

## Water-Data Report 2011

**01589795 SOUTH FORK JABEZ BRANCH AT MILLERSVILLE, MD**Upper Chesapeake Basin  
Severn Subbasin

LOCATION.--Lat 39°04'05.7", long 76°39'05.5" referenced to North American Datum of 1983, Anne Arundel County, MD, Hydrologic Unit 02060004, on left bank 300 ft upstream from the confluence with the West Branch Jabez Branch, 0.5 mi northwest of Millersville, 1.0 mi west of Gambrills, and 1.6 mi upstream from mouth.

DRAINAGE AREA.--1.0 mi<sup>2</sup>.**SURFACE-WATER RECORDS**

PERIOD OF RECORD.--August 1989 to September 1990, July 1997 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 60 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records poor including those for estimated daily discharges (backwater, missing data). U.S. Geological Survey satellite collection platform at station. Several measurements of water temperature were made during the year.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 20 ft<sup>3</sup>/s and (or) maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Mar 10	1650	125	6.11
Jul 8	1620	121	6.08
Jul 24	1930	88	5.81
Jul 25	1520	64	5.56
Aug 18	1710	30	5.06
Aug 21	1535	53	5.42
Aug 27	2240	167	6.37
Sep 6	1540	60	5.51
Sep 7	2310	*1,430	*13.75
Sep 23	1705	120	6.22
Sep 28	2140	26	5.32

Minimum discharge, 0.06 ft<sup>3</sup>/s, June 26.

## 01589795 SOUTH FORK JABEZ BRANCH AT MILLERSVILLE, MD—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	31	0.53	1.2	0.24	0.24	0.58	0.54	0.51	0.21	0.15	0.31	e0.80
2	8.1	0.53	0.48	0.24	3.3	0.34	0.37	0.51	0.21	0.14	0.31	e0.80
3	2.0	0.53	0.37	0.24	1.2	0.32	0.28	0.46	0.17	0.40	0.32	e0.77
4	2.8	2.8	0.32	0.24	0.55	0.32	0.23	2.0	0.16	0.19	0.37	e0.76
5	0.41	1.1	0.32	0.24	0.84	0.32	0.31	0.56	0.17	0.16	0.34	1.9
6	0.28	0.62	0.32	0.24	1.0	1.3	0.23	0.47	0.20	0.16	0.31	19
7	0.27	0.59	0.32	0.24	0.62	1.9	0.21	0.43	0.18	0.15	0.33	e61
8	0.30	0.53	0.32	0.25	0.43	0.57	0.27	0.43	0.17	7.2	0.34	e46
9	0.31	0.48	0.33	0.24	0.27	0.49	0.33	0.40	0.16	1.6	0.31	e22
10	0.30	0.44	0.34	0.24	0.25	32	0.24	0.43	0.16	0.37	0.28	e10
11	0.37	0.38	0.36	0.24	0.24	17	0.21	0.43	0.16	0.32	0.30	e8.5
12	0.46	0.36	1.5	0.26	0.24	7.4	0.21	0.43	0.37	0.28	0.31	e7.5
13	0.42	0.36	1.1	0.25	0.23	0.81	0.21	0.43	0.16	0.77	0.37	e5.7
14	1.1	0.36	0.46	0.25	0.22	0.34	0.21	0.47	0.13	0.42	0.43	e1.8
15	0.45	0.36	0.37	0.27	0.22	0.28	0.21	0.71	0.13	0.37	0.43	e1.3
16	0.37	0.36	0.36	0.27	0.23	2.4	1.4	0.48	0.14	0.34	0.40	e1.2
17	0.37	0.54	0.32	0.27	0.21	0.46	1.3	0.51	0.15	0.31	0.37	e1.2
18	0.36	0.39	0.32	0.30	0.21	0.31	0.74	0.53	0.14	0.28	1.7	e1.1
19	0.38	0.36	0.30	0.29	0.21	0.26	0.66	0.44	0.13	0.26	0.64	e1.0
20	0.38	0.34	0.31	0.28	0.22	0.26	0.61	0.43	0.12	0.28	0.48	e1.1
21	0.36	0.32	0.28	0.25	0.22	0.39	0.58	0.40	0.10	0.24	2.6	e1.1
22	0.36	0.32	0.27	0.24	0.23	0.34	0.58	0.37	0.09	0.21	0.66	e1.0
23	0.35	0.32	0.27	0.24	0.22	0.38	0.69	0.34	0.10	0.21	0.48	15
24	0.33	0.32	0.26	0.24	0.21	0.64	0.73	0.28	0.09	3.5	0.37	6.8
25	0.38	0.32	0.24	0.25	0.53	0.40	0.77	0.26	0.08	5.5	0.41	e2.0
26	0.33	0.32	0.25	0.44	0.30	0.37	0.56	0.26	0.08	2.5	0.40	e0.90
27	2.3	0.32	0.24	0.39	0.31	0.37	0.55	0.26	0.08	0.40	26	e0.76
28	0.77	0.32	0.24	0.35	0.93	0.33	0.53	0.26	0.39	0.37	36	2.0
29	0.59	0.32	0.24	0.30	---	0.31	0.51	0.26	0.20	0.34	e1.8	3.1
30	0.56	0.32	0.24	0.26	---	0.32	0.51	0.24	0.16	0.31	e0.97	0.61
31	0.53	---	0.24	0.26	---	0.35	---	0.23	---	0.31	e0.85	---
<b>Total</b>	57.29	15.16	12.49	8.31	13.88	71.86	14.78	14.22	4.79	28.04	79.19	226.70
<b>Mean</b>	1.85	0.51	0.40	0.27	0.50	2.32	0.49	0.46	0.16	0.90	2.55	7.56
<b>Max</b>	31	2.8	1.5	0.44	3.3	32	1.4	2.0	0.39	7.2	36	61
<b>Min</b>	0.27	0.32	0.24	0.24	0.21	0.26	0.21	0.23	0.08	0.14	0.28	0.61
<b>Cfsm</b>	1.85	0.51	0.40	0.27	0.50	2.32	0.49	0.46	0.16	0.90	2.55	7.56
<b>In.</b>	2.13	0.56	0.46	0.31	0.52	2.67	0.55	0.53	0.18	1.04	2.95	8.43

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 – 1990, 1997 – 2011, BY WATER YEAR (WY)**

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Mean</b>	0.55	0.52	0.73	0.51	0.65	1.03	0.61	0.94	0.57	0.43	0.50	1.19
<b>Max</b>	1.85	1.59	4.12	1.60	2.01	4.47	1.65	6.22	2.21	0.90	2.55	7.56
(WY)	(2011)	(2007)	(2010)	(1998)	(1998)	(2010)	(2007)	(2008)	(2003)	(2011)	(2011)	(2011)
<b>Min</b>	0.13	0.16	0.22	0.18	0.14	0.18	0.22	0.21	0.16	0.16	0.14	0.16
(WY)	(2002)	(2002)	(2002)	(2002)	(2002)	(2002)	(2006)	(2006)	(2002)	(2002)	(2002)	(2002)

**01589795 SOUTH FORK JABEZ BRANCH AT MILLERSVILLE, MD—Continued****SUMMARY STATISTICS**

	<b>Calendar Year 2010</b>	<b>Water Year 2011</b>	<b>Water Years 1989 – 1990, 1997 – 2011</b>	
<b>Annual total</b>	386.61	546.71		
<b>Annual mean</b>	1.06	1.50	0.69	
<b>Highest annual mean</b>			1.50	2011
<b>Lowest annual mean</b>			0.21	2002
<b>Highest daily mean</b>	73 Mar 13	e 61 Sep 7	150 May 12, 2008	
<b>Lowest daily mean</b>	0.03 Aug 2	0.08 Jun 25 <sup>a</sup>	0.03 Aug 2, 2010	
<b>Annual seven-day minimum</b>	0.07 Aug 1	0.09 Jun 21	0.07 Aug 1, 2010	
<b>Maximum peak flow</b>		b 1,430 Sep 7	b 1,430 Sep 7, 2011	
<b>Maximum peak stage</b>		c 13.75 Sep 7	c 13.75 Sep 7, 2011	
<b>Instantaneous low flow</b>		0.06 Jun 26	0.02 Aug 12, 2010 <sup>d</sup>	
<b>Annual runoff (cfsm)</b>	1.06	1.50	0.694	
<b>Annual runoff (inches)</b>	14.38	20.34	9.43	
<b>10 percent exceeds</b>	1.1	1.7	0.70	
<b>50 percent exceeds</b>	0.36	0.35	0.33	
<b>90 percent exceeds</b>	0.14	0.21	0.17	

<sup>e</sup> Estimated.<sup>a</sup> June 25–27.<sup>b</sup> From rating curve extended above 22 ft<sup>3</sup>/s on the basis of slope area measurement at gage height of 13.75 ft.<sup>c</sup> From floodmarks.<sup>d</sup> Aug. 1, 12, 2010.