EDWARDS AQUIFER
AUTHORITY

# Hydrologic Data Report
# 2016 Discharge

## 2016 GROUNDWATER DISCHARGE AND USAGE

Groundwater discharges from the Edwards Aquifer either as springflow or as pumping from wells. Comal and San Marcos springs, the largest and second-largest springs in Texas, respectively, are fed by the Edwards Aquifer. This springflow greatly benefits the recreational economies in New Braunfels and San Marcos, and both springs provide habitat for threatened and endangered species. Figure 1 shows locations of the major springs in the Edwards Aquifer region. Wells drilled into the Edwards Aquifer throughout the region provide water for many diverse uses, including irrigation, municipal water supplies, industrial applications, and domestic/livestock consumption.

Estimates of total annual groundwater discharge from combined springflow and pumping for the Edwards Aquifer are provided in Table 1 for the period of record (1934–2016). Annual total groundwater discharge estimates range from a low of 388,800 acre-feet in 1955 to a high of 1,130,000 acre-feet in 1992. In 2016, the total groundwater discharged from the Edwards Aquifer from wells and springs is estimated at 870,290 acre-feet: 554,990 acre-feet as springflow and 325,300 acre-feet as pumping from wells.

The portion of discharge as springflow is estimated by measuring streamflow downstream of the springs and converting the streamflow measurements to spring discharge by subtracting any estimated contributions from surface runoff. Total annual spring discharge has varied from a low of 69,800 acre-feet in 1956 to a high of 802,800 acre-feet in 1992. Monthly springflow estimates for 2016 at each of the six major Edwards Aquifer springs are provided in Table 2.

In Figures 2 and 3, flows at Comal and San Marcos springs are shown as mean annual flows compared with the long-term historical mean flow for the available period of record. The 2016 mean annual flow was greater than the historical mean discharge at both San Marcos Springs and Comal Springs.

Discharge as well pumping can be classified as either reported or unreported discharge. Reported discharge refers to water pumped from the aquifer by a person or entity holding a groundwater withdrawal permit. These users, who are typically larger quantity users, meter their withdrawals and report the totals to the EAA. Unreported discharge refers to use that does not require a groundwater withdrawal permit from the EAA, such as domestic, livestock, or federal facility use. Unreported discharge is estimated based on numbers of wells and statistical estimates of per-well usage. In 2016, unreported discharge for domestic and livestock wells was estimated at 13,981 acre-feet, and non-reporting federal facility discharge was estimated at 5,325 acre-feet, for a total of 19,306 acre-feet of unreported discharge. Reported discharge totaled 305,994 acre-feet. The total of all reported and unreported pumping discharge is 325,300 acre-feet.

Table 3 provides a summary of well and spring discharge for 2016 based on type of use and county. The distribution of discharge from springflows and the different types of pumping for 2016 is shown graphically in Figure 4. Total annual discharge from pumping and springflow are compared in Figure 5 for the period of record from 1934–2016. The years when springflow exceeds pumping tend to be wet years when pumping demand is lowered by more frequent rainfall and higher aquifer levels produce increased springflows. Conversely, during dry years pumping tends to exceed springflow due to increased municipal and agricultural demand and lower aquifer levels. Since 1997, however, the increase in pumping demand during dry years has been limited by the withdrawal permit system and critical period pumping reductions implemented under the Edwards Aquifer Authority Act. Table 4 provides a historical list of total annual discharge by type of use for the period 1955–2016.

Figure 1. Major Springs in the Southern Segment of the Balcones Fault Zone Edwards Aquifer

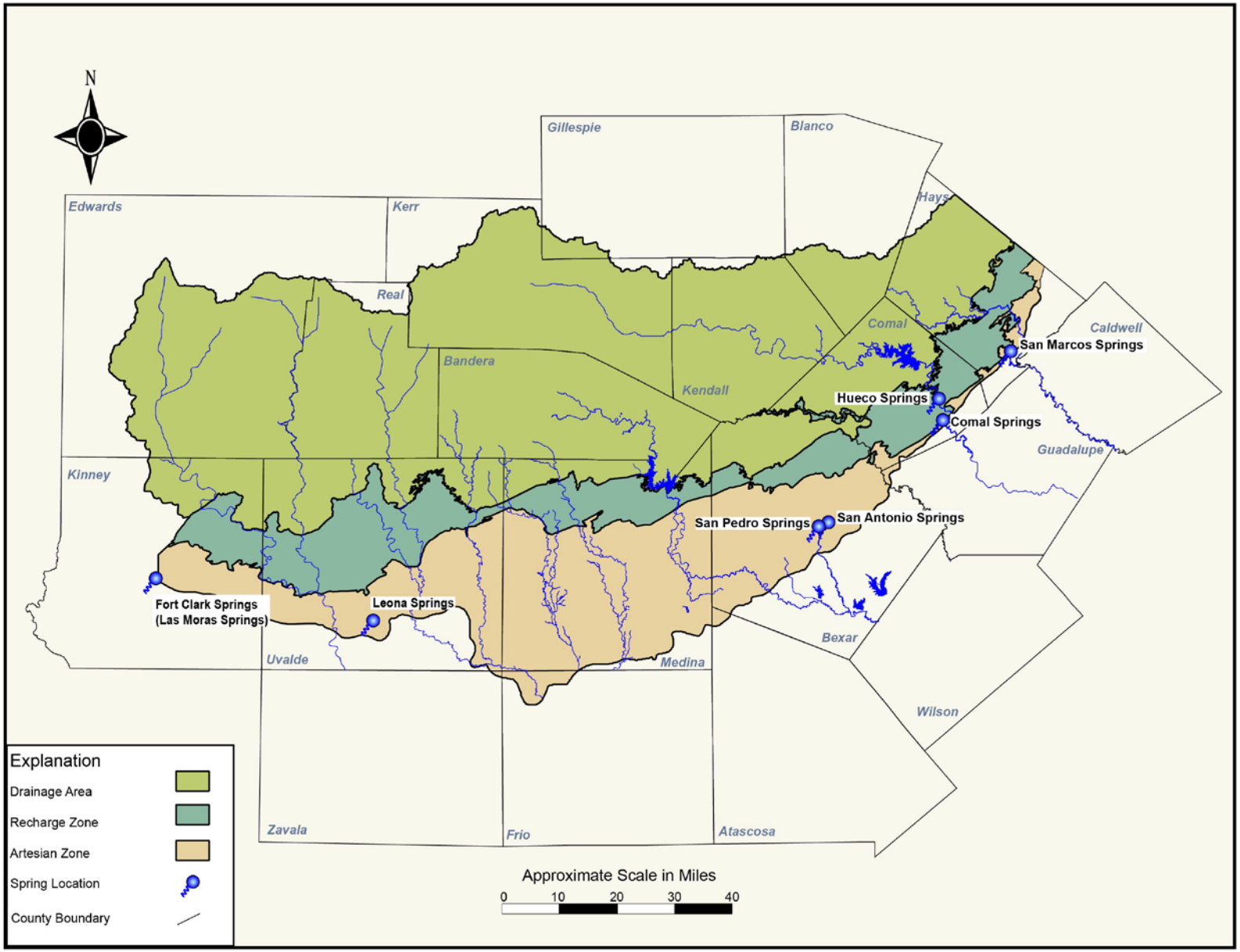

Table 1. Annual Estimated Groundwater Discharge Data by County for the Edwards Aquifer, 1934–2016 (measured in thousands of acre-feet).

| Year | Uvalde[a] | Medina | Bexar[b] | Comal[c] | Hays | Total | Total Wells | Total Springs |
|---|---|---|---|---|---|---|---|---|
| 1934 | 12.6 | 1.3 | 109.3 | 229.1 | 85.6 | 437.9 | 101.9 | 336.0 |
| 1935 | 12.2 | 1.5 | 171.8 | 237.2 | 96.9 | 519.6 | 103.7 | 415.9 |
| 1936 | 26.6 | 1.5 | 215.2 | 261.7 | 93.2 | 598.2 | 112.7 | 485.5 |
| 1937 | 28.3 | 1.5 | 201.8 | 252.5 | 87.1 | 571.2 | 120.2 | 451.0 |
| 1938 | 25.2 | 1.6 | 187.6 | 250.0 | 93.4 | 557.8 | 120.1 | 437.7 |
| 1939 | 18.2 | 1.6 | 122.5 | 219.4 | 71.1 | 432.8 | 118.9 | 313.9 |
| 1940 | 16.1 | 1.6 | 116.7 | 203.8 | 78.4 | 416.6 | 120.1 | 296.5 |
| 1941 | 17.9 | 1.6 | 197.4 | 250.0 | 134.3 | 601.2 | 136.8 | 464.4 |
| 1942 | 22.5 | 1.7 | 203.2 | 255.1 | 112.2 | 594.7 | 144.6 | 450.1 |
| 1943 | 19.2 | 1.7 | 172.0 | 249.2 | 97.2 | 539.3 | 149.1 | 390.2 |
| 1944 | 11.6 | 1.7 | 166.3 | 252.5 | 135.3 | 567.4 | 147.3 | 420.1 |
| 1945 | 12.4 | 1.7 | 199.8 | 263.1 | 137.8 | 614.8 | 153.3 | 461.5 |
| 1946 | 6.2 | 1.7 | 180.1 | 261.9 | 134.0 | 583.9 | 155.0 | 428.9 |
| 1947 | 13.8 | 2.0 | 193.3 | 256.8 | 127.6 | 593.5 | 167.0 | 426.5 |
| 1948 | 9.2 | 1.9 | 159.2 | 203.0 | 77.3 | 450.6 | 168.7 | 281.9 |
| 1949 | 13.2 | 2.0 | 165.3 | 209.5 | 89.8 | 479.8 | 179.4 | 300.4 |
| 1950 | 17.8 | 2.2 | 177.3 | 191.1 | 78.3 | 466.7 | 193.8 | 272.9 |
| 1951 | 16.9 | 2.2 | 186.9 | 150.5 | 69.1 | 425.6 | 209.7 | 215.9 |
| 1952 | 22.7 | 3.1 | 187.1 | 133.2 | 78.8 | 424.9 | 215.4 | 209.5 |
| 1953 | 27.5 | 4.0 | 193.7 | 141.7 | 101.4 | 468.3 | 229.8 | 238.5 |
| 1954 | 26.6 | 6.3 | 208.9 | 101.0 | 81.5 | 424.3 | 246.2 | 178.1 |
| 1955 | 28.3 | 11.1 | 215.2 | 70.1 | 64.1 | 388.8 | 261.0 | 127.8 |
| 1956 | 59.6 | 17.7 | 229.6 | 33.6 | 50.4 | 390.9 | 321.1 | 69.8 |
| 1957 | 29.0 | 11.9 | 189.4 | 113.2 | 113.0 | 456.5 | 237.3 | 219.2 |
| 1958 | 23.7 | 6.6 | 199.5 | 231.8 | 155.9 | 617.5 | 219.3 | 398.2 |
| 1959 | 43.0 | 8.3 | 217.5 | 231.7 | 118.5 | 619.0 | 234.5 | 384.5 |
| 1960 | 53.7 | 7.6 | 215.4 | 235.2 | 143.5 | 655.4 | 227.1 | 428.3 |
| 1961 | 56.5 | 6.4 | 230.3 | 249.5 | 140.8 | 683.5 | 228.2 | 455.3 |
| 1962 | 64.6 | 8.1 | 220.0 | 197.5 | 98.8 | 589.0 | 267.9 | 321.1 |
| 1963 | 51.4 | 9.7 | 217.3 | 155.7 | 81.9 | 516.0 | 276.4 | 239.6 |
| 1964 | 49.3 | 8.6 | 201.0 | 141.8 | 73.3 | 474.0 | 260.2 | 213.8 |
| 1965 | 46.8 | 10.0 | 201.1 | 194.7 | 126.3 | 578.9 | 256.1 | 322.8 |
| 1966 | 48.5 | 10.4 | 198.0 | 198.9 | 115.4 | 571.2 | 255.9 | 315.3 |
| 1967 | 81.1 | 15.2 | 239.7 | 139.1 | 82.3 | 557.4 | 341.3 | 216.1 |
| 1968 | 58.0 | 9.9 | 207.1 | 238.2 | 146.8 | 660.0 | 251.7 | 408.3 |
| 1969 | 88.5 | 13.6 | 216.3 | 218.2 | 122.1 | 658.7 | 307.5 | 351.2 |
| 1970 | 100.9 | 16.5 | 230.6 | 229.2 | 149.9 | 727.1 | 329.4 | 397.7 |
| 1971 | 117.0 | 32.4 | 262.8 | 168.2 | 99.1 | 679.5 | 406.8 | 272.7 |
| 1972 | 112.6 | 28.8 | 247.7 | 234.3 | 123.7 | 747.1 | 371.3 | 375.8 |
| 1973 | 96.5 | 14.9 | 273.0 | 289.3 | 164.3 | 838.0 | 310.4 | 527.6 |
| 1974 | 133.3 | 28.6 | 272.1 | 286.1 | 141.1 | 861.2 | 377.4 | 483.8 |
| 1975 | 112.0 | 22.6 | 259.0 | 296.0 | 178.6 | 868.2 | 327.8 | 540.4 |
| 1976 | 136.4 | 19.4 | 253.2 | 279.7 | 164.7 | 853.4 | 349.5 | 503.9 |
| 1977 | 156.5 | 19.9 | 317.5 | 295.0 | 172.0 | 960.9 | 380.6 | 580.3 |
| 1978 | 154.3 | 38.7 | 269.5 | 245.7 | 99.1 | 807.3 | 431.8 | 375.5 |
| 1979 | 130.1 | 32.9 | 294.5 | 300.0 | 157.0 | 914.5 | 391.5 | 523.0 |
| 1980 | 151.0 | 39.9 | 300.3 | 220.3 | 107.9 | 819.4 | 491.1 | 328.3 |
| 1981 | 104.2 | 26.1 | 280.7 | 241.8 | 141.6 | 794.4 | 387.1 | 407.3 |
| 1982 | 129.2 | 33.4 | 305.1 | 213.2 | 105.5 | 786.4 | 453.1 | 333.3 |
| 1983 | 107.7 | 29.7 | 277.6 | 186.6 | 118.5 | 720.1 | 418.5 | 301.6 |
| 1984 | 156.9 | 46.9 | 309.7 | 108.9 | 85.7 | 708.1 | 529.8 | 178.3 |
| 1985 | 156.9 | 59.2 | 295.5 | 200.0 | 144.9 | 856.5 | 522.5 | 334.0 |
| 1986 | 91.7 | 41.9 | 294.0 | 229.3 | 160.4 | 817.3 | 429.3 | 388.0 |
| 1987 | 94.9 | 15.9 | 326.6 | 286.2 | 198.4 | 922.0 | 364.1 | 557.9 |
| 1988 | 156.7 | 82.2 | 317.4 | 236.5 | 116.9 | 909.7 | 540.0 | 369.7 |

(Table 1. continued)

| Year | Uvalde[a] | Medina | Bexar[b] | Comal[c] | Hays | Total | Total Wells | Total Springs |
|---|---|---|---|---|---|---|---|---|
| 1989 | 156.9 | 70.5 | 305.6 | 147.9 | 85.6 | 766.5 | 542.4 | 224.1 |
| 1990 | 118.1 | 69.7 | 276.8 | 171.3 | 94.1 | 730.0 | 489.4 | 240.6 |
| 1991 | 76.6 | 25.6 | 315.5 | 221.9 | 151.0 | 790.6 | 436.0 | 354.6 |
| 1992 | 76.5 | 9.3 | 370.5 | 412.4 | 261.3 | 1130.0 | 327.2 | 802.8 |
| 1993 | 107.5 | 17.8 | 371.0 | 349.5 | 151.0 | 996.7 | 407.3 | 589.4 |
| 1994 | 95.5 | 41.1 | 297.7 | 269.8 | 110.6 | 814.8 | 424.6 | 390.2 |
| 1995 | 90.8 | 35.2 | 272.1 | 235.0 | 127.8 | 761.0 | 399.6 | 361.3 |
| 1996 | 117.6 | 66.3 | 286.8 | 150.2 | 84.7 | 705.6 | 493.6 | 212.0 |
| 1997 | 77.0 | 31.4 | 260.2 | 243.3 | 149.2 | 761.1 | 377.1 | 383.9 |
| 1998 | 113.1 | 51.3 | 312.4 | 271.8 | 168.8 | 917.6 | 453.5 | 464.1 |
| 1999 | 104.0 | 49.2 | 307.1 | 295.5 | 143.0 | 898.8 | 442.7 | 456.1 |
| 2000 | 89.1 | 45.1 | 283.6 | 226.1 | 108.4 | 752.3 | 414.8 | 337.5 |
| 2001 | 68.6 | 33.9 | 291.6 | 327.7 | 175.4 | 890.0 | 367.7 | 529.6 |
| 2002 | 76.2 | 40.6 | 311.9 | 350.4 | 202.1 | 981.2 | 371.3 | 609.9 |
| 2003 | 89.4 | 34.8 | 331.7 | 344.7 | 176.3 | 976.9 | 362.1 | 621.5 |
| 2004 | 91.3 | 22.5 | 331.9 | 341.4 | 153.1 | 940.3 | 317.4 | 622.9 |
| 2005 | 107.4 | 37.3 | 366.1 | 349.3 | 175.6 | 1035.7 | 388.5 | 647.1 |
| 2006 | 107.5 | 64.9 | 289.5 | 216.7 | 87.9 | 766.5 | 454.5 | 312.0 |
| 2007 | 64.6 | 18.4 | 330.2 | 331.7 | 196.0 | 940.9 | 319.9 | 621.0 |
| 2008 | 102.0 | 48.8 | 320.4 | 266.6 | 108.0 | 845.7 | 428.6 | 417.1 |
| 2009 | 76.9 | 47.3 | 265.2 | 206.6 | 87.8 | 683.7 | 395.7 | 287.9 |
| 2010 | 53.1 | 36.4 | 298.5 | 312.1 | 162.5 | 862.6 | 372.6 | 490.0 |
| 2011 | 79.6 | 57.4 | 277.2 | 187.7 | 91.0 | 692.9 | 427.7 | 265.2 |
| 2012 | 57.6 | 44.3 | 267.5 | 193.4 | 124.2 | 687.0 | 384.7 | 302.3 |
| 2013 | 43.6 | 42.8 | 251.0 | 154.9 | 96.0 | 588.6 | 355.8 | 232.8 |
| 2014 | 41.5 | 43.1 | 230.5 | 114.5 | 97.9 | 527.5 | 332.2 | 195.4 |
| 2015 | 27.1 | 27.6 | 256.3 | 239.8 | 178.8 | 729.7 | 325.2 | 404.5 |
| 2016 | 46.9 | 31.9 | 262.6 | 320.7 | 208.3 | 870.3 | 325.3 | 545.0 |
| **For period of record 1934–2016:** | | | | | | | | |
| Median | 68.6 | 18.4 | 256.3 | 234.3 | 118.5 | 692.9 | 327.8 | 383.9 |
| Mean | 71.2 | 23.8 | 248.7 | 227.5 | 122.7 | 696.6 | 315.5 | 381.3 |
| **For last 10 years, 2007–2016:** | | | | | | | | |
| Median | 55.4 | 43.0 | 266.4 | 223.2 | 116.1 | 711.3 | 264.2 | 353.4 |
| Mean | 59.3 | 39.8 | 275.9 | 218.7 | 125.9 | 742.9 | 366.8 | 376.1 |

Data source: Unpublished USGS and Edwards Aquifer Authority files (2016).
a = As of 2008, no longer includes Kinney County discharge; prior years include 1,900 acre-feet of discharge for Kinney County.
b = Includes reports of Edwards Aquifer irrigators in Atascosa County.
c = Includes reports of Edwards Aquifer industrial and municipal users in Guadalupe County.
Differences in totals may occur as a result of rounding.

Table 2. Estimated Spring Discharge from the Edwards Aquifer, 2016 (measured in acre-feet).

| Month | Leona Springs and Leona River Underflow | San Pedro Springs | San Antonio Springs | Comal Springs | Hueco Springs | San Marcos Springs | Total Monthly Discharge from Springs |
|---|---|---|---|---|---|---|---|
| January | 523 | 238 | 0.02 | 19,810 | 4,740 | 17,880 | 43,190 |
| February | 514 | 165 | 0 | 16,810 | 3,840 | 14,550 | 35,880 |
| March | 503 | 202 | 0 | 18,250 | 4,100 | 14,790 | 37,840 |
| April | 494 | 203 | 33 | 18,040 | 5,030 | 15,320 | 39,120 |
| May | 509 | 442 | 1,220 | 20,550 | 6,520 | 19,170 | 48,410 |
| June | 509 | 708 | 3,880 | 22,790 | 6,350 | 20,380 | 54,710 |
| July | 545 | 260 | 226 | 21,110 | 4,320 | 19,390 | 45,850 |
| August | 747 | 297 | 440 | 21,890 | 4,720 | 17,520 | 45,700 |
| September | 1,340 | 483 | 1,400 | 22,330 | 3,410 | 15,650 | 46,610 |
| October | 1,860 | 495 | 1,810 | 22,670 | 4,970 | 16,580 | 48,380 |
| November | 2,210 | 620 | 2,740 | 22,100 | 4,750 | 14,660 | 47,080 |
| December | 2,450 | 843 | 5,590 | 24,230 | 6,270 | 14,820 | 54,200 |
| **Total** | **12,300** | **4,960** | **17,360** | **250,700** | **59,020** | **200,700** | **544,990** |

Data source: USGS unpublished report (2016).
Totals might not equal sum of discharge values as a result of rounding.

Table 3. Comprehensive Discharge Summary for Calendar Year 2016 (in acre-feet).

| | Reported Use (permitted wells) | | | Unreported Use | | | | |
|---|---|---|---|---|---|---|---|---|
| County | Irrigation | Municipal | Industrial | Domestic or Livestock* | Non-Reporting Facilities* | Total Well Discharge | Spring Discharge | Total Wells and Springs |
| Atascosa | 999 | 0 | 0 | 0 | 0 | 999 | 0 | 999 |
| Bexar | 3,134 | 207,532 | 14,596 | 8,915 | 5,089 | 239,266 | 22,320 | 261,586 |
| Comal | 46 | 6,305 | 4,025 | 406 | 0 | 10,782 | 309,720 | 320,502 |
| Guadalupe | 0 | 4 | 184 | 0 | 0 | 188 | 0 | 188 |
| Hays | 69 | 4,703 | 1,718 | 879 | 236 | 7,605 | 200,700 | 208,305 |
| Medina | 21,609 | 5,692 | 3,450 | 1,146 | 0 | 31,897 | 0 | 31,897 |
| Uvalde | 28,812 | 3,013 | 103 | 2,637 | 0 | 34,565 | 12,300 | 46,865 |
| Totals | **54,669** | **227,249** | **24,076** | **13,981** | **5,325** | **325,300** | **544,990** | **870,290** |

* Federal facilities and domestic and livestock wells do not report annual use (non-reporting); quantities estimated.
Differences in totals may occur because of rounding.

Figure 2. Mean Annual Discharge at Comal Springs

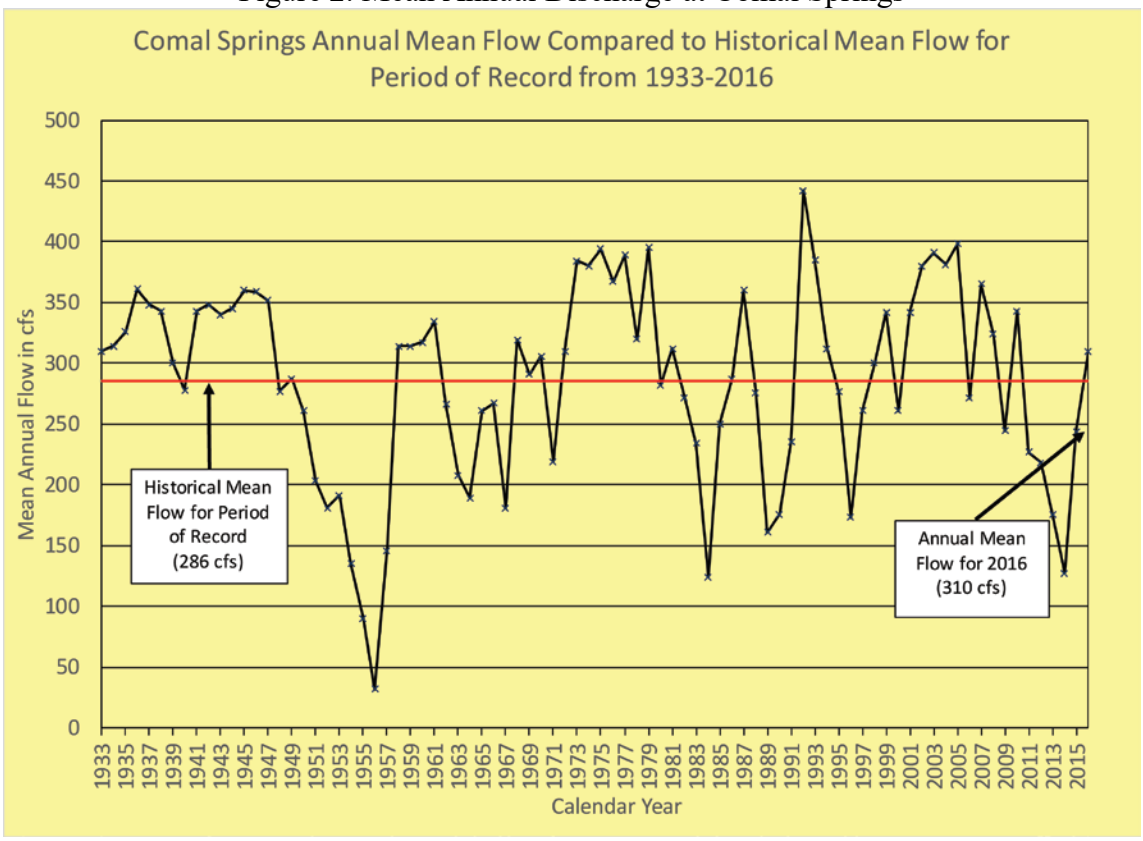


Figure 3. Mean Annual Discharge at San Marcos Springs

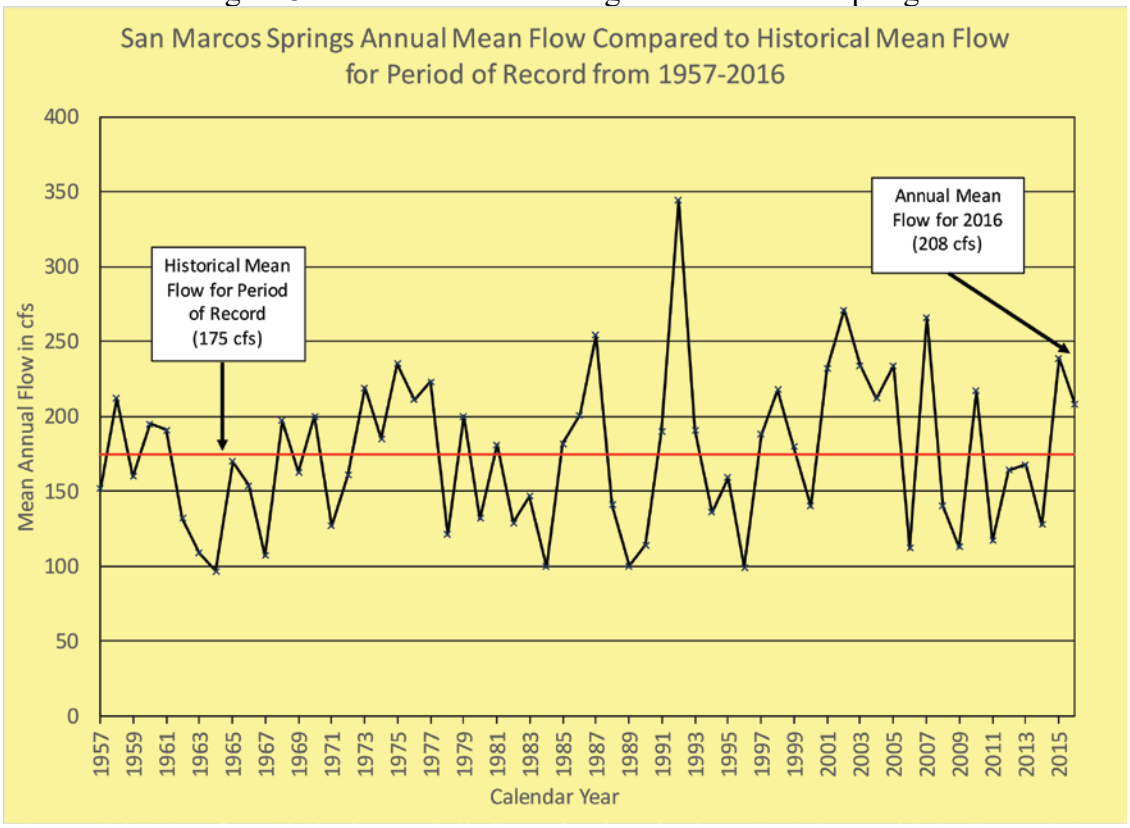

Figure 4. 2016 Discharge by Type of Use

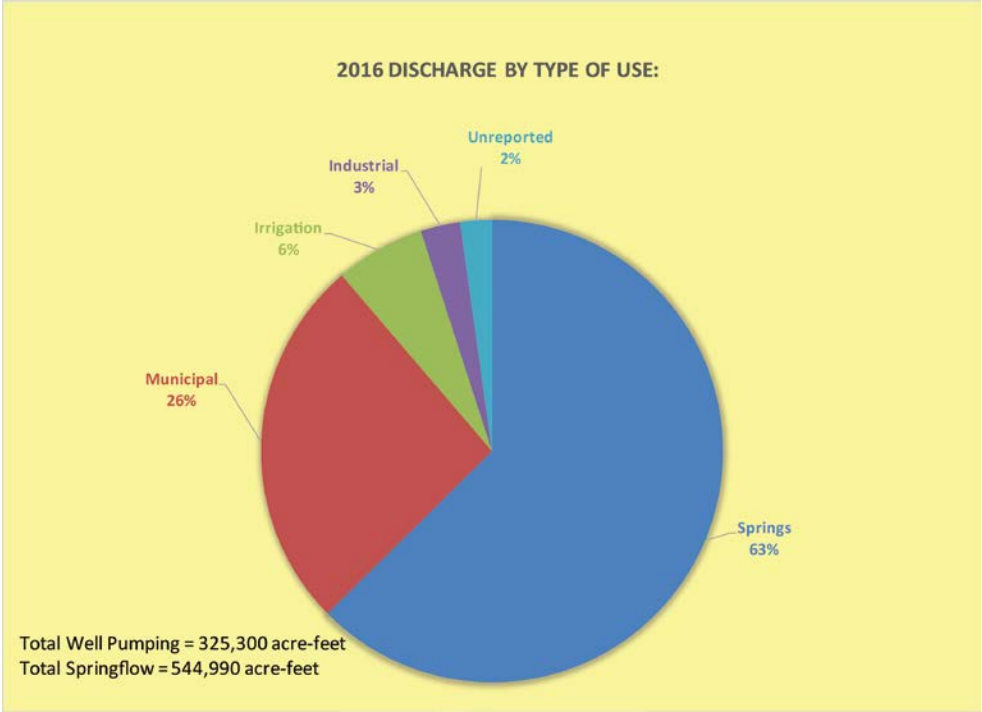


Figure 5. Groundwater Pumping Compared with Springflow

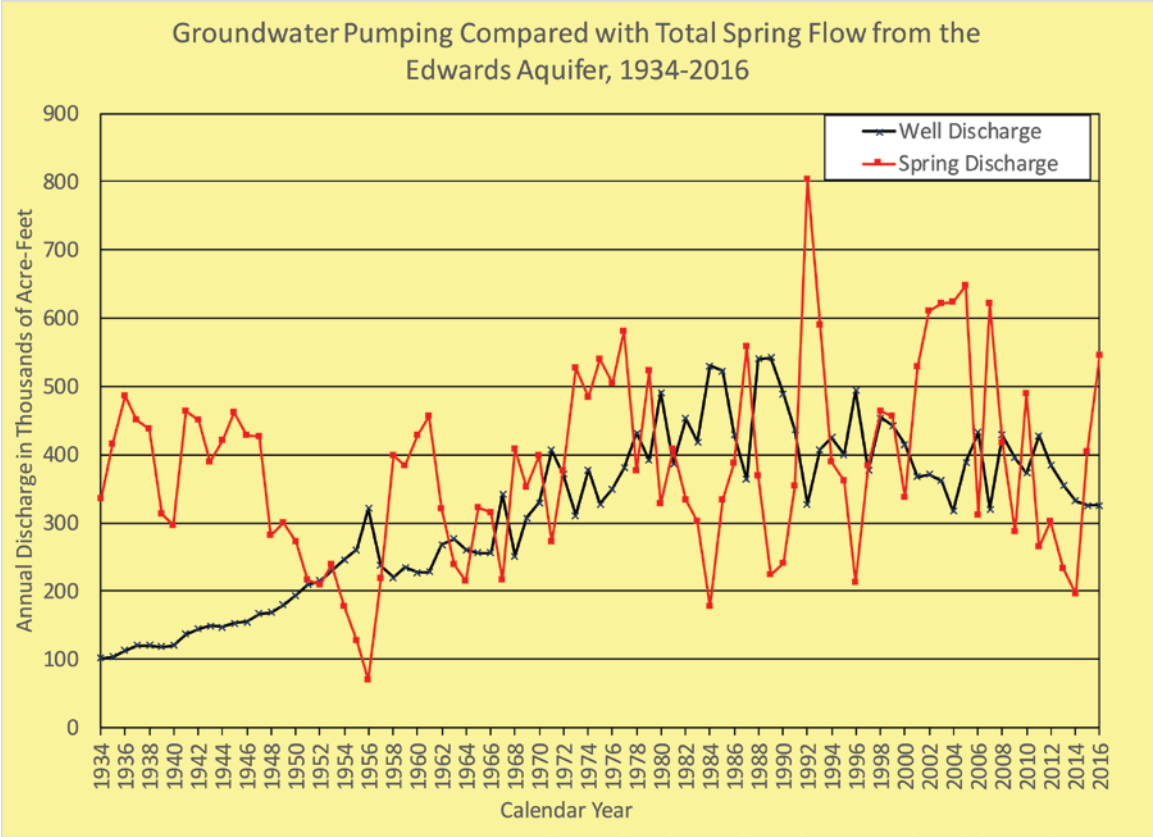

**Table 4. Annual Estimated Edwards Aquifer Groundwater Discharge by Use, 1955–2016**
(measured in thousands of acre-feet).

| Year | Irrigation | Municipal | Domestic/ Stock | Industrial/ Commercial | Springs |
|---|---|---|---|---|---|
| 1955 | 85.2 | 120.5 | 30.1 | 25.1 | 127.8 |
| 1956 | 127.2 | 138.3 | 28.9 | 22.4 | 69.8 |
| 1957 | 68.8 | 116.1 | 29.8 | 22.6 | 219.2 |
| 1958 | 47.2 | 113.7 | 33.4 | 25.1 | 398.2 |
| 1959 | 60.0 | 118.9 | 31.5 | 24.2 | 384.5 |
| 1960 | 54.9 | 121.1 | 29.1 | 23.3 | 428.3 |
| 1961 | 52.1 | 124.5 | 29.6 | 22.2 | 455.3 |
| 1962 | 72.7 | 143.7 | 28.8 | 22.8 | 321.1 |
| 1963 | 75.4 | 151.8 | 27.8 | 21.8 | 239.6 |
| 1964 | 72.6 | 140.2 | 26.3 | 21.7 | 213.8 |
| 1965 | 68.0 | 138.8 | 27.0 | 22.3 | 322.8 |
| 1966 | 68.2 | 141.8 | 23.3 | 22.6 | 315.3 |
| 1967 | 119.4 | 171.0 | 25.1 | 25.8 | 216.1 |
| 1968 | 59.3 | 146.9 | 25.5 | 20.0 | 408.3 |
| 1969 | 95.2 | 162.0 | 29.2 | 21.1 | 351.2 |
| 1970 | 110.1 | 167.5 | 29.3 | 22.5 | 397.7 |
| 1971 | 159.4 | 196.2 | 28.6 | 22.6 | 272.7 |
| 1972 | 128.8 | 190.5 | 30.8 | 21.1 | 375.8 |
| 1973 | 82.2 | 177.1 | 32.3 | 18.8 | 527.6 |
| 1974 | 140.4 | 174.6 | 33.5 | 15.1 | 483.3 |
| 1975 | 96.4 | 182.5 | 33.6 | 15.3 | 540.4 |
| 1976 | 118.2 | 182.1 | 34.6 | 14.7 | 503.9 |
| 1977 | 124.2 | 205.3 | 38.1 | 13.0 | 580.3 |
| 1978 | 165.8 | 214.2 | 40.3 | 11.5 | 375.5 |
| 1979 | 126.8 | 208.9 | 40.7 | 15.2 | 523.0 |
| 1980 | 177.9 | 256.2 | 43.3 | 13.7 | 328.3 |
| 1981 | 101.8 | 231.8 | 40.9 | 12.6 | 407.3 |
| 1982 | 130.0 | 268.6 | 39.5 | 15.0 | 333.3 |
| 1983 | 115.9 | 249.2 | 38.8 | 14.7 | 301.5 |
| 1984 | 191.2 | 287.2 | 36.2 | 15.2 | 178.3 |
| 1985 | 203.1 | 263.7 | 39.2 | 16.5 | 334.0 |
| 1986 | 104.2 | 266.3 | 42.0 | 16.8 | 388.0 |
| 1987 | 40.9 | 260.9 | 43.5 | 18.7 | 557.9 |
| 1988 | 193.1 | 286.2 | 41.9 | 18.8 | 369.7 |
| 1989 | 196.2 | 285.2 | 38.2 | 22.9 | 224.1 |
| 1990 | 172.9 | 254.9 | 37.9 | 23.7 | 240.6 |
| 1991 | 88.5 | 240.5 | 39.5 | 67.5 | 354.6 |
| 1992 | 27.1 | 236.5 | 34.8 | 29.0 | 802.8 |
| 1993 | 69.3 | 252.0 | 49.9 | 36.1 | 589.4 |
| 1994 | 104.5 | 247.0 | 33.9 | 39.3 | 390.2 |
| 1995 | 95.6 | 255.0 | 11.6* | 37.3 | 361.3 |
| 1996 | 181.3 | 261.3 | 12.3* | 38.8 | 212.0 |

(Table 4. continued)

| Year | Irrigation | Municipal | Domestic/ Stock | Industrial/ Commercial | Springs |
|---|---|---|---|---|---|
| 1997 | 77.4[a/b] | 253.0 | 12.3 | 34.4 | 383.9 |
| 1998 | 131.9[a] | 266.5 | 13.4 | 41.7[b] | 464.1 |
| 1999 | 113.6 | 273.3 | 13.4 | 42.4 | 456.1 |
| 2000 | 106.3 | 261.3 | 13.4 | 33.8 | 337.5 |
| 2001 | 79.0 | 245.9 | 13.4 | 29.4 | 529.4 |
| 2002 | 97.1 | 228.4 | 13.6 | 32.3 | 609.9 |
| 2003 | 79.6 | 237.2 | 13.7 | 31.7 | 621.5 |
| 2004 | 55.4 | 220.3 | 13.8 | 28.1 | 622.9 |
| 2005 | 85.3 | 255.1 | 13.8 | 34.3 | 647.1 |
| 2006 | 149.1 | 259.1 | 13.8 | 34.5 | 312.0 |
| 2007 | 42.5 | 236.0 | 13.8 | 27.6 | 620.6 |
| 2008 | 112.7 | 273.6 | 13.5** | 28.8 | 417.1 |
| 2009 | 108.9 | 247.5 | 13.6** | 25.7 | 288.0 |
| 2010 | 72.7 | 259.9 | 13.6** | 26.4 | 490.0 |
| 2011 | 124.9 | 265.5 | 13.6** | 23.6 | 265.2 |
| 2012 | 90.6 | 257.9 | 13.7** | 22.6 | 302.3 |
| 2013 | 76.3 | 239.5 | 13.7** | 26.3 | 232.8 |
| 2014 | 75.3 | 220.1 | 13.9** | 22.8 | 195.4 |
| 2015 | 42.2 | 247.2 | 13.9** | 21.9 | 404.5 |
| 2016 | 54.7 | 232.6 | 14.0** | 24.0 | 545.0 |
| **For period of record 1955–2016:** | | | | | |
| Median | 96.0 | 236.3 | 13.6**` | 22.8 | 379.9 |
| Mean | 102.4 | 215.0 | 13.4** | 24.9 | 389.8 |
| **For period of record 2007–2016 (last ten years):** | | | | | |
| Median | 75.8 | 247.4 | 13.7 | 24.9 | 353.4 |
| Mean | 80.1 | 248.0 | 13.7 | 25.0 | 376.1 |

Data source: USGS unpublished report and Edwards Aquifer Authority files (2016).
a = Includes estimates from Atascosa County discharge by Edwards Aquifer users.
b = Includes estimates from Guadalupe County discharge by Edwards Aquifer users.
* = In 1995 USGS revised the method of calculating domestic/livestock pumpage, which significantly decreased the estimates for 1995 and 1996.
** = Revision based on number of new wells permitted annually and discontinuation of Kinney County estimates in total.
Differences in totals may occur as a result of rounding.

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