

Water-Data Report 2013

11403530 Bucks Creek below Diversion Dam, near Bucks Lodge, CA

Sacramento River Basin

LOCATION.--Lat 39°54'16", long 121°13'47" referenced to North American Datum of 1927, in NW ¼ SW ¼ sec.29, T.24 N., R.7 E., Plumas County, CA, Hydrologic Unit 18020121, Plumas National Forest, on left bank, 20 ft upstream from unnamed tributary, 0.2 mi downstream from diversion dam, and 3.6 mi northwest of Bucks Lodge.

DRAINAGE AREA.--31.5 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1990 to current year. Unpublished records for water years 1981-90 available in files of the U.S. Geological Survey. Seasonal records only for water years 1986-98.

GAGE.--Water-stage recorder and concrete control with V-notch sharp-crested weir Sept. 19, 1990, to Sept. 24, 1998. Ultrasonic-velocity meter since Sept. 24, 1998. Spill is included with this site. Elevation of gage is 4,850 ft above NGVD of 1929, from topographic map.

COOPERATION.--Records, including diversion to Grizzly Powerplant (station 11404240), were collected by Pacific Gas and Electric Co., under general supervision of the U.S. Geological Survey, in connection with Federal Energy Regulatory Commission project no. 619.

REMARKS.--Flow regulated by diversion dam at Lower Bucks Lake 0.2 mi upstream, where most of the flow is diverted to Grizzly Creek via Bucks Creek Tunnel outlet or Grizzly Powerplant. Low flows regulated by fixed-plate orifice until July 27, 2005. See schematic diagram of North Fork Feather River Basin available from the California Water Science Center.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge recorded, 5,870 ft³/s, Feb. 17, 1986, gage height, 9.54 ft; no flow on several days in February 1986.

11403530 Bucks Creek below Diversion Dam, near Bucks Lodge, 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	8.9	8.0	7.6	7.0	7.0	7.1	11	12	11	9.7	8.0	9.1
2	8.8	8.0	7.7	7.0	6.9	7.1	9.2	12	11	8.3	7.9	9.0
3	8.6	7.5	7.7	7.0	7.0	7.1	12	12	11	8.3	8.0	9.1
4	8.7	7.4	7.7	7.0	7.0	7.1	6.3	12	11	8.3	8.0	9.1
5	8.7	7.4	7.6	7.0	7.0	7.1	6.3	12	11	8.3	7.9	9.1
6	8.7	7.1	7.6	7.0	6.9	7.1	6.3	12	11	8.2	8.0	9.1
7	8.7	6.5	7.5	6.9	7.0	7.0	6.2	12	11	7.9	8.0	9.1
8	8.6	6.2	7.6	7.0	7.0	7.0	6.2	12	11	8.3	7.9	9.1
9	8.5	7.1	7.6	6.9	7.0	6.9	6.2	12	11	8.6	8.8	9.1
10	8.6	7.9	7.7	6.9	7.0	6.8	6.1	12	11	8.6	9.3	9.0
11	8.5	8.0	7.7	6.9	6.9	6.8	5.9	12	11	8.7	9.3	8.5
12	8.3	8.0	7.8	6.9	6.9	6.8	5.9	12	11	8.7	9.3	8.4
13	8.2	7.9	8.0	7.0	6.9	6.7	5.9	12	11	8.6	9.3	8.5
14	7.9	7.8	8.0	6.9	6.9	6.7	5.9	12	11	8.7	9.4	8.5
15	7.9	7.7	7.9	6.9	6.9	6.6	5.9	12	11	8.7	9.4	8.4
16	8.0	7.7	8.0	6.9	7.0	6.6	6.8	12	11	8.6	9.4	8.5
17	7.8	7.9	8.0	6.9	7.1	6.7	8.1	12	12	8.6	9.3	8.5
18	8.0	8.1	7.9	6.9	7.0	6.7	8.0	12	12	8.6	9.3	8.4
19	8.3	8.1	7.7	6.9	7.1	6.7	8.0	12	12	8.6	9.3	8.8
20	8.3	7.9	7.2	6.9	7.1	6.7	8.0	12	12	8.2	9.2	9.2
21	8.3	8.0	7.1	6.9	7.0	6.7	8.0	12	12	8.2	9.3	9.3
22	8.1	7.9	7.2	7.0	7.0	6.7	8.0	11	12	8.2	9.3	9.3
23	8.0	7.9	7.2	6.9	7.0	6.7	8.0	11	12	8.3	9.1	9.2
24	8.0	7.9	7.2	6.9	7.1	6.7	8.0	11	12	8.2	9.0	9.2
25	8.0	7.8	7.1	6.9	7.1	6.6	9.8	11	12	8.3	9.1	9.2
26	8.0	7.7	6.9	7.0	7.1	6.8	12	11	12	8.3	9.1	9.3
27	8.0	7.7	7.0	7.0	7.1	7.0	12	11	12	8.1	9.1	9.3
28	8.0	7.6	7.2	6.9	7.0	7.2	12	11	12	8.0	9.1	9.2
29	8.0	7.7	7.2	6.9	---	11	12	11	12	8.0	9.1	9.2
30	8.0	7.6	7.2	7.0	---	92	12	11	12	8.0	9.1	9.2
31	8.0	---	7.1	7.0	---	19	---	11	---	8.0	9.1	---
Total	256.4	230.0	232.9	215.2	196.0	313.7	246.0	362	344	260.1	275.4	268.9
Mean	8.27	7.67	7.51	6.94	7.00	10.1	8.20	11.7	11.5	8.39	8.88	8.96
Max	8.9	8.1	8.0	7.0	7.1	92	12	12	12	9.7	9.4	9.3
Min	7.8	6.2	6.9	6.9	6.9	6.6	5.9	11	11	7.9	7.9	8.4
Ac-ft	509	456	462	427	389	622	488	718	682	516	546	533
Diversion, in acre-feet, to Grizzly Powerplant	4,370	7,110	7,090	2,480	9,830	2,440	1,390	637	1,690	6,880	7,450	6,050

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986 - 2013, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	5.00	4.83	4.76	4.82	7.91	5.06	5.49	19.0	24.6	5.41	5.61	5.72
Max	8.81	8.74	12.4	10.6	57.9	11.9	8.20	187	167	10.0	9.81	11.6
(WY)	(2012)	(2012)	(2011)	(2012)	(1986)	(2011)	(2013)	(1995)	(1995)	(2008)	(2008)	(1993)
Min	1.54	1.64	1.54	1.50	1.50	1.52	2.70	1.78	1.47	1.45	1.45	1.51
(WY)	(1995)	(1996)	(1999)	(1999)	(1999)	(1999)	(1999)	(1994)	(1994)	(1994)	(1994)	(1994)

11403530 Bucks Creek below Diversion Dam, near Bucks Lodge, CA—Continued

SUMMARY STATISTICS

	Calendar Year 2012		Water Year 2013		Water Years 1986 - 2013	
Annual total	3,491.7		3,200.6			
Annual mean	9.54		8.77		7.09	
Highest annual mean					24.1	2006
Lowest annual mean					2.87	1999
Highest daily mean	20	Jan 30	92	Mar 30	1,340	May 18, 1996
Lowest daily mean	6.2	Nov 8	5.9	Apr 11	0.00	Feb 1, 1986
Annual seven-day minimum	7.0	Nov 3	6.0	Apr 9	0.00	Feb 1, 1986
Maximum peak flow			135	Mar 30	5,870	Feb 17, 1986
Maximum peak stage					9.54	Feb 17, 1986
Annual runoff (ac-ft)	6,930		6,350		5,130	
Annual Diversion (ac-ft)^a	64,250		57,410			
10 percent exceeds	13		12		9.5	
50 percent exceeds	8.5		8.0		5.6	
90 percent exceeds	7.7		6.9		1.6	

^a Diversion, in acre-feet, to Grizzly Powerplant (station 11404240).

