Water-Data Report 2013

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 mi^2.

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.

PERIOD OF RECORD, Water-Quality.--
CHEMICAL DATA: Jan. 1965 to June 1965.
BIOCHEMICAL DATA: Jan. 1965 to June 1965.
SEDIMENT DATA: Dec. 1976 to May 1981.

PERIOD OF DAILY RECORD, Water-Quality.--
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 fair. 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. Some records listed in the "Period of Record" for surface water and water quality may not be available electronically.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in May 1890 reached a stage of 53 ft (discharge about 180,000 ft^3/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 ft^3/s).

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	1,260	750	717	1,180	1,150	1,060	1,520	951	1,630	766	733	626
2	4,420	754	709	1,050	1,660	1,030	3,390	907	1,780	759	708	625
3	5,840	741	710	1,050	1,580	986	2,970	904	1,340	734	661	632
4	3,570	714	748	1,150	1,190	957	2,010	888	1,140	697	659	624
5	1,700	727	745	1,020	1,050	927	2,330	867	1,040	714	645	669
6	1,140	774	750	937	1,020	923	4,920	858	990	700	622	749
7	962	791	754	892	1,030	922	4,960	818	940	688	625	742
8	882	738	749	883	1,020	935	2,970	796	1,130	665	622	664
9	953	729	727	1,400	1,010	931	1,850	791	2,820	614	644	633
10	1,040	730	729	2,410	1,890	969	1,500	910	2,600	620	658	614
11	1,010	734	743	7,530	1,740	1,030	1,370	1,150	2,140	642	656	609
12	878	749	732	11,100	2,270	2,220	1,310	1,250	4,870	654	654	659
13	886	733	725	12,200	4,860	5,140	1,790	1,360	4,580	643	648	670
14	854	724	734	9,690	4,170	3,900	1,850	1,220	2,340	663	667	646
15	815	737	717	5,330	3,290	2,120	1,510	1,060	1,300	689	753	649
16	1,410	741	738	3,300	2,580	1,450	1,260	963	1,090	726	1,320	642
17	3,390	733	805	2,130	1,830	1,200	1,170	1,010	1,000	857	2,670	641
18	2,730	734	1,040	1,740	1,480	1,110	1,150	4,340	1,040	1,610	2,100	648
19	1,490	739	950	1,540	1,310	1,020	1,200	7,560	1,000	2,590	1,240	655
20	1,050	738	857	1,400	1,190	977	2,240	5,580	2,390	3,030	918	772
21	926	725	829	1,310	1,120	964	5,080	2,500	2,970	2,060	810	936
22	852	729	820	1,230	1,120	951	4,170	1,420	1,950	1,270	755	2,190
23	791	729	950	1,180	1,130	917	2,240	1,330	1,250	1,130	739	5,070
24	775	725	917	1,140	1,280	889	1,440	3,080	1,000	1,200	726	4,400
25	788	735	856	1,110	1,450	913	1,240	3,450	895	1,070	718	2,030
26	786	718	861	1,090	1,290	1,160	1,160	2,240	826	937	687	1,090
27	797	686	1,070	1,090	1,170	1,060	1,130	1,600	802	836	676	873
28	793	687	3,670	1,070	1,100	993	1,070	2,390	791	771	667	817
29	806	704	3,880	1,030	---	953	1,010	2,510	774	729	674	997
30	774	718	2,210	1,040	---	947	980	1,750	767	768	662	1,290
31	735	---	1,380	1,060	---	975	---	1,290	---	777	649	---
Total	45,103	21,966	32,822	80,282	46,980	40,529	62,790	57,743	49,185	30,609	25,966	32,862
Mean	1,455	732	1,059	2,590	1,678	1,307	2,093	1,863	1,640	987	838	1,095
Max	5,840	791	3,880	12,200	4,860	5,140	5,080	7,560	4,870	3,030	2,670	5,070
Min	735	686	709	883	1,010	889	980	791	767	614	622	609
Ac-ft	89,460	43,570	65,100	159,200	93,180	80,390	124,500	114,500	97,560	60,710	51,500	65,180

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1925 - 2013, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	2,607	3,699	4,970	5,146	6,471	7,875	7,636	10,610	7,465	3,058	1,440	1,611
Max	21,690	25,900	33,280	31,870	35,060	40,450	45,710	56,050	33,550	40,360	11,380	7,361
(WY)	(2010)	(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)

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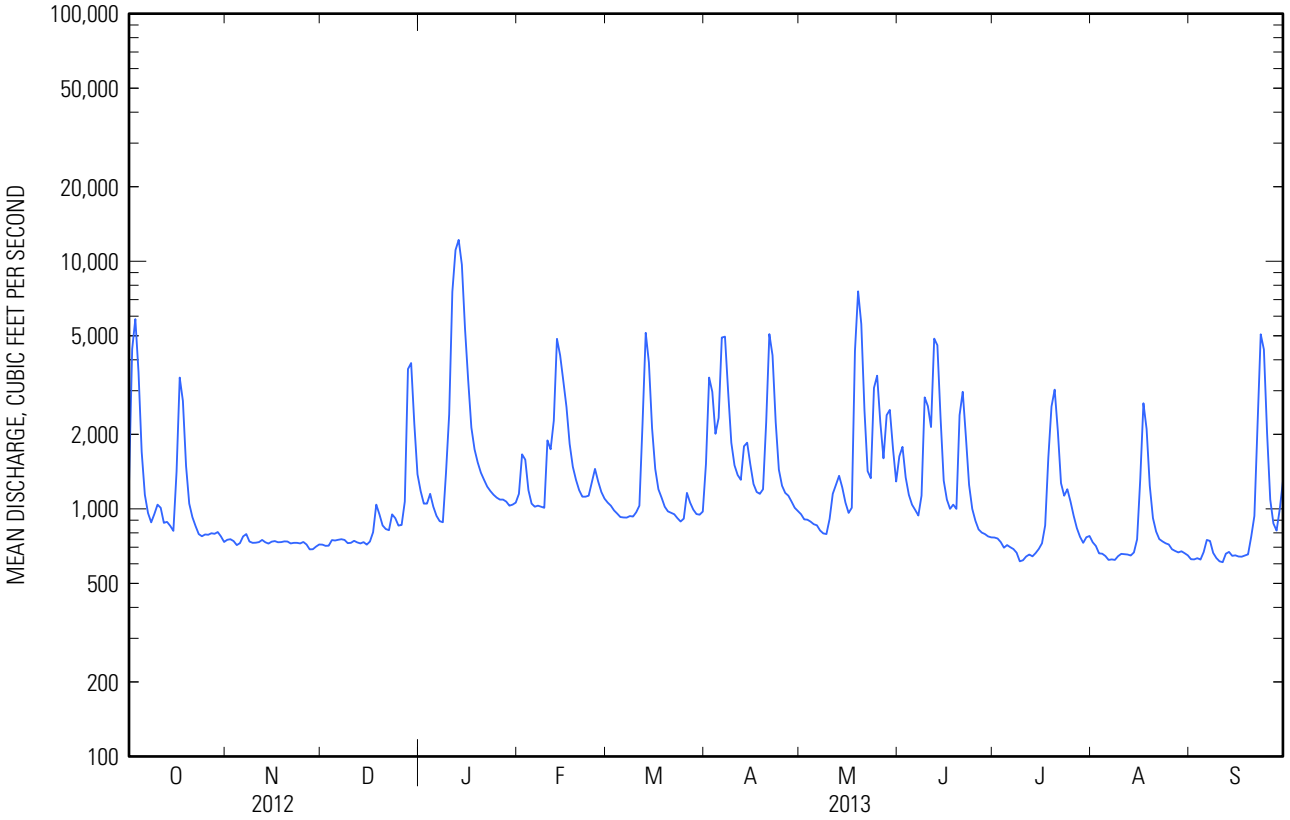
SUMMARY STATISTICS

	Calendar Year 2012		Water Year 2013		Water Years 1925 - 2013	
Annual total	1,336,642		526,837			
Annual mean	3,652		1,443		5,207	
Highest annual mean					15,240	1992
Lowest annual mean					657	1925
Highest daily mean	46,100	Mar 26	12,200	Jan 13	153,000	Apr 29, 1942
Lowest daily mean	620	Aug 6	609	Sep 11	28	Nov 1, 1924
Annual seven-day minimum	628	Aug 2	639	Aug 5	38	Aug 19, 1925
Maximum peak flow			12,600	Jan 13	153,000	Apr 29, 1942
Maximum peak stage			23.48	Jan 13	51.64	Apr 29, 1942
Annual runoff (ac-ft)	2,651,000		1,045,000		3,772,000	
10 percent exceeds	10,300		2,770		14,900	
50 percent exceeds	984		977		1,500	
90 percent exceeds	702		667		340