07308200 Pease River near Vernon, TX

Red-Pease Basin
Pease Subbasin

LOCATION.--Lat 34°10′46.5″, long 99°19′24″ referenced to North American Datum of 1983, Wilbarger County, TX, Hydrologic Unit 11130105, near left bank at downstream side of bridge on U.S. Highway 287, 1.0 mi west of Vernon, and 12.0 mi upstream from mouth.

DRAINAGE AREA.--3,488 mi² of which 559 mi² probably is noncontributing.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Dec. 1959 to Sept. 1982 (daily mean discharge), Oct. 1982 to Sept. 1989 (annual maximum), Mar. 1992 to current year.

PERIOD OF RECORD, Water-Quality.--
CHEMICAL DATA: Oct. 1959 to July 1960, Jan. 1967 to July 1981.
BIOCHEMICAL DATA: Oct. 1959 to July 1960, Apr. 1967 to Aug. 1973.
RADIOCHEMICAL DATA: Dec. 1980 to June 1981.

PERIOD OF DAILY RECORD, Water-Quality.--
SPECIFIC CONDUCTANCE: Oct. 1998 to Sept. 1999.
WATER TEMPERATURE: Oct. 1998 to Sept. 1999.

GAGE.--Water-stage recorder. Datum of gage is 1,179.04 ft above NGVD of 1929. From Nov. 28, 1959 to Mar. 21, 2002, at site 2.0 mi downstream at different datum. Satellite telemeter at station.

REMARKS.--Records good except daily mean discharges for Feb. 4 to Mar. 25, which are fair. Flow is affected at times by discharge from the flood-detention pools of six flood-retarding structures with a combined detention capacity of 1,360 acre-ft. These structures control runoff from 6.27 mi² in the Kent Creek drainage basin. There are four small diversions for irrigation above station. 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 at least 1890, 24 ft in 1891. The flood in Sept. 1936 reached a stage of 23.5 ft, and the flood of June 2, 1957, reached a stage of 22.0 ft from information by local residents.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,500 ft³/s and (or) maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)
Jun 20	1545	*6,430	*12.79
Aug 9	1915	2,630	9.73

Suggested citation: U.S. Geological Survey, 2014, Water-resources data for the United States, Water Year 2013: U.S. Geological Survey Water-Data Report WDR-US-2013, site 07308200, accessed at http://wdr.water.usgs.gov/wy2013/pdfs/07308200.2013.pdf

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	6.0	0.00	0.00	0.00	0.00	8.8	2.2	0.00	0.00	4.1	6.3	2.7
2	3.3	0.00	0.00	0.00	0.00	7.5	3.4	0.00	0.00	3.4	5.3	2.1
3	3.2	0.00	0.00	0.00	0.00	6.7	4.8	0.00	0.00	2.7	4.5	1.6
4	1.1	0.00	0.00	0.00	0.00	5.3	7.9	0.00	0.00	2.2	3.7	1.2
5	0.41	0.00	0.00	0.00	0.00	4.0	5.7	0.00	0.00	1.8	3.1	0.95
6	0.05	0.00	0.00	0.00	0.00	3.7	4.6	0.00	5.9	1.4	2.8	0.74
7	0.00	0.00	0.00	0.00	0.00	3.3	4.2	0.00	168	1.1	2.4	0.65
8	0.00	0.00	0.00	0.00	0.00	3.2	3.8	0.00	260	0.83	2.5	0.57
9	0.00	0.00	0.00	0.01	0.00	3.3	3.2	0.00	124	0.59	558	0.50
10	0.00	0.00	0.00	0.11	0.00	2.9	14	0.00	74	0.39	444	0.45
11	0.00	0.00	0.00	0.00	0.00	2.9	14	0.00	57	0.22	218	0.42
12	0.00	0.00	0.00	0.00	0.36	2.6	8.7	0.00	24	0.14	78	0.37
13	0.00	0.00	0.00	0.00	3.8	2.3	6.4	0.00	13	0.06	44	0.32
14	0.00	0.00	0.00	0.00	1.5	2.1	5.1	0.00	8.0	0.06	31	0.38
15	0.00	0.00	0.00	0.00	1.5	1.7	4.2	0.00	6.4	0.07	36	0.29
16	0.00	0.00	0.00	0.00	1.5	1.4	3.5	0.00	4.5	55	37	0.12
17	0.00	0.00	0.00	0.00	1.6	1.2	5.4	0.00	3.1	80	20	0.30
18	0.00	0.00	0.00	0.00	1.0	1.2	8.5	0.00	0.87	202	191	0.30
19	0.00	0.00	0.00	0.00	0.59	1.1	5.1	0.00	0.42	109	139	0.19
20	0.00	0.00	0.00	0.00	1.1	1.1	3.7	0.00	2,720	38	61	4.7
21	0.00	0.00	0.00	0.00	4.2	1.0	2.7	0.00	1,090	16	33	1.1
22	0.00	0.00	0.00	0.00	6.1	1.1	1.8	0.00	394	10	24	0.55
23	0.00	0.00	0.00	0.00	4.1	1.4	0.59	0.00	248	7.1	19	0.27
24	0.00	0.00	0.00	0.00	3.4	1.3	0.32	0.00	120	5.1	15	0.09
25	0.00	0.00	0.00	0.00	24	1.3	0.22	0.00	56	98	12	0.03
26	0.00	0.00	0.00	0.00	39	2.0	0.20	0.00	28	365	9.6	0.00
27	0.00	0.00	0.00	0.00	18	2.3	0.11	0.00	16	81	8.0	0.00
28	0.00	0.00	0.00	0.00	11	1.8	0.06	0.00	9.8	19	6.8	1.4
29	0.00	0.00	0.00	0.00	---	1.7	0.02	0.00	6.8	11	5.2	0.47
30	0.00	0.00	0.00	0.00	---	1.9	0.00	0.00	5.2	8.5	4.2	0.19
31	0.00	---	0.00	0.00	---	2.4	---	0.00	---	7.5	3.3	---
Total	14.06	0.00	0.00	0.12	122.75	84.5	124.42	0.00	5,442.99	1,131.26	2,027.7	22.95
Mean	0.45	0.00	0.00	0.00	4.38	2.73	4.15	0.00	181	36.5	65.4	0.77
Max	6.0	0.00	0.00	0.11	39	8.8	14	0.00	2,720	365	558	4.7
Min	0.00	0.00	0.00	0.00	0.00	1.0	0.00	0.00	0.00	0.06	2.4	0.00
Ac-ft	28	0.00	0.00	0.2	243	168	247	0.00	10,800	2,240	4,020	46

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 2013[h], BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	97.0	55.4	25.3	26.0	28.5	46.0	83.1	160	271	131	95.5	154
Max	1,057	448	163	138	172	269	972	777	2,196	1,318	1,657	895
(WY)	(1961)	(2005)	(1960)	(2001)	(1993)	(1973)	(2010)	(1977)	(1995)	(2010)	(1995)	(1965)
Min	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21	0.00	0.00	0.00
(WY)	(1964)	(1971)	(1971)	(1971)	(1971)	(1971)	(1971)	(2013)	(2011)	(1964)	(1980)	(2011)

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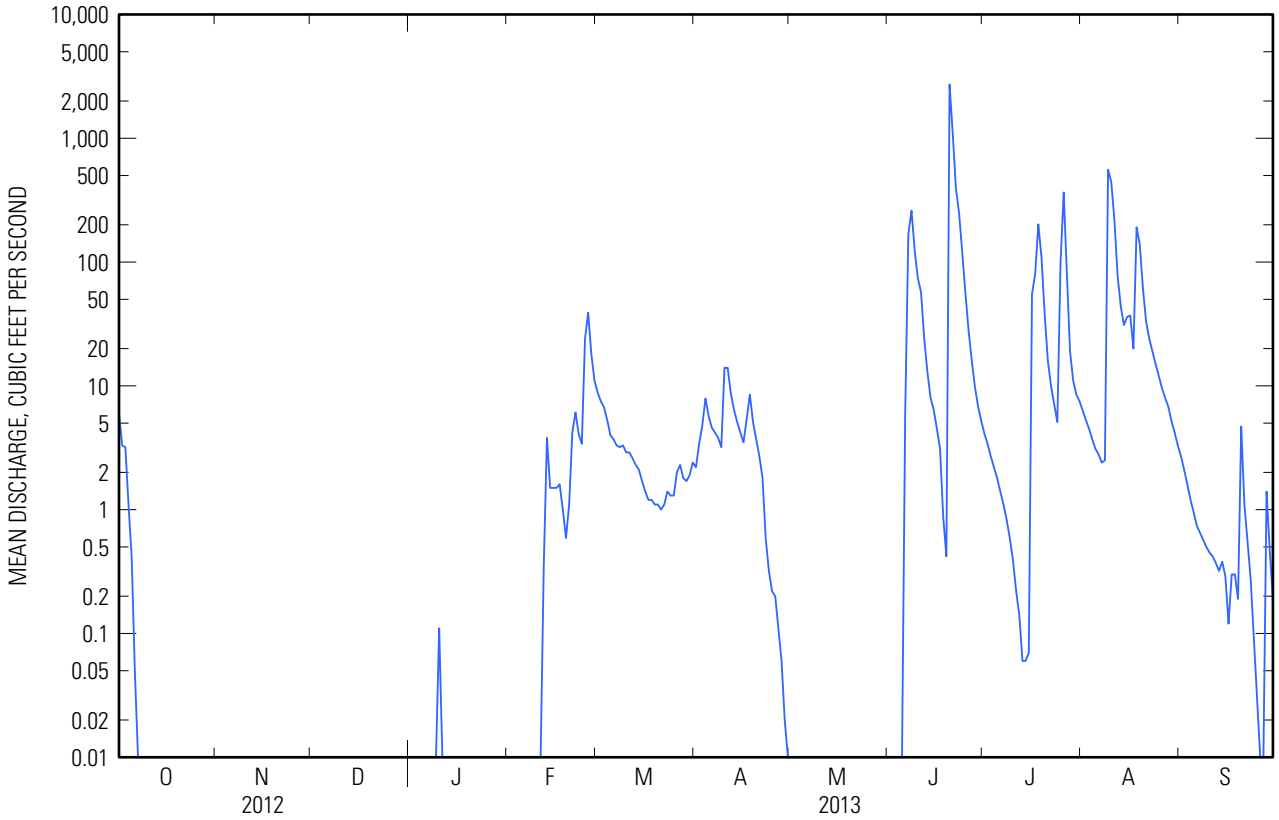
SUMMARY STATISTICS

	Calendar Year 2012		Water Year 2013		Water Years 1960 - 2013[h]	
Annual total	2,825.68		8,970.75			
Annual mean	7.72		24.6		96.0	
Highest annual mean					441	1995
Lowest annual mean					7.23	2000
Highest daily mean	515	Jun 14	2,720	Jun 20	20,400	Jun 5, 1995
Lowest daily mean	0.00	Jan 1	0.00	Oct 7	0.00	Aug 7, 1960
Annual seven-day minimum	0.00	Jan 1	0.00	Oct 7	0.00	Aug 7, 1960
Maximum peak flow			6,430	Jun 20	40,500	Oct 2, 1983
Maximum peak stage			12.79	Jun 20	20.15	Oct 2, 1983
Annual runoff (ac-ft)	5,600		17,790		69,530	
10 percent exceeds	9.1		22		139	
50 percent exceeds	0.00		0.22		10	
90 percent exceeds	0.00		0.00		0.00	

[h] See Period of Record paragraph.