Water-Data Report 2012

11269500 Lake McClure at Exchequer, CA

San Joaquin River Basin

LOCATION.--Lat 37°35′02″, long 120°16′09″ referenced to North American Datum of 1927, in NW ¼ SE ¼ sec.13, T.4 S., R.15 E., Mariposa County, CA, Hydrologic Unit 18040008, on left end of New Exchequer Dam on Merced River, 0.9 mi east of Exchequer, and 5.5 mi northeast of Merced Falls.

DRAINAGE AREA.--1,037 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--April 1926 to September 1930 (daily gage heights; also summary of yearly contents in WSP 881), October 1930 to current year.

REVISED RECORDS.--WSP 881: 1926-32 (yearly summaries only). WSP 1345: 1951 (instantaneous maximum discharge). WSP 1930: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is NGVD of 1929 (levels by Merced Irrigation District). Prior to Oct. 1, 1964, indicator in powerplant at same datum. Oct. 1, 1964, to July 31, 1966, nonrecording gage at center of upstream face of dam at same datum.

COOPERATION.--Records, including diversion through Exchequer Powerplant (station 11269700), were provided by Merced Irrigation District, under general supervision of the U.S. Geological Survey, in connection with Federal Energy Regulatory Commission project no. 2179.

REMARKS.--Reservoir is formed by a rock-fill dam with a reinforced concrete face completed in March 1967. Dam is downstream from and connected to the original concrete arch and gravity-type dam which was completed in April 1926. Usable capacity, 1,024,000 acre-ft, between elevations 440.0 ft, invert entrance to outlet tunnel, and 867.0 ft, top of spillway gates. Dead storage, 300 acre-ft. Water is released through Exchequer Powerplant down the Merced River to a diversion dam for Merced Irrigation District's main canal. Records, excluding extremes, represent total contents at 2400 hours.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 1,026,000 acre-ft, July 14, 15, 1969, elevation, 867.2 ft; practically no storage at times in 1926, 1930-31, 1964-65 when reservoir was drained for inspection or construction. Minimum since construction of New Exchequer Dam in 1966 and since lake first filled, 66,100 acre-ft, Feb. 28, 1991, elevation, 588.4 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 790,600 acre-ft, May 18, 19, elevation, 830.78 ft; minimum, 440,000 acre-ft, Sept. 30, elevation, 756.56 ft.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on table provided by Merced Irrigation District, dated October 1999)

Elevation	Contents	Elevation	Contents	Elevation	Contents
570	47,300	660	173,500	820	729,600
590	67,900	680	215,200	840	845,800
600	79,900	700	263,000	860	975,700
610	92,800	720	317,800	870	1,046,000
620	106,700	750	415,900		
640	137,800	780	534,500		

Suggested citation: U.S. Geological Survey, 2013, Water-resources data for the United States, Water Year 2012: U.S. Geological Survey Water-Data Report WDR-US-2012, site 11269500, accessed at http://wdr.water.usgs.gov/wy2012/pdfs/11269500.2012.pdf

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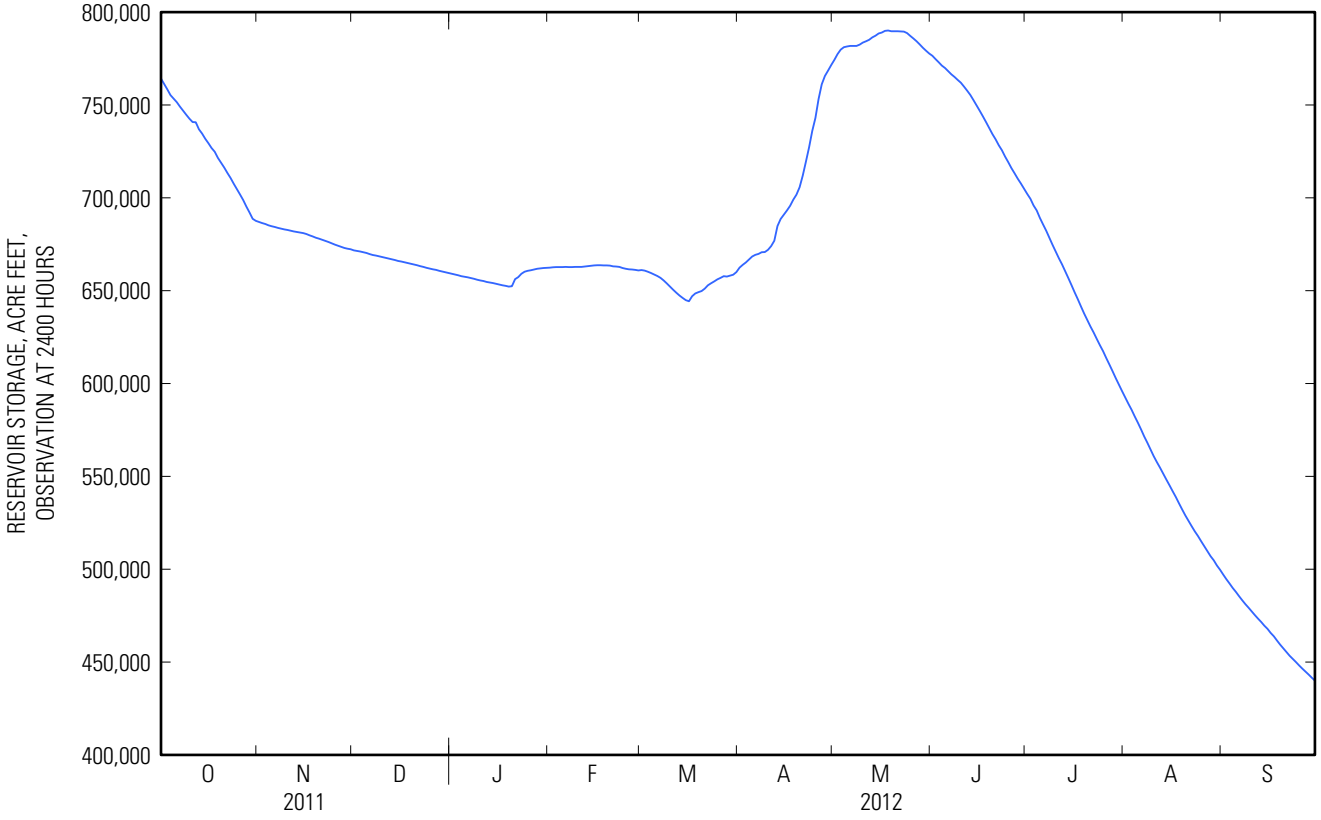
RESERVOIR STORAGE, ACRE FEET
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012
DAILY OBSERVATION AT 2400 HOURS

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	764,200	687,000	671,700	659,100	662,400	661,100	662,400	774,300	776,500	702,100	592,500	497,100
2	761,300	686,400	671,400	658,700	662,600	660,800	663,900	777,400	774,700	699,500	589,100	494,600
3	758,400	685,900	671,100	658,300	662,700	660,200	665,200	779,800	773,000	695,900	585,900	492,300
4	755,300	685,200	670,700	657,800	662,700	659,500	666,800	781,100	771,200	693,200	582,300	489,900
5	753,400	684,700	670,300	657,500	662,700	658,700	668,400	781,500	769,900	689,200	578,900	487,800
6	751,500	684,300	669,700	657,200	662,800	657,900	669,300	781,800	768,200	685,700	575,300	485,500
7	749,100	683,800	669,200	656,800	662,700	656,900	669,800	781,800	766,500	682,300	571,500	483,300
8	746,900	683,400	668,900	656,400	662,700	655,500	670,700	781,800	765,100	678,500	568,100	481,200
9	744,700	683,000	668,500	655,900	662,800	653,900	670,800	782,500	763,500	674,700	564,500	479,300
10	742,600	682,700	668,100	655,500	662,800	652,200	672,000	783,600	762,000	671,100	560,900	477,300
11	740,800	682,300	667,700	655,200	662,800	650,500	674,000	784,300	759,900	667,500	557,700	475,300
12	740,700	681,900	667,300	654,700	663,000	648,900	676,900	785,100	757,700	664,200	554,700	473,400
13	736,900	681,600	666,900	654,400	663,200	647,400	684,800	786,400	755,400	660,500	551,500	471,600
14	734,600	681,300	666,500	654,100	663,400	646,100	688,600	787,300	752,600	656,800	548,300	469,600
15	731,800	681,000	666,000	653,700	663,600	644,900	690,900	788,500	749,700	653,000	545,200	467,900
16	729,400	680,500	665,700	653,300	663,700	644,300	693,200	789,000	746,800	649,100	542,000	465,700
17	726,800	679,800	665,300	652,900	663,700	647,000	695,700	789,900	743,800	645,400	538,900	463,900
18	724,800	679,200	664,900	652,600	663,600	648,500	699,000	790,100	740,700	641,500	535,500	461,600
19	721,500	678,500	664,500	652,200	663,600	649,200	701,700	789,700	737,500	637,700	532,200	459,400
20	718,900	678,000	664,100	652,400	663,500	649,800	705,700	789,700	734,300	634,200	529,000	457,400
21	716,300	677,400	663,700	656,200	663,100	651,100	712,000	789,700	731,500	630,700	526,100	455,400
22	713,400	676,800	663,200	657,300	663,000	652,900	719,500	789,600	728,300	627,500	523,200	453,400
23	710,700	676,200	662,800	659,100	662,800	654,000	727,200	789,500	725,600	624,000	520,400	451,700
24	707,600	675,500	662,300	660,200	662,200	655,000	736,000	788,700	722,200	620,600	517,900	450,000
25	704,700	674,800	661,900	660,700	661,800	656,100	743,000	787,200	719,200	617,400	515,100	448,200
26	701,800	674,200	661,500	661,000	661,500	656,900	753,200	785,800	716,000	613,700	512,400	446,500
27	698,800	673,600	661,200	661,400	661,400	657,800	761,100	784,300	713,200	610,200	509,700	444,900
28	695,300	673,000	660,700	661,800	661,200	657,600	765,600	782,600	710,300	606,600	507,000	443,300
29	692,100	672,600	660,300	662,000	660,900	658,100	768,500	780,800	707,700	602,900	504,800	441,600
30	688,700	672,300	659,900	662,200	---	658,600	771,500	779,200	704,900	599,400	502,000	440,000
31	687,600	---	659,500	662,300	---	660,000	---	777,700	---	595,900	499,700	---
Max	764,200	687,000	671,700	662,300	663,700	661,100	771,500	790,100	776,500	702,100	592,500	497,100
Min	687,600	672,300	659,500	652,200	660,900	644,300	662,400	774,300	704,900	595,900	499,700	440,000
Elevation, in feet, at end of month												
	812.16	809.20	806.69	807.25	806.98	806.80	827.48	828.56	815.44	793.62	771.75	756.56
Change in contents, in acre-feet												
	-79,200	-15,300	-12,800	+2,800	-1,400	-900	+111,500	+6,200	-72,800	-109,000	-96,200	-59,700
Diversion, in acre-feet, through Exchequer Powerplant												
	97, 300	421	425	390	8,650	43,340	35,980	111,200	97,590	114,300	98,240	60,290

	Calendar Year 2011	Water Year 2012
Change in contents, in acre-feet	-107,300	-326,800

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