Water-Data Report 2008

# 08019000 Lake Fork Creek near Quitman, TX

Sabine Basin
Lake Fork Subbasin

LOCATION.--Lat 32°45′47″, long 95°27′46″ referenced to North American Datum of 1927, Wood County, TX, Hydrologic Unit 12010003, at downstream side of highway embankment near left end of bridge on State Highway 37, 0.3 mi downstream from Dry Creek, 2.4 mi south of Quitman, and 23.4 mi upstream from mouth.

DRAINAGE AREA.--585 $mi^2$.

## SURFACE-WATER RECORDS

PERIOD OF RECORD.--July 1924 to Apr. 1926, Feb. 1939 to current year. Discharge from some high-water periods in 1925-26 published in WSP 1342. Monthly discharge only for some periods, published in WSP 1312. Prior to Oct. 1961, published as "Lake Fork Sabine River near Quitman". Water-quality records: Chemical data: Dec. 1961 to Aug. 1989. Radiochemical data: Feb. to June 1981. Specific Conductance: Oct. 1988 to Sept. 1989. Water Temperature: Oct. 1988 to Sept. 1989.

REVISED RECORDS.--WSP 1732: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 317.42 ft above NGVD of 1929. From June 27, 1924, to Apr. 30, 1926, a nonrecording gage was located at site 1,000 ft downstream at same datum. Prior to Sept. 5, 1978, nonrecording gage at present site and datum. Satellite telemeter at station.

REMARKS.--Records good. Since water year 1980, at least 10% of contributing drainage area has been regulated. Lake Fork Reservoir controls runoff from 490 $mi^2$ above this station. The city of Quitman discharges wastewater effluent into a tributary above this station. No flow at times.

AVERAGE DISCHARGE FOR PERIOD PRIOR TO REGULATION.--41 years (water years 1925, 1940-1979), prior to regulation by Lake Fork Reservoir, 432 $ft^3/s$ (313,000 acre-ft/yr).

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in July 1895 reached a stage of about 25.9 ft, from information by local resident.

EXTREMES FOR PERIOD PRIOR TO REGULATION.--WATER YEARS, 1925, 1940-1979: Maximum discharge, 75,600 $ft^3/s$, Mar. 30, 1945, gage height, 29.85 ft, from floodmark, from rating curve extended above 49,000 $ft^3/s$; no flow at times.

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

| Day | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 35 | 25 | 18 | 32 | 112 | 37 | 2,340 | 26 | 18 | 64 | 25 | 27 |
| 2 | 32 | 24 | 18 | 27 | 71 | 37 | 2,640 | 24 | 16 | 35 | 25 | 27 |
| 3 | 31 | 24 | 18 | 26 | 53 | 153 | 2,640 | 22 | 15 | 37 | 25 | 29 |
| 4 | 31 | 24 | 16 | 25 | 48 | 551 | 2,760 | 20 | 14 | 38 | 25 | 29 |
| 5 | 30 | 24 | 15 | 24 | 44 | 1,040 | 2,940 | 18 | 13 | 36 | 25 | 28 |
| 6 | 29 | 27 | 15 | 23 | 42 | 1,140 | 2,770 | 18 | 13 | 33 | 25 | 27 |
| 7 | 29 | 27 | 15 | 24 | 36 | 1,960 | 2,620 | 21 | 15 | 34 | 26 | 26 |
| 8 | 29 | 20 | 15 | 26 | 32 | 3,620 | 1,300 | 33 | 14 | 37 | 29 | 26 |
| 9 | 28 | 16 | 15 | 50 | 29 | 3,840 | 348 | 28 | 13 | 31 | 36 | 42 |
| 10 | 28 | 15 | 16 | 39 | 26 | 3,840 | 455 | 22 | 60 | 29 | 28 | 63 |
| 11 | 27 | 15 | 18 | 33 | 25 | 3,900 | 2,730 | 19 | 53 | 28 | 40 | 36 |
| 12 | 27 | 15 | 38 | 28 | 84 | 3,680 | 3,540 | 18 | 24 | 28 | 83 | 29 |
| 13 | 26 | 15 | 61 | 26 | 234 | 2,310 | 3,520 | 15 | 16 | 28 | 43 | 48 |
| 14 | 24 | 15 | 46 | 23 | 151 | 1,450 | 3,370 | 36 | 19 | 51 | 29 | 1,160 |
| 15 | 38 | 15 | 101 | 23 | 88 | 1,290 | 1,560 | 210 | 38 | 39 | 31 | 1,720 |
| 16 | 65 | 15 | 135 | 22 | 115 | 1,140 | 287 | 275 | 20 | 30 | 35 | 336 |
| 17 | 38 | 16 | 52 | 22 | 891 | 993 | 81 | 235 | 53 | 28 | 30 | 59 |
| 18 | 32 | 16 | 36 | 23 | 3,490 | 957 | 83 | 123 | 1,760 | 28 | 28 | 38 |
| 19 | 29 | 16 | 30 | 20 | 4,100 | 3,110 | 85 | 68 | 3,500 | 28 | 29 | 35 |
| 20 | 27 | 17 | 28 | 19 | 3,800 | 6,810 | 53 | 49 | 1,590 | 29 | 33 | 33 |
| 21 | 25 | 17 | 26 | 19 | 2,730 | 4,870 | 42 | 38 | 279 | 29 | 42 | 32 |
| 22 | 27 | 17 | 24 | 20 | 2,150 | 3,640 | 36 | 29 | 54 | 27 | 36 | 32 |
| 23 | 35 | 17 | 30 | 23 | 1,070 | 2,560 | 33 | 24 | 29 | 26 | 31 | 31 |
| 24 | 34 | 18 | 23 | 22 | 231 | 2,070 | 57 | 21 | 24 | 27 | 38 | 31 |
| 25 | 29 | 30 | 19 | 26 | 86 | 1,970 | 71 | 20 | 21 | 27 | 30 | 31 |
| 26 | 27 | 31 | 37 | 102 | 61 | 1,370 | 49 | 18 | 20 | 26 | 29 | 31 |
| 27 | 27 | 23 | 119 | 82 | 51 | 298 | 52 | 27 | 19 | 26 | 28 | 30 |
| 28 | 26 | 20 | 78 | 54 | 42 | 90 | 54 | 55 | 18 | 26 | 28 | 30 |
| 29 | 26 | 19 | 59 | 49 | 39 | 64 | 41 | 33 | 40 | 25 | 27 | 30 |
| 30 | 26 | 18 | 45 | 56 | --- | 92 | 32 | 24 | 149 | 25 | 27 | 30 |
| 31 | 26 | --- | 38 | 60 | --- | 787 | --- | 20 | --- | 25 | 27 | --- |
| Total | 943 | 591 | 1,204 | 1,048 | 19,931 | 59,669 | 36,589 | 1,589 | 7,917 | 980 | 993 | 4,126 |
| Mean | 30.4 | 19.7 | 38.8 | 33.8 | 687 | 1,925 | 1,220 | 51.3 | 264 | 31.6 | 32.0 | 138 |
| Max | 65 | 31 | 135 | 102 | 4,100 | 6,810 | 3,540 | 275 | 3,500 | 64 | 83 | 1,720 |
| Min | 24 | 15 | 15 | 19 | 25 | 37 | 32 | 15 | 13 | 25 | 25 | 26 |
| Ac-ft | 1,870 | 1,170 | 2,390 | 2,080 | 39,530 | 118,400 | 72,570 | 3,150 | 15,700 | 1,940 | 1,970 | 8,180 |

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 2008 [Z], BY WATER YEAR (WY)**

| | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mean | 134 | 266 | 645 | 446 | 816 | 839 | 478 | 519 | 363 | 250 | 81.8 | 53.0 |
| Max | 1,068 | 1,552 | 3,668 | 1,786 | 3,198 | 3,811 | 1,991 | 2,807 | 2,771 | 1,795 | 940 | 194 |
| (WY) | (1999) | (1989) | (2002) | (1998) | (2001) | (2001) | (1990) | (1990) | (2000) | (1994) | (1992) | (2007) |
| Min | 1.23 | 2.92 | 9.31 | 4.43 | 14.1 | 25.3 | 4.29 | 8.79 | 8.51 | 1.43 | 0.13 | 0.76 |
| (WY) | (1983) | (1981) | (1982) | (1981) | (2006) | (1996) | (1981) | (2006) | (1984) | (1985) | (1980) | (1982) |

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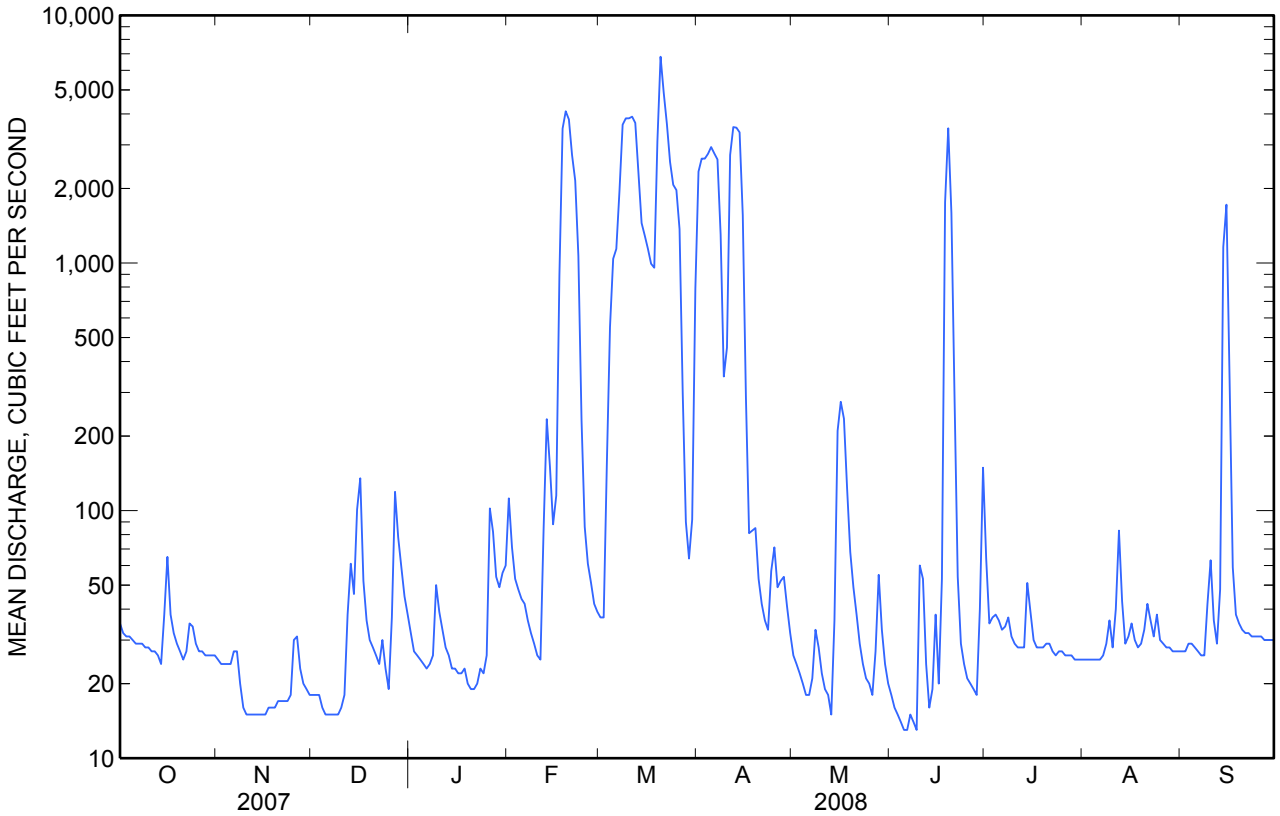
**SUMMARY STATISTICS**

| | Calendar Year 2007 | | Water Year 2008 | | Water Years 1980 - 2008 [Z] | |
|---|---|---|---|---|---|---|
| **Annual total** | 71,942 | | 135,580 | | | |
| **Annual mean** | 197 | | 370 | | 406 | |
| **Highest annual mean** | | | | | 1,006 | 1992 |
| **Lowest annual mean** | | | | | 27.7 | 2006 |
| **Highest daily mean** | 5,370 | Jul 6 | 6,810 | Mar 20 | 26,300 | Dec 17, 2001 |
| **Lowest daily mean** | 15 | Nov 10 | 13 | Jun 5 | 0.00 | Aug 23, 1980 |
| **Annual seven-day minimum** | 15 | Nov 10 | 14 | Jun 3 | 0.00 | Aug 23, 1980 |
| **Maximum peak flow** | | | 7,300 | Mar 20 | 27,300 | Dec 17, 2001 |
| **Maximum peak stage** | | | 18.48 | Mar 20 | 22.35 | Dec 17, 2001 |
| **Annual runoff (ac-ft)** | 142,700 | | 268,900 | | 294,100 | |
| **10 percent exceeds** | 171 | | 1,390 | | 1,160 | |
| **50 percent exceeds** | 47 | | 30 | | 47 | |
| **90 percent exceeds** | 23 | | 18 | | 8.0 | |

[Z] Period of regulated streamflow.