

11042510 Vail Lake near Temecula, CA

Santa Margarita River Basin

LOCATION.--Lat 33°29'44", long 116°58'33" referenced to North American Datum of 1927, Riverside County, CA, Hydrologic Unit 18070302, in Pauba Grant, near center of Vail Dam on Temecula Creek, 0.2 mi downstream from Arroyo Seco, and 10 mi east of Temecula.

DRAINAGE AREA.--320 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1960 to September 1985 (monthend contents only), October 1987 to current year. Prior to October 1977, published with Temecula Creek at Vail Dam.

GAGE.--Water-stage recorder. Datum of gage is NGVD of 1929 (levels by the U.S. Bureau of Reclamation). June 4, 1969, to September 1985, nonrecording gage.

REMARKS.--Reservoir is formed by concrete arch-type dam, completed in June 1949. Total capacity, 49,370 acre-ft, between elevations 1,352.5 ft, bottom of lowest outlet, and 1,470 ft, crest of spillway, all of which is available for release. There had been no spill from Nov. 13, 1948, date of closure, to Feb. 20, 1980, when a peak spill of about 8,000 ft³/s occurred (from theoretical discharge curve). Water is released down Temecula Creek for diversion about 1 mi downstream. Figures given, excluding extremes, represent total contents at 2400 hours. See schematic diagram of Santa Margarita River Basin available from the California Water Science Center.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 52,670 acre-ft, spilling, Feb. 21, 1980, elevation, 1,473.0 ft, from high-water mark; minimum observed, 1,038 acre-ft, Oct. 31, 1960, elevation, 1,379.44 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 32,230 acre-ft, April 25 to May 2, elevation, 1,452.17 ft; minimum observed, 21,930 acre-ft, Dec. 15, elevation, 1,438.78 ft.

**Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on table dated Dec. 22, 1953)**

Elevation	Contents	Elevation	Contents	Elevation	Contents
1,390	2,400	1,420	11,400	1,450	30,420
1,400	4,530	1,430	16,390	1,460	39,280
1,410	7,560	1,440	22,780	1,475	54,940

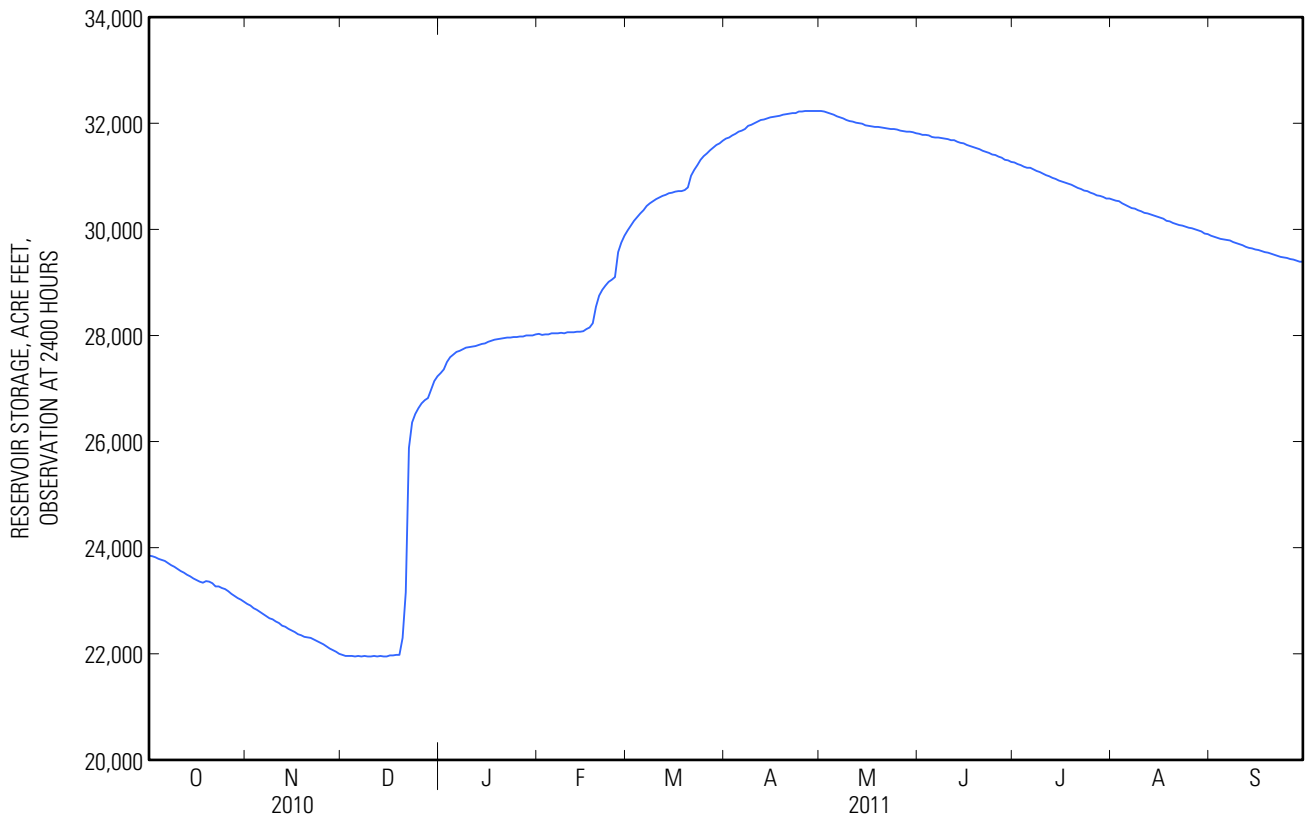
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RESERVOIR STORAGE, ACRE FEET
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011
DAILY OBSERVATION AT 2400 HOURS

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	23,850	22,940	21,980	27,290	28,030	29,980	31,710	32,230	31,800	31,260	30,560	29,880
2	23,840	22,910	21,960	27,360	28,010	30,070	31,730	32,220	31,780	31,230	30,540	29,860
3	23,820	22,860	21,960	27,500	28,020	30,160	31,770	32,200	31,780	31,210	30,530	29,840
4	23,790	22,830	21,960	27,590	28,020	30,230	31,800	32,180	31,770	31,180	30,490	29,820
5	23,770	22,790	21,950	27,640	28,040	30,300	31,840	32,160	31,740	31,160	30,460	29,810
6	23,750	22,750	21,960	27,690	28,040	30,360	31,860	32,130	31,730	31,160	30,430	29,800
7	23,710	22,710	21,950	27,710	28,040	30,440	31,890	32,110	31,730	31,130	30,400	29,790
8	23,670	22,670	21,960	27,740	28,050	30,490	31,950	32,090	31,720	31,100	30,390	29,760
9	23,640	22,650	21,950	27,770	28,040	30,530	31,970	32,060	31,710	31,080	30,360	29,740
10	23,600	22,610	21,950	27,780	28,060	30,570	32,000	32,040	31,700	31,050	30,340	29,720
11	23,560	22,580	21,960	27,790	28,060	30,600	32,030	32,030	31,680	31,020	30,310	29,700
12	23,530	22,530	21,950	27,800	28,060	30,630	32,060	32,010	31,680	31,000	30,300	29,670
13	23,490	22,510	21,960	27,820	28,070	30,650	32,070	32,000	31,650	30,970	30,280	29,650
14	23,460	22,470	21,950	27,840	28,070	30,680	32,090	31,990	31,630	30,950	30,260	29,640
15	23,420	22,440	21,950	27,850	28,080	30,690	32,110	31,960	31,620	30,920	30,240	29,620
16	23,390	22,410	21,970	27,880	28,120	30,710	32,120	31,950	31,590	30,900	30,220	29,610
17	23,360	22,370	21,970	27,900	28,150	30,720	32,130	31,940	31,570	30,880	30,200	29,590
18	23,340	22,350	21,980	27,920	28,230	30,720	32,140	31,930	31,550	30,860	30,160	29,570
19	23,370	22,320	21,980	27,930	28,540	30,740	32,160	31,930	31,530	30,840	30,150	29,560
20	23,360	22,310	22,300	27,940	28,750	30,790	32,170	31,920	31,510	30,810	30,120	29,540
21	23,330	22,300	23,160	27,950	28,860	31,010	32,180	31,910	31,480	30,780	30,100	29,520
22	23,270	22,270	25,880	27,960	28,940	31,120	32,190	31,900	31,460	30,760	30,080	29,500
23	23,270	22,240	26,360	27,960	29,010	31,210	32,190	31,890	31,440	30,730	30,070	29,480
24	23,240	22,210	26,520	27,970	29,050	31,310	32,220	31,890	31,410	30,720	30,050	29,470
25	23,220	22,180	26,630	27,970	29,100	31,380	32,220	31,880	31,400	30,690	30,030	29,460
26	23,180	22,140	26,720	27,980	29,570	31,430	32,230	31,860	31,370	30,670	30,020	29,440
27	23,130	22,100	26,780	27,980	29,750	31,490	32,230	31,850	31,350	30,640	30,000	29,430
28	23,090	22,070	26,820	28,000	29,880	31,540	32,230	31,840	31,310	30,630	29,980	29,410
29	23,050	22,040	26,980	28,000	---	31,590	32,230	31,840	31,300	30,610	29,960	29,390
30	23,020	22,000	27,140	28,000	---	31,620	32,230	31,830	31,270	30,580	29,920	29,390
31	22,980	---	27,230	28,020	---	31,670	---	31,810	---	30,580	29,910	---
Max	23,850	22,940	27,230	28,020	29,880	31,670	32,230	32,230	31,800	31,260	30,560	29,880
Min	22,980	22,000	21,950	27,290	28,010	29,980	31,710	31,810	31,270	30,580	29,910	29,390
Elevation, in feet, at end of month	1440.29	1438.89	1446.02	1447.03	1449.34	1451.50	1452.17	1451.67	1451.03	1450.20	1449.38	1448.74
Change in contents, in acre-feet	-870	-980	+5,230	+790	+1,860	+1,790	+560	-420	-540	-690	-670	-520

	Calendar Year 2010	Water Year 2011
Max	27,230	32,230
Min	20,300	21,930
Change in contents in acre ft	+6,810	+5,540

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11042510 Vail Lake near Temecula, CA—Continued**CLIMATOLOGICAL RECORDS**

PERIOD OF RECORD.--October 2000 to current year.

INSTRUMENTATION.--Recording tipping-bucket rain gage since Oct. 1, 2000.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily rainfall, 2.79 in., Dec. 22, 2010; no rainfall for many days each year.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall, 2.79 in., Dec. 22; no rainfall for many days.

PRECIPITATION, TOTAL, INCHES
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011
DAILY SUM VALUES

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
2	0.00	0.00	0.00	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
6	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.02	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.18	0.00	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	0.00	0.00	0.00	0.83	0.00	0.00	0.02	0.00	0.00	0.00	0.00
19	e1.50	0.00	0.01	0.00	0.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	e0.10	e0.20	1.60	0.00	0.03	0.54	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	e0.40	1.80	0.00	0.00	0.43	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	e0.02	2.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.00	0.00	0.00	0.00	0.24	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00
25	0.00	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	0.00	0.02	0.00	0.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	0.00	0.00	0.36	0.00	---	0.00	0.00	0.01	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.01	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	0.00	---	0.00	0.00	---	0.00	---	0.00	---	0.00	0.00	---
Total	1.69	0.67	6.86	0.46	2.89	1.21	0.12	0.03	0.02	0.00	0.01	0.05
Max	1.50	0.40	2.79	0.22	0.95	0.54	0.04	0.02	0.02	0.00	0.01	0.03
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

11042510 Vail Lake near Temecula, CA—Continued

	Calendar Year 2010	Water Year 2011
Total	17.26	14.01
Max	2.79	2.79
Min	0.00	0.00

