

Table 1.1 -- Annual Pumping within Turlock Basin for 1991-2006
(acre-ft)

| Year | TID | TID Private | Ballico-Cortez | Eastside | MID Private | Non-District Areas | Cities | Rural Domestic | Total |
|------|---------|-------------|----------------|----------|-------------|--------------------|--------|----------------|---------|
| 1991 | 117,521 | 37,604 | 26,083 | 176,576 | 218 | 105,747 | 34,474 | 4,122 | 502,344 |
| 1992 | 94,384 | 29,156 | 25,249 | 170,085 | 168 | 101,420 | 35,439 | 3,959 | 459,861 |
| 1993 | 72,085 | 33,374 | 24,050 | 163,827 | 191 | 100,508 | 36,613 | 3,831 | 434,478 |
| 1994 | 88,809 | 35,424 | 24,113 | 166,085 | 201 | 104,475 | 37,691 | 3,886 | 460,684 |
| 1995 | 96,494 | 24,341 | 21,731 | 150,112 | 135 | 95,921 | 38,305 | 3,577 | 430,615 |
| 1996 | 89,856 | 32,083 | 22,769 | 157,735 | 178 | 101,477 | 38,760 | 3,770 | 446,626 |
| 1997 | 117,123 | 38,716 | 24,392 | 169,706 | 213 | 113,630 | 39,391 | 4,164 | 507,335 |
| 1998 | 94,399 | 27,052 | 19,440 | 135,828 | 137 | 94,067 | 39,612 | 3,392 | 413,926 |
| 1999 | 76,441 | 30,315 | 21,581 | 152,023 | 140 | 107,337 | 40,758 | 3,769 | 432,364 |
| 2000 | 77,877 | 27,087 | 21,234 | 150,794 | 107 | 110,567 | 41,984 | 3,858 | 433,509 |
| 2001 | 79,765 | 29,684 | 21,872 | 154,948 | 112 | 115,096 | 43,504 | 3,959 | 448,940 |
| 2002 | 95,865 | 32,768 | 23,994 | 169,567 | 113 | 127,969 | 44,232 | 4,368 | 498,874 |
| 2003 | 72,777 | 31,777 | 22,427 | 160,973 | 115 | 119,245 | 47,007 | 4,136 | 458,456 |
| 2004 | 80,363 | 31,275 | 22,811 | 167,061 | 104 | 121,670 | 47,654 | 4,294 | 475,231 |
| 2005 | 63,225 | 29,775 | 21,515 | 158,822 | 99 | 117,717 | 48,528 | 4,130 | 443,810 |
| 2006 | 70,449 | 33,965 | 21,629 | 160,924 | 118 | 120,862 | 46,715 | 4,198 | 458,860 |

Table 1.2 -- Annual Canal Deliveries within Turlock Basin for 1991-2006
(acre-ft)

| Year | TID | Ballico-Cortez | Eastside | MID | Wastewater Delivered | Cities | Rural Residential | Total |
|------|---------|----------------|----------|--------|----------------------|--------|-------------------|---------|
| 1991 | 442,218 | 0 | 0 | 17,641 | 2,399 | 5,388 | 0 | 467,646 |
| 1992 | 475,828 | 0 | 0 | 15,877 | 2,399 | 5,388 | 0 | 499,492 |
| 1993 | 457,056 | 0 | 0 | 17,097 | 2,026 | 5,388 | 0 | 481,567 |
| 1994 | 497,103 | 0 | 0 | 18,766 | 2,373 | 6,149 | 0 | 524,391 |
| 1995 | 454,013 | 0 | 1,106 | 16,913 | 1,640 | 5,388 | 0 | 479,060 |
| 1996 | 483,945 | 437 | 1,474 | 18,057 | 1,832 | 5,769 | 0 | 511,514 |
| 1997 | 544,100 | 92 | 1,737 | 22,067 | 2,955 | 6,149 | 0 | 577,100 |
| 1998 | 399,809 | 152 | 2,182 | 15,101 | 5,571 | 5,388 | 0 | 428,203 |
| 1999 | 517,466 | 196 | 2,859 | 19,355 | 9,205 | 6,149 | 0 | 555,230 |
| 2000 | 500,411 | 882 | 2,874 | 17,108 | 9,525 | 5,769 | 0 | 536,568 |
| 2001 | 511,361 | 0 | 0 | 18,237 | 9,072 | 5,769 | 0 | 544,438 |
| 2002 | 526,571 | 0 | 0 | 19,436 | 11,119 | 6,149 | 0 | 563,275 |
| 2003 | 499,631 | 0 | 57 | 17,542 | 8,259 | 6,149 | 0 | 531,639 |
| 2004 | 526,533 | 317 | 2,142 | 19,550 | 8,683 | 6,149 | 0 | 563,374 |
| 2005 | 437,631 | 553 | 2,302 | 19,289 | 7,823 | 5,388 | 0 | 472,986 |
| 2006 | 442,134 | 532 | 2,261 | 13,981 | 7,429 | 5,912 | 0 | 472,249 |

Table 2.1 -- Layout of Simulation Time Steps for 2007-2036

| Year | Time Period | Time Period End | Model Time Step | Year | Time Period | Time Period End | Model Time Step | Year | Time Period | Time Period End | Model Time Step | Year | Time Period | Time Period End | Model Time Step |
|------|-------------|-----------------|-----------------|------|-------------|-----------------|-----------------|------|-------------|-----------------|-----------------|------|-------------|-----------------|-----------------|
| 2007 | J-M | Spring | 1 | 2014 | J-M | Fall | 31 | 2022 | J-M | Spring | 61 | 2029 | J-M | Fall | 91 |
| 2007 | A-J | Summer | 2 | 2014 | A-J | Winter | 32 | 2022 | A-J | Summer | 62 | 2029 | A-J | Winter | 92 |
| 2007 | J-S | Fall | 3 | 2015 | J-S | Spring | 33 | 2022 | J-S | Fall | 63 | 2030 | J-S | Spring | 93 |
| 2007 | O-D | Winter | 4 | 2015 | O-D | Summer | 34 | 2022 | O-D | Winter | 64 | 2030 | O-D | Summer | 94 |
| 2008 | J-M | Spring | 5 | 2015 | J-M | Fall | 35 | 2023 | J-M | Spring | 65 | 2030 | J-M | Fall | 95 |
| 2008 | A-J | Summer | 6 | 2015 | A-J | Winter | 36 | 2023 | A-J | Summer | 66 | 2030 | A-J | Winter | 96 |
| 2008 | J-S | Fall | 7 | 2016 | J-S | Spring | 37 | 2023 | J-S | Fall | 67 | 2031 | J-S | Spring | 97 |
| 2008 | O-D | Winter | 8 | 2016 | O-D | Summer | 38 | 2023 | O-D | Winter | 68 | 2031 | O-D | Summer | 98 |
| 2009 | J-M | Spring | 9 | 2016 | J-M | Fall | 39 | 2024 | J-M | Spring | 69 | 2031 | J-M | Fall | 99 |
| 2009 | A-J | Summer | 10 | 2016 | A-J | Winter | 40 | 2024 | A-J | Summer | 70 | 2031 | A-J | Winter | 100 |
| 2009 | J-S | Fall | 11 | 2017 | J-S | Spring | 41 | 2024 | J-S | Fall | 71 | 2032 | J-S | Spring | 101 |
| 2009 | O-D | Winter | 12 | 2017 | O-D | Summer | 42 | 2024 | O-D | Winter | 72 | 2032 | O-D | Summer | 102 |
| 2010 | J-M | Spring | 13 | 2017 | J-M | Fall | 43 | 2025 | J-M | Spring | 73 | 2032 | J-M | Fall | 103 |
| 2010 | A-J | Summer | 14 | 2017 | A-J | Winter | 44 | 2025 | A-J | Summer | 74 | 2032 | A-J | Winter | 104 |
| 2010 | J-S | Fall | 15 | 2018 | J-S | Spring | 45 | 2025 | J-S | Fall | 75 | 2033 | J-S | Spring | 105 |
| 2010 | O-D | Winter | 16 | 2018 | O-D | Summer | 46 | 2025 | O-D | Winter | 76 | 2033 | O-D | Summer | 106 |
| 2011 | J-M | Spring | 17 | 2018 | J-M | Fall | 47 | 2026 | J-M | Spring | 77 | 2033 | J-M | Fall | 107 |
| 2011 | A-J | Summer | 18 | 2018 | A-J | Winter | 48 | 2026 | A-J | Summer | 78 | 2033 | A-J | Winter | 108 |
| 2011 | J-S | Fall | 19 | 2019 | J-S | Spring | 49 | 2026 | J-S | Fall | 79 | 2034 | J-S | Spring | 109 |
| 2011 | O-D | Winter | 20 | 2019 | O-D | Summer | 50 | 2026 | O-D | Winter | 80 | 2034 | O-D | Summer | 110 |
| 2012 | J-M | Spring | 21 | 2019 | J-M | Fall | 51 | 2027 | J-M | Spring | 81 | 2034 | J-M | Fall | 111 |
| 2012 | A-J | Summer | 22 | 2019 | A-J | Winter | 52 | 2027 | A-J | Summer | 82 | 2034 | A-J | Winter | 112 |
| 2012 | J-S | Fall | 23 | 2020 | J-S | Spring | 53 | 2027 | J-S | Fall | 83 | 2035 | J-S | Spring | 113 |
| 2012 | O-D | Winter | 24 | 2020 | O-D | Summer | 54 | 2027 | O-D | Winter | 84 | 2035 | O-D | Summer | 114 |
| 2013 | J-M | Spring | 25 | 2020 | J-M | Fall | 55 | 2028 | J-M | Spring | 85 | 2035 | J-M | Fall | 115 |
| 2013 | A-J | Summer | 26 | 2020 | A-J | Winter | 56 | 2028 | A-J | Summer | 86 | 2035 | A-J | Winter | 116 |
| 2013 | J-S | Fall | 27 | 2021 | J-S | Spring | 57 | 2028 | J-S | Fall | 87 | 2036 | J-S | Spring | 117 |
| 2013 | O-D | Winter | 28 | 2021 | O-D | Summer | 58 | 2028 | O-D | Winter | 88 | 2036 | O-D | Summer | 118 |
| 2014 | J-M | Spring | 29 | 2021 | J-M | Fall | 59 | 2029 | J-M | Spring | 89 | 2036 | J-M | Fall | 119 |
| 2014 | A-J | Summer | 30 | 2021 | A-J | Winter | 60 | 2029 | A-J | Summer | 90 | 2036 | A-J | Winter | 120 |

Drought period

Table 2.2. Weather Years Used in Simulation for 2007-2036.

| Year | Weather Year | Turlock Annual Precipitation (inches) | Annual Precipitation (percent of average) | Turlock Precipitation Year Type | San Joaquin Valley Index |
|------|--------------|---------------------------------------|---|---------------------------------|--------------------------|
| 2007 | 1966 | 7.63 | 61 | Dry | Below Normal |
| 2008 | 1967 | 12.07 | 97 | Normal | Wet |
| 2009 | 1968 | 12.13 | 97 | Normal | Dry |
| 2010 | 1969 | 17.31 | 138 | Wet | Wet |
| 2011 | 1970 | 13.57 | 109 | Normal | Above Normal |
| 2012 | 1971 | 8.66 | 69 | Dry | Below Normal |
| 2013 | 1972 | 7.30 | 58 | Very dry | Dry |
| 2014 | 1973 | 17.87 | 143 | Wet | Above Normal |
| 2015 | 1974 | 10.00 | 80 | Normal | Wet |
| 2016 | 1975 | 9.65 | 77 | Dry | Wet |
| 2017 | 1976 | 5.53 | 44 | Very dry | Critically Dry |
| 2018 | 1977 | 6.09 | 49 | Very dry | Critically Dry |
| 2019 | 1978 | 19.41 | 155 | Wet | Wet |
| 2020 | 1979 | 13.34 | 107 | Normal | Above Normal |
| 2021 | 1980 | 10.83 | 87 | Normal | Wet |
| 2022 | 1981 | 14.99 | 120 | Normal | Dry |
| 2023 | 1982 | 17.02 | 136 | Wet | Wet |
| 2024 | 1983 | 27.03 | 216 | Wet | Wet |
| 2025 | 1984 | 7.85 | 63 | Dry | Above Normal |
| 2026 | 1985 | 7.92 | 63 | Dry | Dry |
| 2027 | 1986 | 9.82 | 79 | Dry | Wet |
| 2028 | 1987 | 12.35 | 99 | Normal | Critically Dry |
| 2029 | 1988 | 8.86 | 71 | Dry | Critically Dry |
| 2030 | 1989 | 6.52 | 52 | Very dry | Critically Dry |
| 2031 | 1990 | 8.34 | 67 | Dry | Critically Dry |
| 2032 | 1991 | 10.28 | 82 | Normal | Critically Dry |
| 2033 | 1992 | 12.31 | 98 | Normal | Critically Dry |
| 2034 | 1993 | 15.13 | 121 | Wet | Wet |
| 2035 | 1994 | 9.69 | 78 | Dry | Critically Dry |
| 2036 | 1995 | 21.36 | 171 | Wet | Wet |


 Drought period

Table 2.3a -- Water-Use Assumptions Used in Constructing Scenario for Cities

| Geographic Area | Population | Acreage ^{1,2} | Groundwater Use ³ | Surface-Water Use ⁴ |
|-------------------|--|-----------------------------|---|---|
| Ceres | Based on UWMP. | Based on 1997-2006 density. | Pumping assumed to be demand unmet by canal deliveries. | Garden-head deliveries same as for corresponding weather year. Community supply canal deliveries based on schedule provided by TID. |
| Delhi | Based on Community Plan. | Based on 1997-2006 density. | Pumping assumed to be demand unmet by canal deliveries. | Garden-head deliveries same as for corresponding weather year. Community supply canal deliveries based on schedule provided by TID. |
| Denair | Linear projection of 1997-2006 growth. | Based on 1997-2006 density. | Pumping assumed to be demand unmet by canal deliveries. | Community-supply canal deliveries based on schedule provided by TID. |
| Hickman | Linear projection of 1997-2006 growth. | Based on 1997-2006 density. | Pumping assumed to be demand unmet by canal deliveries. | Community-supply canal deliveries based on schedule provided by TID. |
| Hilmar | Linear projection of 1997-2006 growth. | Based on 1997-2006 density. | Pumping assumed to be demand unmet by canal deliveries. | Community-supply canal deliveries based on schedule provided by TID. |
| Hughson | Based on UWMP. | Based on 1997-2006 density. | Pumping assumed to be demand unmet by canal deliveries. | Community-supply canal deliveries based on schedule provided by TID. |
| Keyes | Linear projection of 1997-2006 growth. | Based on 1997-2006 density. | Pumping assumed to be demand unmet by canal deliveries. | Community-supply canal deliveries based on schedule provided by TID. |
| Modesto | Based on UWMP. | Based on 1997-2006 density. | Pumping assumed to be demand unmet by canal deliveries. | Community-supply canal deliveries based on schedule provided by TID. |
| Turlock | Based on UWMP. | Based on 1997-2006 density. | Pumping assumed to be demand unmet by canal deliveries. | Garden-head deliveries same as for corresponding weather year. Community supply canal deliveries based on schedule provided by TID. |
| Rural residential | Same as for 2006. | Same as for 2006. | Based on household and irrigation requirements. | |

¹Crops or landscaping same as for 2006 for all geographic areas. PET for crops and landscaping same as for corresponding weather year.

²See Table 2.4 for particular acreages used in groundwater model.

³See Table 2.5 for particular pumping used in groundwater model.

⁴See Table 2.6 for particular canal deliveries used in groundwater model.

Table 2.3b -- Water-Use Assumptions used in Constructing Scenario for Agriculture

| Geographic Area | Population | Acreage ^{1,2} | Groundwater Use ³ | Surface-Water Use ⁴ |
|-------------------------------------|------------|---|--|---|
| Turlock Irrigation District | | Unchanged from 2006, except for expansion of urban areas. Sole-source acreage (only groundwater used) same as for 2006. | Drainage and rented-well pumping provided by TID. Sole-source pumping (only groundwater used) based on crop irrigation requirement. Supplemental-source pumping (groundwater and canal water used) based on unmet crop irrigation requirement. | Canal deliveries based on simulation of Tuolumne River diversions using Tuolumne River Basin Model. Simulation results provided by TID. |
| Eastside Water District | | Unchanged from 2006, except for expansion of urban areas. | Based on crop irrigation requirement. | Surplus-water deliveries average of 19' 2006 for each year. |
| Ballico-Cortez Water District | | Unchanged from 2006. | Based on crop irrigation requirement. | Surplus-water deliveries average of 19' 2006 for each year. |
| Merced Irrigation District | | Unchanged from 2006, except for expansion of urban areas. | Scaled from TID supplemental-source pumping. | Same as for corresponding weather year. |
| Tuolumne River non-district area | | Unchanged from 2006. | Based on crop irrigation requirement. | |
| Merced River non-district area | | Unchanged from 2006. | Based on crop irrigation requirement. | |
| San Joaquin River non-district area | | Unchanged from 2006. | Based on crop irrigation requirement. | |
| Foothills non-district area | | Growth from 2006 at 2 percent per year. | Based on crop irrigation requirement. | Surplus-water deliveries average of 19' 2006 for each year. |

¹Crops or landscaping same as for 2006 for all geographic areas. PET for crops and landscaping same as for corresponding weather year.

²See Table 2.4 for particular acreages used in groundwater model..

³See Table 2.5 for particular pumping used in groundwater model.

⁴See Table 2.6 for particular canal deliveries used in groundwater model.

Table 2.4 -- Annual Irrigated Acreages Used in the Groundwater Model for 2007-2036

(acre-ft)

| Year | TID | Ballico-Cortez | Eastside | MID | Non-District Areas | Cities | Rural Residential | Total |
|------|---------|----------------|----------|-------|--------------------|--------|-------------------|---------|
| 2007 | 138,358 | 6,473 | 48,163 | 4,990 | 31,115 | 9,094 | 835 | 239,027 |
| 2008 | 138,042 | 6,473 | 48,163 | 4,990 | 31,512 | 9,224 | 835 | 239,239 |
| 2009 | 137,721 | 6,473 | 48,163 | 4,990 | 31,916 | 9,357 | 835 | 239,455 |
| 2010 | 137,394 | 6,473 | 48,163 | 4,990 | 32,329 | 9,491 | 835 | 239,676 |
| 2011 | 137,062 | 6,473 | 48,163 | 4,990 | 32,750 | 9,629 | 835 | 239,902 |
| 2012 | 136,724 | 6,473 | 48,163 | 4,990 | 33,180 | 9,768 | 835 | 240,134 |
| 2013 | 136,380 | 6,473 | 48,163 | 4,990 | 33,618 | 9,910 | 835 | 240,370 |
| 2014 | 136,029 | 6,473 | 48,163 | 4,990 | 34,065 | 10,055 | 835 | 240,611 |
| 2015 | 135,673 | 6,473 | 48,163 | 4,990 | 34,521 | 10,203 | 835 | 240,858 |
| 2016 | 135,310 | 6,473 | 48,163 | 4,990 | 34,986 | 10,353 | 835 | 241,110 |
| 2017 | 134,940 | 6,473 | 48,163 | 4,990 | 35,460 | 10,505 | 835 | 241,367 |
| 2018 | 134,564 | 6,473 | 48,163 | 4,990 | 35,944 | 10,661 | 835 | 241,630 |
| 2019 | 134,180 | 6,473 | 48,163 | 4,990 | 36,437 | 10,820 | 835 | 241,898 |
| 2020 | 133,789 | 6,473 | 48,163 | 4,990 | 36,941 | 10,981 | 835 | 242,173 |
| 2021 | 132,701 | 6,473 | 48,163 | 4,990 | 37,454 | 11,415 | 835 | 242,031 |
| 2022 | 132,296 | 6,473 | 48,163 | 4,990 | 37,978 | 11,582 | 835 | 242,317 |
| 2023 | 131,882 | 6,473 | 48,163 | 4,990 | 38,512 | 11,753 | 835 | 242,609 |
| 2024 | 131,461 | 6,473 | 48,163 | 4,990 | 39,057 | 11,928 | 835 | 242,907 |
| 2025 | 131,031 | 6,473 | 48,163 | 4,990 | 39,612 | 12,105 | 835 | 243,211 |
| 2026 | 130,765 | 6,473 | 48,163 | 4,990 | 40,179 | 12,214 | 835 | 243,620 |
| 2027 | 130,496 | 6,473 | 48,163 | 4,990 | 40,757 | 12,325 | 835 | 244,040 |
| 2028 | 130,224 | 6,473 | 48,163 | 4,990 | 41,347 | 12,436 | 835 | 244,469 |
| 2029 | 129,949 | 6,473 | 48,163 | 4,990 | 41,949 | 12,549 | 835 | 244,908 |
| 2030 | 129,670 | 6,473 | 48,163 | 4,990 | 42,562 | 12,663 | 835 | 245,357 |
| 2031 | 129,388 | 6,473 | 48,163 | 4,990 | 43,188 | 12,779 | 835 | 245,816 |
| 2032 | 129,103 | 6,473 | 48,163 | 4,990 | 43,826 | 12,895 | 835 | 246,286 |
| 2033 | 128,815 | 6,473 | 48,163 | 4,990 | 44,477 | 13,013 | 835 | 246,767 |
| 2034 | 128,524 | 6,473 | 48,163 | 4,990 | 45,141 | 13,133 | 835 | 247,259 |
| 2035 | 128,229 | 6,473 | 48,163 | 4,990 | 45,819 | 13,254 | 835 | 247,763 |
| 2036 | 127,930 | 6,473 | 48,163 | 4,990 | 46,510 | 13,376 | 835 | 248,278 |

Table 2.5 -- Annual Pumping Used in the Groundwater Model for 2007-2036

(acre-ft)

| Year | TID | TID Private | Ballico-Cortez | Eastside | MID Private | Non-District Areas | Cities | Rural Domestic | Total | Weather Year |
|------|---------|-------------|----------------|----------|-------------|--------------------|--------|----------------|---------|--------------|
| 2007 | 61,333 | 40,498 | 22,530 | 167,627 | 195 | 126,297 | 47,294 | 5,691 | 471,465 | 1966 |
| 2008 | 87,619 | 39,899 | 20,663 | 153,729 | 204 | 117,707 | 48,093 | 5,450 | 473,363 | 1967 |
| 2009 | 64,185 | 16,269 | 21,279 | 158,318 | 182 | 121,965 | 48,903 | 5,492 | 436,594 | 1968 |
| 2010 | 81,063 | 48,901 | 21,402 | 159,230 | 141 | 124,920 | 49,727 | 5,479 | 490,862 | 1969 |
| 2011 | 74,703 | 21,056 | 21,836 | 162,463 | 152 | 128,484 | 34,317 | 5,589 | 448,600 | 1970 |
| 2012 | 79,130 | 44,035 | 20,838 | 155,036 | 199 | 126,320 | 21,860 | 5,359 | 452,775 | 1971 |
| 2013 | 65,108 | 39,256 | 22,238 | 165,451 | 185 | 135,583 | 22,540 | 5,530 | 455,891 | 1972 |
| 2014 | 80,070 | 44,073 | 20,916 | 155,618 | 98 | 128,752 | 23,233 | 5,497 | 458,257 | 1973 |
| 2015 | 86,116 | 26,394 | 21,419 | 159,361 | 129 | 135,697 | 23,936 | 5,492 | 458,544 | 1974 |
| 2016 | 86,116 | 29,310 | 20,358 | 151,465 | 149 | 131,504 | 23,530 | 5,345 | 447,777 | 1975 |
| 2017 | 107,916 | 16,553 | 21,557 | 160,385 | 208 | 142,705 | 22,013 | 5,491 | 476,828 | 1976 |
| 2018 | 114,915 | 251,835 | 21,544 | 160,289 | 442 | 143,924 | 21,626 | 5,498 | 720,072 | 1977 |
| 2019 | 70,434 | 76,290 | 20,156 | 149,960 | 193 | 134,966 | 21,247 | 5,478 | 478,724 | 1978 |
| 2020 | 80,070 | 40,205 | 21,933 | 163,187 | 312 | 149,066 | 21,998 | 5,628 | 482,399 | 1979 |
| 2021 | 70,434 | 57,049 | 20,838 | 155,039 | 326 | 144,867 | 22,979 | 5,394 | 476,927 | 1980 |
| 2022 | 64,921 | 40,710 | 22,020 | 163,833 | 259 | 154,544 | 23,959 | 5,656 | 475,902 | 1981 |
| 2023 | 70,515 | 43,696 | 19,356 | 144,013 | 176 | 137,981 | 24,939 | 5,298 | 445,975 | 1982 |
| 2024 | 81,063 | 33,613 | 18,648 | 138,746 | 171 | 134,052 | 25,921 | 5,245 | 437,460 | 1983 |
| 2025 | 86,116 | 46,874 | 22,643 | 168,466 | 204 | 166,772 | 26,931 | 5,634 | 523,639 | 1984 |
| 2026 | 64,185 | 35,356 | 22,096 | 164,398 | 212 | 165,525 | 28,923 | 5,560 | 486,256 | 1985 |
| 2027 | 111,252 | 31,970 | 21,348 | 158,831 | 189 | 164,336 | 30,929 | 5,584 | 524,438 | 1986 |
| 2028 | 106,781 | 36,912 | 20,995 | 156,202 | 281 | 164,826 | 32,196 | 5,658 | 523,851 | 1987 |
| 2029 | 114,931 | 93,015 | 18,281 | 136,013 | 351 | 148,403 | 33,477 | 5,213 | 549,684 | 1988 |
| 2030 | 101,067 | 53,870 | 21,704 | 161,478 | 374 | 176,497 | 32,614 | 5,629 | 553,233 | 1989 |
| 2031 | 114,907 | 84,517 | 21,306 | 158,520 | 347 | 177,167 | 31,911 | 5,699 | 594,373 | 1990 |
| 2032 | 114,867 | 99,460 | 20,982 | 156,111 | 224 | 177,773 | 30,305 | 5,694 | 605,416 | 1991 |
| 2033 | 114,915 | 72,873 | 21,105 | 157,019 | 173 | 176,950 | 32,140 | 5,504 | 580,679 | 1992 |
| 2034 | 70,434 | 39,396 | 20,197 | 150,266 | 196 | 172,609 | 34,195 | 5,351 | 492,644 | 1993 |
| 2035 | 93,704 | 48,310 | 20,741 | 154,316 | 207 | 180,148 | 36,235 | 5,394 | 539,056 | 1994 |
| 2036 | 87,619 | 31,742 | 18,157 | 135,090 | 137 | 160,117 | 37,452 | 5,055 | 475,369 | 1995 |

Table 2.6 -- Annual Canal Deliveries Used in the Groundwater Model for 2007-2036

(acre-ft)

| Year | TID | Ballico-Cortez | Eastside | MID | Wastewater Delivered | Cities | Rural Residential | Total | Weather Year |
|------|---------|----------------|----------|--------|----------------------|--------|-------------------|---------|--------------|
| 2007 | 503,319 | 0 | 0 | 16,049 | 8,414 | 4,349 | 0 | 532,132 | 1966 |
| 2008 | 449,322 | 395 | 1,899 | 20,747 | 8,414 | 3,886 | 0 | 484,664 | 1967 |
| 2009 | 476,745 | 0 | 0 | 22,874 | 8,414 | 4,299 | 0 | 512,332 | 1968 |
| 2010 | 458,769 | 395 | 1,899 | 21,587 | 8,414 | 4,119 | 0 | 495,183 | 1969 |
| 2011 | 528,768 | 395 | 1,899 | 22,943 | 8,414 | 11,668 | 0 | 574,087 | 1970 |
| 2012 | 435,753 | 0 | 0 | 21,122 | 8,414 | 18,942 | 0 | 484,231 | 1971 |
| 2013 | 519,624 | 0 | 0 | 24,959 | 8,414 | 18,969 | 0 | 571,966 | 1972 |
| 2014 | 465,086 | 395 | 1,899 | 22,887 | 8,414 | 18,611 | 0 | 517,292 | 1973 |
| 2015 | 475,994 | 395 | 1,899 | 23,005 | 8,414 | 18,986 | 0 | 528,693 | 1974 |
| 2016 | 458,550 | 395 | 1,899 | 21,749 | 8,414 | 19,560 | 0 | 510,567 | 1975 |
| 2017 | 484,469 | 0 | 0 | 24,922 | 8,414 | 20,740 | 0 | 538,545 | 1976 |
| 2018 | 263,275 | 0 | 0 | 14,244 | 8,414 | 21,293 | 0 | 307,227 | 1977 |
| 2019 | 381,699 | 0 | 0 | 20,385 | 8,414 | 21,105 | 0 | 431,604 | 1978 |
| 2020 | 481,171 | 395 | 1,899 | 22,517 | 8,414 | 21,532 | 0 | 535,929 | 1979 |
| 2021 | 446,320 | 395 | 1,899 | 23,712 | 8,414 | 21,909 | 0 | 502,650 | 1980 |
| 2022 | 442,995 | 0 | 0 | 22,902 | 8,414 | 21,498 | 0 | 495,810 | 1981 |
| 2023 | 380,742 | 395 | 1,899 | 21,069 | 8,414 | 21,540 | 0 | 434,059 | 1982 |
| 2024 | 395,450 | 395 | 1,889 | 21,188 | 8,414 | 21,181 | 0 | 448,517 | 1983 |
| 2025 | 468,932 | 395 | 1,889 | 24,954 | 8,414 | 21,909 | 0 | 526,493 | 1984 |
| 2026 | 452,097 | 0 | 0 | 22,651 | 8,414 | 21,708 | 0 | 504,870 | 1985 |
| 2027 | 458,743 | 395 | 1,889 | 20,552 | 8,414 | 21,508 | 0 | 511,501 | 1986 |
| 2028 | 434,761 | 0 | 0 | 22,463 | 8,414 | 21,571 | 0 | 487,209 | 1987 |
| 2029 | 365,536 | 0 | 0 | 22,331 | 8,414 | 21,607 | 0 | 417,888 | 1988 |
| 2030 | 428,162 | 0 | 0 | 19,343 | 8,414 | 21,737 | 0 | 477,657 | 1989 |
| 2031 | 398,859 | 0 | 0 | 17,646 | 8,414 | 21,909 | 0 | 446,828 | 1990 |
| 2032 | 408,110 | 0 | 0 | 17,641 | 8,414 | 21,534 | 0 | 455,700 | 1991 |
| 2033 | 428,102 | 0 | 0 | 15,877 | 8,414 | 21,534 | 0 | 473,927 | 1992 |
| 2034 | 425,052 | 395 | 1,899 | 17,097 | 8,414 | 21,534 | 0 | 474,392 | 1993 |
| 2035 | 412,332 | 0 | 0 | 18,766 | 8,414 | 21,909 | 0 | 461,421 | 1994 |
| 2036 | 390,665 | 0 | 0 | 16,913 | 8,414 | 21,534 | 0 | 437,526 | 1995 |

Table 2.7 -- Annual Recharge Used in the Groundwater Model for 2007-2036

(acre-ft)

| Year | TID | Ballico-Cortez | Eastside | MID | Non-District Areas | Cities | Rural Residential | Non-Irrigated Areas | Total | Weather Year |
|------|---------|----------------|----------|--------|--------------------|--------|-------------------|---------------------|---------|--------------|
| 2007 | 131,100 | 3,150 | 16,160 | 802 | 30,997 | 6,333 | 2,620 | 7 | 191,163 | 1966 |
| 2008 | 212,109 | 8,251 | 56,626 | 6,429 | 55,937 | 7,828 | 3,327 | 13,488 | 350,506 | 1967 |
| 2009 | 213,954 | 8,919 | 64,447 | 12,211 | 60,496 | 8,953 | 3,375 | 9,155 | 372,353 | 1968 |
| 2010 | 262,860 | 10,503 | 76,444 | 11,886 | 69,980 | 10,888 | 3,530 | 37,035 | 446,091 | 1969 |
| 2011 | 262,031 | 9,536 | 69,246 | 12,175 | 65,393 | 10,345 | 3,439 | 19,409 | 432,165 | 1970 |
| 2012 | 194,302 | 7,615 | 54,957 | 9,731 | 57,964 | 8,656 | 3,113 | 4,932 | 336,338 | 1971 |
| 2013 | 229,652 | 7,219 | 52,011 | 12,134 | 57,063 | 8,776 | 3,062 | 4,108 | 369,917 | 1972 |
| 2014 | 274,322 | 10,716 | 78,028 | 13,673 | 74,552 | 13,696 | 3,655 | 31,707 | 468,642 | 1973 |
| 2015 | 210,574 | 8,282 | 59,917 | 11,565 | 64,780 | 9,095 | 3,249 | 2,002 | 367,461 | 1974 |
| 2016 | 211,092 | 7,679 | 55,634 | 10,671 | 62,652 | 8,931 | 3,166 | 1,403 | 359,824 | 1975 |
| 2017 | 166,860 | 6,516 | 46,577 | 12,214 | 58,282 | 6,912 | 2,966 | 0 | 300,328 | 1976 |
| 2018 | 165,676 | 6,674 | 47,952 | 3,068 | 59,961 | 7,133 | 3,002 | 0 | 293,466 | 1977 |
| 2019 | 248,294 | 10,822 | 79,020 | 10,624 | 81,809 | 13,647 | 3,736 | 26,615 | 447,953 | 1978 |
| 2020 | 240,422 | 9,567 | 69,274 | 11,868 | 77,016 | 11,228 | 3,475 | 12,925 | 422,850 | 1979 |
| 2021 | 233,153 | 8,469 | 61,459 | 13,093 | 72,210 | 9,898 | 3,233 | 21,701 | 401,514 | 1980 |
| 2022 | 235,266 | 10,024 | 72,730 | 12,460 | 82,655 | 11,768 | 3,549 | 8,547 | 428,452 | 1981 |
| 2023 | 220,896 | 10,237 | 74,467 | 12,835 | 83,101 | 13,537 | 3,609 | 8,628 | 418,683 | 1982 |
| 2024 | 303,406 | 13,400 | 98,001 | 15,899 | 101,840 | 20,083 | 4,072 | 50,376 | 556,701 | 1983 |
| 2025 | 201,820 | 7,669 | 55,358 | 12,160 | 73,909 | 9,406 | 3,150 | 780 | 363,471 | 1984 |
| 2026 | 177,456 | 7,433 | 53,601 | 10,103 | 73,342 | 9,325 | 3,133 | 0 | 334,393 | 1985 |
| 2027 | 207,070 | 7,805 | 56,571 | 8,832 | 77,550 | 10,341 | 3,249 | 6,327 | 371,417 | 1986 |
| 2028 | 198,224 | 8,457 | 61,018 | 11,687 | 81,889 | 12,267 | 3,427 | 275 | 376,969 | 1987 |
| 2029 | 198,029 | 6,940 | 49,932 | 12,746 | 71,837 | 10,597 | 3,085 | 4,015 | 353,166 | 1988 |
| 2030 | 156,521 | 6,629 | 47,620 | 6,753 | 75,025 | 8,969 | 3,069 | 0 | 304,586 | 1989 |
| 2031 | 168,010 | 7,229 | 52,236 | 6,514 | 80,385 | 8,153 | 3,204 | 0 | 325,731 | 1990 |
| 2032 | 203,791 | 7,392 | 53,144 | 5,239 | 82,154 | 8,320 | 3,286 | 0 | 363,325 | 1991 |
| 2033 | 222,780 | 8,560 | 61,988 | 5,169 | 88,592 | 10,689 | 3,310 | 9,385 | 401,087 | 1992 |
| 2034 | 238,976 | 9,710 | 70,544 | 7,624 | 97,765 | 13,598 | 3,446 | 24,159 | 441,663 | 1993 |
| 2035 | 203,901 | 7,965 | 57,562 | 7,714 | 87,966 | 10,437 | 3,200 | 6 | 378,744 | 1994 |
| 2036 | 246,880 | 10,130 | 73,666 | 9,530 | 101,091 | 15,905 | 3,503 | 20,195 | 460,705 | 1995 |