Water-Data Report 2013

11416500 Canyon Creek below Bowman Lake, CA

Sacramento River Basin

LOCATION.--Lat 39°26′23″, long 120°39′37″ referenced to North American Datum of 1927, in NE ¼ SE ¼ sec.7, T.18 N., R.12 E., Nevada County, CA, Hydrologic Unit 18020125, on left bank, 1 mi downstream from Bowman Dam, 3.5 mi upstream from Texas Creek, and 8.8 mi south of Sierra City.

DRAINAGE AREA.--28.3 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--January 1927 to current year.

REVISED RECORDS.--WSP 1315-A: 1930 (instantaneous maximum discharge). WSP 1931: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 5,300 ft above NGVD of 1929, from topographic map.

COOPERATION.--Records, including diversion to Bowman-Spaulding Canal (station 11416000), 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.--Flow regulated by Bowman Lake (station 11415500), several smaller reservoirs, and diversion into Bowman-Spaulding Canal. See schematic diagram of North and Middle Yuba River Basins available from the California Water Science Center.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 5,500 ft^3/s, Jan. 2, 1997, gage height, 13.01 ft, from floodmarks (backwater from debris), from rating curve extended above 1,500 ft^3/s, on basis of computation of flow over Bowman Dam; no flow at times in some years.

11416500 Canyon Creek below Bowman Lake, CA—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	5.7	9.1	56	9.5	8.4	6.6	7.4	7.1	5.3	5.6	5.8	4.1
2	5.8	6.8	75	9.5	8.4	6.9	7.2	7.0	5.2	5.6	7.1	5.2
3	5.6	6.2	41	9.5	8.3	7.5	7.1	7.1	5.1	5.6	7.0	4.6
4	5.5	6.3	24	9.5	8.4	7.4	7.8	7.0	4.9	5.6	6.9	4.4
5	5.5	6.3	26	9.5	5.8	7.3	8.0	7.2	4.8	5.5	6.9	4.3
6	5.4	6.3	12	9.5	5.9	7.4	7.3	7.4	4.8	5.4	6.6	4.3
7	5.4	6.4	10	9.6	6.5	7.1	7.3	7.2	5.0	5.3	7.0	4.3
8	5.5	6.4	9.8	10	6.4	7.0	7.6	7.5	5.3	5.2	7.9	4.2
9	5.5	6.3	9.6	10	6.3	6.9	7.3	6.6	5.3	5.2	10	4.0
10	5.4	6.4	9.7	9.7	6.2	6.9	7.2	5.4	5.4	5.1	7.0	4.3
11	5.1	6.6	9.6	9.5	6.1	7.0	7.1	5.0	5.3	5.1	5.9	4.4
12	5.5	6.7	9.6	9.3	6.1	7.4	6.9	5.1	5.3	5.1	4.8	5.1
13	5.5	6.8	9.6	9.2	6.1	7.6	6.8	4.5	5.2	5.4	4.7	6.5
14	5.6	7.0	9.5	9.2	6.2	7.6	6.7	4.6	5.2	5.1	4.7	6.5
15	5.3	7.0	9.5	9.2	6.4	7.6	7.1	4.9	5.2	4.8	4.8	6.4
16	5.2	7.1	9.6	9.3	6.4	7.4	8.5	5.0	5.1	4.7	4.8	6.4
17	5.3	13	17	9.3	6.7	7.3	8.2	5.1	5.1	4.4	4.9	5.6
18	5.4	18	11	9.3	6.7	7.1	7.4	5.1	5.0	4.3	4.9	3.6
19	5.5	9.1	10	9.3	6.8	7.2	7.3	5.2	5.1	4.3	4.9	4.1
20	5.2	7.9	10	9.2	6.7	17	7.5	5.2	5.1	5.6	5.0	4.4
21	5.2	18	10	9.3	6.5	9.7	7.3	5.2	5.2	5.8	4.9	5.2
22	5.6	8.5	10	9.4	6.5	7.9	7.3	5.2	5.3	4.8	4.9	4.9
23	5.6	7.5	10	9.5	6.5	7.4	7.4	5.2	5.3	4.9	5.2	4.9
24	5.9	7.3	9.7	9.9	6.4	7.1	7.3	5.1	5.7	5.0	5.2	4.7
25	6.1	7.2	9.7	11	6.4	7.0	7.2	5.0	7.2	5.3	5.2	4.9
26	6.3	7.0	9.4	11	6.3	7.0	7.1	5.0	6.9	5.1	5.2	4.9
27	6.6	7.0	9.7	9.6	6.4	7.0	7.1	5.2	6.4	5.1	8.7	4.9
28	6.6	8.7	9.5	8.7	6.4	7.0	7.1	5.6	5.8	5.1	4.4	4.9
29	6.5	13	9.5	8.5	---	7.0	7.0	5.6	5.7	5.1	4.3	4.9
30	6.4	77	9.5	8.5	---	6.8	7.1	5.5	5.6	4.8	4.3	4.7
31	6.5	---	9.5	8.5	---	7.3	---	5.3	---	4.8	4.1	---
Total	176.2	316.9	485.0	293.0	186.2	235.4	219.6	177.1	161.8	158.7	178.0	145.6
Mean	5.68	10.6	15.6	9.45	6.65	7.59	7.32	5.71	5.39	5.12	5.74	4.85
Max	6.6	77	75	11	8.4	17	8.5	7.5	7.2	5.8	10	6.5
Min	5.1	6.2	9.4	8.5	5.8	6.6	6.7	4.5	4.8	4.3	4.1	3.6
Ac-ft	349	629	962	581	369	467	436	351	321	315	353	289
Diversion, in acre-feet, to Bowman-Spaulding Canal												
	13,830	8,660	8,710	9,290	461	650	4,790	11,600	10,970	12,070	15,700	16,200

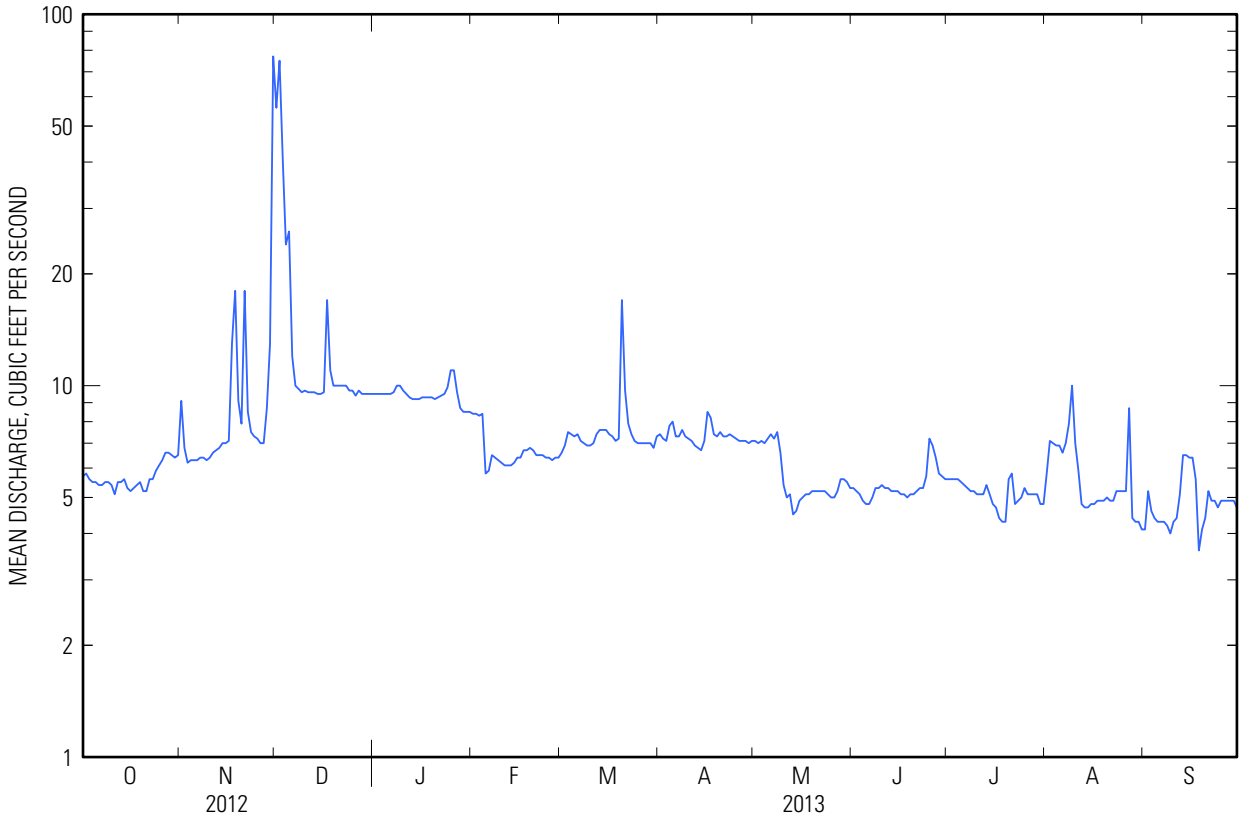
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1927 - 2013, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	3.45	6.13	18.0	24.8	17.5	27.5	42.0	125	136	14.7	3.08	3.09
Max	24.1	195	360	452	198	629	325	773	542	314	37.3	19.6
(WY)	(1973)	(1984)	(1965)	(1997)	(1965)	(1986)	(1940)	(1963)	(1952)	(1952)	(1952)	(2008)
Min	0.13	0.19	0.20	0.20	0.50	0.58	0.46	0.43	0.30	0.03	0.00	0.00
(WY)	(1935)	(1940)	(1937)	(1937)	(1933)	(1935)	(1934)	(1947)	(1977)	(1935)	(1934)	(1963)

11416500 Canyon Creek below Bowman Lake, CA—Continued

SUMMARY STATISTICS

[e, estimated]

	Calendar Year 2012		Water Year 2013		Water Years 1927 - 2013	
Annual total	8,777.3		2,733.5			
Annual mean	24.0		7.49		34.7	
Highest annual mean					165	1965
Lowest annual mean					0.81	1931
Highest daily mean	811	Apr 27	77	Nov 30	5,500	Jan 2, 1997
Lowest daily mean	3.1	Jan 18	3.6	Sep 18	0.00	Apr 16, 1934
Annual seven-day minimum	3.2	Jan 12	4.3	Sep 4	0.00	Apr 16, 1934
Maximum peak flow			141	Nov 30	e5,500	Jan 2, 1997
Maximum peak stage			5.43	Nov 30	13.01[a]	Jan 2, 1997
Annual runoff (ac-ft)	17,410		5,420		25,160	
Annual diversion (ac-ft) [b]	125,700		112,900			
10 percent exceeds	78		9.6		64	
50 percent exceeds	5.9		6.5		3.8	
90 percent exceeds	4.1		4.9		0.40	

[a] From floodmarks (backwater from debris).
[b] Diversion, in acre-feet, to Bowman-Spaulding Canal (station 11416000).