



Water-Data Report 2013

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:

Table with 2 columns: Feature and Elevation (feet). Rows include 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), and 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, 4,350 acre-ft, Aug. 19, 20, gage height, 2,207.42 ft; minimum contents, 933 acre-ft, May 26, gage height, 2,200.85 ft.

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

RESERVOIR STORAGE, ACRE FEET
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	1,730	2,000	1,920	1,870	1,860	1,700	1,400	1,110	1,120	4,130	3,930	4,100
2	2,040	2,000	1,930	1,870	1,850	1,690	1,380	1,070	1,110	4,110	3,930	4,060
3	2,080	1,990	1,930	1,870	1,860	1,690	1,370	1,090	1,120	4,090	3,920	4,050
4	2,080	1,990	1,910	1,870	1,850	1,670	1,370	1,090	1,110	4,070	3,880	4,070
5	2,080	1,980	1,920	1,870	1,850	1,650	1,360	1,080	1,100	4,060	3,830	4,070
6	2,060	1,980	1,910	1,870	1,850	1,650	1,350	1,090	1,130	4,040	3,800	4,050
7	2,060	1,980	1,910	1,870	1,840	1,640	1,340	1,080	1,140	4,030	3,770	4,050
8	2,060	1,980	1,910	1,870	1,840	1,640	1,330	1,080	1,130	4,030	3,750	4,010
9	2,060	1,980	1,910	1,880	1,840	1,630	1,310	1,060	1,110	4,020	3,750	3,950
10	2,060	1,980	1,900	1,900	1,830	1,600	1,280	1,060	1,110	4,030	3,720	3,930
11	2,060	1,970	1,900	1,900	1,830	1,590	1,270	1,060	1,080	4,050	3,720	3,930
12	2,060	1,960	1,900	1,890	1,830	1,580	1,270	1,050	1,070	4,040	3,710	3,930
13	2,070	1,960	1,900	1,890	1,840	1,580	1,260	1,050	1,060	4,010	3,660	3,890
14	2,050	1,950	1,910	1,880	1,830	1,570	1,250	1,040	1,020	3,950	3,720	3,880
15	2,050	1,950	1,900	1,890	1,810	1,560	1,240	1,040	1,020	3,950	3,750	3,870
16	2,050	1,950	1,900	1,890	1,810	1,550	1,220	1,030	1,010	4,000	3,840	3,860
17	2,040	1,950	1,890	1,880	1,800	1,530	1,220	1,030	1,010	4,030	4,120	3,850
18	2,030	1,950	1,890	1,890	1,790	1,530	1,190	1,020	1,020	4,040	4,260	3,840
19	2,020	1,950	1,890	1,880	1,780	1,510	1,190	997	1,430	4,000	4,300	3,830
20	2,030	1,950	1,880	1,880	1,770	1,510	1,180	970	3,490	4,000	4,280	3,830
21	2,030	1,950	1,880	1,880	1,770	1,500	1,180	970	4,110	4,040	4,260	3,820
22	2,040	1,950	1,880	1,880	1,760	1,480	1,180	978	4,230	4,050	4,280	3,800
23	2,040	1,930	1,880	1,880	1,750	1,470	1,150	974	4,240	4,050	4,270	3,790
24	2,040	1,930	1,880	1,880	1,740	1,450	1,150	979	4,240	4,060	4,250	3,780
25	2,030	1,930	1,870	1,880	1,730	1,450	1,150	957	4,230	4,040	4,240	3,760
26	2,010	1,930	1,870	1,880	1,730	1,450	1,140	960	4,220	4,020	4,210	3,740
27	2,010	1,920	1,870	1,880	1,710	1,440	1,130	1,040	4,180	4,010	4,200	3,730
28	2,010	1,930	1,870	1,880	1,710	1,430	1,130	1,090	4,150	3,980	4,190	3,700
29	2,010	1,930	1,870	1,870	---	1,430	1,130	1,120	4,150	3,970	4,180	3,690
30	2,000	1,930	1,870	1,860	---	1,410	1,120	1,100	4,150	3,970	4,160	3,650
31	2,010	---	1,880	1,860	---	1,400	---	1,120	---	3,940	4,150	---
Mean	2,030	1,960	1,890	1,880	1,800	1,550	1,240	1,040	2,210	4,030	4,000	3,880
Max	2,080	2,000	1,930	1,900	1,860	1,700	1,400	1,120	4,240	4,130	4,300	4,100
Min	1,730	1,920	1,870	1,860	1,710	1,400	1,120	957	1,010	3,940	3,660	3,650

	Calendar Year 2012	Water Year 2013
Mean	1,820	2,300
Max	2,860	4,300
Min	859	957

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

