



Water-Data Report 2008

**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 mi<sup>2</sup> of which 209 mi<sup>2</sup> probably is noncontributing.

**SURFACE-WATER RECORDS**

PERIOD OF RECORD.--June 1952 to current year. Water-quality records: 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. 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 the period Feb. 16-17, which are fair, and 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.

AVERAGE DISCHARGE FOR PERIOD PRIOR TO REGULATION.--14 years (water years 1953-1966) prior to completion of Greenbelt Lake, 72.6 ft<sup>3</sup>/s (52,600 acre-ft/yr).

EXTREMES FOR PERIOD PRIOR TO REGULATION.--WATER YEARS 1953-1966: Maximum discharge, 146,000 ft<sup>3</sup>/s May 16, 1957 (gage height, 19.00 ft), from rating curve extended above 11,000 ft<sup>3</sup>/s on basis of slope-area measurement of 63,400 ft<sup>3</sup>/s; minimum, 0.1 ft<sup>3</sup>/s June 19, 1952.

## 07300000 Salt Fork Red River near Wellington, TX—Continued

**DISCHARGE, CUBIC FEET PER SECOND**  
**WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**  
**DAILY MEAN VALUES**  
[*e*, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	4.3	6.0	11	9.7	7.3	27	17	15	6.8	3.4	3.3	3.2
2	4.6	6.2	12	e6.3	8.0	25	18	13	5.5	3.1	3.1	3.2
3	4.9	6.3	11	5.1	8.6	21	21	13	4.9	3.2	2.9	3.2
4	5.7	6.6	11	7.6	8.5	20	20	13	4.6	3.1	2.7	3.1
5	5.8	6.8	11	7.2	8.2	21	18	14	4.3	2.8	2.6	3.2
6	5.8	6.5	11	6.7	6.9	21	17	16	4.3	2.6	2.4	3.2
7	5.7	6.6	11	6.4	7.0	21	16	81	4.3	2.5	2.7	2.9
8	5.6	7.0	11	6.7	6.9	22	16	194	4.1	3.0	3.6	4.3
9	5.7	7.3	15	6.8	6.9	24	31	93	6.3	5.0	2.8	4.3
10	5.8	8.1	16	7.4	7.2	25	113	62	6.2	4.5	2.7	4.1
11	6.4	8.6	69	6.6	7.2	26	53	38	4.5	3.5	2.9	86
12	95	8.8	49	6.5	7.3	24	39	28	4.1	3.4	2.6	418
13	28	8.4	23	6.1	7.1	22	32	24	4.0	19	2.5	48
14	15	8.2	13	5.9	6.6	21	28	22	4.3	13	3.0	10
15	11	7.6	14	6.1	6.2	21	24	25	4.2	7.3	6.4	4.3
16	9.7	7.8	11	6.8	99	20	22	25	4.0	6.7	14	2.8
17	8.5	8.3	10	e4.5	104	59	22	23	3.8	5.5	17	2.1
18	7.3	8.7	11	e5.2	66	78	23	22	3.8	5.1	135	1.7
19	6.5	8.8	11	e6.7	52	59	24	18	70	5.0	136	1.5
20	6.2	8.8	9.4	e7.0	43	42	21	14	7.4	4.5	45	1.4
21	6.0	8.5	8.7	e9.4	41	33	19	13	5.5	4.2	21	1.3
22	5.9	8.5	7.8	e8.9	40	29	17	11	4.5	4.0	13	1.1
23	5.9	9.3	5.8	e5.8	36	28	18	9.4	3.4	3.7	7.5	1.0
24	5.7	11	7.2	e7.5	33	28	48	8.7	3.1	3.5	5.2	0.88
25	5.7	12	8.3	e7.3	33	26	64	8.4	3.0	3.4	4.2	0.82
26	6.0	11	8.5	9.4	26	25	44	50	3.0	3.2	3.5	0.76
27	5.8	11	8.3	8.6	25	25	30	39	2.9	3.3	3.2	0.71
28	5.8	10	6.5	7.8	27	21	23	19	11	3.8	2.9	0.66
29	6.0	9.8	9.0	7.1	28	19	20	14	5.0	4.3	3.8	0.63
30	6.1	10	e10	6.4	---	20	18	11	3.9	3.6	3.9	0.62
31	6.1	---	12	6.7	---	19	---	8.9	---	3.4	3.8	---
<b>Total</b>	312.5	252.5	432.5	216.2	762.9	872	876	945.4	206.7	146.6	465.2	618.98
<b>Mean</b>	10.1	8.42	14.0	6.97	26.3	28.1	29.2	30.5	6.89	4.73	15.0	20.6
<b>Max</b>	95	12	69	9.7	104	78	113	194	70	19	136	418
<b>Min</b>	4.3	6.0	5.8	4.5	6.2	19	16	8.4	2.9	2.5	2.4	0.62
<b>Ac-ft</b>	620	501	858	429	1,510	1,730	1,740	1,880	410	291	923	1,230

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 2008<sup>2</sup>, BY WATER YEAR (WY)**

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Mean</b>	30.6	28.9	27.9	32.8	39.8	49.1	84.8	99.5	125	27.9	24.6	30.6
<b>Max</b>	279	213	92.4	86.0	117	165	1,218	468	1,006	155	301	123
(WY)	(1987)	(1987)	(1992)	(1993)	(1998)	(1998)	(1997)	(1977)	(1995)	(1993)	(1968)	(2003)
<b>Min</b>	3.81	5.85	3.59	6.97	10.9	8.15	6.10	2.61	5.62	2.65	1.68	2.22
(WY)	(2002)	(2006)	(1984)	(2008)	(1967)	(1972)	(1971)	(1971)	(2006)	(1970)	(1970)	(1984)

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

	<b>Calendar Year 2007</b>	<b>Water Year 2008</b>	<b>Water Years 1967 - 2008<sup>Z</sup></b>
<b>Annual total</b>	17,418.58	6,107.48	
<b>Annual mean</b>	47.7	16.7	50.0
<b>Highest annual mean</b>			165
<b>Lowest annual mean</b>			10.5
<b>Highest daily mean</b>	630	Mar 23	17,500
<b>Lowest daily mean</b>	0.28	Jun 26	0.28
<b>Annual seven-day minimum</b>	1.0	Jun 22	0.71
<b>Maximum peak flow</b>		1,070	81,100
<b>Maximum peak stage</b>		5.00	17.10
<b>Annual runoff (ac-ft)</b>	34,550	12,110	36,230
<b>10 percent exceeds</b>	112	33	71
<b>50 percent exceeds</b>	16	7.8	17
<b>90 percent exceeds</b>	3.5	3.1	3.8

<sup>Z</sup> Period of regulated streamflow.

