

Water-Data Report 2009

11467000 Russian River near Guerneville, CA

Russian River Basin

LOCATION.--Lat 38°30'31", long 122°55'36" referenced to North American Datum of 1927, in NE ¼ SE ¼ sec.26, T.8 N., R.10 W., Sonoma County, CA, Hydrologic Unit 18010110, on right bank, at downstream side of Hacienda Bridge, 0.1 mi upstream from Hobson Creek, and 3.8 mi east of Guerneville.

DRAINAGE AREA.--1,338 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1939 to current year. Monthly discharge only for some periods, published in WSP 1315-B. Prior to October 1954, published as "at Guerneville."

REVISED RECORDS.--WSP 1395: Drainage area at former site. WSP 1929: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 20.14 ft above NGVD of 1929. Prior to Oct. 1, 1954, nonrecording gage at bridge 5.3 mi downstream at datum 8.58 ft lower. Oct. 1, 1954, to Oct. 23, 1974, at site 0.7 mi downstream at datum 2.75 ft lower. Supplementary water-stage recorder 2.1 mi downstream used during periods of low flow, 1948-54.

REMARKS.--Records good except for estimated daily discharges, which are fair. Flow regulated by Lake Mendocino 77 mi upstream, beginning November 1958, and by Lake Sonoma 26 mi upstream, beginning October 1983. Many diversions upstream from station for irrigation of about 29,000 acres. Flow also affected by diversion into basin (see REMARKS for East Fork Russian River stations), and by diversion for municipal use at Wohler Pumping Plant 4.0 mi upstream beginning in May 1959. See schematic diagram of Russian River Basin available from the California Water Science Center.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 102,000 ft³/s, Feb. 18, 1986, gage height, 48.56 ft, from rating curve extended above 57,000 ft³/s, maximum gage height, 49.7 ft, Dec. 23, 1955, site and datum then in use, from floodmarks; minimum daily discharge, 0.75 ft³/s, May 6, 1977.

11467000 Russian River near Guerneville, CA—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009
DAILY MEAN VALUES

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	147	384	172	522	250	3,290	589	276	223	110	72	68
2	138	528	166	487	247	9,650	571	390	222	101	71	78
3	138	493	168	482	231	13,800	562	649	219	120	71	73
4	181	749	166	515	214	11,900	553	829	216	128	71	70
5	174	599	165	478	219	7,410	504	2,230	215	132	66	73
6	166	430	170	461	380	5,170	476	2,460	215	137	61	71
7	155	362	174	490	494	3,920	469	1,590	213	132	62	75
8	147	326	173	458	414	3,180	550	1,190	205	130	64	88
9	137	304	169	425	380	2,630	513	938	201	130	65	88
10	132	288	169	405	350	2,220	526	771	204	123	66	84
11	133	274	172	389	475	1,930	510	647	203	112	66	82
12	135	264	173	379	651	1,700	470	559	202	108	62	81
13	129	251	175	368	1,120	1,510	456	498	199	104	62	83
14	129	238	201	354	1,750	1,380	431	447	200	96	56	88
15	134	223	248	337	3,670	1,270	421	411	198	89	50	93
16	114	210	262	327	9,760	1,220	419	384	193	87	51	93
17	127	201	261	322	12,500	1,340	404	362	180	86	47	94
18	120	203	261	313	10,000	1,310	393	339	173	81	50	90
19	114	202	313	308	5,150	1,150	374	319	168	76	56	88
20	114	195	299	305	3,270	e1,060	359	304	163	69	65	84
21	117	194	325	288	2,360	e960	345	291	158	59	65	83
22	134	191	433	283	7,640	e955	330	277	157	60	64	80
23	126	184	441	291	20,400	e1,100	315	266	155	62	65	75
24	124	177	605	294	19,500	986	302	257	150	68	67	74
25	134	171	1,990	292	8,990	889	294	255	150	71	72	72
26	129	172	2,070	284	6,320	835	286	255	151	74	70	69
27	128	172	1,210	280	4,790	789	279	246	151	78	67	69
28	138	174	827	271	3,540	741	276	234	145	79	65	72
29	146	177	686	263	---	702	268	225	138	80	63	74
30	141	178	658	255	---	662	258	225	120	81	60	77
31	160	---	597	253	---	615	---	226	---	76	62	---
Total	4,241	8,514	13,899	11,179	125,065	86,274	12,503	18,350	5,487	2,939	1,954	2,389
Mean	137	284	448	361	4,467	2,783	417	592	183	94.8	63.0	79.6
Max	181	749	2,070	522	20,400	13,800	589	2,460	223	137	72	94
Min	114	171	165	253	214	615	258	225	120	59	47	68
Ac-ft	8,410	16,890	27,570	22,170	248,100	171,100	24,800	36,400	10,880	5,830	3,880	4,740

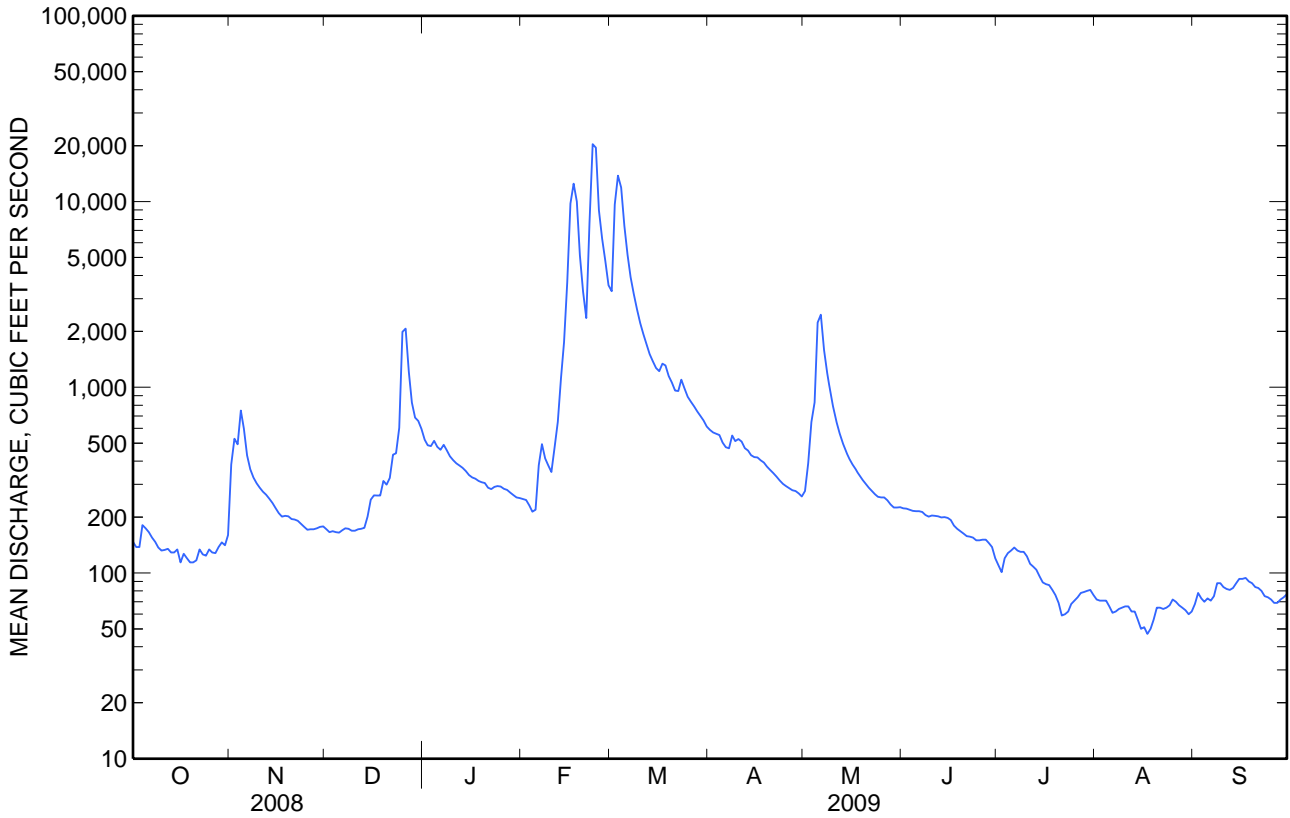
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2009, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	292	1,081	4,060	6,759	6,764	4,516	2,290	767	308	179	165	178
Max	2,515	9,425	17,410	25,220	26,940	23,290	11,700	2,798	1,418	350	308	344
(WY)	(1963)	(1974)	(1956)	(1995)	(1998)	(1983)	(1982)	(1983)	(1998)	(1998)	(1961)	(1961)
Min	25.3	140	116	127	88.2	201	48.2	39.0	22.6	32.0	36.7	35.9
(WY)	(1978)	(1940)	(1977)	(1977)	(1977)	(1977)	(1977)	(1977)	(1977)	(1977)	(1977)	(1977)

11467000 Russian River near Guerneville, CA—Continued

SUMMARY STATISTICS

	Calendar Year 2008		Water Year 2009		Water Years 1940 - 2009	
Annual total	486,848		292,794			
Annual mean	1,330		802		2,261	
Highest annual mean					5,898	1983
Lowest annual mean					88.7	1977
Highest daily mean	30,900	Jan 5	20,400	Feb 23	97,700	Feb 18, 1986
Lowest daily mean	107	Jul 11	47	Aug 17	0.75	May 6, 1977
Annual seven-day minimum	115	Jul 8	53	Aug 13	5.9	Jul 29, 1977
Maximum peak flow			22,400	Feb 24	102,000	Feb 18, 1986
Maximum peak stage			22.99	Feb 24	49.70	Dec 23, 1955
Annual runoff (ac-ft)	965,700		580,800		1,638,000	
10 percent exceeds	2,640		1,290		5,550	
50 percent exceeds	210		222		354	
90 percent exceeds	128		71		138	



11467000 Russian River near Guerneville, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1951-1995, 2002 to current year.

CHEMICAL DATA: Water years 1951-95. Published as "at Guerneville" in 1961-65.

BIOLOGICAL DATA: Water years 1975-81.

TURBIDITY: Water years 1967-95, 2002 to current year.

SEDIMENT DATA: Water years 1966-95.

PERIOD OF DAILY RECORD.--

DISSOLVED OXYGEN: January 2002 to current year.

pH: January 2002 to current year.

SPECIFIC CONDUCTANCE: October 1973 to September 1981, January 2002 to current year.

WATER TEMPERATURE: January 1964 to September 1982, January 2002 to current year.

TURBIDITY: January 2002 to current year.

SEDIMENT DATA: October 1969 to September 1986.

INSTRUMENTATION.--Water-quality monitor since January 2002. Specific conductance recorder from October 1973 to September 1981, at site 0.7 mi downstream. Water temperature recorder from January 1964 to September 1981. Electronic datalogger with 15 minute interval.

REMARKS.--Interruptions in record are due to malfunction of recording and (or) sensing equipment. Turbidity sensor was changed from YSI 6026 to YSI 6136 on July 14, 2008. See National Field manual for explanation of the difference between the two sensors.

Dissolved oxygen records are rated excellent.

pH records are excellent rated except for Oct. 1-6, which are rated good, Apr. 28 to July 16, Aug. 1 to Sept. 2, and Sept. 17-30, which are rated fair, and July 17-31, and Sept. 3-16, which are rated poor.

Specific conductance records are rated excellent.

Water temperature records are rated excellent.

Turbidity records are rated excellent except for Oct. 1-6, June 17-27, and Aug. 8-18, which are rated fair.

EXTREMES FOR PERIOD OF DAILY RECORD.--

DISSOLVED OXYGEN: Maximum recorded, 15.1 mg/L, Oct. 5, 2002; minimum recorded, 6.0 mg/L, Sept. 25, 2003.

pH: Maximum recorded, 8.8 standard units, Aug. 28, 2002, Aug. 8, 2005; minimum recorded, 6.4 standard units, Mar. 31, 2008.

SPECIFIC CONDUCTANCE: Maximum recorded, 605 microsiemens, Feb. 19, 20, 1977; minimum recorded, 57 microsiemens, Nov. 4, 1973.

WATER TEMPERATURE: Maximum recorded, 29.5°C, June 26, 1973; minimum recorded, 4.5°C, Dec. 15, 1967, Jan. 12, 1968.

TURBIDITY: Maximum recorded, >1,200 FNU, several days most years; minimum recorded, 0.1 FNU, several days in August and September 2009.

SEDIMENT CONCENTRATION: (Water years 1970-82) Maximum daily mean, 2,350 mg/L, Jan. 16, 1974; minimum daily mean, 2 mg/L, Dec. 12, 27, 1978, Nov. 15, 16, 25, 26, 1980.

SEDIMENT DISCHARGE: (Water years 1970-81) Maximum daily, 316,000 tons, Jan. 16, 1974; minimum daily, 0.03 ton, May 6, 1977.

EXTREMES FOR CURRENT YEAR.--

DISSOLVED OXYGEN: Maximum recorded, 13.2 mg/L, Jan. 15, 16; minimum recorded, 7.6 mg/L, May 17-19, June 29, and July 15, 16.

pH: Maximum recorded, 8.6 standard units, Dec. 12; minimum recorded, 7.5 standard units, Nov. 2.

SPECIFIC CONDUCTANCE: Maximum recorded, 333 microsiemens, May 2; minimum recorded, 134 microsiemens, Mar. 3.

WATER TEMPERATURE: Maximum recorded, 25.6°C, June 28; minimum recorded, 6.9°C, Dec. 18.

TURBIDITY: Maximum recorded, 380 FNU, Feb. 15; minimum recorded, 0.1 FNU, several days in August and September.

11467000 Russian River near Guerneville, CA—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
(PREVIOUSLY NOT PUBLISHED)

Day	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
	April		May		June		July		August		September	
1							9.6	8.4	9.2	7.9	9.9	8.1
2							9.4	8.2	9.1	7.8	10.0	8.3
3					---	---	9.3	8.1	9.2	7.7	9.9	8.2
4					---	---	9.1	8.1	9.1	7.7	---	---
5					9.6	---	9.1	7.8	9.4	8.0	---	---
6					9.6	8.2	9.1	7.7	9.4	8.0	---	---
7					9.7	8.1	9.0	7.6	9.5	8.1	---	---
8					9.4	8.0	9.0	7.5	9.5	8.0	---	---
9					9.2	7.7	8.8	7.4	9.6	8.0	---	---
10					9.1	7.5	8.7	7.4	9.5	8.2	---	---
11					9.3	7.4	8.9	7.5	9.4	8.0	---	---
12					9.4	7.6	9.0	7.4	9.5	7.7	---	---
13					9.3	7.7	9.1	7.9	9.5	7.9	---	---
14					9.5	7.7	9.2	7.8	9.4	7.9	---	---
15					9.8	8.1	9.0	7.7	9.4	7.9	---	---
16					10.0	7.8	9.1	8.1	9.5	7.9	---	---
17					10.1	8.0	9.3	8.3	9.5	7.8	---	8.7
18					9.8	7.8	9.3	8.1	9.7	8.1	10.8	---
19					9.7	7.9	9.3	8.1	9.8	8.3	10.9	9.2
20					9.4	7.6	9.3	8.0	9.6	8.4	11.0	9.2
21					9.1	7.5	9.6	8.3	9.4	8.0	10.7	9.1
22					9.2	7.4	9.7	8.6	9.5	7.8	10.5	8.8
23					9.5	7.5	9.5	8.4	9.5	7.8	10.5	8.6
24					9.9	8.0	9.4	8.2	9.6	7.9	10.2	8.6
25					9.9	8.0	9.4	8.1	9.4	7.8	10.0	8.5
26					9.8	8.0	9.0	7.9	9.6	7.9	10.0	8.6
27					9.8	8.2	9.0	7.7	9.6	7.9	10.2	8.5
28					9.5	8.2	9.1	7.6	9.4	8.0	10.3	8.5
29					9.5	8.1	9.2	7.9	9.4	7.8	10.2	8.6
30					9.7	8.1	9.3	8.0	9.5	7.8	10.4	8.6
31					---	---	9.3	7.9	9.7	7.9	---	---
Month					---	---	9.7	7.4	9.8	7.7	---	---

11467000 Russian River near Guerneville, CA—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

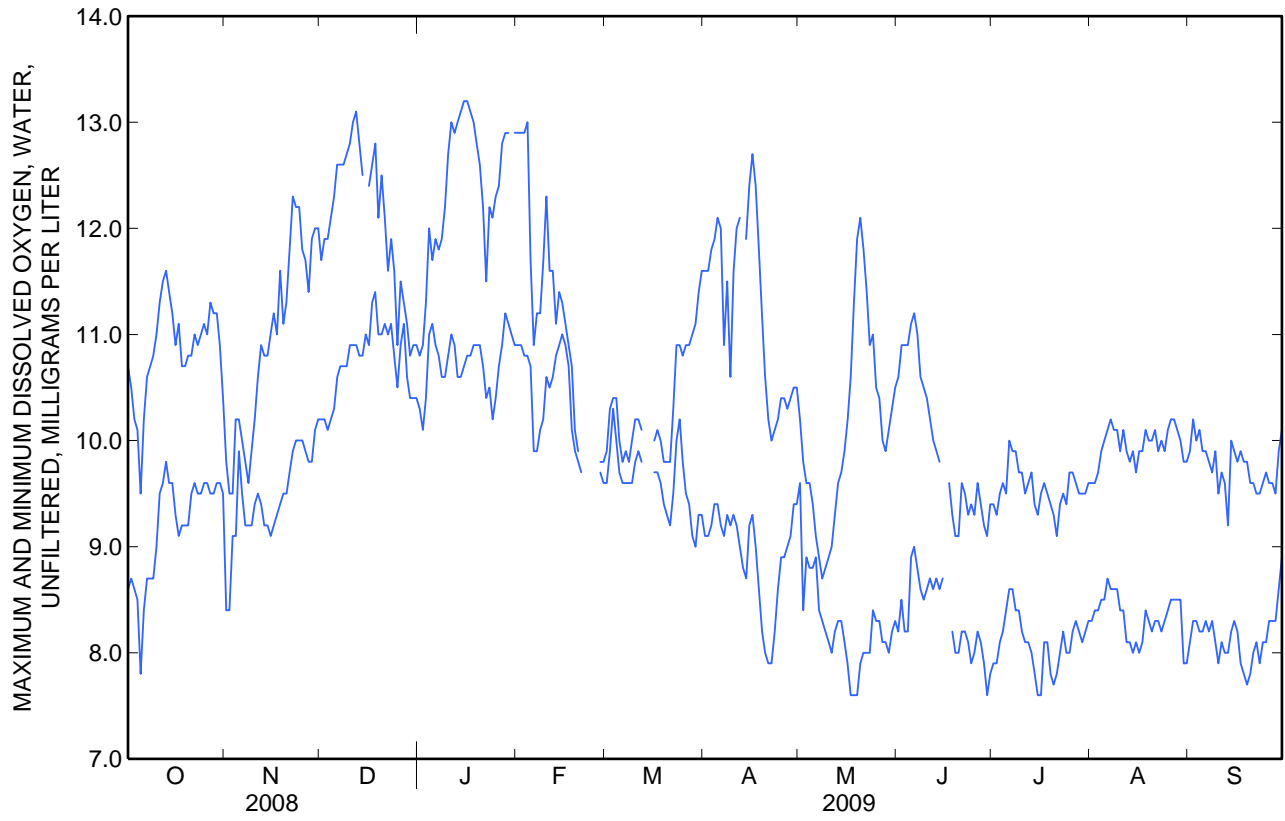
Day	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
	October		November		December		January		February		March	
1	10.7	8.6	9.8	8.4	11.7	10.2	10.8	10.3	12.9	10.9	9.9	9.6
2	10.5	8.7	9.5	8.4	11.9	10.2	10.9	10.1	12.9	10.9	10.3	9.9
3	10.2	8.6	9.5	9.1	11.9	10.1	11.3	10.4	12.9	10.8	10.4	10.3
4	10.1	8.5	10.2	9.1	12.1	10.2	12.0	11.0	13.0	10.8	10.4	10.0
5	9.5	7.8	10.2	9.9	12.3	10.3	11.7	11.1	11.7	10.7	10.0	9.7
6	10.2	8.4	10.0	9.5	12.6	10.6	11.9	10.9	10.9	9.9	9.8	9.6
7	10.6	8.7	9.8	9.2	12.6	10.7	11.8	10.8	11.2	9.9	9.9	9.6
8	10.7	8.7	9.6	9.2	12.6	10.7	11.9	10.6	11.2	10.1	9.8	9.6
9	10.8	8.7	9.9	9.2	12.7	10.7	12.2	10.6	11.7	10.2	10.0	9.6
10	11.0	9.0	10.2	9.4	12.8	10.9	12.7	10.8	12.3	10.6	10.2	9.8
11	11.3	9.5	10.6	9.5	13.0	10.9	13.0	11.0	11.6	10.5	10.2	9.9
12	11.5	9.6	10.9	9.4	13.1	10.9	12.9	10.9	11.6	10.6	10.1	9.8
13	11.6	9.8	10.8	9.2	12.8	10.8	13.0	10.6	11.1	10.8	---	---
14	11.4	9.6	10.8	9.2	12.5	10.8	13.1	10.6	11.4	10.9	---	---
15	11.2	9.6	11.0	9.1	---	11.0	13.2	10.7	11.3	11.0	---	---
16	10.9	9.3	11.2	9.2	12.4	10.9	13.2	10.8	11.1	10.9	10.0	9.7
17	11.1	9.1	11.0	9.3	12.6	11.3	13.1	10.8	10.9	10.7	10.1	9.7
18	10.7	9.2	11.6	9.4	12.8	11.4	13.0	10.9	10.7	10.1	10.0	9.6
19	10.7	9.2	11.1	9.5	12.1	11.0	12.8	10.9	10.1	9.9	9.8	9.4
20	10.8	9.2	11.3	9.5	12.5	11.0	12.6	10.9	9.9	9.8	9.8	9.3
21	10.8	9.5	11.8	9.7	12.1	11.1	12.2	10.7	---	9.7	9.8	9.2
22	11.0	9.6	12.3	9.9	11.6	11.0	11.5	10.4	---	---	10.3	9.5
23	10.9	9.5	12.2	10.0	11.9	11.1	12.2	10.5	---	---	10.9	10.0
24	11.0	9.5	12.2	10.0	11.6	10.8	12.1	10.2	---	---	10.9	10.2
25	11.1	9.6	11.8	10.0	10.9	10.5	12.3	10.4	---	---	10.8	9.8
26	11.0	9.6	11.7	9.9	11.5	10.9	12.4	10.7	---	---	10.9	9.5
27	11.3	9.5	11.4	9.8	11.3	11.1	12.8	10.9	9.8	9.7	10.9	9.4
28	11.2	9.5	11.9	9.8	11.1	10.6	12.9	11.2	9.8	9.6	11.0	9.1
29	11.2	9.6	12.0	10.1	10.8	10.4	12.9	11.1	---	---	11.1	9.0
30	10.9	9.6	12.0	10.2	10.9	10.4	---	11.0	---	---	11.4	9.3
31	10.4	9.5	---	---	10.9	10.4	12.9	10.9	---	---	11.6	9.3
Month	11.6	7.8	12.3	8.4	---	10.1	---	10.1	---	---	---	---

11467000 Russian River near Guerneville, CA—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Day	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
	April		May		June		July		August		September	
1	11.6	9.1	10.2	9.6	10.6	8.2	9.4	7.9	9.6	8.3	9.9	8.1
2	11.6	9.1	9.8	8.4	10.9	8.5	9.3	7.9	9.6	8.4	10.2	8.3
3	11.8	9.2	9.6	8.9	10.9	8.2	9.5	8.1	9.7	8.4	10.0	8.3
4	11.9	9.4	9.6	8.8	10.9	8.2	9.6	8.2	9.9	8.5	10.1	8.2
5	12.1	9.4	9.4	8.8	11.1	8.9	9.5	8.4	10.0	8.5	9.9	8.2
6	12.0	9.2	9.1	8.9	11.2	9.0	10.0	8.6	10.1	8.7	9.9	8.3
7	10.9	9.1	8.9	8.4	11.0	8.8	9.9	8.6	10.2	8.6	9.8	8.2
8	11.5	9.3	8.7	8.3	10.6	8.6	9.9	8.4	10.1	8.6	9.7	8.3
9	10.6	9.2	8.8	8.2	10.5	8.5	9.7	8.4	10.1	8.6	9.9	8.1
10	11.6	9.3	8.9	8.1	10.4	8.6	9.7	8.2	9.9	8.4	9.5	7.9
11	12.0	9.2	9.0	8.0	10.2	8.7	9.5	8.1	10.1	8.4	9.7	8.1
12	12.1	9.0	9.3	8.2	10.0	8.6	9.6	8.1	9.9	8.1	9.6	8.0
13	---	8.8	9.6	8.3	9.9	8.7	9.7	8.0	9.8	8.1	9.2	8.0
14	11.9	8.7	9.7	8.3	9.8	8.6	9.4	7.8	9.9	8.0	10.0	8.2
15	12.4	9.2	9.9	8.1	---	8.7	9.3	7.6	9.7	8.1	9.9	8.3
16	12.7	9.3	10.2	7.9	---	---	9.5	7.6	9.9	8.0	9.8	8.2
17	12.4	9.0	10.6	7.6	9.6	---	9.6	8.1	9.9	8.1	9.9	7.9
18	11.8	8.6	11.3	7.6	9.3	8.2	9.5	8.1	10.1	8.4	9.8	7.8
19	11.2	8.2	11.9	7.6	9.1	8.0	9.4	7.8	10.0	8.3	9.8	7.7
20	10.6	8.0	12.1	7.9	9.1	8.0	9.3	7.7	10.0	8.2	9.6	7.8
21	10.2	7.9	11.8	8.0	9.6	8.2	9.1	7.8	10.1	8.3	9.6	8.0
22	10.0	7.9	11.4	8.0	9.5	8.2	9.4	8.0	9.9	8.3	9.5	8.1
23	10.1	8.2	10.9	8.0	9.3	8.1	9.5	8.2	10.0	8.2	9.5	7.9
24	10.2	8.6	11.0	8.4	9.4	7.9	9.4	8.0	9.9	8.3	9.6	8.1
25	10.4	8.9	10.5	8.3	9.3	8.0	9.7	8.0	10.1	8.4	9.7	8.1
26	10.4	8.9	10.4	8.3	9.6	8.2	9.7	8.2	10.2	8.5	9.6	8.3
27	10.3	9.0	10.0	8.1	9.4	8.1	9.6	8.3	10.2	8.5	9.6	8.3
28	10.4	9.1	9.9	8.1	9.2	7.9	9.5	8.2	10.1	8.5	9.5	8.3
29	10.5	9.4	10.1	8.0	9.1	7.6	9.5	8.1	10.0	8.5	9.9	8.6
30	10.5	9.4	10.3	8.2	9.4	7.8	9.5	8.2	9.8	7.9	10.1	8.9
31	---	---	10.5	8.3	---	---	9.6	8.3	9.8	7.9	---	---
Month	---	7.9	12.1	7.6	---	---	10.0	7.6	10.2	7.9	10.2	7.7

11467000 Russian River near Guerneville, CA—Continued



11467000 Russian River near Guerneville, CA—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

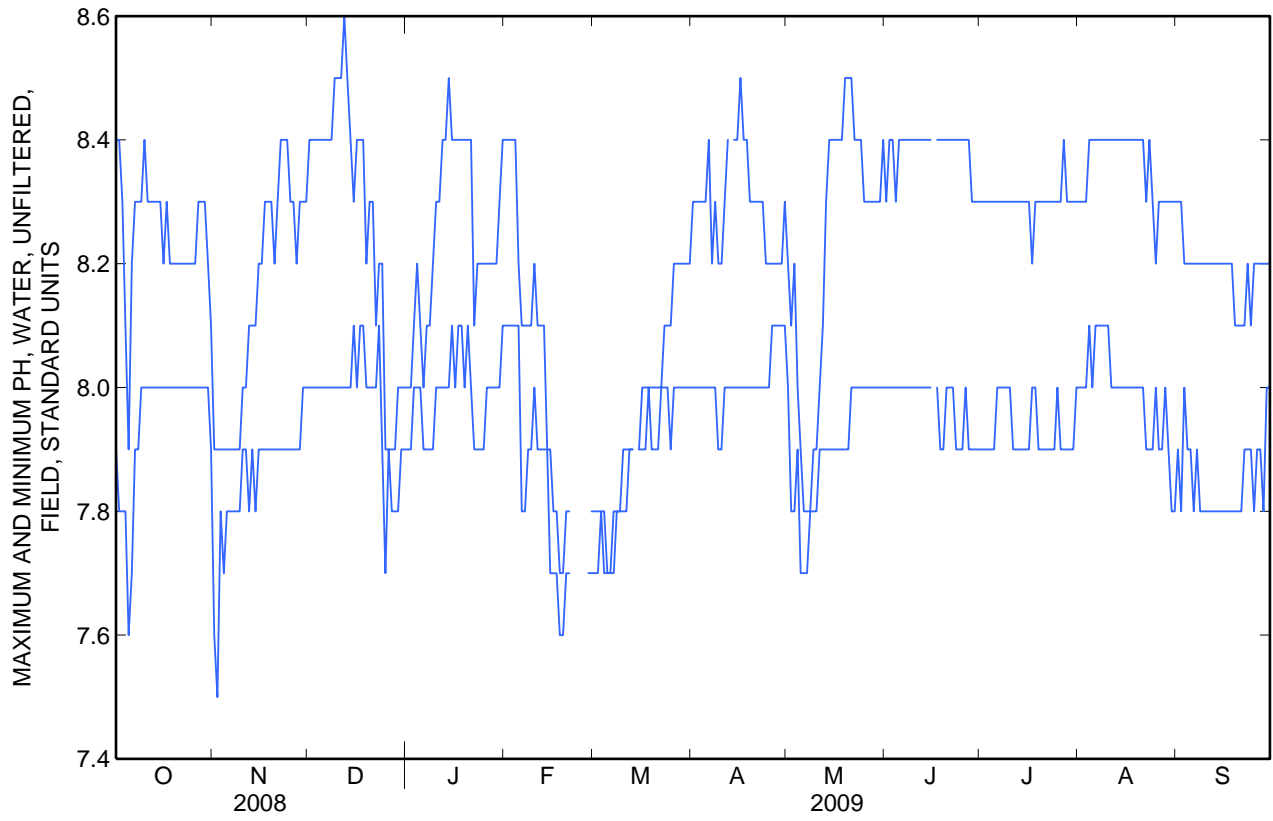
Day	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
	October		November		December		January		February		March	
1	8.4	7.9	7.9	7.6	8.4	8.0	8.0	7.9	8.4	8.1	7.8	7.7
2	8.4	7.8	7.9	7.5	8.4	8.0	8.0	7.9	8.4	8.1	7.8	7.7
3	8.3	7.8	7.9	7.8	8.4	8.0	8.1	8.0	8.4	8.1	7.8	7.8
4	8.1	7.8	7.9	7.7	8.4	8.0	8.2	8.0	8.4	8.1	7.8	7.7
5	7.9	7.6	7.9	7.8	8.4	8.0	8.1	8.0	8.2	8.1	7.7	7.7
6	8.2	7.7	7.9	7.8	8.4	8.0	8.0	7.9	8.1	7.8	7.7	7.7
7	8.3	7.9	7.9	7.8	8.4	8.0	8.1	7.9	8.1	7.8	7.8	7.7
8	8.3	7.9	7.9	7.8	8.4	8.0	8.1	7.9	8.1	7.9	7.8	7.8
9	8.3	8.0	7.9	7.8	8.5	8.0	8.2	7.9	8.1	7.9	7.8	7.8
10	8.4	8.0	8.0	7.9	8.5	8.0	8.3	8.0	8.2	8.0	7.9	7.8
11	8.3	8.0	8.0	7.9	8.5	8.0	8.3	8.0	8.1	7.9	7.9	7.8
12	8.3	8.0	8.1	7.8	8.6	8.0	8.4	8.0	8.1	7.9	7.9	7.9
13	8.3	8.0	8.1	7.9	8.5	8.0	8.4	8.0	8.1	7.9	7.9	7.9
14	8.3	8.0	8.1	7.8	8.4	8.0	8.5	8.0	7.9	7.9	---	---
15	8.3	8.0	8.2	7.9	8.3	8.1	8.4	8.1	7.9	7.7	7.9	7.9
16	8.2	8.0	8.2	7.9	8.4	8.0	8.4	8.0	7.8	7.7	8.0	7.9
17	8.3	8.0	8.3	7.9	8.4	8.1	8.4	8.1	7.8	7.7	8.0	7.9
18	8.2	8.0	8.3	7.9	8.4	8.1	8.4	8.1	7.7	7.6	8.0	8.0
19	8.2	8.0	8.3	7.9	8.2	8.0	8.4	8.0	7.7	7.6	8.0	7.9
20	8.2	8.0	8.2	7.9	8.3	8.0	8.4	8.1	7.8	7.7	8.0	7.9
21	8.2	8.0	8.3	7.9	8.3	8.0	8.4	8.0	7.8	7.7	8.0	7.9
22	8.2	8.0	8.4	7.9	8.1	8.0	8.1	7.9	---	---	8.0	8.0
23	8.2	8.0	8.4	7.9	8.2	8.1	8.2	7.9	---	---	8.1	8.0
24	8.2	8.0	8.4	7.9	8.2	7.9	8.2	7.9	---	---	8.1	8.0
25	8.2	8.0	8.3	7.9	7.9	7.7	8.2	7.9	---	---	8.1	7.9
26	8.2	8.0	8.3	7.9	7.9	7.9	8.2	8.0	---	---	8.2	8.0
27	8.3	8.0	8.2	7.9	7.9	7.8	8.2	8.0	---	7.7	8.2	8.0
28	8.3	8.0	8.3	7.9	7.9	7.8	8.2	8.0	7.8	7.7	8.2	8.0
29	8.3	8.0	8.3	8.0	8.0	7.8	8.2	8.0	---	---	8.2	8.0
30	8.2	8.0	8.3	8.0	8.0	7.9	8.3	8.0	---	---	8.2	8.0
31	8.1	7.9	---	---	8.0	7.9	8.4	8.1	---	---	8.2	8.0
Month	8.4	7.6	8.4	7.5	8.6	7.7	8.5	7.9	---	---	---	---

11467000 Russian River near Guerneville, CA—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Day	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
	April		May		June		July		August		September	
1	8.3	8.0	8.2	8.0	8.3	8.0	8.3	7.9	8.3	8.0	8.3	7.9
2	8.3	8.0	8.1	7.8	8.4	8.0	8.3	7.9	8.3	8.0	8.3	7.8
3	8.3	8.0	8.2	7.8	8.4	8.0	8.3	7.9	8.3	8.0	8.2	8.0
4	8.3	8.0	8.0	7.9	8.3	8.0	8.3	7.9	8.4	8.1	8.2	7.9
5	8.3	8.0	7.9	7.7	8.4	8.0	8.3	7.9	8.4	8.0	8.2	7.9
6	8.4	8.0	7.8	7.7	8.4	8.0	8.3	8.0	8.4	8.1	8.2	7.8
7	8.2	8.0	7.8	7.7	8.4	8.0	8.3	8.0	8.4	8.1	8.2	7.9
8	8.3	8.0	7.8	7.8	8.4	8.0	8.3	8.0	8.4	8.1	8.2	7.8
9	8.2	7.9	7.9	7.8	8.4	8.0	8.3	8.0	8.4	8.1	8.2	7.8
10	8.2	7.9	7.9	7.8	8.4	8.0	8.3	8.0	8.4	8.1	8.2	7.8
11	8.3	8.0	8.0	7.9	8.4	8.0	8.3	7.9	8.4	8.0	8.2	7.8
12	8.4	8.0	8.1	7.9	8.4	8.0	8.3	7.9	8.4	8.0	8.2	7.8
13	---	8.0	8.3	7.9	8.4	8.0	8.3	7.9	8.4	8.0	8.2	7.8
14	8.4	8.0	8.4	7.9	8.4	8.0	8.3	7.9	8.4	8.0	8.2	7.8
15	8.4	8.0	8.4	7.9	8.4	8.0	8.3	7.9	8.4	8.0	8.2	7.8
16	8.5	8.0	8.4	7.9	---	---	8.3	7.9	8.4	8.0	8.2	7.8
17	8.4	8.0	8.4	7.9	8.4	8.0	8.2	8.0	8.4	8.0	8.2	7.8
18	8.4	8.0	8.4	7.9	8.4	7.9	8.3	8.0	8.4	8.0	8.2	7.8
19	8.3	8.0	8.5	7.9	8.4	7.9	8.3	7.9	8.4	8.0	8.1	7.8
20	8.3	8.0	8.5	7.9	8.4	8.0	8.3	7.9	8.4	8.0	8.1	7.8
21	8.3	8.0	8.5	8.0	8.4	8.0	8.3	7.9	8.4	8.0	8.1	7.8
22	8.3	8.0	8.4	8.0	8.4	8.0	8.3	7.9	8.3	7.9	8.1	7.9
23	8.3	8.0	8.4	8.0	8.4	7.9	8.3	7.9	8.4	7.9	8.2	7.9
24	8.2	8.0	8.4	8.0	8.4	7.9	8.3	7.9	8.3	7.9	8.1	7.9
25	8.2	8.0	8.3	8.0	8.4	7.9	8.3	8.0	8.2	8.0	8.2	7.8
26	8.2	8.1	8.3	8.0	8.4	8.0	8.3	7.9	8.3	7.9	8.2	7.9
27	8.2	8.1	8.3	8.0	8.4	7.9	8.4	7.9	8.3	7.9	8.2	7.9
28	8.2	8.1	8.3	8.0	8.3	7.9	8.3	7.9	8.3	8.0	8.2	7.8
29	8.2	8.1	8.3	8.0	8.3	7.9	8.3	7.9	8.3	7.9	8.2	8.0
30	8.3	8.1	8.3	8.0	8.3	7.9	8.3	7.9	8.3	7.8	8.2	8.0
31	---	---	8.4	8.0	---	---	8.3	8.0	8.3	7.8	---	---
Month	---	7.9	8.5	7.7	---	---	8.4	7.9	8.4	7.8	8.3	7.8

11467000 Russian River near Guerneville, CA—Continued



11467000 Russian River near Guerneville, CA—Continued

**SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**

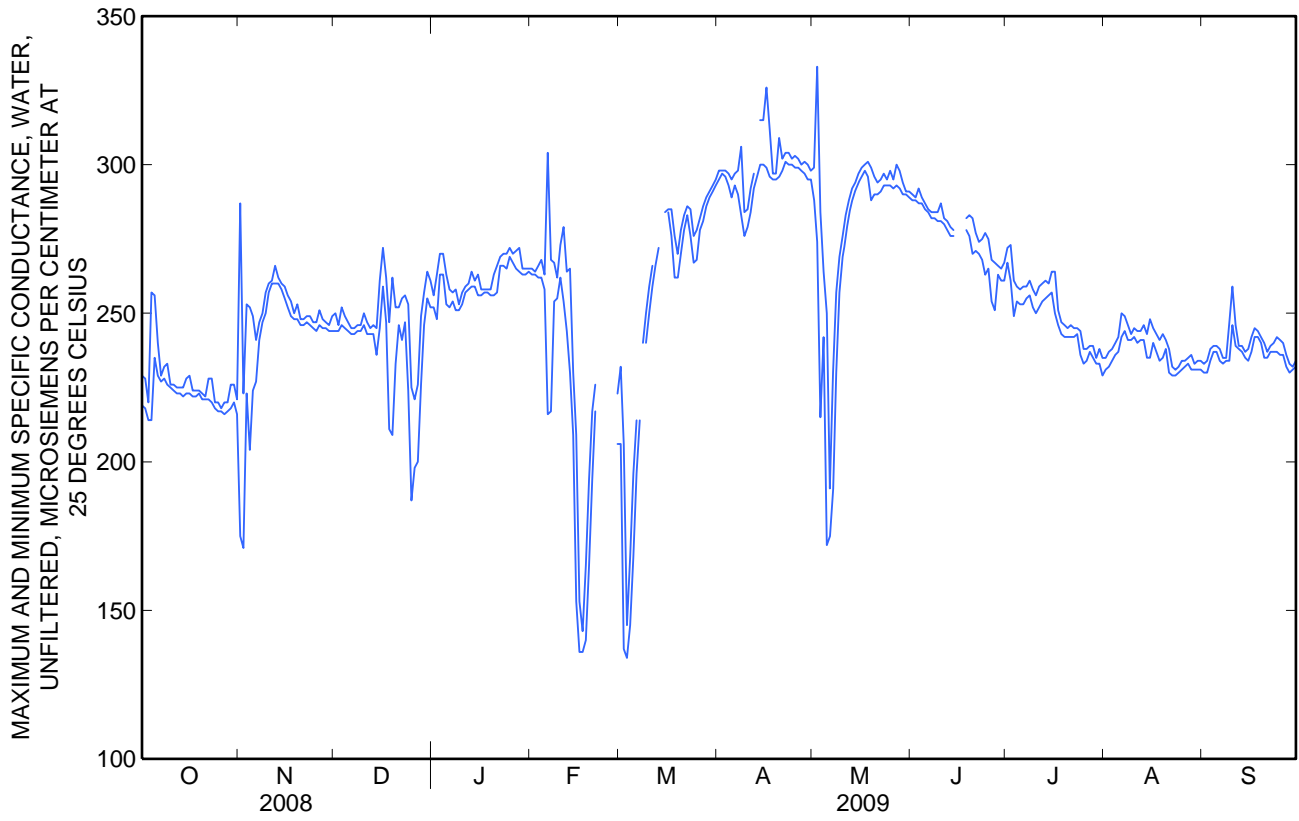
Day	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
	October		November		December		January		February		March	
1	229	219	287	175	250	244	256	252	265	263	232	206
2	228	218	223	171	246	244	263	248	264	263	206	137
3	220	214	253	223	252	246	270	263	266	262	145	134
4	257	214	252	204	249	245	270	263	268	262	168	145
5	256	235	249	224	247	244	263	253	263	258	196	168
6	240	229	241	227	245	243	258	252	304	216	214	196
7	229	227	247	241	245	243	257	254	268	217	---	214
8	232	228	250	247	246	244	258	251	267	254	240	---
9	233	226	257	250	246	244	253	251	262	255	250	240
10	226	225	260	257	250	246	257	253	273	262	259	250
11	226	224	261	260	247	243	259	257	279	254	266	259
12	225	223	266	260	245	243	260	258	264	244	---	266
13	225	223	262	260	246	243	264	259	265	230	---	272
14	225	222	260	258	245	236	261	259	230	209	---	---
15	228	223	259	255	261	245	263	256	209	153	284	---
16	229	223	256	252	272	259	258	256	153	136	285	284
17	224	222	254	249	262	247	258	257	143	136	285	276
18	224	222	250	248	247	211	258	257	165	140	276	262
19	224	223	253	248	262	209	258	256	194	165	270	262
20	223	221	248	246	252	233	263	256	217	194	278	270
21	222	221	248	246	252	246	266	257	226	217	283	278
22	228	221	249	247	255	241	269	266	---	---	286	283
23	228	220	249	246	256	247	270	266	---	---	285	276
24	220	218	247	245	253	224	270	265	---	---	276	267
25	220	217	247	244	225	187	272	269	---	---	278	268
26	218	217	251	246	221	198	270	267	---	---	282	278
27	220	216	248	245	226	200	271	265	---	---	286	281
28	220	217	247	245	249	226	272	264	223	206	289	286
29	226	218	246	244	257	246	265	263	---	---	291	289
30	226	220	249	244	264	255	265	263	---	---	293	291
31	221	216	---	---	261	252	265	264	---	---	295	293
Month	257	214	287	171	272	187	272	248	---	---	---	---

11467000 Russian River near Guerneville, CA—Continued

**SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**

Day	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
	April		May		June		July		August		September	
1	298	295	299	288	290	288	272	267	235	231	233	230
2	298	297	333	274	289	288	273	261	237	232	234	230
3	298	296	284	215	292	287	261	249	238	234	238	234
4	297	293	264	242	289	287	259	254	240	236	239	237
5	295	289	250	172	287	285	258	253	242	237	239	237
6	297	293	191	175	285	284	259	253	250	242	238	234
7	298	290	230	191	284	282	259	255	249	244	235	233
8	306	283	257	230	284	282	261	256	246	241	235	234
9	284	276	269	257	284	281	258	252	243	241	247	234
10	285	279	276	269	287	281	256	250	245	242	259	246
11	292	284	283	276	282	280	259	252	244	240	246	239
12	297	292	288	283	281	278	260	254	244	241	239	238
13	---	296	292	288	279	276	261	255	246	241	239	237
14	315	300	294	291	278	276	260	256	243	235	237	235
15	315	300	297	294	---	---	264	257	248	235	238	234
16	326	299	299	296	---	---	264	250	245	240	242	237
17	312	296	300	298	---	---	251	246	243	237	245	242
18	297	295	301	296	282	278	247	243	241	234	244	242
19	297	295	299	288	283	276	246	242	243	235	242	240
20	309	296	296	290	282	270	245	242	241	238	240	235
21	302	298	294	290	277	271	246	242	238	230	237	235
22	304	301	295	291	274	270	245	242	232	229	239	237
23	304	300	297	293	275	268	245	243	231	229	240	237
24	302	300	295	293	277	263	244	236	232	230	242	237
25	303	299	298	293	275	265	238	233	234	231	241	236
26	302	299	295	292	268	254	238	234	234	232	240	236
27	300	298	300	293	267	251	239	237	235	233	236	232
28	301	297	298	292	266	263	239	235	236	231	233	230
29	300	295	294	290	265	261	235	233	233	231	232	231
30	298	295	291	290	267	261	238	233	234	231	234	232
31	---	---	291	289	---	---	235	229	234	231	---	---
Month	---	276	333	172	---	---	273	229	250	229	259	230

11467000 Russian River near Guerneville, CA—Continued



11467000 Russian River near Guerneville, CA—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

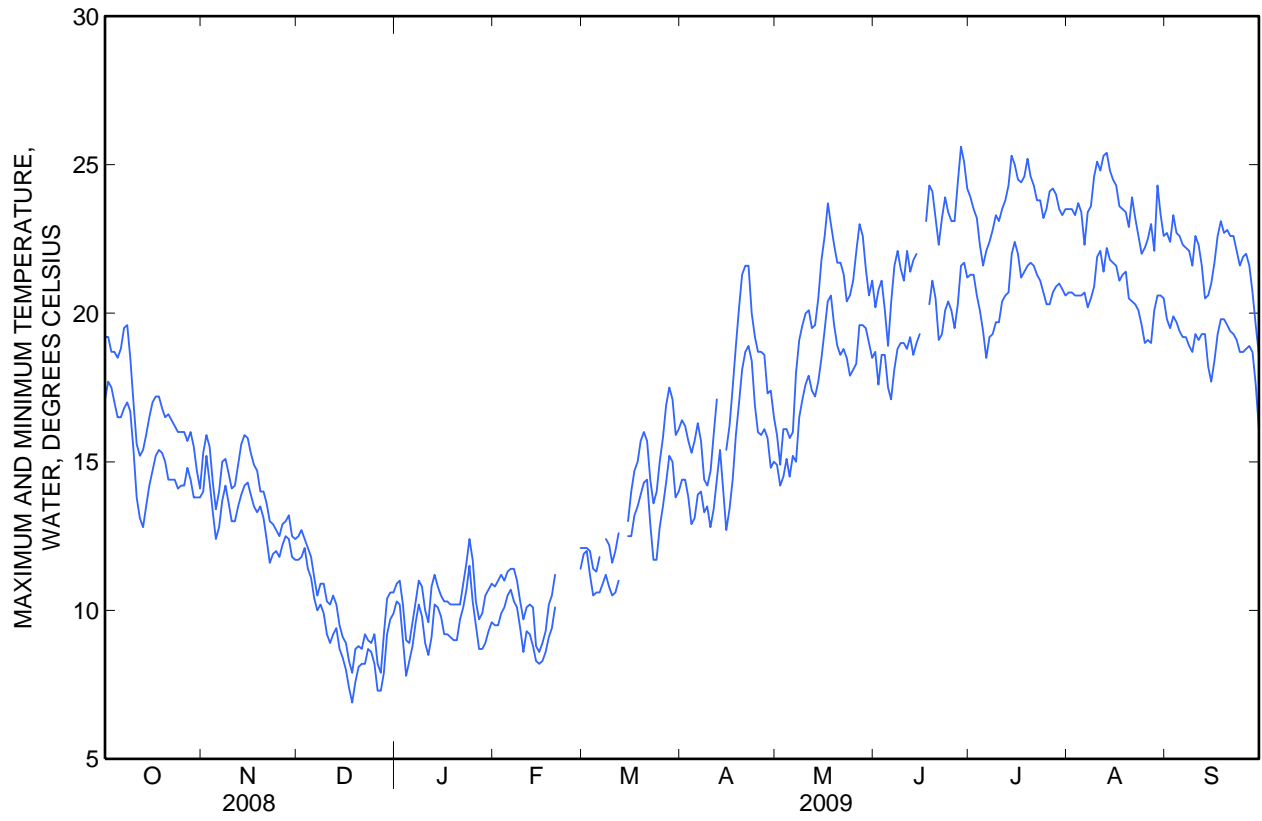
Day	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
	October		November		December		January		February		March	
1	19.2	17.1	15.3	14.0	12.5	11.7	10.9	10.3	10.8	9.5	12.1	11.9
2	19.2	17.7	15.9	15.2	12.7	11.8	11.0	10.2	11.0	9.5	12.1	12.0
3	18.7	17.5	15.5	14.3	12.4	12.1	10.2	9.0	11.2	9.9	12.0	11.2
4	18.7	17.0	14.3	13.3	12.1	11.4	9.0	7.8	11.0	10.1	11.4	10.5
5	18.5	16.5	13.4	12.4	11.8	11.1	8.9	8.3	11.3	10.5	11.3	10.6
6	18.8	16.5	14.0	12.8	11.1	10.4	9.6	8.8	11.4	10.7	11.8	10.6
7	19.5	16.8	15.0	13.7	10.5	10.0	10.3	9.6	11.4	10.3	---	10.9
8	19.6	17.0	15.1	14.2	10.9	10.2	11.0	10.2	11.0	10.1	12.4	11.2
9	18.5	16.7	14.6	13.6	10.9	9.9	10.8	9.8	10.3	9.4	12.2	10.8
10	17.0	15.4	14.1	13.0	10.3	9.2	10.0	8.9	9.7	8.6	11.6	10.5
11	15.6	13.8	14.2	13.0	10.2	8.9	9.6	8.5	10.1	9.3	12.0	10.6
12	15.2	13.1	14.9	13.5	10.5	9.2	10.8	9.1	10.2	9.2	12.6	11.0
13	15.4	12.8	15.6	13.9	10.2	9.4	11.2	10.2	10.1	8.8	---	---
14	15.9	13.5	15.9	14.2	9.5	8.7	10.8	10.1	8.8	8.3	---	---
15	16.5	14.2	15.8	14.3	9.1	8.4	10.5	9.8	8.6	8.2	13.0	12.5
16	17.0	14.7	15.3	13.9	8.9	8.0	10.3	9.2	8.9	8.3	14.0	12.5
17	17.2	15.2	14.9	13.5	8.3	7.4	10.3	9.2	9.3	8.6	14.7	13.2
18	17.2	15.4	14.7	13.3	7.9	6.9	10.2	9.1	10.2	9.1	15.0	13.5
19	16.8	15.3	14.0	13.5	8.7	7.6	10.2	9.0	10.5	9.4	15.7	13.9
20	16.5	15.0	14.0	13.1	8.8	8.1	10.2	9.0	11.2	10.1	16.0	14.3
21	16.6	14.4	13.6	12.4	8.7	8.2	10.2	9.7	---	---	15.7	14.4
22	16.4	14.4	13.0	11.6	9.2	8.2	10.9	10.1	---	---	14.4	12.9
23	16.2	14.4	12.9	11.9	9.0	8.7	11.6	10.7	---	---	13.6	11.7
24	16.0	14.1	12.7	12.0	8.9	8.6	12.4	11.5	---	---	14.0	11.7
25	16.0	14.2	12.5	11.8	9.2	8.2	11.7	10.3	---	---	15.0	12.8
26	16.0	14.2	12.9	12.2	8.2	7.3	10.3	9.5	---	---	15.8	13.5
27	15.7	14.8	13.0	12.5	7.9	7.3	9.7	8.7	---	---	16.9	14.3
28	16.0	14.4	13.2	12.4	9.2	7.9	9.9	8.7	12.1	11.4	17.5	15.2
29	15.5	13.8	12.5	11.8	10.4	9.2	10.5	8.9	---	---	17.1	15.0
30	14.7	13.8	12.4	11.7	10.6	9.7	10.7	9.3	---	---	15.9	13.8
31	14.1	13.8	---	---	10.6	9.9	10.9	9.6	---	---	16.1	14.0
Month	19.6	12.8	15.9	11.6	12.7	6.9	12.4	7.8	---	---	---	---

11467000 Russian River near Guerneville, CA—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Day	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
	April		May		June		July		August		September	
1	16.4	14.4	15.9	14.9	20.2	18.7	23.9	21.3	23.5	20.7	22.7	19.8
2	16.2	14.4	14.9	14.2	20.8	17.6	23.5	21.3	23.5	20.7	22.4	19.5
3	15.7	13.8	16.1	14.5	21.1	18.6	23.2	20.6	23.3	20.6	23.3	19.9
4	15.3	12.9	16.1	15.1	20.1	18.6	22.3	20.1	23.7	20.6	22.7	19.7
5	15.7	13.1	15.8	14.5	18.9	17.5	21.6	19.4	23.4	20.6	22.6	19.4
6	16.3	13.9	16.0	15.2	20.4	17.1	22.1	18.5	22.3	20.7	22.3	19.2
7	15.7	14.0	18.0	15.0	21.6	18.1	22.4	19.2	23.4	20.2	22.2	19.2
8	14.4	13.3	19.1	16.5	22.1	18.8	22.8	19.3	23.6	20.5	22.1	18.9
9	14.2	13.5	19.6	17.1	21.5	19.0	23.3	19.7	24.6	20.9	21.6	18.7
10	14.7	12.8	20.0	17.6	21.1	19.0	23.1	19.7	25.1	21.9	22.6	19.3
11	15.9	13.4	20.1	17.9	22.1	18.8	23.5	20.4	24.8	22.1	22.3	19.1
12	17.1	14.4	19.5	17.4	21.4	19.2	23.8	20.6	25.3	21.4	21.6	19.3
13	---	15.4	19.6	17.2	21.8	18.6	24.3	20.7	25.4	22.2	20.5	19.3
14	---	14.1	20.5	17.7	22.0	19.0	25.3	22.0	24.8	21.8	20.6	18.2
15	15.4	12.7	21.8	18.5	---	19.3	25.0	22.4	24.5	21.7	21.0	17.7
16	16.2	13.4	22.6	19.4	---	---	24.5	22.0	24.3	21.6	21.7	18.4
17	17.5	14.4	23.7	20.4	23.1	---	24.4	21.2	23.6	21.1	22.6	19.3
18	18.9	15.9	23.0	20.6	24.3	20.3	24.6	21.4	23.5	21.3	23.1	19.8
19	20.2	17.0	22.3	19.6	24.1	21.1	25.2	21.6	23.4	21.4	22.7	19.8
20	21.3	18.1	21.7	18.9	23.2	20.5	24.6	21.7	22.9	20.5	22.8	19.6
21	21.6	18.7	21.7	18.6	22.3	19.1	24.3	21.6	23.9	20.4	22.6	19.4
22	21.6	18.9	21.3	18.8	23.2	19.3	23.8	21.3	23.2	20.3	22.6	19.3
23	20.0	18.4	20.4	18.5	23.9	20.1	23.8	21.1	22.6	20.1	22.1	19.1
24	19.2	16.9	20.6	17.9	23.4	20.4	23.2	20.7	22.0	19.6	21.6	18.7
25	18.7	16.0	21.1	18.1	23.1	20.1	23.5	20.3	22.2	19.0	21.9	18.7
26	18.7	15.9	22.1	18.3	23.1	19.5	24.1	20.3	22.5	19.1	22.0	18.8
27	18.6	16.1	23.0	19.6	24.4	20.3	24.2	20.7	23.0	19.0	21.6	18.9
28	17.3	15.8	22.6	19.6	25.6	21.6	24.0	20.9	22.1	20.1	20.7	18.7
29	17.4	14.8	21.5	19.5	25.1	21.7	23.5	21.0	24.3	20.6	19.6	17.6
30	16.5	15.0	20.6	19.0	24.2	21.2	23.3	20.8	23.3	20.6	18.6	16.1
31	---	---	21.1	18.5	---	---	23.5	20.6	22.6	20.5	---	---
Month	---	12.7	23.7	14.2	---	---	25.3	18.5	25.4	19.0	23.3	16.1

11467000 Russian River near Guerneville, CA—Continued



11467000 Russian River near Guerneville, CA—Continued

TURBIDITY, WATER, UNFILT, NEAR IR LED LIGHT, 780-900 NM, DETECT ANG. 90 DEG, FORMAZIN NEPHELOMETRIC UNITS
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Day	Max	Min	Median	Max	Min	Median	Max	Min	Median	Max	Min	Median
	October			November			December			January		
1	4.2	0.3	0.7	23	2.3	4.3	2.5	0.3	---	5.5	3.0	4.3
2	1.8	0.5	0.8	21	5.2	13	1.0	0.3	---	4.2	2.3	3.0
3	4.0	0.6	1.0	7.8	4.7	5.8	1.1	0.4	---	2.9	1.7	2.2
4	4.9	1.1	1.9	25	6.8	12	0.6	0.3	0.4	2.1	1.4	1.6
5	4.8	1.4	2.7	34	12	22	0.6	0.3	0.4	2.2	1.2	1.5
6	2.0	0.6	1.3	12	5.1	7.4	0.7	0.3	0.4	2.6	1.7	2.1
7	2.1	1.0	1.4	5.6	2.2	2.7	0.8	0.2	0.4	2.1	1.2	1.6
8	2.1	1.0	1.5	3.0	1.8	2.3	0.8	0.2	0.3	2.0	1.1	1.4
9	2.0	0.7	1.2	2.6	1.6	1.9	0.7	0.3	0.4	2.1	1.3	1.6
10	1.9	0.7	1.0	2.2	1.5	1.8	0.7	0.3	0.4	1.8	1.0	1.3
11	1.9	0.6	0.8	2.4	1.4	1.7	1.0	0.3	0.5	1.5	0.9	---
12	1.1	0.6	0.7	2.2	1.4	1.7	1.6	0.3	---	1.4	0.7	1.0
13	1.1	0.6	0.7	2.2	1.3	1.6	---	---	---	1.6	0.7	1.0
14	1.2	0.6	0.8	2.1	1.4	1.6	---	---	---	1.8	0.7	---
15	1.2	0.6	0.9	2.2	1.3	1.6	---	---	---	2.0	1.0	1.6
16	1.8	0.8	1.1	2.1	1.1	1.4	1.0	0.4	0.5	2.9	0.9	1.4
17	2.5	0.7	---	2.2	0.8	---	0.7	0.3	0.4	---	---	---
18	---	---	---	2.8	0.7	1.0	2.3	0.3	0.4	---	---	---
19	1.6	0.6	1.0	1.5	0.6	0.9	5.3	0.5	2.1	---	---	---
20	1.9	0.9	---	1.7	0.7	0.9	4.1	0.9	1.6	3.3	0.4	---
21	1.7	0.6	0.9	1.8	0.7	0.8	2.8	0.8	---	1.3	0.4	0.6
22	1.7	0.6	0.9	1.8	0.6	0.8	4.1	1.7	3.0	1.3	0.4	0.7
23	1.7	0.6	0.9	1.0	0.6	0.8	5.4	1.7	2.0	1.5	0.5	0.8
24	1.4	0.6	0.9	2.0	0.6	0.8	16	2.7	4.2	2.0	0.8	1.1
25	1.6	0.6	1.0	1.6	0.6	0.8	120	14	60	1.6	0.7	---
26	1.8	0.8	1.0	2.0	0.7	0.9	130	59	71	2.1	0.9	1.2
27	2.3	0.7	1.0	1.5	0.7	0.9	69	18	39	3.6	1.1	1.9
28	2.1	0.7	1.0	1.2	0.7	0.9	19	8.1	12	3.9	0.9	2.4
29	2.3	0.8	---	2.0	0.8	1.0	9.0	4.8	---	---	---	---
30	---	0.6	---	2.0	0.7	1.1	5.4	3.4	4.2	3.9	0.5	---
31	3.0	0.9	1.6	---	---	---	5.2	3.4	4.1	1.2	0.5	0.6
Max	---	---	---	34	12	---	---	---	---	---	---	---
Min	---	---	---	1.0	0.6	---	---	---	---	---	---	---

11467000 Russian River near Guerneville, CA—Continued

TURBIDITY, WATER, UNFILT, NEAR IR LED LIGHT, 780-900 NM, DETECT ANG. 90 DEG, FORMAZIN NEPHELOMETRIC UNITS
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

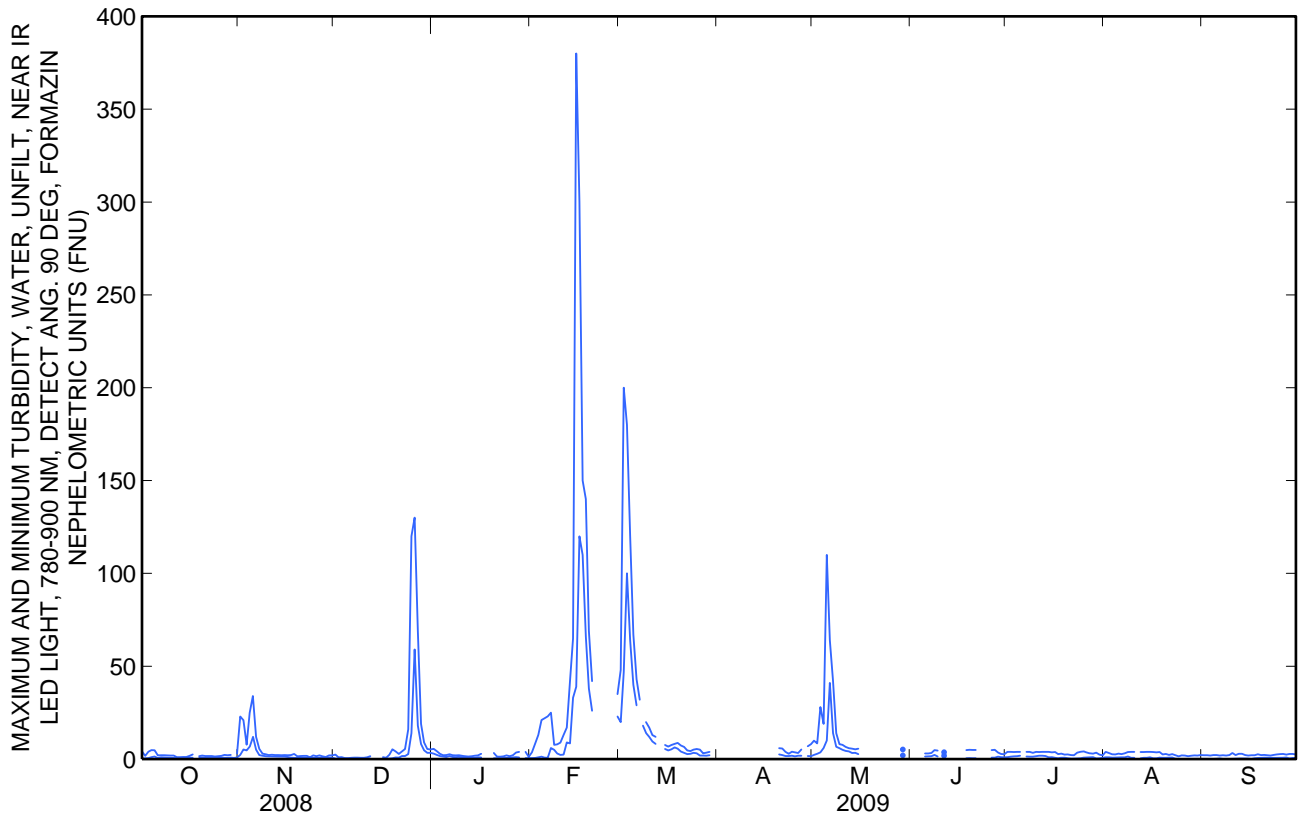
Day	Max	Min	Median	Max	Min	Median	Max	Min	Median	Max	Min	Median
	February			March			April			May		
1	3.6	0.5	---	48	20	---	---	---	---	9.9	2.3	---
2	8.3	0.6	2.4	200	47	140	---	---	---	8.5	2.9	4.9
3	13	1.0	5.0	180	100	120	---	---	---	28	3.7	---
4	21	1.3	11	120	64	86	---	---	---	19	6.0	8.4
5	22	0.8	2.8	67	40	49	---	---	---	110	10	58
6	23	0.7	4.2	43	29	34	---	---	---	64	41	52
7	25	6.0	8.8	32	---	---	---	---	---	42	14	22
8	7.7	5.0	---	---	18	---	---	---	---	14	6.7	9.3
9	7.9	3.0	---	20	14	17	---	---	---	8.0	5.9	7.2
10	8.9	2.3	4.5	17	12	14	---	---	---	7.7	5.0	---
11	13	2.4	5.5	13	9.5	11	---	---	---	6.6	4.4	5.3
12	17	9.0	11	12	8.2	---	---	---	---	5.9	4.2	---
13	42	8.5	25	---	---	---	---	---	---	5.6	3.3	4.4
14	65	33	45	---	---	---	---	---	---	5.3	3.4	4.4
15	380	39	---	7.6	5.4	---	---	---	---	5.6	2.7	3.9
16	300	120	160	6.8	4.7	5.5	---	---	---	---	---	---
17	150	110	130	7.6	5.3	6.2	---	---	---	---	---	---
18	140	66	100	8.2	6.3	7.1	---	---	---	---	---	---
19	69	38	50	8.7	5.6	---	---	---	---	---	---	---
20	42	26	32	7.4	4.1	---	5.9	2.5	3.6	---	---	---
21	---	---	---	6.6	3.4	4.7	5.7	2.2	3.5	---	---	---
22	---	---	---	4.7	2.7	---	3.9	1.7	---	---	---	---
23	---	---	---	4.4	2.9	3.5	2.9	1.7	2.2	---	---	---
24	---	---	---	5.1	3.4	4.2	4.0	1.8	2.5	---	---	---
25	---	---	---	5.5	3.1	4.1	3.7	1.5	2.4	---	---	---
26	---	---	---	5.1	1.9	3.1	3.3	1.8	---	---	---	---
27	---	---	---	3.2	1.9	2.4	5.2	1.8	2.6	---	---	---
28	35	23	29	3.5	1.8	2.6	---	---	---	---	---	---
29	---	---	---	3.9	2.1	---	6.9	1.7	---	5.2	2.0	---
30	---	---	---	---	---	---	8.0	1.6	3.0	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
Max	---	---	---	---	---	---	---	---	---	---	---	---
Min	---	---	---	---	---	---	---	---	---	---	---	---

11467000 Russian River near Guerneville, CA—Continued

TURBIDITY, WATER, UNFILT, NEAR IR LED LIGHT, 780-900 NM, DETECT ANG. 90 DEG, FORMAZIN NEPHELOMETRIC UNITS
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Day	Max	Min	Median	Max	Min	Median	Max	Min	Median	Max	Min	Median
	June			July			August			September		
1	---	---	---	3.9	1.1	1.6	3.9	1.0	1.6	2.1	0.1	0.6
2	---	---	---	3.9	1.3	1.9	3.3	1.0	1.5	2.1	0.1	1.0
3	---	---	---	3.8	1.5	2.7	2.6	0.8	1.4	1.9	0.1	0.5
4	---	---	---	3.9	1.6	2.3	2.5	0.8	1.4	2.2	0.1	0.5
5	3.0	1.4	---	3.9	1.9	---	3.0	1.0	1.5	2.2	0.2	0.7
6	3.0	1.5	2.0	---	---	---	2.7	0.9	1.7	1.9	0.4	0.8
7	3.3	1.6	---	3.9	1.4	---	3.1	1.0	1.5	2.1	0.1	0.7
8	4.9	2.3	3.7	3.9	1.3	---	3.8	1.4	2.4	1.9	0.1	0.6
9	4.6	1.4	1.9	3.4	1.3	1.8	3.9	0.7	2.5	2.2	0.1	0.7
10	---	---	---	3.9	1.6	2.3	3.9	0.7	2.1	3.3	0.1	0.6
11	3.7	1.8	---	3.8	1.8	2.8	---	---	---	2.2	0.2	0.7
12	---	---	---	3.9	1.8	2.8	3.8	0.5	1.7	2.9	0.5	1.1
13	---	---	---	3.9	1.7	2.5	3.8	0.7	---	2.9	0.5	1.2
14	---	---	---	3.9	1.0	---	3.9	0.7	2.3	2.2	0.2	0.8
15	---	---	---	3.7	1.1	2.1	3.9	1.0	2.6	1.9	0.2	0.7
16	---	---	---	3.8	0.7	1.8	3.8	0.5	2.0	2.1	0.1	---
17	---	---	---	2.7	0.5	1.1	3.7	0.5	2.0	2.1	0.5	1.1
18	4.8	0.5	2.4	3.0	0.7	1.3	3.8	0.8	---	2.6	0.6	1.2
19	5.0	0.6	---	2.4	0.8	1.4	2.5	0.7	1.4	2.2	0.8	1.4
20	4.9	0.5	2.2	2.5	0.5	1.2	2.8	0.7	1.3	2.3	0.9	1.4
21	4.9	0.4	2.0	2.2	0.3	0.9	2.3	0.8	1.3	2.1	0.6	1.2
22	---	---	---	2.1	0.3	0.9	2.7	0.9	1.4	1.9	0.6	1.1
23	---	---	---	3.5	0.4	1.0	2.1	0.2	0.9	2.3	0.7	1.3
24	---	---	---	3.9	0.5	2.0	1.5	0.1	0.6	2.5	0.7	1.4
25	---	---	---	4.2	0.8	2.0	2.0	0.1	0.6	2.7	0.7	1.2
26	4.8	0.8	2.1	3.5	0.9	1.9	1.9	0.1	0.6	2.8	0.8	1.3
27	5.0	0.8	2.5	3.2	1.0	1.6	1.6	0.1	0.4	2.4	0.9	---
28	3.6	1.3	1.9	3.0	1.1	1.7	1.8	0.1	0.6	2.8	0.4	1.6
29	2.8	1.1	1.7	3.5	0.4	1.5	2.0	0.2	0.8	2.8	0.6	1.1
30	2.6	1.0	1.5	2.4	0.5	1.0	1.9	0.2	0.8	2.5	0.6	1.2
31	---	---	---	2.0	0.7	---	2.2	0.1	0.6	---	---	---
Max	---	---	---	---	---	---	---	---	---	3.3	0.9	---
Min	---	---	---	---	---	---	---	---	---	1.9	0.1	---

11467000 Russian River near Guerneville, CA—Continued



11467000 Russian River near Guerneville, CA—Continued

CROSS SECTION ANALYSES
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Date	Time	Baro- metric pres- sure, mm Hg (00025)	Dis- solved oxygen, mg/L (00300)	Dis- solved oxygen, percent of sat- uration (00301)	pH, water, unfltrd field, std units (00400)	Specif- ic conduc- tance, wat unf μS/cm @ 25 degC (00095)	Temper- ature, deg C (00010)	Turbid- ity, IR LED light, det ang 90 deg, FNU (63680)	DepthTo bottom at sample loca- tion, feet (81903)	Sam- pling depth, feet (00003)	Stream width, feet (00004)	Loca- tion in X-sect. looking dwnstrm ft from l bank (00009)
Apr												
24...	1114	766	9.1	94	7.8	303	17.2	2.7	1.95	.39	64.0	10.0
24...	1115	766	9.1	94	7.8	302	17.2	2.4	1.95	1.56	64.0	10.0
24...	1116	766	9.0	93	7.8	302	17.2	2.6	2.30	.46	64.0	15.0
24...	1117	766	9.0	93	7.8	302	17.2	2.6	2.30	1.84	64.0	15.0
24...	1118	766	9.0	94	7.8	303	17.2	2.6	2.25	.45	64.0	20.0
24...	1119	766	9.0	94	7.8	302	17.2	2.7	2.25	1.80	64.0	20.0
24...	1120	766	9.0	94	7.8	302	17.3	2.7	2.10	.42	64.0	25.0
24...	1121	766	9.1	94	7.8	302	17.3	2.6	2.10	1.68	64.0	25.0
24...	1122	766	9.1	94	7.8	302	17.3	2.4	2.25	.45	64.0	30.0
24...	1123	766	9.1	94	7.8	302	17.3	2.5	2.25	1.80	64.0	30.0
24...	1124	766	9.1	94	7.9	302	17.3	2.6	2.25	.45	64.0	35.0
24...	1125	766	9.1	94	7.9	302	17.2	2.5	2.25	1.80	64.0	35.0
24...	1126	766	9.0	94	7.8	303	17.2	2.7	2.40	.48	64.0	40.0
24...	1127	766	9.0	93	7.9	302	17.2	2.7	2.40	1.92	64.0	40.0
24...	1128	766	9.0	94	7.9	302	17.3	2.5	2.35	.47	64.0	45.0
24...	1129	766	9.0	94	7.9	302	17.2	2.7	2.35	1.88	64.0	45.0
24...	1130	766	9.0	93	7.9	302	17.3	2.7	2.30	.46	64.0	50.0
24...	1131	766	9.1	94	7.9	302	17.3	2.6	2.30	1.84	64.0	50.0
24...	1132	766	9.1	94	7.9	302	17.3	2.5	1.90	.38	64.0	55.0
24...	1133	766	9.1	94	7.9	302	17.3	2.4	1.90	1.52	64.0	55.0
Sep												
18...	1019	759	7.6	84	7.5	241	19.7	2.8	1.24	.62	62.0	10.0
18...	1020	759	7.6	84	7.5	241	19.7	1.7	1.10	.55	62.0	15.0
18...	1021	759	7.6	84	7.5	241	19.7	1.9	1.13	.57	62.0	20.0
18...	1022	759	7.6	84	7.5	241	19.7	2.1	1.04	.52	62.0	25.0
18...	1023	759	7.6	84	7.5	241	19.7	1.9	1.17	.59	62.0	30.0
18...	1024	759	7.6	84	7.5	241	19.7	1.8	1.45	.73	62.0	35.0
18...	1025	759	7.6	84	7.5	241	19.8	1.7	1.47	.73	62.0	40.0
18...	1026	759	7.6	84	7.5	241	19.8	1.9	1.30	.65	62.0	45.0
18...	1027	759	7.7	84	7.5	241	19.8	1.7	.95	.48	62.0	50.0
18...	1028	759	7.6	84	7.5	241	19.8	1.5	.65	.33	62.0	55.0

Note: Instantaneous discharge at the mean time of cross-sectional measurements: Apr. 24, 302 ft³/s, Sept. 18, 90 ft³/s.