Water-Data Report 2008

11319500 Mokelumne River near Mokelumne Hill, CA

San Joaquin River Basin

LOCATION.--Lat 38°18′46″, long 120°43′09″ referenced to North American Datum of 1927, in SW ¼ SW ¼ sec.1, T.5 N., R.11 E., Calaveras County, CA, Hydrologic Unit 18040012, on downstream side of bridge, 1.2 mi northwest of Mokelumne Hill, and 8 mi downstream from confluence of north and south Forks of Mokelumne River.

DRAINAGE AREA.--544 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--January to June 1901, May 1903 to December 1904, October 1927 to current year. Yearly estimate only for water year 1928 (incomplete), published in WSP 1315-A. Published as "at Electra" 1901, 1903-04.
CHEMICAL DATA: Water year 1980. Water years 1971-79 in files of California Department of Water Resources.
WATER TEMPERATURE: Water years 1961-79.

REVISED RECORDS.--WSP 1445: 1903-04, 1928 (instantaneous maximum discharge), 1936 (instantaneous maximum discharge), 1938 (instantaneous maximum discharge), 1940 (instantaneous maximum discharge), 1943 (instantaneous maximum discharge), 1945 (instantaneous maximum discharge). WSP 1930: Drainage area. WDR CA-00-3: 1996 (maximum gage height).

GAGE.--Water-stage recorder. Datum of gage is 584.88 ft above NGVD of 1929 (levels by California Division of Highways). Jan. 1, to June 30, 1901, and May 11, 1903, to Dec. 31, 1904, nonrecording gage at site 3 mi upstream at different datum. Nov. 10, 1927, to Aug. 26, 1952, water-stage recorder at site 40 ft upstream at datum 5.00 ft higher. Aug. 27, 1952, to Oct. 14, 1977, at present site at datum 5.00 ft higher.

COOPERATION.--Records were collected by East Bay Municipal Utility District, under general supervision of the U.S. Geological Survey.

REMARKS.--Flow regulated by Salt Springs Reservoir (station 11313500) beginning in 1931, several smaller reservoirs, and four powerplants. Diversion upstream from station for irrigation and domestic use. See schematic diagram of Mokelumne River Basin available from the California Water Science Center.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 41,300 ft^3/s, Jan. 2, 1997, gage height, 25.60 ft, present datum; minimum observed, 5 ft^3/s, Aug. 13-15, 17, 18, 1904.

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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	399	592	547	415	558	748	466	523	858	158	457	466
2	473	563	525	387	511	729	439	408	832	164	522	423
3	391	529	431	473	742	618	443	447	750	132	457	89
4	330	508	364	608	666	553	478	417	831	328	453	101
5	348	614	367	785	568	603	528	434	760	399	443	150
6	349	562	401	556	443	623	532	406	594	376	438	520
7	407	554	428	245	384	552	526	391	706	391	435	520
8	443	549	476	209	387	538	526	436	791	321	455	470
9	409	550	420	301	392	548	513	435	853	332	457	556
10	424	524	407	456	371	617	478	491	817	391	442	482
11	445	552	371	465	353	615	472	537	688	325	433	488
12	429	624	373	471	337	591	481	604	694	400	531	474
13	407	587	372	509	350	779	382	517	461	362	485	517
14	419	515	360	432	415	1,040	419	625	716	372	455	516
15	74	525	356	446	409	901	539	786	670	492	433	512
16	50	539	394	365	409	811	533	856	598	511	443	516
17	95	591	390	445	375	803	515	843	592	495	516	522
18	88	523	397	473	373	821	496	646	522	477	463	510
19	69	468	436	447	494	798	466	655	434	543	462	518
20	74	486	557	438	511	825	466	654	537	530	450	566
21	72	536	457	438	602	837	479	621	502	498	475	491
22	70	569	427	443	507	810	468	662	397	512	524	163
23	69	538	443	495	658	784	459	766	429	504	410	76
24	138	542	398	521	745	851	460	760	318	467	420	75
25	527	531	421	458	997	840	459	920	228	487	406	73
26	539	514	383	444	692	868	452	908	220	458	427	74
27	636	514	261	536	740	876	408	949	555	469	490	71
28	544	544	137	1,030	674	887	444	891	523	385	492	69
29	494	425	385	627	589	892	464	832	429	113	451	68
30	582	549	371	473	---	834	546	938	254	117	425	73
31	592	---	385	447	---	611	---	755	---	416	465	---
Total	10,386	16,217	12,440	14,838	15,252	23,203	14,337	20,113	17,559	11,925	14,215	10,149
Mean	335	541	401	479	526	748	478	649	585	385	459	338
Max	636	624	557	1,030	997	1,040	546	949	858	543	531	566
Min	50	425	137	209	337	538	382	391	220	113	406	68
Ac-ft	20,600	32,170	24,670	29,430	30,250	46,020	28,440	39,890	34,830	23,650	28,200	20,130

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928 - 2008, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	509	581	769	928	1,041	1,189	1,387	1,888	1,785	741	559	525
Max	898	3,275	4,375	5,659	4,788	3,950	4,896	5,092	6,243	3,384	1,117	949
(WY)	(1984)	(1951)	(1951)	(1997)	(1986)	(1983)	(2006)	(1952)	(1983)	(1983)	(1983)	(1983)
Min	8.97	25.3	70.1	65.5	100	115	221	273	262	106	77.5	67.7
(WY)	(1978)	(1930)	(1931)	(1991)	(1977)	(1977)	(1977)	(1987)	(1977)	(1928)	(1930)	(1930)

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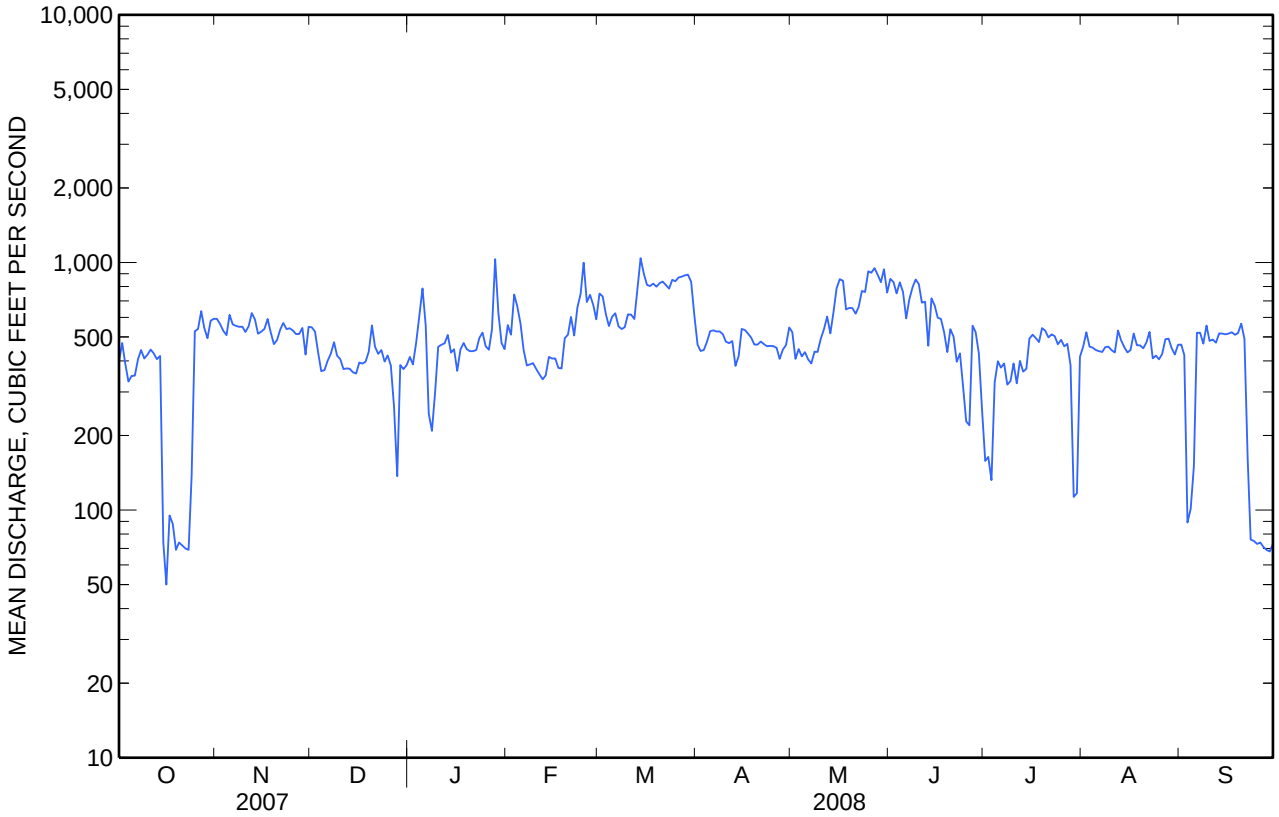
SUMMARY STATISTICS

	Calendar Year 2007		Water Year 2008		Water Years 1928 - 2008	
Annual total	187,285		180,634			
Annual mean	513		494		991	
Highest annual mean					2,511	1983
Lowest annual mean					208	1977
Highest daily mean	1,660	Feb 11	1,040	Mar 14	31,300	Jan 2, 1997
Lowest daily mean	50	Oct 16	50	Oct 16	6.6	Oct 2, 1977
Annual seven-day minimum	74	Oct 16	72	Sep 24	7.0	Sep 28, 1977
Maximum peak flow			1,420	Jan 28	41,300	Jan 2, 1997
Maximum peak stage			9.47	Jan 28	25.60	Jan 2, 1997
Annual runoff (ac-ft)	371,500		358,300		717,600	
10 percent exceeds	772		770		2,160	
50 percent exceeds	504		476		623	
90 percent exceeds	334		320		252