Water-Data Report 2013

08062000 East Fork Trinity River near Crandall, TX

Upper Trinity Basin
East Fork Trinity Subbasin

LOCATION.--Lat 32°38′19″, long 96°29′06″ referenced to North American Datum of 1927, Kaufman County, TX, Hydrologic Unit 12030106, on right bank upstream side of westbound U.S. Highway 175 bridge, 0.7 mi downstream from Mustang Creek, 1.8 mi northwest of Crandall, 4.0 mi upstream from Buffalo Creek, and 11.0 mi upstream from mouth.

DRAINAGE AREA.--1,256 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--July 1949 to current year.

PERIOD OF RECORD, Water-Quality.--
CHEMICAL DATA: Jan. to Apr. 1964, May 1966 to Sept. 1981, June 1986 to Aug. 2000.
BIOCHEMICAL DATA: Jan. to Apr. 1964, May 1966 to Sept. 1981, June 1986 to Aug. 2000.
PESTICIDE DATA: Mar. 1977 to July 1981, Feb. to May 1994.
RADIOCHEMICAL DATA: Jan. to July 1981.
SEDIMENT DATA: Apr. to Sept. 1964, Feb. to May 1994.

PERIOD OF DAILY RECORD, Water-Quality.--
SPECIFIC CONDUCTANCE: Oct. 1967 to Sept. 1981, May 1986 to Sept. 2000.
pH: Mar. to Sept. 1977, May 1986 to Sept. 2000.
WATER TEMPERATURE: Oct. 1967 to Sept. 1981, May 1986 to Sept. 2000.
DISSOLVED OXYGEN: Mar. to Sept. 1977, May 1986 to Sept. 2000.

PERIOD OF DAILY RECORD, Atmospheric.--
PRECIPITATION DATA: Oct. 2001 to Sept. 2002.

REVISED RECORDS.--WSP 1922: Drainage area. WDR TX-75-1: 1974.

GAGE.--Water-stage recorder. Datum of gage is 338.69 ft above NGVD of 1929. Prior to Feb. 21, 1983, at datum 5.00 ft higher. Satellite telemeter at station.

REMARKS.--Records fair. Some records listed in the "Period of Record" for surface water and water quality may not be available electronically. Since Sept. 1953, at least 10% of contributing drainage area has been regulated. The City of Forney discharges wastewater effluent into a tributary below Lake Ray Hubbard and above this station. The North Texas Municipal Water District discharges wastewater effluent into tributaries above this station from their Mesquite and Changler's Landing wastewater treatment plants. The North Texas Municipal Water District periodically diverts water immediately upstream of gage for water reuse. Flow is also affected at times by discharge from floodwater-retarding structures controlling runoff from a 39.2 mi^2 area above this station. No flow at times.

AVERAGE DISCHARGE FOR PERIOD PRIOR TO REGULATION.--4 years (water years 1950-53) prior to regulation by Lavon Lake, 652 ft^3/s (472,400 acre-ft/yr).

EXTREMES FOR PERIOD PRIOR TO REGULATION.--WATER YEARS, 1950-1953: Maximum discharge, 24,000 ft^3/s May 4, 1950 (gage height, 22.12 ft); no flow at times.

08062000 East Fork Trinity River near Crandall, TX—Continued

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

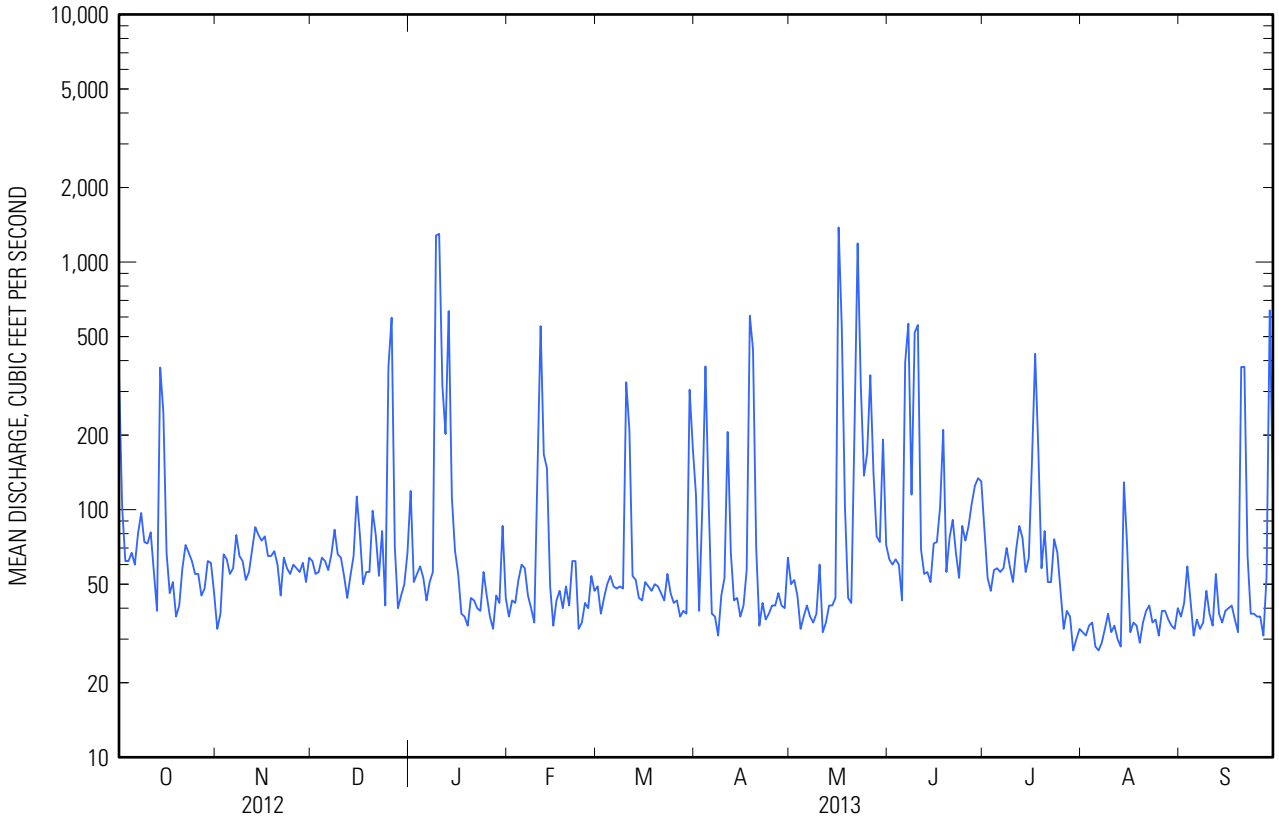
Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	355	33	62	119	37	49	115	50	63	83	32	37
2	102	38	55	51	43	38	39	52	60	53	31	42
3	62	66	56	55	42	44	103	45	63	47	34	59
4	62	63	64	59	52	50	379	33	60	57	35	43
5	67	55	62	53	60	54	109	37	43	58	28	31
6	60	58	57	43	58	49	38	41	394	56	27	36
7	80	79	66	51	45	48	37	37	564	58	29	33
8	97	65	83	56	40	49	31	35	115	70	33	35
9	74	62	66	1,280	e35	48	45	38	519	59	38	47
10	73	52	64	1,300	e141	327	53	60	557	51	32	38
11	81	56	54	319	e551	210	206	32	69	69	34	34
12	56	69	44	202	167	54	67	35	55	86	30	55
13	39	85	54	634	147	52	43	41	56	77	28	38
14	375	79	65	112	49	44	44	41	51	56	129	35
15	246	75	113	68	34	43	37	44	73	64	72	39
16	67	78	79	55	43	51	41	1,380	74	158	32	40
17	46	65	50	38	47	49	57	545	102	426	35	41
18	51	65	56	37	40	47	607	103	210	175	34	36
19	37	68	56	34	49	50	443	44	56	58	29	32
20	41	60	99	44	41	49	70	42	77	82	35	377
21	58	45	79	43	62	46	34	207	91	51	39	377
22	72	64	54	40	62	43	42	1,190	67	51	41	65
23	67	58	82	39	33	55	36	317	53	76	35	38
24	62	55	41	56	35	46	38	137	86	67	36	38
25	55	60	378	45	42	42	41	169	75	47	31	37
26	55	58	596	37	40	43	41	349	86	33	39	37
27	45	56	71	33	54	37	46	140	106	39	39	31
28	48	61	40	45	47	39	41	78	125	37	36	54
29	62	51	45	42	---	38	40	74	134	27	34	638
30	61	64	50	86	---	305	64	192	130	e30	33	115
31	46	---	67	44	---	178	---	72	---	33	40	---
Total	2,702	1,843	2,808	5,120	2,096	2,277	2,987	5,660	4,214	2,334	1,180	2,558
Mean	87.2	61.4	90.6	165	74.9	73.5	99.6	183	140	75.3	38.1	85.3
Max	375	85	596	1,300	551	327	607	1,380	564	426	129	638
Min	37	33	40	33	33	37	31	32	43	27	27	31
Ac-ft	5,360	3,660	5,570	10,160	4,160	4,520	5,920	11,230	8,360	4,630	2,340	5,070

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 2013[Z], BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	383	461	610	604	817	1,067	1,061	1,493	954	449	159	202
Max	4,116	3,293	4,401	5,039	4,176	8,028	6,394	9,586	5,718	5,332	1,459	1,560
(WY)	(1974)	(1995)	(1972)	(1998)	(2001)	(2001)	(2002)	(1957)	(1989)	(2007)	(1989)	(1974)
Min	1.58	3.78	3.57	7.77	23.1	10.6	7.47	42.1	17.8	3.84	0.00	0.00
(WY)	(1957)	(1956)	(1955)	(1957)	(1957)	(1956)	(1956)	(1959)	(1954)	(1956)	(1956)	(1954)

08062000 East Fork Trinity River near Crandall, TX—Continued

SUMMARY STATISTICS

	Calendar Year 2012		Water Year 2013		Water Years 1954 - 2013[z]	
Annual total	92,074		35,779			
Annual mean	252		98.0		688	
Highest annual mean					2,209	1995
Lowest annual mean					38.4	1955
Highest daily mean	7,700	Mar 21	1,380	May 16	48,800	May 5, 1990
Lowest daily mean	30	Mar 17	27	Jul 29	0.00	Oct 1, 1953
Annual seven-day minimum	36	Mar 13	31	Aug 1	0.00	Oct 1, 1953
Maximum peak flow			2,240	May 16	59,900	May 5, 1990
Maximum peak stage			5.00	May 16	27.17	May 5, 1990
Annual runoff (ac-ft)	182,600		70,970		498,100	
10 percent exceeds	501		171		2,080	
50 percent exceeds	69		54		99	
90 percent exceeds	43		35		26	

[z] Period of regulated streamflow.