Water-Data Report 2012

11162620 Pilarcitos Creek below Stone Dam, near Hillsborough, CA

Pilarcitos Creek Basin

LOCATION.--Lat 37°31′29″, long 122°23′54″ referenced to North American Datum of 1927, in NE ¼ SW ¼ sec.3, T.5 S., R.5 W., San Mateo County, CA, Hydrologic Unit 18050006, on left bank, 50 ft downstream of unnamed tributary, 0.2 mi downstream of Stone Dam, and 2.4 mi southwest of Hillsborough.

DRAINAGE AREA.--6.54 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1997 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 500 ft above NGVD of 1929, from topographic map.

REMARKS.--Records poor. Flow regulated by storage in Pilarcitos Lake, 2.6 mi upstream, capacity, 2,900 acre-ft. Water is diverted by city of San Francisco water system at Pilarcitos Lake and Stone Dam.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 279 ft^3/s, Feb. 7, 1999, gage height, 7.46 ft, from rating curve extended above 90 ft^3/s; no flow Oct. 13, 14, 2001.

11162620 Pilarcitos Creek below Stone Dam, near Hillsborough, CA—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	1.4	1.3	0.98	1.8	2.5	2.8	6.9	1.8	1.2	2.0	1.2	1.5
2	1.1	1.3	0.88	1.7	2.5	2.6	4.9	1.6	1.5	1.8	1.2	1.9
3	0.88	1.3	0.86	1.7	2.5	2.4	1.8	1.7	1.8	1.8	1.2	1.4
4	0.62	1.3	1.2	1.6	2.4	2.3	2.0	1.7	1.7	2.0	1.2	1.2
5	2.8	1.6	1.6	1.6	2.4	2.1	2.2	1.4	1.5	1.9	1.2	1.3
6	1.2	1.5	1.3	1.6	2.4	2.0	2.2	1.3	1.5	1.8	1.2	1.4
7	1.2	1.3	1.2	1.6	2.4	2.6	1.9	1.2	1.3	1.8	1.2	1.4
8	2.1	1.3	1.2	1.5	2.4	2.0	1.7	1.1	1.3	1.9	1.2	1.3
9	2.5	1.1	1.2	1.4	2.4	1.9	1.6	1.2	1.3	2.1	1.2	1.3
10	2.0	1.1	1.2	1.4	2.4	1.8	1.9	1.3	1.3	2.0	1.2	1.8
11	1.9	1.0	1.2	1.4	2.5	1.9	3.1	1.3	1.6	1.9	1.6	1.7
12	1.6	1.2	1.2	1.4	2.4	1.9	3.0	1.5	1.7	1.9	2.3	1.6
13	1.4	1.5	1.1	1.4	2.8	2.5	74	1.7	1.6	1.8	1.8	1.5
14	1.7	0.96	1.2	1.5	2.4	39	15	1.7	1.6	1.8	1.5	1.5
15	2.8	1.2	1.2	1.5	1.8	48	4.1	1.7	1.6	1.8	1.4	1.5
16	2.8	1.2	1.0	1.5	2.0	48	6.9	1.6	1.6	1.7	1.3	1.5
17	2.7	1.2	1.0	1.4	1.9	42	4.3	1.6	1.8	1.8	1.3	1.4
18	2.6	1.2	0.94	1.4	1.7	6.8	2.8	1.6	1.8	1.7	1.2	1.5
19	2.5	1.3	0.86	1.5	1.7	4.1	2.0	1.5	1.8	1.6	1.4	1.5
20	1.6	1.5	0.82	3.6	1.9	4.9	1.6	1.5	1.7	1.6	1.8	1.4
21	1.3	1.3	1.3	8.9	1.8	4.4	2.1	1.4	1.7	2.0	1.4	1.4
22	1.2	1.2	2.2	3.3	1.7	3.8	3.1	1.3	1.7	2.0	1.4	1.4
23	1.3	1.2	2.1	6.4	1.6	2.3	3.0	1.3	1.6	2.1	2.2	1.5
24	1.3	1.3	2.0	4.1	2.2	3.4	2.2	1.3	2.2	0.94	1.8	1.5
25	1.4	1.3	2.0	3.3	1.6	6.8	2.2	1.2	2.0	1.4	1.7	1.4
26	1.4	1.2	1.7	3.0	1.6	3.7	2.6	1.4	2.0	1.5	1.5	1.5
27	1.5	1.2	2.0	2.9	1.7	4.1	1.5	1.6	2.2	1.4	1.4	1.5
28	1.4	1.2	1.3	2.7	1.6	6.5	1.6	1.5	2.2	1.5	1.4	1.5
29	1.3	1.1	1.0	2.6	2.6	11	1.5	1.9	2.1	1.4	1.3	1.4
30	1.2	1.2	1.7	2.6	---	9.1	1.6	2.1	2.4	1.3	1.3	1.3
31	1.3	---	1.8	2.5	---	6.9	---	1.5	---	1.2	1.2	---
Total	52.00	37.56	41.24	74.8	61.8	283.6	165.3	46.5	51.3	53.44	44.2	44.0
Mean	1.68	1.25	1.33	2.41	2.13	9.15	5.51	1.50	1.71	1.72	1.43	1.47
Max	2.8	1.6	2.2	8.9	2.8	48	74	2.1	2.4	2.1	2.3	1.9
Min	0.62	0.96	0.82	1.4	1.6	1.8	1.5	1.1	1.2	0.94	1.2	1.2
Ac-ft	103	75	82	148	123	563	328	92	102	106	88	87

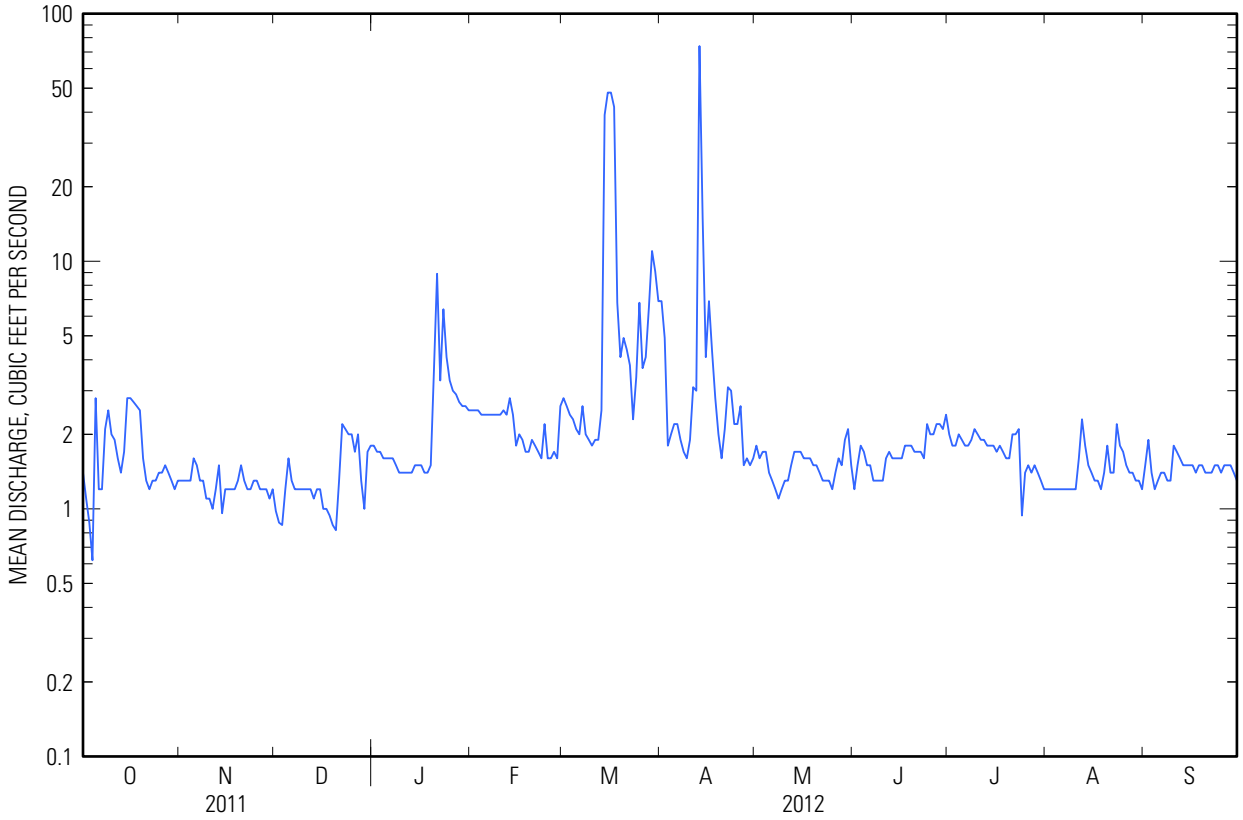
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2012, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	0.66	0.76	2.79	7.37	11.1	7.68	4.45	1.82	1.06	0.79	0.61	0.53
Max	1.68	2.70	11.6	29.2	60.4	31.9	34.2	8.23	2.92	1.72	1.77	1.47
(WY)	(2012)	(2007)	(2006)	(2006)	(1998)	(2006)	(2006)	(2006)	(2006)	(2012)	(2010)	(2012)
Min	0.03	0.10	0.07	0.44	0.35	0.46	0.22	0.12	0.06	0.06	0.05	0.06
(WY)	(2002)	(2000)	(2000)	(2001)	(2003)	(2003)	(2001)	(2001)	(2001)	(2001)	(2001)	(2001)

11162620 Pilarcitos Creek below Stone Dam, near Hillsborough, CA—Continued

SUMMARY STATISTICS

	Calendar Year 2011		Water Year 2012		Water Years 1998 - 2012	
Annual total	1,775.80		955.74			
Annual mean	4.87		2.61		3.26	
Highest annual mean					11.2	2006
Lowest annual mean					0.31	2001
Highest daily mean	92	Mar 26	74	Apr 13	174	Dec 31, 2005
Lowest daily mean	0.62	Oct 4	0.62	Oct 4	0.00	Oct 13, 2001
Annual seven-day minimum	0.66	Sep 10	1.0	Dec 14	0.01	Oct 9, 2001
Maximum peak flow			136	Apr 13	279	Feb 7, 1999
Maximum peak stage			6.89	Apr 13	7.46	Feb 7, 1999
Annual runoff (ac-ft)	3,520		1,900		2,360	
10 percent exceeds	7.8		2.8		5.6	
50 percent exceeds	2.0		1.6		0.81	
90 percent exceeds	0.95		1.2		0.12	



11162620 Pilarcitos Creek below Stone Dam, near Hillsborough, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--October 2008 to current year.
WATER TEMPERATURE: October 2008 to current year.

INSTRUMENTATION.--Water-temperature recorder since October 2008.

REMARKS.--Water-temperature records rated excellent. Water temperature can be affected by releases from Pilarcitos Reservoir.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Maximum recorded 19.4°C, June 28, 2009; minimum recorded, 3.6°C, Jan. 18, 2012.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum recorded, 17.8°C, Aug. 11; minimum recorded, 3.6°C, Jan. 18.

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

Day	Max	Min	Median	Max	Min	Median	Max	Min	Median	Max	Min	Median
	October			November			December			January		
1	16.9	16.3	16.5	13.1	11.9	12.4	9.6	9.2	9.4	7.3	6.7	6.9
2	16.5	15.5	16.2	11.9	11.0	11.6	9.4	8.6	9.0	8.0	6.6	7.3
3	15.6	14.7	15.2	11.5	10.7	11.4	8.9	7.9	8.6	8.1	7.7	7.9
4	14.9	14.5	14.7	11.3	10.5	10.9	8.1	6.9	7.7	7.7	7.2	7.6
5	15.5	14.3	14.9	11.7	10.3	10.8	7.9	7.3	7.7	7.8	7.2	7.4
6	14.4	13.7	14.0	11.7	10.8	11.1	7.4	6.7	7.1	7.3	6.9	7.1
7	14.2	12.8	13.6	11.0	10.2	10.7	7.1	6.3	6.8	7.0	6.3	6.7
8	15.1	12.9	13.8	10.2	9.4	9.9	7.3	6.6	6.9	6.8	6.2	6.4
9	14.8	14.1	14.5	10.1	9.3	9.7	7.1	6.4	6.8	6.3	5.5	5.9
10	15.2	14.3	14.7	10.1	8.8	9.6	7.1	6.2	6.7	5.9	5.1	5.6
11	15.8	15.0	15.2	11.0	9.4	10.0	8.3	7.1	7.6	5.7	4.9	5.3
12	15.2	14.2	14.9	12.0	11.0	11.4	8.5	7.7	8.3	5.5	4.8	5.2
13	15.0	13.9	14.6	11.6	10.8	11.1	7.7	6.8	7.2	5.5	4.8	5.2
14	14.8	13.7	14.4	11.3	10.6	11.1	7.2	6.3	6.9	5.5	4.6	5.0
15	15.6	14.4	14.8	11.0	10.2	10.5	8.1	7.0	7.6	5.7	4.6	5.3
16	16.1	15.3	15.6	11.0	10.2	10.6	7.5	6.5	6.8	5.5	4.3	4.9
17	15.8	14.5	15.1	11.7	10.4	11.0	6.8	6.0	6.3	4.6	4.0	4.3
18	15.6	14.7	15.1	11.5	10.7	11.1	7.0	5.6	6.3	4.7	3.6	4.2
19	15.2	14.7	15.0	10.7	9.8	10.2	7.7	6.8	7.4	6.0	4.0	4.6
20	14.7	13.8	14.2	10.9	10.2	10.7	6.8	5.8	6.3	9.2	6.0	7.8
21	14.7	13.4	13.9	10.8	10.3	10.6	6.3	5.2	5.8	9.0	8.3	8.8
22	14.6	13.2	14.0	10.9	10.2	10.5	5.9	5.4	5.8	8.7	7.9	8.2
23	15.1	13.5	14.2	11.1	9.9	10.6	5.4	4.7	5.0	9.5	8.7	9.2
24	14.8	14.0	14.4	11.7	10.3	11.2	4.8	4.4	4.6	9.2	8.7	9.0
25	14.4	13.6	14.2	11.0	10.0	10.6	5.0	4.2	4.5	9.4	8.7	9.0
26	13.6	12.2	13.0	11.0	10.3	10.7	6.5	4.5	5.5	10.2	9.4	9.9
27	12.5	11.3	12.1	10.6	9.8	10.3	6.8	6.3	6.5	9.9	8.2	9.1
28	12.6	11.2	12.0	10.5	9.6	10.2	6.8	5.9	6.2	8.2	7.2	7.6
29	12.5	11.1	12.0	10.2	9.2	9.7	8.0	6.7	7.1	7.7	6.8	7.2
30	13.0	11.3	12.0	9.9	9.2	9.6	9.3	8.0	8.8	8.5	7.4	7.8
31	13.3	12.2	12.7	---	---	---	8.9	7.3	7.9	9.0	8.5	8.7
Max	16.9	16.3	16.5	13.1	11.9	12.4	9.6	9.2	9.4	10.2	9.4	9.9
Min	12.5	11.1	12.0	9.9	8.8	9.6	4.8	4.2	4.5	4.6	3.6	4.2

11162620 Pilarcitos Creek below Stone Dam, near Hillsborough, CA—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

Day	Max	Min	Median	Max	Min	Median	Max	Min	Median	Max	Min	Median
		February			March			April			May	
1	9.1	8.4	8.8	8.7	8.1	8.3	11.5	10.5	10.9	13.6	12.3	12.9
2	8.6	7.7	7.9	8.2	7.2	7.7	11.8	10.1	10.5	12.7	11.4	12.1
3	7.7	7.0	7.4	8.4	6.6	7.3	11.3	9.3	10.4	12.7	11.8	12.1
4	7.2	6.6	7.0	8.9	7.1	7.9	10.8	9.6	10.2	13.2	11.8	12.5
5	7.6	6.2	6.7	8.5	7.4	8.2	10.2	8.6	9.5	13.5	10.9	12.0
6	8.2	6.8	7.3	8.3	7.6	8.0	10.3	8.6	9.4	14.4	11.4	12.6
7	9.3	8.2	8.8	8.0	7.0	7.3	10.9	8.2	9.5	15.1	12.0	13.3
8	9.4	8.9	9.1	8.0	6.3	7.2	10.6	8.3	9.7	14.8	12.4	13.6
9	8.9	8.1	8.5	8.0	6.4	7.5	11.0	8.7	9.9	14.8	12.5	13.5
10	9.1	7.9	8.4	8.5	6.9	7.8	10.9	10.3	10.8	15.1	12.1	13.3
11	9.8	9.0	9.5	9.1	8.1	8.6	11.4	10.7	11.0	15.0	12.2	13.6
12	9.5	9.1	9.4	8.8	7.3	8.4	11.7	10.8	11.1	15.2	12.3	13.7
13	9.2	8.5	8.8	9.5	8.7	8.9	12.2	10.4	11.5	14.6	13.4	14.0
14	8.5	7.9	8.1	10.2	9.5	9.8	11.9	10.6	11.2	14.6	13.5	13.9
15	8.0	7.1	7.5	10.8	10.2	10.6	12.4	10.1	10.8	14.9	13.1	13.8
16	7.5	6.5	7.0	10.8	10.4	10.6	12.9	10.7	11.4	15.0	13.4	13.9
17	7.7	6.5	7.1	10.4	9.6	9.9	13.3	11.7	12.2	14.6	13.4	13.8
18	8.5	7.6	8.0	10.0	9.1	9.5	13.1	11.2	12.1	14.7	12.4	13.4
19	7.8	7.0	7.4	10.0	8.6	9.4	13.6	11.8	12.6	14.8	12.1	13.3
20	8.5	7.4	8.1	11.4	9.8	10.4	14.2	11.8	12.9	15.6	12.4	13.6
21	9.4	8.0	8.4	12.2	10.3	11.2	15.4	12.0	13.2	15.1	13.3	14.1
22	9.4	8.2	9.0	12.0	10.2	11.3	14.8	13.3	14.1	15.7	14.0	14.6
23	9.3	8.2	8.8	10.3	9.1	9.7	14.0	13.3	13.6	14.6	13.4	14.0
24	9.2	8.0	8.7	9.8	8.6	9.0	13.9	13.0	13.5	14.3	12.4	13.2
25	9.2	7.9	8.5	10.1	9.1	9.5	15.1	12.6	13.6	13.2	12.1	12.7
26	8.0	6.7	7.6	10.3	8.9	9.6	14.5	12.0	13.8	12.7	12.0	12.4
27	7.6	6.9	7.2	10.6	9.8	10.2	13.0	11.1	12.0	13.2	12.4	12.6
28	7.7	6.6	7.3	11.5	10.6	10.9	14.0	11.4	12.4	14.0	12.4	12.8
29	8.8	7.7	8.4	12.0	10.7	11.1	14.0	11.8	12.8	14.9	12.4	12.9
30	---	---	---	12.1	11.7	11.9	14.6	12.2	13.2	14.7	12.8	13.6
31	---	---	---	12.0	11.1	11.4	---	---	---	15.1	12.7	13.6
Max	9.8	9.1	9.5	12.2	11.7	11.9	15.4	13.3	14.1	15.7	14.0	14.6
Min	7.2	6.2	6.7	8.0	6.3	7.2	10.2	8.2	9.4	12.7	10.9	12.0

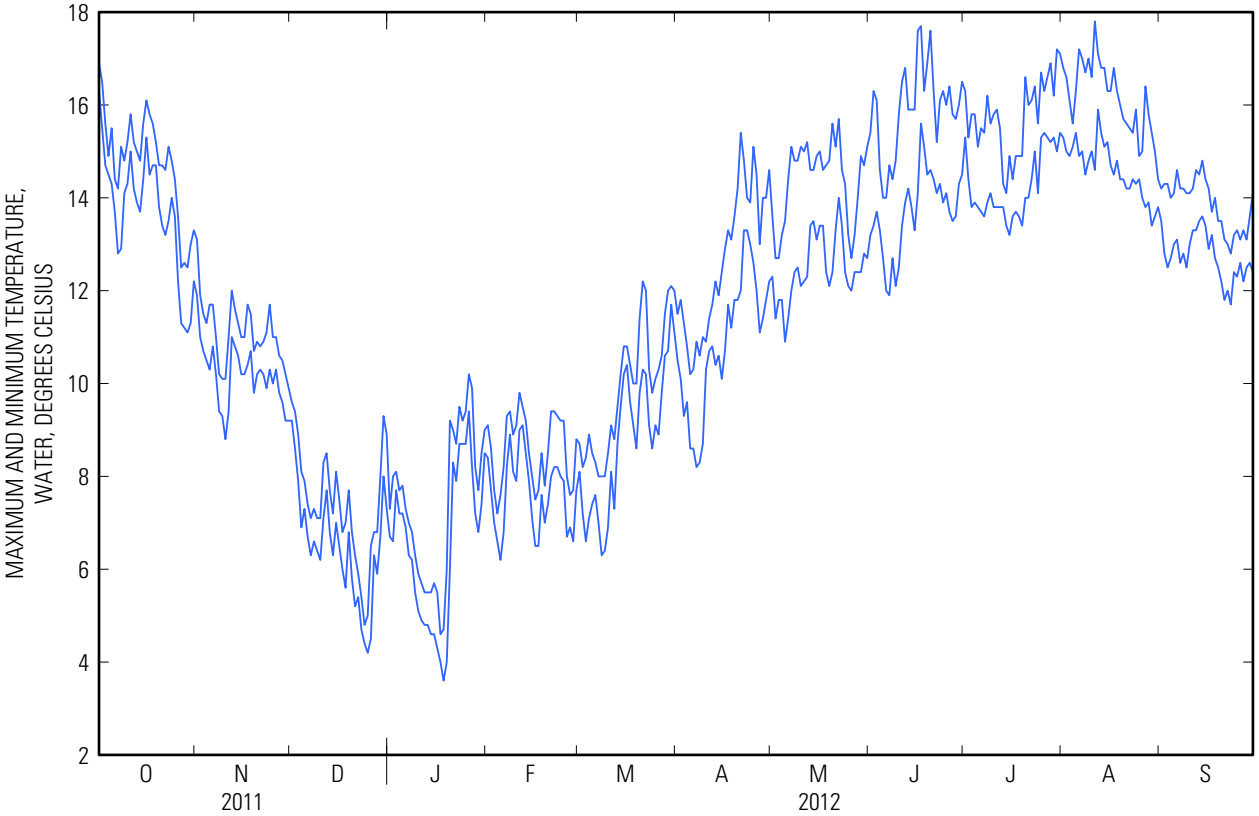
11162620 Pilarcitos Creek below Stone Dam, near Hillsborough, CA—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

Day	Max	Min	Median	Max	Min	Median	Max	Min	Median	Max	Min	Median
		June			July			August			September	
1	15.4	13.2	14.2	16.3	15.3	15.7	16.8	15.3	15.9	14.2	13.5	13.7
2	16.3	13.4	14.3	15.3	14.4	14.8	16.6	15.0	15.7	14.3	12.8	13.5
3	16.1	13.7	14.6	15.8	13.8	14.5	16.1	14.9	15.6	14.3	12.5	13.6
4	14.6	13.3	13.9	15.8	13.9	14.4	15.6	15.1	15.4	14.0	12.7	13.4
5	14.0	12.7	13.2	15.1	13.8	14.1	16.3	15.4	15.6	14.1	13.0	13.6
6	14.0	12.0	12.9	15.5	13.7	14.2	17.2	14.9	15.7	14.6	13.1	13.6
7	14.7	11.9	13.1	15.4	13.6	14.6	17.0	15.0	15.9	14.2	12.6	13.5
8	14.4	12.7	13.5	16.2	13.9	14.6	16.7	14.5	15.6	14.2	12.8	13.4
9	14.8	12.1	13.2	15.6	14.1	14.5	17.0	14.8	15.9	14.1	12.5	13.2
10	15.8	12.5	13.7	15.8	13.8	14.6	16.6	15.0	15.8	14.1	13.0	13.4
11	16.5	13.4	14.8	15.9	13.8	14.6	17.8	14.6	15.6	14.2	13.3	13.7
12	16.8	13.9	15.1	15.5	13.8	14.4	17.1	15.9	16.6	14.6	13.3	13.9
13	15.9	14.2	14.9	14.3	13.8	14.1	16.8	15.4	16.1	14.5	13.5	14.2
14	15.9	13.8	14.6	14.1	13.4	13.8	16.8	15.1	15.8	14.8	13.6	14.1
15	15.9	13.3	14.4	14.9	13.2	13.8	16.3	15.2	15.7	14.4	13.4	13.9
16	17.6	14.1	15.3	14.4	13.6	14.0	16.3	14.7	15.4	14.2	12.9	13.5
17	17.7	15.6	16.5	14.9	13.7	14.0	16.8	14.5	15.3	13.7	13.2	13.3
18	16.3	15.1	15.6	14.9	13.6	14.0	16.3	14.8	15.3	14.0	12.7	13.1
19	16.9	14.5	15.3	14.9	13.4	14.4	16.0	14.4	15.0	13.5	12.5	12.8
20	17.6	14.6	15.9	16.6	14.0	14.7	15.7	14.4	14.9	13.5	12.2	12.6
21	16.3	14.4	14.8	16.0	14.0	15.0	15.6	14.2	14.7	13.1	11.8	12.4
22	15.2	14.1	14.4	16.1	14.4	15.1	15.5	14.2	14.6	13.0	12.0	12.5
23	16.1	14.3	15.0	16.4	15.0	15.6	15.4	14.4	14.6	12.8	11.7	12.5
24	16.3	13.9	15.0	15.6	14.1	14.9	15.9	14.3	14.9	13.2	12.4	12.7
25	16.0	14.1	14.9	16.7	15.3	15.7	14.9	14.4	14.6	13.3	12.3	12.8
26	16.4	13.7	14.5	16.3	15.4	15.8	15.0	14.0	14.3	13.1	12.6	12.8
27	15.8	13.5	14.4	16.6	15.3	15.7	16.4	13.8	14.6	13.3	12.2	12.7
28	15.7	13.6	14.5	16.9	15.2	15.8	15.8	13.9	14.7	13.1	12.5	12.9
29	16.0	14.3	14.7	16.2	15.3	15.8	15.4	13.4	14.4	13.6	12.6	13.1
30	16.5	14.5	15.0	17.2	15.0	15.8	15.0	13.6	14.3	14.1	12.4	13.1
31	---	---	---	17.1	15.4	16.2	14.4	13.8	14.0	---	---	---
Max	17.7	15.6	16.5	17.2	15.4	16.2	17.8	15.9	16.6	14.8	13.6	14.2
Min	14.0	11.9	12.9	14.1	13.2	13.8	14.4	13.4	14.0	12.8	11.7	12.4

	Max	Min	Median
Year Maximum	17.8	16.3	16.6
Year Minimum	4.6	3.6	4.2

11162620 Pilarcitos Creek below Stone Dam, near Hillsborough, CA—Continued



11162620 Pilarcitos Creek below Stone Dam, near Hillsborough, CA—Continued

CROSS SECTION ANALYSES
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012
[ft, feet; °C, degrees Celsius]

Sample date-time	Tempera-ture, water, °C (00010)	Depth to bottom at sample location, ft (81903)	Sampling depth, ft (00003)	Stream width, ft (00004)	Location in cross section, distance from left bank looking downstream, ft (00009)
05-09-2012 1323	13.9	0.52	0.26	15.0	0.50
05-09-2012 1324	13.9	1.00	.50	15.0	1.50
05-09-2012 1325	13.9	1.20	.60	15.0	2.50
05-09-2012 1326	13.9	1.13	.56	15.0	3.50
05-09-2012 1327	13.9	1.88	.38	15.0	4.50
05-09-2012 1328	13.9	1.88	.94	15.0	4.50
05-09-2012 1329	13.9	1.88	1.50	15.0	4.50
05-09-2012 1330	13.9	1.64	.33	15.0	5.50
05-09-2012 1331	13.9	1.64	.82	15.0	5.50
05-09-2012 1332	13.9	1.64	1.31	15.0	5.50
05-09-2012 1333	13.9	2.18	.44	15.0	6.50
05-09-2012 1334	13.9	2.18	1.09	15.0	6.50
05-09-2012 1335	13.9	2.18	1.74	15.0	6.50
05-09-2012 1336	13.9	2.73	.55	15.0	7.50
05-09-2012 1337	13.9	2.73	1.37	15.0	7.50
05-09-2012 1338	13.9	2.73	2.18	15.0	7.50
05-09-2012 1339	13.9	2.24	.45	15.0	8.50
05-09-2012 1340	13.9	2.24	1.12	15.0	8.50
05-09-2012 1341	13.9	2.24	1.79	15.0	8.50
05-09-2012 1342	13.9	2.13	.43	15.0	9.50
05-09-2012 1343	13.9	2.13	1.07	15.0	9.50
05-09-2012 1344	13.9	2.13	1.70	15.0	9.50
05-09-2012 1345	13.9	1.84	.37	15.0	10.5
05-09-2012 1346	13.9	1.84	.92	15.0	10.5
05-09-2012 1347	13.9	1.84	1.47	15.0	10.5
05-09-2012 1348	13.9	1.72	.34	15.0	11.5
05-09-2012 1349	13.9	1.72	.86	15.0	11.5
05-09-2012 1350	13.9	1.72	1.38	15.0	11.5
05-09-2012 1351	13.9	1.66	.33	15.0	12.5
05-09-2012 1352	13.9	1.66	.83	15.0	12.5
05-09-2012 1353	13.9	1.66	1.33	15.0	12.5
05-09-2012 1354	14.0	1.24	.62	15.0	13.5
05-09-2012 1355	14.0	.98	.49	15.0	14.5

Note: Instantaneous discharge at mean time of cross-sectional measurements: May 9, 1.3 ft^3/s.