

Water-Data Report 2009

11389500 Sacramento River at Colusa, CA

Sacramento River Basin

LOCATION.--Lat 39°12'51", long 121°59'57" referenced to North American Datum of 1927, Colusa County, CA, Hydrologic Unit 18020104, at northeast end of Jimeno Land Grant, on right bank, 60 ft downstream from bridge on River Road in Colusa, and at mile 89.4 upstream from Sacramento.

DRAINAGE AREA.--12,090 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--April 1921 to current year (prior to October 1940, low-water periods only).

CHEMICAL DATA: Water years 1959-66, 1996-2001.

SPECIFIC CONDUCTANCE: Water years 1995-98.

WATER TEMPERATURE: Water years 1975, 1977-80, 1995-98.

SEDIMENT DATA: Water years 1973-80, 1996-2000.

REVISED RECORDS.--WSP 1345: 1952. WDR CA-77-4: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 2.95 ft below NGVD of 1929. Prior to December 1930, water-stage recorder in center fender pier 50 ft upstream from bridge at same datum.

REMARKS.--Records good except for Oct. 1 to Feb. 9 and Mar. 30 to June 19, which are fair. Natural flow of stream affected by storage reservoirs, including Shasta Lake (station 11370000) since 1943, power development, bypassing for flood control, diversions for irrigation, and return flow from irrigated areas. When discharge exceeds about 30,000 ft³/s, flow begins over Colusa Weir, 2.5 mi upstream on left bank, into Butte Sink and Sutter Bypass. See schematic diagram of lower Sacramento River Basin available from the California Water Science Center.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge (since water year 1941), 51,800 ft³/s, Mar. 4, 1983, gage height, 68.50 ft, maximum gage height, 69.20 ft, Feb. 18, 1942; minimum recorded, 820 ft³/s, July 25, 26, 1931, gage height, 34.79 ft.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	5,460	7,050	4,420	5,680	5,150	12,600	7,260	5,890	6,390	7,410	8,700	7,290
2	5,290	7,470	4,390	5,400	5,020	19,200	7,020	6,410	6,450	7,660	8,630	8,170
3	5,320	7,820	4,470	5,230	4,930	35,300	7,600	7,930	6,470	7,980	8,460	8,130
4	5,450	7,960	4,450	5,770	4,910	33,700	7,390	10,000	7,020	8,050	8,470	7,560
5	5,530	8,140	4,540	5,500	4,850	26,600	7,220	11,300	7,240	8,130	8,510	6,720
6	5,660	7,470	4,570	5,110	4,840	22,000	7,110	13,600	7,560	8,190	8,510	6,710
7	5,580	6,890	4,620	4,980	4,910	17,100	7,050	13,500	8,080	8,280	8,560	6,770
8	5,300	6,660	4,490	4,900	5,030	14,100	6,930	11,900	8,430	8,340	8,400	6,870
9	5,240	6,460	4,440	4,880	5,100	12,400	7,040	10,500	8,430	8,420	8,520	7,060
10	5,120	6,420	4,370	4,880	5,550	11,400	7,590	9,320	8,040	8,400	8,440	6,820
11	5,040	6,270	4,180	4,860	5,540	10,600	8,020	8,550	7,940	8,390	8,400	6,840
12	5,130	6,050	4,180	4,770	5,510	9,960	8,110	7,840	8,180	8,490	8,360	7,080
13	5,160	6,010	4,250	4,690	6,580	9,520	7,900	7,220	7,930	8,700	8,260	7,130
14	4,980	5,930	4,390	4,670	7,680	9,160	7,700	6,840	7,780	8,630	8,190	7,110
15	4,360	5,980	4,510	4,610	8,390	8,890	7,450	6,760	7,920	8,670	8,200	6,880
16	4,360	5,690	4,700	4,470	14,800	8,750	7,340	7,190	6,940	8,480	7,960	6,620
17	4,440	5,420	4,790	4,350	30,300	9,520	7,060	7,470	7,360	8,380	7,650	6,700
18	4,630	5,170	4,770	4,330	37,200	12,400	6,570	7,540	7,410	8,440	7,680	6,680
19	4,790	5,010	4,710	4,300	32,400	10,700	6,500	7,490	6,910	8,540	7,650	6,420
20	4,820	4,930	4,730	4,310	19,300	9,740	6,600	7,290	6,790	8,330	7,640	6,220
21	5,040	4,750	4,970	4,300	12,900	9,340	6,220	7,210	6,960	8,300	7,720	6,290
22	5,180	4,630	5,000	4,300	11,000	9,100	6,000	7,060	6,810	8,340	7,830	6,170
23	5,320	4,580	5,110	4,470	22,000	8,900	5,860	7,010	6,870	8,420	7,730	5,910
24	5,310	4,520	5,430	4,730	32,700	8,650	5,940	6,810	6,920	8,570	7,660	5,950
25	5,210	4,440	5,570	6,200	30,100	8,370	5,900	6,750	7,190	8,510	7,670	5,910
26	5,090	4,430	9,800	9,000	21,600	8,130	5,790	6,880	7,150	8,450	7,670	5,680
27	5,350	4,430	8,100	7,540	17,200	7,990	5,770	7,030	7,350	8,510	7,840	5,420
28	5,650	4,400	6,260	6,280	14,600	7,970	5,750	6,970	7,530	8,800	8,000	5,350
29	5,880	4,350	5,720	5,690	---	7,910	5,820	6,860	7,270	8,750	7,800	5,270
30	5,990	4,440	5,720	5,440	---	7,870	5,830	6,650	7,360	8,910	7,530	5,310
31	6,320	---	5,870	5,240	---	7,620	---	6,540	---	8,710	7,580	---
Total	162,000	173,770	157,520	160,880	380,090	395,490	204,340	250,310	220,680	260,180	250,220	197,040
Mean	5,226	5,792	5,081	5,190	13,570	12,760	6,811	8,075	7,356	8,393	8,072	6,568
Max	6,320	8,140	9,800	9,000	37,200	35,300	8,110	13,600	8,430	8,910	8,700	8,170
Min	4,360	4,350	4,180	4,300	4,840	7,620	5,750	5,890	6,390	7,410	7,530	5,270
Ac-ft	321,300	344,700	312,400	319,100	753,900	784,500	405,300	496,500	437,700	516,100	496,300	390,800

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 2009, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	6,409	8,336	13,510	17,760	19,580	17,340	12,630	10,870	9,170	8,901	8,301	7,249
Max	12,040	27,000	38,000	39,720	45,500	44,450	39,590	26,680	24,590	13,890	12,320	10,850
(WY)	(1958)	(1974)	(1984)	(1997)	(1998)	(1983)	(2006)	(1983)	(1998)	(1998)	(1998)	(1998)
Min	3,219	3,860	4,141	5,190	5,147	5,852	4,966	5,015	4,852	5,073	5,081	4,322
(WY)	(1978)	(1993)	(1977)	(2009)	(1991)	(1977)	(1994)	(1947)	(1992)	(1992)	(1947)	(1977)

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SUMMARY STATISTICS

	Calendar Year 2008		Water Year 2009		Water Years 1946 - 2009	
Annual total	2,938,800		2,812,520			
Annual mean	8,030		7,706		11,640	
Highest annual mean					21,790	1983
Lowest annual mean					5,671	1977
Highest daily mean	36,600	Jan 27	37,200	Feb 18	51,300	Mar 4, 1983
Lowest daily mean	4,180	Dec 11	4,180	Dec 11	2,620	Oct 16, 1977
Annual seven-day minimum	4,330	Dec 8	4,330	Dec 8	2,690	Oct 12, 1977
Maximum peak flow			38,500	Feb 18	51,800	Mar 4, 1983
Maximum peak stage			63.67	Feb 18	68.83	Jan 3, 1997
Annual runoff (ac-ft)	5,829,000		5,579,000		8,431,000	
10 percent exceeds	10,400		9,520		24,400	
50 percent exceeds	7,100		6,970		8,350	
90 percent exceeds	4,900		4,630		5,340	

