

**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 mi<sup>2</sup>.

**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 ft<sup>3</sup>/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, 26,560 acre-ft, Oct. 1, elevation, 1,445.15 ft; minimum observed, 20,770 acre-ft, Sept. 30, elevation, 1,437.07 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 2012 TO SEPTEMBER 2013**  
**DAILY OBSERVATION AT 2400 HOURS**

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	26,540	25,760	24,450	24,180	23,940	23,730	23,560	23,320	22,890	22,380	21,850	21,410
2	26,510	25,720	24,430	24,170	23,920	23,720	23,550	23,300	22,880	22,370	21,830	21,390
3	26,490	25,670	24,420	24,160	23,920	23,710	23,540	23,290	22,860	22,350	21,800	21,380
4	26,460	25,620	24,420	24,140	23,910	23,700	23,540	23,280	22,840	22,330	21,780	21,370
5	26,430	25,570	24,400	24,130	23,900	23,690	23,540	23,270	22,830	22,310	21,760	21,360
6	26,400	25,530	24,390	24,120	23,900	23,680	23,530	23,260	22,820	22,300	21,740	21,340
7	26,370	25,480	24,380	24,110	23,890	23,680	23,520	23,260	22,800	22,270	21,720	21,320
8	26,350	25,440	24,370	24,100	23,900	23,710	23,510	23,250	22,780	22,260	21,700	21,310
9	26,320	25,390	24,360	24,100	23,900	23,710	23,500	23,240	22,770	22,240	21,680	21,290
10	26,300	25,340	24,350	24,080	23,890	23,710	23,490	23,220	22,740	22,230	21,670	21,260
11	26,300	25,280	24,340	24,080	23,880	23,690	23,490	23,220	22,730	22,210	21,650	21,240
12	26,280	25,240	24,320	24,050	23,870	23,690	23,480	23,200	22,710	22,200	21,630	21,210
13	26,260	25,190	24,350	24,050	23,870	23,670	23,470	23,190	22,700	22,180	21,620	21,180
14	26,240	25,150	24,340	24,030	23,850	23,660	23,460	23,170	22,680	22,160	21,610	21,160
15	26,220	25,100	24,340	24,020	23,840	23,660	23,450	23,150	22,660	22,140	21,590	21,140
16	26,190	25,060	24,330	24,000	23,820	23,640	23,440	23,140	22,650	22,120	21,580	21,120
17	26,170	25,020	24,330	24,000	23,820	23,630	23,440	23,120	22,620	22,090	21,560	21,080
18	26,150	24,980	24,340	23,980	23,810	23,620	23,430	23,110	22,600	22,070	21,550	21,060
19	26,130	24,940	24,320	23,970	23,830	23,620	23,420	23,100	22,590	22,050	21,540	21,040
20	26,110	24,900	24,290	23,960	23,830	23,620	23,410	23,080	22,570	22,040	21,520	21,010
21	26,080	24,850	24,280	23,950	23,820	23,610	23,400	23,070	22,550	22,030	21,520	20,980
22	26,070	24,810	24,270	23,950	23,810	23,610	23,390	23,050	22,530	22,020	21,520	20,960
23	26,040	24,770	24,260	23,940	23,790	23,610	23,390	23,030	22,510	22,000	21,500	20,940
24	26,010	24,730	24,250	23,940	23,790	23,600	23,370	23,010	22,500	21,980	21,480	20,920
25	25,980	24,690	24,240	23,970	23,770	23,590	23,380	22,990	22,480	21,970	21,480	20,890
26	25,950	24,640	24,240	23,970	23,770	23,590	23,370	22,980	22,460	21,960	21,460	20,870
27	25,920	24,610	24,220	23,970	23,750	23,590	23,350	22,960	22,450	21,940	21,450	20,840
28	25,900	24,560	24,210	23,970	23,740	23,580	23,350	22,950	22,440	21,920	21,430	20,820
29	25,860	24,530	24,210	23,950	---	23,570	23,340	22,930	22,420	21,890	21,430	20,800
30	25,840	24,490	24,210	23,950	---	23,560	23,330	22,920	22,400	21,880	21,430	20,780
31	25,820	---	24,190	23,940	---	23,560	---	22,910	---	21,860	21,420	---
<b>Max</b>	26,540	25,760	24,450	24,180	23,940	23,730	23,560	23,320	22,890	22,380	21,850	21,410
<b>Min</b>	25,820	24,490	24,190	23,940	23,740	23,560	23,330	22,910	22,400	21,860	21,420	20,780
<b>Elevation, in feet, at end of month</b>	1444.17	1442.39	1441.98	1441.63	1441.36	1441.11	1440.78	1440.18	1439.46	1438.68	1438.04	1437.08
<b>Change in contents, in acre-feet</b>	-740	-1330	-300	-250	-200	-180	-230	-420	-510	-540	-440	-640

	Calendar Year 2012	Water Year 2013
<b>Max</b>	29,360	26,560
<b>Min</b>	24,180	20,770

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