

11151300 San Lorenzo Creek below Bitterwater Creek, near King City, CA

Salinas River Basin

LOCATION.--Lat 36°16'05", long 121°03'55" referenced to North American Datum of 1927, Monterey County, CA, Hydrologic Unit 18060005, on left bank, 1.3 mi downstream from Bitterwater Creek, 5 mi northeast of King City, and 10 mi upstream from mouth.

DRAINAGE AREA.--233 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1958 to current year.

CHEMICAL DATA: Water year 1977.

REVISED RECORDS.--WDR CA-85-2: 1969-84 (instantaneous maximum discharge); WDR CA-2002-2: Datum.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 431.48 ft above NGVD of 1929. October 1958 to Apr. 24, 1967, at site 500 ft upstream at datum 5.16 ft higher. Apr. 25, 1967, to May 23, 1972, at site 200 ft upstream at datum 0.16 ft higher. May 23, 1972, to May 21, 1975, at site 200 ft upstream at datum 0.06 ft higher. May 21, 1975, to July 12, 1981, at site 200 ft upstream at same datum.

REMARKS.--Records are poor. No regulation; small diversions upstream from station by ranchers and sand-processing plant. Site is subject to extensive scour and fill, as well as heavy vegetation growth throughout the channel. See schematic diagram of Salinas River Basin available from the California Water Science Center.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,500 ft³/s, Jan. 25, 1969, gage height, 15.33 ft, in gage well, 16.2 ft, from floodmarks, from rating curve extended above 7,100 ft³/s, on basis of slope-area measurement of peak flow; no flow at times in 1961, 1973, 2007-2011.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 250 ft³/s and (or) maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|--------|------|--------------------------------|------------------|
| Dec 29 | 1330 | 526 | 5.72 |
| Jan 2 | 1915 | 1,780 | 8.35 |
| Feb 18 | 1130 | 2,680 | 9.19 |
| Feb 25 | 2245 | 712 | 6.01 |
| Mar 20 | 1045 | *4,000 | *10.22 |
| Mar 25 | 0300 | 2,340 | 8.13 |

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

[e, estimated]

| Day | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
|--------------|------|-------|-------|---------|---------|---------|-------|-------|-------|-------|-------|-------|
| 1 | 0.00 | 0.79 | 1.4 | 8.4 | 2.3 | 18 | 62 | 11 | 4.1 | 1.1 | 0.64 | 0.67 |
| 2 | 0.00 | 0.77 | 1.4 | 792 | 2.2 | 16 | 55 | 10 | 4.0 | 0.92 | 0.59 | 0.75 |
| 3 | 0.00 | 0.72 | 1.4 | 266 | 2.2 | 18 | 49 | 9.3 | 4.0 | 0.80 | 0.55 | 0.66 |
| 4 | 0.00 | 0.84 | 1.5 | 45 | 2.2 | 15 | 44 | 9.0 | 4.7 | 0.70 | 0.56 | 0.71 |
| 5 | 0.00 | 0.68 | 2.1 | 21 | 2.2 | 13 | 40 | 8.3 | 6.7 | 0.62 | 0.61 | 0.76 |
| 6 | 0.00 | 0.70 | 2.7 | 14 | 2.1 | 11 | 37 | 7.6 | 11 | 0.54 | 0.62 | 0.77 |
| 7 | 0.00 | 0.90 | 2.1 | 9.9 | 2.0 | 12 | 35 | 7.5 | 7.9 | 0.43 | 0.62 | 0.69 |
| 8 | 0.00 | 1.3 | 1.7 | 7.5 | 1.9 | 13 | 36 | 7.3 | 6.2 | 0.41 | 0.63 | 0.57 |
| 9 | 0.00 | 1.2 | 1.6 | 5.9 | 1.9 | 10 | 36 | 7.4 | 5.6 | 0.45 | 0.62 | 0.59 |
| 10 | 0.00 | 1.0 | 1.6 | 4.8 | 2.0 | 9.6 | 31 | 7.3 | 5.1 | 0.57 | 0.59 | 0.74 |
| 11 | 0.00 | 1.00 | 1.5 | 4.2 | 2.0 | 8.7 | 28 | 7.2 | 4.5 | 0.62 | 0.62 | 0.84 |
| 12 | 0.00 | 0.97 | 1.5 | 3.8 | 2.0 | 8.3 | 26 | 6.8 | 4.2 | 0.66 | 0.68 | 1.0 |
| 13 | 0.05 | 1.0 | 1.5 | 3.6 | 2.0 | 8.1 | 25 | 6.3 | 3.8 | 0.77 | 0.73 | 1.1 |
| 14 | 0.09 | 1.1 | 1.5 | 3.4 | 2.0 | 7.6 | 23 | 6.0 | 3.3 | 0.67 | 0.67 | 0.97 |
| 15 | 0.10 | 1.1 | 1.6 | 3.2 | 2.0 | 7.0 | 22 | 6.8 | 2.8 | 0.73 | 0.55 | 0.94 |
| 16 | 0.08 | 1.1 | 1.5 | 3.1 | 2.6 | 6.6 | 21 | 8.3 | 2.4 | 0.82 | 0.46 | 1.1 |
| 17 | 0.19 | 1.1 | 1.7 | 2.9 | 3.6 | 6.7 | 19 | 8.5 | 2.4 | 0.84 | 0.34 | 1.2 |
| 18 | 0.45 | 1.0 | 2.1 | 2.7 | 1,140 | 7.0 | 19 | 10 | 2.4 | 0.79 | 0.41 | 1.2 |
| 19 | 0.52 | 1.1 | 10 | e2.7 | 628 | 12 | 18 | 11 | 2.3 | 0.73 | 0.39 | 1.1 |
| 20 | 0.45 | 2.2 | 56 | e2.7 | 172 | 2,010 | 17 | 8.2 | 1.9 | 0.69 | 0.54 | 0.95 |
| 21 | 0.44 | 2.6 | 25 | 2.7 | 62 | 991 | 17 | 6.5 | 1.5 | 0.58 | 0.75 | 0.82 |
| 22 | 0.55 | 2.0 | 28 | 2.6 | 31 | 347 | 16 | 5.6 | 1.2 | 0.47 | 0.76 | 0.80 |
| 23 | 0.63 | 1.7 | 46 | 2.5 | 21 | 238 | 16 | 5.4 | 1.1 | 0.62 | 0.56 | 0.82 |
| 24 | 0.67 | 1.5 | 17 | 2.5 | 15 | 342 | 15 | 5.1 | 1.1 | 0.63 | 0.58 | 0.91 |
| 25 | 0.62 | 1.4 | 7.5 | 2.4 | 71 | 951 | 15 | 4.9 | 1.2 | 0.66 | 0.49 | 0.98 |
| 26 | 0.59 | 1.4 | 31 | 2.4 | 207 | 214 | 14 | 4.5 | 1.2 | 0.65 | 0.40 | 1.0 |
| 27 | 0.51 | 1.5 | 19 | 2.4 | 41 | 353 | 13 | 4.4 | 1.1 | 0.64 | 0.53 | 1.0 |
| 28 | 0.47 | 1.5 | 9.0 | 2.3 | 24 | 132 | 12 | 4.2 | 1.1 | 0.62 | 0.56 | 1.0 |
| 29 | 0.54 | 1.5 | 151 | 2.3 | --- | 101 | 12 | 4.3 | 1.5 | 0.58 | 0.56 | 0.94 |
| 30 | 0.76 | 1.4 | 61 | 2.5 | --- | 84 | 11 | 4.5 | 1.3 | 0.60 | 0.61 | 0.98 |
| 31 | 0.83 | --- | 16 | 2.5 | --- | 69 | --- | 4.2 | --- | 0.64 | 0.62 | --- |
| Total | 8.54 | 37.07 | 506.9 | 1,233.9 | 2,449.2 | 6,039.6 | 784 | 217.4 | 101.6 | 20.55 | 17.84 | 26.56 |
| Mean | 0.28 | 1.24 | 16.4 | 39.8 | 87.5 | 195 | 26.1 | 7.01 | 3.39 | 0.66 | 0.58 | 0.89 |
| Max | 0.83 | 2.6 | 151 | 792 | 1,140 | 2,010 | 62 | 11 | 11 | 1.1 | 0.76 | 1.2 |
| Min | 0.00 | 0.68 | 1.4 | 2.3 | 1.9 | 6.6 | 11 | 4.2 | 1.1 | 0.41 | 0.34 | 0.57 |
| Ac-ft | 17 | 74 | 1,010 | 2,450 | 4,860 | 11,980 | 1,560 | 431 | 202 | 41 | 35 | 53 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1959 - 2011, BY WATER YEAR (WY)

| | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
|-------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Mean | 1.71 | 3.64 | 11.4 | 39.4 | 55.1 | 44.0 | 16.1 | 5.97 | 2.25 | 1.05 | 0.71 | 1.08 |
| Max | 20.0 | 34.7 | 76.1 | 401 | 583 | 422 | 113 | 90.1 | 33.9 | 15.0 | 7.26 | 17.9 |
| (WY) | (1977) | (1966) | (2005) | (1969) | (1998) | (1995) | (1983) | (1998) | (1998) | (1983) | (1983) | (1976) |
| Min | 0.05 | 0.06 | 0.07 | 0.07 | 0.25 | 0.59 | 0.19 | 0.07 | 0.01 | 0.00 | 0.00 | 0.00 |
| (WY) | (1991) | (1991) | (1991) | (1991) | (1991) | (1964) | (1964) | (1992) | (2009) | (2010) | (2010) | (2010) |

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SUMMARY STATISTICS

| | Calendar Year 2010 | | Water Year 2011 | | Water Years 1959 - 2011 | |
|---------------------------------|--------------------|--------|-----------------|--------|-------------------------|--------------|
| Annual total | 4,258.42 | | 11,443.16 | | | |
| Annual mean | 11.7 | | 31.4 | | 15.0 | |
| Highest annual mean | | | | | 81.4 | 1998 |
| Lowest annual mean | | | | | 0.66 | 1968 |
| Highest daily mean | 768 | Jan 20 | 2,010 | Mar 20 | 5,860 | Mar 10, 1995 |
| Lowest daily mean | 0.00 | Jul 4 | 0.00 | Oct 1 | 0.00 | Jun 12, 1961 |
| Annual seven-day minimum | 0.00 | Jul 4 | 0.00 | Oct 1 | 0.00 | Jun 12, 1961 |
| Maximum peak flow | | | 4,000 | Mar 20 | 11,500 | Jan 25, 1969 |
| Maximum peak stage | | | 10.22 | Mar 20 | 15.33 | Jan 25, 1969 |
| Annual runoff (ac-ft) | 8,450 | | 22,700 | | 10,870 | |
| 10 percent exceeds | 16 | | 31 | | 18 | |
| 50 percent exceeds | 0.97 | | 2.0 | | 1.3 | |
| 90 percent exceeds | 0.00 | | 0.54 | | 0.10 | |

