

SCOTTS FLAT RESERVOIR IN NEVADA CITY, CA

LOCATION.--Lat 39°16'26.4" N, long 120°55'53.0" W referenced to North American Datum of 1927, Nevada County, CA, in the SE ¼ of Section 2, T.16N., R.9E., 21.

DRAINAGE AREA.—20 mi²

ESTABLISHMENT AND HISTORY.—Scotts Flat Reservoir was originally constructed in 1948 and had a storage of 27,000 AF. The dam was raised in 1964 to its present height and increased storage to 48,547 AF. In 1987, the gage house was constructed and a gas manometer was installed.

GAGE.—Design Analysis H350XL-50 data logger and Air Force II bubbler, Goes Satellite Transmitter H2221 V2.

The outside gage is 18 vertical staffs just below the gage house. The staff gages are standard enamel plates on redwood bolted to galvanized steel channels. Limits of gages are listed below. Add thousands and hundreds to gage readings to obtain sea level readings. On 11/12/2014, reference markers were added to the concrete bases of the staff plates.

Staff Plates	
9	3020.34 – 3027.14
8	3027.14 – 3033.94
7	3033.94 – 3040.74 Screw @ 39.00 surveyed 38.992 (10/6/2014)
6	3040.74 – 3047.54 Screw @ 45.01 surveyed 44.991 (10/6/2014)
5	3047.54 – 3054.34 Screw @ 49.00 surveyed 48.98 (10/6/2014)
4	3054.34 – 3061.14 Screw @ 56.99 surveyed 56.975 (10/6/2014)
3	3061.14 – 3067.94 Screw @ 64.00 surveyed 63.987 & 64.98 surveyed 64.965 (10/9/2018)
2	3067.94 – 3074.74 Screw @ 71.00 surveyed 70.982 & 71.79 surveyed 71.767 (10/9/2018)
1	3074.74 – 3081.54 Screw @ 77.00 surveyed 76.993 & 78.37 surveyed 78.363 (10/9/2018)

FLOODS.--Maximum contents:

Dec 12, 1983, elevation 3075.58'
Feb 18, 1986, elevation 3077.63'
Mar 25, 1989, elevation 3075.81'
Jan 1, 1997, elevation 3077.92'
Jan 1, 2006, elevation 3076.09'
Jan 10, 2018, elevation 3077.08'

REGULATION AND DIVERSIONS.--Discharge normally is released through outlet tunnel to Scotts Flat Powerhouse at the right abutment of dam. Ungated spillway on left bank with crest elevation of 3074.81'.

Stored water is released to Lower Scotts Flat (Deer Creek Diversion Dam). Water is used for irrigation and domestic purposes.

ACCURACY.--Excellent.

COOPERATION.--Nevada Irrigation District operates gage.

JUSTIFICATION.—Storage and re-diversion reservoir.

REMARKS.--Usable contents of Scotts Flat Reservoir are 48,502 acre-ft between spillway crest, 3074.81', 48,547 acre-ft, and centerline of outlet tunnel, elevation 2921.20', capacity 45 acre-ft. Crest of rockfill portion of dam is 3085'.