

**USGS Water-Year Summary**

[**11335000**](https://waterdata.usgs.gov/nwis/inventory?agency_code=USGS&site_no=11335000) **Cosumnes River at**

**Michigan Bar, CA**

**LOCATION** - LOCATION - Lat 38°30'01", long 121°02'39" referenced to North American Datum of 1927, in NW 1/4 SE 1/4 sec.36, T.8 N., R.8 E., Sacramento County, CA, Hydrologic Unit 18040013, on downstream side of midstream pier of county bridge at Michigan Bar, 5.5 mi southwest of Latrobe, and 16.3 river mi downstream from confluence of North and Middle Forks of Cosumnes River.

DRAINAGE AREA - 536 mi².

**SURFACE-WATER RECORDS**

**PERIOD OF RECORD** - October 1907 to current year. Monthly discharge only for some periods, published in WSP 1315-A.

**GAGE** - Water-stage recorder. Elevation of gage is 168.09 ft above NGVD of 1929. Prior to July 10, 1930, nonrecording gage at same site and datum.

**REMARKS** - Flow partly regulated since January 1955 by Jenkinson Lake, usable capacity, 40,570 acre-ft. Water is released from Jenkinson Lake through Camino Conduit for irrigation and domestic supply in North Fork Cosumnes and South Fork American River Basins. Numerous small diversions upstream from station for irrigation and domestic use. See schematic diagram of Sacramento-San Joaquin Delta available from the California Water Science Center. Discharge record for 2014 water year rated good. Discharge record for 2015 water year rated good. Discharge record for 2016 water year rated good.

**EXTREMES OUTSIDE PERIOD OF RECORD** - Flood in March 1907 reached a stage of 16.3 ft, estimated discharge, 71,000 ft³/s.

**EXTREMES FOR PERIOD OF RECORD** - Maximum discharge, 93,000 ft³/s, Jan. 2, 1997, gage height, 18.54 ft, from rating curve extended above 34,000 ft³/s on basis of slope-area determination of peak flow; no flow at times in many years.

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **00060, Discharge, cubic feet per second,** | | | | | | | | | | | | | |
| **YEAR** | **Monthly mean in ft3/s   (Calculation Period: 1907-10-01 -> 2016-10-31)** | | | | | | | | | | | |  |
| **Jan** | **Feb** | **Mar** | **Apr** | **May** | **Jun** | **Jul** | **Aug** | **Sep** | **Oct** | **Nov** | **Dec** |  |
| **1907** |  |  |  |  |  |  |  |  |  | 67.0 | 76.7 | 195.3 |  |
| **1908** | 448.7 | 291.8 | 512.0 | 323.7 | 336.1 | 113.9 | 12.6 | 0.000 | 0.733 | 11.3 | 23.6 | 49.1 |  |
| **1909** | 3,609 | 2,753 | 1,365 | 1,227 | 641.7 | 280.7 | 42.0 | 8.29 | 8.73 | 26.7 | 242.9 | 1,125 |  |
| **1910** | 1,315 | 1,050 | 2,214 | 1,146 | 414.2 | 96.1 | 20.9 | 4.97 | 10.1 | 19.6 | 47.9 | 111.6 |  |
| **1911** | 4,181 | 2,162 | 3,236 | 2,480 | 1,268 | 819.2 | 176.9 | 35.5 | 26.9 | 46.0 | 72.3 | 77.9 |  |
| **1912** | 213.2 | 128.7 | 346.7 | 347.1 | 701.2 | 277.9 | 31.9 | 11.9 | 33.6 | 17.6 | 82.6 | 68.0 |  |
| **1913** | 294.7 | 170.1 | 234.5 | 646.1 | 461.8 | 120.4 | 13.8 | 4.61 | 2.20 | 4.00 | 32.6 | 307.4 |  |
| **1914** | 3,698 | 1,956 | 1,126 | 1,040 | 637.1 | 264.0 | 41.4 | 5.03 | 5.23 | 16.3 | 27.7 | 121.7 |  |
| **1915** | 356.4 | 2,130 | 904.1 | 1,104 | 1,635 | 503.3 | 85.5 | 15.0 | 7.95 | 9.24 | 33.5 | 235.9 |  |
| **1916** | 2,083 | 2,128 | 2,490 | 1,391 | 722.4 | 323.3 | 56.6 | 8.74 | 7.48 | 61.9 | 71.5 | 369.8 |  |
| **1917** | 298.4 | 2,194 | 947.0 | 1,386 | 1,071 | 541.5 | 77.5 | 12.7 | 6.67 | 7.08 | 27.1 | 50.2 |  |
| **1918** | 48.0 | 374.8 | 1,776 | 894.4 | 403.6 | 101.9 | 8.08 | 1.50 | 24.1 | 32.4 | 67.9 | 69.3 |  |
| **1919** | 124.2 | 1,539 | 1,004 | 1,009 | 472.8 | 73.5 | 8.55 | 1.42 | 0.840 | 11.3 | 13.0 | 126.7 |  |
| **1920** | 73.1 | 74.5 | 929.6 | 919.8 | 507.9 | 125.5 | 25.9 | 2.63 | 3.28 | 49.8 | 187.5 | 630.9 |  |
| **1921** | 1,610 | 1,070 | 1,444 | 807.6 | 622.6 | 289.2 | 40.9 | 4.63 | 3.60 | 7.22 | 19.2 | 224.8 |  |
| **1922** | 286.6 | 1,882 | 1,135 | 1,410 | 1,584 | 549.3 | 68.7 | 12.2 | 3.99 | 18.4 | 201.2 | 1,694 |  |
| **1923** | 1,240 | 812.9 | 643.4 | 1,655 | 659.0 | 263.1 | 64.2 | 11.9 | 13.6 | 35.9 | 33.8 | 52.9 |  |
| **1924** | 79.3 | 194.0 | 83.9 | 141.0 | 49.3 | 4.42 | 0.123 | 0.000 | 0.000 | 14.2 | 88.9 | 245.8 |  |
| **1925** | 225.5 | 2,436 | 723.5 | 1,674 | 773.5 | 250.1 | 40.1 | 9.74 | 9.72 | 22.5 | 34.8 | 64.2 |  |
| **1926** | 67.6 | 930.3 | 366.6 | 814.1 | 188.8 | 29.1 | 3.69 | 0.077 | 0.583 | 9.42 | 243.1 | 230.9 |  |
| **1927** | 554.5 | 2,391 | 1,164 | 2,051 | 687.5 | 278.6 | 45.0 | 10.4 | 7.02 | 20.4 | 141.9 | 216.2 |  |
| **1928** | 198.4 | 441.8 | 2,376 | 1,351 | 359.8 | 75.6 | 20.9 | 5.85 | 4.57 | 9.08 | 37.3 | 73.5 |  |
| **1929** | 116.7 | 337.5 | 331.9 | 496.5 | 336.5 | 165.2 | 23.7 | 1.95 | 0.910 | 4.04 | 7.90 | 93.0 |  |
| **1930** | 328.0 | 341.6 | 929.0 | 592.5 | 327.2 | 97.7 | 14.0 | 2.24 | 3.44 | 8.76 | 37.1 | 25.3 |  |
| **1931** | 95.6 | 200.9 | 198.7 | 121.5 | 60.5 | 20.6 | 1.39 | 0.000 | 0.000 | 2.16 | 26.0 | 518.9 |  |
| **1932** | 457.9 | 1,583 | 760.2 | 725.5 | 830.6 | 292.4 | 41.1 | 7.13 | 1.83 | 4.83 | 10.4 | 30.5 |  |
| **1933** | 86.8 | 117.9 | 308.5 | 399.5 | 553.8 | 327.2 | 33.0 | 2.74 | 0.390 | 10.9 | 26.6 | 289.0 |  |
| **1934** | 509.1 | 552.6 | 367.0 | 173.8 | 73.3 | 44.1 | 5.21 | 0.039 | 0.000 | 4.37 | 73.4 | 93.7 |  |
| **1935** | 539.7 | 434.0 | 710.9 | 2,929 | 994.8 | 308.7 | 54.0 | 10.1 | 2.28 | 18.8 | 32.7 | 45.1 |  |
| **1936** | 949.4 | 4,064 | 1,195 | 1,451 | 637.5 | 348.9 | 57.9 | 12.7 | 7.17 | 9.62 | 17.6 | 51.9 |  |
| **1937** | 155.9 | 1,662 | 1,859 | 1,529 | 1,093 | 269.2 | 53.0 | 10.9 | 4.32 | 17.6 | 52.9 | 492.4 |  |
| **1938** | 309.6 | 2,682 | 3,264 | 2,094 | 1,715 | 654.1 | 125.7 | 36.3 | 17.6 | 45.6 | 70.0 | 78.7 |  |
| **1939** | 105.1 | 206.6 | 441.8 | 403.3 | 140.2 | 39.0 | 5.10 | 0.184 | 0.800 | 24.5 | 23.2 | 37.1 |  |
| **1940** | 1,247 | 2,253 | 2,593 | 1,576 | 461.6 | 115.9 | 26.9 | 1.81 | 1.59 | 11.2 | 36.3 | 450.5 |  |
| **1941** | 808.9 | 1,439 | 1,360 | 1,358 | 904.9 | 278.4 | 55.5 | 13.9 | 8.63 | 18.3 | 53.9 | 384.5 |  |
| **1942** | 1,786 | 1,915 | 761.1 | 1,434 | 1,391 | 614.5 | 134.6 | 38.4 | 20.6 | 26.8 | 345.5 | 618.5 |  |
| **1943** | 2,242 | 1,472 | 4,047 | 1,243 | 556.2 | 259.2 | 81.6 | 29.6 | 16.2 | 32.9 | 51.3 | 75.1 |  |
| **1944** | 173.2 | 592.3 | 772.0 | 551.2 | 627.6 | 202.3 | 35.0 | 5.30 | 1.65 | 6.28 | 384.9 | 300.7 |  |
| **1945** | 246.5 | 2,165 | 911.2 | 995.1 | 651.1 | 342.5 | 50.2 | 9.28 | 2.65 | 41.1 | 243.7 | 1,761 |  |
| **1946** | 911.4 | 506.7 | 1,057 | 1,091 | 600.8 | 179.3 | 40.8 | 8.26 | 4.10 | 26.7 | 173.2 | 196.6 |  |
| **1947** | 131.5 | 410.3 | 702.6 | 540.6 | 175.0 | 55.9 | 6.28 | 1.13 | 0.193 | 41.7 | 60.4 | 48.9 |  |
| **1948** | 144.0 | 162.9 | 539.8 | 1,614 | 1,232 | 509.2 | 82.3 | 15.0 | 5.24 | 11.6 | 41.6 | 99.7 |  |
| **1949** | 132.8 | 302.3 | 1,371 | 1,060 | 690.2 | 184.1 | 27.5 | 6.18 | 4.51 | 10.1 | 48.5 | 47.0 |  |
| **1950** | 657.8 | 1,246 | 924.6 | 1,546 | 771.4 | 252.4 | 45.7 | 10.6 | 9.31 | 57.8 | 2,493 | 2,946 |  |
| **1951** | 2,186 | 1,556 | 1,549 | 791.7 | 767.5 | 196.9 | 69.9 | 28.7 | 20.3 | 67.3 | 164.0 | 958.8 |  |
| **1952** | 2,292 | 2,038 | 2,133 | 2,365 | 1,895 | 730.5 | 205.2 | 63.2 | 42.8 | 38.5 | 71.3 | 238.9 |  |
| **1953** | 950.1 | 350.5 | 526.6 | 830.6 | 716.1 | 509.9 | 106.6 | 27.4 | 13.9 | 28.1 | 74.3 | 98.4 |  |
| **1954** | 253.1 | 627.2 | 1,070 | 1,094 | 414.5 | 120.0 | 30.7 | 9.65 | 7.68 | 11.8 | 45.9 | 319.2 |  |
| **1955** | 635.7 | 376.9 | 375.5 | 481.8 | 522.9 | 150.8 | 30.5 | 5.96 | 5.44 | 9.28 | 37.6 | 3,189 |  |
| **1956** | 3,180 | 1,160 | 864.5 | 808.9 | 1,236 | 341.6 | 81.2 | 34.4 | 24.8 | 46.4 | 60.5 | 67.6 |  |
| **1957** | 114.7 | 622.5 | 1,371 | 553.8 | 805.6 | 240.5 | 48.3 | 17.7 | 13.0 | 31.5 | 55.7 | 117.2 |  |
| **1958** | 386.7 | 1,890 | 2,468 | 3,784 | 1,480 | 567.4 | 126.5 | 45.2 | 27.7 | 30.9 | 44.3 | 50.3 |  |
| **1959** | 238.0 | 673.6 | 360.5 | 333.7 | 143.1 | 38.3 | 27.5 | 22.3 | 15.3 | 11.0 | 13.6 | 25.5 |  |
| **1960** | 106.3 | 728.2 | 690.9 | 512.2 | 296.6 | 58.4 | 36.8 | 22.6 | 6.93 | 10.7 | 42.3 | 63.9 |  |
| **1961** | 43.0 | 110.1 | 186.3 | 180.4 | 171.2 | 52.7 | 31.6 | 13.7 | 6.97 | 4.97 | 14.3 | 41.4 |  |
| **1962** | 41.6 | 1,296 | 717.9 | 878.2 | 383.9 | 155.1 | 34.7 | 12.4 | 8.16 | 334.8 | 49.0 | 176.1 |  |
| **1963** | 280.9 | 2,102 | 662.7 | 2,232 | 1,354 | 340.1 | 87.3 | 30.2 | 21.1 | 37.7 | 237.7 | 125.1 |  |
| **1964** | 428.9 | 206.0 | 224.3 | 442.9 | 458.6 | 129.3 | 40.6 | 26.5 | 11.1 | 11.8 | 100.6 | 3,380 |  |
| **1965** | 2,854 | 965.1 | 635.2 | 1,671 | 763.7 | 299.9 | 78.8 | 42.6 | 25.4 | 29.2 | 156.8 | 314.8 |  |
| **1966** | 370.7 | 440.1 | 489.2 | 649.6 | 184.4 | 52.2 | 52.5 | 45.6 | 17.0 | 8.32 | 69.0 | 587.4 |  |
| **1967** | 1,262 | 835.8 | 1,675 | 2,152 | 2,128 | 924.3 | 226.4 | 56.9 | 36.0 | 47.3 | 58.8 | 126.8 |  |
| **1968** | 280.5 | 839.1 | 662.0 | 460.2 | 193.2 | 65.8 | 52.4 | 37.7 | 9.63 | 14.6 | 92.0 | 242.0 |  |
| **1969** | 3,539 | 2,268 | 1,383 | 1,966 | 1,301 | 393.6 | 96.3 | 34.7 | 26.9 | 53.4 | 75.1 | 439.7 |  |
| **1970** | 3,301 | 1,176 | 1,258 | 453.4 | 377.0 | 144.6 | 63.1 | 52.0 | 39.3 | 25.9 | 286.9 | 1,087 |  |
| **1971** | 662.5 | 481.8 | 939.6 | 911.2 | 687.0 | 291.7 | 81.3 | 24.4 | 16.5 | 29.1 | 61.6 | 371.4 |  |
| **1972** | 217.8 | 492.3 | 682.5 | 614.8 | 339.6 | 92.0 | 57.6 | 51.9 | 15.7 | 30.2 | 110.3 | 257.5 |  |
| **1973** | 1,873 | 1,767 | 1,387 | 962.4 | 712.8 | 162.4 | 56.0 | 50.1 | 29.8 | 49.5 | 429.7 | 1,074 |  |
| **1974** | 1,739 | 617.5 | 2,117 | 1,741 | 792.2 | 227.2 | 134.9 | 51.4 | 26.9 | 37.3 | 61.7 | 93.8 |  |
| **1975** | 183.6 | 962.6 | 1,538 | 1,197 | 1,352 | 458.0 | 109.9 | 53.6 | 29.8 | 81.0 | 96.4 | 89.1 |  |
| **1976** | 72.8 | 104.6 | 155.6 | 153.0 | 97.9 | 24.8 | 4.89 | 16.2 | 12.1 | 13.9 | 20.0 | 18.3 |  |
| **1977** | 32.9 | 39.4 | 43.5 | 33.7 | 48.5 | 12.1 | 0.096 | 0.000 | 0.000 | 0.000 | 14.6 | 208.8 |  |
| **1978** | 1,552 | 1,002 | 1,524 | 1,849 | 911.7 | 330.9 | 84.4 | 18.5 | 41.0 | 21.6 | 43.8 | 63.9 |  |
| **1979** | 467.5 | 967.8 | 1,306 | 1,027 | 982.5 | 189.0 | 61.5 | 21.2 | 18.8 | 43.0 | 85.7 | 170.5 |  |
| **1980** | 2,914 | 2,956 | 1,484 | 763.8 | 571.2 | 259.6 | 110.5 | 37.8 | 26.4 | 29.9 | 41.0 | 68.4 |  |
| **1981** | 241.7 | 196.9 | 732.0 | 377.4 | 194.0 | 47.2 | 12.3 | 10.1 | 1.00 | 28.3 | 576.6 | 1,274 |  |
| **1982** | 2,342 | 3,091 | 2,829 | 3,992 | 1,267 | 331.8 | 128.8 | 55.4 | 78.5 | 202.4 | 779.3 | 2,267 |  |
| **1983** | 2,416 | 3,394 | 5,255 | 2,182 | 2,218 | 1,067 | 345.8 | 114.0 | 82.0 | 79.6 | 1,570 | 3,297 |  |
| **1984** | 1,162 | 1,056 | 1,162 | 739.4 | 488.4 | 176.1 | 69.7 | 39.8 | 30.7 | 68.7 | 293.4 | 227.1 |  |
| **1985** | 142.4 | 456.4 | 549.8 | 613.9 | 251.8 | 68.2 | 20.2 | 11.1 | 24.2 | 28.3 | 119.9 | 297.8 |  |
| **1986** | 681.1 | 6,610 | 2,889 | 823.3 | 424.5 | 146.4 | 53.1 | 25.4 | 36.3 | 40.7 | 38.7 | 51.1 |  |
| **1987** | 77.6 | 235.4 | 470.5 | 179.5 | 87.2 | 24.6 | 7.09 | 1.83 | 1.66 | 9.72 | 29.7 | 65.3 |  |
| **1988** | 215.2 | 109.2 | 149.0 | 146.7 | 104.9 | 34.8 | 4.95 | 0.002 | 0.000 | 0.372 | 41.9 | 50.4 |  |
| **1989** | 76.2 | 147.1 | 1,433 | 615.0 | 228.5 | 67.9 | 17.2 | 5.32 | 16.5 | 56.3 | 67.2 | 54.3 |  |
| **1990** | 133.5 | 213.0 | 437.1 | 273.4 | 131.6 | 106.7 | 20.9 | 4.68 | 3.63 | 7.47 | 18.1 | 19.2 |  |
| **1991** | 21.4 | 35.9 | 736.6 | 444.2 | 329.6 | 121.3 | 28.5 | 6.99 | 1.91 | 16.6 | 25.9 | 36.8 |  |
| **1992** | 60.5 | 639.8 | 587.0 | 281.5 | 76.3 | 18.0 | 12.4 | 0.409 | 0.000 | 4.20 | 21.5 | 195.4 |  |
| **1993** | 1,859 | 1,642 | 1,988 | 1,240 | 649.3 | 355.0 | 64.7 | 21.5 | 10.4 | 19.3 | 26.4 | 80.8 |  |
| **1994** | 75.2 | 267.1 | 227.1 | 156.7 | 148.5 | 29.8 | 4.67 | 0.042 | 0.000 | 7.61 | 61.2 | 228.2 |  |
| **1995** | 2,866 | 1,007 | 4,478 | 2,035 | 2,362 | 819.8 | 249.9 | 63.3 | 32.6 | 29.6 | 33.4 | 157.2 |  |
| **1996** | 775.0 | 2,034 | 1,790 | 1,112 | 1,015 | 266.9 | 91.9 | 37.5 | 30.5 | 35.0 | 188.4 | 2,599 |  |
| **1997** | 7,129 | 1,285 | 573.6 | 419.2 | 243.7 | 113.1 | 51.5 | 30.1 | 22.5 | 45.4 | 90.2 | 158.8 |  |
| **1998** | 1,550 | 3,563 | 2,365 | 1,996 | 1,819 | 1,111 | 275.6 | 89.5 | 66.1 | 66.1 | 111.7 | 218.9 |  |
| **1999** | 820.7 | 2,964 | 1,400 | 1,137 | 748.9 | 277.0 | 78.3 | 44.9 | 29.6 | 29.3 | 73.6 | 70.9 |  |
| **2000** | 782.9 | 2,580 | 1,275 | 660.0 | 526.8 | 145.5 | 53.3 | 24.2 | 34.3 | 54.3 | 61.0 | 75.3 |  |
| **2001** | 139.8 | 350.8 | 458.9 | 465.3 | 268.1 | 44.9 | 15.0 | 5.74 | 6.40 | 10.2 | 57.7 | 300.1 |  |
| **2002** | 533.0 | 567.1 | 853.9 | 565.0 | 318.3 | 103.2 | 22.3 | 7.67 | 5.66 | 8.69 | 58.4 | 243.8 |  |
| **2003** | 273.1 | 256.3 | 339.9 | 1,022 | 1,082 | 209.4 | 38.0 | 20.3 | 8.81 | 8.48 | 31.8 | 201.3 |  |
| **2004** | 289.6 | 733.9 | 741.8 | 402.9 | 171.5 | 46.4 | 14.7 | 5.79 | 5.34 | 44.8 | 72.0 | 279.6 |  |
| **2005** | 1,169 | 849.5 | 1,973 | 1,415 | 1,588 | 522.4 | 119.3 | 40.3 | 26.4 | 29.3 | 40.7 | 1,439 |  |
| **2006** | 1,773 | 1,100 | 2,577 | 5,255 | 1,564 | 407.6 | 118.8 | 58.9 | 41.8 | 52.6 | 76.4 | 128.1 |  |
| **2007** | 152.9 | 640.1 | 567.5 | 347.0 | 215.7 | 59.5 | 21.0 | 9.93 | 10.4 | 24.9 | 29.4 | 59.6 |  |
| **2008** | 327.5 | 423.5 | 351.5 | 322.0 | 245.0 | 66.9 | 15.3 | 4.39 | 2.68 | 12.4 | 34.4 | 47.4 |  |
| **2009** | 144.5 | 532.1 | 1,088 | 475.9 | 768.7 | 96.3 | 22.0 | 6.60 | 4.75 | 22.9 | 20.2 | 79.2 |  |
| **2010** | 344.8 | 470.1 | 656.5 | 984.3 | 1,063 | 630.1 | 79.5 | 19.7 | 12.2 | 67.8 | 162.3 | 1,815 |  |
| **2011** | 985.1 | 989.4 | 3,819 | 2,171 | 1,312 | 944.0 | 269.9 | 66.1 | 37.1 | 63.0 | 60.3 | 53.1 |  |
| **2012** | 133.2 | 98.5 | 781.6 | 1,160 | 378.7 | 91.5 | 31.4 | 12.5 | 11.4 | 19.2 | 75.7 | 1,013 |  |
| **2013** | 297.0 | 222.6 | 301.9 | 312.5 | 101.1 | 36.3 | 13.4 | 5.91 | 8.80 | 15.4 | 22.8 | 24.4 |  |
| **2014** | 23.5 | 318.7 | 356.6 | 262.1 | 88.2 | 16.6 | 2.11 | 0.000 | 0.000 | 4.23 | 20.3 | 234.2 |  |
| **2015** | 57.7 | 617.6 | 88.5 | 58.0 |  |  |  |  |  | 2.77 | 26.2 | 259.4 |  |
| **2016** | 771.3 | 629.5 | 2,313 | 656.8 | 295.0 | 78.5 | 21.1 | 7.18 | 5.10 | 6.28 |  |  |  |
| **Mean of monthly Discharge** | 885 | 1,120 | 1,190 | 1,050 | 684 | 252 | 60 | 20 | 15 | 31 | 127 | 428 |  |