

Water-Data Report 2011

07343500 White Oak Creek near Talco, TX

Big Cypress-Sulphur Basin
White Oak Bayou Subbasin

LOCATION.--Lat 33°19'20", long 95°05'33" referenced to North American Datum of 1927, Titus County, TX, Hydrologic Unit 11140303, near center of main channel at downstream side of bridge on U.S. Highway 271, 0.8 mi downstream from Lewis Creek, 2.4 mi upstream from Ripley Creek, 2.7 mi south of Talco, and 38.4 mi upstream from mouth.

DRAINAGE AREA.--494 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Dec. 1949 to current year.

PERIOD OF RECORD, Water-Quality.--

CHEMICAL DATA: Oct. 1967 to Sept. 1998, Feb. 2005 to Sept. 2007.

BIOCHEMICAL DATA: Oct. 1967 to Sept. 1973, Nov. 1982 to Sept. 1985, Oct. 1991 to Sept. 1998, Feb. 2005 to Sept. 2007.

RADIOCHEMICAL DATA: Feb. to June 1981, Feb. 2005 to Aug. 2007.

PERIOD OF DAILY RECORD, Water-Quality.--

SPECIFIC CONDUCTANCE: Oct. 1967 to Sept. 1989.

WATER TEMPERATURE: Oct. 1967 to Sept. 1989.

REVISED RECORDS.--WSP 1711: Elevation of historical maximum.

GAGE.--Water-stage recorder. Datum of gage is 286.45 ft above NGVD of 1929. Satellite telemeter at station.

REMARKS.--Records good. Some records listed in the Period of Record for surface water and water quality may not be available electronically. Since water year 1973, at least 10% of contributing drainage area has been regulated. There are several small diversions upstream from station for municipal supply. The cities of Sulphur Springs and Mount Vernon discharge wastewater effluent into tributaries above this station. No flow at times.

AVERAGE DISCHARGE FOR PERIOD PRIOR TO REGULATION.--22 years (water years 1951-1972) prior to regulation by Lake Sulphur Springs, 405 ft³/s (293,400 acre-ft/yr).

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1870, 22.9 ft Mar. 31, 1945, from floodmarks and from information by local residents.

EXTREMES FOR PERIOD PRIOR TO REGULATION.--WATER YEARS 1951-1972: Maximum discharge 48,000 ft³/s Dec. 11, 1971 (gage height, 21.20 ft). No flow at times.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	14	13	4.1	31	3.6	146	8.3	75	12	4.8	1.4	1.1
2	10	13	6.4	38	39	145	8.7	45	11	3.9	1.3	1.3
3	7.6	16	5.9	24	292	135	8.5	76	8.9	4.2	1.1	1.6
4	6.2	15	4.1	16	338	83	8.3	91	7.3	6.1	1.1	1.6
5	5.2	69	4.4	15	166	55	11	148	7.1	4.7	1.3	1.5
6	4.6	210	6.6	11	72	44	11	152	7.1	4.2	1.3	1.3
7	4.1	215	5.5	7.1	56	39	9.4	68	11	3.2	1.3	1.2
8	3.6	80	3.5	5.4	93	38	8.8	37	12	3.7	1.2	1.1
9	3.4	27	3.1	5.2	153	39	12	26	15	3.6	1.1	1.3
10	3.2	14	2.7	4.5	129	35	14	21	15	2.8	0.97	1.3
11	3.3	6.1	2.4	3.5	87	39	13	16	12	2.6	0.90	1.1
12	3.3	5.6	2.0	3.1	62	41	11	16	8.6	2.0	0.85	1.2
13	3.6	4.1	1.8	2.8	46	34	9.2	15	7.0	1.8	0.84	1.3
14	5.0	2.9	1.7	4.1	36	30	7.8	26	6.0	2.2	0.90	1.3
15	19	1.9	1.6	7.8	31	25	8.2	114	4.9	2.4	0.91	1.3
16	20	1.4	1.7	11	28	22	9.6	58	4.4	1.9	0.88	1.3
17	15	1.2	1.7	15	24	21	15	31	3.9	1.9	0.89	1.2
18	10	0.98	1.2	75	23	18	15	21	3.5	2.1	0.95	2.0
19	7.7	0.99	1.00	125	22	16	11	16	3.3	1.8	0.90	5.6
20	6.2	1.8	0.91	91	22	15	9.1	13	3.0	1.4	0.82	4.2
21	4.9	1.7	1.2	49	21	14	9.2	15	2.9	1.5	0.84	3.6
22	3.8	0.99	1.2	31	19	14	9.0	289	3.1	1.5	1.2	3.4
23	3.5	0.79	1.1	22	19	13	7.6	646	2.8	1.4	1.7	3.3
24	38	0.72	1.1	15	20	13	6.5	559	2.8	1.3	1.4	3.2
25	190	0.75	1.2	11	55	12	34	174	4.6	1.2	1.3	3.1
26	113	1.0	1.1	8.4	206	11	972	60	20	1.1	1.4	3.7
27	64	1.0	0.97	6.7	305	10	1,190	38	15	1.3	1.3	3.0
28	70	0.95	0.92	6.6	222	9.9	1,140	26	10	1.4	1.4	1.9
29	43	2.2	2.7	6.4	---	9.7	792	21	8.3	1.1	3.1	1.5
30	26	5.3	13	4.6	---	8.7	271	17	6.3	1.4	2.2	2.3
31	18	---	22	3.9	---	8.1	---	14	---	1.5	1.4	---
Total	729.2	714.37	108.80	660.1	2,589.6	1,143.4	4,640.2	2,924	238.8	76.0	38.15	62.8
Mean	23.5	23.8	3.51	21.3	92.5	36.9	155	94.3	7.96	2.45	1.23	2.09
Max	190	215	22	125	338	146	1,190	646	20	6.1	3.1	5.6
Min	3.2	0.72	0.91	2.8	3.6	8.1	6.5	13	2.8	1.1	0.82	1.1
Ac-ft	1,450	1,420	216	1,310	5,140	2,270	9,200	5,800	474	151	76	125

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1973 - 2011², BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	397	586	824	547	789	896	669	613	428	287	90.4	77.8
Max	6,548	2,984	3,166	3,222	3,381	3,491	2,737	3,166	2,620	3,743	1,045	867
(WY)	(2010)	(1975)	(2002)	(1980)	(1997)	(1990)	(2008)	(1990)	(1981)	(1992)	(2009)	(1974)
Min	0.00	0.34	2.45	2.27	5.90	12.2	29.0	7.35	0.83	0.39	0.00	0.00
(WY)	(1979)	(1976)	(2006)	(1976)	(1996)	(1996)	(1981)	(1988)	(1988)	(1978)	(1978)	(1978)

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SUMMARY STATISTICS

	Calendar Year 2010	Water Year 2011	Water Years 1973 - 2011 ^z
Annual total	130,887.27	13,925.42	
Annual mean	359	38.2	516
Highest annual mean			1,160 1992
Lowest annual mean			38.2 2011
Highest daily mean	8,530 Feb 6	1,190 Apr 27	31,700 Jan 24, 1980
Lowest daily mean	0.72 Nov 24	0.72 Nov 24	0.00 Aug 30, 1973
Annual seven-day minimum	0.89 Nov 22	0.88 Aug 11	0.00 Jul 24, 1978
Maximum peak flow		1,210 Apr 27	34,600 Jan 24, 1980
Maximum peak stage		13.46 Apr 27	19.86 Jan 24, 1980
Annual runoff (ac-ft)	259,600	27,620	373,600
10 percent exceeds	1,080	75	1,460
50 percent exceeds	32	6.7	43
90 percent exceeds	2.7	1.2	2.0

^z Period of regulated streamflow.

