

## Water-Data Report 2011

**07307800 Pease River near Childress, TX**

 Red-Pease Basin  
 Pease Subbasin

LOCATION.--Lat 34°13'39", long 100°04'24" referenced to North American Datum of 1927, Cottle County, TX, Hydrologic Unit 11130105, near right bank at downstream side of bridge on State Highway 207, 0.8 mi upstream from Catfish Creek, 4.4 mi downstream from confluence of North and Middle Forks, 17 mi southeast of Childress, and 71.0 mi upstream from mouth.

DRAINAGE AREA.--2,754 mi<sup>2</sup> of which 559 mi<sup>2</sup> probably is noncontributing.

**SURFACE-WATER RECORDS**

PERIOD OF RECORD.--Dec. 1959 to Sept. 1962, Oct. 1967 to Sept. 2011 (discontinued).

PERIOD OF RECORD, Water-Quality.--

CHEMICAL DATA: Oct. 1967 to June 1982, Nov. 1994 to Sept. 1997.

BIOCHEMICAL DATA: July 1968 to Sept. 1970, June 1973, Oct. 1996 to Sept. 1997.

PESTICIDE DATA: June 1997.

RADIOCHEMICAL DATA: Nov. 1980, Jan. 1981 to Apr. 1981.

SEDIMENT DATA: May 1977 to Sept. 1982.

PERIOD OF DAILY RECORD, Water-Quality.--

SPECIFIC CONDUCTANCE: Sept. 1994 to Sept. 1997.

WATER TEMPERATURE: Sept. 1994 to Sept. 1997.

GAGE.--Water-stage recorder. Datum of gage is 1,492.98 ft above NGVD of 1929. Prior to Dec. 21, 1959, nonrecording gage at same site and datum. Satellite telemeter at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. No known regulation. There are three small diversions for irrigation above station. Flow is affected at times by discharge from the flood-detention pools of six floodwater-retarding structures with a combined detention capacity of 1,360 acre-ft. These structures control runoff from 6.27 mi<sup>2</sup> in the Kent Creek drainage basin. 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.--Maximum stage since 1909, 22 ft June 1, 1957; flood in May 1935 reached a stage of 18 ft and was the second highest, from information by local resident.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,200 ft<sup>3</sup>/s and (or) maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Oct 22	1700	*433	*7.93

## 07307800 Pease River near Childress, 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	10	9.7	6.7	10	9.0	9.2	7.6	4.4	7.7	1.5	2.5	0.95
2	9.6	9.3	6.8	11	11	9.1	e7.6	5.2	3.9	1.7	2.3	1.6
3	9.1	6.6	7.0	11	13	9.1	7.6	4.1	5.1	4.0	2.8	0.82
4	8.9	5.4	7.1	11	13	9.9	8.2	2.9	5.3	1.3	2.3	e1.0
5	7.8	5.5	7.2	11	12	9.4	8.2	2.8	2.7	0.69	1.7	1.2
6	7.2	5.2	7.1	10	16	8.9	7.9	2.9	1.6	0.60	1.9	1.2
7	6.7	5.6	7.0	11	15	8.8	9.2	2.7	1.4	0.86	2.2	1.3
8	6.0	5.5	7.5	11	14	9.0	9.4	2.4	1.6	1.4	2.6	1.4
9	4.8	5.4	7.5	11	10	9.3	9.7	2.2	2.0	1.4	e1.6	e1.5
10	5.3	5.1	7.5	11	12	9.2	9.5	2.4	2.1	1.3	0.55	1.5
11	5.7	5.1	8.1	9.9	17	9.0	9.6	3.1	3.2	1.4	0.58	1.5
12	5.0	9.6	8.0	10	15	9.2	7.1	3.0	1.3	1.4	0.65	1.7
13	4.8	14	8.0	10	14	9.5	6.1	2.8	0.81	1.6	1.0	1.8
14	4.8	8.9	6.6	11	14	9.5	5.6	3.8	0.87	1.7	1.3	2.6
15	5.0	7.5	6.5	11	13	9.6	4.7	3.6	1.0	1.6	0.97	9.2
16	5.2	7.3	8.7	11	12	11	4.6	3.7	1.0	1.4	1.6	6.5
17	5.1	6.0	8.4	11	12	9.9	3.4	4.2	0.94	1.8	2.2	6.7
18	5.4	5.8	9.1	10	11	9.4	3.2	3.2	1.1	1.9	2.2	5.6
19	5.9	5.8	9.0	11	11	9.8	3.3	2.4	1.1	2.2	1.8	5.5
20	6.4	5.8	8.4	11	11	10	3.0	29	0.95	2.2	2.3	3.7
21	6.9	6.3	9.4	10	11	11	3.8	14	1.0	2.3	0.54	5.1
22	162	6.5	10	10	11	9.1	4.2	7.9	1.2	2.0	0.59	7.4
23	226	6.2	10	11	11	6.9	3.0	4.9	1.4	1.8	0.70	5.7
24	52	6.3	10	9.9	11	7.1	3.1	3.3	1.3	2.2	0.79	5.0
25	18	6.2	11	10	11	6.9	3.7	2.3	1.3	2.1	0.79	e3.6
26	23	5.9	11	10	11	7.2	3.3	2.5	1.4	2.3	1.0	e2.2
27	19	6.0	11	10	10	7.8	4.1	2.4	1.4	2.3	1.1	2.1
28	16	6.1	10	10	9.1	7.4	5.0	2.4	1.6	2.5	e1.0	1.2
29	14	6.4	11	9.9	---	8.3	3.0	2.1	1.6	4.0	e0.90	0.46
30	11	6.7	11	11	---	8.7	2.8	2.0	1.6	4.9	e0.80	0.45
31	11	---	10	9.9	---	7.9	---	22	---	2.7	0.70	---
<b>Total</b>	687.6	201.7	266.6	325.6	340.1	277.1	171.5	156.6	59.47	61.05	43.96	90.48
<b>Mean</b>	22.2	6.72	8.60	10.5	12.1	8.94	5.72	5.05	1.98	1.97	1.42	3.02
<b>Max</b>	226	14	11	11	17	11	9.7	29	7.7	4.9	2.8	9.2
<b>Min</b>	4.8	5.1	6.5	9.9	9.0	6.9	2.8	2.0	0.81	0.60	0.54	0.45
<b>Ac-ft</b>	1,360	400	529	646	675	550	340	311	118	121	87	179
<b>Cfsm</b>	0.01	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>In.</b>	0.01	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 2011<sup>b</sup>, BY WATER YEAR (WY)**

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Mean</b>	82.6	24.9	19.2	19.5	23.7	33.3	64.1	82.1	176	52.0	55.2	80.1
<b>Max</b>	895	220	132	158	170	181	750	424	858	405	723	683
(WY)	(1984)	(2005)	(1992)	(1992)	(1992)	(1973)	(1997)	(1997)	(1995)	(2010)	(1995)	(1995)
<b>Min</b>	1.68	3.04	3.74	2.70	2.83	2.78	2.87	3.67	1.98	0.28	0.13	0.58
(WY)	(1981)	(1978)	(1979)	(1971)	(1971)	(1971)	(1960)	(1961)	(2011)	(1980)	(1980)	(2000)

**07307800 Pease River near Childress, TX—Continued****SUMMARY STATISTICS**

	<b>Calendar Year 2010</b>		<b>Water Year 2011</b>		<b>Water Years 1960 - 2011<sup>h</sup></b>	
<b>Annual total</b>	40,852.3		2,681.76			
<b>Annual mean</b>	112		7.35		58.9	
<b>Highest annual mean</b>					204	1995
<b>Lowest annual mean</b>					7.35	2011
<b>Highest daily mean</b>	4,940	Apr 17	226	Oct 23	14,800	Oct 20, 1983
<b>Lowest daily mean</b>	4.8	Oct 9	0.45	Sep 30	0.00	Aug 10, 1969
<b>Annual seven-day minimum</b>	5.0	Oct 12	0.79	Aug 21	0.00	Aug 10, 1969
<b>Maximum peak flow</b>			433	Oct 22	28,500	Jun 5, 1995
<b>Maximum peak stage</b>			7.93	Oct 22	17.12	Jun 5, 1995
<b>Annual runoff (ac-ft)</b>	81,030		5,320		42,700	
<b>Annual runoff (cfs-m)</b>	0.051		0.003		0.027	
<b>Annual runoff (inches)</b>	0.69		0.05		0.36	
<b>10 percent exceeds</b>	154		11		85	
<b>50 percent exceeds</b>	20		5.9		9.3	
<b>90 percent exceeds</b>	6.6		1.2		1.7	

<sup>h</sup> See Period of Record paragraph.

