

Water-Data Report 2012

**07302500 LAKE ALTUS AT LUGERT, OK**

North Fork Red Basin  
Middle North Fork Red Subbasin

LOCATION.--Lat 34°53'08", long 99°17'43" referenced to North American Datum of 1927, in SW ¼ SE ¼ sec.22, T.5 N., R.20 W., Kiowa County, OK, Hydrologic Unit 11120302, on upstream face of Altus Dam on North Fork Red River, 1.0 mi west of Lugert, 2.6 mi upstream from Elm Fork of North Fork, and at mile 73.5.

DRAINAGE AREA.--2,832 mi<sup>2</sup> of which 579 mi<sup>2</sup> probably is noncontributing, revised. From automated delineation using 10-meter National Elevation Dataset digital elevation model data dated 10/01/2006 and Watershed Boundary Dataset dated 10/01/2006, using Albers Equal-Area Projection, North American Datum 1983.

**SURFACE-WATER RECORDS**

PERIOD OF RECORD.--December 1943 to September 1950 (monthly records only), October 1950 to current year.

REVISED RECORDS.--Records have been revised that are published in Water Data Report WDR-US 2007: Month-end elevation and change in contents, WDR-US-2006.

GAGE.--Water-stage recorder. Datum of gage is NGVD of 1929 (levels by U.S. Bureau of Reclamation). Prior to Nov. 19, 1948, nonrecording or float gage at same site and datum.

REMARKS.--Reservoir is formed by concrete and coursed masonry dam. Storage began in December 1943. Capacity, 134,500 acre- ft at elevation 1,559.0 ft, crest of uncontrolled spillway, and 72,400 acre-ft at elevation 1,547.0 ft, crest of controlled spillway. Dead storage, 1,660 acre-ft below elevation 1,517.5 ft, sill of headgate at irrigation canal. Figures given herein represent total contents. Reservoir is used for flood control and irrigation of about 48,000 acres. Revised capacity table used since June 15, 2012. From 1927 to 1943, a dam to form reservoir for municipal water supply was at same site. Elevation of crest was 1,514.31 ft. U.S. Army Corps of Engineers' satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 170,600 acre-ft, May 19, 1951, elevation 1,562.10 ft; minimum after initial storage, 4,690 acre-ft, Aug. 25, 1944, elevation, 1,520.2 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 33,490 acre-ft, Jun 14, elevation 1,535.49 ft, affected by seiche; minimum, 22,540 acre-ft, Nov. 5, elevation, 1,531.04 ft.

REVISIONS.--WRD 2012: Drainage area.

Reservoir Elevation-Capacity Tables  
Oct. 1 to June 14

Elevation, in ft	Capacity, in acre-ft	Elevation, in ft	Capacity, in acre-ft
1520	3,844	1540	46,780
1525	10,710	1548	76,580
1529	18,130	1559	134,500
1534	29,620	1563	161,000

Reservoir Elevation-Capacity Tables  
June 15 to Sept. 30

Elevation, in ft	Capacity, in acre-ft	Elevation, in ft	Capacity, in acre-ft
1520	1,899	1540	43,190
1525	7,971	1548	72,940
1529	15,060	1559	128,900
1534	26,160	1563	155,400

## 07302500 LAKE ALTUS AT LUGERT, OK—Continued

**RESERVOIR STORAGE, ACRE FEET**  
**WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012**  
**DAILY OBSERVATION AT 2400 HOURS**

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	23,110	22,720	24,840	24,940	24,560	25,790	28,840	31,670	32,430	29,300	27,080	25,430
2	22,930	23,020	24,750	24,870	24,420	25,770	29,150	31,670	32,300	29,200	26,850	25,360
3	22,950	22,810	24,960	24,920	24,660	25,770	29,320	31,750	32,380	29,090	26,800	25,310
4	22,840	22,750	24,960	24,870	24,630	25,820	29,320	31,520	32,460	28,990	26,830	25,260
5	23,090	22,650	24,960	24,820	24,590	25,530	29,370	31,620	32,400	28,880	26,730	25,330
6	22,750	22,750	24,890	24,890	24,560	25,600	29,370	31,800	32,560	28,850	26,650	24,990
7	22,650	23,500	24,890	24,820	24,610	25,820	29,450	31,720	32,540	28,800	26,700	24,870
8	23,220	24,120	24,960	24,820	24,560	26,300	29,500	31,570	32,460	28,800	26,780	24,600
9	23,290	24,150	24,940	24,840	24,660	26,300	29,500	31,520	32,240	28,800	26,730	24,480
10	23,270	24,100	24,870	24,800	24,660	26,440	29,670	31,490	32,240	28,800	26,650	24,190
11	23,360	24,050	24,870	24,870	24,660	26,490	29,700	31,750	32,320	28,720	26,420	23,970
12	23,310	24,100	24,890	24,770	24,490	26,540	29,620	31,750	32,400	28,690	26,470	23,990
13	23,290	24,080	24,890	24,750	24,840	26,460	30,330	31,750	33,170	28,510	26,420	24,040
14	23,250	24,050	25,030	24,700	24,890	26,630	30,510	31,700	33,520	28,570	26,320	24,040
15	23,160	24,030	25,010	24,590	24,990	26,730	31,130	31,670	29,970	28,410	26,160	23,970
16	23,180	23,980	24,990	24,700	25,060	26,710	31,230	31,620	30,050	28,360	26,240	23,970
17	23,250	23,800	24,990	24,680	25,110	26,830	31,130	31,470	30,020	28,210	26,160	23,990
18	23,060	23,840	24,940	24,660	25,270	26,920	31,130	31,230	29,970	28,160	26,090	23,890
19	23,000	23,980	25,060	24,680	25,250	27,510	31,410	31,390	29,890	28,130	26,090	23,800
20	22,970	23,940	25,030	24,730	25,440	27,730	31,440	32,060	30,080	28,050	26,020	23,700
21	22,950	24,630	25,080	24,450	25,480	27,780	31,440	32,930	30,080	28,000	25,950	23,770
22	22,950	24,800	25,060	24,590	25,510	27,930	31,490	32,830	30,000	27,930	25,900	23,770
23	22,880	24,800	25,010	24,560	25,560	28,000	31,470	32,800	29,920	27,800	25,770	23,630
24	22,770	24,680	24,960	24,700	25,580	28,150	31,390	32,960	29,920	27,670	25,680	23,540
25	22,770	24,750	24,990	24,660	25,390	28,220	31,570	32,770	29,860	27,490	25,730	23,350
26	22,880	24,890	24,990	24,560	25,650	28,300	31,570	32,750	29,780	27,570	25,750	23,510
27	23,000	24,800	24,990	24,610	25,600	28,420	31,540	32,620	29,620	27,440	25,750	23,650
28	e22,970	24,800	24,960	24,560	25,720	28,590	31,600	32,750	29,490	27,420	25,700	23,650
29	e23,010	24,770	25,030	24,540	25,700	28,640	31,490	32,720	29,440	27,240	25,650	23,680
30	e22,960	24,610	24,940	24,470	---	28,870	31,570	32,620	29,360	27,140	25,580	23,700
31	e23,010	---	24,960	24,560	---	28,890	---	32,560	---	27,110	25,550	---
<b>Max</b>	23,360	24,890	25,080	24,940	25,720	28,890	31,600	32,960	33,520	29,300	27,080	25,430
<b>Min</b>	22,650	22,650	24,750	24,450	24,420	25,530	28,840	31,230	29,360	27,110	25,550	23,350
<b>Elevation, in feet, at end of month</b>	1,531.25	1,531.94	1,532.09	1,531.92	1,532.40	1,533.71	1,534.76	1,535.14	1,535.24	1,534.37	1,533.75	1,532.99
<b>Change in contents, in acre-ft</b>	-170	+1,600	+350	-400	+1,140	+3,190	+2,680	+990	-3,200	-2,250	-1,560	-1,850

	Calendar Year 2011	Water Year 2012
<b>Max</b>	65,700	33,520
<b>Min</b>	22,650	22,650
<b>Change in Contents, in acre-ft</b>	-29,410	+520

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