



A. FISH CREEK NEAR DUARTE, CALIF.

Note broad-crested control used in southern California.



B. SAN JOAQUIN RIVER BELOW KERCKHOFF POWERHOUSE, CALIF.



C. NORTH FORK CACHE CREEK NEAR LOWER LAKE, CALIF.

FIGURE 1.—GAGING-STATION STRUCTURES.

tables are published for all stations except those at which the daily discharge for the greater part of the year was determined by the shifting-control method, the slope method, or other special methods.

The description of the station gives the type of gage, its latitude and longitude as determined from the best available maps, and information in regard to diversions that decrease the flow at the gage, artificial regulation from pondage or storage, and the accuracy of the records. Under "Average discharge" is given the average discharge for the number of years indicated. It is given only for stations for which there are 10 or more complete years of record. Under "Extremes" are given the maximum discharge and gage height; the minimum discharge if there is little or no regulation; the minimum daily discharge if there is extensive regulation (also the minimum discharge if useful); and the minimum gage height (unless it is of no importance). Unless otherwise qualified, the maximum discharge corresponds to the crest stage, obtained by use of a water-stage recorder or a nonrecording gage read at the time of the crest. Likewise the minimum discharge represents the lowest stage, unless otherwise qualified. Selected peak discharges with the times of their occurrence are given, below the table of monthly discharge, for some stations. This supplementary information is generally omitted for a station at which the drainage area of the stream is less than 10 or more than 10,000 square miles or at which, on most days, the peak discharge exceeds the mean discharge by less than 10 percent.

For stations equipped with water-stage recorders, except those on streams subject to sudden or rapid fluctuation, the table gives the discharge corresponding to the daily mean gage height. For stations subject to such fluctuation the daily mean gage height may not indicate the true daily mean discharge, which must be obtained by averaging the discharge for parts of the day or by using the discharge integrator, an instrument for obtaining the daily mean discharge from a continuous gage-height graph and containing as an essential element a curve representing the stage-discharge relation at the station. For stations equipped with nonrecording gages, the table of daily discharge gives the discharge in second-feet corresponding to once-daily readings of the gage or the mean of twice-daily readings. For periods of rapidly changing stage the daily mean discharge is determined from gage-height graphs based on gage readings made once or twice daily or oftener, as stated in the station description.

In the table of monthly discharge the column headed "Second-foot-days" gives the sum for each month of the figures given in the table of daily discharge. The column headed "Maximum" gives the maximum daily discharge, not the momentary discharge when the water surface was at crest stage. Likewise, in the column headed "Minimum" the quantity given is the minimum daily discharge. The column headed "Mean" gives the average flow in cubic feet per second during the month.

For most gaging stations on lakes and reservoirs the data presented comprise a description of the station and a monthly summary table of stage and contents. For some reservoirs a table showing daily contents is given. A skeleton table of capacity at given stages is usually given in the first report in which data for a station are published but is omitted from succeeding reports.

TIME BASIS

At 2 a.m. on February 9, 1942, as an emergency measure, the Nation shifted from standard time to "war time," and clock time in the several zones of the country was moved ahead 1 hour, or to 3 a.m. At 2 a.m., war time, on September 30, 1945, a change was made

Discharge, in second-feet, of Fresno River near Daulton, Calif., 1941-45--Continued

1944-45

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	0.4	32	28	66	1,780	127	566	224	168	a70	13	1.2
2	.6	31	61	59	4,610	114	494	224	172	a65	13	1.2
3	1.0	23	57	55	2,670	108	420	193	160	a60	13	1.2
4	1.6	11	38	48	1,060	369	380	185	177	a56	14	1.0
5	1.6	58	36	44	656	310	365	168	193	a52	9.7	.4
6	1.8	59	32	44	483	262	355	164	160	a49	8.8	.2
7	1.8	31	31	46	a380	247	360	157	157	a47	8.8	.8
8	2.5	28	29	48	a320	202	380	160	142	a45	9.7	.8
9	3.0	20	28	44	286	198	478	177	142	a43	9.7	.6
10	4.0	116	28	43	a240	185	345	185	146	41	7.0	.2
11	5.5	850	26	43	a200	172	300	181	157	39	6.0	0
12	5.0	491	26	46	a160	157	271	181	138	36	5.0	0
13	3.0	252	24	44	a130	149	254	195	142	32	5.0	0
14	2.5	105	25	41	a260	134	211	211	149	31	4.5	0
15	2.5	87	25	43	494	1,360	215	215	138	28	4.0	0
16	2.5	71	24	39	a280	734	215	206	142	26	4.0	0
17	2.5	61	24	38	a220	980	224	211	134	24	3.5	0
18	2.5	50	24	38	a200	662	229	181	131	21	4.5	0
19	2.0	44	26	38	185	466	243	189	131	20	5.0	0
20	1.6	43	28	39	164	410	238	215	111	20	3.5	0
21	1.6	41	32	43	134	390	202	177	111	20	2.5	0
22	2.0	36	34	41	124	566	181	164	105	20	2.5	.1
23	2.0	32	105	39	124	1,320	177	172	101	19	1.6	1.4
24	3.0	31	87	39	124	686	160	172	95	17	1.4	2.5
25	2.0	29	59	41	127	650	168	149	90	16	1.0	3.0
26	1.8	26	53	41	117	1,540	164	146	84	15	.8	2.5
27	1.6	25	44	39	117	1,060	202	153	84	14	.6	2.0
28	1.4	24	48	41	172	779	220	138	87	14	.6	2.0
29	1.2	26	114	41	-	680	220	142	82	14	.6	1.8
30	1.4	28	82	41	-	596	224	168	76	13	1.4	2.0
31	8.8	-	71	44	-	566	-	172	-	14	1.4	-

a No gage-height record; discharge computed on basis of 1 discharge measurement, weather records, and records for station near Knowles.

Monthly discharge, in second-feet, 1941-45

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October 1941	399	26	4	12.9	791
November	509	39	11	17.0	1,010
December	6,299	1,680	21	205	12,490
Calendar year	-	-	-	-	-
January 1942	8,000	855	105	258	15,870
February	8,834	945	184	316	17,520
March	9,942	1,120	152	321	19,720
April	9,043	785	216	301	17,940
May	7,543	410	183	243	14,960
June	5,082	220	129	169	10,080
July	2,354	153	2	75.9	4,670
August	264	14	2	8.5	524
September	144	8	2	4.8	286
Water year 1941-42	58,413	1,680	2	160	115,900
October 1942	250	11	5	8.1	496
November	1,357	477	12	45.2	2,690
December	1,660	315	24	53.5	3,290
Calendar year 1942	54,473	1,120	2	149	108,000
January 1943	9,124	1,800	31	294	18,100
February	7,045	535	112	252	13,970
March	20,409	2,300	150	658	40,480
April	9,345	389	263	312	18,540
May	6,150	286	116	198	12,200
June	2,265	116	36	75.5	4,490
July	741	33	7	23.9	1,470
August	228	11	4	7.4	452
September	98	4	1	3.3	194
Water year 1942-43	58,672	2,300	1	161	116,400
October 1943	316	35	3	10.2	627
November	258	16	4	8.6	512
December	472	94	4	15.2	936
Calendar year 1943	56,451	2,300	1	155	112,000
January 1944	1,131	72	16	36.5	2,240
February	5,556	1,190	54	192	11,020
March	7,134	1,090	81	230	14,150
April	4,419	406	92	147	8,760
May	4,388	173	103	142	8,700
June	2,692	126	23	89.7	5,340
July	365	25	6	11.7	720
August	107	6	1	3.5	212
September	39	4	0	1.3	77
Water year 1943-44	26,875	1,190	0	73.4	53,290

Monthly discharge, in second-feet, of Fresno River near Daulton, Calif., 1941-45--Continued

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October 1944	74.7	5.5	0.4	2.41	148
November	2,751	850	11	91.7	5,460
December	1,348	114	24	43.5	2,670
Calendar year 1944	30,002.7	1,190	0	82.0	59,500
January 1945	1,356	66	38	43.7	2,690
February	15,817	4,610	117	565	31,370
March	16,179	1,540	108	522	32,090
April	8,441	566	160	281	16,740
May	5,573	224	138	180	11,050
June	3,905	193	76	130	7,750
July	981	70	13	51.6	1,950
August	166.1	15	0.6	5.36	329
September	24.9	3.0		.85	49
Water year 1944-45	56,616.7	4,610	0	155	112,300

Time basis: Pacific standard time except 2 a.m., Feb. 9, 1942, to 2 a.m., Sept. 30, 1945, when Pacific war time was used. To convert war time to standard time, subtract 1 hour.

CHAMBERLAIN SLOUGH BASIN

Chamberlain Slough near El Nido, Calif.

Location.- Water-stage recorder, lat. 37°06'45", long. 120°35'20", in sec. 31, T. 9 S., R. 13 E., 30 feet downstream from head and 5 miles southwest of El Nido. Datum of gage is 100.14 feet above mean sea level (Bureau of Reclamation bench mark).

Records available.- October 1939 to September 1945.

Extremes.- 1944-45: Maximum discharge during water year, 2,060 second-feet Feb. 9 (gage height, 9.84 feet); no flow at times in October (result of irrigation operations).

Remarks.- Records good except those for periods of no gage-height record or indefinite stage-discharge relation, which are fair. Flow regulated by Friant and Mendota Dams and by diversion through Temple Slough. Many diversions from river above station for irrigation. No diversion from slough above station. Same recorder used for San Joaquin River near El Nido.

Cooperation.- One discharge measurement furnished by Miller & Lux, Inc. Ten discharge measurements and records for October 1939 to September 1944 furnished by Bureau of Reclamation.

Discharge, in second-feet, 1939-45

1939-40

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	2	1	1	131	1,040	1,540	1,510	575	1,710	354	8	4
2	2	1	1	123	870	1,600	1,510	595	1,630	359	8	4
3	2	1	1	115	810	1,620	1,560	670	1,530	371	9	4
4	2	1	192	105	795	1,600	1,580	960	1,500	362	9	4
5	2	1	199	107	875	1,570	1,510	1,140	1,490	349	9	4
6	2	1	170	249	1,180	1,540	1,290	1,240	1,490	274	8	4
7	2	1	98	320	1,290	1,510	1,160	1,220	1,480	183	8	4
8	2	1	67	318	1,280	1,460	1,050	1,270	1,380	157	7	4
9	2	1	73	269	1,220	1,390	950	1,270	1,260	123	7	4
10	2	1	103	253	1,110	1,340	910	1,330	1,260	85	7	4
11	2	1	129	545	945	1,310	890	1,410	1,320	50	6	4
12	2	1	124	955	825	1,290	885	1,490	1,380	36	4	4
13	2	1	153	1,170	720	1,210	910	1,590	1,420	30	3	4
14	2	1	157	1,440	695	1,130	940	1,660	1,450	26	3	4
15	2	1	111	1,430	705	990	1,020	1,680	1,460	24	3	4
16	2	1	111	1,170	745	895	1,070	1,710	1,480	22	3	4
17	2	1	120	815	890	655	1,100	1,730	1,480	387	3	4
18	2	1	121	620	860	665	1,070	1,740	1,480	575	3	4
19	2	1	121	520	825	665	815	1,750	1,470	284	3	4
20	2	1	118	457	830	685	695	1,750	1,460	206	4	4
21	2	1	117	434	745	421	800	1,750	1,430	176	4	4
22	1	1	113	404	750	314	875	1,750	1,300	129	4	4
23	1	1	108	368	750	348	910	1,730	1,010	56	4	3
24	1	1	108	324	715	500	965	1,730	865	35	4	3
25	1	1	114	312	940	760	1,120	1,780	825	26	4	3
26	1	1	135	340	1,280	1,060	1,200	1,730	760	19	5	3
27	1	1	133	465	1,350	1,240	1,240	1,730	595	14	5	3
28	1	1	108	1,210	1,410	1,390	1,220	1,730	520	11	5	3
29	1	1	79	1,440	1,490	1,490	1,490	1,730	395	10	5	3
30	1	1	80	1,420	-	1,560	765	1,720	355	9	5	3
31	1	-	120	1,290	-	1,560	-	1,720	-	8	4	-

Discharge, in second-feet, of Chamberlain Slough near El Mido, Calif., 1939-45--Continued

1940-41

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	4	3	1	1,790	1,180	1,890	1,630	1,680	2,250	2,100	80	4
2	5	3	1	1,710	1,090	1,860	1,680	1,740	2,250	1,970	39	4
3	5	3	1	1,540	1,020	1,940	1,560	1,770	2,230	1,830	30	4
4	5	3	1	1,260	920	2,110	1,600	1,770	2,210	1,760	25	4
5	5	3	1	1,050	865	2,210	1,630	1,780	2,160	1,770	20	3
6	5	2	1	990	925	2,210	1,680	1,800	2,140	1,820	15	3
7	5	2	1	910	920	2,160	1,800	1,810	2,140	1,860	13	2
8	6	2	1	820	1,020	2,100	1,820	1,830	2,150	1,890	12	2
9	6	2	1	1,070	1,240	2,060	1,810	1,860	2,170	1,880	11	2
10	5	2	29	1,350	1,310	1,980	1,800	1,900	2,210	1,870	10	2
11	5	2	77	1,400	1,490	1,920	1,790	1,940	2,230	1,820	10	2
12	5	2	97	1,300	1,820	1,870	1,810	2,000	2,250	1,750	11	2
13	5	2	128	1,150	2,020	1,840	1,870	2,050	2,240	1,670	10	2
14	5	2	161	990	2,110	1,820	1,890	2,110	2,220	1,630	10	2
15	5	2	222	875	2,150	1,810	1,880	2,140	2,210	1,560	7	2
16	4	1	253	1,020	2,130	1,810	1,840	2,160	2,220	1,130	6	2
17	4	1	250	1,130	2,120	1,790	1,820	2,180	2,240	900	5	2
18	4	1	210	1,110	2,080	1,750	1,810	2,170	2,270	910	5	2
19	5	1	240	1,020	2,060	1,720	1,810	2,160	2,290	905	5	1
20	5	1	331	900	2,020	1,730	1,780	2,150	2,300	520	5	1
21	5	1	378	820	1,960	1,750	1,740	2,150	2,310	410	6	1
22	4	1	400	745	1,910	1,750	1,690	2,150	2,320	400	6	1
23	4	1	370	775	1,860	1,730	1,600	2,140	2,330	385	5	1
24	4	1	385	855	1,860	1,690	1,570	2,130	2,350	383	5	1
25	4	1	695	905	1,850	1,640	1,530	2,130	2,350	380	5	1
26	4	1	1,250	1,320	1,890	1,610	1,490	2,130	2,350	378	5	1
27	4	1	1,320	1,630	1,920	1,620	1,520	2,150	2,330	377	4	1
28	4	1	1,180	1,650	1,920	1,620	1,570	2,170	2,300	372	4	1
29	3	1	1,350	1,540	-	1,610	1,580	2,210	2,270	299	4	1
30	3	1	1,650	1,440	-	1,630	1,600	2,250	2,200	169	4	1
31	3	-	1,800	1,280	-	1,640	-	2,240	-	112	4	-

1941-42

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	1	0	238	1,540	1,910	1,080	341	1,410	2,220	1,490	126	11
2	1	0	238	1,800	1,870	1,020	376	1,310	2,210	1,190	102	10
3	1	0	245	1,280	1,790	960	413	1,220	2,160	1,190	72	10
4	1	0	254	1,840	1,660	895	444	1,200	2,100	1,220	42	10
5	1	0	309	1,730	1,680	875	565	1,150	2,050	1,260	30	10
6	1	0	660	1,680	1,560	915	710	1,060	2,030	1,320	27	10
7	1	0	960	1,400	1,600	930	1,060	1,030	2,030	1,380	24	10
8	1	0	935	1,270	1,680	930	1,190	1,030	2,050	1,440	21	10
9	1	0	850	1,210	1,800	900	1,140	1,060	2,070	1,510	19	9
10	1	20	750	1,180	1,860	900	1,090	1,160	2,100	1,520	18	9
11	1	37	675	1,180	1,850	760	1,270	1,310	2,140	1,490	18	9
12	1	28	775	1,190	1,820	800	1,330	1,460	2,170	1,330	17	9
13	1	14	695	1,160	1,760	940	1,320	1,580	2,210	1,220	16	9
14	1	7	655	1,110	1,680	1,170	1,320	1,650	2,240	1,050	15	9
15	1	9	630	1,120	1,610	1,300	1,310	1,620	2,270	880	15	9
16	0	27	640	1,010	1,520	1,330	1,430	1,350	2,290	800	15	9
17	1	105	620	1,620	1,420	1,420	1,590	1,080	2,300	655	14	8
18	0	127	665	1,010	1,350	1,600	1,700	1,000	2,300	655	13	8
19	0	148	760	1,070	1,250	1,380	1,680	895	2,310	710	13	8
20	0	153	845	1,260	1,230	1,240	1,670	835	2,310	725	13	7
21	1	157	840	1,320	1,200	1,150	1,600	935	2,330	695	13	7
22	1	162	800	1,090	1,180	1,080	1,460	1,120	2,340	486	13	7
23	1	140	770	995	1,170	995	1,400	1,380	2,320	355	12	7
24	1	110	745	1,000	1,220	955	1,400	1,570	2,320	285	12	7
25	0	119	725	1,120	1,250	780	1,530	1,730	2,290	271	12	7
26	0	121	745	1,260	1,220	735	1,590	1,860	2,250	242	11	7
27	0	99	750	1,410	1,190	595	1,590	1,950	2,200	213	11	6
28	0	97	720	1,640	1,130	570	1,580	2,020	2,140	205	11	6
29	0	119	755	1,780	-	429	1,540	2,080	2,080	169	11	6
30	0	202	920	1,860	-	424	1,480	2,160	1,900	160	11	6
31	0	-	1,200	1,920	-	358	-	2,200	-	142	11	-

Discharge, in second-feet, of Chamberlain Slough near El Nido, Calif., 1939-45--Continued

1942-43

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5	6	214	685	2,130	1,440	2,070	1,830	2,170	119	7	3
2	5	9	205	670	2,090	1,210	2,100	1,950	2,220	132	7	3
3	5	10	204	640	2,040	1,050	2,090	2,010	2,280	176	7	3
4	4	10	222	545	1,970	910	2,060	2,040	2,310	207	7	3
5	4	28	223	482	1,900	975	2,040	2,040	2,310	219	7	3
6	4	74	215	439	1,780	955	2,030	1,970	2,320	223	7	3
7	4	105	242	421	1,640	1,050	2,030	1,890	2,270	211	7	2
8	4	140	242	418	1,550	1,410	2,040	1,870	2,140	196	7	2
9	4	147	227	430	1,470	1,760	2,030	1,890	1,520	208	7	2
10	4	147	193	405	1,440	1,930	2,010	1,940	865	224	7	2
11	4	139	195	399	1,510	2,060	2,000	1,980	870	224	7	3
12	4	119	224	392	1,550	2,220	1,990	1,970	970	214	7	3
13	4	111	266	346	1,490	2,330	1,960	1,940	1,040	201	7	3
14	4	109	283	328	1,390	2,370	1,870	1,910	1,080	188	7	3
15	4	108	299	334	1,340	2,440	1,730	1,860	920	127	7	3
16	4	107	274	332	1,300	2,460	1,600	1,810	750	33	7	3
17	4	98	249	335	1,230	2,460	1,590	1,700	715	19	7	3
18	4	88	268	337	1,130	2,420	1,670	1,460	700	15	6	4
19	3	87	298	326	1,050	2,370	1,740	1,080	770	13	6	4
20	3	120	326	286	940	2,360	1,800	855	960	12	6	4
21	3	484	332	266	990	2,350	1,850	710	1,110	11	6	4
22	3	865	345	278	1,040	2,350	1,850	660	1,150	10	5	4
23	3	775	372	452	1,060	2,330	1,830	680	1,140	10	5	4
24	3	600	364	1,240	1,190	2,300	1,820	790	1,020	10	5	5
25	3	407	417	1,740	1,340	2,260	1,820	1,060	735	9	4	5
26	4	294	476	2,060	1,480	2,220	1,840	1,350	515	9	4	5
27	4	289	700	2,220	1,570	2,180	1,870	1,550	348	9	4	6
28	4	292	910	2,320	1,570	2,120	1,880	1,700	268	8	4	6
29	4	261	935	2,360	-	2,060	1,820	1,650	226	8	4	6
30	4	223	765	2,320	-	2,040	1,750	1,970	139	8	4	6
31	4	-	695	2,220	-	2,040	-	2,080	-	7	4	-

1943-44

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	7	6	3	190	268	189	10	9	85	67	5	3
2	7	6	3	255	259	210	9	8	81	67	4	3
3	6	6	3	255	256	282	8	7	75	68	4	5
4	7	5	3	266	262	377	7	6	74	69	4	7
5	7	6	2	233	266	336	6	6	77	69	4	6
6	7	6	2	223	273	433	6	6	80	68	4	4
7	7	6	2	210	285	482	6	6	81	65	4	3
8	7	5	2	220	299	590	6	6	82	58	4	3
9	7	5	3	274	292	670	6	6	77	57	3	4
10	7	5	3	317	221	525	6	6	81	58	3	4
11	7	5	2	335	173	342	8	6	85	56	3	5
12	7	5	2	337	285	284	7	6	89	53	3	3
13	7	5	2	342	256	263	7	7	88	48	3	4
14	7	5	2	339	351	242	7	7	79	21	4	5
15	7	5	2	317	328	218	7	8	71	9	4	6
16	7	6	2	310	307	197	8	9	69	6	4	8
17	7	6	2	307	279	212	8	10	70	6	5	9
18	7	5	2	304	263	256	9	11	70	5	4	10
19	7	5	2	302	258	220	8	11	71	4	4	11
20	7	5	3	292	256	194	9	20	71	4	4	9
21	7	5	3	285	255	187	9	48	71	4	3	6
22	7	5	69	281	266	157	8	51	70	5	3	5
23	7	4	83	277	266	111	8	50	72	4	3	5
24	6	4	86	276	305	73	8	54	74	4	3	4
25	6	4	107	267	378	34	8	64	73	5	3	4
26	6	4	112	267	358	20	7	68	74	5	3	6
27	6	4	109	267	330	17	9	78	74	5	4	5
28	6	3	110	273	280	14	9	83	72	5	6	3
29	6	3	125	286	237	12	9	87	68	5	6	0
30	6	3	128	292	-	12	9	91	66	5	4	0
31	6	-	142	279	-	11	-	94	-	5	3	-

SACRAMENTO RIVER MAIN STEM

Sacramento River at Delta, Calif.

Location.- Water-stage recorder, lat. 40°56'14", long. 122°25'05", in NW¼ sec. 35, T. 36 N., R. 5 W., 0.2 mile downstream from Dog Creek and 0.6 mile southeast of Delta.
Datum of gage is 1,075.00 feet above mean sea level (levels by Bureau of Reclamation).

Drainage area.- 427 square miles.

Records available.- December 1944 to September 1945.

Extremes.- Maximum discharge during period, 12,000 second-feet Feb. 2 (gage height, 11.75 feet); minimum, 148 second-feet Sept. 13.

Remarks.- Records excellent. Small diversions above station for irrigation.

Rating table, Dec. 14, 1944, to Sept. 30, 1945
(gage height, in feet, and discharge, in second-feet)

3.7	146	5.5	935	8.0	3,500
3.9	158	6.0	1,290	9.0	5,200
4.1	245	6.5	1,720	10.0	7,370
4.5	390	7.0	2,240	11.0	9,940
5.0	630	7.5	2,820		

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1			-	954	5,180	850	1,610	1,860	961	350	202	172
2			-	890	9,800	518	1,430	1,930	916	340	199	170
3			-	835	6,390	793	1,510	1,940	885	329	186	170
4			-	793	3,760	763	1,230	1,890	922	318	183	170
5			-	781	6,500	745	1,200	1,790	870	312	181	170
6			-	775	3,990	769	1,180	1,650	831	304	186	170
7			-	850	2,860	739	1,180	1,510	775	301	193	165
8			-	902	3,160	751	1,480	1,430	745	294	188	163
9			-	896	2,920	727	1,510	1,350	709	290	186	161
10			-	955	2,420	685	1,200	1,410	674	298	185	161
11			-	935	2,140	709	1,150	1,200	646	304	181	161
12			-	864	1,940	775	1,100	1,390	619	290	181	157
13			-	844	2,210	805	1,060	1,990	597	280	179	156
14			452	853	2,600	775	1,020	1,910	570	273	179	154
15			434	1,020	2,180	757	1,060	1,680	550	266	181	154
16			414	948	1,920	757	1,290	1,650	525	259	179	154
17			406	853	1,740	838	1,480	1,560	505	252	176	154
18			406	838	1,570	799	1,690	1,460	490	248	176	154
19			758	757	1,410	518	1,930	1,310	475	245	186	154
20			2,930	759	1,290	1,060	2,140	1,190	462	239	183	156
21			2,020	697	1,190	1,240	2,210	1,100	448	236	176	165
22			3,590	668	1,130	1,750	1,930	1,120	439	230	174	167
23			2,540	646	1,080	1,500	1,750	1,310	434	227	172	170
24			1,820	624	1,020	1,460	2,000	1,150	430	227	172	170
25			1,390	602	974	1,410	2,000	1,070	462	224	170	167
26			1,190	586	935	1,340	1,600	1,100	462	221	172	163
27			1,180	565	909	1,360	1,490	1,100	414	218	172	165
28			1,500	545	876	1,370	1,520	1,040	394	212	172	165
29			1,310	530	-	1,360	1,630	994	374	210	172	165
30			1,180	550	-	1,340	1,720	987	358	207	174	165
31			1,040	1,790	-	1,530	-	1,030	-	204	174	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	-	-	-	-	-
November.....	-	-	-	-	-
December 14-31	24,390	3,590	406	1,355	48,580
Calendar year	-	-	-	-	-
January.....	25,188	1,790	530	813	49,960
February.....	74,094	9,800	876	2,646	147,000
March.....	31,723	1,800	685	1,023	62,920
April.....	44,900	2,210	1,020	1,497	89,080
May.....	44,131	1,990	927	1,424	87,530
June.....	17,940	961	358	598	35,580
July.....	8,208	350	204	265	16,280
August.....	5,628	202	170	182	11,160
September.....	4,888	172	154	163	9,700
The period.....	-	-	-	-	557,600

Peak discharge.- Dec. 22 (9:30 a.m.) 4,430 sec.-ft.; Feb. 2 (7:30 p.m.) 12,000 sec.-ft.; Feb. 5 (6 a.m.) 8,200 sec.-ft.
Time basis: Pacific war time up to 2 a.m., Sept. 30, 1945; Pacific standard time thereafter.
To convert war time to standard time, subtract 1 hour.

Shasta Reservoir near Redding, Calif.

Location.— Water-stage recorder, lat. 40°43', long. 122°25', in S½ sec. 15, T. 33 N., R. 5 W., at Shasta Dam on Sacramento River, 2 miles downstream from Squaw Creek and 9.5 miles north of Redding. Datum of gage is at mean sea level (levels by Bureau of Reclamation).

Drainage area.— 6,665 square miles (excluding Goose Lake Basin).

Records available.— November 1942 to September 1945.

Extremes.— Maximum contents during year, 3,153,000 acre-feet June 16, 17 (elevation, 1,014.4 feet); minimum, 918,700 acre-feet Oct. 1 (elevation, 877.55 feet).
1942-45: Maximum contents, that of June 16, 17, 1945; minimum, 1,960 acre-feet Dec. 21, 1942 (elevation, 616.5 feet).

Remarks.— Reservoir is formed by concrete gravity-type dam not yet completed; regulation of discharge from reservoir began Dec. 30, 1943. Temporary usable capacity, 3,563,000 acre-feet between elevations 737.75 feet (bottom of lowest set of river outlets) and 1,036.42 feet (top of temporary wooden crest) above mean sea level. 115,700 acre-feet is not available for release. All water passes down Sacramento River, some first passing through power plant at dam. Records show total contents at 12 p.m.

Cooperation.— Record of contents furnished by Bureau of Reclamation.

Contents, in acre-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1	918,700	977,400	1,205,000	1,612,000	1,654,000	2,339,000
2	920,200	981,200	1,223,000	1,616,000	1,727,000	2,347,000
3	922,000	991,000	1,234,000	1,618,000	1,783,000	2,352,000
4	923,500	1,006,000	1,243,000	1,619,000	1,821,000	2,356,000
5	924,200	1,011,000	1,251,000	1,620,000	1,879,000	2,362,000
6	924,900	1,017,000	1,258,000	1,621,000	1,919,000	2,368,000
7	925,600	1,022,000	1,264,000	1,622,000	1,948,000	2,371,000
8	924,300	1,026,000	1,270,000	1,622,000	1,982,000	2,375,000
9	925,500	1,052,000	1,275,000	1,630,000	2,010,000	2,379,000
10	926,400	1,076,000	1,279,000	1,633,000	2,036,000	2,383,000
11	927,400	1,089,000	1,284,000	1,638,000	2,068,000	2,385,000
12	928,900	1,098,000	1,288,000	1,642,000	2,078,000	2,388,000
13	930,400	1,108,000	1,292,000	1,645,000	2,101,000	2,394,000
14	931,500	1,114,000	1,296,000	1,653,000	2,130,000	2,400,000
15	932,000	1,120,000	1,301,000	1,656,000	2,157,000	2,406,000
16	933,700	1,123,000	1,304,000	1,662,000	2,180,000	2,418,000
17	935,600	1,127,000	1,307,000	1,666,000	2,203,000	2,428,000
18	937,300	1,130,000	1,310,000	1,666,000	2,221,000	2,434,000
19	939,000	1,132,000	1,319,000	1,670,000	2,237,000	2,442,000
20	940,800	1,135,000	1,335,000	1,673,000	2,252,000	2,453,000
21	942,900	1,137,000	1,348,000	1,676,000	2,265,000	2,465,000
22	943,700	1,139,000	1,372,000	1,678,000	2,276,000	2,489,000
23	946,400	1,142,000	1,393,000	1,679,000	2,290,000	2,511,000
24	949,000	1,144,000	1,409,000	1,679,000	2,299,000	2,529,000
25	951,300	1,146,000	1,421,000	1,678,000	2,310,000	2,547,000
26	953,500	1,150,000	1,431,000	1,676,000	2,318,000	2,566,000
27	955,600	1,152,000	1,442,000	1,674,000	2,326,000	2,582,000
28	957,500	1,156,000	1,456,000	1,671,000	2,333,000	2,600,000
29	957,500	1,162,000	1,475,000	1,669,000	-	2,615,000
30	963,500	1,173,000	1,490,000	1,669,000	-	2,629,000
31	974,400	-	1,502,000	1,687,000	-	2,643,000

Sacramento River at Knights Landing, Calif.

Location.— Water-stage recorder, lat. 38°48'10", long. 121°42'55", in NE 1/4 sec. 14, T. 11 N., R. 2 E., just upstream from Southern Pacific Railroad bridge at Knights Landing. Zero of gage is set to datum of Corps of Engineers, U. S. Army. Auxiliary gage is water-stage recorder at upstream end of Fremont Weir. Prior to June 30, 1945, auxiliary gage was water-stage recorder at station at Verona.

Records available.— April 1921 to October 1939 (low-water periods only) and June 1940 to September 1945 in reports of Geological Survey. 1939-45 in reports of Division of Water Resources, Department of Public Works, State of California.

Extremes.— Maximum daily discharge during year, 22,700 second-feet Feb. 5; maximum gage height, 37.80 feet Feb. 4; minimum daily discharge, 3,000 second-feet Oct. 21, 22 (gage height, 13.86 feet).

1940-45: Maximum discharge, 27,900 second-feet Feb. 9, 1942, maximum gage height, 41.83 feet Feb. 8, 1942.

1921-45: Minimum discharge recorded, 250 second-feet July 23, 1931 (gage height, 7.80 feet).

Remarks.— Records fair Oct. 1 to June 30, good July 1 to Sept. 30. Flow regulated by Shasta Reservoir (see p. 318). Many diversions for irrigation, and bypassing for flood control; considerable return water from irrigation. Discharge computed by using fall as a factor.

Cooperation.— Records collected and prepared in cooperation with Division of Water Resources, Department of Public Works, State of California.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3,630	3,160	6,040	13,500	9,080	8,890	13,100	3,510	6,560	4,790	5,880	5,750
2	3,470	3,510	8,860	11,900	16,400	8,760	12,200	3,740	6,760	4,440	5,850	5,870
3	3,460	4,240	11,400	10,500	19,800	8,880	11,500	3,580	6,880	4,150	5,930	6,020
4	3,420	4,360	12,400	9,560	22,400	8,380	11,200	4,150	6,620	4,090	5,980	6,010
5	3,210	4,630	10,800	10,200	22,700	8,100	10,700	4,400	6,560	4,130	5,960	5,840
6	3,100	6,040	8,920	10,300	21,900	7,980	10,200	4,350	6,750	4,280	6,020	5,850
7	3,140	6,640	7,860	10,100	22,600	7,890	10,100	4,180	6,820	4,680	6,020	5,800
8	3,110	6,310	7,280	10,100	21,500	7,970	9,310	4,150	6,950	4,840	6,000	5,760
9	3,200	6,620	6,900	9,680	20,500	8,020	8,670	4,220	6,730	4,960	5,780	5,670
10	3,160	6,390	6,530	8,520	21,000	7,940	8,690	4,250	6,520	4,940	5,740	5,630
11	3,210	12,500	6,190	8,970	21,100	7,780	8,480	4,340	6,120	5,020	5,730	5,720
12	3,240	15,100	6,130	8,970	18,700	7,520	8,030	4,390	5,770	5,110	5,830	5,850
13	3,220	13,000	6,040	8,810	16,800	7,490	a7,590	5,400	5,230	5,290	5,320	6,000
14	3,270	11,700	5,830	8,420	14,500	7,300	a7,150	5,330	4,920	5,260	5,810	5,980
15	3,290	9,860	5,560	7,980	14,600	7,140	a6,700	6,640	4,660	5,220	5,810	6,150
16	3,440	8,460	5,400	7,530	19,500	7,140	a6,270	7,190	4,470	5,180	5,740	6,490
17	3,350	7,420	5,290	7,270	19,500	7,680	5,830	6,840	4,290	5,110	5,540	6,560
18	3,320	6,790	5,120	7,670	16,100	9,420	5,260	7,330	3,990	5,080	5,690	6,340
19	a3,120	6,470	5,010	8,020	14,600	11,300	5,040	5,350	3,820	5,300	5,440	6,160
20	a3,040	6,130	5,000	8,550	13,700	10,700	4,960	7,880	3,580	5,660	5,520	6,170
21	a3,000	5,860	8,280	8,610	12,700	9,950	5,060	7,360	3,840	5,800	5,560	6,300
22	a3,000	5,700	11,900	8,370	12,000	10,900	5,470	6,930	4,350	5,940	5,700	6,650
23	a3,080	5,580	11,400	7,990	11,600	12,100	6,320	6,620	4,330	5,900	5,810	6,970
24	a3,100	5,250	16,800	7,590	11,200	17,000	6,480	6,490	4,820	5,810	5,590	7,200
25	a3,100	5,210	17,100	7,830	10,500	19,000	5,890	6,550	4,830	5,790	5,600	7,510
26	3,090	5,090	14,100	8,090	10,100	15,200	5,260	6,470	4,820	5,740	5,530	7,380
27	3,130	5,130	12,000	8,240	9,590	19,000	4,720	6,750	4,800	5,810	5,640	7,120
28	3,080	5,180	10,500	8,440	9,020	20,900	4,060	6,730	5,060	5,810	5,610	6,810
29	3,100	5,130	10,500	8,430	-	18,800	3,700	6,870	5,000	5,830	5,620	6,660
30	3,040	5,350	12,800	8,310	-	16,300	3,470	6,690	4,780	5,870	5,740	6,560
31	3,070	-	13,900	8,170	-	14,300	-	6,500	-	5,890	5,810	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	99,060	3,630	3,000	3,195	186,500
November.....	202,750	15,100	3,160	6,758	402,100
December.....	281,940	17,100	5,000	9,095	559,200
Calendar year 1944.....	1,975,060	22,400	1,430	5,396	3,917,000
January.....	277,010	13,500	7,270	8,936	549,400
February.....	452,690	22,700	9,020	16,170	897,900
March.....	359,360	20,900	7,140	10,950	673,200
April.....	221,610	13,100	3,470	7,394	440,000
May.....	178,990	8,590	3,510	5,774	355,000
June.....	160,930	6,950	3,680	5,364	319,200
July.....	161,720	5,940	4,090	5,217	320,800
August.....	178,100	6,020	5,440	5,745	353,300
September.....	188,780	7,510	5,630	6,293	374,400
Water year 1944-45.....	2,743,150	22,700	3,000	7,515	5,441,000

a No gage-height record; discharge computed on basis of records at stations above and below Knights Landing.

Time basis: Pacific war time up to 2 a.m., Sept. 30, 1945; Pacific standard time thereafter.

To convert war time to standard time, subtract 1 hour.

Sacramento River at Verona, Calif.

Location.— Water-stage recorder, lat. 38°46'50", long. 121°36'15", in SE $\frac{1}{4}$ sec. 23, T. 11 N., R. 3 E., 0.8 mile southeast of Verona and 1 mile downstream from Feather River. Zero of gage is set 0.06 foot below datum of Corps of Engineers, U. S. Army. Auxiliary gage is water-stage recorder at Sacramento weir 16 miles downstream; set to datum of Corps of Engineers, U. S. Army.

Records available.— May 1926 to September 1945 (1926-29, low-water periods only).

Average discharge.— 16 years (1929-45), 16,850 second-feet.

Extremes.— Maximum discharge during year, 56,200 second-feet Feb. 6; maximum gage height, 35.77 feet Feb. 4; minimum discharge, 4,560 second-feet Oct. 7 (gage height, 10.62 feet).

1926-45: Maximum discharge, 79,200 second-feet Mar. 1, 1940 (gage height, 41.20 feet); minimum, 281 second-feet July 24, 1931 (gage height, 6.93 feet).

1934-45: Maximum combined discharge of Sacramento River at Verona and Fremont weir, about 315,000 second-feet Mar. 1, 1940.

Remarks.— Records good. Storage, many diversions, and considerable return water effect flow. When discharge is larger than about 55,000 second-feet, flow begins over Fremont weir (just upstream) into Yolo bypass (see p. 409). Elevation of crest of Fremont weir is 33.5 feet (datum of Corps of Engineers, U. S. Army).

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5,400	5,930	10,500	21,100	17,600	17,600	29,900	16,800	13,300	6,500	6,840	7,740
2	5,220	6,940	15,100	18,900	30,400	17,200	28,000	17,500	13,800	6,000	6,880	7,180
3	4,950	6,980	19,800	15,900	45,300	16,800	26,200	19,000	14,100	5,750	6,880	7,120
4	5,000	7,140	19,300	15,600	53,900	16,500	24,800	20,800	13,700	5,680	7,000	6,960
5	4,900	10,000	16,600	15,600	56,100	16,400	22,900	20,800	14,400	5,470	7,080	6,890
6	4,650	10,900	14,300	15,600	56,200	16,000	21,500	19,000	15,600	5,540	6,960	6,880
7	4,560	10,100	12,800	15,300	56,100	15,900	20,800	17,800	16,300	5,780	6,960	6,950
8	4,630	10,300	12,000	15,000	54,800	15,800	20,100	17,600	16,500	6,200	6,960	7,080
9	4,730	10,400	11,300	14,600	52,300	15,400	21,000	18,100	15,200	6,120	6,950	7,300
10	4,620	13,300	10,800	14,300	51,600	15,200	20,900	18,000	14,100	6,040	6,820	7,120
11	4,770	22,800	10,400	14,300	50,600	15,100	19,800	17,900	13,200	6,290	6,780	6,900
12	4,760	25,700	10,000	14,500	47,600	14,800	19,100	19,800	12,400	6,470	6,840	7,120
13	4,740	22,400	9,840	14,400	42,900	14,500	18,700	18,500	11,300	6,560	6,700	7,320
14	4,730	19,000	9,630	13,900	38,700	15,400	18,000	18,400	10,600	6,500	6,700	7,510
15	4,760	16,500	9,430	13,300	39,100	16,800	16,700	21,500	10,000	6,500	6,740	7,670
16	4,950	14,100	9,440	12,800	42,100	18,300	15,700	21,700	9,090	6,300	6,840	8,150
17	4,910	12,400	9,410	12,800	41,100	18,900	15,500	19,900	8,240	6,230	6,900	8,100
18	4,830	11,200	8,980	13,000	38,000	21,700	16,000	22,500	7,520	6,230	6,760	8,050
19	4,910	10,500	8,860	13,100	36,000	24,000	16,800	22,700	7,000	6,320	6,760	8,050
20	4,910	9,910	9,220	13,500	35,400	22,400	17,700	21,000	6,560	6,560	6,760	8,290
21	4,900	9,490	14,400	13,500	30,400	20,600	19,100	19,200	6,660	6,830	6,830	8,580
22	4,980	9,220	20,500	12,900	27,400	21,100	20,800	17,600	7,000	7,090	7,010	8,970
23	4,970	8,980	23,700	12,500	24,900	24,800	21,900	16,500	7,030	6,820	7,010	9,650
24	4,870	8,900	32,100	12,000	22,900	29,400	21,600	15,600	7,280	6,700	6,940	9,630
25	4,970	8,760	33,300	12,300	21,400	32,000	20,400	15,000	7,280	6,750	6,800	9,800
26	5,020	8,700	28,400	12,500	20,000	33,600	19,700	14,300	7,220	6,700	6,770	9,980
27	5,000	8,610	23,500	12,600	18,800	40,600	18,600	14,000	7,110	6,690	6,700	9,780
28	5,010	8,540	19,700	12,700	18,200	43,400	17,600	13,700	7,200	6,680	6,590	9,490
29	4,810	8,830	19,900	12,400	-	41,500	16,900	13,300	7,140	6,940	6,700	9,430
30	4,800	9,320	22,200	12,000	-	36,900	16,900	13,200	6,650	6,740	6,740	9,410
31	4,950	-	22,600	12,200	-	32,800	-	13,000	-	6,820	6,860	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October	151,210	5,400	4,560	4,878	299,900
November	345,650	25,700	5,930	11,520	685,800
December	498,030	33,800	8,580	16,080	987,600
Calendar year 1944	4,100,990	46,600	2,740	11,200	8,135,000
January	436,300	21,100	12,000	14,070	865,400
February	1,067,800	56,200	17,600	38,100	2,118,000
March	701,200	43,400	14,500	22,600	1,390,000
April	603,400	29,900	15,600	20,110	1,197,000
May	553,800	22,700	13,000	17,800	1,097,000
June	318,290	16,800	6,560	10,440	621,400
July	198,210	7,080	5,470	6,394	393,100
August	212,060	7,080	6,590	6,840	420,600
September	242,080	9,980	6,740	8,069	480,100
Water year 1944-45	5,322,500	56,200	4,560	14,580	10,560,000

Time basis: Pacific war time up to 2 a.m., Sept. 30, 1945; Pacific standard time thereafter. To convert war time to standard time, subtract 1 hour.

North Fork Feather River near Prattville, Calif.

Location.— Water-stage recorder and compound rectangular concrete weir, lat. 40°10', long. 121°06', in SW¹ sec. 28, T. 27 N., R. 8 E., 0.5 mile downstream from Almanor Dam, 5 miles southeast of Prattville, and 9 miles upstream from Butt Creek. Altitude of gage, about 4,380 feet (from topographic map).

Drainage area.— 507 square miles.

Records available.— March 1914 to September 1945 (tables of daily discharge for July 1921 to September 1936 include water diverted through Almanor-Butt Creek tunnel). June 1905 to March 1914 at site near that of Almanor Dam.

Average discharge.— 39 years (1905-10, 1911-45), 886 second-feet, including diversion through Almanor-Butt Creek tunnel.

Extremes.— Maximum discharge during year, 440 second-feet (regulated) Sept. 1-4 (gage height, 3.60 feet); minimum, 3.5 second-feet (regulated) Oct. 1, 11. Extremes do not include diversions through Almanor-Butt Creek tunnel.

1905-45: Maximum discharge, 10,000 second-feet Mar. 19, 1907, before construction of dam (gage height, 16.2 feet, at former site), from rating curve extended above 3,700 second-feet; no flow (result of regulation) Apr. 15, 16, 1914, at times during January to April 1919, and on Apr. 21, 1923.

Remarks.— Records good. Flow regulated by Lake Almanor (see preceding page). Figures of daily discharge show release from Lake Almanor down North Fork Feather River. Figures of monthly discharge show total runoff also. Water is diverted for power from Lake Almanor through Almanor-Butt Creek tunnel to Butt Creek.

Cooperation.— Water-stage recorder graph, furnished by Pacific Gas & Electric Co., obtained in connection with a Federal Power Commission project.

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	3.5	4.4	4.4	4.4	5.0	5.4	5.8	5.8	5.4	15	380	410
2	3.6	4.4	4.4	4.4	5.8	5.4	5.8	5.8	5.4	15	380	440
3	3.8	4.7	4.4	4.4	5.0	5.4	5.8	5.8	5.4	15	380	440
4	3.8	4.4	4.4	4.4	4.7	5.4	5.8	5.8	6.6	15	380	410
5	3.8	4.4	4.4	4.4	5.4	5.4	5.8	5.8	9.5	15	360	388
6	3.8	4.4	4.4	4.4	5.0	5.4	5.8	5.8	9.5	15	337	388
7	3.8	4.7	4.4	4.4	5.0	5.4	5.4	5.8	9.0	15	303	388
8	3.8	4.7	4.4	4.4	5.0	5.4	5.4	5.8	9.0	15	303	388
9	3.8	5.0	4.4	4.4	5.0	5.4	5.4	5.8	9.0	15	290	388
10	3.8	4.7	4.4	4.4	5.0	5.8	5.4	5.8	9.0	15	270	384
11	3.5	4.4	4.4	4.4	5.0	5.8	5.4	5.8	9.0	15	277	380
12	3.8	4.4	4.4	4.4	5.0	5.8	5.4	5.8	9.0	15	303	380
13	3.8	4.4	4.4	4.4	5.0	5.8	5.4	5.8	9.0	15	303	380
14	3.8	4.4	4.4	4.4	5.0	6.2	5.4	5.8	9.0	15	303	380
15	3.8	4.4	4.4	4.4	5.0	5.8	5.4	5.8	9.0	24	348	380
16	3.8	4.4	4.4	4.4	5.0	5.8	5.8	5.8	9.0	123	341	380
17	4.1	4.4	4.4	4.4	5.0	5.8	5.8	5.8	9.0	262	330	380
18	4.1	4.4	4.4	4.4	5.0	5.8	5.8	5.8	9.0	354	421	380
19	4.1	4.4	4.4	4.4	5.0	5.4	5.8	5.8	9.0	377	421	380
20	4.1	4.4	4.4	4.4	5.0	5.4	5.8	5.8	9.0	334	341	377
21	4.1	4.4	4.4	4.4	5.0	5.4	5.8	5.8	12	334	258	377
22	4.1	4.4	4.4	4.4	5.0	5.4	5.8	5.8	15	344	239	377
23	4.1	4.4	4.4	4.4	5.0	5.4	5.8	5.8	15	366	184	377
24	4.1	4.4	4.4	4.4	5.0	5.4	5.8	5.8	15	290	171	377
25	4.1	4.4	4.4	4.4	5.0	5.4	5.8	5.8	15	228	213	377
26	4.1	4.4	4.4	4.4	5.4	5.4	5.8	5.4	15	226	280	377
27	4.1	4.4	4.4	4.4	5.4	5.4	5.8	5.4	15	226	261	377
28	4.4	4.4	4.4	4.4	5.4	5.4	5.8	5.4	15	239	313	377
29	4.4	4.4	4.4	4.4	-	5.4	5.8	5.4	15	303	313	377
30	4.4	4.4	4.4	4.4	-	5.4	5.8	5.4	15	299	313	373
31	4.4	-	4.4	4.4	-	5.4	-	5.4	-	360	344	-

Month	Observed					Diversion in acre-feet†	Adjusted for diversion	
	Second- foot-days	Maximum	Minimum	Mean	Runoff in acre-feet		Mean	Runoff in acre-feet
October.....	122.7	4.4	3.5	3.96	243	51,930	649	52,170
November.....	135.8	5.0	4.4	4.46	265	36,520	618	36,780
December.....	136.4	4.4	4.4	4.40	271	37,940	621	38,210
Calendar year 1944	30,117.7	557	3.2	82.3	59,740	514,200	791	573,900
January.....	136.4	4.4	4.4	4.40	271	50,520	826	50,790
February.....	142.1	5.8	4.7	5.06	282	1,520	32.4	1,600
March.....	171.4	6.2	5.4	5.53	340	2,370	44.1	2,710
April.....	170.4	5.8	5.4	5.68	338	32,490	552	32,830
May.....	177.4	5.8	5.4	5.72	352	31,210	513	31,660
June.....	314.8	15	5.4	10.5	624	42,180	719	42,800
July.....	4,949	384	15	160	9,820	56,000	1,070	65,820
August.....	9,680	421	171	312	19,200	57,900	1,254	77,100
September.....	11,587	440	373	386	22,980	55,150	1,313	76,330
Water year 1944-45	27,721.4	440	3.5	75.9	54,990	455,700	705	510,700

† Diversion through Almanor-Butt Creek tunnel, computed as difference in flow between the 2 stations on Butt Creek. There is some unmeasured inflow between the 2 stations.

a No gage-height record; discharge interpolated.

Time basis: Pacific war time up to 2 a.m., Sept. 30, 1945; Pacific standard time thereafter.

To convert war time to standard time, subtract 1 hour.

North Fork Feather River at Big Bar, Calif.

Location.- Water-stage recorder, lat. 39°48', long. 121°27', in NE $\frac{1}{4}$ sec. 6, T. 22 N., R. 5 E., between railroad and highway bridges, 0.2 mile downstream from Big Bar and 6 miles upstream from intake of power plant at Big Bend. Altitude of gage, about 1,320 feet (from topographic map).

Drainage area.- 1,945 square miles.

Records available.- October 1939 to September 1945. February 1911 to August 1930 and October 1931 to September 1937 at site 0.8 mile upstream.

Average discharge.- 29 years (1911-12, 1913-20, 1921-30, 1931-37, 1939-45), 2,702 second-feet.

Extremes.- Maximum discharge during year, 17,500 second-feet Feb. 2 (gage height, 14.66 feet); minimum not determined.

1911-37; 1939-45: Maximum discharge, 66,900 second-feet Dec. 11, 1937 (gage height, 29.7 feet at present site, from floodmarks), from rating curve extended above 34,000 second-feet by logarithmic plotting; minimum daily discharge, 235 second-feet (regulated) Oct. 31, 1932.

Remarks.- Records good except those for Oct. 1 to Dec. 4, Jan. 2-13, which are fair.

Flow regulated by Lake Almanor (see p.346), Bucks Creek Reservoir (see p.355), Butt Valley Reservoir, power plants, and diversions.

Cooperation.- Water-stage recorder record furnished by Pacific Gas & Electric Co.

Rating table, water year 1944-45 (gage height, in feet, and discharge, in second-feet)

3.5	1,330	6.0	3,260	9.5	7,800
4.0	1,650	6.5	3,750	11.0	10,500
4.5	2,000	7.0	4,330	14.0	16,000
5.0	2,380	7.5	4,930		
5.5	2,790	8.5	6,280		

Discharge, in second-feet, water year October 1944 to September 1945

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1			4,550	1,520	6,300	1,880	2,730	4,910	3,150	1,630	1,900	1,850
2			4,000	1,600	15,200	1,820	2,970	5,120	2,970	1,760	1,830	1,730
3			2,700	2,100	13,100	1,660	2,970	5,200	2,640	1,790	1,900	1,780
4			2,400	2,050	7,990	1,530	2,830	5,000	3,040	1,770	1,880	1,900
5			2,210	1,500	9,280	1,720	2,800	4,690	3,090	1,720	1,730	1,870
6			2,040	1,850	7,590	1,710	2,790	3,840	3,150	1,740	1,860	1,830
7			2,000	1,400	5,450	1,660	2,770	3,950	3,050	1,730	1,830	1,840
8			1,970	1,900	5,200	1,610	2,790	4,080	2,960	1,590	1,810	1,800
9			1,860	2,250	5,310	1,540	2,920	3,870	2,840	1,680	1,800	1,620
10			1,670	2,200	4,860	1,520	2,960	4,110	2,670	1,660	1,770	1,820
11			1,850	2,350	4,040	1,320	2,920	3,540	2,640	1,700	1,740	1,820
12			1,940	2,400	3,940	1,620	2,850	3,280	2,440	1,680	1,590	1,800
13			1,920	2,400	3,690	2,040	2,770	3,660	2,470	1,680	1,790	1,800
14			1,900	2,180	5,020	2,080	2,710	4,640	2,420	1,660	1,800	1,770
15			1,890	2,420	4,610	2,350	2,490	4,100	2,150	1,670	1,730	1,710
16	1,350	1,910	1,810	2,390	4,090	2,550	2,790	4,380	2,080	1,680	1,810	1,570
17			1,760	2,330	4,020	2,590	3,310	4,100	1,540	1,800	1,760	1,760
18			1,850	2,260	3,470	2,090	3,890	3,940	1,870	1,990	1,800	1,800
19			2,670	2,190	3,240	2,280	4,560	4,100	1,800	1,990	1,730	1,820
20			4,260	2,130	2,930	2,370	5,060	3,900	1,750	1,970	1,920	1,820
21			3,180	1,800	2,700	2,720	5,500	4,160	1,580	1,950	1,780	1,770
22			4,670	2,030	2,440	2,670	4,930	3,940	1,640	1,830	1,690	1,690
23			4,210	2,040	2,330	2,970	4,890	3,750	1,560	1,970	1,710	1,470
24			2,960	2,040	2,280	2,980	5,280	3,630	1,600	1,950	1,620	1,730
25			2,280	2,040	1,920	2,830	4,640	3,430	1,700	1,820	1,650	1,830
26			2,110	1,980	2,060	3,040	4,400	3,200	1,720	1,810	1,580	1,830
27			2,250	1,960	2,010	3,020	4,260	2,430	1,760	1,770	1,780	1,830
28			2,250	1,310	1,970	2,920	4,130	2,560	1,660	1,730	1,840	1,860
29			2,230	1,420	-	2,860	3,820	3,240	1,680	1,680	1,800	1,800
30			2,920	1,530	-	2,840	4,310	3,320	1,760	1,790	1,800	1,620
31			1,590	1,990	-	2,920	-	3,290	-	1,900	1,840	-

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
October.....	41,850	-	-	1,350	83,010
November.....	57,300	-	-	1,910	113,700
December.....	78,300	4,870	1,590	2,526	155,300
Calendar year 1944	845,208	6,290	800	2,309	1,676,000
January.....	61,860	2,420	1,310	1,995	122,700
February.....	136,940	15,200	1,920	4,891	271,600
March.....	70,110	3,040	1,320	2,262	139,100
April.....	108,090	5,500	2,490	3,503	214,400
May.....	121,370	5,200	2,430	3,915	240,700
June.....	67,310	3,150	1,500	2,244	133,500
July.....	54,990	1,990	1,570	1,774	109,100
August.....	55,090	1,920	1,580	1,777	109,300
September.....	53,140	1,900	1,470	1,771	105,400
Water year 1944-45	906,350	15,200	-	2,483	1,798,000

Note.- Doubtful gage-height record Oct. 1-15; no gage-height record Oct. 24 to Dec. 4, Jan. 2-13; discharge computed on basis of records at Big Bend powerhouse.

Time basis: Pacific war time up to 2 a.m., Sept. 30, 1945; Pacific standard time thereafter.

To convert war time to standard time, subtract 1 hour.

FEATHER RIVER BASIN

375

Discharge, in second-feet, of South Fork Yuba River near Cisco, Calif., 1942-45--Continued

1944-45-

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	8.1	24	50	62	651	64	194	1,300	612	102	65	11
2	8.1	12	40	58	2,060	65	140	1,400	546	96	64	11
3	8.1	43	34	56	467	62	118	1,420	542	88	66	11
4	7.8	142	33	55	265	62	115	1,530	660	78	66	11
5	7.4	49	39	56	198	61	133	1,200	577	70	62	11
6	8.1	32	45	60	144	59	157	1,290	577	65	61	10
7	8.1	29	44	58	128	60	176	1,320	465	64	60	10
8	8.1	28	43	72	178	59	166	1,220	437	99	59	9.9
9	7.8	113	41	72	176	60	153	1,160	440	88	57	9.9
10	8.8	85	38	78	137	71	124	1,570	472	83	56	9.9
11	9.2	49	37	74	148	80	116	1,050	482	77	55	9.6
12	9.2	43	33	66	157	89	110	822	524	106	46	9.2
13	9.6	37	30	71	148	110	104	868	518	100	44	8.8
14	9.6	31	31	82	158	133	106	708	437	90	42	8.8
15	9.2	30	30	104	118	113	151	612	350	83	41	8.8
16	8.8	30	30	85	103	110	332	935	305	80	40	8.8
17	6.8	29	30	68	100	102	472	788	305	77	39	8.5
18	6.0	26	31	62	92	89	591	500	305	80	39	8.5
19	6.0	22	264	63	83	85	776	353	290	78	39	8.1
20	5.7	21	545	63	78	82	966	347	250	77	38	8.1
21	6.0	22	265	58	74	92	980	356	218	82	37	8.1
22	6.6	27	671	52	71	124	827	365	188	82	36	8.1
23	6.0	39	255	50	78	115	784	389	178	81	21	8.5
24	5.4	32	158	47	76	103	804	383	148	80	20	8.5
25	5.2	32	116	43	72	90	780	389	128	78	20	8.5
26	5.2	31	93	39	70	100	672	347	121	a77	15	6.8
27	6.0	31	86	38	69	92	720	386	115	a76	11	3.1
28	5.2	30	74	38	69	85	966	353	107	70	11	2.5
29	5.4	32	72	37	-	77	1,150	365	113	69	11	2.2
30	6.0	39	68	36	-	83	1,220	386	109	68	11	1.6
31	44	-	66	39	-	139	-	482	-	67	11	-

a No gage-height record; discharge computed on basis of records for nearby streams.

Monthly discharge, in second-feet, 1942-45

Month	Second-foot-days	Maximum	Minimum	Mean	Runoff in acre-feet
April 24-30, 1942	3,399	684	282	486	6,740
May	22,845	1,830	245	737	45,310
June	25,308	1,370	320	844	50,800
July	2,850	344	26	91.9	5,650
August	1,541.4	81	3.8	49.7	3,060
September	810	57	13	27.0	1,610
The period.....	-	-	-	-	112,600
October 1942	703.1	35	8.5	22.7	1,390
November	2,372.7	687	3.8	79.1	4,710
December	4,892	642	48	158	9,700
January 1943	6,969	2,670	54	225	13,820
February	3,641	230	95	130	7,220
March	10,247	1,090	103	331	20,320
April	23,137	1,540	341	771	45,890
May	22,386	1,260	311	722	44,400
June	7,729	1,560	75	258	15,330
July	1,731	110	17	55.8	3,430
August	1,521	75	11	45.8	2,820
September	210.0	11	3.3	7.00	417
Water year 1942-43	85,438.8	2,670	3.3	234	169,400
October 1943	255.4	16	4.6	8.24	507
November	219.1	18	3.3	7.30	435
December	123.0	11	1.9	3.97	244
Calendar year 1943	78,068.5	2,670	1.9	214	154,800
January 1944	219.1	11	3.6	7.07	435
February	451.4	39	7.4	15.6	895
March	3,022	223	34	97.5	5,990
April	6,392	640	96	213	12,680
May	23,752	1,530	373	766	47,110
June	7,211	700	66	240	14,530
July	1,637	85	40	53.8	3,310
August	1,008	44	28	32.5	2,000
September	546.4	27	8.1	18.2	1,080
Water year 1943-44	44,866.4	1,530	1.9	123	88,990
October 1944	261.5	44	5.2	8.44	519
November	1,190	142	12	39.7	2,560
December	3,590	671	30	109	6,720
Calendar year 1944	49,110.4	1,530	3.6	134	97,400
January 1945	1,842	104	36	59.4	3,650
February	6,168	2,060	69	230	12,210
March	2,716	139	59	87.6	5,390
April	14,103	1,220	104	470	27,970
May	24,394	1,570	347	787	49,380
June	10,819	660	107	351	20,680
July	2,601	116	64	80.7	4,960
August	1,243	66	11	40.1	2,470
September	249.8	11	1.6	8.33	495
Water year 1944-45	68,567.3	2,060	1.6	188	136,000

Time basis: Pacific war time up to 2 a.m., Sept. 30, 1945; Pacific standard time thereafter.
To convert war time to standard time, subtract 1 hour.

South Fork Yuba River near Washington, Calif.

Location.- Water-stage recorder, lat. 39°22', long. 120°46', in sec. 8, T. 17 N., R. 11 E., 1 mile downstream from Canyon Creek and 1.7 miles east of Washington. Altitude of gage, about 2,750 feet (from topographic map).

Drainage area.- 198 square miles.

Records available.- March 1942 to September 1945.

Extremes.- 1942: Maximum discharge during period March to September, 5,330 second-feet May 25 (gage height, 8.9 feet); minimum, 17 second-feet Aug. 18, 23, 25-27.
 1942-43: Maximum discharge during water year, 20,300 second-feet Jan. 21 (gage height, 13.8 feet), from rating curve extended above 6,600 second-feet by logarithmic plotting; minimum, 18 second-feet Nov. 3.
 1943-44: Maximum discharge during water year, 1,390 second-feet June 1 (gage height, 5.60 feet); minimum not determined.
 1944-45: Maximum discharge during water year, 4,670 second-feet Feb. 2 (gage height, 8.50 feet); minimum, 17 second-feet Sept. 19, 28-30.

Remarks.- Records fair March 1942 to October 1944, remainder good. Diversions for power and irrigation above station. Flow regulated by Lake Spaulding (capacity, 70,500 acre-feet), Bowman Lake (see p. 380), and many smaller reservoirs.

Cooperation.- Base data prior to Oct. 20, 1944, furnished by Bureau of Reclamation.

Rating table, Mar. 14, 1942, to Sept. 30, 1945 (gage height, in feet,
 and discharge, in second-feet)
 (Shifting-control method used July 1 to Sept. 30, 1945)

0.5	15	2.0	120	4.5	790	7.6	3,330
.8	24	2.4	174	5.0	1,040	8.2	4,200
1.0	33	2.8	244	5.5	1,330	9.0	5,500
1.2	45	3.2	332	6.0	1,670	9.6	6,640
1.4	60	3.6	448	6.5	2,090		
1.7	87	4.0	588	7.0	2,600		

Discharge, in second-feet, 1942-45

Day	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1						-	248	678	1,260	638	21	19
2						-	256	599	1,450	560	21	19
3						-	685	573	1,500	487	21	20
4						-	962	558	1,690	416	21	20
5						-	875	603	2,400	278	20	20
6						-	666	626	2,790	299	20	20
7						-	558	748	2,330	220	21	20
8						-	521	1,170	1,940	155	22	20
9						-	565	1,370	1,870	47	21	20
10						-	690	1,140	2,320	40	21	21
11						-	1,110	952	2,270	37	21	21
12						-	1,600	773	1,670	33	22	20
13						-	1,910	765	1,640	31	22	20
14						378	2,170	875	1,800	34	22	20
15						340	1,570	1,170	1,980	29	20	19
16						217	1,370	1,110	1,850	31	19	19
17						224	1,160	1,080	1,370	30	19	19
18						211	905	1,280	1,160	30	18	19
19						200	852	1,360	1,120	29	19	18
20						211	958	1,600	848	28	18	19
21						213	1,040	2,360	1,180	28	18	20
22						201	1,320	3,000	1,210	28	18	20
23						248	1,400	2,930	1,150	26	18	19
24						231	1,180	2,580	958	26	18	19
25						251	1,130	4,230	782	24	18	19
26						239	1,120	3,950	790	22	18	19
27						254	1,140	2,420	714	21	18	20
28						206	1,010	1,800	558	22	19	20
29						210	765	1,480	565	22	19	21
30						215	719	1,260	386	22	19	21
31						260	-	1,170	-	21	19	-

