

Water-Data Report 2011

08172400 Plum Creek at Lockhart, TX

Guadalupe Basin
San Marcos Subbasin

LOCATION.--Lat 29°55'22", long 97°40'44" referenced to North American Datum of 1927, Caldwell County, TX, Hydrologic Unit 12100203, on right bank 548 ft upstream from bridge on U.S. Highway 183, 2.7 mi north of Lockhart, 3.7 mi upstream from Town Creek, 5.0 mi downstream from Brushy Creek, and 30.4 mi upstream from mouth.

DRAINAGE AREA.--112 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Apr. 1959 to current year.

PERIOD OF RECORD, Water-Quality.--

CHEMICAL DATA: Apr. 1962 to June 1966.

BIOCHEMICAL DATA: Apr. 1962 to June 1966.

REVISED RECORDS.--WSP 2123: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 431.19 ft above NGVD of 1929. Apr. 30, 1959, to July 25, 1968, at site 548 ft downstream at present datum. Satellite telemeter at station.

REMARKS.--Records fair. No known diversions above station. Flow is affected at times by discharge from the flood-detention pools of 17 floodwater-retarding structures. These structures control runoff from 67.8 mi² above this station. Since 1964, at least 10% of contributing drainage area has been regulated. No flow at times. 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.--4 years (water years 1959-63), 48.2 ft³/s (34,940 acre-ft/yr).

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1905, 22 ft in June 1936 at present site; flood in 1951 reached a stage of 20 ft at present site, from information by local resident.

EXTREMES FOR PERIOD PRIOR TO REGULATION.--WATER YEARS 1959-1963: Maximum discharge, 26,600 ft³/s Oct. 29, 1960 (gage height, 20.62 ft). No flow at times.

08172400 Plum Creek at Lockhart, TX—Continued

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	9.4	0.71	1.7	5.7	8.8	3.5	2.0	0.05	1.0	0.38	0.12	0.09
2	6.9	0.92	1.6	5.0	11	2.8	1.8	0.05	0.75	0.28	0.11	0.10
3	5.4	4.6	1.3	4.0	9.5	2.5	2.1	0.36	0.56	0.49	0.16	0.09
4	4.4	3.9	0.66	4.4	7.0	2.5	2.7	0.26	0.33	0.54	0.13	0.11
5	3.8	3.2	0.49	4.5	6.3	2.4	2.7	0.41	0.09	0.60	0.08	0.03
6	2.9	3.9	0.59	2.6	6.2	2.2	1.5	0.63	0.02	0.65	0.06	0.00
7	2.6	2.5	2.8	2.1	5.4	2.8	2.3	0.36	0.00	0.63	0.09	0.00
8	2.6	4.0	25	2.3	4.7	3.2	1.9	0.02	0.01	0.77	0.17	0.02
9	2.1	4.6	17	24	5.0	2.5	1.7	0.00	0.00	0.59	0.37	0.47
10	1.6	2.8	12	74	6.5	1.6	1.5	0.01	0.00	0.43	0.54	0.82
11	0.60	2.3	8.4	37	e5.2	1.6	1.6	0.03	0.03	0.38	0.40	0.91
12	0.41	2.5	6.3	24	e3.3	1.7	1.7	0.31	0.05	1.4	0.41	0.83
13	0.45	9.2	6.0	17	4.3	2.1	0.77	4.0	0.01	1.9	0.47	0.31
14	0.26	4.1	6.2	13	4.8	1.9	0.54	7.0	0.00	1.3	2.6	0.09
15	0.31	2.8	4.8	16	5.7	2.1	0.13	1.0	0.01	0.63	3.9	0.19
16	0.21	3.0	6.9	174	5.4	1.9	0.01	0.17	0.00	0.82	3.8	0.10
17	0.21	2.0	7.0	173	5.1	2.2	0.00	0.29	0.00	0.97	3.2	0.14
18	0.50	2.1	6.5	71	3.5	2.4	0.05	0.65	0.00	1.0	2.4	2.8
19	1.2	1.5	5.9	44	3.4	2.4	0.18	1.3	0.00	1.3	0.87	3.1
20	0.67	2.5	6.1	29	3.7	2.0	0.12	2.9	0.00	2.8	0.58	2.4
21	0.74	2.0	6.3	20	4.4	2.1	0.12	16	0.00	2.0	0.35	2.2
22	1.6	3.0	9.5	13	6.5	2.4	0.49	1.4	22	1.6	0.24	0.86
23	1.6	3.5	8.2	9.3	8.2	2.5	0.57	0.96	65	1.6	0.35	0.29
24	1.3	2.3	7.6	8.3	5.9	3.0	0.43	0.79	16	2.1	0.52	0.20
25	1.7	2.3	19	8.2	5.3	2.7	0.62	0.71	9.2	1.7	0.35	0.37
26	2.5	2.0	22	7.9	4.5	3.0	0.95	0.54	4.1	1.3	0.28	0.35
27	2.6	1.7	11	8.4	3.9	2.7	0.54	0.54	1.6	2.8	0.27	0.37
28	1.1	1.5	8.0	8.3	3.8	2.8	0.09	0.53	1.9	1.3	0.25	1.0
29	0.50	2.6	6.9	7.3	---	3.2	0.00	0.34	1.8	0.06	0.11	0.72
30	0.69	3.8	7.2	7.6	---	1.9	0.04	0.65	0.85	0.05	0.11	0.79
31	0.92	---	7.2	8.3	---	1.5	---	0.65	---	0.11	0.16	---
Total	61.77	87.83	240.14	833.2	157.3	74.1	29.15	42.91	125.31	32.48	23.45	19.75
Mean	1.99	2.93	7.75	26.9	5.62	2.39	0.97	1.38	4.18	1.05	0.76	0.66
Max	9.4	9.2	25	174	11	3.5	2.7	16	65	2.8	3.9	3.1
Min	0.21	0.71	0.49	2.1	3.3	1.5	0.00	0.00	0.00	0.05	0.06	0.00
Ac-ft	123	174	476	1,650	312	147	58	85	249	64	47	39

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2011^Z, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	58.8	62.4	53.3	49.9	69.5	42.2	34.5	87.6	92.0	20.7	3.43	9.14
Max	1,526	590	605	416	815	332	343	595	905	241	118	142
(WY)	(1999)	(1986)	(1992)	(1968)	(1992)	(1992)	(1976)	(1975)	(1981)	(2007)	(1974)	(1974)
Min	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(WY)	(1964)	(1964)	(1964)	(1964)	(1989)	(1964)	(1967)	(1971)	(1971)	(1967)	(1964)	(1965)

08172400 Plum Creek at Lockhart, TX—Continued

SUMMARY STATISTICS

	Calendar Year 2010		Water Year 2011		Water Years 1964 - 2011 ^Z	
Annual total	26,544.93		1,727.39			
Annual mean	72.7		4.73		48.5	
Highest annual mean					238	1992
Lowest annual mean					0.10	1978
Highest daily mean	1,680	Jan 16	174	Jan 16	19,400	Oct 18, 1998
Lowest daily mean	0.00	Apr 29	0.00	Apr 17	0.00	Oct 1, 1963
Annual seven-day minimum	0.00	Apr 29	0.00	Jun 14	0.00	Oct 1, 1963
Maximum peak flow			405	Jan 16	47,200	Oct 18, 1998
Maximum peak stage			9.60	Jan 16	^a 23.09	Oct 18, 1998
Annual runoff (ac-ft)	52,650		3,430		35,100	
10 percent exceeds	143		8.3		68	
50 percent exceeds	6.9		1.7		1.0	
90 percent exceeds	0.00		0.09		0.00	

^Z Period of Regulated streamflow.

^a From floodmark.

