Water-Data Report 2012

08028500 Sabine River near Bon Wier, TX

Sabine Basin
Lower Sabine Subbasin

LOCATION.--Lat 30°44′49″, long 93°36′30″ referenced to North American Datum of 1927, Newton County, TX, Hydrologic Unit 12010005, near left bank on downstream side of bridge on U.S. Highway 190, 0.7 mi upstream from Quicksand Creek, 0.8 mi upstream from Gulf, Colorado, and Santa Fe Railway Co. bridge, 2.0 mi east of Bon Wier, 2.4 mi upstream from Caney Creek and at mile 97.7.

DRAINAGE AREA.--8,229 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Oct. 1923 to current year. Monthly discharge only for some periods, published in WSP 1312. Gage-height records collected in this vicinity since 1913 are contained in reports of the National Weather Service.

REVISED RECORDS.--WSP 1342: 1953. WSP 1442: 1924, 1926-27(M), 1929(M), 1939. WSP 1732: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 33.42 ft above NGVD of 1929. Prior to July 8, 1931, nonrecording gage at site 0.8 mi downstream at datum 13.00 ft higher. July 8, 1931, to Oct. 15, 1958, nonrecording gage at present site at datum 13.00 ft higher. Oct. 16, 1958, to Sept. 30, 1975, water-stage recorder at present site at datum 13.00 ft higher. Oct. 1, 1975, to Dec. 31, 1988, at present site at datum 10.00 ft higher. Satellite telemeter at station.

REMARKS.--Records good. Since water year 1961, at least 10% of contributing drainage area has been regulated. 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.--37 years (water years 1924-1960) 7,155 ft^3/s (5,184,000 acre-ft/yr).

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1833, 43.5 ft Apr. 23 or 24, 1913, from information by Gulf, Colorado, and Santa Fe Railway Co. and local residents. Flood in May 1884 reached a stage of 39 ft. Floods occurring about 1844 and 1860 were higher than flood in May 1884, from information by local residents. All flood data referenced to current datum.

EXTREMES FOR PERIOD PRIOR TO REGULATION.--WATER YEARS, 1924-1960: Maximum discharge, 115,000 ft^3/s, May 19, 1953, gage height, 38.70 ft, current datum; minimum, 160 ft^3/s, Sept. 29, 1956.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	757	777	912	635	1,440	1,330	16,900	2,530	3,810	829	1,160	979
2	757	781	869	564	1,760	1,280	16,700	3,970	3,810	646	935	1,250
3	760	786	802	517	2,020	1,510	16,600	3,900	3,130	821	1,150	985
4	761	784	801	590	6,510	2,280	17,100	4,300	1,760	640	895	1,190
5	763	780	903	699	9,930	2,070	17,700	4,330	2,190	815	1,120	873
6	766	785	1,230	697	8,640	1,490	17,600	2,640	3,690	635	868	1,070
7	767	790	1,340	692	6,860	1,270	16,900	1,240	3,850	840	1,100	759
8	769	796	1,260	691	5,280	1,200	16,400	2,540	3,870	697	837	1,000
9	768	837	1,080	725	3,430	3,790	16,200	4,100	3,930	1,010	1,090	658
10	767	814	950	1,170	2,280	10,300	16,000	4,200	3,420	1,220	899	1,010
11	765	796	878	4,340	1,800	7,840	15,900	4,290	1,970	2,720	1,100	736
12	757	790	842	4,030	1,580	7,240	12,400	4,740	2,310	1,890	853	971
13	751	791	818	2,880	1,480	8,930	9,130	3,140	3,880	1,910	1,070	717
14	743	788	809	1,750	1,520	6,890	5,230	1,380	4,110	5,830	817	997
15	742	807	799	1,340	1,790	5,150	2,050	2,570	4,270	4,910	1,050	749
16	743	854	800	1,190	6,200	3,230	2,780	4,160	2,450	3,030	800	1,000
17	742	829	784	1,130	8,270	2,330	6,640	4,230	1,030	2,170	1,040	696
18	745	788	775	1,120	7,280	1,890	4,960	4,220	789	1,650	809	1,040
19	757	789	773	1,450	11,900	1,640	3,210	4,180	714	2,820	1,150	686
20	757	803	860	1,530	11,000	1,970	2,250	2,440	716	3,940	885	1,060
21	754	798	1,070	1,230	8,340	26,600	3,740	1,060	710	3,590	1,080	804
22	760	833	1,630	1,130	6,280	42,400	7,500	2,310	666	2,360	813	996
23	764	875	1,880	1,080	3,880	48,900	5,790	3,830	612	1,240	1,050	726
24	769	886	2,000	1,030	2,620	45,900	3,470	3,910	577	1,050	825	977
25	760	887	1,720	1,120	2,070	37,200	2,190	3,910	546	953	1,100	699
26	754	925	1,550	2,820	1,720	28,400	1,720	3,920	520	895	842	955
27	759	954	2,010	5,510	1,540	21,600	2,640	2,260	501	853	1,090	685
28	790	1,020	1,810	4,230	1,430	18,400	2,730	907	481	818	832	952
29	781	990	1,260	2,700	1,370	17,300	1,450	711	468	787	1,050	730
30	777	982	925	1,780	---	17,100	1,260	2,040	605	754	791	1,110
31	774	---	741	1,460	---	17,200	---	3,690	---	871	1,110	---
Total	23,579	25,115	34,881	51,830	130,220	394,630	265,140	97,648	61,385	53,194	30,211	27,060
Mean	761	837	1,125	1,672	4,490	12,730	8,838	3,150	2,046	1,716	975	902
Max	790	1,020	2,010	5,510	11,900	48,900	17,700	4,740	4,270	5,830	1,160	1,250
Min	742	777	741	517	1,370	1,200	1,260	711	468	635	791	658
Ac-ft	46,770	49,820	69,190	102,800	258,300	782,700	525,900	193,700	121,800	105,500	59,920	53,670

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 2012 [Z], BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	1,916	3,375	6,844	9,413	10,650	11,630	9,272	8,160	5,774	4,895	3,608	3,432
Max	8,948	29,220	21,420	30,930	31,390	46,850	27,370	31,210	26,340	31,490	7,921	12,310
(WY)	(2002)	(2010)	(1983)	(1974)	(1999)	(2001)	(1969)	(1966)	(1989)	(1989)	(2007)	(2001)
Min	188	217	820	988	746	1,159	634	876	663	530	211	206
(WY)	(1968)	(1968)	(2008)	(2008)	(1968)	(2011)	(1971)	(2011)	(1970)	(1964)	(1967)	(1967)

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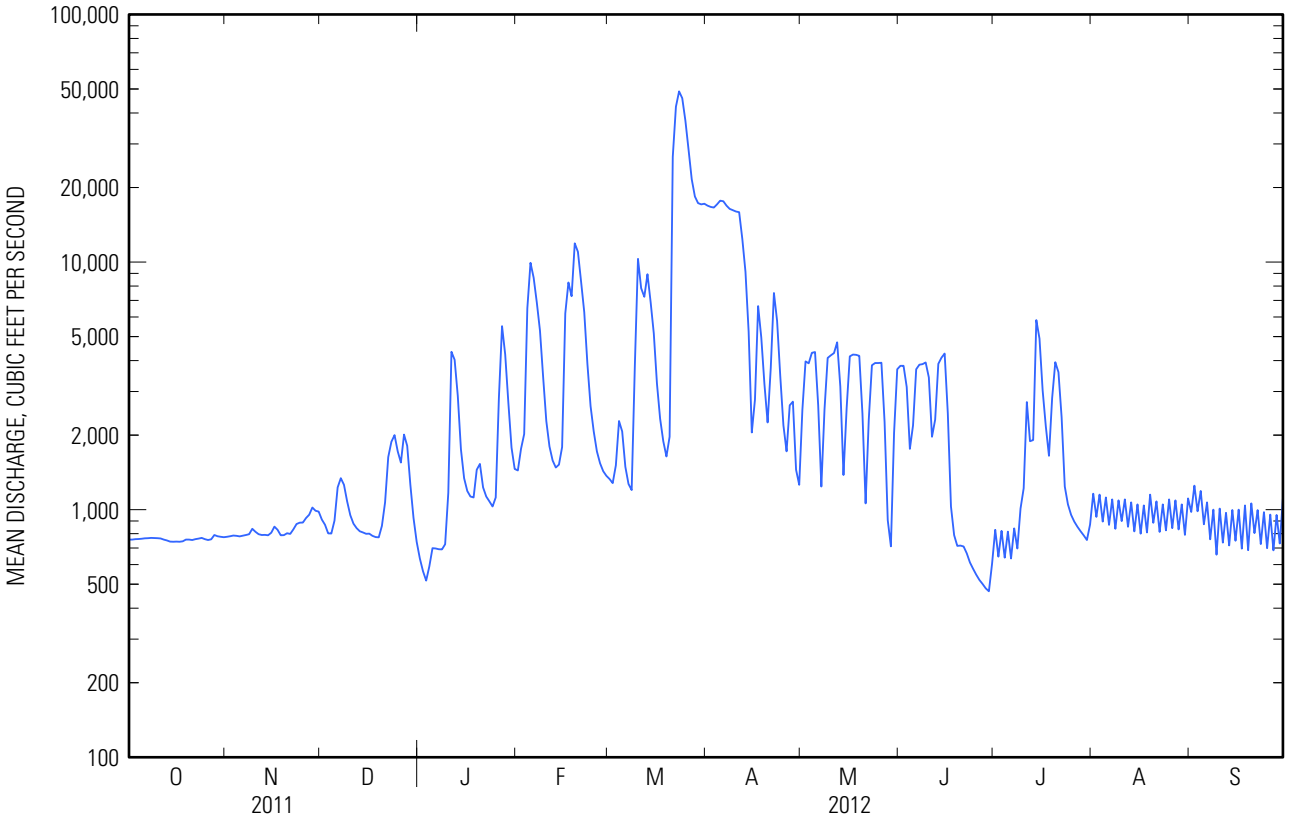
SUMMARY STATISTICS

	Calendar Year 2011		Water Year 2012		Water Years 1961 - 2012 [z]	
Annual total	349,605		1,194,893			
Annual mean	958		3,265		6,562	
Highest annual mean					12,670	1975
Lowest annual mean					928	2011
Highest daily mean	4,260	Feb 20	48,900	Mar 23	98,000	Jul 4, 1989
Lowest daily mean	538	Jun 20	468	Jun 29	134	Nov 9, 1966
Annual seven-day minimum	688	Aug 5	528	Jun 24	142	Nov 3, 1966
Maximum peak flow			49,600	Mar 23	98,200	Jul 4, 1989
Maximum peak stage			34.82	Mar 23	37.90	Jul 4, 1989
Annual runoff (ac-ft)	693,400		2,370,000		4,754,000	
10 percent exceeds	1,370		7,000		16,900	
50 percent exceeds	884		1,120		3,450	
90 percent exceeds	608		742		716	

[z] Period of regulated streamflow.



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WATER-QUALITY RECORDS

PERIOD OF RECORD.--
CHEMICAL DATA: Oct. 1969 to current year.
BIOCHEMICAL DATA: Oct. 1969 to May 1973.
SEDIMENT DATA: Apr. 1957 to Sept. 1962.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Nov. 1969 to June 1983.
WATER TEMPERATURE: Nov. 1969 to June 1983.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 407 microsiemens/cm, Aug. 31, 1978; minimum daily, 33 microsiemens/cm, Dec. 14, 2001.
WATER TEMPERATURE: Maximum daily, 33.0°C, July 17, 1978, and July 14, 26, 1980; minimum daily, 4.0°C, Feb. 2, 1980.

WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

[ft³/s, cubic feet per second; mg/L, milligrams per liter; °C, degrees Celsius; µS/cm, microsiemens per centimeter]

Date	Sample start time	Medium name	Sample type	Discharge, instantaneous, ft³/s (00061)	Specific conductance, water, unfiltered, µS/cm at 25°C (00095)	Temperature, water, °C (00010)	Chloride, water, filtered, mg/L (00940)	Sulfate, water, filtered, mg/L (00945)
10-02-2011	**1850**	Surface water	Regular	753	--	24.0	17.9	37.3
10-16-2011	**1858**	Surface water	Regular	739	--	24.0	18.1	41.2
10-29-2011	**1815**	Surface water	Regular	777	--	19.0	17.8	41.2
11-12-2011	**1739**	Surface water	Regular	791	--	19.0	17.6	44.0
11-26-2011	**1046**	Surface water	Regular	911	--	20.0	17.6	67.5
12-10-2011	**1710**	Surface water	Regular	931	--	12.0	15.7	79.4
12-24-2011	**1041**	Surface water	Regular	2,030	--	13.0	11.4	66.5
01-08-2012	**1736**	Surface water	Regular	693	--	18.0	16.5	64.6
01-21-2012	**1735**	Surface water	Regular	1,220	--	19.0	9.96	32.1
02-04-2012	**1607**	Surface water	Regular	7,110	--	19.0	5.17	12.8
02-19-2012	**1345**	Surface water	Regular	12,500	--	15.0	3.11	6.90
02-25-2012	**1135**	Surface water	Regular	2,070	118	18.0	6.71	21.8
03-10-2012	**1747**	Surface water	Regular	10,500	85	15.0	6.09	13.2
03-24-2012	**1826**	Surface water	Regular	43,000	105	20.0	10.1	13.5
04-06-2012	**1848**	Surface water	Regular	17,400	249	31.0	15.8	45.3
04-08-2012	**2000**	Surface water	Regular	16,200	176	31.0	17.6	22.5
04-13-2012	**1820**	Surface water	Regular	8,800	221	31.0	17.2	34.2
04-21-2012	**1116**	Surface water	Regular	3,240	175	29.0	8.06	30.7
04-25-2012	**1909**	Surface water	Regular	1,960	218	28.0	16.9	35.1
04-28-2012	**1923**	Surface water	Regular	1,990	169	28.0	14.6	24.2
05-05-2012	**1626**	Surface water	Regular	4,970	190	27.0	18.1	25.9
05-22-2012	**2015**	Surface water	Regular	3,870	179	--	16.5	23.3
06-03-2012	**1832**	Surface water	Regular	3,260	200	--	19.2	27.7
06-16-2012	**1712**	Surface water	Regular	1,730	262	--	17.6	49.5
06-30-2012	**2004**	Surface water	Regular	880	256	--	15.2	45.0
07-07-2012	**1947**	Surface water	Regular	684	207	29.0	17.4	30.0
07-21-2012	**1755**	Surface water	Regular	3,990	181	29.0	17.5	24.8
08-19-2012	**1925**	Surface water	Regular	952	219	29.0	17.2	34.0