



Water-Data Report 2009

**08123950 E. V. Spence Reservoir near Robert Lee, TX**

Upper Colorado Basin  
Upper Colorado Subbasin

LOCATION.--Lat 31°52'46", long 100°31'01" referenced to North American Datum of 1927, Coke County, TX, Hydrologic Unit 12080008, in outlet works of Robert Lee Dam on the Colorado River, 2.2 mi west of Robert Lee, and at mile 716.0.

DRAINAGE AREA.--15,278 mi<sup>2</sup> of which 10,260 mi<sup>2</sup> probably is noncontributing.

**SURFACE-WATER RECORDS**

PERIOD OF RECORD.--Dec. 1968 to Sept. 2003, Oct. 2003 to Sept. 2004 (elevation), Oct. 2004 to current year.

PERIOD OF RECORD, Water-Quality.--

CHEMICAL DATA: Nov. 1969 to Aug. 1988.

BIOCHEMICAL DATA: Nov. 1969 to Aug. 1988.

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

GAGE.--Water-stage recorder. Datum of gage is NGVD of 1929. Prior to June 24, 1969, non-recording gage at same site and datum. Satellite telemeter at station.

COOPERATION.--Records of diversions can be obtained from the city of San Angelo and from the Colorado River Municipal Water District.

REMARKS.--Records good except for estimated contents, which are fair. Some records listed in the "Period of Record" for surface water and water quality may not be available electronically. The reservoir is formed by a rolled earth-fill dam 21,500 ft long. Closure was made Dec. 30, 1968, and dam was completed in June 1969. The dam is the property of the Colorado River Municipal Water District, which has a permit to divert 50,000 acre-ft annually for municipal, mining, and industrial uses. Inflow into the reservoir is partially regulated by Lake J.B. Thomas (station 08118000), Lake Colorado City (station 08123000), and Champion Creek Reservoir (station 08123600). There are two spillways: The controlled service spillway is a morning-glory type that is partially controlled by 12 lift gates, 14.48 by 22.0 ft, and discharges through a 28.0 ft diameter concrete conduit. The uncontrolled spillway is a 3,200 ft wide cut through natural ground near the right end of dam. Data regarding the dam are given in the following table:

	Elevation (feet)
Top of dam.....	1,928.00
Crest of spillway.....	1,908.00
Top of gates.....	1,900.00
Crest of spillway.....	1,878.00
Lowest gated outlet (invert).....	1,815.85

EXTREMES FOR PERIOD OF RECORD.--Dec. 1968 to Sept. 2003, Oct. 2004 to current year: Maximum contents, 355,300 acre-ft, June 16, 1987; minimum contents after initial filling, 31,640 acre-ft, June 1, 2003; Dec. 1968 to current year: Maximum elevation, 1,887.03 ft, June 16, 1987; minimum elevation, 1,832.67 ft, June 1, 2003.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 60,780 acre-ft, Oct. 1, gage height, 1,845.69 ft; minimum contents, 29,550 acre-ft, Sept. 30, gage height, 1,835.37 ft.

## 08123950 E. V. Spence Reservoir near Robert Lee, TX—Continued

**RESERVOIR STORAGE, ACRE FEET**  
**WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**  
**DAILY MEAN VALUES**

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	60,680	58,180	55,730	53,640	51,590	50,240	47,950	45,310	42,520	39,070	35,950	32,200
2	60,690	58,160	55,430	53,570	51,480	50,160	47,930	45,230	42,450	38,940	35,830	32,110
3	60,590	58,030	55,430	53,530	51,400	50,070	47,600	45,130	42,460	38,780	35,720	31,990
4	60,420	57,890	55,310	53,460	51,360	50,010	47,540	45,010	42,320	38,650	35,570	31,900
5	60,290	57,890	55,270	53,370	51,340	49,990	47,380	44,930	42,190	38,550	35,430	31,910
6	60,600	57,840	55,210	53,340	51,310	49,890	47,180	44,860	42,050	38,520	35,320	31,940
7	60,470	57,710	55,160	53,220	51,270	49,800	47,060	44,740	41,940	38,410	35,190	31,840
8	60,290	57,620	55,180	53,120	51,190	49,750	46,960	44,670	41,840	38,260	35,020	31,730
9	60,140	57,490	55,220	53,070	51,380	49,640	46,870	44,520	41,720	38,080	34,860	31,630
10	60,020	57,390	55,130	52,990	51,210	49,600	46,640	44,380	41,630	37,920	34,750	31,540
11	59,920	57,260	55,040	52,870	51,280	49,570	46,470	44,260	41,510	37,770	34,650	31,560
12	59,810	57,160	54,950	52,820	51,130	49,610	46,650	44,120	41,370	37,610	34,670	31,590
13	59,690	57,070	54,930	52,710	51,130	49,610	46,520	44,000	e41,220	37,430	34,570	31,530
14	59,770	57,000	54,900	52,630	51,090	49,580	46,320	43,860	e41,070	37,250	34,440	31,450
15	59,680	56,760	54,780	52,570	51,060	49,510	46,180	43,740	e40,970	37,110	34,340	31,320
16	59,530	56,640	54,660	52,500	51,000	49,440	46,040	43,670	40,770	36,950	34,280	31,220
17	59,420	56,560	54,600	52,510	50,980	49,380	46,200	43,540	e40,600	36,840	34,160	31,110
18	59,340	56,490	54,550	52,460	50,970	49,300	46,150	43,370	40,420	36,690	34,010	30,960
19	59,230	56,420	54,520	52,380	50,870	49,270	46,040	43,240	40,410	36,690	33,890	30,840
20	59,130	56,400	54,490	52,280	50,820	49,210	45,970	43,110	40,490	36,590	33,740	30,740
21	59,090	56,300	54,390	52,240	50,770	49,140	45,990	42,910	40,400	36,450	33,650	30,670
22	59,070	56,220	54,250	52,220	50,660	49,040	45,950	42,650	40,230	36,440	33,520	30,530
23	58,950	56,150	54,210	52,160	50,600	48,950	45,780	42,610	40,070	36,700	33,410	30,360
24	58,850	56,090	54,170	52,040	50,580	48,920	45,670	42,640	39,960	36,620	33,270	30,270
25	58,720	56,010	54,120	51,930	50,550	48,800	45,590	42,560	39,830	36,480	33,160	30,180
26	58,650	55,990	54,140	51,900	50,490	48,760	45,480	42,580	39,660	36,360	33,040	30,070
27	58,520	55,940	54,160	51,890	50,410	48,720	45,540	42,760	39,540	36,260	32,900	29,960
28	58,440	55,900	53,920	51,780	50,370	48,500	45,460	42,750	39,400	36,140	32,770	29,860
29	58,300	55,880	53,840	51,710	---	48,270	45,400	42,700	39,260	36,100	32,660	29,750
30	58,240	55,900	53,790	51,650	---	48,210	45,360	42,630	39,160	36,140	32,500	29,630
31	58,180	---	53,700	51,620	---	48,060	---	42,510	---	36,070	32,340	---
<b>Mean</b>	59,510	56,880	54,680	52,590	51,010	49,320	46,400	43,710	40,920	37,290	34,180	31,080
<b>Max</b>	60,690	58,180	55,730	53,640	51,590	50,240	47,950	45,310	42,520	39,070	35,950	32,200
<b>Min</b>	58,180	55,880	53,700	51,620	50,370	48,060	45,360	42,510	39,160	36,070	32,340	29,630

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