



Water-Data Report 2010

11124500 Santa Cruz Creek near Santa Ynez, CA

Santa Ynez River Basin

LOCATION.--Lat 34°35'48", long 119°54'28" referenced to North American Datum of 1927, Santa Barbara County, CA, Hydrologic Unit 18060010, in San Marcos Grant, on right bank, 0.6 mi downstream from Pine Canyon, and 9.9 mi east of Santa Ynez.

DRAINAGE AREA.--74.0 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1941 to current year. Monthly discharge only for some periods, published in WSP 1315-B.

GAGE.--Water-stage recorder. Datum of gage is 783.38 ft above NGVD of 1929. See WSP 1735 for history of changes prior to Sept. 27, 1952. Sept. 27, 1952, to June 24, 1969, at datum 3.25 ft higher.

REMARKS.--Records fair except for Nov. 28 to Dec. 12, and estimated daily discharges, which are poor. No regulation or diversion upstream from station. See schematic diagram of Santa Ynez River Basin available from the California Water Science Center.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,200 ft³/s, Jan. 27, 2008, gage height, 14.97 ft, from rating curve extended above 5,000 ft³/s; no flow at times since 1953.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 100 ft³/s and (or) maximum (*), from rating curve extended above 5,000 ft³/s, on basis of slope-area measurement at gage height 12.40 ft:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec 12	2200	375	7.58
Jan 18	1520	*1,860	*9.79
Feb 5	1830	245	6.85
Feb 27	0545	558	7.77
Apr 12	0045	396	7.35

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11124500 Santa Cruz Creek near Santa Ynez, CA—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010
DAILY MEAN VALUES
[*e*, estimated]

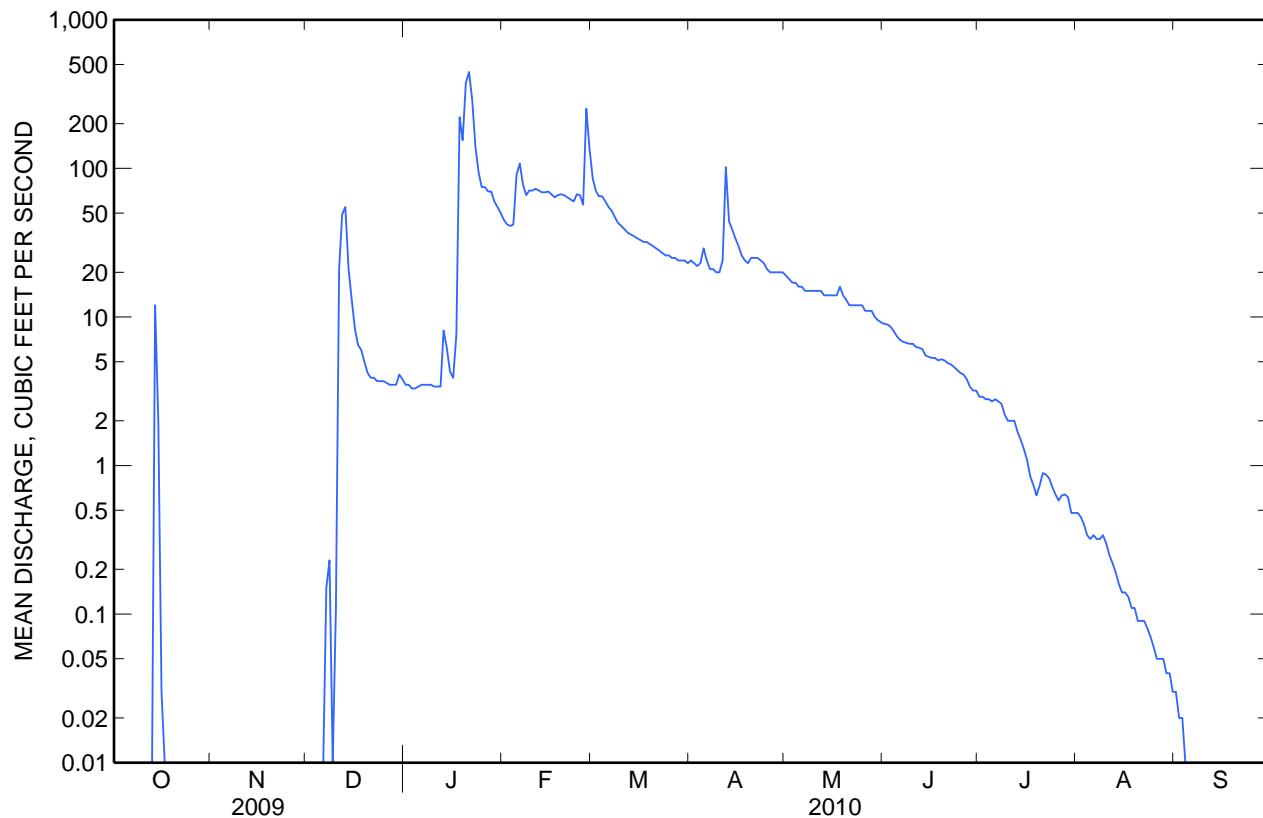
Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	0.00	0.00	0.00	3.5	e45	e86	24	19	9.0	2.9	0.48	0.03
2	0.00	0.00	0.00	3.5	e42	e71	23	18	8.9	2.9	0.45	0.02
3	0.00	0.00	0.00	3.3	41	e65	22	17	8.6	2.8	0.40	0.02
4	0.00	0.00	0.00	3.3	42	e65	23	17	8.0	2.8	0.34	0.01
5	0.00	0.00	0.00	3.4	91	e60	29	16	7.4	2.7	0.32	0.01
6	0.00	0.00	0.00	3.5	108	55	24	16	7.0	2.8	0.34	0.01
7	0.00	0.00	0.15	3.5	78	52	21	15	6.8	2.7	0.32	0.01
8	0.00	0.00	0.23	3.5	66	47	21	15	6.7	2.6	0.32	0.00
9	0.00	0.00	0.00	3.5	71	43	20	15	6.6	2.2	0.34	0.00
10	0.00	0.00	0.11	3.4	71	41	20	15	6.6	2.0	0.30	0.00
11	0.00	0.00	21	3.4	73	39	24	15	6.3	2.0	0.25	0.00
12	0.00	0.00	49	3.4	71	37	e102	15	6.2	2.0	0.22	0.00
13	0.00	0.00	e55	8.1	69	36	e44	14	6.1	1.7	0.19	0.00
14	12	0.00	e21	6.2	69	35	e39	14	5.5	1.5	0.16	0.00
15	2.0	0.00	e13	4.3	70	34	e34	14	5.4	1.3	0.14	0.00
16	0.03	0.00	8.3	3.9	67	33	30	14	5.3	1.1	0.14	0.00
17	0.00	0.00	6.5	7.7	64	32	26	14	5.3	0.85	0.13	0.00
18	0.00	0.00	6.0	221	66	32	24	16	5.1	0.74	0.11	0.00
19	0.00	0.00	5.0	e155	67	31	23	14	5.2	0.63	0.11	0.00
20	0.00	0.00	4.2	376	66	30	25	13	5.1	0.73	0.09	0.00
21	0.00	0.00	3.9	446	64	29	25	12	4.9	0.89	0.09	0.00
22	0.00	0.00	3.9	288	62	28	25	12	4.8	0.87	0.09	0.00
23	0.00	0.00	3.7	e140	60	27	24	12	4.6	0.82	0.08	0.00
24	0.00	0.00	3.7	e95	67	26	23	12	4.4	0.72	0.07	0.00
25	0.00	0.00	3.7	e75	66	26	21	12	4.2	0.64	0.06	0.00
26	0.00	0.00	3.6	e75	57	25	20	11	4.1	0.58	0.05	0.00
27	0.00	0.00	3.5	e70	252	25	20	11	3.8	0.63	0.05	0.00
28	0.00	0.00	3.5	e70	e136	24	20	11	3.4	0.64	0.05	0.00
29	0.00	0.00	3.5	e60	---	24	20	10	3.2	0.61	0.04	0.00
30	0.00	0.00	4.1	e55	---	24	20	9.5	3.2	0.48	0.04	0.00
31	0.00	---	3.8	e50	---	23	---	9.2	---	0.48	0.03	---
Total	14.03	0.00	230.39	2,247.4	2,101	1,205	816	427.7	171.7	46.31	5.80	0.11
Mean	0.45	0.00	7.43	72.5	75.0	38.9	27.2	13.8	5.72	1.49	0.19	0.00
Max	12	0.00	55	446	252	86	102	19	9.0	2.9	0.48	0.03
Min	0.00	0.00	0.00	3.3	41	23	20	9.2	3.2	0.48	0.03	0.00
Ac-ft	28	0.00	457	4,460	4,170	2,390	1,620	848	341	92	12	0.2

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 2010, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	0.65	2.93	11.4	41.9	70.0	60.0	36.2	14.8	6.11	2.19	0.88	0.50
Max	12.4	50.4	205	510	743	355	378	141	63.0	27.9	13.7	8.68
(WY)	(1984)	(1966)	(1967)	(1969)	(1969)	(1995)	(1958)	(1998)	(1998)	(1998)	(1998)	(1998)
Min	0.00	0.00	0.00	0.00	0.10	0.23	0.11	0.00	0.00	0.00	0.00	0.00
(WY)	(1954)	(1954)	(1954)	(1963)	(1951)	(1948)	(1961)	(1961)	(1961)	(1959)	(1953)	(1953)

SUMMARY STATISTICS

	Calendar Year 2009		Water Year 2010		Water Years 1942 - 2010	
Annual total	2,870.90		7,265.44			
Annual mean	7.87		19.9		20.4	
Highest annual mean					134	1969
Lowest annual mean					0.07	1990
Highest daily mean	98	Feb 23	446	Jan 21	5,000	Feb 24, 1969
Lowest daily mean	0.00	Jul 28	0.00	Oct 1	0.00	Jul 6, 1953
Annual seven-day minimum	0.00	Jul 28	0.00	Oct 1	0.00	Jul 6, 1953
Maximum peak flow			1,860	Jan 18	10,200	Jan 27, 2008
Maximum peak stage			9.79	Jan 18	14.97	Jan 27, 2008
Annual runoff (ac-ft)	5,690		14,410		14,750	
10 percent exceeds	20		64		35	
50 percent exceeds	2.8		3.7		1.5	
90 percent exceeds	0.00		0.00		0.00	



11124500 Santa Cruz Creek near Santa Ynez, CA—Continued**WATER-QUALITY RECORDS**

PERIOD OF RECORD.—Water years 1992 to current year.

CHEMICAL DATA: Water years 1992 to current year.

**WATER-QUALITY DATA
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010**

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; E, estimated]

Sample date-time	Discharge, instanta- neous, ft ³ /s (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, water, unfiltered, mg/L (00300)			pH, water, unfiltered, field, standard % (00301)	Specific conduc- tance, water, unfiltered, µS/cm at 25 °C (00095)	Tempera- ture, water, °C (00010)	Hardness, water, CaCO ₃ mg/L as CaCO ₃ (00900)	Non- carbonate hardness, water, field, mg/L as CaCO ₃ (00904)	Calcium, water, filtered, mg/L (00915)
			Dissolved oxygen, water, unfiltered, mg/L (00300)	% (00301)	units (00400)						
12-15-2009 1215	12	--	--	--	8.0	912	12.0	--	--	--	
01-12-2010 1130	3.5	--	--	--	8.0	1,030	13.5	--	--	--	
02-02-2010 1330	42	--	--	--	8.4	794	14.6	--	--	--	
03-24-2010 1330	26	--	--	--	8.4	829	18.5	--	--	--	
04-15-2010 1145	34	739	9.4	101	8.3	726	17.5	342	133	78.4	
05-21-2010 1250	13	--	--	--	8.5	855	23.1	--	--	--	
06-15-2010 1315	5.4	--	--	--	8.5	897	26.2	--	--	--	
07-20-2010 1111	1.1	--	--	--	8.0	971	24.4	--	--	--	
08-04-2010 1150	.34	--	--	--	8.0	997	27.4	--	--	--	

11124500 Santa Cruz Creek near Santa Ynez, CA—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010

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; E, estimated]

Sample date-time	Magne-sium, water, filtered, mg/L (00925)	Potassium, water, filtered, mg/L (00935)	Sodium adsorption ratio, water, number (00931)	Sodium, water, filtered, mg/L (00930)	Percent in equivalents of major cations (00932)	Alkalinity, water,		Chloride, water, filtered, mg/L (00940)	Fluoride, water, filtered, mg/L (00950)	Silica, water, filtered, mg/L as SiO ₂ (00955)
						Sodium fraction of cations, water, percent in equivalents of major cations	filtered, inflection-point, incremental titration method, field, mg/L as CaCO ₃ (39086)			
12-15-2009 1215	--	--	--	--	--	--	--	--	--	--
01-12-2010 1130	--	--	--	--	--	--	--	--	--	--
02-02-2010 1330	--	--	--	--	--	--	--	--	--	--
03-24-2010 1330	--	--	--	--	--	--	--	--	--	--
04-15-2010 1145	35.5	2.06	.68	28.9	15	215	255	7.90	.37	16.4
05-21-2010 1250	--	--	--	--	--	--	--	--	--	--
06-15-2010 1315	--	--	--	--	--	--	--	--	--	--
07-20-2010 1111	--	--	--	--	--	--	--	--	--	--
08-04-2010 1150	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010

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; E, estimated]

Sample date-time	Dissolved solids, water, filtered, mg/L (00945)		Dissolved solids, water, dried at 180 °C, tons per acre-foot (70301) (70303)		Nitrate plus ammonia, water, filtered, mg/L as N (70300) (00608)		Orthophosphate, water, filtered, mg/L as P (00613) (00631)		Boron, water, filtered, µg/L (01020)	Iron, water, filtered, µg/L (01046)
	Sulfate, water, filtered, mg/L (00945)	sum of constituents, mg/L (70301)	Dissolved solids, water, filtered, tons per acre-foot (70303)	dried at 180 °C, mg/L (70300)	Ammonia, water, filtered, mg/L as N (00608)	Nitrate plus nitrite, water, filtered, mg/L as N (00631)	Nitrite, water, filtered, mg/L as N (00613)	Orthophosphate, water, filtered, mg/L as P (00671)		
12-15-2009 1215	--	--	.90	663	--	--	--	--	--	--
01-12-2010 1130	--	--	1.09	802	--	--	--	--	--	--
02-02-2010 1330	--	--	.75	555	--	--	--	--	--	--
03-24-2010 1330	--	--	.78	576	--	--	--	--	--	--
04-15-2010 1145	176	E 472	.66	484	E .013	.22	.003	.035	134	< 6
05-21-2010 1250	--	--	.79	578	--	--	--	--	--	--
06-15-2010 1315	--	--	1.12	825	--	--	--	--	--	--
07-20-2010 1111	--	--	.92	675	--	--	--	--	--	--
08-04-2010 1150	--	--	.95	701	--	--	--	--	--	--

11124500 Santa Cruz Creek near Santa Ynez, CA—Continued

**WATER-QUALITY DATA
WATER YEAR OCTOBER 2009 TO
SEPTEMBER 2010**

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; E, estimated]

Sample date-time	Manganese, water, filtered, µg/L (01056)
12-15-2009 1215	--
01-12-2010 1130	--
02-02-2010 1330	--
03-24-2010 1330	--
04-15-2010 1145	5.8
05-21-2010 1250	--
06-15-2010 1315	--
07-20-2010 1111	--
08-04-2010 1150	--

11124500 Santa Cruz Creek near Santa Ynez, CA—Continued

CROSS SECTION ANALYSES
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010

[%; 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, unfiltered,		Dissolved oxygen, water, unfiltered,	pH, water, unfiltered, field, standard units	Specific conductance, water, unfiltered, µS/cm at 25 °C	Temperature, water, °C	Depth to bottom at sample location, ft	Sampling depth, ft	Stream width, ft	Location in cross section, distance from left bank looking downstream, ft
	mm Hg (00025)	mg/L (00300)	% saturation (00301)	(00400)	(00095)	(00010)	(81903)	(00003)	(00004)	(00009)
02-02-2010 1318	--	--	--	8.4	795	14.6	.47	.23	26.3	1.00
02-02-2010 1319	--	--	--	8.4	794	14.6	.61	.30	26.3	3.50
02-02-2010 1320	--	--	--	8.4	795	14.6	.48	.24	26.3	6.00
02-02-2010 1321	--	--	--	8.4	795	14.6	.51	.26	26.3	8.50
02-02-2010 1322	--	--	--	8.4	794	14.6	.46	.23	26.3	11.0
02-02-2010 1323	--	--	--	8.4	794	14.6	.43	.22	26.3	13.5
02-02-2010 1324	--	--	--	8.4	793	14.6	.72	.36	26.3	16.0
02-02-2010 1325	--	--	--	8.4	794	14.6	.80	.40	26.3	18.5
02-02-2010 1326	--	--	--	8.4	793	14.6	.98	.49	26.3	21.0
02-02-2010 1327	--	--	--	8.4	795	14.6	.80	.40	26.3	23.5
04-15-2010 1203	739	9.4	101	8.3	728	17.4	.43	.21	27.2	1.00
04-15-2010 1204	739	9.4	101	8.3	730	17.4	.48	.24	27.2	3.50
04-15-2010 1205	739	9.4	101	8.3	729	17.4	.60	.30	27.2	6.00
04-15-2010 1206	739	9.4	102	8.3	727	17.4	.81	.40	27.2	8.50
04-15-2010 1207	739	9.5	102	8.3	725	17.5	.80	.40	27.2	11.0
04-15-2010 1208	739	9.4	102	8.3	725	17.5	.69	.35	27.2	13.5
04-15-2010 1209	739	9.5	102	8.3	725	17.5	.61	.30	27.2	16.0
04-15-2010 1210	739	9.4	102	8.3	723	17.5	.42	.21	27.2	18.5
04-15-2010 1211	739	9.4	102	8.2	722	17.5	.30	.15	27.2	21.0
04-15-2010 1212	739	9.4	102	8.2	721	17.6	.30	.15	27.2	23.5
04-15-2010 1213	739	9.4	101	8.3	728	17.7	.31	.16	27.2	26.0

Note: Instantaneous discharge at time of cross-sectional measurements: Feb. 2, 42 ft³/s; Apr. 15, 33 ft³/s.