

Water-Data Report 2011

11045600 O'Neill Lake Outlet Channel near Fallbrook, CA

Santa Margarita River Basin

LOCATION.--Lat 33°19'30", long 117°19'29" referenced to North American Datum of 1927, in SE ¼ NW ¼ sec.8, T.10 S., R.4 W., San Diego County, CA, Hydrologic Unit 18070302, on Camp Joseph H. Pendleton Naval Reservation, on left bank, 300 ft downstream from O'Neill Lake, and 5.5 mi southwest of Fallbrook.

DRAINAGE AREA.--9.77 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1998 to February 2003, October 2003 to current year.

GAGE.--Water-stage recorder and concrete control with low-water V-notch weir. Elevation of gage is 100 ft above NGVD of 1929, from topographic map.

REMARKS.--Records fair. Records for this station represent regulated releases from O'Neill Lake. Water is sometimes diverted into O'Neill Lake from the Santa Margarita River via a diversion dam 0.9 mi above gage. Slight regulation by two small storage reservoirs upstream from gaging station on Fallbrook Creek near Fallbrook (station 11045300). See schematic diagram of Santa Margarita River Basin available from the California Water Science Center.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 53 ft³/s, Jan. 11, 2005, gage height, 3.96 ft; no flow at times in most years.

11045600 O'Neill Lake Outlet Channel near Fallbrook, CA—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011
DAILY MEAN VALUES

| Day | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
|--------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| 1 | 0.05 | 0.05 | 0.04 | 25 | 0.79 | 0.67 | 0.83 | 0.45 | 0.78 | 0.90 | 0.69 | 0.74 |
| 2 | 0.05 | 0.07 | 0.04 | 25 | 0.78 | 0.73 | 0.83 | 0.37 | 0.78 | 0.93 | 0.74 | 0.73 |
| 3 | 0.06 | 0.09 | 0.04 | 20 | 0.83 | 0.77 | 0.75 | 0.37 | 0.83 | 0.94 | 0.70 | 0.74 |
| 4 | 0.06 | 0.07 | 0.04 | 9.8 | 0.86 | 0.76 | 0.73 | 0.39 | 0.83 | 0.94 | 0.72 | 0.70 |
| 5 | 0.06 | 0.06 | 0.05 | 0.95 | 0.90 | 0.77 | 0.78 | 0.46 | 0.86 | 0.89 | 0.76 | 0.67 |
| 6 | 0.06 | 0.05 | 0.06 | 0.73 | 0.90 | 0.86 | 0.87 | 0.47 | 0.90 | 0.86 | 0.77 | 0.66 |
| 7 | 0.06 | 0.04 | 0.07 | 0.65 | 0.90 | 0.87 | 0.98 | 0.46 | 0.91 | 0.87 | 0.74 | 0.66 |
| 8 | 0.07 | 0.04 | 0.08 | 0.61 | 0.90 | 0.86 | 1.00 | 0.45 | 0.91 | 0.87 | 0.72 | 0.60 |
| 9 | 0.08 | 0.04 | 0.09 | 0.62 | 0.92 | 0.90 | 1.1 | 0.48 | 0.81 | 0.85 | 0.74 | 0.62 |
| 10 | 0.08 | 0.05 | 0.09 | 0.62 | 0.93 | 0.91 | 1.0 | 0.53 | 0.85 | 0.90 | 0.81 | 0.66 |
| 11 | 0.08 | 0.06 | 0.10 | 0.62 | 0.88 | 0.89 | 1.0 | 0.52 | 0.82 | 0.86 | 0.79 | 0.70 |
| 12 | 0.08 | 0.05 | 0.10 | 0.62 | 0.87 | 0.82 | 1.0 | 0.56 | 0.87 | 0.74 | 0.82 | 0.69 |
| 13 | 0.08 | 0.04 | 0.10 | 0.53 | 0.93 | 0.79 | 0.89 | 0.56 | 0.91 | 0.74 | 0.77 | 0.65 |
| 14 | 0.08 | 0.03 | 0.10 | 0.58 | 0.94 | 0.84 | 0.77 | 0.54 | 0.90 | 0.80 | 0.72 | 0.60 |
| 15 | 0.11 | 0.04 | 0.10 | 0.58 | 0.94 | 0.91 | 0.77 | 0.55 | 0.93 | 0.74 | 0.75 | 0.60 |
| 16 | 0.10 | 0.03 | 0.10 | 0.63 | 0.95 | 0.98 | 0.81 | 0.58 | 0.95 | 0.72 | 0.76 | 0.61 |
| 17 | 0.09 | 0.03 | 0.11 | 0.68 | 0.97 | 1.0 | 0.88 | 0.59 | 0.96 | 0.69 | 0.76 | 0.61 |
| 18 | 0.09 | 0.01 | 0.10 | 0.76 | 0.98 | 0.96 | 0.93 | 0.52 | 0.94 | 0.69 | 0.79 | 0.55 |
| 19 | 0.11 | 0.01 | 0.09 | 0.77 | 0.93 | 0.96 | 0.73 | 0.52 | 0.90 | 0.70 | 0.80 | 0.59 |
| 20 | 0.11 | 0.01 | 0.11 | 0.73 | 0.85 | 1.0 | 0.85 | 0.54 | 0.92 | 0.74 | 0.77 | 0.59 |
| 21 | 0.11 | 0.01 | 5.3 | 0.80 | 0.85 | 1.0 | 0.93 | 0.62 | 0.98 | 0.71 | 0.77 | 0.56 |
| 22 | 0.09 | 0.01 | 26 | 0.83 | 0.86 | 1.1 | 0.98 | 0.67 | 0.99 | 0.73 | 0.76 | 0.54 |
| 23 | 0.10 | 0.01 | 26 | 0.78 | 0.84 | 1.1 | 0.94 | 0.67 | 0.94 | 0.67 | 0.74 | 0.53 |
| 24 | 0.11 | 0.03 | 26 | 0.73 | 0.82 | 1.0 | 0.43 | 0.71 | 0.88 | 0.64 | 0.71 | 0.46 |
| 25 | 0.10 | 0.04 | 26 | 0.75 | 0.82 | 1.0 | 0.42 | 0.69 | 0.93 | 0.67 | 0.70 | 0.46 |
| 26 | 0.10 | 0.04 | 26 | 0.76 | 0.89 | 1.0 | 0.44 | 0.69 | 0.95 | 0.67 | 0.71 | 0.46 |
| 27 | 0.08 | 0.04 | 26 | 0.70 | 0.83 | 1.0 | 0.46 | 0.72 | 0.98 | 0.60 | 0.70 | 0.45 |
| 28 | 0.08 | 0.04 | 26 | 0.72 | 0.74 | 1.0 | 0.45 | 0.69 | 0.98 | 0.66 | 0.70 | 0.43 |
| 29 | 0.08 | 0.04 | 26 | 0.77 | --- | 1.1 | 0.46 | 0.69 | 0.98 | 0.73 | 0.74 | 0.41 |
| 30 | 0.08 | 0.04 | 26 | 0.78 | --- | 1.1 | 0.45 | 0.75 | 0.92 | 0.66 | 0.74 | 0.40 |
| 31 | 0.06 | --- | 26 | 0.79 | --- | 0.97 | --- | 0.74 | --- | 0.63 | 0.74 | --- |
| Total | 2.55 | 1.17 | 266.91 | 98.89 | 24.60 | 28.62 | 23.46 | 17.55 | 27.09 | 23.74 | 23.13 | 17.67 |
| Mean | 0.08 | 0.04 | 8.61 | 3.19 | 0.88 | 0.92 | 0.78 | 0.57 | 0.90 | 0.77 | 0.75 | 0.59 |
| Max | 0.11 | 0.09 | 26 | 25 | 0.98 | 1.1 | 1.1 | 0.75 | 0.99 | 0.94 | 0.82 | 0.74 |
| Min | 0.05 | 0.01 | 0.04 | 0.53 | 0.74 | 0.67 | 0.42 | 0.37 | 0.78 | 0.60 | 0.69 | 0.40 |
| Ac-ft | 5.1 | 2.3 | 529 | 196 | 49 | 57 | 47 | 35 | 54 | 47 | 46 | 35 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2011, BY WATER YEAR (WY)

| | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
|----------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Mean | 1.79 | 0.91 | 3.35 | 2.33 | 2.61 | 2.38 | 1.45 | 1.51 | 0.74 | 0.69 | 0.40 | 0.38 |
| Max | 10.4 | 3.88 | 11.4 | 17.0 | 13.9 | 14.1 | 7.96 | 6.61 | 2.78 | 1.86 | 1.13 | 1.90 |
| (WY) (2009) | (2001) | (2006) | (2005) | (2005) | (2005) | (2010) | (2010) | (2010) | (2006) | (2006) | (2006) | (2006) |
| Min | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| (WY) | (2001) | (2003) | (2000) | (2002) | (2002) | (2002) | (2000) | (2000) | (2000) | (2000) | (2000) | (2002) |

11045600 O'Neill Lake Outlet Channel near Fallbrook, CA—Continued**SUMMARY STATISTICS**

| | Calendar Year 2010 | Water Year 2011 | Water Years 1999 - 2011 | |
|---------------------------------|---------------------------|------------------------|--------------------------------|------|
| Annual total | 1,031.46 | 555.38 | | |
| Annual mean | 2.83 | 1.52 | 1.60 | |
| Highest annual mean | | | 5.84 | 2005 |
| Lowest annual mean | | | 0.00 | 2000 |
| Highest daily mean | 26 Dec 22 | 26 Dec 22 | 34 Jan 11, 2005 | |
| Lowest daily mean | 0.01 Nov 18 | 0.01 Nov 18 | 0.00 Sep 26, 1999 | |
| Annual seven-day minimum | 0.01 Nov 17 | 0.01 Nov 17 | 0.00 Oct 9, 1999 | |
| Maximum peak flow | | 26 Dec 22 | 53 Jan 11, 2005 | |
| Maximum peak stage | | 2.88 Dec 22 | 3.96 Jan 11, 2005 | |
| Annual runoff (ac-ft) | 2,050 | 1,100 | 1,160 | |
| 10 percent exceeds | 12 | 0.98 | 2.9 | |
| 50 percent exceeds | 0.13 | 0.73 | 0.37 | |
| 90 percent exceeds | 0.04 | 0.06 | 0.00 | |

