



Water-Data Report 2008

11427400 French Meadows Reservoir near Foresthill, CA

Sacramento River Basin

LOCATION.--Lat 39°06'32", long 120°25'49" referenced to North American Datum of 1927, in SW ¼ NE ¼ sec.32, T.15 N., R.14 E., Placer County, CA, Hydrologic Unit 18020128, in Tahoe National Forest, on left bank, 2.2 mi upstream from French Meadows Dam on Middle Fork American River, 6.9 mi upstream from Chipmunk Creek, and 21 mi northeast of Foresthill.

DRAINAGE AREA.--47.0 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--December 1964 to current year.

GAGE.--Water-stage recorder. Datum of gage is NGVD of 1929 (levels by Placer County Water Agency).

COOPERATION.--Records provided by Placer County Water Agency, under general supervision of the U.S. Geological Survey, in connection with Federal Energy Regulatory Commission project no. 2079.

REMARKS.--Reservoir is formed by rock-fill dam with earth core. Storage began Dec. 21, 1964. Usable capacity, 125,601 acre-ft, between elevations 5,125 ft, minimum operating level, and 5,263 ft, top of radial gates. Dead storage, 10,804 acre-ft. Reservoir is used to store water for hydroelectric power. Up to 400 ft³/s diverted from Duncan Creek through a tunnel to reservoir. Water is released through a tunnel to French Meadows Powerplant (station 11427200) at Hell Hole Reservoir (station 11428700) on the Rubicon River; releases began Dec. 13, 1965. Records, including extremes, represent contents at 2400 hours. See schematic diagram of Middle Fork American and Rubicon River Basins available from the California Water Science Center.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 137,700 acre-ft, May 19, 1966, elevation, 5,263.9 ft; minimum since reservoir first filled, 28,500 acre-ft, Oct. 21-24, 1991, elevation, 5,157.6 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 93,700 acre-ft, June 12, 13, elevation, 5,229.7 ft; minimum, 47,400 acre-ft, Feb. 28, 29, Mar. 9, 12, elevation, 5,183.1 ft.

**Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on a survey by Placer County Water Agency in 1965)**

| Elevation | Contents | Elevation | Contents | Elevation | Contents |
|-----------|----------|-----------|----------|-----------|----------|
| 5,125 | 10,800 | 5,170 | 37,100 | 5,270 | 146,500 |
| 5,130 | 13,100 | 5,200 | 62,400 | | |
| 5,150 | 23,700 | 5,230 | 94,100 | | |

11427400 French Meadows Reservoir near Foresthill, CA—Continued

RESERVOIR STORAGE, ACRE FEET
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
DAILY OBSERVATION AT 2400 HOURS

| Day | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
|--|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1 | 68,700 | 64,300 | 60,300 | 55,700 | 51,400 | 47,500 | 49,400 | 65,200 | 91,100 | 90,200 | 79,700 | 67,500 |
| 2 | 68,500 | 64,200 | 60,000 | 55,500 | 51,200 | 47,500 | 49,400 | 65,700 | 91,500 | 89,700 | 79,300 | 67,000 |
| 3 | 68,300 | 64,000 | 59,900 | 55,300 | 51,100 | 47,500 | 49,300 | 66,600 | 91,900 | 89,400 | 78,900 | 66,600 |
| 4 | 68,000 | 63,900 | 59,800 | 55,800 | 50,800 | 47,500 | 49,600 | 67,600 | 92,100 | 89,000 | 78,500 | 66,200 |
| 5 | 68,000 | 63,700 | 59,700 | 56,000 | 50,600 | 47,500 | 50,100 | 68,600 | 92,300 | 88,600 | 78,300 | 65,800 |
| 6 | 67,800 | 63,700 | 59,700 | 56,100 | 50,300 | 47,500 | 50,400 | 69,800 | 92,700 | 88,300 | 77,900 | 65,400 |
| 7 | 67,600 | 63,600 | 59,500 | 56,100 | 49,800 | 47,500 | 50,700 | 71,200 | 92,900 | 87,700 | 77,600 | 65,100 |
| 8 | 67,500 | 63,500 | 59,300 | 56,200 | 49,700 | 47,500 | 50,900 | 72,500 | 93,000 | 87,400 | 77,100 | 64,700 |
| 9 | 67,400 | 63,400 | 59,000 | 56,200 | 49,600 | 47,400 | 51,000 | 73,600 | 93,300 | 87,000 | 77,000 | 64,500 |
| 10 | 67,400 | 63,400 | 58,800 | 56,300 | 49,300 | 47,500 | 51,300 | 74,700 | 93,500 | 86,700 | 76,900 | 64,100 |
| 11 | 67,200 | 63,500 | 58,700 | 56,300 | 48,800 | 47,500 | 51,600 | 75,800 | 93,500 | 86,400 | 76,400 | 63,800 |
| 12 | 67,100 | 63,300 | 58,500 | 56,300 | 48,600 | 47,400 | 52,200 | 76,900 | 93,700 | 86,000 | 76,000 | 63,500 |
| 13 | 67,000 | 63,200 | 58,300 | 56,300 | 48,300 | 47,900 | 53,100 | 77,800 | 93,700 | 85,800 | 75,500 | 63,400 |
| 14 | 66,800 | 63,000 | 58,300 | 56,100 | 48,200 | 48,000 | 54,100 | 78,600 | 93,600 | 85,400 | 75,200 | 63,100 |
| 15 | 66,500 | 62,900 | 58,100 | 56,000 | 48,100 | 48,300 | 54,600 | 79,900 | 93,500 | 85,100 | 74,700 | 62,700 |
| 16 | 66,500 | 62,600 | 57,900 | 55,600 | 48,100 | 48,300 | 55,100 | 81,300 | 93,400 | 84,800 | 74,200 | 62,600 |
| 17 | 66,300 | 62,500 | 57,900 | 55,500 | 48,100 | 48,200 | 55,800 | 82,500 | 93,100 | 84,500 | 73,800 | 62,300 |
| 18 | 66,200 | 62,400 | 57,800 | 55,100 | 48,000 | 48,000 | 56,500 | 83,800 | 93,000 | 84,200 | 73,400 | 61,900 |
| 19 | 66,200 | 62,300 | 57,600 | 54,900 | 47,900 | 48,000 | 57,500 | 84,800 | 92,800 | 83,600 | 73,000 | 61,600 |
| 20 | 66,200 | 62,200 | 57,500 | 54,600 | 47,800 | 48,000 | 58,100 | 85,800 | 92,700 | 83,600 | 72,600 | 61,300 |
| 21 | 66,000 | 62,000 | 57,400 | 54,300 | 47,900 | 47,700 | 58,600 | 86,600 | 92,500 | 83,500 | 72,100 | 61,100 |
| 22 | 65,900 | 61,900 | 57,200 | 53,800 | 47,800 | 47,800 | 59,000 | 87,100 | 92,100 | 83,200 | 71,700 | 60,700 |
| 23 | 65,800 | 61,700 | 57,000 | 53,700 | 47,800 | 48,000 | 59,300 | 87,500 | 91,800 | 82,800 | 71,200 | 60,500 |
| 24 | 65,600 | 61,600 | 56,900 | 53,000 | 47,800 | 48,000 | 59,600 | 88,000 | 91,700 | 82,400 | 70,800 | 60,100 |
| 25 | 65,500 | 61,500 | 56,800 | 53,000 | 47,700 | 48,100 | 59,600 | 88,600 | 91,500 | 82,200 | 70,400 | 59,800 |
| 26 | 65,200 | 61,200 | 56,700 | 52,700 | 47,500 | 48,500 | 60,100 | 89,200 | 91,400 | 81,600 | 69,900 | 59,500 |
| 27 | 65,100 | 61,000 | 56,500 | 52,600 | 47,500 | 48,800 | 61,200 | 89,500 | 91,200 | 81,400 | 69,500 | 59,200 |
| 28 | 64,900 | 60,800 | 56,300 | 52,400 | 47,400 | 49,000 | 62,600 | 89,800 | 91,000 | 81,100 | 69,100 | 59,000 |
| 29 | 64,700 | 60,700 | 56,200 | 52,100 | 47,400 | 49,100 | 64,000 | 90,200 | 90,700 | 80,800 | 68,700 | 58,700 |
| 30 | 64,600 | 60,500 | 56,000 | 51,800 | --- | 49,200 | 64,700 | 90,500 | 90,500 | 80,400 | 68,200 | 58,500 |
| 31 | 64,500 | --- | 55,900 | 51,800 | --- | 49,200 | --- | 90,900 | --- | 79,800 | 67,900 | --- |
| Max | 68,700 | 64,300 | 60,300 | 56,300 | 51,400 | 49,200 | 64,700 | 90,900 | 93,700 | 90,200 | 79,700 | 67,500 |
| Min | 64,500 | 60,500 | 55,900 | 51,800 | 47,400 | 47,400 | 49,300 | 65,200 | 90,500 | 79,800 | 67,900 | 58,500 |
| Gage height, in feet, at end of month | 5,202.1 | 5,197.9 | 5,192.9 | 5,188.3 | 5,183.1 | 5,185.3 | 5,202.4 | 5,227.2 | 5,226.9 | 5,217.2 | 5,205.6 | 5,195.8 |
| Change in contents, in acre-feet | -4,400 | -4,000 | -4,600 | -4,100 | -4,400 | +1,800 | +15,500 | +26,200 | -400 | -10,700 | -11,900 | -9,400 |

| | Calendar Year 2007 | Water Year 2008 |
|---|--------------------|-----------------|
| Change in contents, in acre-feet | -13,700 | -10,400 |

11427400 French Meadows Reservoir near Foresthill, CA—Continued

