Water-Data Report 2011

07343200 Sulphur River near Talco, TX

Big Cypress-Sulphur Basin
Lower Sulphur Subbasin

LOCATION.--Lat 33°23′26″, long 95°03′44″ referenced to North American Datum of 1927, Red River County, TX, Hydrologic Unit 11140302, on downstream side of left end of bridge on County Road 2152, 1.0 mi downstream from Little Mustang Creek, 4.3 mi downstream from U.S Highway 271 and 2.8 mi northeast of Talco.

DRAINAGE AREA.--1,405 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Oct. 1956 to current year. Oct. 1997 to Sept. 2000, published as "below Talco" (station 07343210).

PERIOD OF RECORD, Water-Quality.--
CHEMICAL DATA: Mar. 1965 to Jan. 2002, Feb. 2005 to Sept. 2007.
BIOCHEMICAL DATA: Mar. 1965 to Jan. 2002, Feb. 2005 to Sept. 2007.
RADIOCHEMICAL DATA: Feb. to June 1981, Mar. 1999 to Jan. 2002, Feb. 2005 to Aug. 2007.
PESTICIDE DATA: Jan. 1968 to Sept. 1995.

PERIOD OF DAILY RECORD, Water-Qualiy.--
SPECIFIC CONDUCTANCE: Oct. 1966 to Sept. 1991.
WATER TEMPERATURE: Oct. 1966 to Sept. 1991.

REVISED RECORDS.--WDR TX-76-1: (P).

GAGE.--Water-stage recorder. Datum of gage is 275.48 ft above NGVD of 1929. Prior to May 21, 1997, at site 4.3 mi upstream at datum 15.34 ft higher. 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 Sept. 1991, at least 10% of contributing drainage area has been regulated. The River Crest Steam Electric Generating Plant diverts an unknown amount of water upstream from station. Flow may be slightly affected at times by floodwater-retarding structures. These structures control runoff in the Auds and Depot Creek drainage basins. No flow at times.

AVERAGE DISCHARGE FOR PERIOD PRIOR TO REGULATION.--35 years (water years 1957-1991) prior to regulation by Jim L. Chapman Lake (station 07342495), 1,408 ft^3/s (1,020,000 acre-ft/yr).

EXTREMES OUTSIDE PERIOD OF RECORD.--Floods in 1908 and 1914 each reached a stage of 27.5 ft, and flood in 1945 reached a stage of 26.5 ft, from information by local residents.

EXTREMES FOR PERIOD PRIOR TO REGULATION.--WATER YEARS 1957-1991: Maximum discharge, 77,000 ft^3/s, Dec. 11, 1971 (gage height, 29.40 ft); no flow at times.

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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	41	31	17	257	e120	168	8.6	364	106	16	2.6	0.02
2	36	36	21	e179	e220	115	7.1	596	87	18	4.7	0.00
3	32	40	24	e124	204	85	7.5	5,060	73	16	5.2	0.00
4	29	247	22	83	168	65	8.4	10,900	63	13	5.4	0.00
5	27	339	21	57	e125	56	8.8	6,800	59	12	5.5	0.03
6	26	228	19	41	98	51	11	2,600	53	13	4.6	0.00
7	25	144	18	30	96	42	11	976	74	11	4.2	0.00
8	24	90	16	22	e192	38	9.1	340	56	10	3.2	0.00
9	23	63	14	e18	e196	36	8.5	236	50	9.8	2.6	0.04
10	22	46	13	e15	e214	73	7.3	180	45	10	1.5	0.00
11	26	35	11	15	175	93	7.1	145	40	11	1.1	0.00
12	26	28	10	19	e126	82	5.8	261	36	9.7	0.46	0.00
13	32	24	9.9	26	93	69	28	1,510	31	8.2	0.06	0.00
14	36	25	9.3	26	84	57	36	497	29	7.1	0.35	0.00
15	33	35	9.6	24	75	48	34	248	26	7.4	1.4	0.00
16	30	38	7.9	25	66	41	33	185	24	7.2	2.1	0.00
17	27	36	7.3	83	60	37	63	148	19	7.2	2.3	0.02
18	25	31	6.1	285	54	34	58	124	15	6.4	1.9	1.2
19	23	27	5.4	241	46	32	43	106	15	6.2	2.2	3.7
20	22	27	5.1	178	41	30	31	108	15	5.1	3.1	0.63
21	21	28	5.0	e131	37	29	24	1,440	15	4.3	3.9	0.00
22	20	24	3.9	e98	33	26	19	5,250	18	3.9	3.6	0.00
23	22	21	3.9	77	29	23	15	3,520	15	4.7	1.7	0.00
24	27	17	4.7	63	35	18	13	1,830	15	4.4	1.1	0.00
25	91	16	5.8	52	375	16	108	886	14	3.8	1.1	0.00
26	130	17	4.6	45	894	15	3,310	1,860	13	3.2	0.91	0.00
27	98	15	5.5	37	407	13	5,420	599	12	3.7	1.0	0.00
28	71	13	7.7	32	247	12	3,730	288	13	3.4	0.97	0.00
29	55	15	16	27	---	10	2,020	216	13	3.2	1.1	0.51
30	44	16	223	27	---	9.5	754	166	12	3.0	0.02	3.3
31	36	---	414	27	---	8.9	---	130	---	2.6	0.00	---
Total	1,180	1,752	960.7	2,364	4,510	1,432.4	15,839.2	47,569	1,056	244.5	69.87	9.45
Mean	38.1	58.4	31.0	76.3	161	46.2	528	1,534	35.2	7.89	2.25	0.32
Max	130	339	414	285	894	168	5,420	10,900	106	18	5.5	3.7
Min	20	13	3.9	15	29	8.9	5.8	106	12	2.6	0.00	0.00
Ac-ft	2,340	3,480	1,910	4,690	8,950	2,840	31,420	94,350	2,090	485	139	19

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2011[hz], BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	1,050	1,230	1,989	1,248	1,826	2,296	1,360	1,381	641	490	214	175
Max	10,920	5,798	7,249	4,052	6,470	9,436	5,144	8,950	3,096	3,760	1,832	1,126
(WY)	(2010)	(1997)	(2002)	(1998)	(1997)	(2008)	(2002)	(2009)	(2007)	(2007)	(1992)	(2009)
Min	0.80	6.63	10.8	14.2	12.7	46.2	51.8	30.0	4.94	0.69	0.31	0.32
(WY)	(2000)	(2007)	(2006)	(2006)	(1996)	(2011)	(2003)	(2006)	(2006)	(2006)	(2006)	(2011)

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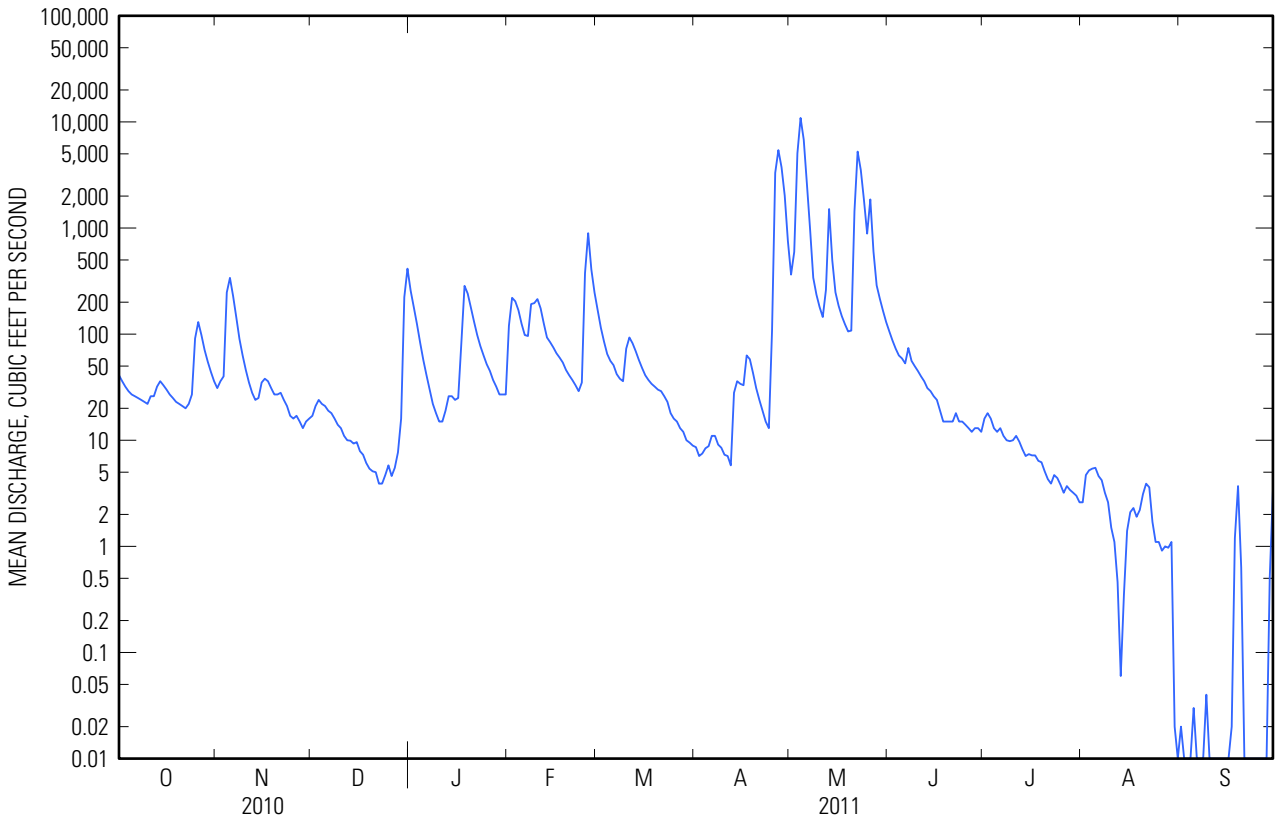
SUMMARY STATISTICS

	Calendar Year 2010		Water Year 2011		Water Years 1992 - 2011[hz]	
Annual total	323,507.7		76,987.12			
Annual mean	886		211		1,157	
Highest annual mean					2,642	2001
Lowest annual mean					107	2004
Highest daily mean	22,000	Feb 10	10,900	May 4	64,100	Dec 18, 2001
Lowest daily mean	3.9	Dec 22	0.00	Aug 31	0.00	Jul 25, 2006
Annual seven-day minimum	4.7	Dec 20	0.00	Sep 10	0.00	Jul 25, 2006
Maximum peak flow			11,900	May 4	79,800	Dec 18, 2001
Maximum peak stage			24.54	May 4	30.99	Dec 18, 2001
Annual runoff (ac-ft)	641,700		152,700		838,100	
10 percent exceeds	2,720		231		3,260	
50 percent exceeds	63		24		75	
90 percent exceeds	19		1.1		8.2	

[h] See Period of Record paragraph.
[z] Period of regulated streamflow.