

Water-Data Report 2013

08041000 Neches River at Evadale, TX

Neches Basin
Lower Neches Subbasin

LOCATION.--Lat 30°21'20", long 94°05'35" referenced to North American Datum of 1927, Jasper County, TX, Hydrologic Unit 12020003, near right bank of low water channel at downstream side of bridge on U.S. Highway 96 at Evadale, 0.8 mi upstream from Mill Creek, 16 mi upstream from Village Creek, and at mile 55.6.

DRAINAGE AREA.--7,951 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--July 1904 to Dec. 1906, Apr. 1921 to current year. Monthly discharge only for some periods, published in WSP 1312.

PERIOD OF RECORD, Water-Quality.--

CHEMICAL DATA: Sept. 1939 to July 2006.

BIOCHEMICAL DATA: Sept. 1939 to Aug. 1994.

PESTICIDE DATA: Feb. 1968 to July 1981.

SEDIMENT DATA: Oct. 1960 to Aug. 1994.

REVISED RECORDS.--WSP 718: 1929. WSP 1342: 1905-07, 1924. WSP 1732: Drainage area at former site.

GAGE.--Water-stage recorder. Datum of gage is 8.25 ft above NGVD of 1929. July 1, 1904, to Dec. 31, 1906, nonrecording gage on Gulf, Colorado, and Santa Fe Railway Co. bridge at site 1.2 mi downstream at datum 5.50 ft lower; Apr. 1, 1921, to Dec. 7, 1948, nonrecording gages at site 1.2 mi downstream at present datum; Dec. 8, 1948, to Nov. 8, 1963, water-stage recorder at site 1.2 mi downstream at present datum. Satellite telemeter at station.

REMARKS.--Records good. Since water year 1951, at least 10% of contributing drainage area has been regulated. There are some diversions upstream for municipal use. 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.--31 years (water years 1905-1906, 1922-1950) 7,089 ft³/s (5,136,000 acre-ft/yr).

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in May 1884 reached a stage of 26.2 ft, at former site (discharge, about 125,000 ft³/s), and flood in Aug. 1915 reached a stage of 24.5 ft, at former site (discharge, about 102,000 ft³/s). These are the highest floods since at least 1884. Stages furnished by Gulf, Colorado, and Santa Fe Railway Co.

EXTREMES FOR PERIOD PRIOR TO REGULATION.--WATER YEARS, 1905-1906, 1922-1950: Maximum discharge, 92,100 ft³/s May 11, 1944 (gage height, 23.58 ft, from floodmark), at site then in use; minimum daily, 148 ft³/s Sept. 10, 1925.

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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	2,180	1,930	1,240	1,770	1,930	1,550	1,620	1,510	1,690	1,770	1,930	1,730
2	2,140	1,840	1,250	1,800	2,170	1,770	1,610	1,540	1,710	1,770	1,830	1,790
3	2,340	1,600	1,220	1,830	1,910	1,840	1,710	1,830	1,750	1,770	1,900	1,800
4	2,990	1,560	1,230	1,770	1,810	1,830	1,830	2,140	2,250	1,770	1,920	1,810
5	2,960	1,550	1,250	1,730	1,810	1,830	2,330	1,880	2,330	1,740	1,920	1,830
6	3,070	1,540	1,230	1,750	1,810	1,820	2,600	1,620	2,980	1,640	1,910	1,810
7	3,190	1,530	1,220	1,780	1,850	1,780	2,590	1,600	4,250	1,600	1,910	1,710
8	2,980	1,520	1,230	2,040	1,830	1,760	2,550	1,570	4,470	1,580	1,920	1,330
9	2,550	1,510	1,250	3,350	1,820	1,760	2,280	1,450	5,060	1,580	1,920	1,180
10	2,510	1,490	1,360	4,740	1,770	1,800	2,450	2,320	5,010	1,570	1,920	1,180
11	2,520	1,480	1,400	5,890	1,780	1,840	3,140	4,880	4,170	1,490	1,980	1,150
12	2,340	1,500	1,370	3,960	2,540	1,820	5,450	6,300	3,510	1,530	1,940	1,160
13	1,690	1,500	1,640	2,670	3,690	1,830	6,060	5,380	3,260	1,870	1,900	1,160
14	1,440	1,490	1,740	2,680	4,820	1,880	5,270	3,670	3,280	1,920	1,930	1,160
15	1,200	1,450	1,770	3,360	5,580	1,960	3,680	2,480	3,060	2,010	2,030	1,120
16	1,070	1,250	1,750	3,440	5,780	2,240	3,020	1,980	2,380	2,230	2,120	1,150
17	1,250	1,100	1,590	3,360	5,510	2,340	2,810	1,770	2,300	2,510	2,120	1,170
18	1,860	1,020	1,720	3,270	5,260	2,380	2,550	1,830	2,190	2,880	2,080	1,120
19	2,100	999	1,290	3,220	5,790	2,310	2,190	1,910	1,890	2,720	1,990	1,110
20	2,400	996	1,000	3,180	5,790	1,750	1,890	1,900	1,530	2,140	1,950	1,500
21	2,210	1,090	898	3,150	4,140	1,520	1,790	1,870	1,450	1,990	1,760	2,260
22	1,680	1,140	836	3,120	2,800	1,510	1,800	1,930	1,560	1,920	1,710	3,910
23	1,540	1,150	831	3,090	2,310	1,510	1,780	2,210	1,740	1,840	1,700	2,570
24	1,520	1,140	854	2,910	2,080	1,490	1,820	2,370	1,760	1,860	1,690	1,840
25	1,510	1,020	857	2,410	1,830	1,490	1,860	2,330	1,730	1,850	1,780	1,720
26	1,490	991	947	1,980	1,680	1,480	1,870	1,910	1,600	1,840	1,830	1,690
27	1,520	1,020	1,610	1,860	1,570	1,500	1,790	1,750	1,560	1,860	1,750	1,660
28	1,730	1,190	1,770	1,840	1,530	1,530	1,600	1,770	1,550	1,940	1,820	1,620
29	1,860	1,250	1,690	1,820	---	1,570	1,540	1,730	1,600	1,950	1,930	1,670
30	1,900	1,260	1,670	1,840	---	1,580	1,530	1,700	1,740	1,940	1,760	1,730
31	1,920	---	1,610	1,800	---	1,600	---	1,690	---	1,940	1,720	---
Total	63,660	40,106	41,323	83,410	83,190	54,870	75,010	70,820	75,360	59,020	58,570	48,640
Mean	2,054	1,337	1,333	2,691	2,971	1,770	2,500	2,285	2,512	1,904	1,889	1,621
Max	3,190	1,930	1,770	5,890	5,790	2,380	6,060	6,300	5,060	2,880	2,120	3,910
Min	1,070	991	831	1,730	1,530	1,480	1,530	1,450	1,450	1,490	1,690	1,110
Ac-ft	126,300	79,550	81,960	165,400	165,000	108,800	148,800	140,500	149,500	117,100	116,200	96,480

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 2013 ², BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	2,684	3,315	5,032	7,103	8,314	9,353	8,477	8,520	5,997	4,397	2,858	2,555
Max	15,780	16,580	20,420	31,060	22,720	28,790	21,440	46,790	19,920	25,680	11,860	7,090
(WY)	(1995)	(1958)	(2005)	(1961)	(1995)	(1992)	(1995)	(1953)	(1991)	(1989)	(2007)	(1979)
Min	169	110	143	159	394	484	654	827	919	863	358	194
(WY)	(1955)	(1957)	(1957)	(1957)	(1957)	(2011)	(2011)	(2011)	(2011)	(1955)	(1951)	(1956)

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SUMMARY STATISTICS

	Calendar Year 2012		Water Year 2013		Water Years 1951 - 2013 ^Z	
Annual total	1,219,120		753,979			
Annual mean	3,331		2,066		5,704	
Highest annual mean					13,480	1995
Lowest annual mean					852	2011
Highest daily mean	25,400	Mar 23	6,300	May 12	80,000	May 24, 1953
Lowest daily mean	467	Jan 8	831	Dec 23	63	Nov 26, 1956
Annual seven-day minimum	634	Jan 4	889	Dec 20	66	Nov 23, 1956
Maximum peak flow			6,400	May 12	80,300	May 24, 1953
Maximum peak stage			10.96	May 12	22.53	May 24, 1953
Annual runoff (ac-ft)	2,418,000		1,496,000		4,133,000	
10 percent exceeds	7,180		3,180		15,900	
50 percent exceeds	2,120		1,810		3,170	
90 percent exceeds	1,080		1,230		750	

^Z Period of regulated streamflow.

