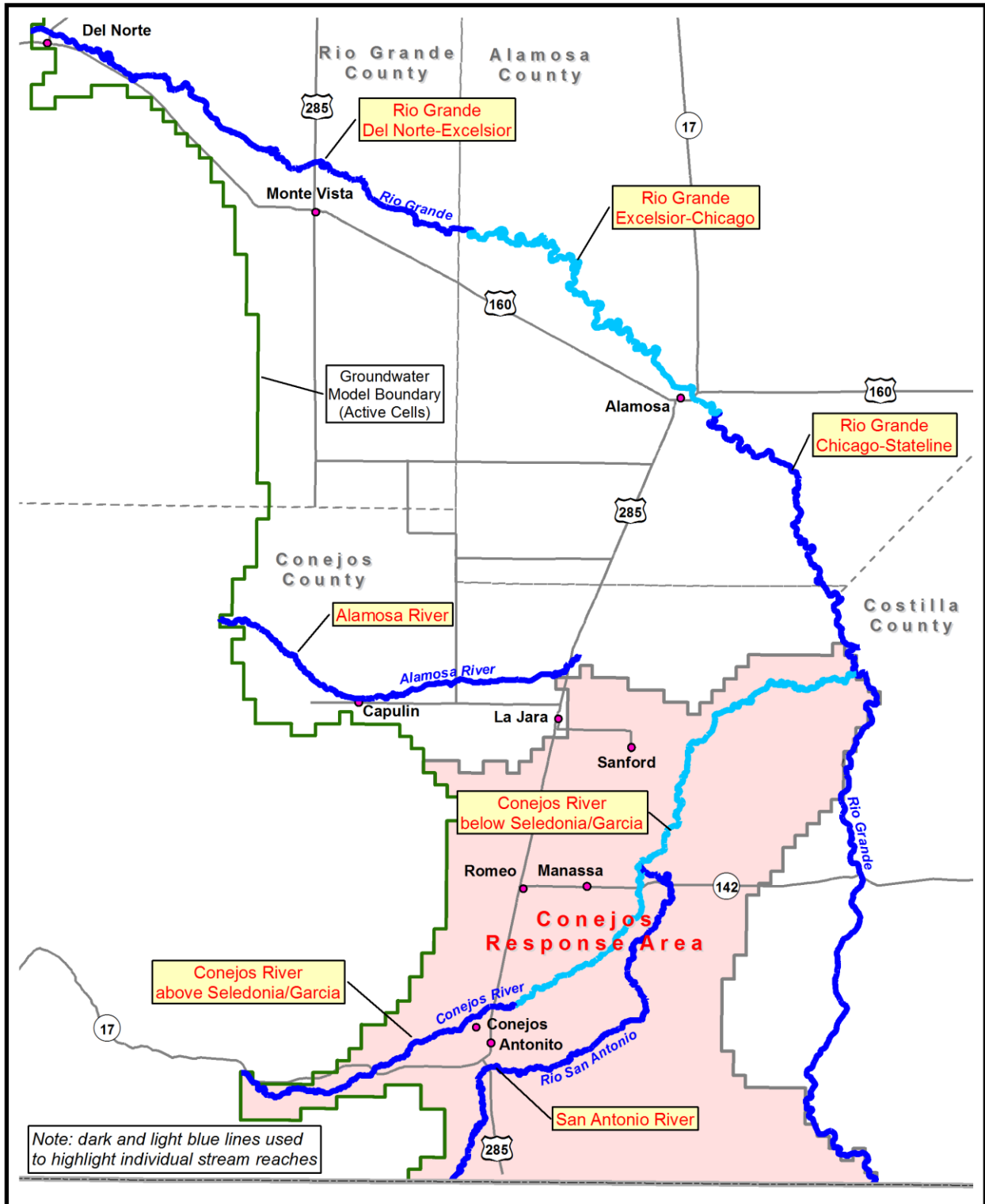


RESPONSE AREA SUMMARY PACKAGE

CONEJOS RESPONSE AREA

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Figure 1	<p><i>Conejos Response Area, Stream Reaches with Response Functions</i> - This figure shows the stream reaches for which Response Functions were calibrated. For the Conejos Response Area there are seven stream reaches with Response Functions:</p> <ol style="list-style-type: none">1. Conejos River above Seledonia/Garcia Ditches2. Conejos River below Seledonia/Garcia Ditches3. Rio Grande Del Norte to Excelsior Ditch4. Rio Grande Excelsior Ditch to Chicago Ditch5. Rio Grande Chicago Ditch to the State Line6. Alamosa River7. San Antonio River
Table 1a	<p><i>Estimated Historical and Current Year Net Stream Depletions from Groundwater Withdrawals in the Conejos Response Area (acre-feet)</i> - This table provides a summary of the Conejos Response Area's groundwater withdrawal impacts to streams using Response Functions calibrated to the RGDSS Groundwater Model for the time frame of 2001 through 2015. For illustrative purposes, groundwater withdrawal was discontinued after 2015 and the Response Functions were applied to estimate post plan depletions. Net Groundwater Consumptive Use is defined as the groundwater consumed by the operations of one or more wells and represents the difference between groundwater withdrawals less any return flow to the hydrogeologic system.</p>
Table 1b	<p><i>Estimated Post Plan Net Stream Depletions from Groundwater Withdrawals in the Conejos Response Area (acre-feet)</i></p>
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Table 2	<p><i>Monthly Net Stream Depletions for 2015 Plan Year in the Conejos Response Area (acre-feet)</i> - This table provides the monthly distribution of Net Stream Depletions for the 2015 Plan Year.</p>




 **COLORADO**
Division of Water Resources
Department of Natural Resources

Figure 1. Conejos Response Area Stream Reaches with Response Functions

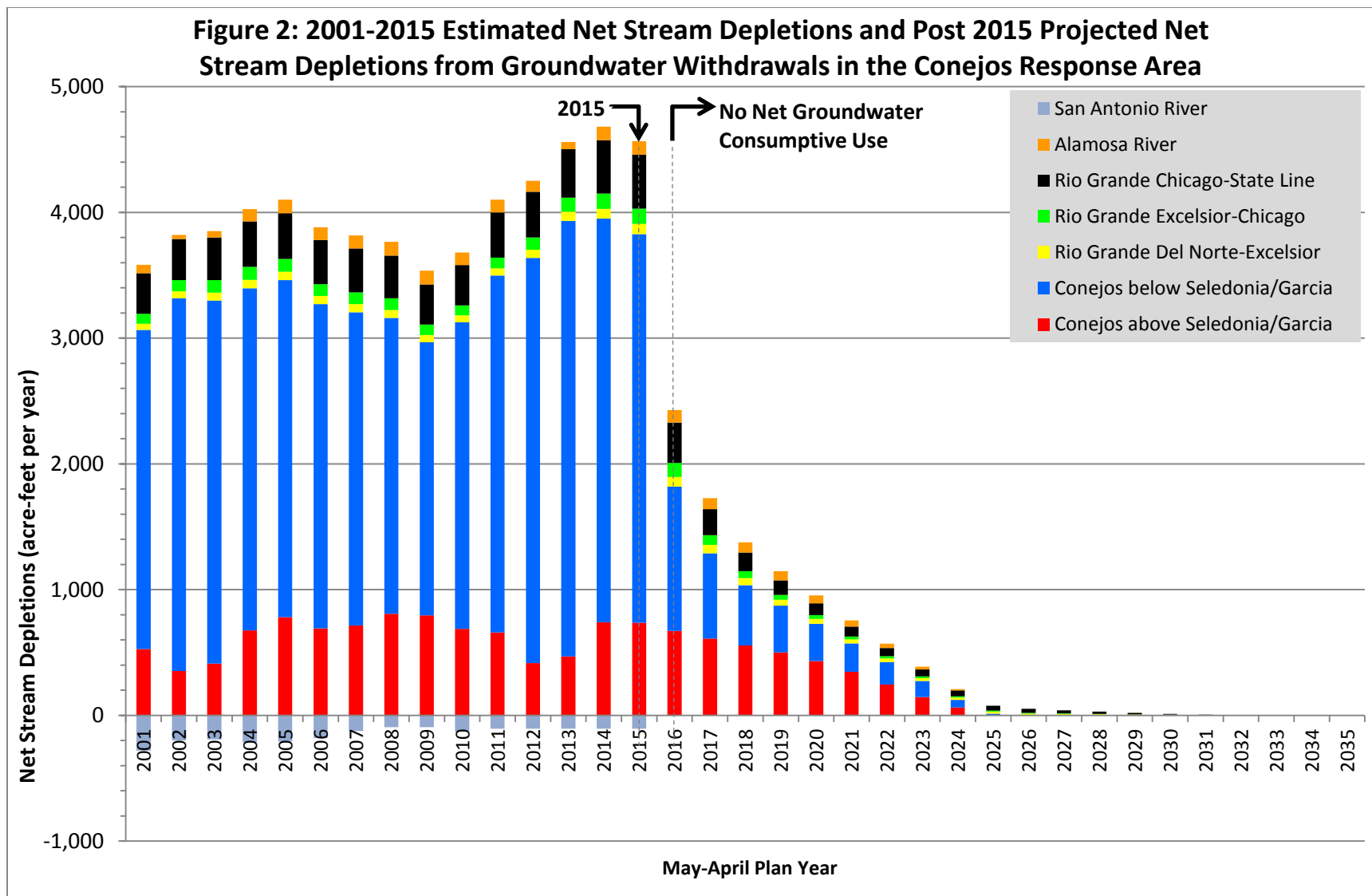
Table 1a: Estimated Historical and Current Year Net Stream Depletions from Groundwater Withdrawals in the Conejos Response Area (acre-feet)

Year	Conejos River near Mogote (Apr-Sep)	Net Groundwater Consumptive Use (Jan-Dec)	Net Stream Depletions (May – April)							Total
			Conejos above Seledonia /Garcia	Conejos below Seledonia/ Garcia	Rio Grande Del Norte- Excelsior	Rio Grande Excelsior- Chicago	Rio Grande Chicago- State Line	Alamosa River	San Antonio River	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
2001	186,276	21,766	528	2,538	48	80	322	68	-282	3,302
2002	41,441	29,566	353	2,964	55	90	327	33	-199	3,623
2003	113,212	26,346	411	2,888	62	100	339	50	-192	3,658
2004	165,509	21,512	676	2,721	67	104	361	98	-214	3,813
2005	251,583	21,056	782	2,680	67	101	363	108	-209	3,892
2006	148,836	20,620	692	2,579	65	95	351	101	-180	3,703
2007	168,399	19,801	715	2,490	65	95	349	103	-125	3,692
2008	235,334	17,639	808	2,353	63	92	339	111	-95	3,671
2009	204,792	16,020	795	2,173	58	83	318	110	-93	3,444
2010	179,106	20,441	689	2,438	55	78	321	101	-129	3,553
2011	165,793	25,247	659	2,836	58	85	358	102	-106	3,992
2012	113,579	31,497	415	3,223	64	98	363	87	-106	4,144
2013	98,509	32,940	468	3,467	72	111	386	57	-106	4,455
2014	149,303	25,710	741	3,210	79	120	425	109	-106	4,578
2015	149,303	25,710	737	3,092	81	121	429	108	-106	4,462
Average	158,065	23,725	631	2,777	64	97	357	90	-150	3,865

Year	Conejos River near Mogote (Apr-Sep)	Net Groundwater Consumptive Use (Jan-Dec)	Net Stream Depletions (May – April)							Total
			Conejos above Seledonia /Garcia	Conejos below Seledonia /Garcia	Rio Grande Del Norte-Excelsior	Rio Grande Excelsior-Chicago	Rio Grande Chicago-State Line	Alamosa River	San Antonio River	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
2016		0	672	1,147	78	112	321	98	0	2,428
2017		0	610	678	67	79	206	89	0	1,729
2018		0	555	481	56	54	147	81	0	1,374
2019		0	501	371	47	40	115	73	0	1,147
2020		0	432	296	39	30	93	63	0	953
2021		0	346	225	33	23	78	50	0	755
2022		0	245	180	27	18	65	35	0	570
2023		0	145	130	22	14	55	21	0	387
2024		0	63	60	19	11	46	9	0	208
2025		0	0	13	16	8	39	0	0	76
2026		0	0	0	13	7	32	0	0	52
2027		0	0	0	11	4	25	0	0	40
2028		0	0	0	9	2	18	0	0	29
2029		0	0	0	8	0	12	0	0	20
2030		0	0	0	6	0	6	0	0	12
2031		0	0	0	5	0	1	0	0	6
2032		0	0	0	3	0	0	0	0	3
2033		0	0	0	1	0	0	0	0	1
2034		0	0	0	1	0	0	0	0	1
2035		0	0	0	0	0	0	0	0	0
Post Plan Depletion		0	3,569	3,581	461	402	1,259	519	0	9,791

Notes for Tables 1a and 1b columns:

1. Year
2. Conejos River near Mogote streamflow in acre-feet for the period of April through September. The 2015 streamflow data was estimated to be the same as in 2014.
3. Net Groundwater Consumptive Use (NetGWCU) for January through December.
 - a. NetGWCU values for 2001 through 2010 were taken from the RGDSS Groundwater Model output.
 - b. NetGWCU values for 2011 through 2014 were calculated using well meter data and irrigated acreage information.
 - c. NetGWCU data for 2015 was estimated to be the same as in 2014.
4. Net Stream Depletions in the Conejos River above the Seledonia/Garcia Ditches for the plan year (May through April) in acre-feet.
5. Net Stream Depletions in the Conejos River below the Seledonia/Garcia Ditches for the plan year (May through April) in acre-feet.
6. Net Stream Depletions in the Rio Grande Del Norte to Excelsior Ditch reach for the plan year (May through April) in acre-feet.
7. Net Stream Depletions in the Rio Grande Excelsior Ditch to Chicago Ditch reach for the plan year (May through April) in acre-feet.
8. Net Stream Depletions in the Rio Grande Chicago Ditch to the State Line reach for the plan year (May through April) in acre-feet.
9. Net Stream Depletions in the Alamosa River for the plan year (May through April) in acre-feet.
10. Net Stream Depletions in the San Antonio River for the plan year (May through April) in acre-feet.
11. Total Net Stream Depletions columns (4+5+6+7+8+9+10) in acre-feet.



**Table 2: Monthly Net Stream Depletions for 2015 Plan Year in
the Conejos Response Area (acre-feet)**

Stream Reach	2015								2016				Total
	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)
Conejos above Seledonia/Garcia	71	89	88	77	67	67	59	56	44	37	40	41	736
Conejos below Seledonia/Garcia	191	249	334	386	381	348	273	236	206	167	170	150	3,091
Rio Grande Del Norte-Excelsior	7	7	7	6	6	7	7	7	7	7	7	7	82
Rio Grande Excelsior-Chicago	11	10	10	9	9	9	9	10	11	10	11	11	120
Rio Grande Chicago-State Line	43	39	32	16	22	35	46	44	39	35	41	37	429
Alamosa River	29	21	13	7	6	5	0	0	0	0	0	26	107
San Antonio River	-10	-9	-11	-11	-8	-7	-9	-8	-8	-8	-9	-10	-108
Total	342	406	473	490	483	464	385	345	299	248	260	262	4,457

Notes for columns:

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