

Water-Data Report 2011

**08095200 North Bosque River at Valley Mills, TX**

Middle Brazos-Bosque Basin  
North Bosque Subbasin

LOCATION.--Lat 31°40'10", long 97°28'09" referenced to North American Datum of 1927, Bosque County, TX, Hydrologic Unit 12060204, on right bank at downstream side of bridge on Farm Road 56, about 0.8 mi downstream from Thompson Hollow, 0.8 mi north of intersection of State Highway 6 and Farm Road 56 in Valley Mills, and 28.0 mi upstream from mouth.

DRAINAGE AREA.--1,146 mi<sup>2</sup>.

**SURFACE-WATER RECORDS**

PERIOD OF RECORD.--Aug. 1959 to Sept. 2005, Oct. 2007 to current year (daily mean discharge), Oct. 2005 to Sept. 2007 (peak discharges greater than base discharge).

PERIOD OF RECORD, Water-Quality--

CHEMICAL DATA: Oct. 1980 to Aug. 1982, Oct. 1997 to Sept. 2008.

BIOCHEMICAL DATA: Oct. 1980 to Aug. 1982, Oct. 1997 to Sept. 2008.

RADIOCHEMICAL DATA: Feb. 1981 to June 1981.

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

GAGE.--Water-stage recorder. Datum of gage is 524.55 ft above NGVD of 1929. Prior to Dec. 29, 1959, nonrecording gage at same site and datum.  
Satellite telemeter at station.

REMARKS.--Records good except for estimated daily discharges, which are poor. Since installation of gage, at least 10% of contributing drainage area has been regulated. There are several small diversions 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 1868, flood in May 1908 reached a stage of 43 ft. Floods in Sept. 1936 and Apr. 1945 reached a stage of about 38 ft, from information by local residents.

## Water-Data Report 2011

**08095200 North Bosque River at Valley Mills, 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>	67	29	31	52	46	35	26	14	7.8	3.2	0.96	0.35
<b>2</b>	63	28	29	47	46	34	26	18	7.4	3.0	0.95	0.40
<b>3</b>	60	33	30	44	42	32	25	23	7.0	2.9	0.89	0.39
<b>4</b>	65	36	30	43	42	31	27	21	6.8	3.0	0.81	0.32
<b>5</b>	74	33	30	40	42	31	26	20	6.7	2.9	0.70	0.26
<b>6</b>	75	31	31	39	43	29	25	17	6.3	2.7	0.66	0.27
<b>7</b>	68	34	35	38	41	28	25	22	6.9	2.5	0.64	0.27
<b>8</b>	63	31	41	37	41	29	25	21	6.1	2.4	0.63	0.26
<b>9</b>	64	26	43	91	42	28	26	17	6.0	2.1	0.59	0.26
<b>10</b>	51	26	42	140	41	28	23	15	5.6	2.0	0.53	0.25
<b>11</b>	50	26	42	85	39	28	54	17	5.5	2.1	0.51	0.23
<b>12</b>	47	28	40	74	38	27	68	36	5.5	1.9	0.52	0.22
<b>13</b>	35	e27	39	74	38	28	38	22	5.2	1.9	0.67	0.26
<b>14</b>	36	e27	38	65	37	29	26	18	4.9	1.8	0.84	0.24
<b>15</b>	36	27	39	60	36	28	24	22	4.9	1.6	0.72	0.25
<b>16</b>	35	28	38	68	36	28	22	34	4.4	1.6	0.65	0.27
<b>17</b>	28	27	37	67	36	28	23	23	3.8	1.6	0.59	0.35
<b>18</b>	37	28	37	61	35	28	24	19	3.6	1.6	0.56	0.83
<b>19</b>	34	28	38	55	37	28	24	17	3.4	1.7	0.53	11
<b>20</b>	35	29	39	50	36	28	22	14	3.1	1.7	0.50	5.0
<b>21</b>	33	30	39	47	34	28	21	14	3.4	1.5	0.48	2.4
<b>22</b>	32	31	37	45	33	28	21	12	9.7	1.4	0.54	1.4
<b>23</b>	32	32	37	44	32	27	19	11	8.3	1.3	0.58	1.1
<b>24</b>	32	31	44	42	33	26	18	9.9	5.0	1.4	0.54	0.87
<b>25</b>	30	32	56	38	32	27	18	13	4.0	1.3	0.50	0.81
<b>26</b>	30	31	49	34	32	27	17	11	3.7	1.2	0.48	0.76
<b>27</b>	28	31	47	34	32	26	16	10	4.1	1.1	0.46	0.74
<b>28</b>	29	32	47	34	37	26	16	9.5	4.0	1.1	0.45	0.75
<b>29</b>	30	34	66	33	---	27	15	9.0	3.8	1.0	0.47	0.79
<b>30</b>	29	34	63	33	---	26	14	8.4	3.4	1.0	0.42	3.2
<b>31</b>	27	---	57	33	---	26	---	8.1	---	0.99	0.40	---
<b>Total</b>	1,355	900	1,271	1,647	1,059	879	754	525.9	160.3	57.49	18.77	34.50
<b>Mean</b>	43.7	30.0	41.0	53.1	37.8	28.4	25.1	17.0	5.34	1.85	0.61	1.15
<b>Max</b>	75	36	66	140	46	35	68	36	9.7	3.2	0.96	11
<b>Min</b>	27	26	29	33	32	26	14	8.1	3.1	0.99	0.40	0.22
<b>Ac-ft</b>	2,690	1,790	2,520	3,270	2,100	1,740	1,500	1,040	318	114	37	68

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1959 - 2011<sup>b</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>	232	144	276	248	466	457	407	566	352	88.5	94.4	114
<b>Max</b>	2,834	1,995	7,469	1,833	5,156	2,865	2,392	3,247	1,609	712	1,625	1,046
(WY)	(1960)	(2005)	(1992)	(1961)	(1992)	(1998)	(1977)	(1965)	(1989)	(1968)	(1995)	(2007)
<b>Min</b>	1.35	2.69	4.10	6.78	6.71	8.82	6.02	2.94	0.63	0.11	0.19	0.00
(WY)	(1979)	(1984)	(1979)	(1984)	(2000)	(2000)	(1984)	(1984)	(1984)	(1984)	(2000)	(1984)

**08095200 North Bosque River at Valley Mills, TX—Continued****SUMMARY STATISTICS**

	<b>Calendar Year 2010</b>	<b>Water Year 2011</b>		<b>Water Years 1959 - 2011<sup>h</sup></b>	
<b>Annual total</b>	177,223		8,661.96		
<b>Annual mean</b>	486		23.7		284
<b>Highest annual mean</b>				1,664	1992
<b>Lowest annual mean</b>				14.6	1984
<b>Highest daily mean</b>	34,100	Jan 29	140	Jan 10	123,000 Dec 21, 1991
<b>Lowest daily mean</b>	25	Sep 6	0.22	Sep 12	0.00 Oct 5, 1963
<b>Annual seven-day minimum</b>	27	Nov 9	0.24	Sep 9	0.00 Oct 5, 1963
<b>Maximum peak flow</b>			170	Jan 10	220,000 Dec 21, 1991
<b>Maximum peak stage</b>			6.43	Jan 10	44.60 Dec 21, 1991
<b>Annual runoff (ac-ft)</b>	351,500		17,180		206,000
<b>10 percent exceeds</b>	953		46		476
<b>50 percent exceeds</b>	88		26		45
<b>90 percent exceeds</b>	31		0.61		6.7

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

