Water-Data Report 2008

11367800 McCloud River at Ah-Di-Na, near McCloud, CA

Sacramento River Basin

LOCATION.--Lat 41°06′39″, long 122°05′42″ referenced to North American Datum of 1927, in NE ¼ SW ¼ sec.33, T.38 N., R.2 W., Shasta County, CA, Hydrologic Unit 18020004, in Shasta National Forest, on right bank at Ah-Di-Na, 1.8 mi downstream from Squirrel Creek, 3.9 mi downstream from McCloud Dam, and 9.6 mi south of McCloud.

DRAINAGE AREA.--427 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1964 to current year.

REVISED RECORDS.--WDR CA-98-4: 1997 (daily minimum).

GAGE.--Water-stage recorder. Elevation of gage is 2,160 ft above NGVD of 1929, from topographic map.

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) 3.9 mi upstream since November 1965. Diversion to Iron Canyon Reservoir (station 11363920) through McCloud-Iron Canyon diversion tunnel (station 11367720) started Dec. 1, 1965. This station records fishwater release. The minimum release requirements range from 160 to 210 ft^3/s per schedule outlined in Federal Energy Regulatory Commission License 2106. See schematic diagram of Pit and McCloud River Basins available from the California Water Science Center.

EXTREMES FOR PERIOD OF RECORD.--Prior to completion of McCloud Dam in 1965, maximum discharge, 9,660 ft^3/s, Dec. 22, 1964, gage height, 9.43 ft, from rating curve extended above 2,500 ft^3/s; minimum daily, 86 ft^3/s, Oct. 1-26, 1964.
Since completion of McCloud Dam, maximum discharge, 31,700 ft^3/s, Jan. 1, 1997, gage height, 14.77 ft, from rating curve extended above 8,000 ft^3/s on basis of slope-area measurement of peak flow; minimum daily, 41 ft^3/s, Dec. 18-20, 1971 (caused by valve malfunction at McCloud Dam).

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Dec. 21, 1955, reached a stage of 12.5 ft, discharge, 17,800 ft^3/s, from rating curve extended above 2,500 ft^3/s.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,000 ft^3/s and (or) maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 19	0100	*1,440	*3.81

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	191	192	191	178	194	283	185	198	255	264	249	257
2	191	191	194	174	192	272	187	195	253	459	249	259
3	191	191	206	180	190	248	189	197	254	323	249	261
4	191	191	226	330	184	233	194	202	253	259	249	261
5	191	191	207	269	181	222	196	455	255	253	251	261
6	191	191	204	204	181	214	198	702	251	253	253	261
7	191	191	208	186	179	208	197	697	251	252	253	261
8	189	191	202	186	179	203	193	783	251	253	252	261
9	189	191	197	178	179	201	195	772	251	252	252	261
10	196	191	196	176	180	204	195	755	251	252	252	261
11	191	192	194	177	182	215	199	963	250	251	252	261
12	191	191	193	179	188	229	205	974	249	251	252	260
13	191	191	191	178	197	264	211	910	250	251	252	261
14	189	191	191	177	201	276	219	586	249	250	251	261
15	190	191	191	175	199	259	216	239	248	250	251	261
16	195	191	192	172	196	240	201	214	605	249	251	264
17	195	191	197	170	195	226	193	215	617	252	251	263
18	191	191	232	170	197	220	195	258	531	252	251	257
19	223	198	196	170	201	225	200	1,210	451	252	252	254
20	201	193	205	172	205	228	191	717	426	252	253	258
21	193	191	188	173	214	226	189	659	445	252	254	261
22	191	191	181	172	225	222	196	647	493	251	252	341
23	191	191	184	170	233	220	211	566	602	251	250	435
24	189	189	184	171	307	226	201	420	333	251	250	492
25	189	189	184	171	399	239	195	266	329	251	250	550
26	189	189	185	185	332	245	197	268	267	251	250	608
27	189	189	186	221	295	238	210	265	255	251	250	650
28	189	189	186	275	279	230	220	264	252	250	250	688
29	193	189	184	235	277	221	216	262	252	250	251	717
30	194	191	184	212	---	213	204	259	253	250	251	734
31	193	---	183	205	---	200	---	257	---	250	253	---
Total	5,968	5,729	6,042	5,991	6,361	7,150	5,998	15,375	9,882	8,088	7,786	10,680
Mean	193	191	195	193	219	231	200	496	329	261	251	356
Max	223	198	232	330	399	283	220	1,210	617	459	254	734
Min	189	189	181	170	179	200	185	195	248	249	249	254
Ac-ft	11,840	11,360	11,980	11,880	12,620	14,180	11,900	30,500	19,600	16,040	15,440	21,180

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 2008, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	246	274	314	429	403	452	375	375	263	224	222	235
Max	919	1,140	1,863	2,211	1,770	2,107	2,102	1,732	1,173	1,035	992	954
(WY)	(1966)	(1974)	(1965)	(1970)	(1986)	(1983)	(1965)	(2006)	(1965)	(1965)	(1965)	(1965)
Min	180	182	93.2	93.4	119	167	166	162	160	159	155	182
(WY)	(1978)	(1978)	(1972)	(1972)	(1972)	(1977)	(1968)	(1977)	(1977)	(1977)	(1977)	(1977)

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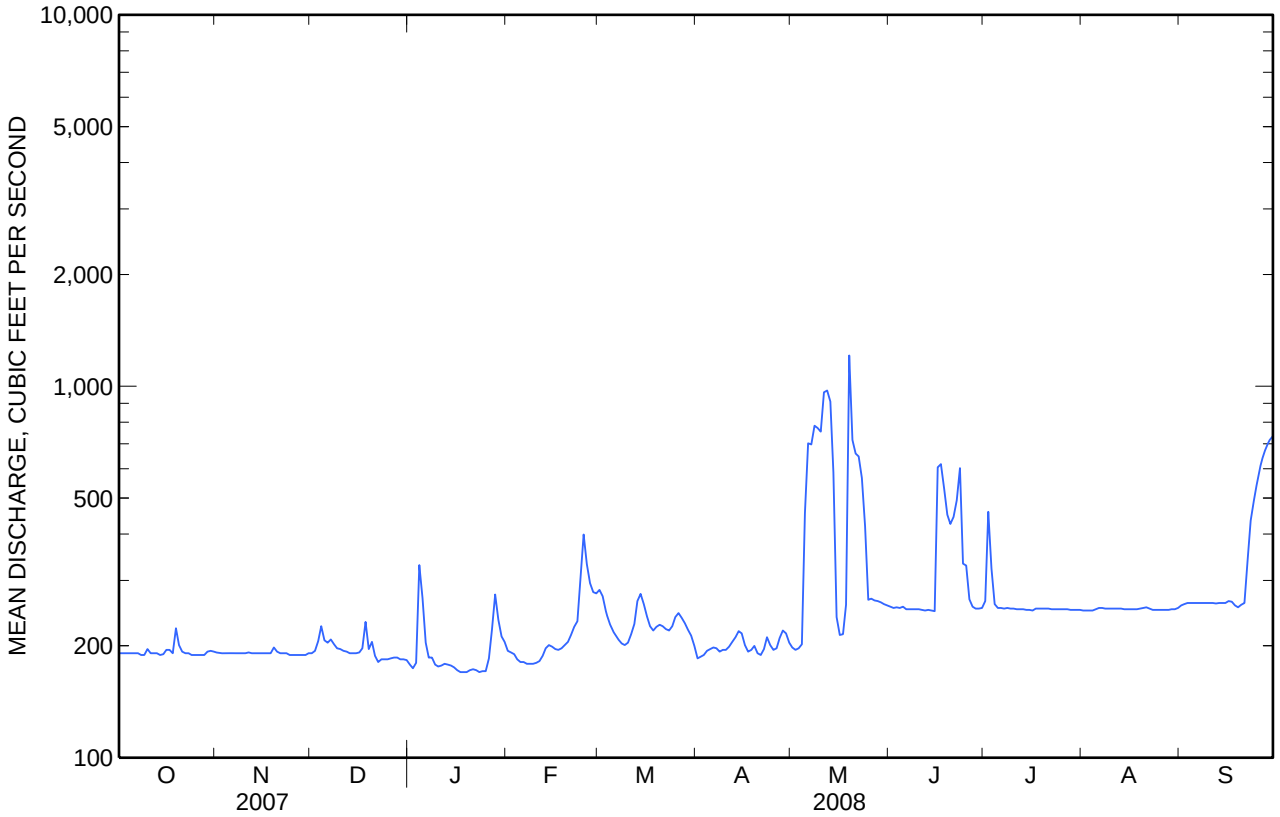
SUMMARY STATISTICS

	Calendar Year 2007		Water Year 2008		Water Years 1965 - 2008	
Annual total	70,371		95,050			
Annual mean	193		260		317	
Highest annual mean					1,326	1965
Lowest annual mean					168	1977
Highest daily mean	625	Feb 11	1,210	May 19	25,200	Jan 1, 1997
Lowest daily mean	168	Jun 18	170	Jan 17	41	Dec 18, 1971
Annual seven-day minimum	168	Jul 3	171	Jan 17	42	Dec 15, 1971
Maximum peak flow			1,440	May 19	31,700	Jan 1, 1997
Maximum peak stage			3.81	May 19	14.77	Jan 1, 1997
Annual runoff (ac-ft)	139,600		188,500		230,000	
10 percent exceeds	211		332		463	
50 percent exceeds	185		221		210	
90 percent exceeds	172		185		170