

Water-Data Report 2011

11136800 Cuyama River below Buckhorn Canyon, near Santa Maria, CA

Santa Maria River Basin

LOCATION.--Lat 35°01'19", long 120°13'39" referenced to North American Datum of 1927, in SW ¼ sec.14, T.11 N., R.32 W., San Luis Obispo County, CA, Hydrologic Unit 18060007, on left bank, 270 ft downstream of bridge on State Highway 166, 1.5 mi downstream from Buckhorn Canyon, 10 mi upstream from Twitchell Reservoir, and 13 mi northeast of Santa Maria.

DRAINAGE AREA.--886 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1903 to December 1905 (published as "Santa Maria River near Santa Maria"), October 1959 to current year. Monthly discharge only for October 1903 and July 1904. Yearly estimate for water year 1941 (incomplete), published in WSP 1315-B.

REVISED RECORDS.--WDR CA-71-1: Drainage area. WDR CA-77-1: 1976.

GAGE.--Water-stage recorder. Elevation of gage is 760 ft above NGVD of 1929, from topographic map. Prior to October 1959, nonrecording gage at different site and datum.

REMARKS.--Records poor. No regulation upstream from station. Pumping from wells along stream for irrigation of several thousand acres in Upper Cuyama Valley.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 26,200 ft³/s, Feb. 23, 1998, gage height, 14.76 ft, from rating curve extended above 4,900 ft³/s, on basis of slope-area measurement at gage height 14.76 ft; no flow at times in most years.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 200 ft³/s and (or) maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec 19	2015	2,820	10.73
Dec 23	0630	1,310	9.70
Dec 29	0630	212	8.39
Feb 26	1730	313	8.59
Mar 21	0500	*5,450	*11.07
Mar 25	1245	516	8.38

11136800 Cuyama River below Buckhorn Canyon, near Santa Maria, CA—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011
DAILY MEAN VALUES
[e, estimated]

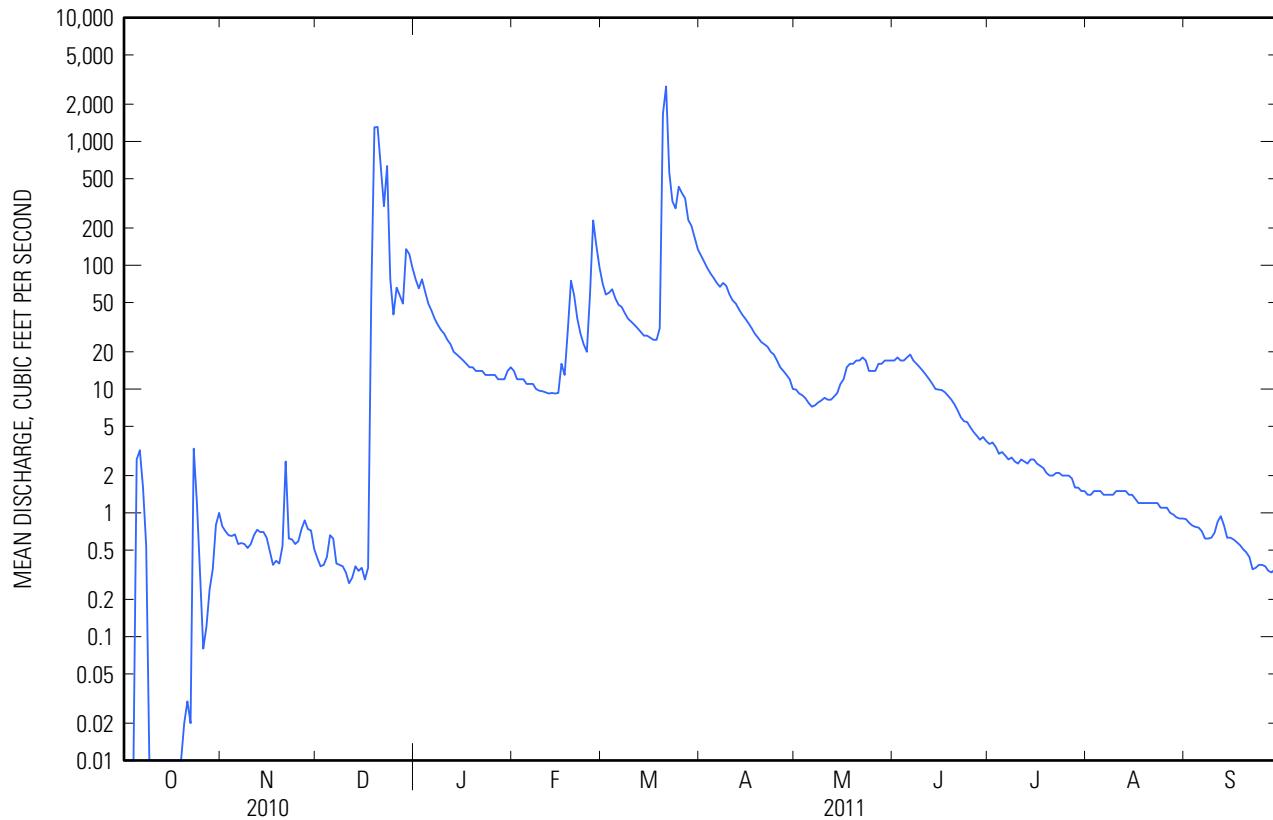
Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	0.00	0.78	0.43	e77	14	71	120	9.9	17	3.6	1.4	0.89
2	0.00	0.71	0.37	65	12	58	107	9.2	18	3.7	1.4	0.83
3	0.00	0.66	0.38	77	12	60	95	8.9	17	3.4	1.5	0.79
4	0.00	0.65	0.44	61	12	64	86	8.4	17	3.0	1.5	0.77
5	2.7	0.67	0.66	49	11	54	79	7.7	18	3.1	1.5	0.76
6	3.2	0.56	0.62	43	11	48	72	7.2	19	2.9	1.4	0.71
7	1.6	0.57	0.39	37	11	46	67	7.4	17	2.7	1.4	0.62
8	0.54	0.56	0.38	33	10	41	72	7.8	16	2.8	1.4	0.62
9	0.01	0.52	0.37	30	9.7	37	68	8.1	15	2.6	1.4	0.63
10	0.00	0.56	0.33	28	9.6	35	58	8.5	14	2.5	1.5	0.69
11	0.00	0.66	0.27	25	9.4	33	52	8.2	13	2.7	1.5	0.85
12	0.00	0.73	0.30	23	9.2	31	49	8.2	12	2.6	1.5	0.94
13	0.00	0.70	0.37	20	9.3	29	44	8.7	11	2.5	1.5	0.79
14	0.00	0.70	0.34	19	9.2	27	40	9.3	10	2.7	1.4	0.63
15	0.00	0.63	0.36	18	9.3	27	37	11	9.9	2.7	1.4	0.63
16	0.00	0.49	0.29	17	16	26	34	12	9.8	2.5	1.3	0.61
17	0.00	0.38	0.36	16	13	25	31	15	9.4	2.4	1.2	0.58
18	0.00	0.41	56	15	30	25	28	16	8.8	2.3	1.2	0.55
19	0.01	0.39	1,300	15	75	31	26	16	8.2	2.1	1.2	0.51
20	0.02	0.54	1,310	14	57	1,660	24	17	7.5	2.0	1.2	0.48
21	0.03	2.6	628	14	37	2,780	23	17	6.7	2.0	1.2	0.44
22	0.02	0.62	300	14	28	565	22	18	5.9	2.1	1.2	0.35
23	3.3	0.61	634	13	23	328	20	17	5.5	2.1	1.2	0.36
24	1.2	0.56	77	13	20	288	19	14	5.4	2.0	1.1	0.38
25	0.32	0.59	40	13	58	431	17	14	4.9	2.0	1.1	0.38
26	0.08	0.74	66	13	230	383	15	14	4.5	2.0	1.1	0.37
27	0.12	0.87	57	12	144	347	14	16	4.2	1.9	1.0	0.34
28	0.24	0.74	49	12	96	232	13	16	3.9	1.6	0.97	0.33
29	0.35	0.72	e135	12	---	208	12	17	4.1	1.6	0.92	0.35
30	0.80	0.51	e123	14	---	168	10	17	3.8	1.5	0.90	0.30
31	1.0	---	e95	15	---	135	---	17	---	1.5	0.90	---
Total	15.54	20.43	4,876.66	827	985.7	8,293	1,354	381.5	316.5	75.1	39.39	17.48
Mean	0.50	0.68	157	26.7	35.2	268	45.1	12.3	10.6	2.42	1.27	0.58
Max	3.3	2.6	1,310	77	230	2,780	120	18	19	3.7	1.5	0.94
Min	0.00	0.38	0.27	12	9.2	25	10	7.2	3.8	1.5	0.90	0.30
Ac-ft	31	41	9,670	1,640	1,960	16,450	2,690	757	628	149	78	35

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 2011, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	0.66	2.08	16.0	39.5	98.7	92.9	27.1	7.47	3.95	1.69	1.03	1.39
Max	11.3	23.6	275	467	1,210	974	243	96.9	66.0	26.2	20.8	22.7
(WY) (1999)	(1966)	(1967)	(1969)	(1998)	(1995)	(1998)	(1998)	(1998)	(1998)	(1998)	(1998)	(1990)
Min	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(WY)	(1960)	(1960)	(1960)	(1960)	(1964)	(1961)	(1961)	(1961)	(1961)	(1960)	(1960)	(1960)

11136800 Cuyama River below Buckhorn Canyon, near Santa Maria, CA—Continued**SUMMARY STATISTICS**

	Calendar Year 2010	Water Year 2011	Water Years 1960 - 2011	
Annual total	7,552.53	17,202.30		
Annual mean	20.7	47.1	24.0	
Highest annual mean			168	1998
Lowest annual mean			0.00	1964
Highest daily mean	1,310	Dec 20	2,780	Mar 21
Lowest daily mean	0.00	Jan 1	0.00	Oct 1
Annual seven-day minimum	0.00	Jan 1	0.00	Oct 10
Maximum peak flow			5,450	Mar 21
Maximum peak stage			11.07	Mar 21
Annual runoff (ac-ft)	14,980	34,120	17,370	
10 percent exceeds	23	67	19	
50 percent exceeds	0.67	7.5	0.43	
90 percent exceeds	0.00	0.37	0.00	



11136800 Cuyama River below Buckhorn Canyon, near Santa Maria, CA—Continued**WATER-QUALITY RECORDS**

PERIOD OF RECORD.—Water years 1978 to current year.

CHEMICAL DATA: Water years 1978 to current year.

SEDIMENT DATA: Water years 1999-2002.

**WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

Part 1 of 4

[%; percent; CaCO₃, calcium carbonate; N, nitrogen; P, phosphorus; SiO₂, silicon dioxide; ft³/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; --, no data; <, less than]

Sample date-time	Barometric pressure, mm Hg (00025)	Discharge, instantaneous, ft ³ /s (00061)	Dissolved oxygen, water, unfiltered, mg/L (00300)	Dissolved oxygen, water, unfiltered, % saturation (00301)	pH, water, unfiltered, field, standard units (00400)	Specific conductance, water, unfiltered, µS/cm at 25 °C (00095)	Temperature, water, °C (00010)	Dissolved solids, dried at 180 °C, water, filtered, mg/L (70300)	Dissolved solids, water, filtered, sum of constituents, mg/L (70301)
10-06-2010 0930	--	3.6	--	--	7.6	1,360	15.0	1,470	--
11-09-2010 1350	--	.56	--	--	8.3	1,210	17.9	813	--
12-06-2010 1445	--	.56	--	--	8.3	1,220	18.0	840	--
12-21-2010 1131	--	611	--	--	7.8	912	11.0	653	--
01-03-2011 1055	--	79	--	--	8.1	1,100	9.5	756	--
02-02-2011 1025	--	13	--	--	8.2	1,690	10.0	1,260	--
03-01-2011 1010	--	69	--	--	8.2	984	8.3	688	--
04-11-2011 1200	745	54	10.1	103	8.3	1,480	15.2	1,050	1,030
05-17-2011 1040	--	15	--	--	8.4	1,600	14.8	1,190	--
06-27-2011 1040	--	4.2	--	--	8.2	1,320	20.4	954	--
07-15-2011 0820	--	2.8	--	--	8.0	1,200	17.3	850	--
08-09-2011 1335	--	1.4	--	--	8.2	1,170	27.6	800	--
09-09-2011 1015	--	.68	--	--	8.1	1,210	17.8	827	--

11136800 Cuyama River below Buckhorn Canyon, near Santa Maria, CA—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

Part 2 of 4

[%, percent; CaCO₃, calcium carbonate; N, nitrogen; P, phosphorus; SiO₂, silicon dioxide; ft³/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; --, no data; <, less than]

Sample date-time	Dissolved solids, water, filtered, tons per acre-foot (70303)	Non-carbonate hardness, water, filtered, field, mg/L as CaCO ₃ (00900)			Calcium, water, filtered, mg/L (00915)	Magnesium, water, filtered, mg/L (00925)	Potassium, water, filtered, mg/L (00935)	Sodium adsorption ratio, water, number (00931)	Sodium fraction of cations, water, percent in equivalents of major cations (00932)	Sodium, water, filtered, mg/L (00930)
		Hardness, water, mg/L as CaCO ₃ (00900)	water, filtered, mg/L as CaCO ₃ (00904)	water, filtered, mg/L (00915)						
10-06-2010 0930	2.00	--	--	--	--	--	--	--	--	--
11-09-2010 1350	1.11	--	--	--	--	--	--	--	--	--
12-06-2010 1445	1.14	--	--	--	--	--	--	--	--	--
12-21-2010 1131	.89	--	--	--	--	--	--	--	--	--
01-03-2011 1055	1.03	--	--	--	--	--	--	--	--	--
02-02-2011 1025	1.71	--	--	--	--	--	--	--	--	--
03-01-2011 1010	.94	--	--	--	--	--	--	--	--	--
04-11-2011 1200	1.43	620	346	137	67.5	3.67	2.16	30	123	
05-17-2011 1040	1.62	--	--	--	--	--	--	--	--	--
06-27-2011 1040	1.30	--	--	--	--	--	--	--	--	--
07-15-2011 0820	1.16	--	--	--	--	--	--	--	--	--
08-09-2011 1335	1.09	--	--	--	--	--	--	--	--	--
09-09-2011 1015	1.12	--	--	--	--	--	--	--	--	--

11136800 Cuyama River below Buckhorn Canyon, near Santa Maria, CA—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

Part 3 of 4

[%, percent; CaCO₃, calcium carbonate; N, nitrogen; P, phosphorus; SiO₂, silicon dioxide; ft³/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; --, no data; <, less than]

Sample date-time	Alkalinity, water, filtered, inflection- point, incremental titration method, field,		Carbonate, Bicarbonate, water, filtered, inflection- point, incremental titration method, field,		Chloride, water, filtered, mg/L (00940)	Fluoride, water, filtered, mg/L (00950)	Silica, water, filtered, mg/L as SiO ₂ (00955)	Sulfate, water, filtered, mg/L (00945)	Ammonia, water, filtered, mg/L as N (00608)	Nitrate plus nitrite, water, filtered, mg/L as N (00631)
	mg/L as CaCO ₃ (39086)	mg/L (00453)	mg/L (00452)	mg/L (00450)						
10-06-2010 0930	--	--	--	--	--	--	--	--	--	--
11-09-2010 1350	--	--	--	--	--	--	--	--	--	--
12-06-2010 1445	--	--	--	--	--	--	--	--	--	--
12-21-2010 1131	--	--	--	--	--	--	--	--	--	--
01-03-2011 1055	--	--	--	--	--	--	--	--	--	--
02-02-2011 1025	--	--	--	--	--	--	--	--	--	--
03-01-2011 1010	--	--	--	--	--	--	--	--	--	--
04-11-2011 1200	274	328	2.8	71.8	.45	16.9	444	< .010	.50	
05-17-2011 1040	--	--	--	--	--	--	--	--	--	--
06-27-2011 1040	--	--	--	--	--	--	--	--	--	--
07-15-2011 0820	--	--	--	--	--	--	--	--	--	--
08-09-2011 1335	--	--	--	--	--	--	--	--	--	--
09-09-2011 1015	--	--	--	--	--	--	--	--	--	--

11136800 Cuyama River below Buckhorn Canyon, near Santa Maria, CA—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

Part 4 of 4

[%, percent; CaCO₃, calcium carbonate; N, nitrogen; P, phosphorus; SiO₂, silicon dioxide;
 ft³/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury;
 °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; --,
 no data; <, less than]

Sample date-time	Nitrite, water, filtered, mg/L as N (00613)	Orthophosphate, water, filtered, mg/L as P (00671)	Iron, water, filtered, µg/L (01046)	Manganese, water, filtered, µg/L (01056)	Boron, water, filtered, µg/L (01020)
10-06-2010 0930	--	--	--	--	--
11-09-2010 1350	--	--	--	--	--
12-06-2010 1445	--	--	--	--	--
12-21-2010 1131	--	--	--	--	--
01-03-2011 1055	--	--	--	--	--
02-02-2011 1025	--	--	--	--	--
03-01-2011 1010	--	--	--	--	--
04-11-2011 1200	.004	.020	5	135	278
05-17-2011 1040	--	--	--	--	--
06-27-2011 1040	--	--	--	--	--
07-15-2011 0820	--	--	--	--	--
08-09-2011 1335	--	--	--	--	--
09-09-2011 1015	--	--	--	--	--

11136800 Cuyama River below Buckhorn Canyon, near Santa Maria, CA—Continued

CROSS SECTION ANALYSES
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

Part 1 of 2

[%; percent; ft, feet; mg/L, milligrams per liter; mm Hg, millimeters of mercury; °C, degrees Celsius; µS/cm, microsiemens per centimeter; --, no data]

Sample date-time	Barometric pressure, mm Hg (00025)	Dissolved oxygen, water, unfiltered, mg/L (00300)	Dissolved oxygen, water, unfiltered, % saturation (00301)	pH, water, unfiltered, field, standard units (00400)	Specific conductance, water, unfiltered, µS/cm at 25 °C (00095)	Temperature, 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)
12-21-2010 1137	--	--	--	7.9	894	11.2	.70	.35	114	5.00
12-21-2010 1138	--	--	--	7.8	911	11.0	1.10	.55	114	20.0
12-21-2010 1139	--	--	--	7.8	914	11.0	1.28	.64	114	35.0
12-21-2010 1140	--	--	--	7.8	914	11.0	1.51	.76	114	50.0
12-21-2010 1141	--	--	--	7.8	917	10.9	1.38	.69	114	65.0
12-21-2010 1142	--	--	--	7.8	915	11.0	1.68	.84	114	80.0
12-21-2010 1143	--	--	--	7.8	916	10.9	1.80	.90	114	95.0
12-21-2010 1144	--	--	--	7.8	916	11.0	2.24	1.12	114	110
01-03-2011 1039	--	--	--	8.1	1,100	9.4	.68	.34	52.0	2.00
01-03-2011 1040	--	--	--	8.1	1,100	9.4	.71	.35	52.0	6.00
01-03-2011 1041	--	--	--	8.1	1,100	9.4	.60	.30	52.0	10.0
01-03-2011 1042	--	--	--	8.2	1,100	9.4	.60	.30	52.0	14.0
01-03-2011 1043	--	--	--	8.2	1,100	9.5	.74	.37	52.0	18.0
01-03-2011 1044	--	--	--	8.1	1,090	9.5	.99	.50	52.0	22.0
01-03-2011 1045	--	--	--	8.1	1,090	9.5	.95	.47	52.0	26.0
01-03-2011 1046	--	--	--	8.1	1,100	9.5	1.16	.58	52.0	30.0
01-03-2011 1047	--	--	--	8.1	1,100	9.5	1.32	.66	52.0	34.0
01-03-2011 1048	--	--	--	8.1	1,100	9.5	1.49	.75	52.0	38.0
01-03-2011 1049	--	--	--	8.1	1,100	9.5	1.46	.73	52.0	42.0
01-03-2011 1050	--	--	--	8.1	1,100	9.5	1.68	.84	52.0	46.0
01-03-2011 1051	--	--	--	8.1	1,100	9.5	.31	.16	52.0	50.0
02-02-2011 1035	--	--	--	8.2	1,690	10.4	1.00	.50	37.5	2.50
02-02-2011 1036	--	--	--	8.2	1,690	10.4	.72	.36	37.5	6.00
02-02-2011 1037	--	--	--	8.2	1,690	10.3	.68	.34	37.5	9.50
02-02-2011 1038	--	--	--	8.2	1,690	10.3	.69	.35	37.5	13.0
02-02-2011 1039	--	--	--	8.2	1,690	10.3	.59	.30	37.5	16.5
02-02-2011 1040	--	--	--	8.2	1,690	10.3	.56	.28	37.5	20.0
02-02-2011 1041	--	--	--	8.2	1,690	10.4	.69	.35	37.5	23.5
02-02-2011 1042	--	--	--	8.2	1,690	10.4	.90	.45	37.5	27.0
02-02-2011 1043	--	--	--	8.2	1,690	10.4	.99	.50	37.5	30.5
02-02-2011 1045	--	--	--	8.2	1,690	10.4	1.15	.57	37.5	34.0
03-01-2011 0953	--	--	--	8.1	983	8.3	.82	.41	52.5	48.0
03-01-2011 0954	--	--	--	8.1	984	8.3	1.56	.78	52.5	44.0
03-01-2011 0955	--	--	--	8.1	984	8.3	1.48	.74	52.5	40.0
03-01-2011 0956	--	--	--	8.1	984	8.3	1.45	.72	52.5	36.0
03-01-2011 0957	--	--	--	8.1	985	8.3	1.33	.67	52.5	32.0
03-01-2011 0958	--	--	--	8.1	985	8.3	1.03	.51	52.5	28.0
03-01-2011 0959	--	--	--	8.1	983	8.3	.82	.41	52.5	24.0
03-01-2011 1000	--	--	--	8.1	985	8.3	.57	.28	52.5	20.0
03-01-2011 1001	--	--	--	8.1	983	8.3	.45	.22	52.5	16.0

Note: Instantaneous discharge at the time of cross-sectional measurements: Dec. 21, 643 ft³/s; Jan. 3, 79.0 ft³/s; Feb. 2, 12.1 ft³/s;
Mar. 1, 69.2 ft³/s.

11136800 Cuyama River below Buckhorn Canyon, near Santa Maria, CA—Continued

CROSS SECTION ANALYSES
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

Part 2 of 2

[%; percent; ft, feet; mg/L, milligrams per liter; mm Hg, millimeters of mercury; °C, degrees Celsius; µS/cm, microsiemens per centimeter; --, no data]

Sample date-time	Barometric pressure, mm Hg (00025)	Dissolved oxygen, water, unfiltered, mg/L (00300)	Dissolved oxygen, water, unfiltered, % saturation (00301)	pH, water, unfiltered, field, standard units (00400)	Specific conductance, water, unfiltered, µS/cm at 25 °C (00095)	Temperature, 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)
03-01-2011 1002	--	--	--	8.1	983	8.4	.40	.20	52.5	12.0
03-01-2011 1003	--	--	--	8.2	983	8.4	.47	.24	52.5	8.00
03-01-2011 1004	--	--	--	8.2	983	8.4	.43	.22	52.5	4.00
04-11-2011 1141	745	10.1	103	8.3	1,480	15.1	.52	.26	58.0	54.0
04-11-2011 1142	745	10.1	103	8.3	1,470	15.2	.40	.20	58.0	50.0
04-11-2011 1143	745	10.1	103	8.3	1,480	15.2	.47	.24	58.0	46.0
04-11-2011 1144	745	10.1	103	8.3	1,480	15.2	.52	.26	58.0	42.0
04-11-2011 1145	745	10.1	103	8.3	1,480	15.2	.59	.30	58.0	38.0
04-11-2011 1146	745	10.1	103	8.3	1,480	15.2	.62	.31	58.0	34.0
04-11-2011 1147	745	10.1	103	8.3	1,480	15.2	.75	.38	58.0	30.0
04-11-2011 1148	745	10.1	103	8.3	1,480	15.2	.99	.50	58.0	26.0
04-11-2011 1149	745	10.1	103	8.3	1,480	15.3	.85	.42	58.0	22.0
04-11-2011 1150	745	10.1	103	8.3	1,480	15.3	.73	.36	58.0	18.0
04-11-2011 1151	745	10.1	103	8.3	1,480	15.3	.73	.36	58.0	14.0
04-11-2011 1152	745	10.1	103	8.3	1,480	15.4	.62	.31	58.0	10.0
05-17-2011 1023	--	--	--	8.4	1,600	14.8	1.00	.50	27.5	2.00
05-17-2011 1024	--	--	--	8.4	1,600	14.8	.99	.50	27.5	4.00
05-17-2011 1025	--	--	--	8.4	1,600	14.8	1.00	.50	27.5	6.00
05-17-2011 1026	--	--	--	8.4	1,600	14.8	1.01	.50	27.5	8.00
05-17-2011 1027	--	--	--	8.4	1,600	14.8	1.12	.56	27.5	10.0
05-17-2011 1028	--	--	--	8.4	1,600	14.8	1.10	.55	27.5	12.0
05-17-2011 1029	--	--	--	8.4	1,600	14.8	.90	.45	27.5	14.0
05-17-2011 1030	--	--	--	8.3	1,600	14.8	.73	.36	27.5	16.0
05-17-2011 1031	--	--	--	8.3	1,600	14.8	.68	.34	27.5	18.0
05-17-2011 1032	--	--	--	8.4	1,600	14.8	.52	.26	27.5	20.0
05-17-2011 1033	--	--	--	8.3	1,600	14.8	.48	.24	27.5	22.0
05-17-2011 1034	--	--	--	8.3	1,600	14.8	.39	.20	27.5	24.0
09-09-2011 1005	--	--	--	8.1	1,210	17.9	.62	.31	6.50	6.00
09-09-2011 1006	--	--	--	8.1	1,210	17.9	.67	.34	6.50	5.00
09-09-2011 1007	--	--	--	8.1	1,210	17.9	.70	.35	6.50	4.00
09-09-2011 1008	--	--	--	8.1	1,210	17.8	.68	.34	6.50	3.00
09-09-2011 1009	--	--	--	8.1	1,210	17.8	.63	.32	6.50	2.00
09-09-2011 1010	--	--	--	8.1	1,210	17.8	.50	.25	6.50	1.00

Note: Instantaneous discharge at the time of cross-sectional measurements: Mar. 1, 69.2 ft³/s; Apr. 11, 53.7 ft³/s; May 17, 14.6 ft³/s; Sept. 9, 0.6 ft³/s.