

08118000 Lake J. B. Thomas near Vincent, TX

Upper Colorado Basin
Colorado Headwaters Subbasin

LOCATION.--Lat 32°35'35", long 101°08'16" referenced to North American Datum of 1927, Scurry County, TX, Hydrologic Unit 12080002, on upstream edge of dam 500 ft right of valve tower for Snyder pump station near center of dam on Colorado River, 8.5 mi west of Ira, 9.2 mi northeast of Vincent, and at mile 837.0.

DRAINAGE AREA.--3,389 mi² of which 2,455 mi² probably is noncontributing, Drainage area includes 455 mi² above Bull Creek diversion dam, of which 38 mi² probably is noncontributing.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Oct. 2002 to Sept. 2004 (elevations), Oct. 1953 to Sept. 1986, Feb. 1999 to Sept. 2002, Oct. 2004 to current year.

PERIOD OF RECORD, Water-Quality.--

CHEMICAL DATA: Sept. 1964 to May 1984.

BIOCHEMICAL DATA: Sept. 1964 to Aug. 1967, Feb. 1970 to July 1973.

RADIOCHEMICAL DATA: Nov. 1980.

REVISED RECORDS.--WDR TX-81-3: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is NGVD of 1929. Water-stage recorder and nonrecording gage read once daily from October 1953 to September 1986 at site 4.0 mi upstream at same datum. Nov. 4, 1953, to Feb. 7, 1955, Colorado River Municipal Water District nonrecording gage at present site and datum. Satellite telemeter at station.

COOPERATION.--Records of diversions may be obtained from the Colorado River Municipal Water District.

REMARKS.--Records poor. Some records listed in the period of record may not be available electronically. The lake is formed by a rolled earthfill dam, 14,500 ft long. Storage began in July 1952, and the dam was completed in September 1952. There was no appreciable storage prior to July 1953. There are two uncontrolled emergency spillways, both cut through natural ground and are located as follows: the first is a 500 ft wide cut located at the left end of dam, and the second cut is 1,600 ft wide located at the right end of the dam. These spillways are designed to discharge 161,000 ft³/s (elevation 2,275.0 ft). An uncontrolled rectangular concrete drop inlet, 38.0 by 53.0 ft at the crest, discharges into two 10.0-ft concrete conduits. In addition, there is an outlet that can release water through a 24-inch gate into a 30-inch concrete pipe. The dam was built by the Colorado River Municipal Water District to impound water for municipal and industrial supply for the cities of Big Spring, Odessa, and Snyder. A diversion dam on Bull Creek diverts water through a 13,000-ft long gravity canal into Lake J.B. Thomas. These diversions began in November 1953. Data regarding the dam are given in the following table:

	Elevation (feet)
Top of dam.....	2,280.0
Crest of right spillway (south).....	2,267.0
Crest of left spillway (north).....	2,264.0
Crest of drop inlet.....	2,258.0
Lowest gated outlet (invert).....	2,200.0

EXTREMES FOR PERIOD OF RECORD.--

Oct. 1953 to Sept. 1986, Feb. 1999 to Sept. 2002, Oct. 2004 to current year (contents):

Maximum contents, 218,600 acre-ft, Sept. 8, 1962; minimum contents, 3,720 acre-ft, Sept. 30, 2011.

Oct. 1953 to Sept. 1986, Feb. 1999 to current year (elevation):

Maximum elevation, 2,259.85 ft, Sept. 8, 1962; minimum elevation, 2,206.43 ft, May 28, 1971.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 14,160 acre-ft, Oct. 1, gage height, 2,215.01 ft; minimum contents, 3,720 acre-ft, Sept. 30, gage height, 2,206.60 ft.

08118000 Lake J. B. Thomas near Vincent, TX—Continued

RESERVOIR STORAGE, ACRE FEET
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	14,130	13,120	12,350	11,750	11,290	10,740	9,890	8,560	7,390	6,200	5,160	4,360
2	14,080	13,080	12,320	11,730	11,260	10,710	9,870	8,580	7,330	6,160	5,140	4,330
3	14,050	13,040	12,300	11,720	11,250	10,700	e9,820	8,550	7,270	6,140	5,120	4,310
4	14,020	13,000	12,270	11,710	11,250	10,680	9,770	8,520	7,250	6,130	5,110	4,270
5	13,990	12,970	12,240	11,700	11,230	10,650	9,750	8,490	7,180	6,110	5,080	4,240
6	13,960	12,950	12,210	11,670	11,210	10,630	9,720	8,460	7,150	6,090	5,030	4,220
7	13,950	12,920	12,190	11,660	11,220	10,600	9,680	8,440	7,110	6,070	5,010	4,200
8	13,920	12,900	12,180	11,650	11,190	10,570	9,640	8,420	7,080	6,050	4,980	4,170
9	13,890	12,890	12,160	11,620	11,170	10,540	9,610	8,400	7,120	6,020	4,950	4,150
10	13,870	12,850	12,150	11,590	11,130	10,510	9,560	8,360	7,090	5,980	4,920	4,140
11	13,820	12,850	12,120	11,560	11,110	10,480	9,480	8,300	e7,050	5,980	4,900	4,130
12	13,780	12,820	12,100	11,540	11,100	10,450	9,440	8,220	e7,000	5,960	4,880	4,100
13	13,730	12,790	12,080	11,530	11,080	10,430	9,420	8,190	e6,900	5,930	4,860	4,080
14	13,710	12,760	12,060	11,520	11,060	10,400	9,400	8,140	e6,860	5,880	4,850	4,050
15	13,680	12,750	12,050	11,520	11,060	10,380	9,300	8,090	e6,810	5,830	4,840	4,050
16	13,650	12,740	12,020	11,510	11,050	10,380	9,250	8,050	6,720	5,780	4,800	4,080
17	13,610	12,680	11,990	11,510	11,050	10,370	9,220	8,020	6,680	5,750	4,770	4,050
18	13,600	12,660	11,990	11,480	11,020	10,320	9,200	7,990	6,650	5,740	4,740	4,010
19	13,590	12,640	11,980	11,470	11,020	10,300	9,130	7,920	6,610	5,750	4,710	3,990
20	13,580	12,620	11,970	11,430	11,020	10,280	9,080	7,960	6,560	5,720	4,680	3,970
21	13,560	12,610	11,940	11,420	10,980	10,270	9,070	7,910	6,520	5,680	4,640	3,940
22	13,520	12,580	11,920	11,400	10,950	10,240	9,040	7,860	6,530	5,680	4,600	3,910
23	13,470	12,540	11,900	11,380	10,950	10,190	8,970	7,830	6,520	5,650	4,570	3,910
24	13,430	12,530	11,910	11,370	10,920	10,150	8,920	e7,760	6,490	5,560	4,540	3,900
25	13,400	12,480	11,890	11,350	10,870	10,140	e8,880	7,680	6,460	5,490	4,520	3,870
26	13,340	12,460	11,870	11,330	10,860	10,080	8,840	7,650	6,450	5,450	4,510	3,850
27	13,300	12,430	11,850	11,330	e10,810	10,040	8,790	7,630	6,420	5,400	4,480	3,840
28	13,260	12,420	11,850	11,300	10,760	10,010	8,740	7,600	6,390	5,340	4,450	3,820
29	13,240	12,410	11,850	11,280	---	9,980	8,700	7,560	6,360	5,290	4,420	3,790
30	13,200	12,380	11,830	11,260	---	9,960	8,640	7,450	6,250	5,270	4,390	3,740
31	13,160	---	11,790	11,260	---	9,930	---	7,430	---	5,220	4,370	---
Mean	13,660	12,730	12,040	11,500	11,070	10,360	9,290	8,070	6,810	5,780	4,770	4,050
Max	14,130	13,120	12,350	11,750	11,290	10,740	9,890	8,580	7,390	6,200	5,160	4,360
Min	13,160	12,380	11,790	11,260	10,760	9,930	8,640	7,430	6,250	5,220	4,370	3,740

	Calendar Year 2010	Water Year 2011
Mean	13,440	9,170
Max	17,260	14,130
Min	9,770	3,740

08118000 Lake J. B. Thomas near Vincent, TX—Continued

