



Water-Data Report 2009

11368000 McCloud River above Shasta Lake, CA

Sacramento River Basin

LOCATION.--Lat 40°57'30", long 122°13'07" referenced to North American Datum of 1927, Shasta County, CA, Hydrologic Unit 18020004, unsurveyed, on right bank, just upstream from Shasta Lake, 0.2 mi downstream from Big Bollibokka Creek, and 11.3 mi east of Lamoine.

DRAINAGE AREA.--604 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1945 to current year. Prior to 1950, published as "above Shasta Reservoir."

CHEMICAL DATA: 1951, 1953-59.

WATER TEMPERATURE: Water years 1951, 1954-59.

REVISED RECORDS.--WSP 1445: 1953 (instantaneous maximum discharge). WSP 1931: Drainage area. WDR CA-94-4: 1993 (peaks above base).

GAGE.--Water-stage recorder. Datum of gage is 1,100.00 ft above NGVD of 1929 (levels by U.S. Bureau of Reclamation).

COOPERATION.--Records were collected by Pacific Gas and Electric Co., under general supervision of the U.S. Geological Survey, in connection with Federal Energy Regulatory Commission project no. 2106.

REMARKS.--Low flow completely regulated by Lake McCloud (station 11367740) 16.5 mi upstream since Nov. 3, 1965. Diversions to Iron Canyon Reservoir (station 11363920) began Dec. 1, 1965. See schematic diagram of Pit and McCloud River Basins available from the California Water Science Center.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 51,300 ft³/s, Jan. 1, 1997, gage height, 29.00 ft, from rating curve extended above 15,000 ft³/s on basis of slope-area measurement of peak flow; minimum daily, 109 ft³/s, Dec. 16-20, 1971. Minimum prior to regulation by Lake McCloud, 825 ft³/s, Jan. 3, 1950.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,500 ft³/s and (or) maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb 23	2030	16,100	*20.77
Mar 2	0900	11,200	18.40
Mar 16	1715	5,760	15.19

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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	834	1,310	380	313	277	3,280	969	604	536	384	303	312
2	842	1,390	374	337	274	10,100	936	1,020	531	377	304	313
3	913	1,320	373	328	271	7,670	896	2,600	532	369	304	312
4	1,060	1,380	363	306	270	5,420	854	2,070	556	365	304	310
5	927	606	342	292	302	3,300	816	3,450	539	363	304	310
6	862	421	344	283	671	2,130	785	2,620	536	360	307	311
7	851	385	341	281	580	1,710	772	1,950	514	357	314	312
8	849	371	338	285	489	1,500	802	1,600	501	357	309	310
9	846	384	333	288	475	1,350	1,320	1,390	493	355	304	312
10	850	362	330	284	430	1,230	1,480	1,240	491	352	301	312
11	846	356	330	284	439	1,150	1,290	1,130	489	349	299	311
12	844	353	330	301	419	1,050	1,130	1,030	493	347	298	309
13	843	346	330	342	506	991	1,040	958	476	343	298	310
14	843	340	337	349	529	966	979	903	468	341	296	328
15	844	337	346	344	705	1,300	916	853	458	337	295	324
16	837	338	332	335	730	4,600	856	809	451	335	294	316
17	784	334	319	327	739	4,020	811	773	446	331	294	316
18	801	326	322	318	696	2,570	782	745	438	328	291	313
19	826	316	279	309	653	2,000	769	725	432	327	291	312
20	838	314	262	301	608	1,770	768	698	427	323	290	312
21	839	310	263	294	593	1,780	775	677	429	322	288	308
22	842	308	267	318	1,700	2,020	780	658	419	320	286	302
23	855	304	250	342	9,700	1,780	768	642	410	318	287	298
24	844	301	263	342	8,070	1,550	746	628	404	316	287	297
25	839	301	296	363	2,760	1,400	704	611	403	314	286	297
26	838	301	261	336	2,180	1,300	674	592	399	314	286	296
27	837	297	251	312	1,710	1,240	655	580	393	310	285	293
28	836	293	274	300	1,330	1,210	643	568	392	309	290	295
29	839	293	380	292	---	1,170	622	558	387	307	306	296
30	839	293	411	287	---	1,090	598	548	384	306	306	295
31	971	---	339	283	---	1,020	---	542	---	304	308	---
Total	26,519	14,290	9,960	9,676	38,106	73,667	25,936	33,772	13,827	10,440	9,215	9,242
Mean	855	476	321	312	1,361	2,376	865	1,089	461	337	297	308
Max	1,060	1,390	411	363	9,700	10,100	1,480	3,450	556	384	314	328
Min	784	293	250	281	270	966	598	542	384	304	285	293
Ac-ft	52,600	28,340	19,760	19,190	75,580	146,100	51,440	66,990	27,430	20,710	18,280	18,330

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 1965, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	1,121	1,252	2,080	2,077	2,617	2,177	2,467	1,965	1,460	1,159	1,059	1,020
Max	1,899	2,162	6,513	4,525	7,493	3,966	4,599	2,978	2,248	1,715	1,489	1,395
(WY)	(1951)	(1951)	(1956)	(1953)	(1958)	(1958)	(1963)	(1958)	(1958)	(1958)	(1958)	(1958)
Min	856	870	856	903	1,040	1,265	1,320	1,085	1,069	901	852	839
(WY)	(1950)	(1950)	(1950)	(1949)	(1948)	(1964)	(1964)	(1947)	(1949)	(1950)	(1950)	(1950)

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SUMMARY STATISTICS

	Water Years 1946 - 1965	
Annual mean	1,699	
Highest annual mean	2,703	1958
Lowest annual mean	1,213	1950
Highest daily mean	36,100	Dec 21, 1955
Lowest daily mean	825	Jan 3, 1950
Annual seven-day minimum	826	Oct 9, 1950
Maximum peak flow	^a 45,200	Dec 22, 1955
Maximum peak stage	28.20	Dec 22, 1955
Annual runoff (ac-ft)	1,231,000	
10 percent exceeds	2,670	
50 percent exceeds	1,270	
90 percent exceeds	928	

^a From rating curve extended above 6,400 ft³/s on basis of slope-area measurement of peak flow.

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 2009, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	323	542	897	1,407	1,500	1,573	1,001	738	444	329	289	296
Max	855	4,068	3,681	6,043	5,118	5,825	4,497	2,354	1,379	540	409	408
(WY)	(2009)	(1974)	(1997)	(1970)	(1986)	(1983)	(2006)	(2006)	(1998)	(1998)	(1998)	(2008)
Min	206	227	235	222	232	248	226	232	215	200	192	200
(WY)	(1992)	(1992)	(1977)	(1991)	(1977)	(1977)	(1977)	(1977)	(1977)	(1977)	(1991)	(1991)

SUMMARY STATISTICS

	Calendar Year 2008	Water Year 2009	Water Years 1967 - 2009
Annual total	207,789	274,650	
Annual mean	568	752	775
Highest annual mean			1,720
Lowest annual mean			230
Highest daily mean	3,140	Feb 25	10,100
Lowest daily mean	250	Dec 23	250
Annual seven-day minimum	264	Dec 21	264
Maximum peak flow			16,100
Maximum peak stage			20.77
Annual runoff (ac-ft)	412,100	544,800	561,500
10 percent exceeds	868	1,320	1,520
50 percent exceeds	473	385	373
90 percent exceeds	305	293	257

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