

Water-Data Report 2011

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 fair except those for estimated daily discharges, which are poor. 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, 0.1 ft³/s June 19, 1952.

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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	2.2	10	7.5	20	e25	27	21	6.1	0.89	0.18	0.05	0.13
2	2.3	9.0	8.4	e24	e25	25	20	6.5	0.90	0.20	0.06	0.15
3	2.4	7.9	8.7	42	e25	22	18	6.2	0.97	0.17	0.05	0.19
4	2.3	6.8	8.3	49	e25	24	17	5.4	0.84	0.16	0.05	0.24
5	2.3	6.0	7.8	48	25	24	15	5.1	0.77	0.16	0.05	0.24
6	2.9	6.1	6.8	63	59	24	15	5.0	0.74	0.16	0.06	0.24
7	3.8	6.5	7.1	62	44	24	15	4.6	0.72	0.17	0.16	0.26
8	4.0	6.9	7.5	54	48	30	14	4.2	0.60	0.17	0.19	0.24
9	3.7	6.9	7.9	49	46	29	14	3.7	0.48	0.16	0.27	0.22
10	3.8	6.5	8.2	48	60	25	12	3.6	0.59	0.15	0.37	0.21
11	3.9	6.6	8.8	32	50	22	11	4.7	0.79	0.17	0.40	0.21
12	4.0	18	8.7	32	66	21	11	4.9	0.46	0.40	0.39	0.19
13	3.6	23	8.8	34	77	22	11	3.2	0.39	0.18	0.41	0.21
14	3.5	16	8.8	40	52	22	10	3.1	0.30	0.14	0.40	0.21
15	3.8	14	10	44	43	22	9.2	3.3	0.37	0.11	0.38	0.32
16	3.9	13	11	41	42	21	8.7	3.3	0.37	0.10	0.33	0.25
17	4.6	13	10	37	36	20	8.9	3.6	0.27	0.10	0.37	0.24
18	4.9	12	10	37	29	19	9.0	3.6	0.31	0.10	0.30	0.21
19	4.9	12	11	31	26	19	8.2	3.3	0.23	0.09	0.24	0.21
20	5.0	12	13	26	26	19	7.8	4.7	0.17	0.09	0.18	0.20
21	7.5	11	15	27	28	19	8.0	3.7	0.20	0.10	0.14	0.21
22	138	10	12	26	27	19	8.1	2.6	0.22	0.09	0.09	0.24
23	62	8.3	12	24	28	18	8.1	2.0	0.21	0.08	0.09	0.23
24	36	8.3	13	22	29	17	7.9	1.7	0.18	0.09	0.12	0.22
25	25	8.7	13	22	32	17	8.7	1.5	0.17	0.07	0.12	0.22
26	17	7.8	12	22	31	17	9.8	1.6	0.19	0.07	0.15	0.23
27	16	8.5	13	22	30	17	9.8	1.4	0.21	0.05	0.15	0.23
28	15	8.9	15	24	30	18	8.4	1.2	0.26	0.05	0.13	0.21
29	13	8.1	18	24	---	19	7.2	0.97	0.19	0.06	0.19	0.21
30	12	7.8	21	24	---	20	6.2	0.84	0.17	0.06	0.18	0.23
31	11	---	19	25	---	21	---	0.82	---	0.06	0.15	---
Total	424.3	299.6	341.3	1,075	1,064	663	338.0	106.43	13.16	3.94	6.22	6.60
Mean	13.7	9.99	11.0	34.7	38.0	21.4	11.3	3.43	0.44	0.13	0.20	0.22
Max	138	23	21	63	77	30	21	6.5	0.97	0.40	0.41	0.32
Min	2.2	6.0	6.8	20	25	17	6.2	0.82	0.17	0.05	0.05	0.13
Ac-ft	842	594	677	2,130	2,110	1,320	670	211	26	7.8	12	13

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 2011², BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	30.4	27.9	27.2	32.5	40.3	47.8	81.6	95.4	117	32.1	23.2	28.7
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	3.81	5.85	3.59	6.97	10.9	8.15	6.10	2.61	0.44	0.13	0.20	0.22
(WY)	(2002)	(2006)	(1984)	(2008)	(1967)	(1972)	(1971)	(1971)	(2011)	(2011)	(2011)	(2011)

07300000 Salt Fork Red River near Wellington, TX—Continued**SUMMARY STATISTICS**

	Calendar Year 2010	Water Year 2011			Water Years 1967 - 2011^Z	
Annual total	19,559.0		4,341.55			
Annual mean	53.6		11.9		48.6	
Highest annual mean					165	1997
Lowest annual mean					10.5	1971
Highest daily mean	2,890	Jul 7	138	Oct 22	17,500	Apr 3, 1997
Lowest daily mean	1.7	Sep 8	0.05	Jul 27	0.05	Jul 27, 2011
Annual seven-day minimum	2.3	Sep 27	0.05	Jul 30	0.05	Jul 30, 2011
Maximum peak flow			462	Oct 22	81,100	Apr 3, 1997
Maximum peak stage			4.15	Oct 22	17.10	Apr 3, 1997
Annual runoff (ac-ft)	38,800		8,610		35,230	
10 percent exceeds	90		30		69	
50 percent exceeds	19		6.9		17	
90 percent exceeds	3.7		0.16		3.7	

^Z Period of regulated streamflow.

