

Water-Data Report CA-2005

**1143000 SOUTH FORK RUBICON RIVER BELOW GERLE CREEK, NEAR GEORGETOWN, CA**

Sacramento River Basin

LOCATION.--Lat 38°57'17", long 120°24'02" referenced to North American Datum of 1927, in SW ¼ SW ¼ sec.22, T.13 N., R.14 E., El Dorado County, Hydrologic Unit 18020128, in Eldorado National Forest, on left bank, 600 ft downstream from Gerle Creek, 1.2 mi downstream from South Fork Rubicon River Diversion Dam, and 18 mi east of Georgetown.

DRAINAGE AREA.--47.6 mi<sup>2</sup>.

**WATER-DISCHARGE RECORDS**

PERIOD OF RECORD.--February 1910 to June 1914 (published as "Little South Fork Rubicon River below Gerle Creek, near Quintette"), August 1961 to current year.

REVISED RECORDS.--WSP 1931: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 4,970 ft above NGVD of 1929, from topographic map. Feb. 1, 1910, to June 21, 1914, nonrecording gage at site about 700 ft downstream at different datum.

REMARKS.--Beginning in 1884, flow regulated by Loon Lake (station 11429350). Original dam was dismantled during September and October 1962 to permit construction of a new earthfill dam completed Dec. 27, 1963. Loon Lake receives water from Rubicon River via Rubicon-Rockbound Tunnel (station 11427940) to Buck Island Lake and from Buck Island Lake to Loon Lake via Buck-Loon Tunnel (station 11428300). Prior to Dec. 3, 1961, water was diverted out of the basin in Georgetown Divide Ditch. Water is diverted 1.2 mi upstream at South Fork Rubicon River Diversion Dam to Robbs Peak Powerplant (station 11429300). Diversion of up to 1,440 ft<sup>3</sup>/s to Silver Creek Basin began in October 1962. See schematic diagram of Middle Fork American and Rubicon River Basins.

COOPERATION.--Records, including diversion to Robbs Peak Powerplant, were collected by Sacramento Municipal Utility District, under general supervision of the U.S. Geological Survey, in connection with Federal Energy Regulatory Commission project no. 2101.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,600 ft<sup>3</sup>/s, Jan. 1, 1997, gage height, 12.65 ft, from rating curve extended above 2,500 ft<sup>3</sup>/s, on basis of slope-area measurement of peak flow; minimum, 0.8 ft<sup>3</sup>/s, Sept. 21, 1962.

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**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	21	11	6.2	9.2	7.7	9.6	11	13	12	12	11	12
2	19	10	6.2	7.2	7.5	11	11	12	12	11	11	12
3	17	7.8	6.2	6.4	7.2	11	11	12	12	12	12	12
4	11	7.3	6.4	6.3	7.4	9.9	9.8	12	11	12	12	11
5	11	6.5	6.1	6.8	7.4	34	10	15	11	12	12	11
6	11	6.2	6.1	6.2	7.3	12	11	15	11	12	12	12
7	11	6.1	6.9	104	7.3	16	12	12	11	11	12	12
8	11	6.1	10	16	7.6	11	11	18	12	12	11	12
9	16	6.1	9.5	19	7.2	11	9.7	120	22	11	12	12
10	18	6.2	8.1	14	6.9	12	9.6	17	12	11	12	12
11	16	7.0	7.6	11	7.2	12	10	14	12	11	12	12
12	15	6.6	7.2	9.7	8.6	12	11	12	12	11	11	12
13	15	6.3	7.3	8.9	8.8	12	11	12	12	11	11	12
14	15	6.0	7.4	8.5	9.7	11	9.6	11	11	11	11	12
15	15	5.9	7.1	8.2	9.5	9.5	9.6	11	11	11	11	12
16	15	6.1	6.9	7.9	12	8.0	11	589	12	11	11	11
17	18	5.8	6.9	7.8	11	7.4	12	16	15	13	11	11
18	16	5.7	6.8	8.1	10	7.1	11	67	13	13	11	11
19	21	6.1	6.7	8.2	10	13	10	623	13	12	11	11
20	25	5.9	7.2	8.0	12	12	9.4	61	13	12	11	12
21	21	5.8	7.2	7.3	11	11	9.0	12	12	13	11	12
22	19	6.0	6.6	7.0	11	30	9.6	10	12	13	12	12
23	18	5.8	6.7	7.2	10	16	11	13	12	12	11	12
24	19	5.8	7.2	7.3	9.7	11	10	14	12	12	11	12
25	16	5.9	7.2	8.5	9.8	10	9.3	16	11	12	11	12
26	12	5.8	6.8	13	9.7	9.5	9.7	19	11	12	11	12
27	11	7.1	7.4	12	9.2	12	13	15	11	12	12	12
28	11	6.2	7.5	10	10	17	16	12	11	12	12	11
29	11	6.1	6.6	9.8	---	12	15	69	12	12	12	11
30	11	6.1	8.0	8.7	---	11	14	13	13	12	11	11
31	11	---	9.8	7.8	---	10	---	12	---	12	12	---
<b>Total</b>	477	195.3	223.8	380.0	252.7	391.0	327.3	1,867	367	366	354	351
<b>Mean</b>	15.4	6.51	7.22	12.3	9.03	12.6	10.9	60.2	12.2	11.8	11.4	11.7
<b>Max</b>	25	11	10	104	12	34	16	623	22	13	12	12
<b>Min</b>	11	5.7	6.1	6.2	6.9	7.1	9.0	10	11	11	11	11
<b>Ac-ft</b>	946	387	444	754	501	776	649	3,700	728	726	702	696
<b>Diversion, in acre-feet, to Robbs Peak Powerplant</b>	1,220	11,910	8,450	20,800	8,640	16,280	30,920	48,160	46,050	19,350	5,980	2,580

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 2005, BY WATER YEAR (WY)**

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Mean</b>	10.9	17.7	33.0	53.3	33.0	19.3	12.8	25.9	19.3	12.7	9.46	9.66
<b>Max</b>	52.2	268	396	530	524	130	141	276	249	92.5	13.2	22.3
<b>(WY)</b>	(1963)	(1984)	(1965)	(1997)	(1986)	(1986)	(1982)	(1996)	(1983)	(1967)	(2003)	(1982)
<b>Min</b>	2.40	2.75	4.79	4.86	5.03	3.11	2.35	2.42	2.29	2.36	2.03	1.99
<b>(WY)</b>	(1978)	(1978)	(1968)	(1968)	(1966)	(1977)	(1977)	(1977)	(1977)	(1977)	(1977)	(1977)

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SUMMARY STATISTICS

	Calendar Year 2004		Water Year 2005		Water Years 1963 - 2005	
Annual total	3,724.5		5,552.1			
Annual mean	10.2		15.2		21.4	
Highest annual mean					67.1	1997
Lowest annual mean					3.59	1977
Highest daily mean	25	Oct 20	623	May 19	8,050	Jan 1, 1997
Lowest daily mean	5.7	Nov 18	5.7	Nov 18	1.3	Sep 29, 1963
Annual seven-day minimum	5.9	Nov 20	5.9	Nov 20	1.5	Sep 28, 1963
Maximum peak flow			1,100	May 16	12,600	Jan 1, 1997
Maximum peak stage			6.13	May 16	12.65	Jan 1, 1997
Annual runoff (ac-ft)	7,390		11,010		15,510	
Annual diversion (ac-ft) a	148,000		220,600			
10 percent exceeds	13		15		13	
50 percent exceeds	11		11		8.9	
90 percent exceeds	6.4		6.7		5.3	

a Diversion, in acre-feet, to Robbs Peak Powerplant.

