# 07191300 SPAVINAW LAKE AT SPAVINAW, OK

Neosho Basin
Lower Neosho Subbasin

LOCATION.--Lat 36°22′59″, long 95°02′52″ referenced to North American Datum of 1927, in NW ¼ SW ¼ SE ¼ sec.15, T.22 N., R.21 E., Mayes County, OK, Hydrologic Unit 11070209, right of intake tower on face of dam on Spavinaw Creek at Spavinaw, and at mile 5.5.

DRAINAGE AREA.--386 $mi^2$, (U.S. Army Corps of Engineers).

## SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1991 to current year.

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

REMARKS.--Reservoir is formed by earth dam with uncontrolled concrete spillway. Levels are maintained in Spavinaw Lake by releases from Lake Eucha. Storage began 1924; conservation pool first filled November 1924. Capacity 41,200 acre-ft at elevation 682 ft. Dead storage, 15,300 acre-ft at elevation 662 ft. Figures given herein represent total contents. Capacity table based on data provided by OWRB. Capacities from 680.00 to 686.00 are based upon a linear extension of existing data. Reservoir is used for water supply, recreation, and fish and wildlife. U.S. Army Corps of Engineers satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 41,630 acre-ft, July 3, 2004, elevation 683.83 ft; minimum, 20,560 acre-ft, Jan. 16, 2007, elevation, 672.54 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of April 1942 reached a stage of 689.13 ft, contents unknown.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 31,750 acre-ft, Oct. 09, elevation 683.41 ft; minimum, 25,730 acre-ft, Aug. 15, elevation 679.57 ft.

Reservoir Elevation-Capacity Table

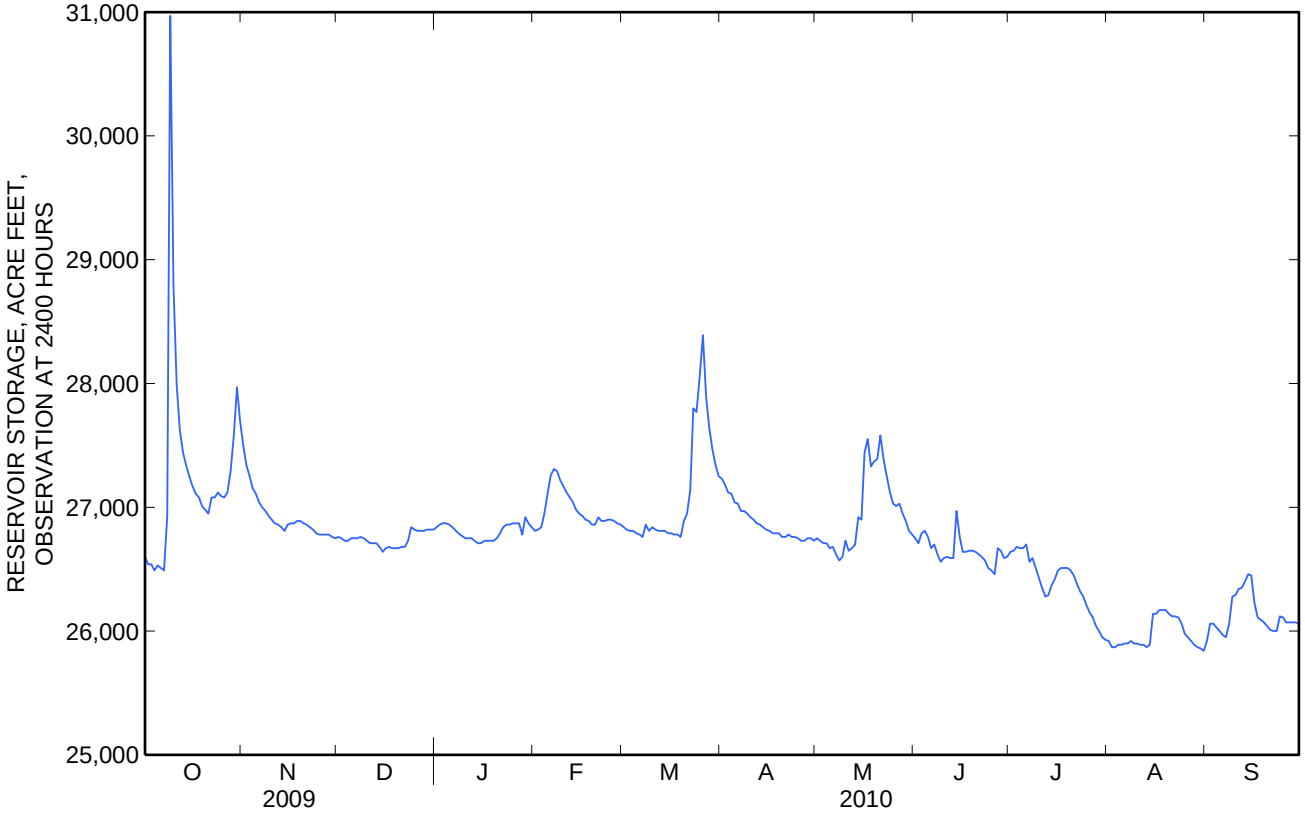
| Elevation, in ft | Capacity, in acre-ft | Elevation, in ft | Capacity, in acre-ft |
|---|---|---|---|
| 660 | 5,545 | 663 | 7,916 |
| 667 | 10,793 | 670 | 14,104 |
| 673 | 17,758 | 677 | 21,746 |
| 680 | 26,400 | 686 | 35,820 |

**07191300 SPAVINAW LAKE AT SPAVINAW, OK—Continued**

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

[e, estimated]

| Day | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 26,600 | 27,500 | 26,760 | 26,840 | 26,810 | 26,840 | 27,230 | 26,750 | 26,750 | 26,640 | 25,920 | 25,920 |
| 2 | 26,540 | 27,340 | 26,750 | 26,860 | 26,820 | 26,820 | 27,180 | 26,730 | 26,710 | 26,650 | 25,870 | 26,060 |
| 3 | 26,540 | 27,250 | 26,730 | 26,870 | 26,840 | 26,810 | 27,120 | 26,710 | 26,790 | 26,680 | 25,870 | 26,060 |
| 4 | 26,490 | 27,150 | 26,730 | 26,870 | 26,950 | 26,810 | 27,110 | 26,710 | 26,810 | 26,670 | 25,890 | 26,030 |
| 5 | 26,530 | 27,110 | 26,750 | 26,860 | 27,110 | 26,790 | 27,040 | 26,670 | 26,760 | 26,670 | 25,890 | 26,000 |
| 6 | 26,510 | 27,040 | 26,750 | 26,840 | 27,260 | 26,780 | 27,030 | 26,680 | 26,670 | 26,700 | 25,900 | 25,970 |
| 7 | 26,490 | 27,000 | 26,750 | 26,810 | 27,310 | 26,760 | 26,970 | 26,620 | 26,700 | 26,560 | 25,900 | 25,950 |
| 8 | 26,930 | 26,970 | 26,760 | e26,790 | 27,290 | 26,860 | 26,970 | 26,570 | 26,620 | 26,590 | 25,920 | 26,060 |
| 9 | 30,970 | 26,930 | 26,750 | e26,770 | 27,220 | 26,810 | 26,950 | 26,600 | 26,560 | 26,510 | 25,900 | 26,280 |
| 10 | 28,790 | 26,900 | 26,730 | e26,750 | 27,170 | 26,840 | 26,920 | 26,730 | 26,590 | 26,430 | 25,900 | 26,290 |
| 11 | 27,990 | 26,870 | 26,710 | 26,750 | 27,120 | 26,820 | 26,900 | 26,650 | 26,600 | 26,350 | 25,890 | 26,340 |
| 12 | 27,620 | 26,860 | 26,710 | 26,750 | 27,080 | 26,810 | 26,870 | 26,670 | 26,590 | 26,280 | 25,890 | 26,350 |
| 13 | 27,440 | 26,840 | 26,710 | 26,730 | 27,040 | 26,810 | 26,860 | 26,700 | 26,590 | 26,290 | 25,870 | 26,400 |
| 14 | 27,340 | 26,810 | 26,680 | 26,710 | 26,980 | 26,810 | 26,840 | 26,920 | 26,970 | 26,370 | 25,890 | 26,460 |
| 15 | 27,250 | 26,860 | 26,640 | 26,710 | 26,950 | 26,790 | 26,820 | 26,900 | 26,760 | 26,420 | 26,140 | 26,450 |
| 16 | 27,170 | 26,870 | 26,670 | 26,730 | 26,930 | 26,790 | 26,810 | 27,440 | 26,640 | 26,490 | 26,140 | 26,230 |
| 17 | 27,110 | 26,870 | 26,680 | 26,730 | 26,900 | 26,780 | 26,790 | 27,550 | 26,640 | 26,510 | 26,170 | 26,110 |
| 18 | 27,080 | 26,890 | 26,670 | 26,730 | 26,890 | 26,780 | 26,790 | 27,330 | 26,650 | 26,510 | 26,170 | 26,090 |
| 19 | 27,010 | 26,890 | 26,670 | 26,730 | 26,860 | 26,760 | 26,790 | 27,370 | 26,650 | 26,510 | 26,170 | 26,070 |
| 20 | 26,980 | 26,870 | 26,670 | 26,750 | 26,860 | 26,890 | 26,760 | 27,390 | 26,640 | 26,490 | 26,140 | 26,040 |
| 21 | 26,950 | 26,860 | 26,680 | 26,790 | 26,920 | 26,950 | 26,760 | 27,580 | 26,620 | 26,450 | 26,120 | 26,010 |
| 22 | 27,080 | 26,840 | 26,680 | 26,840 | 26,890 | 27,140 | 26,780 | 27,390 | 26,600 | 26,380 | 26,120 | 26,000 |
| 23 | 27,080 | 26,820 | 26,730 | 26,860 | 26,890 | 27,800 | 26,760 | 27,250 | 26,570 | 26,320 | 26,110 | 26,000 |
| 24 | 27,120 | 26,790 | 26,840 | 26,860 | 26,900 | 27,770 | 26,760 | 27,120 | 26,510 | 26,280 | 26,060 | 26,120 |
| 25 | 27,090 | 26,780 | 26,820 | 26,870 | 26,900 | 28,060 | 26,750 | 27,030 | 26,490 | 26,210 | 25,980 | 26,110 |
| 26 | 27,080 | 26,780 | 26,810 | 26,870 | 26,890 | 28,390 | 26,730 | 27,010 | 26,460 | 26,150 | 25,950 | 26,070 |
| 27 | 27,120 | 26,780 | 26,810 | 26,870 | 26,870 | 27,890 | 26,730 | 27,030 | 26,670 | 26,110 | 25,920 | 26,070 |
| 28 | 27,290 | 26,780 | 26,810 | 26,780 | 26,860 | 27,640 | 26,750 | 26,950 | 26,650 | 26,040 | 25,890 | 26,070 |
| 29 | 27,580 | 26,760 | 26,820 | 26,920 | --- | 27,470 | 26,750 | 26,890 | 26,590 | 26,000 | 25,870 | 26,070 |
| 30 | 27,970 | 26,750 | 26,820 | 26,870 | --- | 27,340 | 26,730 | 26,810 | 26,600 | 25,950 | 25,860 | 26,060 |
| 31 | 27,700 | --- | 26,820 | 26,840 | --- | 27,250 | --- | 26,780 | --- | 25,930 | 25,840 | --- |
| Max | 30,970 | 27,500 | 26,840 | 26,920 | 27,310 | 28,390 | 27,230 | 27,580 | 26,970 | 26,700 | 26,170 | 26,460 |
| Min | 26,490 | 26,750 | 26,640 | 26,710 | 26,810 | 26,760 | 26,730 | 26,570 | 26,460 | 25,930 | 25,840 | 25,920 |
| Elevation, in feet, at end of month | 680.83 | 680.22 | 680.27 | 680.28 | 680.29 | 680.54 | 680.21 | 680.24 | 680.13 | 679.70 | 679.64 | 679.78 |
| Change in contents, in acre-ft | +1,050 | -950 | +70 | +20 | +20 | +390 | -520 | +50 | -180 | -670 | -90 | +220 |

| | Calendar Year 2009 | Water Year 2010 |
|---|---|---|
| Max | 30,970 | 30,970 |
| Min | 25,690 | 25,840 |
| Change in Contents, in acre-ft | +40 | -590 |

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