Water-Data Report 2007

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 2006 TO SEPTEMBER 2007
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	613	115	703	814	245	611	514	434	608	454	533	578
2	614	174	704	835	215	484	536	421	735	518	549	516
3	647	221	702	822	226	540	474	498	751	587	534	533
4	583	216	706	964	239	545	416	414	515	538	532	536
5	653	190	716	1,120	184	637	457	459	432	485	481	555
6	662	207	717	906	197	568	497	495	407	473	465	486
7	698	627	712	783	276	794	446	464	474	553	518	521
8	631	704	694	770	312	716	518	465	786	515	586	551
9	636	712	592	596	385	715	490	419	713	506	527	486
10	613	684	717	555	841	809	469	398	697	486	531	534
11	529	685	571	558	1,660	732	495	374	565	523	516	560
12	571	706	750	536	1,260	855	487	384	393	484	505	298
13	606	718	748	415	774	1,010	474	573	487	584	532	458
14	642	1,110	823	462	566	1,010	472	592	454	499	480	513
15	591	927	1,000	496	520	1,070	575	526	350	530	535	522
16	582	769	665	414	528	1,080	445	464	356	477	502	495
17	570	720	680	498	483	1,170	510	547	385	154	508	475
18	544	701	717	486	486	1,250	365	899	337	124	527	516
19	511	698	731	371	465	994	364	795	405	215	506	473
20	578	696	738	456	460	879	406	800	347	519	523	484
21	563	686	755	553	450	830	365	568	350	586	534	517
22	561	690	843	421	785	694	637	496	359	598	485	540
23	561	697	831	437	839	582	542	476	369	574	480	542
24	571	695	800	382	765	583	497	680	350	609	491	513
25	545	703	764	286	984	535	461	643	325	567	476	410
26	542	690	695	286	1,300	598	510	801	316	615	471	395
27	570	593	810	240	1,330	600	458	837	376	594	508	382
28	539	599	636	203	861	611	504	792	409	591	95	457
29	160	672	704	178	---	511	443	618	391	648	245	381
30	94	689	716	190	---	558	430	545	392	607	559	460
31	101	---	788	193	---	545	---	521	---	580	561	---
Total	16,881	18,294	22,728	16,226	17,636	23,116	14,257	17,398	13,834	15,793	15,295	14,687
Mean	545	610	733	523	630	746	475	561	461	509	493	490
Max	698	1,110	1,000	1,120	1,660	1,250	637	899	786	648	586	578
Min	94	115	571	178	184	484	364	374	316	124	95	298
Ac-ft	33,480	36,290	45,080	32,180	34,980	45,850	28,280	34,510	27,440	31,330	30,340	29,130

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928 - 2007, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	511	581	773	934	1,048	1,195	1,399	1,903	1,800	745	560	528
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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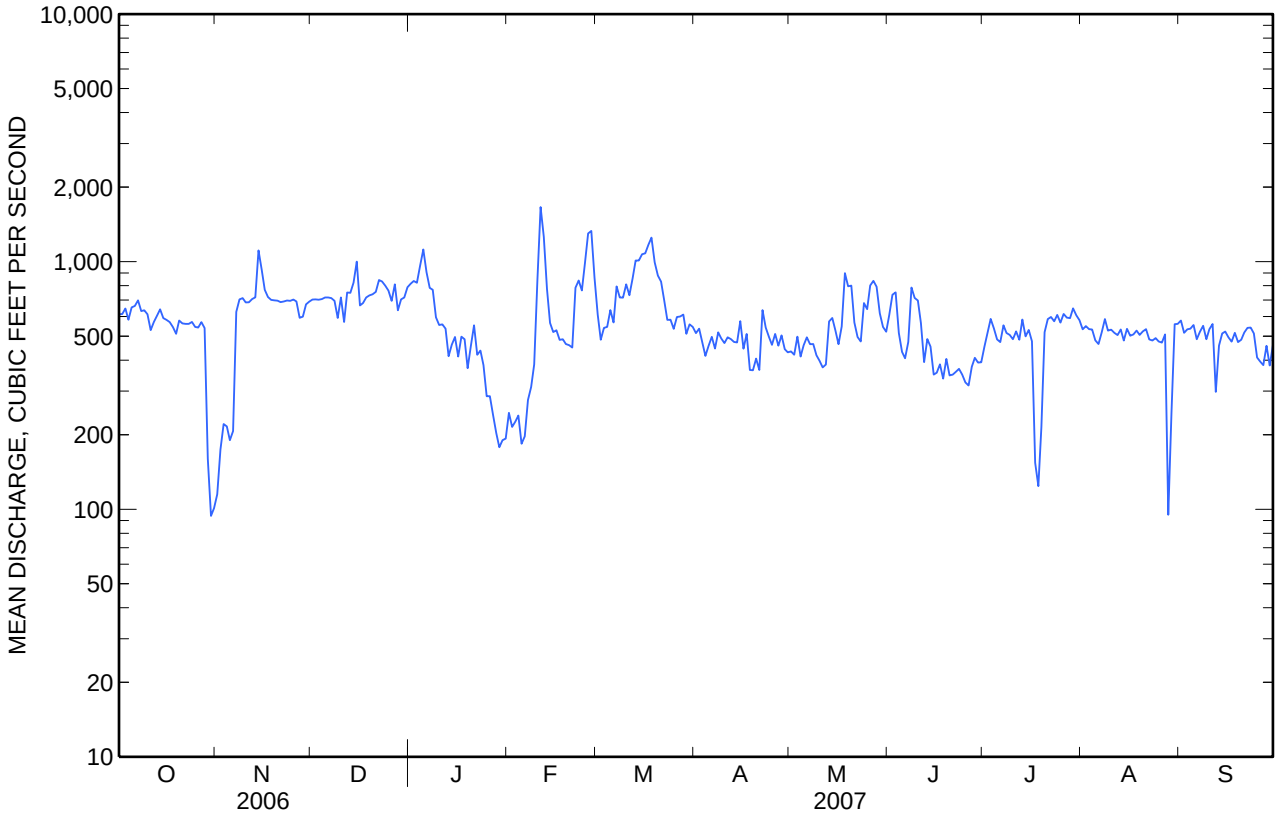
SUMMARY STATISTICS

	Calendar Year 2006		Water Year 2007		Water Years 1928 - 2007	
Annual total	699,230		206,145			
Annual mean	1,916		565		997	
Highest annual mean					2,511	1983
Lowest annual mean					208	1977
Highest daily mean	13,200	Apr 4	1,660	Feb 11	31,300	Jan 2, 1997
Lowest daily mean	87	Sep 12	94	Oct 30	6.6	Oct 2, 1977
Annual seven-day minimum	102	Sep 12	154	Oct 29	7.0	Sep 28, 1977
Maximum peak flow			2,100	Feb 11	41,300	Jan 2, 1997
Maximum peak stage			10.19	Feb 11	25.60	Jan 2, 1997
Annual runoff (ac-ft)	1,387,000		408,900		722,100	
10 percent exceeds	4,640		800		2,170	
50 percent exceeds	1,150		536		626	
90 percent exceeds	571		350		252