11046000 Santa Margarita River at Ysidora, CA

Santa Margarita River Basin

LOCATION.--Lat 33°18′40″, long 117°20′47″ referenced to North American Datum of 1927, in NW ¼ NW ¼ sec.18, T.10 S., R.4 W., San Diego County, CA, Hydrologic Unit 18070302, on Camp Joseph H. Pendleton Naval Reservation, at Basilone Road Bridge, 5.2 mi upstream from Ysidora, and 7.9 mi upstream from mouth.

DRAINAGE AREA.--723 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--February 1923 to February 1999, September 2001 to current year (see GAGE paragraph). Low-flow records not equivalent prior to Dec. 10, 1980, due to installation of conservation ponds above downstream site.
CHEMICAL DATA: Water years 1980-81.
WATER TEMPERATURE: Water years 1969-81.
SEDIMENT DATA: Water years 1969-78, 1982-83.

REVISED RECORDS.--WDR CA-87-1: Drainage area.

GAGE.--Water-stage recorder. Auxiliary gage 2.3 mi upstream with crest-stage gage and steel drop structure (diversion dam). Primary gage temporarily out of operation from Feb. 26, 1999, to Sept. 27, 2001, due to channel work and replacement of Basilone Road Bridge. During this period, the auxiliary gage (station 11045050) was operated as a temporary replacement. Elevation of gage is 75 ft above NGVD of 1929, from topographic map. February 1923 to Feb. 16, 1927, at site 4.4 mi downstream at different datum (destroyed by flood). Feb. 17, 1927, to Feb. 1, 1931, no gage in operation; records based on discharge measurements. Feb. 2, 1931, to Feb. 24, 1970, at site 5.4 mi downstream at different datum. Feb. 25, 1970, to Dec. 10, 1980, at site 6.2 mi downstream at different datum.

REMARKS.--Records poor. Flow partly regulated by Vail Lake (station 11042510) since November 1948 and by Skinner Reservoir since 1974. Flow in Warm Springs Creek, a tributary to Murrieta Creek, slightly regulated beginning in water year 1999 by Diamond Valley Lake, capacity, 800,000 acre-ft (see station 11042800). Diversions to O'Neill Lake and to ground-water recharge basins are made at point 2.3 mi upstream by Camp Pendleton personnel. Regulated return flows from O'Neill Lake can occur at times, as can unregulated spills. See schematic diagram of Santa Margarita River Basin available from the California Water Science Center.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 44,000 ft^3/s, estimated, based on regression equation and flood routing of upstream flows, Jan. 16, 1993, gage height, 20.47 ft; no flow for all or part of most years.

Suggested citation: U.S. Geological Survey, 2012, Water-resources data for the United States, Water Year 2011: U.S. Geological Survey Water-Data Report WDR-US-2011, site 11046000, accessed at http://wdr.water.usgs.gov/wy2011/pdfs/11046000.2011.pdf

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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	0.00	1.9	325	48	165	78	29	23	e15	12	6.2
2	0.00	0.00	2.0	289	48	139	76	29	22	e15	11	10
3	0.00	0.00	2.0	373	46	119	71	28	23	e15	11	11
4	0.00	0.00	2.0	371	45	115	69	26	23	e15	9.9	11
5	0.00	0.00	2.0	245	44	109	71	26	23	e15	9.5	11
6	0.00	0.00	1.8	199	44	109	69	27	22	e15	9.6	11
7	0.00	0.00	1.3	166	45	131	67	27	21	e15	9.5	11
8	0.00	0.00	1.2	145	45	134	70	27	21	e14	9.4	11
9	0.00	0.00	1.0	137	43	125	66	29	17	e14	9.3	8.4
10	0.00	0.00	0.99	125	42	119	65	27	19	e14	8.3	7.8
11	0.00	0.00	0.99	117	42	110	61	21	22	e14	7.6	8.2
12	0.00	0.00	1.1	109	40	113	58	22	22	e14	8.2	8.7
13	0.00	0.00	1.1	102	40	104	58	21	23	e14	8.3	8.0
14	0.00	0.00	1.2	88	42	104	57	21	22	e14	8.2	8.2
15	0.00	0.00	1.3	87	45	106	54	21	22	e13	7.6	7.9
16	0.00	0.00	1.5	88	49	107	49	22	21	13	7.1	7.0
17	0.00	0.00	1.7	91	54	104	48	21	21	14	6.8	7.5
18	0.00	0.00	2.7	80	50	100	48	22	19	14	6.3	7.2
19	0.00	0.00	24	75	477	99	46	25	20	13	6.2	6.8
20	9.6	0.00	1,910	78	372	103	48	27	19	12	8.4	6.5
21	13	0.00	e5,700	73	142	680	48	26	15	12	8.9	6.5
22	5.8	28	e18,500	68	85	300	46	26	15	11	9.2	6.5
23	0.89	22	e2,800	67	65	145	42	26	15	12	8.3	6.7
24	0.07	10	720	61	53	222	39	25	16	11	7.3	6.6
25	0.00	4.9	456	58	50	137	40	25	16	11	7.2	6.6
26	0.00	2.8	513	58	1,290	110	35	25	16	11	7.2	6.9
27	0.00	2.2	403	58	485	87	34	25	e16	11	6.2	6.3
28	0.00	2.1	321	55	233	82	32	25	e16	11	5.5	6.1
29	0.00	1.9	609	48	---	78	30	24	e16	11	5.1	5.8
30	0.00	1.9	702	50	---	80	30	24	e16	11	5.5	5.9
31	0.00	---	404	54	---	77	---	24	---	12	5.6	---
Total	29.36	75.80	33,089.78	3,940	4,064	4,313	1,605	773	582	406	250.2	238.3
Mean	0.95	2.53	1,067	127	145	139	53.5	24.9	19.4	13.1	8.07	7.94
Max	13	28	18,500	373	1,290	680	78	29	23	15	12	11
Min	0.00	0.00	0.99	48	40	77	30	21	15	11	5.1	5.8
Ac-ft	58	150	65,630	7,810	8,060	8,550	3,180	1,530	1,150	805	496	473

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1923 - 1948, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	1.31	6.31	30.9	58.5	152	190	58.9	11.8	3.21	.54	.29	.88
Max	13.3	65.8	141	532	1,002	1,730	465	101	28.7	3.15	2.30	13.5
(WY)	(1942)	(1945)	(1941)	(1943)	(1937)	(1938)	(1941)	(1941)	(1941)	(1936)	(1935)	(1939)
Min	.000	.000	.000	.000	1.32	1.18	1.33	.000	.000	.000	.000	.000
(WY)	(1924)	(1924)	(1948)	(1948)	(1925)	(1925)	(1925)	(1948)	(1923)	(1923)	(1923)	(1923)

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SUMMARY STATISTICS

	Water Years 1923 - 1948	
Annual mean	43.3	
Highest annual mean	169	1938
Lowest annual mean	.77	1948
Highest daily mean	15,500	Mar 3, 1938
Lowest daily mean	.00	May 11, 1923
Annual seven-day minimum	.00	May 11, 1923
Maximum peak flow	33,600	Feb 16, 1927
Maximum peak stage	18.00	Feb 16, 1927
Annual runoff (ac-ft)	31,390	
10 percent exceeds	53	
50 percent exceeds	1.6	
90 percent exceeds	.00	

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 1980, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	.007	1.31	4.30	69.8	153	84.3	26.3	3.84	.65	.17	.036	.030
Max	.23	41.7	71.7	749	2,249	1,071	379	52.7	12.1	3.14	.80	.67
(WY)	(1970)	(1966)	(1967)	(1978)	(1980)	(1978)	(1958)	(1980)	(1979)	(1979)	(1980)	(1980)
Min	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	(1949)	(1949)	(1949)	(1949)	(1950)	(1950)	(1949)	(1949)	(1949)	(1949)	(1949)	(1949)

SUMMARY STATISTICS

	Water Years 1949 - 1980	
Annual mean	27.9	
Highest annual mean	282	1980
Lowest annual mean	.000	1950
Highest daily mean	18,000	Feb 21, 1980
Lowest daily mean	.00	Oct 1, 1948
Annual seven-day minimum	.00	Oct 1, 1948
Maximum peak flow	24,000	Feb 18, 1980
Maximum peak stage	18.80	Feb 18, 1980
Annual runoff (ac-ft)	20,250	
10 percent exceeds	4.4	
50 percent exceeds	.00	
90 percent exceeds	.00	

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1981 - 2011, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	12.0	14.3	72.2	214	198	156	49.8	23.9	10.6	4.14	3.23	2.30
Max	213	62.0	1,067	2,261	1,296	896	202	121	36.6	16.5	31.6	13.3
(WY)	(2005)	(1984)	(2011)	(1993)	(1993)	(1995)	(1983)	(1998)	(1998)	(2003)	(1983)	(2005)
Min	0.00	0.00	0.01	3.75	8.27	3.85	4.07	1.58	0.00	0.00	0.00	0.00
(WY)	(1982)	(1985)	(1990)	(2007)	(1989)	(1987)	(2002)	(1984)	(1984)	(1981)	(1981)	(1981)

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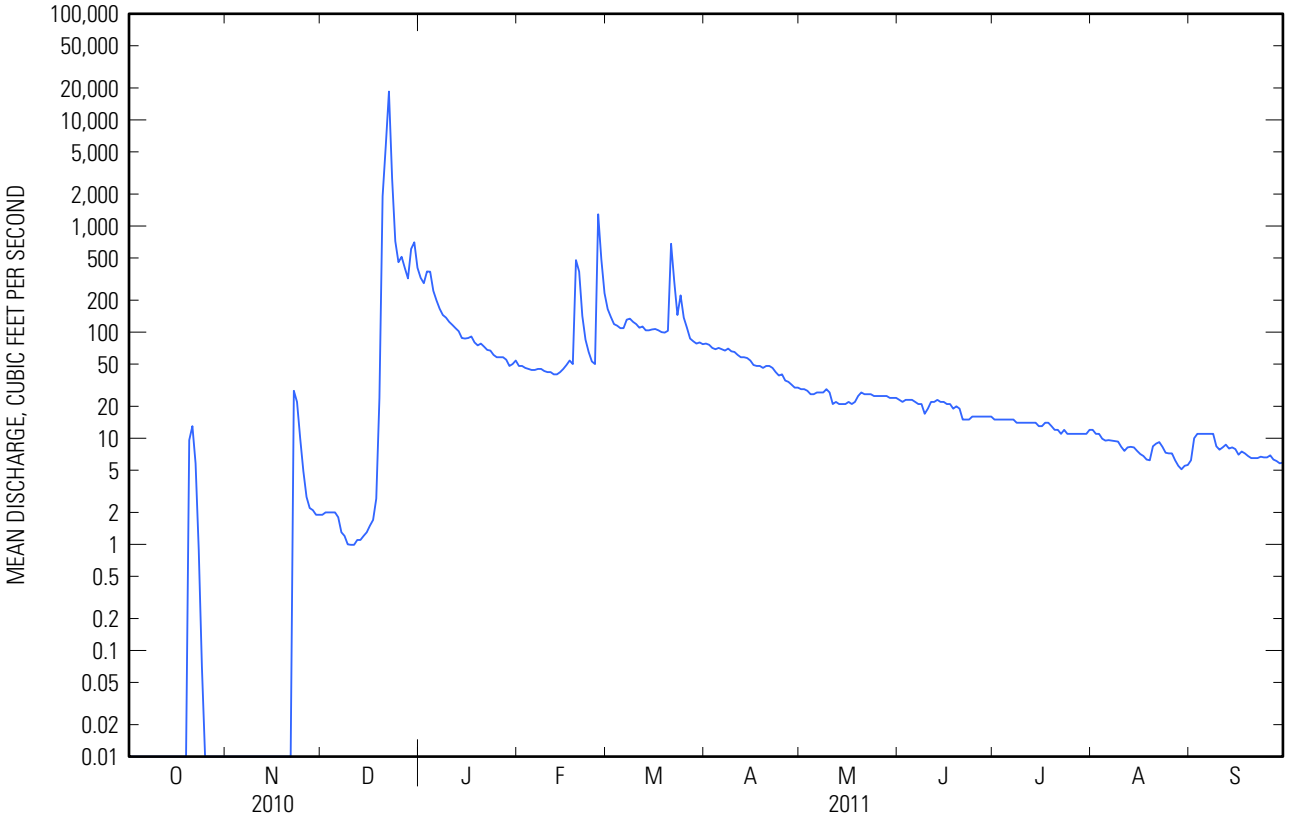
SUMMARY STATISTICS

[e, estimated]

	Calendar Year 2010		Water Year 2011		Water Years 1981 - 2011	
Annual total	58,931.55		49,366.44			
Annual mean	161		135		63.5	
Highest annual mean					337	1993
Lowest annual mean					4.59	1989
Highest daily mean	18,500	Dec 22	18,500	Dec 22	22,000	Jan 16, 1993
Lowest daily mean	0.00	Aug 16	0.00	Oct 1	0.00	Jun 19, 1981
Annual seven-day minimum	0.00	Aug 16	0.00	Oct 1	0.00	Jun 19, 1981
Maximum peak flow			e30,000	Dec 22	e44,000	Jan 16, 1993
Maximum peak stage			12.29	Dec 22	20.47	Jan 16, 1993
Annual runoff (ac-ft)	116,900		97,920		46,020	
10 percent exceeds	105		127		78	
50 percent exceeds	5.9		19		8.2	
90 percent exceeds	0.00		0.00		0.00