

Water-Data Report 2011
01644380 CABIN BRANCH NEAR BOYDS, MD

Potomac Basin
 Middle Potomac-Catoctin Subbasin

LOCATION.--Lat 39°12'23.8", long 77°17'18.9" referenced to North American Datum of 1983, Montgomery County, MD, Hydrologic Unit 02070008, on right bank, 1.45 mi upstream of Little Seneca Creek, 2 mi northeast of Boyds, and 2.35 mi southwest of Clarksburg.

DRAINAGE AREA.--0.79 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--June 2004 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 420 ft above National Geodetic Vertical Datum of 1929, from topographic map.

COOPERATION.--Records were provided by the Montgomery County Department of Environmental Protection.

REMARKS.--Records poor including those for estimated daily discharges (backwater, ice effect). 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 ft³/s and (or) maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan 27	0235	Unknown	^a 4.71
Mar 6	1525	67	4.98
Mar 10	2011	54	5.57
Apr 16	1945	26	5.18
Aug 14	2123	362	7.29
Sep 5	2225	32	5.29
Sep 8	1725	*1,560	*9.42

^a Backwater from ice and snow.

Minimum discharge, 0.10 ft³/s, Oct. 9-14, Aug. 12.

01644380 CABIN BRANCH NEAR BOYDS, 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	1.8	0.19	2.3	0.36	e0.28	1.1	0.89	1.1	0.49	0.19	0.17	0.27
2	0.23	0.19	0.60	0.36	1.3	0.99	0.85	1.1	0.45	0.18	0.16	0.28
3	0.21	0.20	0.44	0.36	0.71	0.86	0.84	1.0	0.44	0.38	0.19	0.42
4	0.29	1.0	0.37	0.36	0.63	0.80	0.85	1.2	0.44	0.29	0.19	0.30
5	0.21	0.51	0.36	0.36	0.56	0.78	1.2	1.0	0.44	0.27	0.16	2.9
6	0.16	0.36	0.36	0.35	0.66	16	0.97	0.97	0.42	0.24	0.28	2.8
7	0.15	0.32	0.36	e0.35	0.74	4.1	0.93	0.91	0.39	0.39	0.29	4.1
8	0.13	e0.32	0.33	e0.34	0.72	1.3	1.0	0.86	0.37	0.58	0.19	71
9	0.12	e0.31	0.32	e0.34	0.57	0.98	0.99	0.83	0.36	0.35	0.19	2.5
10	0.12	e0.31	e0.33	e0.34	0.48	5.7	0.96	0.80	0.32	0.31	0.17	1.7
11	0.12	0.32	e0.33	e0.34	e0.44	2.7	0.94	0.79	0.32	0.50	0.16	1.5
12	0.12	0.32	0.61	e0.34	e0.42	1.8	1.4	0.73	0.32	0.36	0.14	1.4
13	0.11	0.32	0.47	0.33	0.39	1.6	1.9	0.70	0.30	0.88	0.21	1.2
14	0.49	0.32	0.37	e0.33	1.2	1.4	1.3	0.86	0.31	0.41	9.6	1.3
15	0.21	0.32	0.36	e0.33	0.82	1.3	1.1	1.4	0.28	0.33	1.0	1.3
16	0.17	0.75	e0.37	e0.31	0.68	1.5	3.4	1.0	0.32	0.30	0.38	1.1
17	0.16	0.55	e0.37	0.32	0.70	1.3	2.1	0.85	0.40	0.28	0.26	1.1
18	0.16	0.40	0.36	0.37	0.70	1.2	1.5	0.89	0.43	0.27	0.30	1.0
19	0.28	0.35	0.36	0.43	0.59	1.1	1.5	0.83	0.31	0.26	0.28	1.0
20	0.19	0.32	0.36	0.37	0.54	0.96	1.3	0.80	0.33	0.25	0.24	1.0
21	0.18	0.32	0.36	e0.35	0.58	1.0	1.2	0.75	0.31	0.23	0.25	0.99
22	0.18	0.32	0.36	e0.33	0.63	0.93	1.2	0.70	0.28	0.22	0.22	0.97
23	0.18	0.32	0.36	e0.33	0.56	0.98	1.2	0.77	0.27	0.21	0.21	1.3
24	0.18	0.31	0.36	e0.33	0.63	0.96	1.3	0.80	0.26	0.20	0.22	0.91
25	0.19	0.31	0.36	e0.33	2.7	0.90	1.2	0.75	0.23	0.35	0.24	0.83
26	0.19	0.32	0.36	e0.50	1.3	0.88	1.1	0.68	0.23	0.22	0.23	0.80
27	0.66	0.30	0.36	e0.45	1.1	0.85	1.2	0.71	0.24	0.20	0.50	0.80
28	0.22	0.28	0.36	e0.37	1.3	0.85	1.7	0.69	0.23	0.20	1.3	0.82
29	0.20	0.28	0.36	e0.31	---	0.85	1.3	0.65	0.21	0.19	0.37	0.78
30	0.21	0.34	0.36	e0.28	---	0.86	1.1	0.58	0.20	0.19	0.29	0.76
31	0.21	---	0.36	e0.28	---	0.85	---	0.53	---	0.17	0.27	---
Total	8.03	10.78	13.69	10.85	21.93	57.38	38.42	26.23	9.90	9.40	18.66	107.13
Mean	0.26	0.36	0.44	0.35	0.78	1.85	1.28	0.85	0.33	0.30	0.60	3.57
Max	1.8	1.0	2.3	0.50	2.7	16	3.4	1.4	0.49	0.88	9.6	71
Min	0.11	0.19	0.32	0.28	0.28	0.78	0.84	0.53	0.20	0.17	0.14	0.27
Cfsm	0.33	0.45	0.56	0.44	0.99	2.34	1.62	1.07	0.42	0.38	0.76	4.52
In.	0.38	0.51	0.64	0.51	1.03	2.70	1.81	1.24	0.47	0.44	0.88	5.04

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2004 - 2011, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	0.50	0.70	0.93	0.87	0.87	1.20	1.13	0.98	0.84	0.63	0.34	0.72
Max	1.08	1.37	2.43	1.47	1.61	2.08	2.22	1.42	1.69	1.28	0.60	3.57
(WY)	(2005)	(2005)	(2010)	(2005)	(2006)	(2010)	(2005)	(2005)	(2006)	(2005)	(2011)	(2011)
Min	0.14	0.21	0.25	0.29	0.33	0.41	0.44	0.32	0.32	0.19	0.14	0.09
(WY)	(2008)	(2008)	(2008)	(2008)	(2009)	(2009)	(2006)	(2006)	(2010)	(2010)	(2008)	(2007)

01644380 CABIN BRANCH NEAR BOYDS, MD—Continued**SUMMARY STATISTICS**

	Calendar Year 2010	Water Year 2011	Water Years 2004 - 2011	
Annual total	255.72	332.40		
Annual mean	0.70	0.91	0.79	
Highest annual mean			1.17	2005
Lowest annual mean			0.44	2008
Highest daily mean	6.1	May 23	71	Sep 8, 2011
Lowest daily mean	0.05	Sep 25	0.11	Sep 25, 2007 ^a
Annual seven-day minimum	0.06	Sep 20	0.12	Oct 7
Maximum peak flow			b1,560	Sep 8, 2011
Maximum peak stage			9.42	Sep 8, 2011
Instantaneous low flow			0.10	Oct 9 ^c
Annual runoff (cfsm)	0.887	1.15		1.00
Annual runoff (inches)	12.04	15.65		13.64
10 percent exceeds	1.6	1.3		1.4
50 percent exceeds	0.38	0.37		0.50
90 percent exceeds	0.12	0.20		0.18

^e Estimated.^a Sept. 25, 26, Oct. 3-11, 13-18, 2007, Sept. 25, 2010.^b From rating curve extended above 45 ft³/s on basis of slope-area measurements at gage-heights 7.30 and 9.42 ft.^c Oct. 9-14, Aug. 12.^d Sept. 23-26, 2010.