

Water-Data Report 2007

08065000 Trinity River near Oakwood, TX

Lower Trinity Basin
Lower Trinity-Tehuacana Subbasin

LOCATION.--Lat 31°38'54", long 95°47'21" referenced to North American Datum of 1927, Anderson County, TX, Hydrologic Unit 12030201, on left bank at downstream side of bridge on U.S. Highways 79 and 84, 1.5 mi upstream from Missouri Pacific Railroad Co. bridge, 6.0 mi northeast of Oakwood, and at mile 313.4.

DRAINAGE AREA.--12,833 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Oct. 1923 to Sept. 1924 (monthly discharge only), Oct. 1924 to current year. Records of Jan. 1905 to Sept. 1923, published in WSP 850 and 878, have been found unreliable and should not be used. Gage-height records collected in this vicinity since 1904 are contained in reports of the National Weather Service. Water-quality records: Sediment data: Dec. 1976 to Sept. 1981. Specific conductance: Dec. 1976 to Sept. 1981. Water temperature: Dec. 1976 to Sept. 1981. Suspended sediment data: Dec. 1976 to Sept. 1981.

REVISED RECORDS.--WSP 1442: 1934. WSP 1922: Drainage area. WDR TX-81-1: 1980 (M,m).

GAGE.--Water-stage recorder. Datum of gage is 175.06 ft above NGVD of 1929. Prior to July 1932, nonrecording gage at site 1.5 mi downstream at datum 1.06 ft lower. July 15, 1932, to Oct. 7, 1934, nonrecording gage at present site and datum. Satellite telemeter at station.

REMARKS.--Records good. Since installation of gage in water year 1924, at least 10% of contributing drainage area has been regulated. The Industrial Generating Co. at Fairfield makes a minor diversion from the river at a site about 34 mi upstream. The diversion to Fairfield Lake (capacity 50,600 acre-ft) is used to maintain the normal pool elevation for that lake.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in May 1890 reached a stage of 53 ft (discharge about 180,000 ft³/s) and was the highest since that date, from information in local newspapers. Flood of June 4, 1908, reached a stage of 52.2 ft, present site and datum, from information by the National Weather Service (discharge, about 164,000 ft³/s).

08065000 Trinity River near Oakwood, TX—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	737	870	903	9,720	2,280	1,220	14,200	4,070	17,800	28,500	20,600	2,500
2	737	866	1,290	11,100	2,280	1,200	15,100	4,620	18,900	37,100	20,700	3,630
3	703	873	3,430	10,500	2,150	1,160	15,900	10,300	20,200	44,500	20,800	4,350
4	685	840	3,660	7,580	2,830	1,120	17,600	15,200	21,800	48,500	20,900	4,480
5	700	838	2,210	4,910	2,930	1,100	21,600	17,200	23,100	52,300	21,000	4,460
6	703	935	1,340	5,850	2,280	1,080	31,400	19,100	24,200	60,700	21,200	5,140
7	698	1,110	1,120	7,450	1,970	1,060	40,700	21,100	25,000	60,900	21,400	8,100
8	689	1,860	1,060	6,560	1,980	1,050	41,800	23,600	25,500	62,100	21,500	10,900
9	674	3,830	1,080	4,160	1,710	1,030	39,400	27,000	25,800	69,000	20,800	12,200
10	685	3,680	1,040	2,730	1,600	1,040	35,400	26,800	25,800	70,600	19,200	11,800
11	730	2,150	998	2,150	1,550	1,060	29,900	23,300	25,500	65,300	16,400	10,500
12	918	1,330	960	1,870	1,500	2,190	22,400	18,800	24,800	57,600	13,000	10,700
13	2,460	1,100	946	2,040	1,490	6,420	12,700	16,100	23,700	50,400	10,800	11,900
14	2,910	1,010	953	8,390	1,450	11,300	8,060	13,800	22,100	47,700	9,500	12,900
15	1,860	950	948	16,000	1,460	12,700	6,640	11,000	20,400	44,300	8,620	13,400
16	1,110	936	925	20,400	1,500	10,800	6,320	8,600	17,700	41,500	8,030	12,700
17	953	903	930	23,900	1,460	8,140	6,910	6,630	13,300	39,400	7,600	9,340
18	2,560	901	935	27,000	1,370	4,600	7,420	5,240	11,900	37,500	7,320	6,380
19	6,330	894	930	28,600	1,300	2,670	6,950	4,480	12,900	35,400	7,060	5,560
20	7,700	857	947	27,600	1,270	2,010	6,190	3,710	14,000	33,000	7,140	5,230
21	5,590	841	1,040	22,800	1,270	1,760	6,330	3,130	15,500	30,600	7,210	5,050
22	2,560	822	1,440	13,400	1,250	1,620	6,070	3,390	17,100	28,600	7,150	5,080
23	1,290	821	2,410	9,620	1,230	1,530	5,510	3,140	18,600	27,100	7,020	4,840
24	1,030	816	2,540	8,970	1,200	1,460	5,150	2,770	19,700	25,600	6,920	4,700
25	1,030	830	1,870	7,100	1,200	1,400	5,120	4,210	20,400	24,300	6,460	4,680
26	1,170	834	1,360	4,720	1,200	1,370	5,720	5,370	21,400	23,000	4,970	4,940
27	1,030	809	1,460	3,480	1,390	2,370	7,100	6,770	22,500	22,100	2,890	5,050
28	1,010	810	2,420	3,100	1,300	4,820	9,020	9,630	23,100	21,400	1,840	5,130
29	1,040	819	2,750	2,750	---	7,800	8,210	12,400	23,400	20,900	1,570	4,980
30	988	850	5,020	2,690	---	9,660	5,360	15,200	24,800	20,700	1,460	4,810
31	923	---	7,070	2,500	---	12,100	---	16,900	---	20,700	1,680	---
Total	52,203	34,985	55,985	309,640	46,400	118,840	450,180	363,560	620,900	1,251,300	352,740	215,430
Mean	1,684	1,166	1,806	9,988	1,657	3,834	15,010	11,730	20,700	40,360	11,380	7,181
Max	7,700	3,830	7,070	28,600	2,930	12,700	41,800	27,000	25,800	70,600	21,500	13,400
Min	674	809	903	1,870	1,200	1,030	5,120	2,770	11,900	20,700	1,460	2,500
Ac-ft	103,500	69,390	111,000	614,200	92,030	235,700	892,900	721,100	1,232,000	2,482,000	699,700	427,300

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1925 - 2007, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	2,423	3,620	5,154	5,330	6,391	7,739	7,699	11,030	7,796	3,188	1,454	1,533
Max	14,250	25,900	33,280	31,870	35,060	40,450	45,710	56,050	33,550	40,360	11,380	7,361
(WY)	(1974)	(1975)	(1992)	(1998)	(1932)	(1945)	(1945)	(1990)	(1957)	(2007)	(2007)	(1962)
Min	85.0	100	146	166	222	242	278	812	151	74.2	62.7	62.8
(WY)	(1925)	(1925)	(1926)	(1940)	(1925)	(1925)	(1925)	(1971)	(1925)	(1925)	(1925)	(1930)

08065000 Trinity River near Oakwood, TX—Continued

SUMMARY STATISTICS

	Calendar Year 2006		Water Year 2007		Water Years 1925 - 2007	
Annual total	635,220		3,872,163			
Annual mean	1,740		10,610		5,273	
Highest annual mean					15,240	1992
Lowest annual mean					657	1925
Highest daily mean	17,900	Mar 28	70,600	Jul 10	153,000	Apr 29, 1942
Lowest daily mean	637	Aug 23	674	Oct 9	28	Nov 1, 1924
Annual seven-day minimum	655	Aug 19	691	Oct 4	38	Aug 19, 1925
Maximum peak flow			71,600	Jul 10	153,000	Apr 29, 1942
Maximum peak stage			46.83	Jul 10	51.64	Apr 29, 1942
Annual runoff (ac-ft)	1,260,000		7,680,000		3,820,000	
10 percent exceeds	2,810		25,700		15,000	
50 percent exceeds	974		5,140		1,530	
90 percent exceeds	715		933		323	

