

Water-Data Report 2011

**08082000 Salt Fork Brazos River near Aspermont, TX**

Brazos Headwaters Basin  
Salt Fork Brazos Subbasin

LOCATION.--Lat 33°20'02", long 100°14'16" referenced to North American Datum of 1927, Stonewall County, TX, Hydrologic Unit 12050007, on left bank at downstream side of bridge on U.S. Highway 83, 5.5 mi downstream from Salt Croton Creek, 13.2 mi north of Aspermont, and at mile 27.3 measured from confluence with Double Mountain Fork Brazos River which is at mile 923.2 on the Brazos River.

A temporary gage site was established (July 26, 2007) approximately ¼ mile upstream from previous site due to highway bridge repair. The equipment was housed in a metal job box on left bank of river, with an outside staff as the base gage. This gage was abandoned upon completion of the new U.S. Highway 83 bridge and subsequent installation of a new gage at the new bridge (April 13, 2010).

DRAINAGE AREA.--5,130 mi<sup>2</sup> of which 2,634 mi<sup>2</sup> probably is noncontributing.

**SURFACE-WATER RECORDS**

PERIOD OF RECORD.--Dec. 1923 to Aug. 1925, June 1939 to current year.

PERIOD OF RECORD, Water-Quality--

CHEMICAL DATA: July 1941 to Oct. 1951, Oct. 1956 to Aug. 1994.

BIOCHEMICAL DATA: Oct. 1974 to Aug. 1994.

PESTICIDE DATA: Mar. to June 1979.

SEDIMENT DATA: June 1961 to Sept. 1965, Oct. 1974 to Aug. 1994.

PERIOD OF DAILY RECORD, Water-Quality--

SPECIFIC CONDUCTANCE: Oct. 1948 to Oct. 1951, Oct. 1956 to Sept. 1982.

WATER TEMPERATURE: Oct. 1948 to Oct. 1951, Oct. 1956 to Sept. 1982.

REVISED RECORDS.--WDR TX-76-2: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,588.70 ft above NGVD of 1929. Dec. 5, 1923 to Aug. 29, 1925, nonrecording gage at site 6.7 mi downstream at different datum. June 15, 1939 to July 13, 1972, water-stage recorder at present site. July 14, 1972 to July 14, 1975, at site 0.1 mi upstream at same datum. Satellite telemeter at station.

REMARKS.--Records good except for period of Oct. 18, to Jan. 3, and estimated daily discharges, which are poor. Since water year 1964, at least 10% of contributing drainage area has been regulated. There are no large diversions above station. Some records listed in the "Period of Record" for surface water and water quality may not be available electronically. No flow at times.

AVERAGE DISCHARGE FOR PERIOD PRIOR TO REGULATION.--24 years (water years 1940-63) prior to completion of White River Reservoir, 148 ft<sup>3</sup>/s (107,400 acre-ft/yr).

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in Dec. 1913 reached a stage of 14.4 ft, and flood in Nov. 1934 reached a stage of 13.7 ft, from information by local residents.

EXTREMES FOR PERIOD PRIOR TO REGULATION.--WATER YEARS 1940-1963: Maximum discharge, 52,200 ft<sup>3</sup>/s Sept. 25, 1955 (gage height, 14.92 ft) from rating curve extended above 28,800 ft<sup>3</sup>/s by logarithmic plotting; no flow at times.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 83 ft<sup>3</sup>/s, Oct. 22, gage height, 3.52 ft; minimum daily discharge, 0.03 ft<sup>3</sup>/s, Sept. 30.

## 08082000 Salt Fork Brazos River near Aspermont, TX—Continued

**DISCHARGE, CUBIC FEET PER SECOND**  
**WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**  
**DAILY MEAN VALUES**  
[e, estimated]

<b>Day</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>
<b>1</b>	30	22	e7.3	8.9	3.9	5.0	2.7	1.4	0.18	0.09	0.11	0.06
<b>2</b>	28	20	6.6	6.6	3.8	4.8	2.6	3.9	0.17	0.10	0.11	0.07
<b>3</b>	26	21	7.7	6.6	3.8	5.1	2.4	2.2	0.16	0.09	0.12	0.07
<b>4</b>	24	26	7.2	7.3	3.8	5.2	2.3	1.2	0.15	0.09	0.12	0.07
<b>5</b>	12	29	7.9	7.6	3.9	4.9	2.3	0.68	0.14	0.09	0.18	0.06
<b>6</b>	8.6	28	6.8	7.7	5.0	4.7	2.1	0.45	0.13	0.09	0.17	0.06
<b>7</b>	9.2	27	5.7	8.0	7.9	5.1	2.1	0.27	0.13	0.10	0.14	0.06
<b>8</b>	8.2	20	5.2	7.9	7.3	5.6	2.1	0.22	0.13	0.10	0.14	0.07
<b>9</b>	5.5	18	5.3	8.2	4.0	5.3	2.1	0.19	0.10	0.10	0.14	0.07
<b>10</b>	4.3	17	5.5	8.4	3.8	5.1	2.0	0.19	0.14	0.10	0.14	0.07
<b>11</b>	4.1	17	5.4	6.2	3.8	4.8	1.9	0.16	0.12	0.10	0.14	0.07
<b>12</b>	3.7	20	4.4	5.2	3.9	4.8	1.8	0.12	0.08	0.10	0.15	0.06
<b>13</b>	2.8	30	4.1	5.4	4.4	4.4	1.9	0.12	0.07	0.10	0.14	0.06
<b>14</b>	2.5	24	4.5	5.4	5.0	4.4	1.7	0.11	0.07	0.09	0.14	0.06
<b>15</b>	2.4	20	6.3	5.8	5.4	4.0	1.6	0.13	0.08	0.09	0.11	0.11
<b>16</b>	13	18	7.5	6.3	6.0	4.1	1.3	0.12	0.07	0.07	0.11	0.06
<b>17</b>	8.5	17	6.6	6.8	6.1	4.5	1.5	0.12	0.07	0.07	0.11	0.05
<b>18</b>	10	15	6.2	7.5	6.0	4.3	1.5	0.10	0.06	0.08	0.10	0.04
<b>19</b>	15	15	7.1	7.4	5.9	3.8	1.4	0.10	0.07	0.08	0.10	0.04
<b>20</b>	12	16	9.6	6.2	6.0	3.7	1.4	6.0	0.05	0.08	0.10	0.04
<b>21</b>	11	15	15	4.6	5.9	3.7	1.4	6.4	0.06	0.08	0.10	0.04
<b>22</b>	39	15	15	3.7	6.0	3.8	1.4	4.6	0.09	0.09	0.10	0.04
<b>23</b>	29	15	14	3.8	6.0	3.5	1.5	2.1	0.09	0.09	0.08	0.05
<b>24</b>	38	15	15	3.6	6.4	3.1	1.5	0.95	0.08	0.09	0.07	0.04
<b>25</b>	22	14	19	3.7	5.9	3.1	1.5	0.40	0.09	0.09	0.07	0.04
<b>26</b>	23	e13	12	3.9	5.9	3.1	1.1	0.31	0.09	0.09	0.07	0.05
<b>27</b>	31	e11.5	11	4.1	5.6	3.1	0.91	0.25	0.09	0.09	0.07	0.05
<b>28</b>	29	e10.5	11	4.0	5.1	2.9	0.79	0.20	0.09	0.09	0.07	0.05
<b>29</b>	26	e9.50	13	4.0	---	2.8	0.54	0.19	0.09	0.10	0.07	0.04
<b>30</b>	25	8.3	13	4.0	---	2.8	0.37	0.19	0.09	0.10	0.06	0.03
<b>31</b>	24	---	12	3.9	---	2.8	---	0.20	---	0.11	0.07	---
<b>Total</b>	526.8	546.80	276.9	182.7	146.5	128.3	49.71	33.57	3.03	2.83	3.40	1.68
<b>Mean</b>	17.0	18.2	8.93	5.89	5.23	4.14	1.66	1.08	0.10	0.09	0.11	0.06
<b>Max</b>	39	30	19	8.9	7.9	5.6	2.7	6.4	0.18	0.11	0.18	0.11
<b>Min</b>	2.4	8.3	4.1	3.6	3.8	2.8	0.37	0.10	0.05	0.07	0.06	0.03
<b>Ac-ft</b>	1,040	1,080	549	362	291	254	99	67	6.0	5.6	6.7	3.3

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2011<sup>2</sup>, BY WATER YEAR (WY)**

	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>
<b>Mean</b>	92.1	30.1	19.6	16.3	22.4	30.1	38.0	103	153	53.9	90.7	93.2
<b>Max</b>	918	350	226	134	232	192	225	724	1,087	745	1,054	664
(WY)	(1987)	(2005)	(1992)	(1992)	(1992)	(2000)	(2010)	(1987)	(1990)	(2010)	(1972)	(1966)
<b>Min</b>	0.06	0.07	0.00	0.03	0.05	0.26	0.26	0.35	0.10	0.01	0.01	0.00
(WY)	(1980)	(2000)	(2000)	(2000)	(2000)	(1971)	(1971)	(1964)	(2011)	(1998)	(2000)	(2000)

**08082000 Salt Fork Brazos River near Aspermont, TX—Continued****SUMMARY STATISTICS**

	<b>Calendar Year 2010</b>	<b>Water Year 2011</b>	<b>Water Years 1964 - 2011<sup>Z</sup></b>
<b>Annual total</b>	39,073.05	1,902.22	
<b>Annual mean</b>	107	5.21	62.0
<b>Highest annual mean</b>			212
<b>Lowest annual mean</b>			5.21
<b>Highest daily mean</b>	3,340	Jul 6	11,300
<b>Lowest daily mean</b>	0.25	Jun 27	0.00
<b>Annual seven-day minimum</b>	1.1	Jun 21	0.00
<b>Maximum peak flow</b>		83	30,200
<b>Maximum peak stage</b>		3.52	12.45
<b>Annual runoff (ac-ft)</b>	77,500	3,770	44,900
<b>10 percent exceeds</b>	180	15	101
<b>50 percent exceeds</b>	18	2.8	7.0
<b>90 percent exceeds</b>	4.1	0.07	0.13

<sup>Z</sup> Period of regulated streamflow.

