11235500 PORTAL POWERPLANT AT HUNTINGTON LAKE, CA

San Joaquin River Basin

LOCATION.--Lat 37°15′25″, long 119°09′30″ referenced to North American Datum of 1927, in SE ¼ SW ¼ sec.5, T.8 S., R.26 E., Fresno County, Hydrologic Unit 18040006, in Sierra National Forest, in powerplant at tunnel outlet at east end of Huntington Lake, 0.9 mi east of Lakeshore Post Office, and 6 mi northeast of town of Big Creek.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1927 to current year. Monthly discharge only for some periods, published in WSP 1315-A. Prior to October 1960, published as "Ward Tunnel at Outlet" and October 1960 to September 1991 as "Ward Tunnel Outlet at Huntington Lake."

GAGE.--Acoustic-velocity meter in tunnel since Dec. 1, 1987. Elevation of gage is 6,980 ft above NGVD of 1929, from topographic map. November 1927 to May 23, 1956, water-stage recorder at datum 6,999.00 ft above NGVD of 1929 (levels by Southern California Edison Co.). May 24, 1956, to Sept. 30, 1968, no recorder, see REMARKS below. Oct. 1, 1968, to Nov. 30, 1987, pressure-differential recorder recorded discharge through penstock.

REMARKS.--Daily discharge for the period May 24, 1956, to Sept. 30, 1968, computed as the sum of Ward Tunnel at Intake, Mono-Bear Conduit, Camp Creek Conduit, and corrected for change in contents of Portal Forebay. Powerplant receives water from Florence Lake (station 11229600) via Ward Tunnel, receives diversions from Bear and Mono Creeks (stations 11230520 and 11231550), and at times from several other small tributaries to South Fork San Joaquin River. See schematic diagram of lower San Joaquin River Basin.

COOPERATION.--Records were collected by Southern California Edison Co., under general supervision of the U.S. Geological Survey, in connection with Federal Energy Regulatory Commission project no. 2174.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 2,080 ft^3/s, June 21, 1935; no flow at times in many years.

11235500 PORTAL POWERPLANT AT HUNTINGTON LAKE, CA—Continued

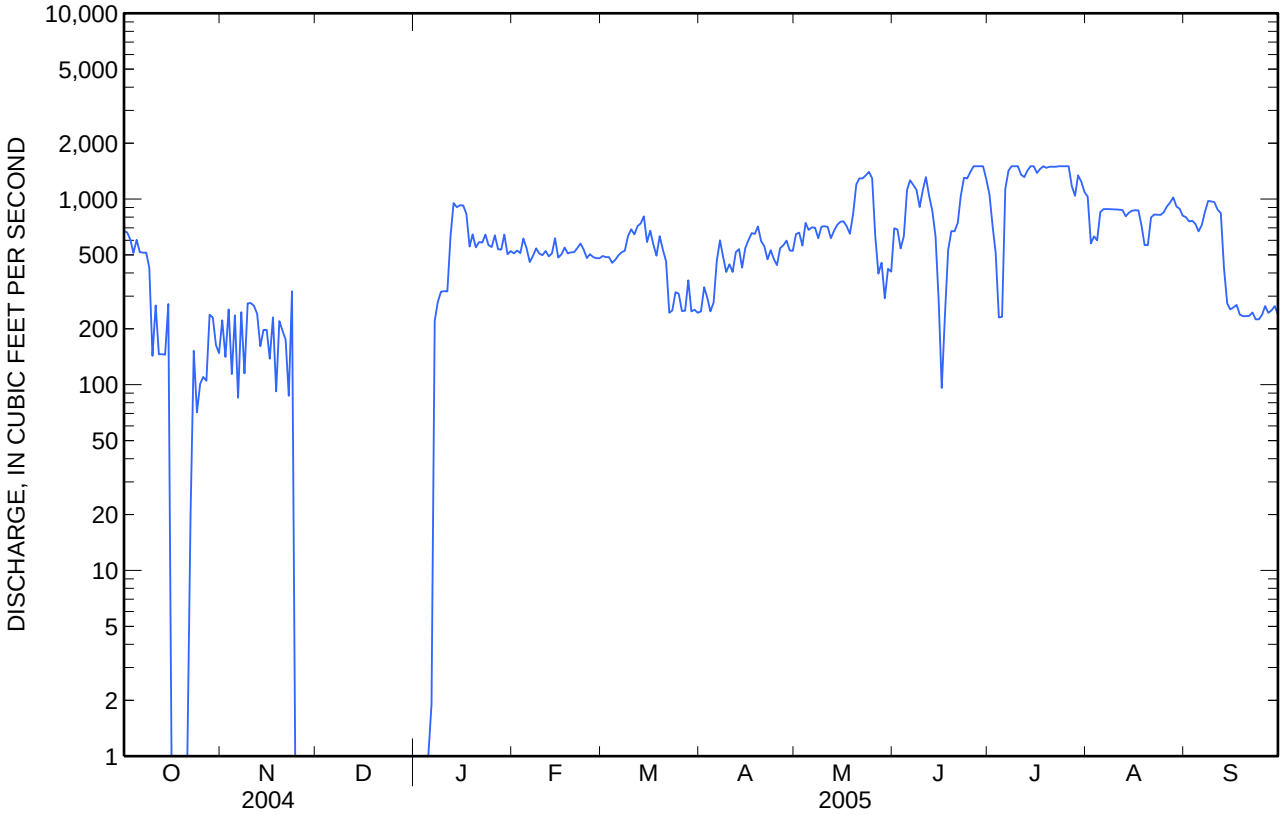
DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	673	222	0.00	0.00	509	493	248	647	695	1,060	1,030	798
2	660	141	0.00	0.00	527	486	335	659	685	711	577	757
3	603	254	0.00	0.00	511	486	295	561	541	512	629	763
4	512	114	0.00	0.00	612	453	248	743	630	230	599	735
5	602	236	0.00	0.00	544	471	277	681	1,120	232	849	669
6	517	85	0.00	1.9	457	498	465	703	1,260	1,130	881	723
7	514	246	0.00	221	494	516	599	701	1,190	1,420	881	852
8	514	115	0.00	278	542	526	485	615	1,120	1,500	881	976
9	427	274	0.00	317	509	631	404	709	905	1,500	880	970
10	143	275	0.00	319	498	686	445	713	1,120	1,500	878	960
11	267	266	0.00	318	524	645	404	707	1,310	1,350	875	876
12	146	241	0.00	634	491	715	517	614	1,040	1,310	871	839
13	146	161	0.00	951	510	737	537	675	863	1,420	806	423
14	145	197	0.00	903	614	807	427	726	630	1,500	843	274
15	272	197	0.00	925	483	586	544	754	280	1,500	865	254
16	0.00	138	0.00	922	503	675	600	758	96	1,380	869	261
17	0.00	230	0.00	831	548	566	655	712	238	1,450	868	269
18	0.00	92	0.00	554	509	495	648	650	532	1,500	714	238
19	0.00	220	0.00	645	516	631	712	829	672	1,470	564	234
20	0.00	195	0.00	549	517	533	593	1,200	669	1,490	564	234
21	0.00	175	0.00	586	543	462	557	1,290	744	1,490	795	235
22	20	87	0.00	582	576	244	473	1,290	1,040	1,490	824	245
23	152	319	0.00	643	534	251	530	1,340	1,300	1,500	823	225
24	71	0.00	0.00	564	481	315	474	1,400	1,290	1,500	821	225
25	101	0.00	0.00	551	504	309	440	1,290	1,400	1,500	847	238
26	110	0.00	0.00	637	487	249	544	638	1,500	1,500	911	265
27	105	0.00	0.00	536	480	250	563	396	1,500	1,170	956	244
28	238	0.00	0.00	534	480	365	597	454	1,500	1,040	1,020	251
29	230	0.00	0.00	643	---	248	528	292	1,500	1,340	910	265
30	163	0.00	0.00	504	---	253	525	421	1,280	1,240	885	239
31	148	---	0.00	524	---	244	---	406	---	1,090	813	---
Total	7,479.00	4,480.00	0.00	14,672.90	14,503	14,826	14,669	23,574	28,650	39,025	25,529	14,537
Mean	241	149	0.00	473	518	478	489	760	955	1,259	824	485
Max	673	319	0.00	951	614	807	712	1,400	1,500	1,500	1,030	976
Min	0.00	0.00	0.00	0.00	457	244	248	292	96	230	564	225
Ac-ft	14,830	8,890	0.00	29,100	28,770	29,410	29,100	46,760	56,830	77,410	50,640	28,830

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928 - 2005, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	326	258	263	253	255	298	516	847	931	842	671	510
Max	757	908	1,102	793	806	815	953	1,459	1,665	1,321	1,386	1,104
(WY)	(1996)	(1983)	(1946)	(1985)	(1985)	(1985)	(1936)	(1946)	(1974)	(1956)	(1995)	(1983)
Min	0.82	0.81	0.00	13.4	10.3	78.8	98.9	119	3.93	150	147	2.00
(WY)	(1946)	(1946)	(2005)	(1991)	(1991)	(1976)	(1991)	(1983)	(1938)	(1931)	(1934)	(1949)

11235500 PORTAL POWERPLANT AT HUNTINGTON LAKE, CA—Continued

SUMMARY STATISTICS

	Calendar Year 2004		Water Year 2005		Water Years 1928 - 2005	
Annual total	157,424.00		201,944.90			
Annual mean	430		553		499	
Highest annual mean					748	1997
Lowest annual mean					196	1977
Highest daily mean	1,750	Jun 12	1,500	Jun 26	2,080	Jun 21, 1935
Lowest daily mean	0.00	Jan 24	0.00	Oct 16	0.00	Sep 18, 1961
Annual seven-day minimum	0.00	Nov 24	0.00	Nov 24	0.00	Dec 2, 1969
Annual runoff (ac-ft)	312,300		400,600		361,300	
10 percent exceeds	962		1,250		1,090	
50 percent exceeds	328		524		462	
90 percent exceeds	0.00		0.00		61