11372350 Old Cow Creek below Diversion to Olsen Powerplant, near Whitmore, CA

Sacramento River Basin

LOCATION.--Lat 40°40′10″, long 121°53′27″ referenced to North American Datum of 1927, in NW ¼ SW ¼ sec.32, T.33 N., R.1 E., Shasta County, CA, Hydrologic Unit 18020118, on right bank, 1.2 mi downstream from Kilarc Powerhouse, 2.2 mi upstream from Glendenning Creek, and 3.0 mi north of Whitmore.

DRAINAGE AREA.--32.6 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--January 1990 to September 1991 (operated as low-flow station only); October 1996 to September 1997; October 1998 to September 2003; October 2004 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 2,340 ft above NGVD of 1929, from topographic map.

COOPERATION.--Records were collected by Synergics Incorporated, under general supervision of the U.S. Geological Survey, in connection with Federal Energy Regulatory Commission project no. 8361. Discharge for Olsen Powerplant (station 11372330), provided by Synergics Incorporated.

REMARKS.--This station records regulated bypass flow or natural flow only. During times of powerplant operation the minimum release requirement is 30 ft^3/s. See schematic diagram of Battle Creek and Cow Creek Basins available from the California Water Science Center.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,280 ft^3/s, Jan. 1, 1997, gage height, 7.29 ft; minimum daily, 6.9 ft^3/s, Aug. 7, 9, 1997.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	34	37	e32	31	31	30	31	30	31	31	28	26
2	35	41	e32	31	31	30	31	30	31	30	27	26
3	35	44	e33	31	31	30	31	30	31	30	27	26
4	38	43	e33	31	31	30	31	30	31	30	27	27
5	39	40	e32	33	31	30	31	30	31	30	27	26
6	38	36	e33	31	31	30	31	30	31	29	28	26
7	36	36	e32	38	31	30	31	30	31	29	28	27
8	34	e42	e33	50	31	30	31	31	31	29	28	27
9	33	e42	e35	47	53	30	31	31	31	29	28	27
10	34	e44	e31	39	149	30	31	31	31	29	28	26
11	33	e47	e31	31	153	30	31	31	31	30	27	26
12	32	e48	e31	33	45	30	31	31	31	30	28	26
13	33	e51	e31	31	35	30	31	30	30	29	27	27
14	35	e47	e31	31	34	30	31	30	30	29	27	28
15	36	43	e31	31	33	30	31	30	31	29	27	27
16	39	53	31	37	33	30	31	30	31	28	27	28
17	36	49	31	38	32	29	31	30	30	29	27	27
18	37	43	31	31	32	29	31	32	30	34	27	28
19	37	40	35	31	32	29	30	31	30	33	28	29
20	36	38	31	31	36	29	30	30	31	31	27	30
21	35	36	31	31	31	30	30	31	32	30	27	29
22	35	e34	31	31	31	30	30	31	32	30	26	29
23	35	e36	31	31	31	30	30	31	32	29	25	33
24	34	e38	31	31	31	30	30	30	32	29	26	30
25	34	e31	31	31	31	30	30	31	32	29	26	29
26	34	e31	31	31	36	30	30	31	31	29	26	29
27	34	e30	31	31	31	31	30	31	31	29	27	29
28	35	e30	31	31	30	31	30	31	31	28	27	30
29	36	e30	31	31	---	30	30	31	31	28	26	30
30	36	e33	31	31	---	30	31	31	31	28	26	30
31	35	---	31	31	---	31	---	31	---	28	26	---
Total	1,093	1,193	981	1,028	1,167	929	919	948	930	915	836	838
Mean	35.3	39.8	31.6	33.2	41.7	30.0	30.6	30.6	31.0	29.5	27.0	27.9
Max	39	53	35	50	153	31	31	32	32	34	28	33
Min	32	30	31	31	30	29	30	30	30	28	25	26
Ac-ft	2,170	2,370	1,950	2,040	2,310	1,840	1,820	1,880	1,840	1,810	1,660	1,660
Discharge, in acre-feet, for Olsen Powerplant	0	115	964	494	1,470	2,670	1,920	904	107	3.2	0	0

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2007, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	30.4	33.5	50.8	59.2	42.3	38.6	50.4	61.2	39.0	30.6	29.4	29.7
Max	36.8	45.1	110	184	69.1	59.6	165	168	75.9	45.1	41.1	35.9
(WY)	(1999)	(1999)	(2006)	(1997)	(2006)	(2006)	(2006)	(2006)	(2006)	(2006)	(1999)	(1999)
Min	21.2	27.5	29.1	27.1	20.4	17.4	18.2	16.7	17.1	10.4	19.7	25.7
(WY)	(2003)	(2003)	(2001)	(2001)	(2001)	(2001)	(2001)	(2001)	(2001)	(1997)	(1997)	(2001)

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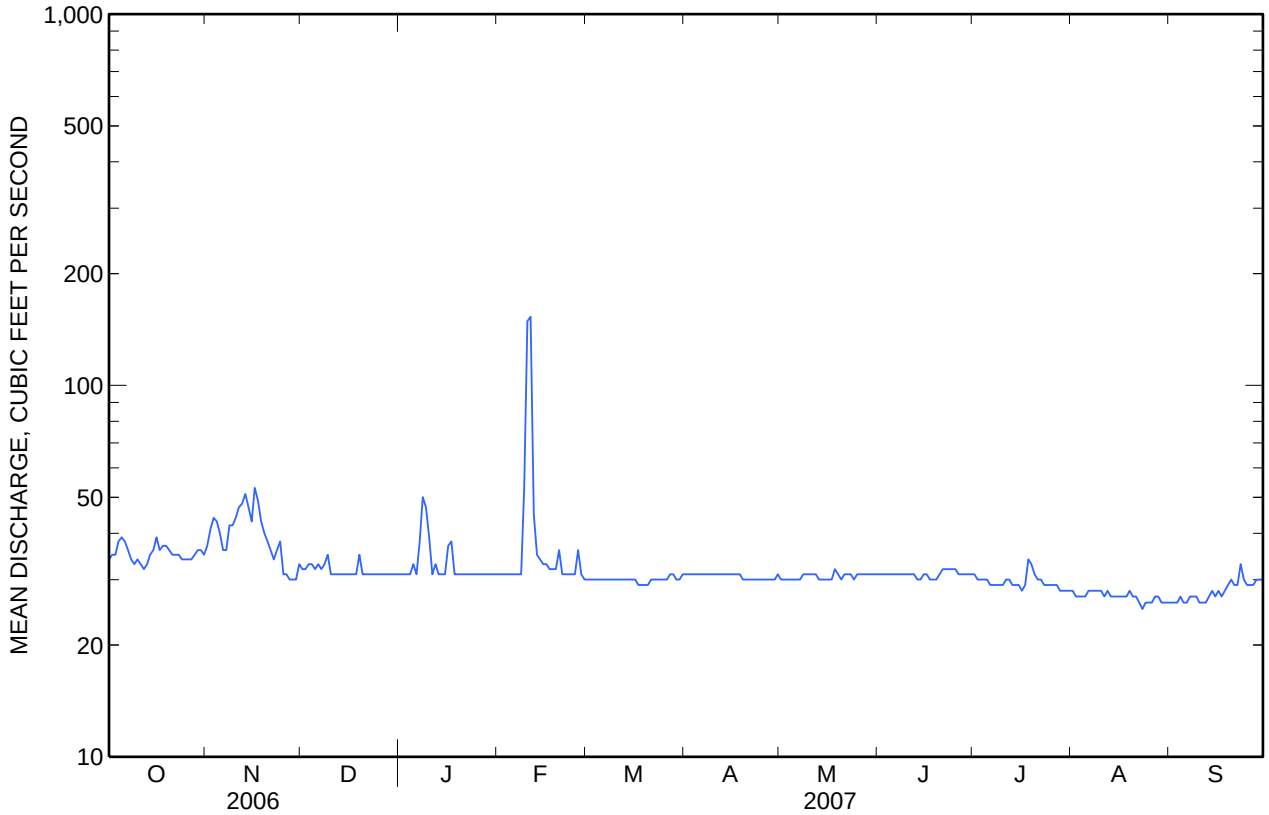
SUMMARY STATISTICS

	Calendar Year 2006		Water Year 2007		Water Years 1997 - 2007	
Annual total	25,863		11,777			
Annual mean	70.9		32.3		41.3	
Highest annual mean					76.0	2006
Lowest annual mean					22.5	2001
Highest daily mean	384	Jan 1	153	Feb 11	1,510	Jan 1, 1997
Lowest daily mean	30	Nov 27	25	Aug 23	6.9	Aug 7, 1997
Annual seven-day minimum	31	Nov 25	26	Aug 20	7.1	Aug 5, 1997
Maximum peak flow			252	Feb 10	2,280	Jan 1, 1997
Maximum peak stage			3.98	Feb 10	7.29	Jan 1, 1997
Annual runoff (ac-ft)	51,300		23,360		29,920	
10 percent exceeds	187		36		52	
50 percent exceeds	43		31		32	
90 percent exceeds	33		27		24