Water-Data Report 2008

11408000 Milton-Bowman Tunnel Outlet near Graniteville, CA

Sacramento River Basin

LOCATION.--Lat 39°27′37″, long 120°36′37″ referenced to North American Datum of 1927, in NW ¼ NE ¼ sec.3, T.18 N., R.12 E., Nevada County, CA, Hydrologic Unit 18020125, on right bank, 100 ft downstream from tunnel outlet, near upper end of Bowman Lake, and 6.9 mi east of Graniteville.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--May 1928 to September 1930, February 1931 to current year. Monthly discharge only for some periods, published in WSP 1315-A. Prior to October 1962, published as "Milton-Bowman tunnel at outlet."

GAGE.--Water-stage recorder and Parshall flume. Datum of gage is 5,592.51 ft above NGVD of 1929. Prior to Sept. 22, 1964, at datum 0.56 ft higher.

COOPERATION.--Records were collected by Nevada Irrigation District, under general supervision of the U.S. Geological Survey, in connection with Federal Energy Regulatory Commission project no. 2266.

REMARKS.--Tunnel diverts from Middle Yuba River at Milton Reservoir, in sec.12, T.19 N., R.12 E., and discharges into Bowman Lake. Nearly the entire flow of Middle Yuba River is diverted during low and medium flows. Middle Yuba River is regulated by Jackson Meadows Reservoir (station 11407800) since November 1964. See schematic diagram of North and Middle Yuba River Basins available from the California Water Science Center.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 492 ft^3/s, Feb. 11, 1941; minimum daily, 0.4 ft^3/s, Oct. 7, 1944.

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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	58	56	54	7.4	8.9	11	19	36	147	137	130	170
2	57	56	54	7.4	8.7	11	18	35	146	137	130	169
3	57	55	54	7.5	9.3	11	19	36	146	137	130	135
4	57	55	45	21	8.6	11	21	37	145	137	129	67
5	59	55	10	18	8.3	11	22	40	144	137	129	66
6	57	55	8.6	12	8.4	11	23	69	144	137	129	66
7	57	55	10	10	8.2	11	23	163	143	137	129	66
8	57	55	7.9	11	8.2	11	22	172	142	136	129	64
9	57	55	7.6	9.8	8.2	11	20	168	142	136	128	61
10	59	56	7.6	9.4	8.2	12	21	168	141	136	128	61
11	58	59	7.4	9.1	8.2	13	23	170	141	135	128	61
12	57	56	7.3	9.0	8.5	14	27	168	140	135	128	62
13	57	56	7.3	8.8	8.6	20	32	163	140	135	128	62
14	57	55	7.3	8.8	8.4	21	36	168	140	135	128	62
15	56	55	7.3	8.7	8.4	17	32	180	139	135	128	63
16	57	55	7.3	8.6	8.5	15	28	180	139	134	127	67
17	59	55	8.2	8.4	8.8	15	30	177	139	134	99	67
18	58	55	8.9	8.4	9.0	15	36	175	141	133	15	67
19	62	56	8.1	8.4	9.1	16	38	169	139	133	11	67
20	66	55	9.5	8.4	9.3	16	32	164	138	133	11	67
21	57	55	7.6	8.9	9.4	16	28	159	138	133	11	68
22	57	55	7.4	8.4	10	17	26	155	138	132	19	68
23	56	54	7.6	8.3	9.4	18	26	154	138	132	40	67
24	56	55	7.8	8.5	10	19	23	157	138	132	68	68
25	56	55	7.6	8.7	9.4	22	24	153	139	132	132	68
26	56	55	7.5	8.5	9.3	25	29	152	139	131	170	68
27	56	55	7.5	9.4	9.3	22	39	151	139	131	171	68
28	56	54	7.6	9.5	9.6	21	48	151	139	131	171	68
29	57	54	7.7	8.7	10	21	47	149	138	131	171	65
30	56	54	7.7	8.7	---	20	40	148	137	131	170	74
31	56	---	7.5	8.8	---	19	---	148	---	130	170	---
Total	1,781	1,656	420.8	296.5	258.2	493	852	4,315	4,219	4,155	3,487	2,252
Mean	57.5	55.2	13.6	9.56	8.90	15.9	28.4	139	141	134	112	75.1
Max	66	59	54	21	10	25	48	180	147	137	171	170
Min	56	54	7.3	7.4	8.2	11	18	35	137	130	11	61
Ac-ft	3,530	3,280	835	588	512	978	1,690	8,560	8,370	8,240	6,920	4,470

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928 - 1964, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	8.00	14.6	31.4	35.3	51.6	72.9	176	242	142	28.6	6.77	3.88
Max	101	65.4	118	124	143	213	294	414	272	90.9	26.8	10.1
(WY)	(1963)	(1951)	(1956)	(1942)	(1963)	(1940)	(1936)	(1937)	(1933)	(1938)	(1952)	(1952)
Min	.50	.50	.70	1.00	4.28	9.19	19.7	45.6	24.8	4.21	2.06	1.00
(WY)	(1931)	(1931)	(1931)	(1931)	(1931)	(1933)	(1938)	(1936)	(1934)	(1939)	(1964)	(1931)

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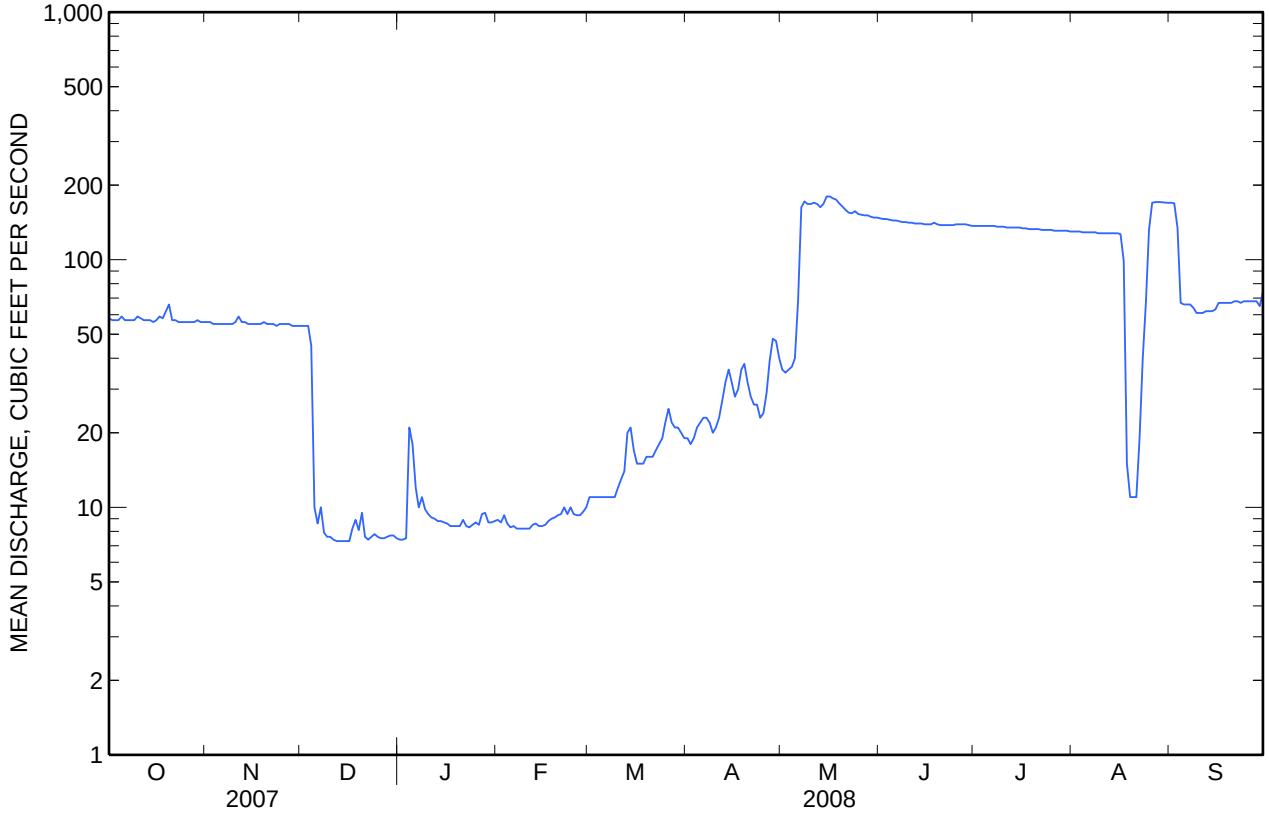
SUMMARY STATISTICS

	Water Years 1928 - 1964	
Annual mean	67.9	
Highest annual mean	97.2	1930
Lowest annual mean	33.5	1949
Highest daily mean	492	Feb 11, 1941
Lowest daily mean	.40	Oct 7, 1944
Annual seven-day minimum	.50	Oct 1, 1930
Annual runoff (ac-ft)	49,180	
10 percent exceeds	220	
50 percent exceeds	20	
90 percent exceeds	3.0	

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 2008, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	145	107	50.3	36.3	41.3	64.5	62.4	99.9	86.2	75.8	94.3	146
Max	310	368	357	211	197	265	225	333	280	174	253	300
(WY)	(1981)	(1973)	(1973)	(1985)	(1985)	(1986)	(1999)	(1969)	(1998)	(1976)	(1968)	(1974)
Min	1.52	1.34	1.25	1.17	1.20	1.68	5.38	7.69	5.23	3.95	2.20	1.72
(WY)	(1977)	(1977)	(1977)	(1977)	(1977)	(1977)	(1977)	(1986)	(1976)	(1977)	(1993)	(1981)

SUMMARY STATISTICS

	Calendar Year 2007		Water Year 2008		Water Years 1966 - 2008	
Annual total	19,725.6		24,185.5			
Annual mean	54.0		66.1		84.2	
Highest annual mean					133	1998
Lowest annual mean					14.5	1977
Highest daily mean	112	May 18	180	May 15	438	Nov 4, 1972
Lowest daily mean	7.3	Dec 12	7.3	Dec 12	1.1	Dec 11, 1976
Annual seven-day minimum	7.4	Dec 10	7.4	Dec 10	1.1	Dec 26, 1976
Annual runoff (ac-ft)	39,130		47,970		61,020	
10 percent exceeds	102		145		246	
50 percent exceeds	55		55		32	
90 percent exceeds	10		8.4		6.2	

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