

**11376000 Cottonwood Creek near Cottonwood, CA**

Sacramento River Basin

LOCATION.--Lat 40°23'14", long 122°14'15" referenced to North American Datum of 1927, in NE ¼ NE ¼ sec.7, T.29 N., R.3 W., Shasta County, CA, Hydrologic Unit 18020102, on right bank, 0.3 mi upstream from unnamed tributary, 2.2 mi east of Cottonwood, and 2.5 mi upstream from mouth.

DRAINAGE AREA.--927 mi<sup>2</sup>.

**SURFACE-WATER RECORDS**

PERIOD OF RECORD.--October 1940 to current year.

CHEMICAL DATA: Water years 1982-85.

WATER TEMPERATURE: Water years 1963-67, 1977-85.

SEDIMENT DATA: Water years 1957-67, 1977-85.

REVISED RECORDS.--WSP 1345: 1943, 1944 (instantaneous maximum discharge), 1946-47, 1949 (instantaneous maximum discharge), 1951-52. WSP 1931: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 363.80 ft above NGVD of 1929 (levels by U.S. Army Corps of Engineers). Prior to July 26, 1963, on right bank at datum 3.59 ft higher. July 26, 1963, to Sept. 13, 1972, at site 250 ft downstream on right bank at present datum. Sept. 21, 1967, to Jan. 14, 1968, supplementary gage at a site 1,450 ft downstream on right bank at datum 2.35 ft higher. Since Dec. 7, 1998, auxiliary water-stage recorder on right bank from base gage at same datum.

REMARKS.--Records good. Small diversions for irrigation upstream from station. At times during irrigation season, Cottonwood Creek receives water from the Sacramento River by way of Anderson-Cottonwood Irrigation District Canal. See schematic diagrams of upper Sacramento River Basin and Battle Creek and Cow Creek Basins available from the California Water Science Center.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 86,000 ft<sup>3</sup>/s, Mar. 1, 1983, gage height, 21.59 ft, from rating curve extended above 34,000 ft<sup>3</sup>/s, on basis of runoff comparisons with upstream stations then in use; minimum, 15 ft<sup>3</sup>/s, several days during September 1945.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 11,000 ft<sup>3</sup>/s and (or) maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Dec 2	1315	*16,800	*13.17
Dec 5	0745	13,900	12.57

## 11376000 Cottonwood Creek near Cottonwood, 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	63	62	1,980	888	647	272	629	228	129	78	50	56
2	63	65	9,520	801	615	286	558	219	128	66	49	38
3	63	66	4,380	739	589	296	485	211	113	65	49	36
4	63	64	2,270	695	571	308	468	204	112	64	60	48
5	63	59	8,840	666	557	319	775	201	108	59	56	40
6	72	57	3,930	741	550	394	737	211	97	53	44	40
7	77	55	2,070	732	546	410	650	227	96	57	43	47
8	75	56	1,410	833	572	357	597	224	90	58	44	55
9	76	55	1,080	972	514	333	553	220	79	54	39	69
10	70	55	881	1,030	483	321	506	217	87	57	38	69
11	68	58	756	937	458	313	472	200	86	52	41	56
12	72	57	730	838	439	320	446	195	78	49	51	47
13	68	56	623	751	423	347	424	194	72	44	52	48
14	76	56	538	682	411	371	403	187	69	47	51	45
15	79	57	498	634	402	392	387	175	70	56	45	38
16	78	60	572	597	398	393	367	170	78	54	50	54
17	78	92	947	580	397	379	342	175	85	57	54	52
18	74	126	906	576	395	364	335	170	84	50	40	46
19	64	176	699	583	396	349	325	169	76	55	44	45
20	71	134	607	580	394	369	305	167	74	53	46	47
21	76	365	4,790	577	361	487	296	152	78	53	45	73
22	107	339	6,160	566	336	452	297	144	60	56	41	85
23	103	228	6,090	581	323	404	278	142	62	53	44	87
24	81	172	4,100	1,070	316	375	270	140	72	54	46	82
25	73	143	2,450	1,220	307	361	258	132	91	45	48	74
26	72	125	4,210	1,190	295	348	253	135	125	43	56	69
27	70	114	2,570	1,120	282	342	249	141	126	47	61	66
28	69	130	1,780	956	274	337	238	163	115	48	60	61
29	64	243	1,480	834	---	343	235	149	101	46	50	59
30	63	2,900	1,190	749	---	340	230	136	94	46	52	82
31	62	---	1,010	690	---	378	---	128	---	54	55	---
<b>Total</b>	2,253	6,225	79,067	24,408	12,251	11,060	12,368	5,526	2,735	1,673	1,504	1,714
<b>Mean</b>	72.7	208	2,551	787	438	357	412	178	91.2	54.0	48.5	57.1
<b>Max</b>	107	2,900	9,520	1,220	647	487	775	228	129	78	61	87
<b>Min</b>	62	55	498	566	274	272	230	128	60	43	38	36
<b>Ac-ft</b>	4,470	12,350	156,800	48,410	24,300	21,940	24,530	10,960	5,420	3,320	2,980	3,400

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 2013, BY WATER YEAR (WY)**

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Mean</b>	123	322	1,266	2,082	2,358	1,923	1,215	683	324	122	72.1	76.1
<b>Max</b>	805	1,828	5,428	9,193	12,430	10,770	5,466	2,748	2,082	495	178	164
<b>(WY)</b>	(1958)	(1985)	(1984)	(1995)	(1998)	(1983)	(2006)	(2005)	(1998)	(1998)	(1998)	(1983)
<b>Min</b>	50.6	52.2	49.8	60.3	76.3	146	136	165	74.5	36.8	26.4	30.8
<b>(WY)</b>	(1995)	(1991)	(1991)	(1991)	(1977)	(1977)	(1977)	(1977)	(1977)	(1994)	(1945)	(1945)

11376000 Cottonwood Creek near Cottonwood, CA—Continued

SUMMARY STATISTICS

	Calendar Year 2012		Water Year 2013		Water Years 1941 - 2013	
<b>Annual total</b>	205,561		160,784			
<b>Annual mean</b>	562		441		874	
<b>Highest annual mean</b>					2,714	1983
<b>Lowest annual mean</b>					94.4	1977
<b>Highest daily mean</b>	9,520	Dec 2	9,520	Dec 2	54,300	Jan 16, 1974
<b>Lowest daily mean</b>	55	Aug 24	36	Sep 3	15	Sep 7, 1945
<b>Annual seven-day minimum</b>	56	Nov 7	43	Aug 6	16	Sep 4, 1945
<b>Maximum peak flow</b>			16,800	Dec 2	86,000	Mar 1, 1983
<b>Maximum peak stage</b>			13.17	Dec 2	21.59	Mar 1, 1983
<b>Annual runoff (ac-ft)</b>	407,700		318,900		633,000	
<b>10 percent exceeds</b>	1,300		814		2,070	
<b>50 percent exceeds</b>	156		143		225	
<b>90 percent exceeds</b>	65		49		59	

