Water-Data Report 2013

08044000 Big Sandy Creek near Bridgeport, TX

Upper Trinity Basin
Upper West Fork Trinity Subbasin

LOCATION.--Lat 33°13′54″, long 97°41′40″ referenced to North American Datum of 1927, Wise County, TX, Hydrologic Unit 12030101, on right bank at upstream side of Hwy 380, 4.0 mi. east of Bridgeport and 4.4 mi. upstream from mouth.

DRAINAGE AREA.--333 mi^2, from Corps of Engineers based on aerial photographs.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Oct. 1936 to Sept. 1995, Oct. 2004 to current year.

PERIOD OF RECORD, Water-Quality.--
CHEMICAL DATA: Jan. 1964 to Aug. 1995.
BIOLOGICAL DATA: Oct. 1992 to July 1993.
PESTICIDE DATA: Oct. 1992 to May 1994.
RADIOCHEMICAL DATA: Oct. 1992.
SEDIMENT DATA: Apr. 1964 to Aug. 1995.

PERIOD OF DAILY RECORD, Water-Quality.--
SPECIFIC CONDUCTANCE: May 1968 to Sept. 1977.
WATER TEMPERATURE: May 1968 to Sept. 1977.
SUSPENDED SEDIMENT DISCHARGE: May 1968 to Sept. 1977.

REVISED RECORDS.--WSP 1148: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 724.44 ft above NGVD of 1929. Prior to Oct. 1, 1984,at datum 3.00 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 May 1, 1956, runoff from 100 mi^2 above this station is affected at times by storage in Lake Amon G. Carter, 30 mi upstream, with a capacity of 15,240 acre-ft at elevation 920.0 ft (spillway crest). The City of Bowie diverts water from Lake Amon G. Carter for municipal use and discharges sewage effluent into tributaries to Big Sandy Creek upstream from this station. Flow is also affected at times by discharge from the flood-detention pools of 19 floodwater-retarding structures with a combined capacity of 11,430 acre-ft. These structures control runoff from a 46.0 mi^2 area upstream from this station and below Lake Amon G. Carter.

AVERAGE DISCHARGE FOR PERIOD PRIOR TO REGULATION.--19 years (water years 1937-55) prior to completion of Lake Amon G. Carter, 88.2 ft^3/s (63,850 acre-ft/yr).

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stages since at least 1887 occurred in 1908 and 1915 and reached about the same stage as that of June 10, 1941.

EXTREMES FOR PERIOD PRIOR TO REGULATION.--WATER YEARS 1937-1955: Maximum discharge, 53,000 ft^3/s, June 10, 1941, (gage-height, 15.69 ft, datum then in use), from rating curve extended above 22,000 ft^3/s; no flow at times.

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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	0.00	0.00	0.00	0.00	0.07	0.30	0.32	0.13	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.05	0.24	0.30	0.07	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.05	0.25	1.9	0.06	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.05	0.22	3.3	0.05	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.05	0.12	1.3	0.04	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.07	0.09	0.79	0.04	27	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.09	0.13	0.61	0.03	22	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.08	0.12	0.51	0.02	4.2	0.00	0.00	0.00
9	0.00	0.00	0.01	0.05	0.15	0.31	0.49	0.03	2.4	0.00	0.00	0.00
10	0.00	0.00	0.00	0.12	0.42	0.75	0.52	0.03	3.5	0.00	0.00	0.00
11	0.00	0.00	0.00	0.05	0.27	0.59	0.54	0.02	2.0	0.00	0.00	0.00
12	0.00	0.00	0.00	0.03	0.26	0.40	0.39	0.01	0.49	0.00	0.00	0.00
13	0.00	0.00	0.00	0.01	0.42	0.28	0.39	0.00	0.17	0.00	0.00	0.00
14	0.00	0.00	0.00	0.01	0.28	0.18	0.40	0.00	0.05	0.00	0.00	0.00
15	0.00	0.00	0.00	0.01	0.23	0.16	0.37	0.00	0.01	0.00	0.00	0.00
16	0.00	0.00	0.00	0.01	0.15	0.22	0.34	136	0.00	0.00	0.00	0.00
17	0.00	0.00	0.00	0.01	0.15	0.24	0.35	24	0.08	0.00	0.00	0.00
18	0.00	0.00	0.00	0.00	0.16	0.21	1.0	3.2	6.3	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.17	0.18	1.2	0.93	1.5	0.00	0.00	0.00
20	0.00	0.00	0.00	0.01	0.38	0.14	1.0	0.37	0.61	0.00	0.00	0.00
21	0.00	0.00	0.00	0.02	0.43	0.12	0.62	0.23	0.20	0.00	0.00	0.00
22	0.00	0.00	0.00	0.03	0.55	0.14	0.42	0.22	0.05	0.00	0.00	0.00
23	0.00	0.00	0.00	0.03	0.37	0.21	0.35	0.09	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.04	0.37	0.31	0.27	0.03	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.04	0.40	0.31	0.19	0.02	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.05	0.37	0.28	0.21	0.01	0.00	0.00	0.00	0.00
27	0.00	0.00	0.00	0.05	0.37	0.27	0.19	0.00	0.00	0.00	0.00	0.00
28	0.00	0.00	0.00	0.06	0.31	0.26	0.18	0.00	0.00	0.00	0.00	0.00
29	0.00	0.00	0.00	0.11	---	0.39	0.18	0.00	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.16	---	1.4	0.15	0.00	0.00	0.00	0.00	0.00
31	0.00	---	0.00	0.12	---	0.91	---	0.00	---	0.00	0.00	---
Mean	0.00	0.00	0.00	0.03	0.24	0.31	0.63	5.34	2.35	0.00	0.00	0.00
Max	0.00	0.00	0.01	0.16	0.55	1.4	3.3	136	27	0.00	0.00	0.00
Min	0.00	0.00	0.00	0.00	0.05	0.09	0.15	0.00	0.00	0.00	0.00	0.00
Ac-ft	0.00	0.00	0.02	2.0	13	19	37	329	140	0.00	0.00	0.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1956 - 2013[hz], BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	93.1	37.1	37.1	27.8	38.4	82.0	97.5	204	128	20.2	10.5	25.8
Max	1,829	298	743	257	214	570	1,175	1,284	1,250	181	230	491
(WY)	(1982)	(1965)	(1992)	(1992)	(1992)	(1977)	(1957)	(1990)	(1989)	(1973)	(1973)	(1962)
Min	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(WY)	(1959)	(1956)	(1956)	(1956)	(2006)	(1956)	(1956)	(1980)	(1956)	(1964)	(1957)	(1956)

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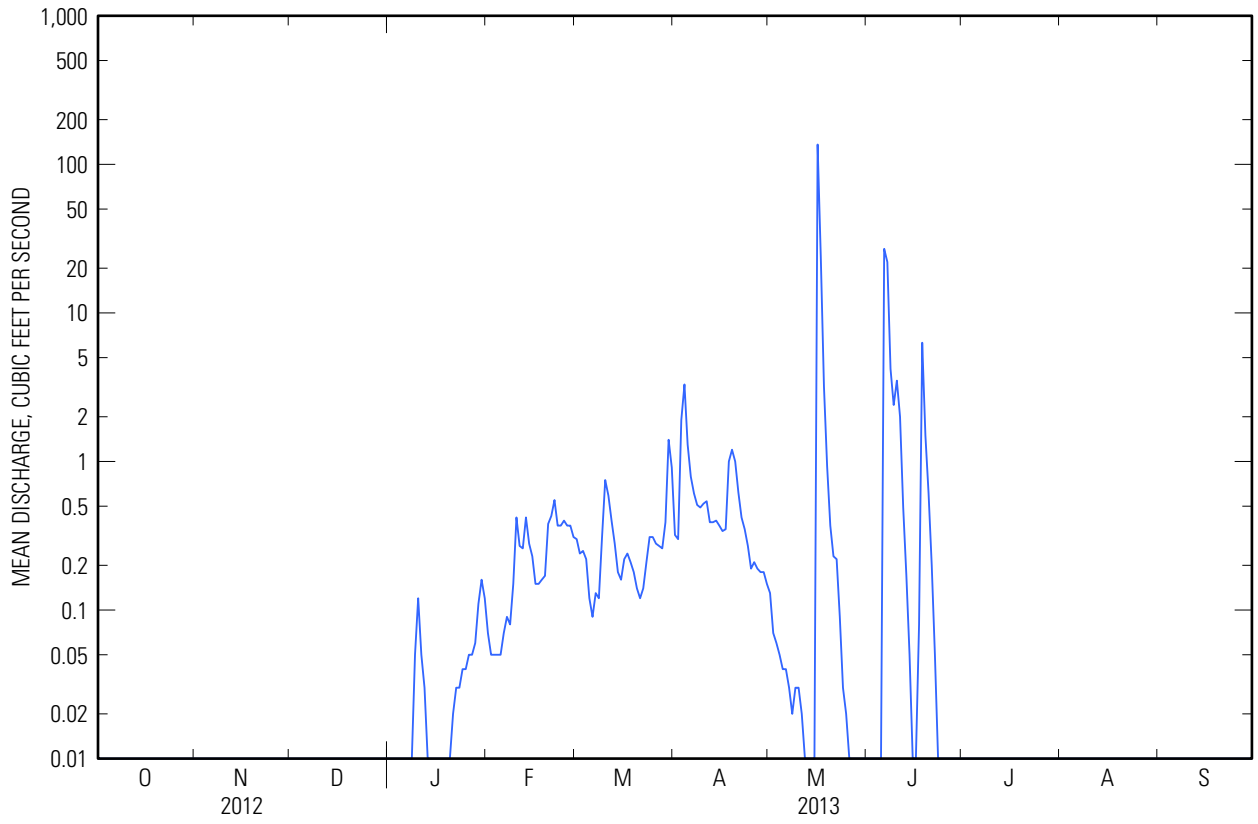
SUMMARY STATISTICS

	Calendar Year 2012		Water Year 2013		Water Years 1956 - 2013[hz]	
Annual mean	14.5		0.75		66.9	
Highest annual mean					317	1982
Lowest annual mean					0.75	2013
Highest daily mean	1,050	Jan 25	136	May 16	23,800	Oct 13, 1981
Lowest daily mean	0.00	May 22	0.00	Oct 1	0.00	Oct 1, 1955
Annual seven-day minimum	0.00	May 22	0.00	Oct 1	0.00	Oct 5, 1955
Maximum peak flow			279	May 16	45,000	Oct 13, 1981
Maximum peak stage			3.39	May 16	[g]14.78	Oct 13, 1981
Annual runoff (ac-ft)	10,550		540		48,480	
10 percent exceeds	5.4		0.41		83	
50 percent exceeds	0.00		0.00		4.9	
90 percent exceeds	0.00		0.00		0.00	

[h] See Period of Record paragraph.
[z] Period of regulated streamflow.
[g] At datum then in use.