



Water-Data Report 2008

08153500 Pedernales River near Johnson City, TX

Middle Colorado-Llano Basin
Pedernales Subbasin

LOCATION.--Lat 30°17'30", long 98°23'57" referenced to North American Datum of 1927, Blanco County, TX, Hydrologic Unit 12090206, near left downstream end of bridge on U.S. Highway 281, 0.2 mi downstream from Towhead Creek, 1.1 mi northeast of Johnson City, 3.4 mi downstream from Buffalo Creek, and 48.0 mi upstream from mouth.

DRAINAGE AREA.--901 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--May 1939 to current year.

PERIOD OF RECORD, Water-Quality.--

CHEMICAL DATA: Apr. 1948 to Sept. 1950, Feb. 1969 to Sept. 1985.

BIOCHEMICAL DATA: Feb. 1969 to Sept. 1973.

BIOLOGICAL DATA: Feb. 1969 to April 1969.

RADIOCHEMICAL DATA: Nov. 1980 to June 1981.

REVISED RECORDS.--WSP 1632: 1953(M), 1957, 1958(M). WDR TX-81-3: Drainage area. WRD TX-03-4.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,096.70 ft above NGVD of 1929. May 4 to Sept. 13, 1939, nonrecording gage, and Sept. 14, 1939, to Sept. 10, 1952, water-stage recorder at upstream side of bridge at same datum. Sept. 11, 1952, to June 29, 1953, nonrecording gage, and June 30, 1953, to Oct. 7, 1954, water-stage recorder at site 360 ft downstream at same datum. Radio telemeter at station. Satellite telemeter at station.

COOPERATION.--Lower Colorado River Authority provides operation and maintenance of the gage and verification of stage-discharge relation at low stages. U.S. Geological Survey maintains stage-discharge relation at medium to high stages, computes and publishes streamflow record.

REMARKS.--Records good except for estimated daily discharges, and daily discharges below 10 ft³/s, which are poor. There are diversions above station for irrigation. During the year, the city of Fredericksburg discharged varying amounts of wastewater effluent into the river upstream from station. The city of Johnson City diverts varying amounts of water from the pool at gage and discharges wastewater effluent into river below the gage. No flow at times. Some records listed in the "Period of Record" for surface water and water quality may not be available electronically.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 1869, reached a stage of 33 ft from information by local residents.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
DAILY MEAN VALUES
[*e*, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	271	142	143	115	108	166	93	66	33	22	7.7	17
2	263	142	138	114	108	159	e94	66	30	16	7.1	15
3	252	139	133	113	110	e160	e95	60	26	12	6.1	11
4	240	138	129	117	111	160	95	59	23	13	5.2	11
5	231	137	126	119	103	154	108	89	21	17	4.8	12
6	222	132	125	119	110	153	95	68	22	16	5.0	11
7	215	131	128	120	111	156	86	60	21	17	5.2	10
8	215	131	126	119	111	169	81	69	20	20	4.8	10
9	210	132	126	126	110	149	77	60	19	24	4.1	10
10	211	131	125	118	110	159	86	53	22	27	3.4	10
11	209	131	130	115	114	168	82	42	19	19	3.0	9.7
12	204	131	158	107	108	168	74	36	18	19	5.0	9.0
13	196	128	157	110	112	151	67	35	17	22	8.6	5.8
14	190	120	140	110	110	141	71	47	17	20	16	6.2
15	186	116	e135	110	110	132	59	108	18	17	24	6.7
16	184	118	130	112	113	125	49	176	14	14	21	6.5
17	e189	117	125	108	114	121	47	144	14	13	19	5.9
18	e180	122	124	115	116	114	60	95	16	9.9	21	5.8
19	164	120	124	115	114	127	75	69	12	7.5	39	5.8
20	159	121	121	111	111	154	65	55	10	6.2	55	5.8
21	154	117	121	114	116	137	64	57	13	4.6	37	6.0
22	174	110	e118	116	117	125	81	58	16	3.9	29	6.0
23	223	e112	115	123	117	118	84	54	15	3.5	26	5.8
24	177	e134	112	122	114	110	76	53	14	5.8	23	5.8
25	154	172	112	122	116	107	85	50	13	19	22	5.8
26	145	192	e115	121	100	103	90	44	9.7	19	24	5.7
27	142	161	119	119	108	101	88	42	9.2	18	21	5.7
28	139	141	118	120	108	94	104	50	8.7	19	20	5.6
29	137	140	121	e108	137	97	98	45	9.9	16	21	5.3
30	136	140	119	113	---	101	72	38	20	13	18	4.9
31	146	---	117	e104	---	98	---	34	---	9.6	18	---
Total	5,918	3,998	3,930	3,575	3,247	4,177	2,401	1,982	520.5	463.0	524.0	240.8
Mean	191	133	127	115	112	135	80.0	63.9	17.4	14.9	16.9	8.03
Max	271	192	158	126	137	169	108	176	33	27	55	17
Min	136	110	112	104	100	94	47	34	8.7	3.5	3.0	4.9
Ac-ft	11,740	7,930	7,800	7,090	6,440	8,290	4,760	3,930	1,030	918	1,040	478

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 2008, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	219	130	173	126	205	194	240	337	327	174	134	189
Max	2,041	1,034	3,161	1,177	2,794	1,289	2,368	1,745	2,905	4,554	1,953	6,332
(WY)	(1960)	(2005)	(1992)	(1968)	(1992)	(1992)	(1977)	(2007)	(1987)	(2002)	(1978)	(1952)
Min	0.44	2.51	2.44	1.68	4.83	2.07	0.06	2.05	0.52	0.00	0.00	0.00
(WY)	(1952)	(1952)	(1955)	(1957)	(1957)	(1956)	(1956)	(1956)	(1971)	(1971)	(1954)	(1984)

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	Calendar Year 2007	Water Year 2008		Water Years 1939 - 2008	
Annual total	243,553		30,976.3		
Annual mean	667		84.6		205
Highest annual mean				840	1992
Lowest annual mean				4.12	1956
Highest daily mean	39,700	Aug 17	271	Oct 1	129,000 Sep 11, 1952
Lowest daily mean	16	Mar 4	3.0	Aug 11	0.00 Aug 8, 1951
Annual seven-day minimum	17	Mar 1	4.3	Aug 5	0.00 Aug 8, 1951
Maximum peak flow			264	Oct 23	i441,000 Sep 11, 1952
Maximum peak stage			10.67	Oct 23	a42.50 Sep 11, 1952
Annual runoff (ac-ft)	483,100		61,440		148,300
10 percent exceeds	1,000		157		299
50 percent exceeds	191		101		55
90 percent exceeds	29		8.3		5.0

^a From floodmark.ⁱ From indirect measurement of peak flow.