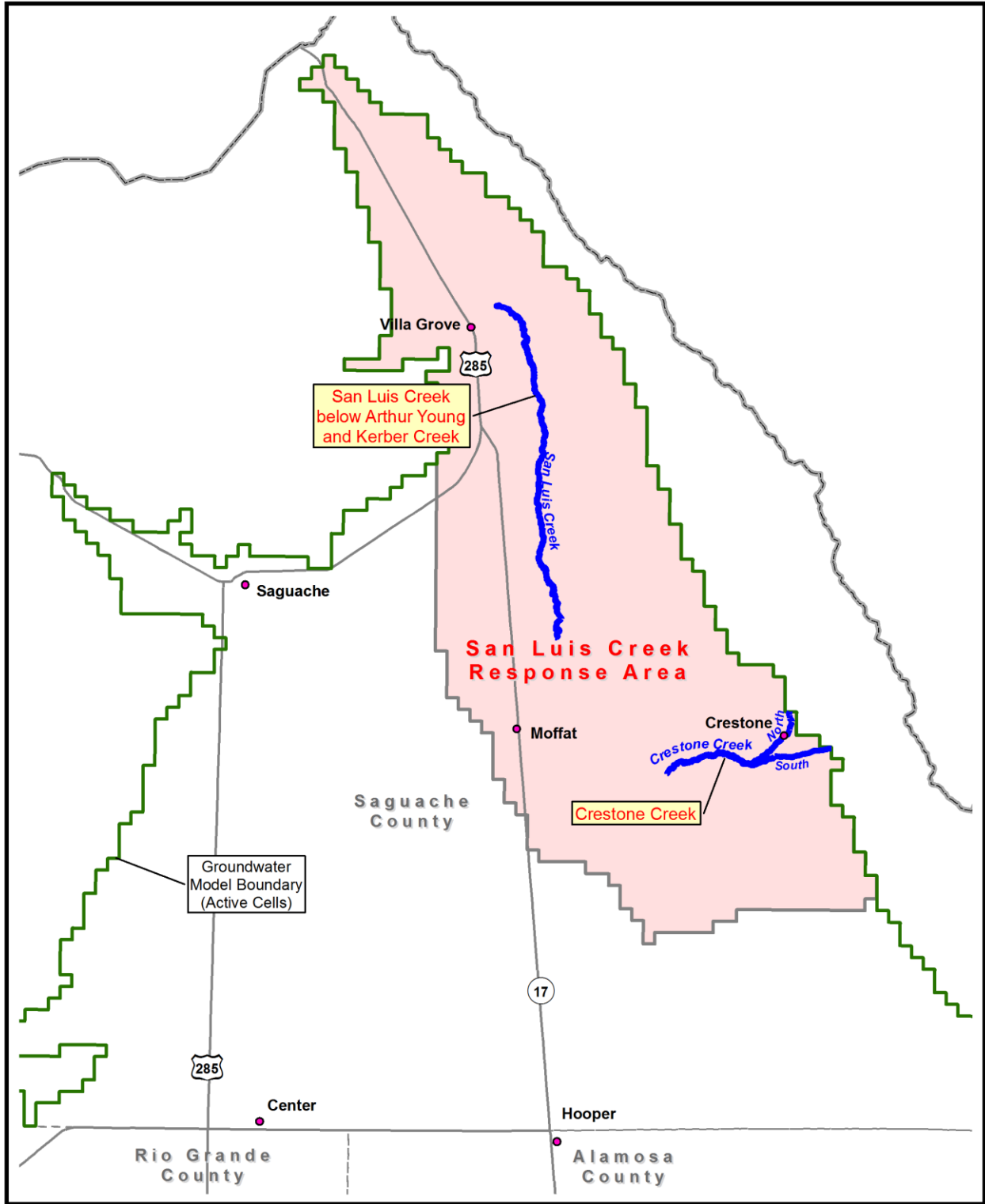


RESPONSE AREA SUMMARY PACKAGE

SAN LUIS CREEK RESPONSE AREA

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|----------|--|
| Figure 1 | <i>San Luis Creek Response Area, Stream Reaches with Response Functions</i> - This figure shows the stream reaches for which Response Functions were calibrated. For the San Luis Creek Response Area there are two stream reaches with Response Functions: <ol style="list-style-type: none">1. San Luis Creek below the Arthur Young Ditch and Kerber Creek2. Crestone Creek |
| Table 1a | <i>Estimated Historical and Current Year Net Stream Depletions from Groundwater Withdrawals in the San Luis Creek Response Area (acre-feet)</i> - This table provides a summary of the San Luis Creek 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. |
| Table 1b | <i>Estimated Post Plan Net Stream Depletions from Groundwater Withdrawals in the San Luis Creek Response Area (acre-feet)</i> |
| Figure 2 | <i>2001-2015 Estimated Net Stream Depletions and Post 2015 Projected Net Stream Depletions from Groundwater Withdrawals in the San Luis Creek Response Area</i> - The stacked graph shows the combination of Table 1a (historical and current year depletions) and Table 1b (post-plan depletions) . |
| Table 2 | <i>Monthly Net Stream Depletions for 2015 Plan Year in the San Luis Response Area (acre-feet)</i> - This table provides the monthly distribution of Net Stream Depletions for the 2015 Plan Year. |




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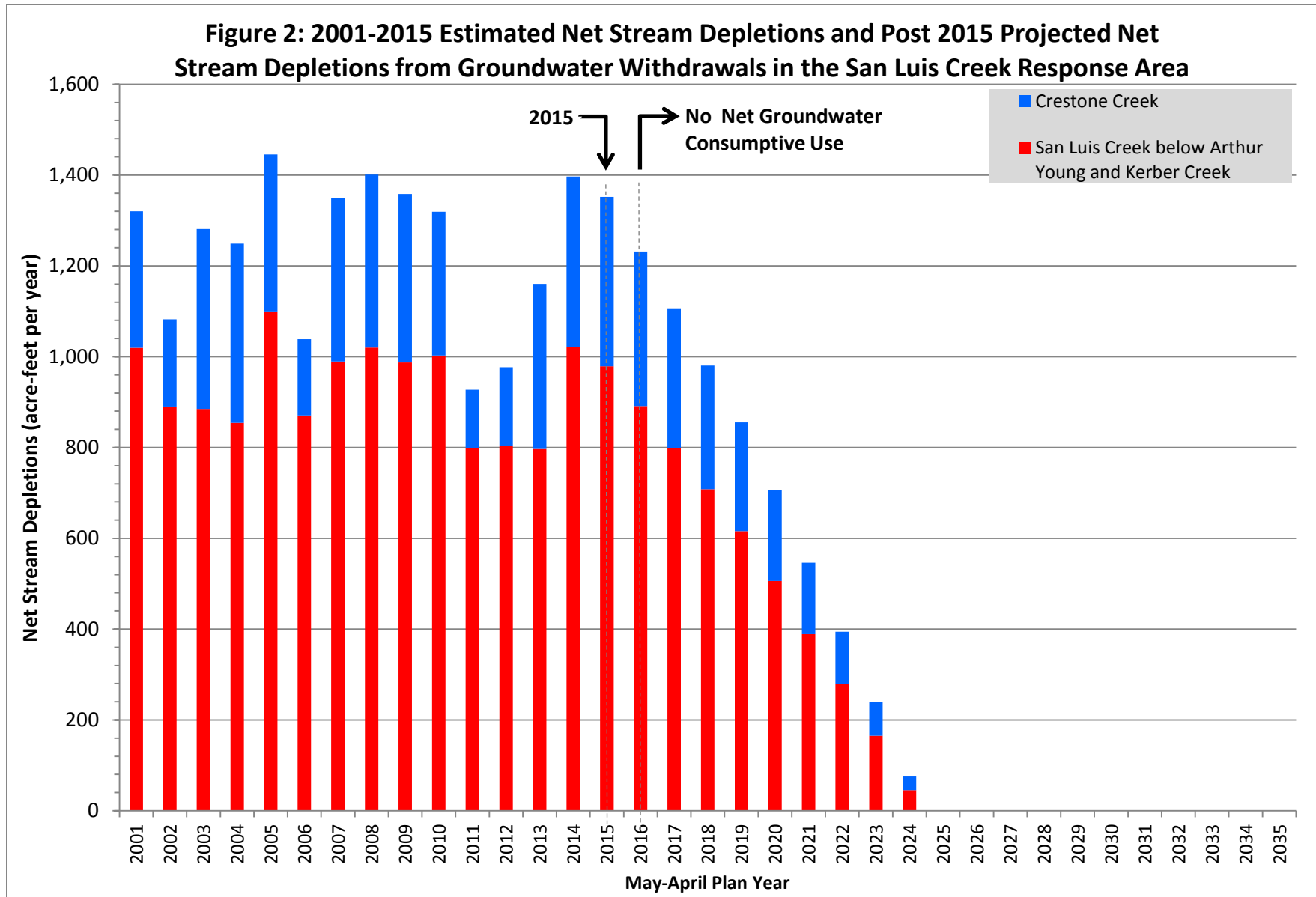
Figure 1. San Luis Creek Response Area Stream Reaches with Response Functions

| Table 1a: Estimated Historical and Current Year Net Stream Depletions from Groundwater Withdrawals in the San Luis Creek Response Area (acre-feet) | | | | | | |
|---|--|---|--|----------------|-------|--|
| Year | Saguache Creek near Saguache (Apr-Sep) | Net Groundwater Consumptive Use (Jan-Dec) | Net Stream Depletions (May – April) | | | |
| | | | San Luis Creek below Arthur Young and Kerber Creek | Crestone Creek | Total | |
| (1) | (2) | (3) | (4) | (5) | (6) | |
| 2001 | 39,690 | 10,491 | 1,020 | 301 | 1,321 | |
| 2002 | 7,687 | 12,028 | 890 | 192 | 1,082 | |
| 2003 | 16,142 | 8,095 | 885 | 396 | 1,281 | |
| 2004 | 25,585 | 7,524 | 854 | 394 | 1,248 | |
| 2005 | 29,294 | 7,833 | 1,098 | 347 | 1,445 | |
| 2006 | 21,283 | 7,754 | 871 | 168 | 1,039 | |
| 2007 | 39,634 | 7,776 | 989 | 360 | 1,349 | |
| 2008 | 31,611 | 8,579 | 1,020 | 381 | 1,401 | |
| 2009 | 30,123 | 7,618 | 987 | 371 | 1,358 | |
| 2010 | 27,043 | 8,500 | 1,002 | 317 | 1,319 | |
| 2011 | 20,714 | 10,522 | 798 | 129 | 927 | |
| 2012 | 15,263 | 10,347 | 804 | 173 | 977 | |
| 2013 | 19,641 | 9,367 | 797 | 363 | 1,160 | |
| 2014 | 35,933 | 10,588 | 1,021 | 376 | 1,397 | |
| 2015 | 35,933 | 10,588 | 979 | 373 | 1,352 | |
| Average | 26,372 | 9,174 | 934 | 309 | 1,244 | |

| Table 1b: Estimated Post Plan Net Stream Depletions from Groundwater Withdrawals in the San Luis Creek Response Area (acre-feet) | | | | | |
|---|--|---|--|----------------|-------|
| Year | Saguache Creek near Saguache (Apr-Sep) | Net Groundwater Consumptive Use (Jan-Dec) | Net Stream Depletions (May – April) | | |
| | | | San Luis Creek below Arthur Young and Kerber Creek | Crestone Creek | Total |
| (1) | (2) | (3) | (4) | (5) | (6) |
| 2016 | | 0 | 891 | 341 | 1,232 |
| 2017 | | 0 | 798 | 307 | 1,105 |
| 2018 | | 0 | 708 | 272 | 980 |
| 2019 | | 0 | 616 | 239 | 855 |
| 2020 | | 0 | 506 | 201 | 707 |
| 2021 | | 0 | 389 | 157 | 546 |
| 2022 | | 0 | 279 | 115 | 394 |
| 2023 | | 0 | 165 | 74 | 239 |
| 2024 | | 0 | 46 | 30 | 76 |
| 2025 | | 0 | 0 | 0 | 0 |
| 2026 | | 0 | 0 | 0 | 0 |
| 2027 | | 0 | 0 | 0 | 0 |
| 2028 | | 0 | 0 | 0 | 0 |
| 2029 | | 0 | 0 | 0 | 0 |
| 2030 | | 0 | 0 | 0 | 0 |
| 2031 | | 0 | 0 | 0 | 0 |
| 2032 | | 0 | 0 | 0 | 0 |
| 2033 | | 0 | 0 | 0 | 0 |
| 2034 | | 0 | 0 | 0 | 0 |
| 2035 | | 0 | 0 | 0 | 0 |
| Post Plan Depletion | | 0 | 4,398 | 1,736 | 6,134 |

Notes for Tables 1a and 1b columns:

1. Year
2. Saguache Creek near Saguache Gage 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 San Luis Creek below the Arthur Young Ditch and Kerber Creek for the plan year (May through April) in acre-feet.
5. Net Stream Depletions in Crestone Creek for the plan year (May through April) in acre-feet.
6. Total Net Stream Depletions columns (4+5) in acre-feet.



| Table 2: Monthly Net Stream Depletions for 2015 Plan Year in the San Luis Creek Response Area (acre-feet) | | | | | | | | | | | | | |
|--|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|--------------|
| | 2015 | | | | | | | | 2016 | | | | |
| Stream Reach | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar | Apr | Total |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) |
| San Luis Creek below Arthur Young and Kerber Creek | 98 | 58 | 13 | 2 | 2 | 2 | 57 | 164 | 172 | 143 | 144 | 124 | 979 |
| Crestone Creek | 80 | 76 | 29 | 24 | 16 | 15 | 0 | 19 | 36 | 37 | 32 | 9 | 373 |
| Total | 178 | 134 | 42 | 26 | 18 | 17 | 57 | 183 | 208 | 180 | 176 | 133 | 1,352 |

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