



Water-Data Report 2008

## 08050400 Elm Fork Trinity River at Gainesville, TX

Upper Trinity Basin  
Elm Fork Trinity Subbasin

LOCATION.--Lat 33°37'27", long 97°09'22" referenced to North American Datum of 1927, Cooke County, TX, Hydrologic Unit 12030103, on downstream right bank at end of bridge on Farm Road 51, 31 ft downstream from centerline of road, 0.6 mi west of Cooke County courthouse in Gainesville, 1.0 mi upstream from Interstate Highway 35, and 1.2 mi downstream from Dozier Creek.

DRAINAGE AREA.--174 mi<sup>2</sup>.

### SURFACE-WATER RECORDS

PERIOD OF RECORD.--Oct. 1985 to current year.

GAGE.--Water-stage recorder. Datum of gage is 700.00 ft above NGVD of 1929. Satellite telemeter at station.

REMARKS.--No estimated daily discharges. Records good. No known regulation or diversions. No flow at times.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in Oct. 1981 reached a peak stage of 28.1 ft, from information furnished by an employee of the Gainesville Department of Public Works.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 5,100 ft<sup>3</sup>/s and (or) maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Mar 18	1145	*9,630	*16.93
Mar 18	2315	5,230	12.02

## 08050400 Elm Fork Trinity River at Gainesville, TX—Continued

**DISCHARGE, CUBIC FEET PER SECOND**  
**WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**  
**DAILY MEAN VALUES**

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	1.9	2.1	3.5	4.5	2.9	0.20	58	15	12	1.2	0.28	0.73
2	1.6	2.4	3.1	4.3	2.9	0.19	42	14	8.6	0.92	0.26	0.75
3	2.0	2.5	3.1	4.2	3.3	300	40	13	6.5	0.77	0.39	0.62
4	1.8	2.5	3.3	4.1	3.8	22	40	12	5.0	0.71	0.25	0.62
5	2.0	2.3	3.6	4.0	3.7	6.8	28	16	4.0	0.70	0.22	0.57
6	2.0	2.4	4.5	4.2	3.2	2.7	21	29	3.2	0.67	0.18	0.57
7	2.2	2.7	4.1	4.3	3.3	2.2	20	31	2.9	0.58	0.16	0.64
8	2.3	2.7	3.8	4.9	3.6	2.6	16	22	2.6	0.51	0.35	0.68
9	2.8	2.6	3.9	4.1	4.2	2.9	109	19	3.2	0.51	0.23	0.93
10	2.9	2.9	4.4	4.1	3.6	1,450	1,570	16	5.5	0.50	0.17	1.6
11	3.0	3.0	6.1	4.0	3.7	346	569	14	3.0	0.50	0.13	1.5
12	3.1	2.9	11	4.0	4.1	138	249	13	2.2	0.44	0.13	4.9
13	3.1	2.7	9.8	4.0	3.5	80	144	12	1.8	0.42	0.13	6.0
14	3.0	2.7	5.9	3.9	3.3	56	94	13	1.5	0.48	0.14	4.1
15	6.0	2.7	4.8	3.8	3.5	40	75	13	1.3	0.54	1.9	3.4
16	3.9	2.9	4.0	3.9	22	29	60	12	1.1	0.58	0.69	2.9
17	4.3	2.9	3.8	3.5	7.8	23	52	12	2.2	0.56	0.51	2.1
18	3.9	2.8	3.0	3.2	1.4	3,600	50	11	1.5	0.53	0.60	1.8
19	3.5	3.0	2.9	3.1	0.89	2,000	40	10	1.8	0.48	513	1.6
20	3.4	3.0	3.8	3.1	0.64	1,100	34	9.3	2.2	0.44	331	1.5
21	3.0	3.0	4.6	3.1	0.52	820	30	8.7	1.9	0.37	188	1.3
22	5.2	2.9	5.5	2.9	0.47	569	28	8.4	1.8	0.36	46	1.4
23	2.9	2.8	5.2	2.7	0.37	440	27	8.0	1.6	0.31	26	1.1
24	3.8	2.5	4.9	2.7	0.35	323	32	7.7	1.4	0.30	13	0.98
25	3.7	5.3	5.0	2.9	0.34	244	29	7.5	1.3	0.29	8.2	0.97
26	3.2	4.5	4.8	3.0	0.33	170	23	7.2	1.1	0.27	4.9	0.82
27	2.9	4.7	4.9	3.2	0.33	127	20	422	1.1	0.25	3.1	0.73
28	2.8	3.5	4.8	3.2	0.31	102	18	218	1.9	0.23	2.1	0.68
29	2.7	3.1	5.0	3.7	0.27	88	17	52	5.9	0.20	1.4	0.60
30	2.6	3.4	4.4	3.4	---	83	16	27	1.5	0.40	1.0	0.58
31	2.5	---	4.4	3.1	---	73	---	17	---	0.40	0.85	---
<b>Total</b>	94.0	89.4	145.9	113.1	88.62	12,240.59	3,551	1,089.8	91.6	15.42	1,145.27	46.67
<b>Mean</b>	3.03	2.98	4.71	3.65	3.06	395	118	35.2	3.05	0.50	36.9	1.56
<b>Max</b>	6.0	5.3	11	4.9	22	3,600	1,570	422	12	1.2	513	6.0
<b>Min</b>	1.6	2.1	2.9	2.7	0.27	0.19	16	7.2	1.1	0.20	0.13	0.57
<b>Ac-ft</b>	186	177	289	224	176	24,280	7,040	2,160	182	31	2,270	93

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986 - 2008, BY WATER YEAR (WY)**

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Mean</b>	44.7	75.0	112	71.6	138	171	140	241	193	58.1	9.15	22.8
<b>Max</b>	310	372	743	316	828	565	1,063	1,359	1,659	889	78.0	123
<b>(WY)</b>	(1994)	(2001)	(1992)	(1992)	(2001)	(1990)	(1990)	(1990)	(2007)	(2007)	(2005)	(1996)
<b>Min</b>	0.07	0.07	0.26	0.37	0.52	6.54	2.76	0.73	0.56	0.03	0.00	0.03
<b>(WY)</b>	(2006)	(2006)	(2006)	(2006)	(2000)	(1986)	(2000)	(2000)	(2006)	(2006)	(2000)	(2000)

08050400 Elm Fork Trinity River at Gainesville, TX—Continued

SUMMARY STATISTICS

	Calendar Year 2007		Water Year 2008		Water Years 1986 - 2008	
<b>Annual total</b>	104,528.22		18,711.37			
<b>Annual mean</b>	286		51.1		106	
<b>Highest annual mean</b>					287	2007
<b>Lowest annual mean</b>					3.12	2000
<b>Highest daily mean</b>	14,500	Jun 18	3,600	Mar 18	14,500	Jun 18, 2007
<b>Lowest daily mean</b>	0.15	Mar 12	0.13	Aug 11	0.00	Aug 2, 1988
<b>Annual seven-day minimum</b>	0.22	Mar 1	0.18	Aug 8	0.00	Aug 2, 1988
<b>Maximum peak flow</b>			9,630	Mar 18	72,000	Jun 18, 2007
<b>Maximum peak stage</b>			16.93	Mar 18	28.01	Jun 18, 2007
<b>Annual runoff (ac-ft)</b>	207,300		37,110		76,840	
<b>10 percent exceeds</b>	664		51		203	
<b>50 percent exceeds</b>	3.9		3.2		6.1	
<b>90 percent exceeds</b>	0.59		0.44		0.32	

