

08072730 Bear Creek near Barker, TX

San Jacinto Basin
Buffalo-San Jacinto Subbasin

LOCATION.--Lat 29°49'50", long 95°41'12" referenced to North American Datum of 1927, Harris County, TX, Hydrologic Unit 12040104, on right bank at upstream side of bridge on Clay Road, 2.5 mi west of State Highway 6, and 4.1 mi upstream from mouth of Langham Creek.

DRAINAGE AREA.--21.5 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--July 1977 to current year.

PERIOD OF RECORD, Water-Quality.--

CHEMICAL DATA: June 1978 to Aug. 1981.

BIOCHEMICAL DATA: June 1978 to Aug. 1981.

REVISED RECORDS.--WDR TX-88-2: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is NAVD 1988, 2001 adjustment. Prior to Oct. 1, 2008, datum of gage was 100.00 ft above NGVD of 1929 (98.07 ft above current datum). From Mar. 1, 1984 to Mar. 12, 1985, gage located at temporary site 1,100 ft downstream at datum 100.00 ft above NGVD of 1929. Satellite telemeter at station.

REMARKS.--Records fair except those for estimated daily discharge, which are poor. No known regulation. Channel was rectified in 1981 and 1987 water years. Considerable diversions and return of irrigation water from area above station. No flow at times. Some records listed in the "Period of Record" for surface water and water quality may not be available electronically.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 800 ft³/s and (or) maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|--------|------|-----------------------------------|---------------------|
| Mar 14 | 1300 | *515 | *103.91 |

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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 | 2.5 | 3.0 | 3.5 | e4.7 | 6.3 | 2.4 | 2.6 | 2.9 | 3.5 | 3.3 | 1.6 | 2.2 |
| 2 | 2.5 | 6.5 | 3.3 | e3.8 | 3.2 | 2.5 | 2.6 | 2.9 | 4.0 | 3.1 | 1.7 | 2.4 |
| 3 | 2.6 | 11 | 3.3 | e3.0 | 3.0 | 2.6 | 3.2 | 2.8 | 3.4 | 2.9 | 1.7 | 2.0 |
| 4 | 2.8 | 5.7 | 3.1 | 56 | 3.2 | 2.6 | 3.1 | 2.7 | 3.8 | 2.7 | 2.0 | 1.9 |
| 5 | 2.6 | 3.4 | 3.3 | 78 | 3.0 | 2.9 | 2.7 | 2.8 | 3.8 | 3.0 | 1.9 | 1.9 |
| 6 | 2.6 | 3.1 | 3.3 | e6.9 | 2.6 | 2.9 | 2.7 | 2.8 | 3.5 | 2.6 | 1.8 | 2.1 |
| 7 | 2.6 | 3.1 | 3.2 | e3.2 | 2.6 | 2.8 | 2.8 | 2.8 | 3.8 | 2.5 | 1.8 | 2.1 |
| 8 | 2.5 | 2.9 | 3.5 | 3.2 | 2.5 | 2.9 | 2.9 | 3.0 | 3.9 | 2.3 | 2.0 | 2.1 |
| 9 | 2.5 | 3.0 | 3.9 | 85 | 5.2 | 2.7 | 2.9 | 3.3 | 3.5 | 2.3 | 2.0 | 2.6 |
| 10 | 2.6 | 3.0 | 3.3 | 9.5 | 3.4 | 2.6 | 2.9 | 3.1 | 3.7 | 2.6 | 2.2 | 2.2 |
| 11 | 2.6 | 3.5 | 3.3 | 4.3 | 2.5 | 2.5 | 3.1 | 3.3 | 3.7 | 2.6 | 2.1 | 2.7 |
| 12 | 2.4 | 3.5 | 3.1 | 3.6 | 2.2 | 2.8 | 2.8 | 20 | 3.8 | 2.6 | 2.1 | 2.7 |
| 13 | 2.6 | 4.3 | 3.3 | 3.5 | 2.3 | 2.8 | 2.7 | 15 | 3.7 | 2.3 | 2.2 | 2.4 |
| 14 | 2.6 | 4.1 | 3.2 | 3.2 | 2.4 | 95 | 2.7 | 3.8 | 3.6 | 2.5 | 2.3 | 2.5 |
| 15 | 2.7 | 12 | 3.2 | 3.1 | 2.3 | 7.0 | 2.6 | 3.1 | 3.5 | 2.3 | 2.6 | 2.3 |
| 16 | 2.7 | 4.1 | 3.2 | 23 | 2.2 | 3.5 | 2.4 | 3.2 | 3.5 | 2.5 | 2.3 | 2.3 |
| 17 | 2.9 | 3.3 | 3.2 | e87 | 2.2 | 3.0 | 2.6 | 2.6 | 3.4 | 2.4 | 2.4 | 11 |
| 18 | 2.8 | 3.1 | 3.2 | e3.4 | 2.1 | 2.7 | 2.7 | 3.2 | 3.4 | 2.5 | 2.3 | 51 |
| 19 | 2.6 | 3.1 | 3.3 | 3.2 | 2.1 | 2.6 | 2.8 | 3.3 | 3.3 | 2.8 | 2.3 | 77 |
| 20 | 4.2 | 3.2 | 3.3 | 2.9 | 2.5 | 2.6 | 2.6 | 3.4 | 3.3 | 2.8 | 2.3 | 8.0 |
| 21 | 4.3 | 3.3 | 3.4 | 2.8 | 2.5 | 2.6 | 2.7 | 3.4 | 3.4 | 2.2 | 2.7 | 5.2 |
| 22 | 3.8 | 3.4 | 3.5 | 2.5 | 2.5 | 2.6 | 2.8 | 3.3 | 98 | 2.6 | 3.2 | 4.8 |
| 23 | 2.9 | 3.3 | 3.5 | 2.6 | 2.4 | 2.5 | 2.9 | 3.2 | 24 | 2.3 | 2.6 | 4.2 |
| 24 | 3.0 | 3.3 | 26 | 82 | 2.5 | 2.4 | 2.9 | 3.1 | 8.4 | 2.1 | 2.4 | 3.8 |
| 25 | 3.0 | 3.5 | 27 | 11 | 2.1 | 2.5 | 2.9 | 3.5 | 4.6 | 8.6 | 16 | 3.9 |
| 26 | 2.8 | 7.1 | 3.8 | 3.5 | 2.2 | 2.5 | 3.0 | 3.0 | 4.3 | 15 | 2.8 | 4.2 |
| 27 | 2.7 | 5.1 | 3.3 | 2.7 | 2.7 | 2.6 | 2.8 | 3.6 | 3.9 | 2.2 | 1.9 | 4.0 |
| 28 | 2.6 | 3.6 | 3.3 | 2.5 | 2.5 | 2.6 | 2.5 | 3.0 | 3.3 | 1.7 | 1.8 | 4.0 |
| 29 | 2.4 | 6.6 | 57 | 2.4 | --- | 2.4 | 2.7 | 2.9 | 3.9 | 1.9 | 2.2 | 43 |
| 30 | 2.6 | 5.5 | 16 | 2.8 | --- | 3.4 | 2.8 | 3.0 | 3.2 | 2.0 | 2.5 | 30 |
| 31 | 2.8 | --- | e5.7 | 2.8 | --- | 2.7 | --- | 3.4 | --- | 1.9 | 2.1 | --- |
| Total | 86.8 | 133.6 | 218.5 | 508.1 | 77.2 | 180.2 | 83.4 | 125.4 | 229.1 | 95.1 | 81.8 | 290.5 |
| Mean | 2.80 | 4.45 | 7.05 | 16.4 | 2.76 | 5.81 | 2.78 | 4.05 | 7.64 | 3.07 | 2.64 | 9.68 |
| Max | 4.3 | 12 | 57 | 87 | 6.3 | 95 | 3.2 | 20 | 98 | 15 | 16 | 77 |
| Min | 2.4 | 2.9 | 3.1 | 2.4 | 2.1 | 2.4 | 2.4 | 2.6 | 3.2 | 1.7 | 1.6 | 1.9 |
| Ac-ft | 172 | 265 | 433 | 1,010 | 153 | 357 | 165 | 249 | 454 | 189 | 162 | 576 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 2011, BY WATER YEAR (WY)

| | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
|-------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Mean | 33.3 | 36.1 | 22.6 | 23.6 | 25.0 | 18.2 | 24.7 | 31.1 | 32.5 | 19.0 | 13.6 | 22.5 |
| Max | 257 | 250 | 131 | 91.0 | 127 | 106 | 247 | 237 | 159 | 160 | 65.2 | 128 |
| (WY) | (1999) | (1999) | (1992) | (1979) | (2005) | (2001) | (2009) | (2004) | (2004) | (2007) | (2002) | (1979) |
| Min | 0.01 | 0.03 | 0.10 | 0.75 | 0.61 | 0.26 | 0.03 | 0.51 | 0.89 | 0.64 | 0.70 | 0.10 |
| (WY) | (1989) | (1989) | (1990) | (1986) | (1988) | (1982) | (1987) | (1996) | (1998) | (1998) | (2000) | (1990) |

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SUMMARY STATISTICS

| | Calendar Year 2010 | | Water Year 2011 | | Water Years 1977 - 2011 | |
|---------------------------------|--------------------|--------|-----------------|--------|-------------------------|--------------|
| Annual total | 5,405.0 | | 2,109.7 | | | |
| Annual mean | 14.8 | | 5.78 | | 25.2 | |
| Highest annual mean | | | | | 60.5 | 2004 |
| Lowest annual mean | | | | | 4.45 | 1988 |
| Highest daily mean | 465 | Jul 2 | 98 | Jun 22 | 4,110 | Apr 28, 2009 |
| Lowest daily mean | 1.5 | Aug 4 | 1.6 | Aug 1 | 0.00 | Nov 20, 1977 |
| Annual seven-day minimum | 1.8 | Jul 31 | 1.8 | Jul 28 | 0.00 | Mar 16, 1978 |
| Maximum peak flow | | | 515 | Mar 14 | 20,400 | Apr 28, 2009 |
| Maximum peak stage | | | 103.91 | Mar 14 | 114.06 | Apr 28, 2009 |
| Annual runoff (ac-ft) | 10,720 | | 4,180 | | 18,280 | |
| 10 percent exceeds | 28 | | 5.7 | | 57 | |
| 50 percent exceeds | 3.4 | | 2.9 | | 2.7 | |
| 90 percent exceeds | 2.2 | | 2.2 | | 0.13 | |

