



Water-Data Report 2008

08064100 Chambers Creek near Rice, TX

Upper Trinity Basin
Chambers Subbasin

LOCATION.--Lat 32°11'54", long 96°31'12" referenced to North American Datum of 1927, Navarro County, TX, Hydrologic Unit 12030109, on downstream side of highway embankment 20 ft left of left end of bridge on Farm Road 1126, 3.6 mi downstream from Oak Branch, 3.9 mi upstream from Cummins Creek, 4.2 mi upstream from bridge on Interstate Highway 45, 5.0 miles downstream from Waxahachie Creek, and 3.4 mi southwest of Rice.

DRAINAGE AREA.--807 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Oct. 1983 to current year.

GAGE.--Water-stage recorder. Datum of gage is 340.00 ft above NGVD of 1929. Satellite telemeter at station.

REMARKS.--Records good except those for Oct. 1-15 and estimated daily mean discharges, which are fair. Since installation of gage, at least 10% of contributing drainage area has been regulated. At times flow is affected by discharge from floodwater-retarding structures in the drainage basin above this station. No known diversions. No flow at times.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood information for the next downstream station, Chambers Creek near Corsicana, station (08064500) indicates that the maximum stage since at least 1870 occurred in Aug. 1887, and that other significant floods occurred in Dec. 1913, May 1944, and May 1958. Stages for these floods are unknown, but over the years a levee system has been developed along the main channel to limit cropland flooding.

Water-Data Report 2008

08064100 Chambers Creek near Rice, TX—Continued

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	18	7.8	13	13	18	15	993	1,200	37	5.2	0.76	1.6
2	17	7.4	12	13	16	15	963	1,040	33	5.0	0.64	1.2
3	16	7.1	11	12	15	20	925	902	30	5.0	0.43	0.85
4	15	6.8	9.8	11	14	67	1,710	849	27	4.9	0.29	0.59
5	14	6.5	9.2	10	15	62	1,930	816	24	4.7	0.24	0.44
6	14	6.1	8.6	12	19	62	1,100	757	19	4.5	0.22	0.30
7	15	5.8	8.1	14	22	651	962	674	14	4.1	0.20	0.26
8	16	5.2	7.6	14	17	614	807	593	22	4.0	0.19	0.22
9	15	4.9	8.3	14	14	303	563	390	16	4.5	0.16	0.28
10	14	5.1	9.1	14	13	292	853	293	15	5.3	0.14	0.28
11	12	5.2	9.1	22	13	485	1,130	278	14	4.3	0.13	242
12	11	5.3	10	20	14	401	629	234	13	4.4	0.12	156
13	11	5.1	12	17	21	318	508	160	13	4.0	0.09	85
14	10	5.1	12	15	35	e281	416	426	12	3.5	0.09	50
15	11	5.3	34	14	31	244	295	971	12	3.9	0.14	30
16	12	4.6	75	12	29	228	119	490	11	9.3	0.16	19
17	39	4.0	40	10	45	215	111	335	8.9	11	0.12	13
18	33	4.3	34	11	129	324	452	248	8.2	29	0.12	9.9
19	22	5.0	26	12	106	6,210	512	211	7.9	17	58	8.1
20	16	5.7	22	14	49	11,600	346	189	12	9.9	289	6.7
21	13	5.6	20	12	34	3,860	290	168	15	7.3	53	5.6
22	11	5.4	18	12	29	1,450	328	156	12	5.8	28	4.6
23	12	5.4	16	13	25	1,090	312	147	9.0	4.9	17	3.9
24	11	7.1	15	13	22	863	5,720	138	7.8	4.3	13	3.1
25	10	12	14	14	21	683	11,400	132	7.1	3.6	8.7	2.7
26	9.8	23	14	17	19	539	6,560	131	6.6	3.0	6.3	2.2
27	10	34	15	19	17	457	1,870	128	6.3	2.5	4.4	1.8
28	9.9	29	15	25	16	580	1,880	149	5.9	2.2	3.6	1.4
29	8.7	19	15	26	15	1,010	1,490	148	5.7	1.9	2.6	1.0
30	8.0	15	15	21	---	985	1,410	110	5.6	1.6	2.3	0.70
31	7.5	---	14	19	---	967	---	45	---	1.4	2.2	---
Total	441.9	267.8	541.8	465	833	34,891	46,584	12,508	430.0	182.0	492.34	652.72
Mean	14.3	8.93	17.5	15.0	28.7	1,126	1,553	403	14.3	5.87	15.9	21.8
Max	39	34	75	26	129	11,600	11,400	1,200	37	29	289	242
Min	7.5	4.0	7.6	10	13	15	111	45	5.6	1.4	0.09	0.22
Ac-ft	877	531	1,070	922	1,650	69,210	92,400	24,810	853	361	977	1,290

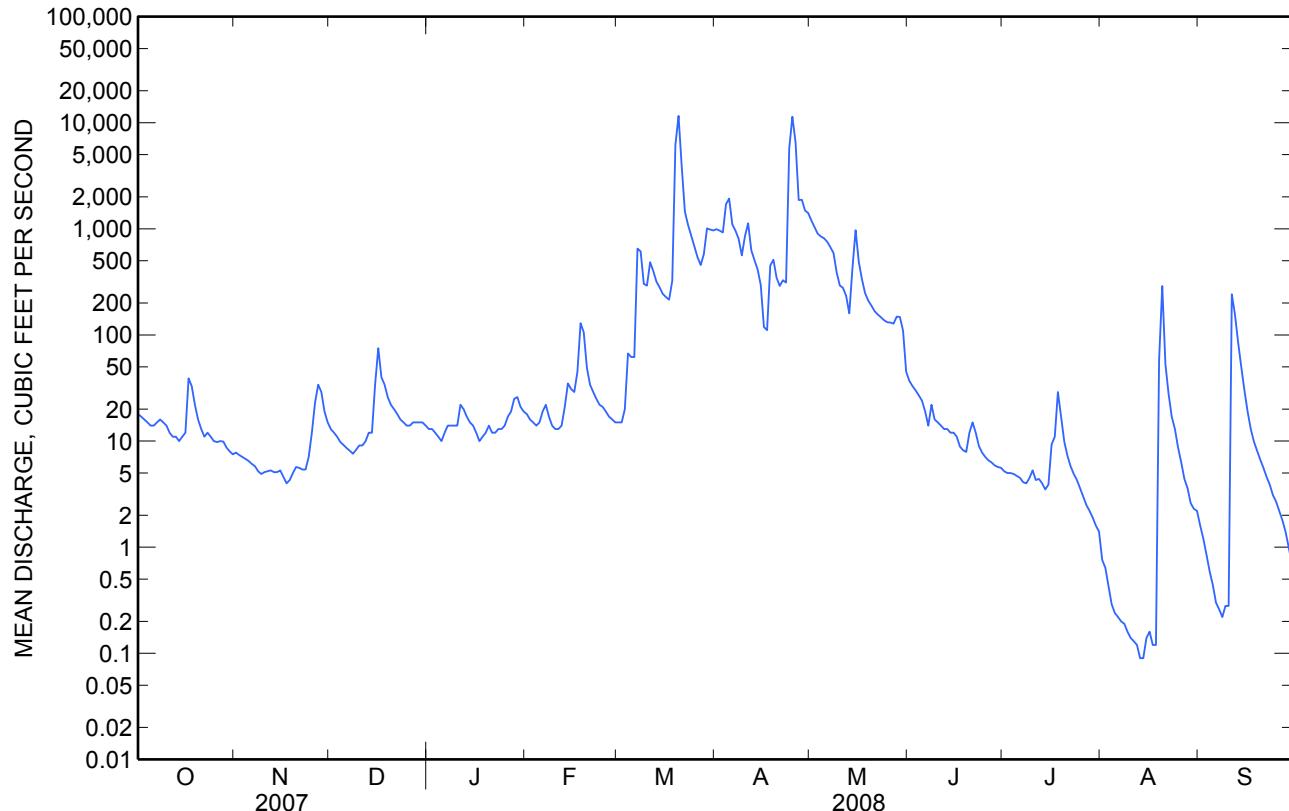
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 2008, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	242	359	735	512	696	810	636	615	635	115	70.9	42.5
Max	1,499	2,172	3,579	2,393	2,450	2,497	2,692	2,932	2,885	1,061	600	522
(WY)	(1986)	(2005)	(1992)	(1998)	(1997)	(2001)	(2007)	(1989)	(2007)	(2007)	(2004)	(2007)
Min	0.00	0.00	0.65	2.33	5.16	6.35	12.2	1.34	0.05	0.08	0.00	0.00
(WY)	(1989)	(2000)	(2006)	(2006)	(1996)	(1996)	(1996)	(1996)	(1996)	(1988)	(1988)	(1985)

08064100 Chambers Creek near Rice, TX—Continued**SUMMARY STATISTICS**

	Calendar Year 2007	Water Year 2008	Water Years 1984 - 2008	
Annual total	320,511.5	98,289.56		
Annual mean	878	269	454	
Highest annual mean			1,263	1992
Lowest annual mean			12.9	1996
Highest daily mean	22,000	Apr 1	11,600	Mar 20
Lowest daily mean	4.0	Nov 17	0.09	Aug 13
Annual seven-day minimum	4.8	Nov 13	0.12	Aug 12
Maximum peak flow			13,000	Mar 20
Maximum peak stage			29.37	Mar 20
Annual runoff (ac-ft)	635,700		195,000	329,300
10 percent exceeds	2,240		636	1,130
50 percent exceeds	98		14	36
90 percent exceeds	9.9		2.2	0.12

^c From rating curve extended above discharge measurement of 22,500 ft³/s.



08064100 Chambers Creek near Rice, TX—Continued**WATER-QUALITY RECORDS****PERIOD OF RECORD--**

CHEMICAL DATA: Nov. 1983 to current year. BIOCHEMICAL DATA: Nov. 1983 to Nov. 1993, Jan. 1997 to current year. BIOLOGICAL DATA: Aug. 1993 to July 1994, Aug. 2002 to current year. RADIOCHEMICAL DATA: Oct. 1992, Aug. 1995, Apr. 1999 to current year. PESTICIDE DATA: Oct. 1992 to Aug. 1995, Feb. 2001 to May 2006. SEDIMENT DATA: Oct. 1992 to Sept. 1995, Feb. 2001 to May 2006.

PERIOD OF DAILY RECORD--

SPECIFIC CONDUCTANCE: Oct. 1983 to Dec. 1993 (local observer), Jan. 1994 to Sept. 2003.

WATER TEMPERATURE: Oct. 1983 to Dec. 1993 (local observer), Jan. 1994 to Sept. 2003.

**WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Part 1 of 5

[Remark codes: <, less than; E, estimated; M, presence verified but not quantified.]

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Disolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	pH, water, unfltrd lab, std units (00403)	Specif. conductance, wat unf 25 degC (90095)	Specif. conductance, wat unf 25 degC (90095)	Specif. conductance, wat unf 25 degC (90095)	Temper-ature, air, deg C (00020)	Temper-ature, water, deg C (00010)	Hard-ness, water, mg/L as CaCO3 (00900)	Noncarb hard-ness, wat flt field, mg/L as CaCO3 (00904)
Dec 03...	1545	11	765	8.9	84	7.9	8.1	936	928	21.5	12.7	320	67	
Jan 29...	1350	25	746	11.0	100	7.6	8.1	842	840	17.5	10.0	280	72	
Mar 11...	1515	496	763	9.7	91	7.7	8.1	492	491	28.0	12.4	180	56	
Apr 30...	1330	1,390	746	9.0	100	8.0	8.1	378	382	30.0	19.5	150	32	
Jul 21...	1300	6.9	755	6.3	85	7.5	8.0	786	808	39.0	30.5	200	54	
Aug 26...	0920	5.9	749	5.0	65	6.8	7.9	624	628	25.0	27.6	210	87	

08064100 Chambers Creek near Rice, TX—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 2 of 5

[Remark codes: <, less than; E, estimated; M, presence verified but not quantified.]

Date	Calcium water, fltrd, mg/L (00915)	Magnesium water, fltrd, mg/L (00925)	Potassium water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)	Sodium water, fltrd, mg/L (00930)	Sodium, CaCO ₃ (39086)	Alka-linity, wat flt inf tit field, mg/L as (00453)	Bicar-bonate, wat flt infl pt titr., field, mg/L (00940)	Chlor-ide, water, fltrd, mg/L (00950)	Fluor-ide, water, fltrd, mg/L (00955)	Silica, water, fltrd, mg/L as SiO ₂ (00945)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue on evap. at 180degC wat flt mg/L (70300)
Dec 03...	115	7.54	4.96	1.8	74.5	251	306	55.7	.40	8.63	159	E576	584	
Jan 29...	100	7.11	3.73	1.9	74.1	207	252	55.5	.41	1.02	144	E512	524	
Mar 11...	66.8	4.17	5.71	.9	29.0	128	156	20.1	.37	8.99	60.3	E298	327	
Apr 30...	57.2	2.59	4.51	.6	17.0	122	148	10.9	.30	7.47	41.7	E220	238	
Jul 21...	70.5	5.64	3.35	2.5	79.8	145	177	70.2	.51	5.34	138	E461	494	
Aug 26...	76.2	4.24	5.17	1.2	40.6	121	147	28.8	.44	9.51	140	E384	412	

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 3 of 5

[Remark codes: <, less than; E, estimated; M, presence verified but not quantified.]

Date	Residue total non-filterable, mg/L (00530)	Ammonia + org-N, water, mg/L as N (00623)	Ammonia water, mg/L as N (71846)	Nitrate + nitrite water, mg/L as N (00608)	Nitrate water, mg/L as N (00631)	Nitrite water, mg/L as N (00618)	Organic nitrogen, water, mg/L as N (00613)	Ortho-phosphate, water, mg/L as P (00607)	Phosphorus water, mg/L as P (00671)	Organic carbon, water, mg/L (00666)	BOD, 5 day, mg/L (00680)	water, unfltrd 20 degC (00310)	Aluminum, water, µg/L (01106)
Dec 03...	18	.30	--	<.020	.04	E.04	E.002	--	E.005	<.04	6.5	1.9	2.4
Jan 29...	15	.28	--	<.020	.41	.40	.009	--	<.006	<.04	4.7	E1.2	2.7
Mar 11...	278	.92	.14	.107	5.83	5.65	.182	.81	.060	.08	12.7	2.9	4.4
Apr 30...	200	.46	.05	.041	1.13	1.06	.065	.42	.021	E.03	9.4	2.1	6.2
Jul 21...	46	.29	--	<.020	.04	E.04	E.002	--	E.005	<.04	4.5	<2.0	--
Aug 26...	79	.58	--	<.020	1.50	1.46	.047	--	.009	<.04	9.2	<2.0	--

08064100 Chambers Creek near Rice, TX—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 4 of 5

[Remark codes: <, less than; E, estimated; M, presence verified but not quantified.]

Date	Anti-mony, water, fltrd, μg/L (01095)	Arsenic water, fltrd, μg/L (01000)	Barium, water, fltrd, μg/L (01005)	Beryll- ium, water, fltrd, μg/L (01010)	Cadmium water, fltrd, μg/L (01025)	Chrom- ium, water, fltrd, μg/L (01030)	Cobalt water, fltrd, μg/L (01035)	Copper, water, fltrd, μg/L (01040)	Iron, water, fltrd, μg/L (01046)	Lead, water, fltrd, μg/L (01049)	Mangan- ese, water, fltrd, μg/L (01056)	Mercury water, fltrd, μg/L (71890)	Molyb- denum, water, fltrd, μg/L (01060)
Dec 03...	E.11	1.5	92	<.01	<.04	E.06	.22	3.2	11	.12	19.0	E.007	3.0
Jan 29...	E.08	1.1	69	<.01	<.04	E.06	.28	3.4	11	.20	12.8	<.010	2.2
Mar 11...	.20	3.8	55	<.01	<.04	E.09	.31	4.3	19	.18	1.3	<.010	4.2
Apr 30...	.19	3.3	50	M	E.03	<.12	.14	6.7	E8	.20	.5	<.010	6.0
Jul 21...	--	--	--	--	--	--	--	--	E4	--	2.9	--	--
Aug 26...	--	--	--	--	--	--	--	--	E6	--	1.6	--	--

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 5 of 5

[Remark codes: <, less than; E, estimated; M, presence verified but not quantified.]

Date	Nickel, water, fltrd, μg/L (01065)	Selen- ium, water, fltrd, μg/L (01145)	Silver, water, fltrd, μg/L (01075)	Zinc, water, fltrd, μg/L (01090)	Uranium natural water, fltrd, μg/L (22703)
Dec 03...	2.5	.24	<.1	2.4	2.44
Jan 29...	2.2	.28	<.1	2.2	2.32
Mar 11...	2.9	.38	<.1	3.5	1.86
Apr 30...	2.4	.32	<.1	4.1	1.00
Jul 21...	--	--	--	--	--
Aug 26...	--	--	--	--	--