Water-Data Report 2012

11299000 New Melones Reservoir near Sonora, CA

San Joaquin River Basin

LOCATION.--Lat 37°57′04″, long 120°31′21″ referenced to North American Datum of 1927, in NW ¼ SE ¼ sec.11, T.1 N., R.13 E., Tuolumne County, CA, Hydrologic Unit 18040010, at right abutment of New Melones Dam on Stanislaus River, 0.1 mi downstream from the old Melones Dam, and 7.6 mi southwest of Sonora.

DRAINAGE AREA.--904 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--1926 (year-end contents only, published in WSP 1315-A), June 1927 to current year. Prior to October 1970, published as "Melones Reservoir at Melones Dam." October 1970 to September 1978, published as "Melones Lake near Sonora."

REVISED RECORDS.--WSP 1930: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is NGVD of 1929 (levels by U.S. Army Corps of Engineers). Prior to Feb. 28, 1961, nonrecording gage, and Mar. 1, 1961, to Nov. 26, 1978, water-stage recorder at site on left side of old Melones Dam, at same datum.

COOPERATION.--Records, including discharge through New Melones Powerplant (station 11299200), were provided by U.S. Bureau of Reclamation.

REMARKS.--Records for 2012 water year were not provided. Reservoir is formed by earth and rock-fill dam completed in November 1978. Dam is downstream from the original concrete dam which was completed in December 1926. Usable capacity, 2,420,000 acre-ft, between elevations 543.0 ft, invert entrance to outlet tunnel, and 1,088.0 ft, gross pool elevation. No dead storage. When elevation is above 808.0 ft, water is released through New Melones Powerplant to Tulloch Reservoir (station 11299995) where it is used for irrigation. Records for the 1971 water year represent contents at 1630 hours. Records, including extremes, represent total contents at 2400 hours. See schematic diagram of Stanislaus River Basin available from the California Water Science Center.

EXTREMES FOR PERIOD OF RECORD.--(Subsequent to completion of New Melones Dam in 1978) Maximum contents, 2,400,000 acre-ft, July 8-10, 1983, elevation, 1,086.42 ft; minimum since first filled in July 1983, 86,630 acre-ft, Oct. 1, 1992, elevation, 721.15 ft.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on table provided by U.S. Army Corps of Engineers, dated September 1978)

Elevation	Contents	Elevation	Contents	Elevation	Contents	Elevation	Contents
700	53,900	760	160,500	880	611,500	1,000	1,471,000
710	66,950	780	212,300	900	723,000	1,020	1,662,000
720	81,800	800	272,800	920	846,500	1,040	1,867,000
730	98,530	820	342,400	940	982,600	1,060	2,087,000
740	117,200	840	421,800	960	1,132,000	1,088	2,420,000
750	137,800	860	511,200	980	1,295,000		

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 11299000, accessed at http://wdr.water.usgs.gov/wy2012/pdfs/11299000.2012.pdf