

Water-Data Report 2011

07301410 Sweetwater Creek near Kelton, TX

North Fork Red Basin
Middle North Fork Red Subbasin

LOCATION.--Lat 35°28'23", long 100°07'14" referenced to North American Datum of 1927, Wheeler County, TX, Hydrologic Unit 11120302, near center of stream at downstream side of bridge on Farm Road 592, 5.0 mi north of Kelton, 8.0 mi upstream from Texas-Oklahoma State line, and 8.5 mi northeast of Wheeler.

DRAINAGE AREA.--287 mi² of which 20 mi² probably is noncontributing.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Nov. 1961 to current year.

PERIOD OF RECORD, Water-Quality.--

CHEMICAL DATA: Nov. 1963 to June 1985.

BIOCHEMICAL DATA: Nov. 1963 to Sept. 1973.

RADIOCHEMICAL DATA: Nov. 1980 to May 1981.

GAGE.--Water-stage recorder. Datum of gage is 2,230 ft above NGVD of 1929. Satellite telemeter at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. No known regulation. There are many small diversions upstream from the station for ranch use. Some records listed in the "Period of Record" for surface water and water quality may not be available electronically.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1882, about 20 ft May 16, 1957, from information by local residents.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 500 ft³/s and (or) maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Oct 22	1100	*40	*6.71

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	1.8	4.8	7.8	10	9.9	9.5	11	7.1	0.86	0.10	0.03	0.01
2	2.0	4.7	8.1	10	9.9	9.5	11	6.8	0.73	0.10	0.03	0.01
3	1.9	4.9	8.2	11	9.9	9.4	11	6.8	0.67	0.10	0.03	0.01
4	2.1	4.9	8.4	10	10	9.5	9.9	6.5	0.67	0.10	0.03	0.02
5	2.2	5.0	8.0	10	10	9.4	9.9	6.0	0.52	0.10	0.03	0.03
6	2.1	5.5	8.0	10	12	9.4	10	5.9	0.45	0.09	0.05	0.03
7	2.0	5.5	8.7	10	12	9.7	10	5.6	0.42	0.06	0.04	0.04
8	2.9	5.8	8.9	10	12	12	9.9	5.2	0.42	0.07	0.03	0.05
9	1.8	6.8	8.7	10	e12	12	9.9	4.7	0.43	0.07	0.04	0.04
10	1.7	5.5	8.7	11	e12	11	9.5	4.5	0.38	0.06	0.04	0.04
11	1.8	5.0	8.6	e13	e12	11	10	4.8	0.38	0.05	0.08	0.04
12	1.9	8.8	8.2	e11	e12	11	9.4	5.0	0.38	0.08	0.06	0.04
13	1.8	13	8.3	e11	13	11	8.9	4.0	0.37	0.06	0.05	0.04
14	1.9	8.7	8.7	e11	14	11	8.9	3.9	0.33	0.05	0.05	0.05
15	2.0	8.3	8.8	11	13	11	8.6	3.8	0.31	0.04	0.04	0.11
16	1.8	8.6	8.6	11	12	11	8.7	3.7	0.26	0.04	0.03	0.12
17	1.8	7.7	8.8	11	11	11	8.6	3.6	0.21	0.04	0.03	0.11
18	2.0	6.7	9.5	12	11	10	8.9	3.5	0.21	0.04	0.03	0.10
19	2.2	6.8	9.7	12	10	10	8.8	3.4	0.17	0.04	0.03	0.10
20	2.4	6.8	10	11	11	10	8.4	4.5	0.16	0.04	0.03	0.09
21	2.7	7.0	9.8	11	10	10	8.3	3.5	0.17	0.04	0.03	0.09
22	19	7.2	9.3	11	10	11	8.5	2.7	0.21	0.04	0.02	0.12
23	13	7.1	9.5	11	10	10	8.2	2.4	0.16	0.04	0.02	0.11
24	7.6	8.0	9.8	11	10	10	7.6	2.1	0.12	0.04	0.02	0.12
25	6.0	9.9	9.7	11	9.8	10	7.8	1.8	0.13	0.04	0.02	0.12
26	5.3	9.8	9.8	10	10	10	8.0	1.7	0.13	0.04	0.02	0.13
27	4.8	9.1	10	10	10	10	8.3	1.7	0.18	0.03	0.02	0.12
28	4.4	8.4	10	10	10	11	8.2	1.6	0.10	0.03	0.02	0.11
29	4.5	8.2	10	10	---	11	8.0	1.5	0.11	0.03	0.02	0.10
30	4.9	8.1	10	9.9	---	11	7.2	1.1	0.11	0.03	0.02	0.10
31	5.0	---	11	10	---	11	---	0.90	---	0.03	0.02	---
Total	117.3	216.6	281.6	330.9	308.5	323.4	271.4	120.30	9.75	1.72	1.01	2.20
Mean	3.78	7.22	9.08	10.7	11.0	10.4	9.05	3.88	0.33	0.06	0.03	0.07
Max	19	13	11	13	14	12	11	7.1	0.86	0.10	0.08	0.13
Min	1.7	4.7	7.8	9.9	9.8	9.4	7.2	0.90	0.10	0.03	0.02	0.01
Ac-ft	233	430	559	656	612	641	538	239	19	3.4	2.0	4.4

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 2011, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	8.11	10.3	11.9	13.1	15.7	18.1	21.3	24.2	21.4	5.78	4.81	6.47
Max	42.1	34.5	27.1	27.6	30.5	42.2	100	196	86.3	32.3	42.7	40.9
(WY)	(1987)	(1975)	(1998)	(1998)	(2001)	(1998)	(1997)	(1977)	(1965)	(1967)	(1963)	(1988)
Min	0.30	1.05	3.11	5.78	6.82	9.09	8.65	3.38	0.32	0.06	0.00	0.03
(WY)	(1985)	(1985)	(1984)	(1995)	(1995)	(1977)	(2006)	(1971)	(2011)	(2011)	(1964)	(1984)

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	Calendar Year 2010	Water Year 2011	Water Years 1962 - 2011	
Annual total	5,122.8	1,984.68		
Annual mean	14.0	5.44	13.3	
Highest annual mean			33.5	1997
Lowest annual mean			4.89	1984
Highest daily mean	284	May 25	19	Oct 22
Lowest daily mean	1.2	Aug 28	0.01	Sep 1
Annual seven-day minimum	1.3	Aug 26	0.02	Aug 28
Maximum peak flow			40	Oct 22
Maximum peak stage			6.71	Oct 22
Annual runoff (ac-ft)	10,160	3,940	9,610	
10 percent exceeds	25	11	22	
50 percent exceeds	11	5.6	9.9	
90 percent exceeds	2.0	0.04	0.80	

