07191400 LAKE HUDSON NEAR LOCUST GROVE, OK

Neosho Basin
Lower Neosho Subbasin

LOCATION.--Lat 36°13′48″, long 95°10′55″ referenced to North American Datum of 1927, in SE ¼ NW ¼ sec.9, T.20 N., R.20 E., Mayes County, OK, Hydrologic Unit 11070209, at left side of Robert S. Kerr dam on Neosho River, 2.0 mi northwest of Locust Grove, 3.5 mi downstream from Saline Creek, and at mile 47.3.

DRAINAGE AREA.--11,534 mi^2.

SURFACE-WATER RECORDS

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

GAGE.--Water-stage recorder. Datum of gage is NGVD of 1929.

REMARKS.--Reservoir is formed by earth dam and concrete spillway controlled by seventeen 22-foot taintor gates. Storage began Nov. 12, 1963; power pool first filled June 12, 1964. Capacity, 444,500 acre-ft at elevation 636.0 ft, top of taintor gages, 200,300 acre-ft at elevation 619.0 ft, power pool, and 48,630 acre-ft at elevation 599.0 ft, top of spillway crest. Figures given herein represent total contents. Reservoir was designed for flood control and power development. U.S. Army Corps of Engineers' satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 443,600 acre-ft, Oct. 4, 1986 and June 15, 1995, elevation, 635.95 ft; minimum since power pool first filled, 149,100 acre-ft, Feb. 16, 2006, elevation, 613.87 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 291,200 acre-ft, Oct. 13, elevation, 626.44 ft; minimum, 195,900 acre-ft, Aug. 06, elevation, 618.59 ft.

Reservoir Elevation-Capacity Table

Elevation, in ft	Capacity, in acre-ft	Elevation, in ft	Capacity, in acre-ft
610	116,500	630	342,600
615	159,600	635	426,100
620	211,300	640	525,100
625	272,000		

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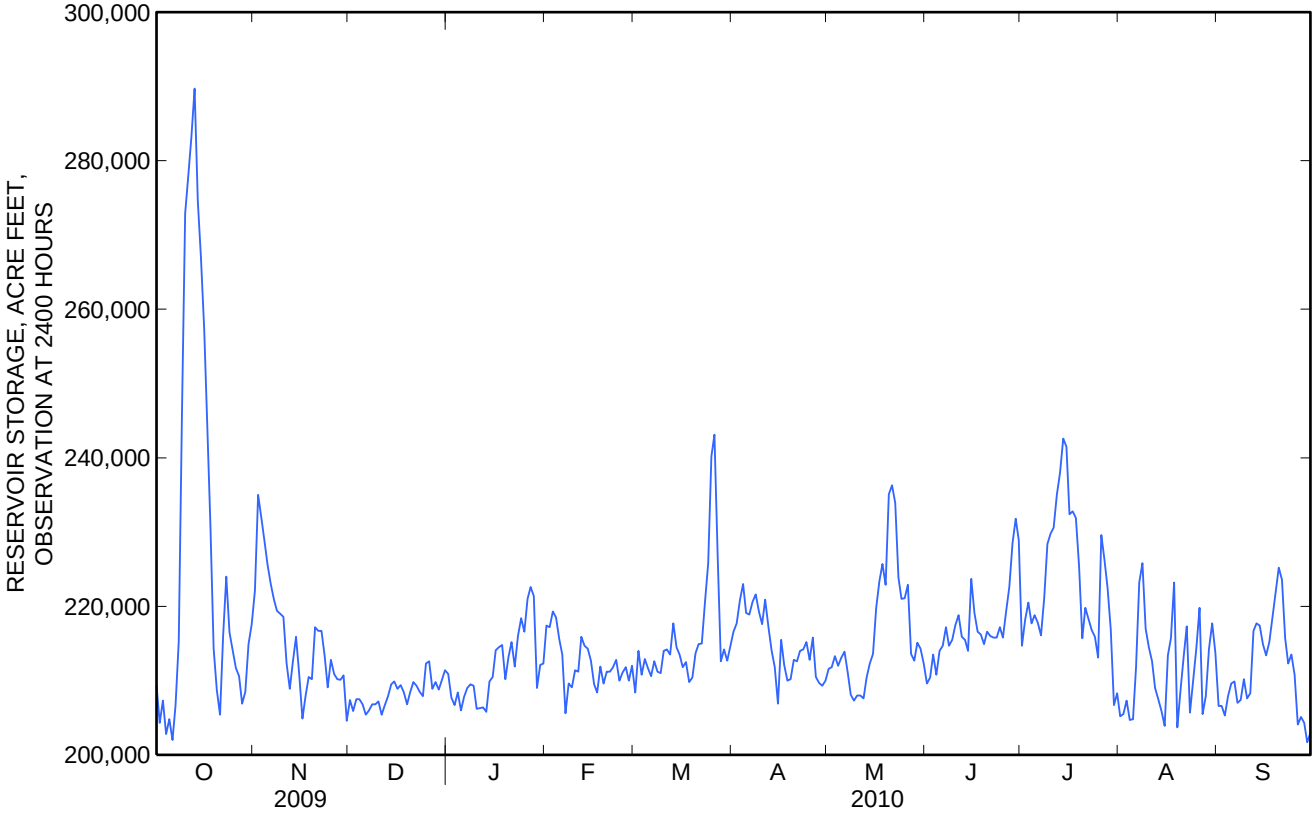
RESERVOIR STORAGE, ACRE FEET
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010
DAILY OBSERVATION AT 2400 HOURS

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	209,300	222,100	207,400	210,900	217,400	208,400	216,600	211,600	209,600	214,700	205,200	206,600
2	204,300	235,000	205,900	207,700	217,200	214,000	217,700	211,800	210,400	218,200	205,500	206,600
3	207,300	232,100	207,500	206,700	219,300	210,800	220,800	213,300	213,500	220,500	207,300	205,300
4	202,800	228,900	207,500	208,400	218,500	212,900	223,000	212,000	210,800	217,700	204,700	207,900
5	204,800	225,600	206,800	206,000	215,600	211,700	219,100	213,100	214,000	218,800	204,800	209,600
6	202,000	223,000	205,400	207,800	213,500	210,600	218,900	213,900	214,700	217,800	211,800	209,900
7	206,700	220,900	206,000	209,000	205,600	212,600	220,600	211,100	217,200	216,100	223,200	207,000
8	215,300	219,400	206,800	209,500	209,600	211,200	221,600	208,100	214,700	221,100	225,800	207,400
9	245,900	219,000	206,800	209,300	209,100	211,000	219,300	207,300	215,500	228,400	217,000	210,200
10	272,900	218,600	207,200	206,200	211,400	214,000	217,600	208,000	217,500	229,800	214,500	207,600
11	278,100	212,300	205,400	206,300	211,200	214,200	220,900	208,000	218,800	230,600	212,600	208,300
12	283,200	208,900	206,700	206,400	215,900	213,500	217,300	207,600	215,900	235,000	209,000	216,700
13	289,700	212,500	207,900	205,800	214,700	217,700	214,100	210,400	215,500	238,000	207,500	217,700
14	274,600	215,900	209,500	209,900	214,300	214,500	211,800	212,300	214,000	242,600	205,900	217,400
15	266,800	210,800	209,900	210,500	212,700	213,500	206,900	213,600	223,700	241,500	203,900	214,900
16	257,300	204,900	208,900	214,100	209,500	211,800	215,500	219,800	219,100	232,400	213,400	213,400
17	244,500	208,000	209,400	214,500	208,400	212,500	212,100	223,400	216,600	232,800	215,700	215,200
18	230,800	210,500	208,400	214,800	211,900	209,800	210,000	225,700	216,200	231,900	223,200	218,400
19	214,300	210,200	206,800	210,200	209,600	210,400	210,200	222,900	214,900	225,400	203,700	221,800
20	208,700	217,200	208,400	213,200	211,200	213,700	212,800	235,100	216,600	215,700	208,700	225,200
21	205,400	216,700	209,800	215,200	211,200	214,900	212,600	236,300	216,000	219,800	213,300	223,600
22	215,900	216,700	209,300	211,900	211,800	215,000	214,000	233,900	215,800	218,300	217,300	215,700
23	224,000	213,300	208,500	216,000	212,800	220,600	214,200	223,900	215,800	216,800	205,700	212,300
24	216,500	209,100	207,900	218,400	210,000	225,800	215,200	221,000	217,200	215,900	210,000	213,500
25	214,100	212,800	212,300	216,600	211,100	240,200	212,800	221,100	215,800	213,100	214,400	210,800
26	211,700	210,900	212,600	221,000	211,800	243,100	215,800	222,900	219,300	229,600	219,800	204,100
27	210,600	210,200	208,900	222,600	210,000	226,900	210,500	213,600	222,600	226,400	205,500	205,100
28	206,900	210,100	209,800	221,400	212,000	212,600	209,700	212,700	228,500	222,500	207,900	204,300
29	208,500	210,700	208,800	209,000	---	214,200	209,300	215,100	231,800	216,900	214,300	201,700
30	214,900	204,600	210,100	212,100	---	212,700	210,000	214,300	228,900	206,700	217,700	203,000
31	217,600	---	211,400	212,300	---	214,700	---	212,300	---	208,300	213,700	---
Max	289,700	235,000	212,600	222,600	219,300	243,100	223,000	236,300	231,800	242,600	225,800	225,200
Min	202,000	204,600	205,400	205,800	205,600	208,400	206,900	207,300	209,600	206,700	203,700	201,700
Elevation, in feet, at end of month	620.55	619.39	620.00	620.08	620.06	620.29	619.88	620.08	621.52	619.72	620.21	619.24
Change in contents, in acre-ft	+4,500	-13,000	+6,800	+900	-300	+2,700	-4,700	+2,300	+16,600	-20,600	+5,400	-10,700

	Calendar Year 2009	Water Year 2010
Max	378,000	289,700
Min	196,700	201,700
Change in Contents, in acre-ft	-1,300	-10,100

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