Water-Data Report 2012

08210000 Nueces River near Three Rivers, TX

Nueces Basin
Lower Nueces Subbasin

LOCATION.--Lat 28°25′38″, long 98°10′40″ referenced to North American Datum of 1927, Live Oak County, TX, Hydrologic Unit 12110111, on right bank at U.S. Highway 281, 1.0 mi downstream from Frio River, 2.2 mi south of Three Rivers, and at mile 100.2.

DRAINAGE AREA.--15,427 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--July 1915 to current year. Monthly discharge only for Nov. 1919 to Jan. 1920, published in WSP 1312.

PERIOD OF RECORD, Water-Quality.--
CHEMICAL DATA: Aug. 1941 to Sept. 1952, May 1965 to Jan. 2010.
BIOCHEMICAL DATA: May 1965 to Jan. 2010.
BIOLOGICAL DATA: Oct. 1974 to Sept. 1981.
PESTICIDE DATA: Jan. 1968 to May 1982, Oct. 1996 to Jan. 2010.
SEDIMENT DATA: Oct. 1941 to Aug. 1945, Mar. 1951 to Sept. 1952, Oct. 1974 to Aug. 1994.

REVISED RECORDS.--WSP 548: 1920-21. WSP 1562: 1916, 1918-21, 1922(M), 1923, 1929. WDR TX-83-3: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 99.26 ft above NGVD of 1929. Prior to Apr. 5, 1932, nonrecording gage at railroad bridge 0.8 mi upstream at datum 1.87 ft higher. Apr. 5, 1932 to Aug. 9, 1983, water-stage recorder at site 0.8 mi upstream at datum 1.87 ft higher. Satellite telemeter at station.

REMARKS.--Records fair. Since Mar. 1948, at least 10% of contributing drainage area has been regulated. Part of the flow of the Nueces and Frio Rivers and their headwater tributaries enters the Edwards and associated limestones in the Balcones Fault Zone that crosses the basin upstream from U.S. Highway 90. Some loss of flow into various permeable formations also occurs downstream from the Balcones Fault Zone. Flow of the Atascosa River at Whitsett (station 08208000) is supplemented during dry periods by discharge from the Campbellton water wells. There are many small diversions for irrigation and for municipal supply above this station. No flow at times. Some records listed in the "Period of Record" for surface water may not be available electronically.

AVERAGE DISCHARGE FOR PERIOD PRIOR TO REGULATION.--33 years (water years 1916-48) 945 ft^3/s (684,500 acre-ft/yr).

EXTREMES FOR PERIOD PRIOR TO REGULATION.--WATER YEARS 1916-1948: Maximum discharge, 85,000 ft^3/s, Sept. 18, 1919, gage height, 46.0 ft, site and datum then in use; no flow at times.

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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	30	48	29	30	30	34	902	27	87	27	24	223
2	30	35	29	29	30	30	193	28	71	29	24	227
3	30	34	30	29	31	30	101	27	61	27	24	227
4	30	32	30	29	30	29	71	27	52	27	24	233
5	30	30	30	29	30	29	54	27	46	24	24	286
6	30	30	29	29	30	28	45	27	42	24	24	290
7	30	30	29	29	30	27	40	25	39	24	24	290
8	29	30	29	29	30	27	36	39	36	26	24	290
9	36	29	29	29	30	29	34	63	33	27	24	289
10	55	29	30	28	30	29	32	55	32	73	24	289
11	304	28	30	28	29	30	32	1,410	30	43	24	290
12	249	29	30	29	28	30	31	1,210	28	46	24	294
13	94	29	30	28	30	30	30	1,870	28	30	23	293
14	60	27	30	28	32	30	30	2,290	28	41	24	295
15	46	27	30	28	31	29	30	834	28	35	23	295
16	39	28	30	28	30	29	31	643	28	31	24	453
17	35	27	29	29	30	29	31	794	28	28	24	544
18	31	27	29	28	30	26	29	745	28	27	24	161
19	31	27	30	28	30	27	33	662	26	29	24	128
20	94	27	30	29	30	33	39	664	27	27	25	170
21	479	27	29	29	48	33	34	677	28	26	95	74
22	584	28	30	29	56	300	31	702	28	35	244	52
23	605	26	30	29	42	221	31	720	28	34	89	44
24	374	26	65	29	36	86	29	722	26	32	167	39
25	158	27	90	30	33	56	28	661	26	27	178	35
26	99	28	54	29	30	43	28	491	27	26	175	34
27	75	29	41	30	30	36	28	305	26	25	174	41
28	59	29	36	30	30	36	28	228	27	24	172	165
29	51	29	34	30	31	264	28	185	27	24	170	288
30	45	28	31	30	---	1,520	28	146	26	24	169	335
31	45	---	30	30	---	2,150	---	111	---	24	174	---
Total	3,887	880	1,062	898	937	5,330	2,117	16,415	1,047	946	2,286	6,674
Mean	125	29.3	34.3	29.0	32.3	172	70.6	530	34.9	30.5	73.7	222
Max	605	48	90	30	56	2,150	902	2,290	87	73	244	544
Min	29	26	29	28	28	26	28	25	26	24	23	34
Ac-ft	7,710	1,750	2,110	1,780	1,860	10,570	4,200	32,560	2,080	1,880	4,530	13,240

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 2012, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	1,091	514	230	295	334	236	452	962	1,114	1,026	582	1,359
Max	13,810	4,944	1,801	4,833	7,868	2,285	5,082	8,645	8,451	16,010	10,550	23,650
(WY)	(1972)	(1977)	(1977)	(1958)	(1958)	(1949)	(1977)	(1957)	(1987)	(2002)	(1971)	(1967)
Min	0.54	0.03	0.63	3.61	5.80	6.21	4.30	1.85	8.72	3.05	0.03	1.28
(WY)	(1963)	(1951)	(1951)	(1967)	(1951)	(1963)	(1984)	(1971)	(1967)	(1967)	(1962)	(1984)

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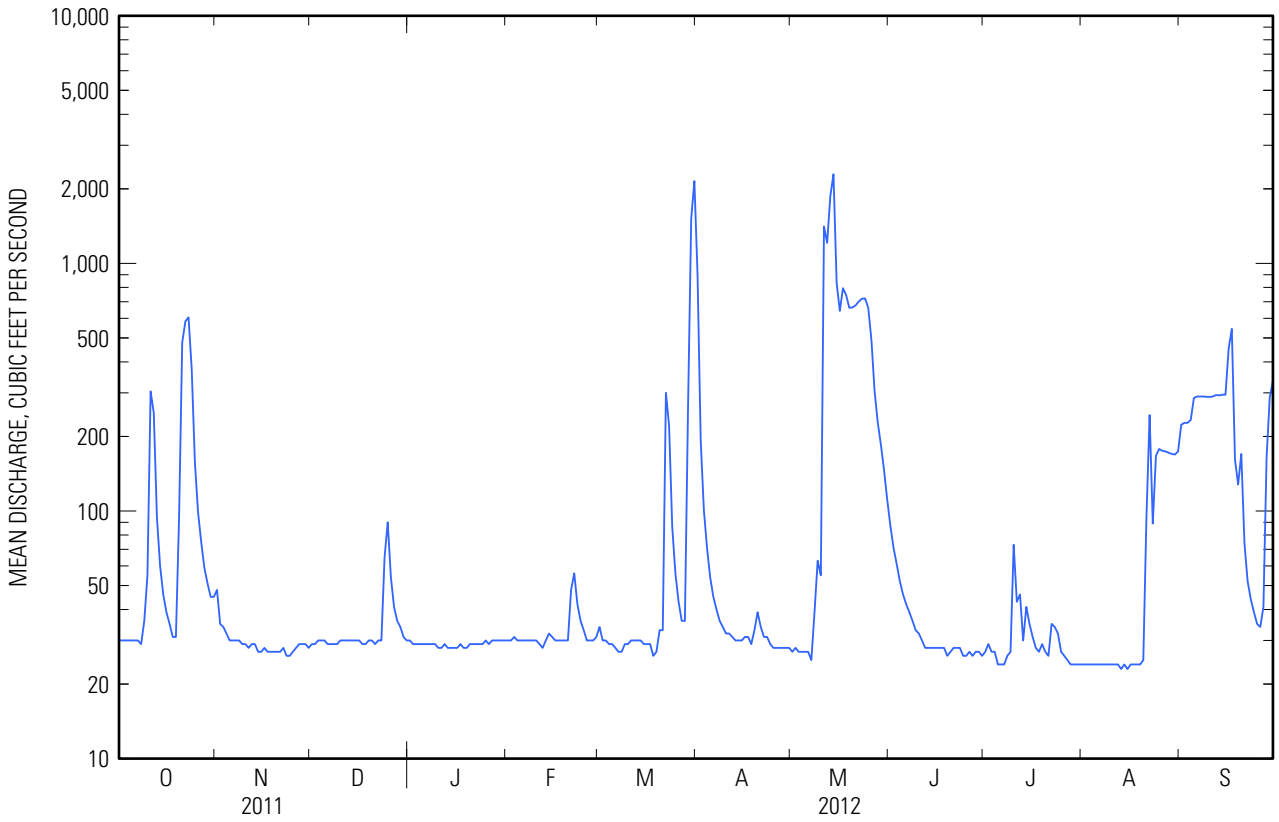
SUMMARY STATISTICS

	Calendar Year 2011		Water Year 2012		Water Years 1949 - 2012	
Annual total	16,793		42,479			
Annual mean	46.0		116		684	
Highest annual mean					2,764	2002
Lowest annual mean					34.7	2009
Highest daily mean	605	Oct 23	2,290	May 14	128,000	Sep 23, 1967
Lowest daily mean	26	May 4	23	Aug 13	0.00	Aug 25, 1950
Annual seven-day minimum	27	Apr 28	24	Aug 9	0.00	Aug 28, 1950
Maximum peak flow			2,590	May 14	141,000	Sep 23, 1967
Maximum peak stage			14.98	May 14	49.21	Sep 23, 1967
Annual runoff (ac-ft)	33,310		84,260		495,400	
10 percent exceeds	60		290		1,370	
50 percent exceeds	31		30		83	
90 percent exceeds	28		26		7.9	

[z] HIGHLIGHT, COPY, AND PASTE THIS FOOTNOTE SYMBOL IN THE TABLE AND THEN CLEAN UP THIS LINE Period of regulated streamflow.#STATISTICS OF MONTHLY;;#SUMMARY STATISTICS;;