	73	0	73
2034			0	65	0	65
2035			0	57	0	57
2036			0	49	0	49
2037			0	39	0	39
2038			0	27	0	27
2039			0	20	0	20
2040			0	7	0	7
Avg 2001-2015	27,144	26,228	793	318	258	1369
Avg 2001-2010	26,809	25,997	830	310	275	1414
Post Plan			9,397	4,012	2,564	15973

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

Explanation of Columns

(1) Year

(2) Saguache Creek near Saguache Gage streamflow in acre-feet for the NRCS streamflow forecast period of April through September.

- (3) Net Groundwater Consumptive Use (NetGWCU) for January through December. NetGWCU values for 2001 through 2010 were taken from the RGDSS Groundwater Model output. NetGWCU values for 2011 through 2020 were calculated using well meter data and irrigated acreage information. NetGWCU data for 2021 was estimated.
- (4) Net Stream Depletions in Saguache Creek for the plan year (May through April) in acre-feet.
- (5) Net Stream Depletions in the Rio Grande Del Norte to Excelsior Ditch reach for the plan year (May through April) in acre-feet.
- (6) Net Stream Depletions in San Luis Creek below the Arthur Young Ditch and Kerber Creek for the plan year (May through April) in acre-feet.
- (7) Total Net Stream Depletions columns (4+5) in acre-feet.

Table 2.4 is an output from the Response Functions that calculates the annual total stream depletions and monthly replacement obligations for Saguache and San Luis Creeks and the Rio Grande. This table lists the Plan Year stream depletions as required under the Groundwater Rules.

Table 2.4
Subdistrict No. 5 Monthly Stream Depletions for Plan Year
(Units in acre-feet)

Stream Reach	Saguache Response Area Total												Total
	2020								2021				
	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Saguache Creek	45.1	22.2	18.3	7.8	9.9	30.3	29.7	33.2	31.9	44.9	113.6	95.0	482.0
Rio Grande Del Norte- Excelsior	29.2	24.5	29.3	23.1	23.7	26.0	26.4	27.6	24.0	22.4	25.0	25.0	306.0
San Luis Creek below Arthur Young and Kerber Creek	2.2	1.2	1.2	1.1	1.2	1.2	0.7	9.8	53.5	47.0	48.0	41.1	207.0
Total	76.5	47.9	48.8	32.0	34.8	57.5	56.8	70.6	109.4	114.4	186.6	161.1	995.0

Explanation of Columns

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

As indicated in the lower right-hand corner of Table 2.4, the Response Functions calculated total stream depletions to Saguache and San Luis Creeks and the Rio Grande during the Plan Year, due to both past ARP Well groundwater withdrawals and the Plan Year ARP Well groundwater withdrawals, are **995** acre-feet. The Response Functions calculated total stream depletions to Saguache Creek are **482** acre-feet, to San Luis Creek are **207** acre-feet and to the Rio Grande are **306** acre-feet. The locations of the stream depletions and monthly quantities are also tabulated in Table 2.4.

According to the RGDSS Groundwater Model, if the wells included in the Subdistrict’s ARP Well List were shut off today, there would be a continuing depletion to the river for

approximately 19 years. This is the calculated time required to recover to conditions that existed before groundwater withdrawals started. The volume of water required to replace stream depletions during this recovery period is called Post-Plan Stream Depletions. Based on predictions from the Response Functions, Table 2.5 shows there would be a total of **6,939** acre-feet of Post-Plan Stream Depletions. The portion of the total Post-Plan Stream Depletions impacting each of the two designated reaches of the creeks are also included in the table.

Table 2.5
Subdistrict No. 5 Post-Plan Stream Depletions
(Units in acre-feet)

Years (May-Apr)	Saguache Creek	Rio Grande Del Norte-Excelsior	San Luis Creek below Arthur Young and Kerber Creek	Total
2022-2041	3,393	2,354	1,192	6,939

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

1. AMOUNTS AND SOURCES OF REPLACEMENT WATER FOR PLAN YEAR

Table 3.1 shows the amounts and sources of replacement water that will be available to replace injurious stream depletions as directed by the Division Engineer of Water Division No. 3.

Table 3.1
Amounts and Sources of Replacement Water Acquired by Subdistrict No. 5

San Luis Creek Replacement Sources					
On Call-Irrigation Season					
Forbearance Agreements	Agreement Limits (1)	Expected Yield	Source of Diversion		Special Conditions
Wells Kerber Ditch	No limit		Kerber Creek		
Wells North Ditch	No Limit		Kerber Creek		
San Luis Co Ditch	No limit		San Luis Creek		
Schultz Dittrich Ditch	No limit		San Luis Creek		
Schultz Dittrich Ditch No. 2	No limit		San Luis Creek		
Dittrich Steel Ditch	No limit		San Luis Creek		
Steel Ditch No. 2	No limit		San Luis Creek		
Hall Ditch No. 1	No limit		Kerber Creek		
Clayton Ditch F and G	No limit		Kerber Creek		
Schultz Dittrich No. 14 Ditch	No limit		San Luis Creek		
Clayton Ditch D	No limit		Kerber Creek		
Clayton Old Channel Ditch	No limit		Kerber Creek		
Cody Ditch	No limit		Kerber Creek		

Greer Ditch No. 1	No limit		San Luis Creek		
Daniels Fish Arroya Ditch	No limit		Kerber Creek		
Kennedy Ditch	No limit		San Luis Creek		
Squires Ditch	No limit		San Luis Creek		
Greer Ditch No. 2	No limit		San Luis Creek		
Tobler Ditch	No limit		San Luis Creek		
Tobler Rominger Ditch	No limit		San Luis Creek		
Greer Ditch No. 3	No limit		San Luis Creek		
Clayton Ditch ABC	No limit		Kelly Creek		
Clayton Ditch ABC ALT	No limit		Kelly Creek		
Daniels Fish Ditch No. 4	No limit		Kerber Creek		
White Ditch	No limit		Kerber Creek		
1920 Ditch	No limit		Kerber Creek		
Schilling Ditch	No Limit		San Luis Creek		
On Call Water-Irrigation Season		49.0			

Saguache Creek Replacement Sources					
On Call-Irrigation Season					
Forbearance Agreements	Agreement Limits (1)	Expected Yield	Source of Diversion		Special Conditions
Campbell Ditch 4	No Limit		Saguache Creek		
Campbell Ditch 5	No Limit		Saguache Creek		
Campbell Ditch 6	No Limit		Saguache Creek		
Nehls Co Ditch	No Limit		Saguache Creek		
Roberts Co Ditch	No Limit		Saguache Creek		
Hearn Ditch	No Limit	5	Saguache Creek		
Slane Scandrett Ditch	No Limit		Saguache Creek		
Jeep Scandrett Ditch	No Limit		Saguache Creek		
On Call-Irrigation Season					
Water Right	Expected Yield	Source of Diversion	SWSP		Contract Limitations
Case No. 16CW3023 Excess Augmentation Credits	10	Saguache Creek			
North Star Lease – WDIDs 2605690, 2605685, and 2605057	+/- 640	Confined Aquifer System			Subject to Approval of a SWSP
Tarbell Ditch Transmountain Diversion	10.0 c.f.s.	Lake Fork Cochetopa Creek			Subject to Finalization of Contracts and DWR Approval
Quartette and Jeep Scandrett Lease	<100 ac-ft	Saguache Creek			Subject to Approval of a SWSP
On Call Water-Irrigation Season		15.0			

Rio Grande River Replacement Sources					
On Call- Year Round					
Water Right	Total RG Allocation (all SDs)	Expected Yield Subdistrict	Water Previously Controlled By	Attributable to	Current Location

				Depletions On	
Closed Basin Project Production	3,800	306	RGWCD	Rio Grande	Closed Basin Project
On Call Agreements		306			

2. AFTER ACQUIRED SOURCES OF REMEDY

Although Subdistrict No. 5 acknowledges that DWR cannot consider sources or remedy acquired or approved for use after the submission of this ARP in evaluating the adequacy of the ARP, the Subdistrict will continue to work to acquire additional sources of remedy and/or Well Injury Payment Agreements, and may, with approval from the Division Engineer, use those sources to remedy injury under this ARP. These potential sources include, but are not limited to, the Quartet Ditch and Jeep Scandrett Ditch (pending), the Tarbell Ditch, and certain groundwater rights.

3. OPERATION OF THE 2021 ANNUAL REPLACEMENT PLAN

As shown in Table 3.1 above, Subdistrict No. 5 has implemented Well Injury Payment Agreements with a number of ditches located on Saguache, Kerber, San Luis, and Crestone Creeks for the Plan Year. In its sole discretion, the Subdistrict will exercise these agreements, with the exception of those agreements that require the Subdistrict must honor the Well Injury Payment Agreement, if the Ditch is the calling right. The Subdistrict reviewed stream flows on the San Luis Creek system for the current and past years and used the peak and average flows to calculate the percent of priorities that have agreed to Well Injury Payment Agreements for the Plan Year within those stream flow ranges to determine the anticipated acre-feet that will be remedied by Well Injury Payment Agreement. On the San Luis Creek system Well Injury Payment Agreements have been made for priority no.'s 1 through 36. Given the expected steam flows in 2021 and the historical administration of the creek, it is reasonable to assume the calling priority will be senior to Priority No. 36. Subdistrict No. 5 staff estimates, based on this analysis, these agreements will remedy a total of **49** acre-feet during the Plan Year.

The Subdistrict has entered into an agreement with the Town of Saguache, to use the Excess Augmentation Credits generated under the Town's Plan for Augmentation, Case No. 16CW3023. The Town is currently applying for a SWSP for the 2021 irrigation season. Upon approval of the Town's SWSP, they will provide the Subdistrict with a calculation of the Excess Credits available to the Subdistrict. The amount of credits available to the Subdistrict are anticipated to be 10 acre-feet for 2021. The Subdistrict will seek approval from the Division Engineer and Water Commissioner prior to using the Excess Credits as a source of remedy.

The Subdistrict has entered into a contract to lease three irrigation wells from North Star Farm and fallow the historically irrigated acres. After consultation with and approval of the Division Engineer and Water Commissioner, the historic consumptive use from those acres will be delivered to Saguache Creek in one or more of the following manners:

- A pipeline or pipelines will deliver water directly to Saguache creek at a location

approved by the Division Engineer.

- Upon notice and consent by the Division Engineer, a pipeline will deliver water to the Warner Arroyo and be exchanged up stream to a point West of Highway 285. From that point a second pump and pipeline will take the water from the Warner Arroyo and deliver that water directly to Saguache creek at a location approved by the Division Engineer.
- The groundwater rights will be changed to be diverted from an alternate point of diversion through an existing or new well, which change will comply with the Confined Aquifer New Use Rules, District Court in and for Water Division No. 3, Case No. 2004CW24. The use of the existing or new well will be through agreement with the land and/or well owner at a location approved by the Division Engineer.
- The pipeline or pipelines will deliver water directly to the injured ditch, upon agreement with the owner(s) of the ditch and approval of the Division Engineer.

The Subdistrict is working to contract with the owners of the Tarbell Ditch Trans-mountain Diversion to lease the use of their structure. The Subdistrict will divert a junior water right from Water Division 4 through the Tarbell Ditch. The total diversion under the terms of the contract is 1.5 c.f.s. This water, minus delivery losses, will be delivered to the head of the Saguache Creek reach. This source of water is subject to review and approval by the Division Engineer. It is anticipated that the Tarbell will be diverting water from May through July and the expected yield of the 1.5 c.f.s. is +/-200 acre-feet.

The Subdistrict has leased 0.9 c.f.s. of Priority No. 24A in the Quartette Ditch and 2.5 c.f.s. of Priority No. 25 in the Jeep Scandrette Ditch. This lease will allow the Subdistrict to use the historic consumptive use of the ditches contingent upon water being available at the headgates. The maximum historic consumptive use of these water rights is +/-110 acre-ft. Upon approval of the SWSP and the Division Engineer, historic consumptive use which becomes available to the Subdistrict under this contract will be used to replace injurious stream depletions through storage, recharge, or direct use, including by exchange.

After submittal of this ARP, Subdistrict No. 5 staff will work with DWR to establish an understanding as to the hierarchy for the use of individual sources of remedy by stream.

As specified in this ARP, several ditches have entered into Well Injury Payment Agreements with Subdistrict No. 5 to remedy injurious stream depletions during the Plan Year, if needed. Some of these same ditches may be approached to consider long-term or permanent Well Injury Payment Agreements for the future.

The Response Functions did not predict stream depletions caused by the withdrawal of groundwater by ARP Wells to streams other than Saguache and San Luis Creeks and the Rio Grande in amounts above the minimum threshold to reliably predict injury. Therefore, Subdistrict No. 5 is not required to make replacements to any stream other than Saguache and

San Luis Creeks and the Rio Grande.

At times when there is a monthly, negative depletion in a stream reach, Subdistrict No. 5 anticipates they will make a request to the Division No. 3 Division Engineer that he allow Subdistrict No. 5 to aggregate that negative depletion amount in one reach, either upstream or downstream, against a positive depletion in another reach, when the opportunity exists under the protocol of DWR. Subdistrict No. 5 also anticipates they will make a request the Division No. 3 Division Engineer to allow Subdistrict No. 5 to aggregate a monthly, positive depletion with a negative depletion of another Subdistrict to offset the positive daily depletion Subdistrict No. 5 would otherwise have to replace or remedy when the opportunity exists under the protocol of DWR. A Memorandum of Understanding would be required before this offset could be allowed between subdistricts. The Subdistrict will not adopt any change until after approval by the Division No. 3 Division Engineer.

The Groundwater 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. Subdistrict No. 5 will continue to work diligently towards obtaining permanent and/or renewable supplies to remedy future injurious stream depletions caused by present or future groundwater withdrawals by Subdistrict ARP Wells.

The Response Functions utilized in the ARP demonstrate that post-plan impacts from past and present groundwater withdrawals by ARP Wells will fluctuate depending on climatic conditions effecting river flows on Saguache and Crestone Creeks. Section 4.1.5 of Subdistrict No. 5'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 Subdistrict No. 5 to provide a financial guarantee to assure that all Post-Plan Injurious Stream Depletions will be replaced or otherwise remedied if Subdistrict No. 5 were to fail or otherwise not be allowed to continue groundwater withdrawals. Subdistrict No. 5 will continue to acquire replacement water for replacing current injurious stream depletions to the impacted streams and also for Post-Plan Injurious Stream Depletions as calculated by the RGDSS Groundwater Model and deemed necessary by DWR and other long-term or permanent remedies, as appropriate.

If Subdistrict No. 5 were to fail, the individual well owners in Subdistrict No. 5 would have to obtain plans for augmentation or take other measures to comply with the Groundwater Rules. Presumably, those plans would be required to replace these Post-Plan Injurious Stream Depletions into the future. In the interim, Subdistrict No. 5 or the Rio Grande Water Conservation District will remedy those Post-Plan Injurious Stream Depletions by supplying water or through agreements of the type contemplated by Colo. Rev. Stat. § 37-92-501(4)(b)(I)(B), pursuant to which injury to water rights is remedied by means other than providing water to replace stream depletions.

4. ANTICIPATED FUNDING FOR PLAN YEAR

Subdistrict No. 5 has approved the creation of a Water Activity Enterprise. The Subdistrict

assesses two separate fees to those Subdistrict ARP Well owners that are benefited from the activities of Subdistrict No. 5. These fees are as follows:

- a. **Administrative Fee:** This fee is assessed to offset the cost of administering the PWM and ARP.
- b. **Groundwater Withdrawal Fee:** This fee is assessed per acre-foot of groundwater withdrawn from ARP Wells. This fee is set every year by the Board of Managers in an amount necessary to purchase replacement water or other sources of replacement to offset injury to those senior water rights caused by Subdistrict No. 5 ARP Wells groundwater withdrawals, to fund programs to comply with the sustainable water supply requirements of the Groundwater Rules, and to fund additional programs Subdistrict No. 5 may deem necessary to meet its goals and objectives.

The fees were set by the Board of Managers in December of 2020. These fees were invoiced directly to landowners in 2021 and are due in full to the Subdistrict by June 30, 2021.

For 2020, the Groundwater Withdrawal Fee for every acre-foot of groundwater withdrawn by ARP Wells for sprinkler application was assessed \$14.25 and every acre-foot of groundwater withdrawn by ARP Wells for flood application was assessed \$10.30. ARP Wells that are used for commercial, industrial, municipal and fish applications were assessed a variable Groundwater Withdrawal Fee. For 2020, the Administrative Fee was set at \$282.10 per in-active well and \$564.20 per active well. The total 2020 Subdistrict No. 5 assessments which were invoiced and are to be collected in 2021 are:

**Table 4.1
Subdistrict No. 5 Assessments to Fund ARP Operations**

Fee Type	Amount of 2020 Assessments
Administrative Fees	\$ 87,733
Groundwater Withdrawal Fees	\$ 286,918

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

1. SUBDISTRICT NO. 4 MEMORANDUM OF UNDERSTANDING

Subdistrict No. 4 has signed a Memorandum of Understanding with Subdistrict No. 5, whereby Subdistrict No. 4 has agreed to provide remedy for injurious stream depletions to San Luis Creek for Subdistrict No. 5. Subdistrict No. 5 will be responsible for determining their monthly depletions to San Luis Creek. On days when the calling water right does not have a Well Injury Payment with the Subdistricts, Subdistrict No. 4 will be responsible for providing replacement

water in an amount equal to the sum of depletions from Subdistrict No. 4 and Subdistrict No. 5.

2. WELL INJURY PAYMENT AGREEMENTS

Well Injury Payment Agreements have been reached with a multitude of ditches on San Luis and Kerber Creeks, copies of which are included in Appendix G along with a summary of the details of each agreement. Pursuant to section 37-92-501(4)(b)(I)(B), C.R.S., Subdistrict No. 5 has reached agreements with these 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 Saguache Creek or the San Luis Creek system. The expected yield of these agreements is as shown above in Table 3.1. See Appendix G for documentation of these Well Injury Payment Agreements.

3. CLOSED BASIN PROJECT PRODUCTION

According to the Division No. 3 Division Engineer's Rio Grande Compact Ten-Day Report on April 8th, 2021, the projected production of the project delivered to the Rio Grande is 8,500.0 acre-feet during the calendar year 2020. The division of the Closed Basin Project production in accordance with agreements with Conejos River and Rio Grande water users' organizations and special districts is 60% to the Rio Grande and 40% to the Conejos River over the long term, with provisions for adjustments in the division during individual years.

Pursuant to the Resolution Regarding Allocation of the Yield of the Closed Basin Project, the management and allocation of the Rio Grande's share of the Project's usable yield is made by the RGWUA in consultation with the SLVWCD. At a meeting of the RGWUA's Board of Directors on March 15th, 2021, the Board of Directors passed a motion to specifically allocate 3,800 acre-feet of the Rio Grande's share of the usable yield of the Closed Basin Project to replace the stream depletions under this ARP and in conjunction with Subdistrict No.1, Subdistrict No. 2, Subdistrict No. 3 and Subdistrict No. 6. Similarly, the Board of Directors of the SLVWCD agreed to an allocation of 3,800 acre-feet as stated in their letter to the Rio Grande Water Conservation District on March 18, 2021. The SLVWCD estimated the amounts each Subdistrict may need to cover their individual impacts but it did not specifically limit the amount each Subdistrict could use so long as the total allocation to the Subdistricts did not exceed the total amount included in the letter. See Appendix H for a copy of the letters. Therefore, 306 acre-feet of water is available to Subdistrict No. 5 under this ARP as shown above in the table of replacement sources.

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

4. TOWN OF SAGUACHE PARTICIPATION CONTRACT

The Town of Saguache has entered into a Participation Contract with Subdistrict No. 5, whereby the Subdistrict has agreed to provide remedy for the Town's injurious stream depletions occurring to the Rio Grande and San Luis Creek. The Town's injurious depletions to Saguache Creek are fully augmented by Case No. 16CW3023. The Subdistrict has also agreed to provide for the proportional responsibility for achieving and maintaining a sustainable water supply in the confined aquifer. The Town will provide its Excess Augmentation Credits on Saguache Creek to the Subdistrict. For 2021 the total amount of credits anticipated is 11.2 acre-feet.

5. WOODARD RANCH LEASE

Subdistrict No. 5 has entered an agreement with Woodard Ranch, LLC to lease 0.9 c.f.s. of the Priority 24A in the Quartet Ditch and 2.5 c.f.s. of the Priority 25 in the Jeep Scandrette Ditch. During the 2021 irrigation season, the historically irrigated acres will be fallowed and no irrigation will take place on those acres. The historical consumptive use credits from those acres will be used under the changed water rights, pending approval of an SWSP. When in priority and within the historical consumptive use limits set forth in the SWSP, Subdistrict No. 5 will apply the historical consumptive use credits to remedy injurious depletions from Subdistrict Wells to senior surface water rights either directly by leaving the water in the stream, or by exchanging the water upstream, or by diverting to storage or recharge.

6. NORTH STAR FARMS LEASE

Subdistrict No. 5 has entered an agreement with the owners of North Star Farms to lease up to three sprinkler irrigated quarter sections. During the 2021 irrigation season, the historically irrigated acres will be fallowed and no irrigation will take place on those acres. The historical consumptive use credits from those acres will be used under the changed water rights, pending approval of an SWSP. Within the historical consumptive use limits set forth in the SWSP, Subdistrict No. 5 will apply the historical consumptive use credits to remedy injurious depletions from Subdistrict Wells to senior surface water rights either directly by pumping the water through a pipeline and releasing it into the stream, or by exchanging the water upstream, or by diverting to storage or recharge, withdrawn from an alternate point of diversion, or with delivering water directly to the injured ditch, with permission of the owners.

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

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 March 13, 2020, the Saguache Response Area five-year running average groundwater withdrawals were below the 1978-2000 average groundwater withdrawals for the Saguache Response Area with a five-year average of 39,427 acre-feet (for the period 2014-2018). Per the July 1, 2020, memo from the State Engineer, Five Year Groundwater Withdrawals in Confined Aquifer Response Area in Division 3: July 2020

Requirement of Division 3 Groundwater Rules Section 8.1.5, the 2015-2019 five-year average groundwater withdrawals for the Saguache Response Area was 38,071 acre-feet. It is anticipated that the five-year average will increase when the 2015 withdrawals of 36,278 acre-feet are removed and the higher anticipated withdrawals for 2020 are included, unpublished Saguache Response area totals withdrawals are 41,132 acre-feet. Although there will likely be an increase, the five-year average for the Saguache Response Area will still remain below the 1978-2000 average groundwater withdrawals and be very close to the average that was calculated at the time the Subdistrict's PWM was approved. The State Engineer's memo is included in Appendix I.

The current five-year running average groundwater withdrawals for ARP Wells, which includes 33 contract wells, for the period 2016-2020 is 38,218 acre-feet. The previous five-year running average from 2015-2019 for ARP wells, including contract wells, was 37,125 acre-feet.

Subdistrict metered groundwater withdrawals account for approximately 97.6 percent of the total metered groundwater withdrawals annually over the period 2011-2020 in the Saguache Response Area. Based on this calculation and the trends of both the Saguache Response Area and the Subdistrict's five-year average, the Subdistrict will remain in compliance with the Sustainable Water Supply Requirement of the Rules.

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

Included as Appendix J is a chart which includes the water level measurements obtained in March of each year for the wells used by DWR to calculate the Composite Water Head for the Saguache Response Area. Also included in Appendix J is the State Engineer's memo dated July 1, 2020, regarding the Composite Water Head for Confined Aquifer Response Area in Division 3: July 2020 Requirement of Division 3 Groundwater Rules Section 8.1.4.

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

The Board of Managers included language in the PWM to continue to monitor groundwater withdrawals for the purpose of meeting the Sustainable Water Supply requirements in the Groundwater Rules and to propose remedies, if necessary, as part of the ARP process. For 2020, the Board of Managers decided to monitor groundwater withdrawal amounts following the first Subdistrict assessments to determine what, if any, affect they would have on groundwater withdrawal amounts. For that reason, Subdistrict No. 5 is not currently pursuing fallowing of any irrigated lands within the boundaries of the Subdistrict. It is anticipated that the imposition of the Groundwater Withdrawal Fees will naturally reduce the amount of groundwater withdrawn by ARP Wells and maintain the Subdistrict's groundwater withdrawals within the limits set by the Groundwater Rules.

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

At this time, the Subdistrict has not leased or purchased any water rights that are to be temporarily or permanently retired.

4. OTHER PROPOSED ACTIONS TO BE TAKEN AS APPLICABLE

The Subdistrict is currently engaging in meetings with various surface water users on Saguache Creek to determine if a Groundwater Withdrawal Restriction Program is feasible and workable.