Water-Data Report 2012

07159550 LAKE HEFNER AT OKLAHOMA CITY, OK

Lower Cimarron Basin
Lower Cimarron-Skeleton Subbasin

LOCATION.--Lat 35°34′58″, long 97°35′43″ referenced to North American Datum of 1927, in SE ¼ SW ¼ sec.23, T.13 N., R.4 W., Oklahoma County, OK, Hydrologic Unit 11050002, on south side of dam on Bluff Creek, 50 ft north of intake structure, 3.0 mi northeast of Hefner Canal at Oklahoma City (07240000) and 6.0 mi northeast of Bethany.

DRAINAGE AREA.--8.99 mi², 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. The source of water for Lake Hefner is mainly diversion of water from the North Canadian River at Lake Overholser through Bluff Creek Canal and runoff in the drainage basin.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--November 17, 1999 to current year.

REVISED RECORDS.--WDR 2012: Drainage area.

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

REMARKS.--Reservoir is formed by an earthen dam which is more than 3 mi long and has a maximum height of 112 ft. The reservoir was constructed in 1947 by the City of Oklahoma City. Capacity, 107,000 acre-ft, elevation, 1209.0 ft, top of stone wall; normal pool, 75,355 acre-ft, elevation, 1199.0 ft. Figures given herein represent total contents. Capacity table supplied by City of Oklahoma City. U.S. Geological Survey satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 79,570 acre-ft, Aug. 19, 2007, elevation 1,200.51 ft; minimum, 42,960 acre-ft, Oct. 16, 2011, elevation, 1184.25 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 72,220 acre-ft, Apr. 17,18 elevation 1,197.77 ft; minimum, 42,960 acre-ft, Oct. 16, elevation, 1,184.25 ft.

Reservoir Elevation-Capacity Table

Elevation, in ft	Capacity, in acre-ft	Elevation, in ft	Capacity, in acre-ft
1172	21,200	1190	54,250
1176	28,100	1199	75,355
1180	35,200	1202	99,000
1185	44,334	1209	107,000

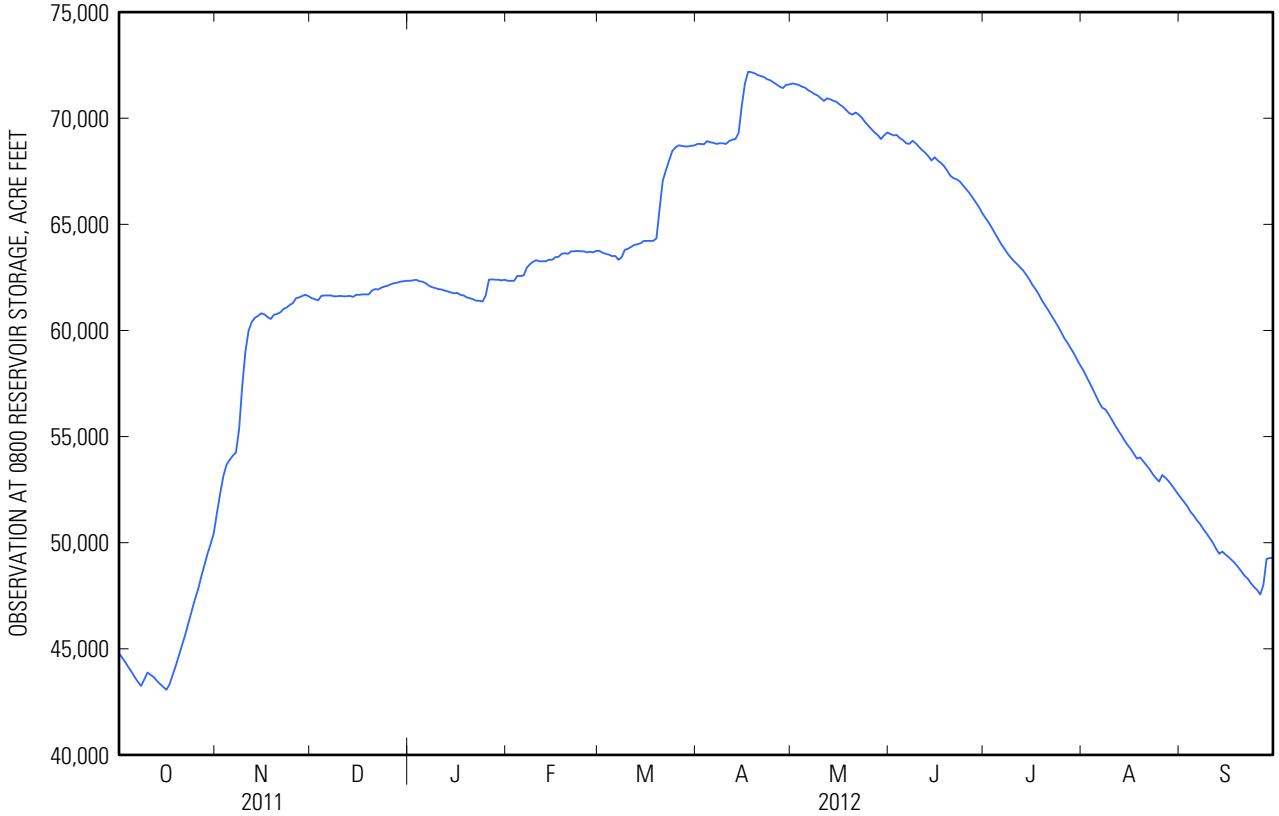
Suggested citation: U.S. Geological Survey, 2013, Water-resources data for the United States, Water Year 2012: U.S. Geological Survey Water-Data Report WDR-US-2012, site 07159550, accessed at http://wdr.water.usgs.gov/wy2012/pdfs/07159550.2012.pdf

07159550 LAKE HEFNER AT OKLAHOMA CITY, OK—Continued

RESERVOIR STORAGE, ACRE FEET
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012
DAILY OBSERVATION AT 0800 HOURS

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	44,790	51,420	61,520	62,340	62,340	63,750	68,790	e71,640	69,260	65,320	58,130	52,090
2	44,580	52,310	61,470	62,360	62,340	63,660	e68,790	e71,610	69,190	65,110	57,830	51,900
3	44,370	53,130	61,420	62,390	62,340	63,610	68,770	e71,570	69,210	64,860	57,540	51,700
4	44,130	53,670	61,630	62,320	62,570	63,570	68,920	e71,490	69,060	64,600	57,240	51,440
5	43,910	53,900	61,650	62,300	62,570	63,500	68,870	71,440	68,970	64,340	56,930	51,270
6	43,660	54,100	61,650	62,230	62,590	e63,510	68,840	71,320	68,820	64,080	56,620	51,050
7	e43,440	54,250	61,650	62,110	62,960	e63,330	68,790	71,240	68,790	63,870	56,360	50,870
8	43,250	55,360	61,610	62,040	63,120	e63,450	68,820	71,140	68,940	63,640	56,280	50,640
9	43,560	57,410	61,610	62,000	63,240	63,800	68,820	71,070	68,820	63,450	56,060	50,440
10	43,880	59,020	61,630	61,950	63,310	63,850	68,790	70,940	e68,660	63,280	55,810	50,220
11	43,770	60,000	61,610	61,930	63,260	63,940	e68,920	70,820	68,500	63,140	55,550	50,000
12	43,670	60,400	61,610	61,880	63,260	64,030	68,990	70,940	68,380	62,980	55,300	49,720
13	43,490	60,600	61,630	61,840	63,260	64,060	69,020	70,890	68,210	62,820	55,080	49,480
14	43,340	60,690	61,580	61,790	63,330	64,110	69,310	70,820	68,010	62,620	54,830	49,580
15	43,200	60,810	61,680	61,750	63,330	64,220	70,590	70,770	68,160	62,390	54,610	49,440
16	43,070	60,760	61,680	61,770	63,450	64,220	71,640	70,640	e68,010	62,130	54,420	49,320
17	43,330	60,630	61,700	61,680	63,470	64,220	72,190	70,540	67,890	61,930	54,190	49,180
18	43,780	60,540	61,700	61,650	63,610	64,220	72,170	70,390	67,740	61,680	53,960	49,030
19	44,220	60,740	61,700	61,560	63,640	64,340	72,120	70,240	e67,520	61,400	54,020	48,850
20	44,710	60,780	61,880	61,520	63,610	65,730	72,040	70,170	67,290	61,170	53,830	48,650
21	45,200	60,850	61,950	61,470	63,730	67,050	71,990	70,270	e67,170	60,940	53,650	48,450
22	45,690	61,010	61,930	61,400	63,730	67,550	71,940	70,170	67,120	60,690	53,460	48,310
23	46,240	61,080	62,020	61,400	63,750	68,010	71,840	70,020	67,020	60,450	53,230	48,100
24	46,780	61,200	62,070	61,360	63,730	68,450	71,790	e69,820	66,830	60,200	53,040	47,920
25	47,320	61,290	62,110	61,650	63,730	68,620	71,690	69,650	66,660	59,930	52,880	47,770
26	47,790	61,520	62,180	62,390	63,680	68,720	71,590	e69,490	66,470	59,640	53,190	e47,560
27	48,390	61,560	62,230	62,410	63,710	68,700	71,490	69,330	66,260	59,420	53,060	48,020
28	48,930	61,630	62,250	62,390	63,680	68,670	71,420	69,210	66,040	59,170	52,900	49,240
29	49,480	61,680	62,300	62,390	63,750	68,670	71,570	69,020	65,820	58,930	52,710	49,280
30	49,940	61,610	62,320	62,360	---	68,700	71,590	69,190	65,540	58,640	52,500	49,280
31	50,460	---	62,340	62,390	---	68,720	---	e69,330	---	58,370	52,290	---
Max	50,460	61,680	62,340	62,410	63,750	68,720	72,190	71,640	69,260	65,320	58,130	52,090
Min	43,070	51,420	61,420	61,360	62,340	63,330	68,770	69,020	65,540	58,370	52,290	47,560
Elevation, in feet, at end of month												
	1188.45	1193.31	1193.67	1193.68	1194.27	1196.36	1197.57	1196.60	1194.97	1191.83	1188.99	1187.55
Change in contents, in acre-ft												
	+5,480	+11,150	+730	+50	+1,360	+4,970	+2,870	-2,260	-3,790	-7,170	-6,080	-3,010

	Calendar Year 2011	Water Year 2012
Max	67,740	72,190
Min	43,070	43,070
Change in Contents, in acre-ft	-4,610	+4,300

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