

Water-Data Report 2013

07300000 Salt Fork Red River near Wellington, TX

Salt Fork Red Basin
Lower Salt Fork Red Subbasin

LOCATION.--Lat 34°57'27", long 100°13'14" referenced to North American Datum of 1927, Collingsworth County, TX, Hydrologic Unit 11120202, near center of stream at downstream side of bridge on U.S. Highway 83, 4.0 mi downstream from Fort Worth and Denver (Burlington) Railway Co. bridge, 4.5 mi south of Lutie, and 7.2 mi north of Wellington.

DRAINAGE AREA.--1,222 mi² of which 209 mi² probably is noncontributing.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--June 1952 to current year.

PERIOD OF RECORD, Water-Quality.--

CHEMICAL DATA: Feb. 1951 to Sept. 1954, Oct. 1967 to Sept. 1997, Oct. 1999 to Sept. 2006.

BIOCHEMICAL DATA: Oct. 1974 to Sept. 1978, Oct. 1982 to Sept. 1997, Oct. 1999 to Sept. 2006.

BIOLOGICAL DATA: Oct. 1974 to Sept. 1978, Oct. 1982 to Sept. 1997, Oct. 1999 to Sept. 2006.

SEDIMENT DATA: Oct. 1974 to Dec. 1977.

PERIOD OF DAILY RECORD, Water-Quality.--

SPECIFIC CONDUCTANCE: June 1952 to Sept. 1954, Oct. 1967 to Sept. 1991.

WATER TEMPERATURE: June 1952 to Sept. 1954, Oct. 1967 to Sept. 1991.

GAGE.--Water-stage recorder. Datum of gage is 1,941.41 ft above NGVD of 1929. Satellite telemeter at station.

REMARKS.--Records good except those for Dec. 4 through Apr. 15, which are fair. Since water year 1967, at least 10% of contributing drainage area has been regulated. There are several small diversions upstream from gage for irrigation. Some records listed in the "Period of Record" for surface water and water quality may not be available electronically.

AVERAGE DISCHARGE FOR PERIOD PRIOR TO REGULATION.--14 years (water years 1953-1966) prior to completion of Greenbelt Lake, 72.6 ft³/s (52,600 acre-ft/yr).

EXTREMES FOR PERIOD PRIOR TO REGULATION.--WATER YEARS 1953-1966: Maximum discharge, 146,000 ft³/s May 16, 1957 (gage height, 19.00 ft), from rating curve extended above 11,000 ft³/s on basis of slope-area measurement of 63,400 ft³/s; minimum, 0.10 ft³/s June 19, 1952.

07300000 Salt Fork Red River near Wellington, TX—Continued

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	5.3	4.4	4.8	5.3	6.8	40	14	3.5	0.80	0.97	1.3	1.6
2	3.9	4.4	4.8	5.2	7.1	34	14	5.2	0.95	1.1	1.0	1.5
3	3.1	4.4	4.6	5.2	7.2	29	14	4.5	0.77	1.1	0.74	1.4
4	2.8	4.4	4.6	5.2	7.4	27	14	3.9	2.1	1.4	0.72	1.4
5	2.8	4.4	4.7	5.7	7.1	22	13	3.8	1.1	1.0	0.51	1.3
6	2.8	4.3	4.8	5.4	7.2	21	12	4.0	4.7	1.1	0.48	1.3
7	3.0	4.1	4.9	5.6	7.0	20	11	3.6	2.1	0.67	0.68	1.2
8	3.5	4.3	4.9	5.7	6.3	19	9.7	4.2	2.4	0.68	0.88	1.1
9	3.2	4.4	4.8	6.8	7.1	24	9.7	4.7	5.7	0.54	102	0.96
10	3.2	4.8	4.6	20	10	25	11	51	2.4	0.53	4.3	0.97
11	3.6	5.7	4.7	11	7.6	20	10	19	1.7	0.73	1.7	0.99
12	3.8	4.7	4.6	9.2	11	19	9.3	9.3	1.3	0.78	2.8	1.0
13	3.7	4.4	4.6	7.5	14	17	8.5	7.1	1.3	0.34	2.3	1.1
14	3.4	4.4	5.6	8.0	12	17	7.7	4.1	1.3	1.2	1.7	2.9
15	3.6	4.2	5.4	8.2	13	17	6.6	2.5	1.7	2.9	1.4	1.6
16	3.8	4.4	4.8	7.7	12	18	6.3	2.2	1.3	12	744	2.2
17	3.8	4.5	4.8	8.0	11	16	6.7	2.0	10	4.9	75	3.4
18	3.9	4.5	4.7	7.1	10	15	6.5	1.7	2.9	3.6	19	1.9
19	4.1	4.6	4.8	7.2	8.8	14	5.4	1.5	4.2	2.5	11	1.9
20	4.2	4.5	4.4	7.1	11	14	4.8	1.4	2.6	2.0	7.8	2.0
21	4.1	4.4	4.6	7.1	24	14	4.2	2.2	1.9	1.8	6.1	1.9
22	3.9	3.8	4.6	7.0	40	13	3.9	1.7	1.6	1.5	4.9	1.8
23	3.9	4.1	4.7	7.1	34	13	4.5	1.7	1.3	1.3	4.0	1.7
24	3.9	4.4	4.8	7.0	35	13	4.5	1.6	1.1	1.2	3.4	1.7
25	4.2	4.5	4.4	7.0	42	12	4.2	1.3	0.97	4.6	2.9	1.7
26	4.2	4.5	4.7	7.1	49	12	4.0	1.1	0.86	3.2	2.5	1.7
27	4.4	4.4	5.2	7.1	69	12	3.8	0.96	0.76	2.3	2.3	1.7
28	4.5	4.4	5.0	6.9	47	12	3.7	1.00	0.70	1.7	2.2	3.8
29	4.5	4.6	4.9	7.1	---	12	3.0	2.3	0.82	1.6	2.0	2.7
30	4.5	4.9	4.6	6.9	---	13	3.0	2.0	1.5	1.4	1.9	18
31	4.5	---	6.3	6.7	---	17	---	1.00	---	1.5	1.7	---
Total	118.1	133.8	149.7	228.1	523.6	571	233.0	156.06	62.83	62.14	1,013.21	68.42
Mean	3.81	4.46	4.83	7.36	18.7	18.4	7.77	5.03	2.09	2.00	32.7	2.28
Max	5.3	5.7	6.3	20	69	40	14	51	10	12	744	18
Min	2.8	3.8	4.4	5.2	6.3	12	3.0	0.96	0.70	0.34	0.48	0.96
Ac-ft	234	265	297	452	1,040	1,130	462	310	125	123	2,010	136

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 2013², BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	29.2	26.9	26.2	31.4	39.2	47.0	78.8	91.9	113	30.8	22.9	27.8
Max	279	213	92.4	86.0	117	165	1,218	468	1,006	271	301	123
(WY)	(1987)	(1987)	(1992)	(1993)	(1998)	(1998)	(1997)	(1977)	(1995)	(2010)	(1968)	(2003)
Min	0.87	2.21	3.59	4.90	10.9	8.15	6.10	2.61	0.44	0.13	0.20	0.22
(WY)	(2012)	(2012)	(1984)	(2012)	(1967)	(1972)	(1971)	(1971)	(2011)	(2011)	(2012)	(2011)

07300000 Salt Fork Red River near Wellington, TX—Continued

SUMMARY STATISTICS

	Calendar Year 2012	Water Year 2013	Water Years 1967 - 2013 ^Z
Annual total	4,202.74	3,319.96	
Annual mean	11.5	9.10	47.0
Highest annual mean			165 1997
Lowest annual mean			9.10 2013
Highest daily mean	230 Sep 29	744 Aug 16	17,500 Apr 3, 1997
Lowest daily mean	0.04 Sep 3	0.34 Jul 13	0.04 Sep 3, 2012
Annual seven-day minimum	0.06 Aug 29	0.61 Jul 7	0.05 Jul 30, 2011
Maximum peak flow		2,270 Aug 16	81,100 Apr 3, 1997
Maximum peak stage		6.67 Aug 16	17.10 Apr 3, 1997
Annual runoff (ac-ft)	8,340	6,590	34,040
10 percent exceeds	26	14	67
50 percent exceeds	4.6	4.4	16
90 percent exceeds	0.16	1.1	3.4

^Z Period of regulated streamflow.

