Water-Data Report TX-2005

08173000 Plum Creek near Luling, TX

Guadalupe River Basin

LOCATION.--Lat 29°41′58″, long 97°36′12″ referenced to North American Datum of 1927, Caldwell County, Hydrologic Unit 12100203, on left bank at downstream side of bridge on county road, 1.2 mi upstream from West Fork, 1.9 mi upstream from Southern Pacific Railroad Co. bridge, 2.2 mi upstream from McNeil Creek, 2.9 mi northeast of Luling, and 7.5 mi upstream from mouth.

DRAINAGE AREA.--309 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Mar. 1930 to Sept. 1993, July 2001 to current year. Water-quality records: Chemical data: Feb. 1944, Apr. 1961 to Sept. 1986. Sediment data: Nov. 1965 to June 1966. Specific conductance: Oct. 1967 to Sept. 1986. Water temperature: Oct. 1967 to Sept. 1986.

REVISED RECORDS.--WSP 1923: 1933. WSP 2123: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 321.57 ft above NGVD of 1929. Prior to Aug. 18, 1976, at datum 5.0 ft higher. Satellite telemeter at station.

REMARKS.--Records fair, except those that are estimated daily discharges, which are poor. No known diversions above station. Flow is affected at times by discharge from the flood-detention pools of 27 floodwater-retarding structures. These structures control runoff from 119 mi^2 above this station. No flow at times.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1868, that of Oct. 18, 1998; flood in 1913 reached about same stage as that of July 1, 1936, from information by local residents.

08173000 Plum Creek near Luling, TX—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES
[e, estimated]

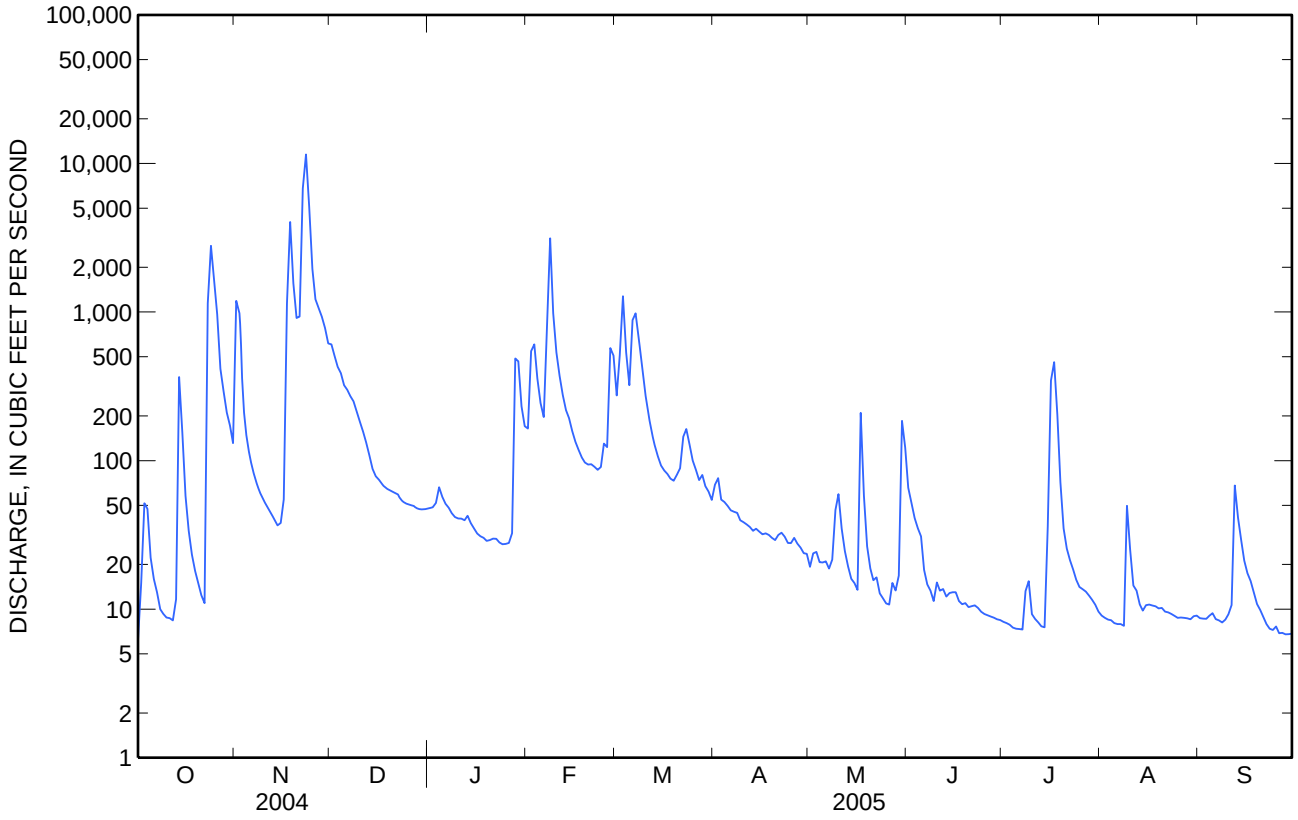
Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	6.2	1,190	e606	48	164	275	69	19	66	8.2	9.1	8.7
2	15	984	e510	49	546	512	76	24	52	8.1	8.7	8.6
3	52	297	e428	52	606	1,280	55	24	41	7.9	8.5	8.6
4	47	161	e388	66	358	535	53	21	35	7.5	8.4	9.0
5	22	116	e322	57	244	322	50	21	31	7.4	8.1	9.4
6	16	91	e300	51	197	885	46	21	18	7.4	7.9	8.6
7	13	75	e272	48	788	981	45	19	15	7.3	7.9	8.4
8	10	65	251	44	3,140	659	45	22	13	13	7.7	8.1
9	9.3	58	214	42	984	427	40	47	11	15	50	8.5
10	8.8	52	182	41	535	292	39	60	15	9.3	25	9.2
11	8.7	48	157	41	372	205	37	35	13	8.6	14	11
12	8.4	44	133	40	276	157	36	25	14	8.1	13	68
13	12	40	109	43	219	127	34	19	12	7.7	11	41
14	366	37	88	38	193	107	35	16	13	7.6	9.8	29
15	155	38	78	35	158	93	33	15	e13	36	11	21
16	58	55	74	32	134	86	32	14	e13	346	11	17
17	34	1,140	70	31	118	81	32	210	11	461	11	15
18	23	4,040	66	30	105	76	32	58	11	203	10	13
19	18	1,560	64	29	97	73	30	27	e11	72	10	11
20	15	912	62	29	94	80	29	19	10	35	10	9.9
21	12	933	61	30	94	89	32	16	10	26	9.6	8.9
22	11	e6,800	59	30	91	145	33	16	11	21	9.5	7.9
23	1,150	e11,500	55	28	87	163	31	13	10	18	9.3	7.4
24	2,790	e5,120	52	27	91	129	28	12	9.6	16	9.0	7.3
25	1,620	e1,950	51	28	130	100	28	11	9.3	14	8.8	7.7
26	965	e1,220	50	28	123	87	30	11	9.1	14	8.8	6.9
27	416	e1,060	50	32	573	74	28	15	8.9	13	8.7	6.9
28	292	e930	48	488	509	80	26	13	8.8	12	8.7	6.8
29	211	e780	47	466	---	67	24	17	8.6	12	8.6	6.8
30	172	e615	47	232	---	62	24	185	8.5	11	9.0	6.8
31	131	---	47	171	---	54	---	122	---	9.6	9.0	---
Total	8,667.4	41,911	4,941	2,406	11,026	8,303	1,132	1,147	511.8	1,442.7	351.1	396.4
Mean	280	1,397	159	77.6	394	268	37.7	37.0	17.1	46.5	11.3	13.2
Max	2,790	11,500	606	488	3,140	1,280	76	210	66	461	50	68
Min	6.2	37	47	27	87	54	24	11	8.5	7.3	7.7	6.8
Ac-ft	17,190	83,130	9,800	4,770	21,870	16,470	2,250	2,280	1,020	2,860	696	786

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 – 2005[h], BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	100	123	121	115	158	89.8	157	191	191	80.1	22.6	48.7
Max	1,280	1,397	1,969	987	2,083	828	1,110	1,922	2,389	1,962	538	485
(WY)	(1961)	(2005)	(1992)	(1991)	(1992)	(1992)	(1976)	(1975)	(1987)	(1936)	(1947)	(1957)
Min	0.00	0.00	0.60	0.80	3.61	1.04	2.55	2.21	0.29	0.00	0.00	0.00
(WY)	(1957)	(1957)	(1955)	(1957)	(1951)	(1956)	(1972)	(1964)	(1956)	(1956)	(1956)	(1956)

08173000 Plum Creek near Luling, TX—Continued

SUMMARY STATISTICS

	Calendar Year 2004		Water Year 2005		Water Years 1930 – 2005[h]	
Annual total	103,718.6		82,235.4			
Annual mean	283		225		116	
Highest annual mean					578	1992
Lowest annual mean					7.27	1956
Highest daily mean	11,500	Nov 23	11,500	Nov 23	43,800	Jul 1, 1936
Lowest daily mean	6.2	Sep 30	6.2	Oct 1	0.00	Aug 8, 1951
Annual seven-day minimum	6.6	Sep 25	7.0	Sep 24	0.00	Aug 8, 1951
Maximum peak flow			31,000	Nov 22	78,500	Jul 1, 1936
Maximum peak stage			[a]25.88	Nov 22	[a]30.70	Jul 1, 1936
Annual runoff (ac-ft)	205,700		163,100		84,270	
10 percent exceeds	513		496		131	
50 percent exceeds	22		35		9.7	
90 percent exceeds	8.7		8.6		1.7	

[h] See Period of Record paragraph.
[a] From floodmark.