



Water-Data Report 2011

01649150 PAINT BRANCH TRIBUTARY NEAR COLESVILLE, MD

Potomac Basin
Middle Potomac-Anacostia-Occoquan Subbasin

LOCATION.--Lat 39°05'18.2", long 76°59'22.5" referenced to North American Datum of 1927, Montgomery County, MD, Hydrologic Unit 02070010, on right bank, 1,000 ft downstream of Good Hope Road, 0.95 mi upstream of confluence with Paint Branch, and 1.1 mi southeast of Colesville.

DRAINAGE AREA.--1.04 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--November 2006 to current year.

REVISED RECORDS.--WDR-US-2009: 2007-08(M).

GAGE.—Water-stage recorder and crest-stage gage. Elevation of gage is 375 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records fair, except those for estimated daily discharges (erroneous record, backwater, ice effect), which are poor. 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 80 ft³/s and (or) maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Sep 8	0215	*52	*2.64
No peak greater than base discharge.			

Minimum discharge, 0.19 ft³/s, July 30, 31, Aug. 1-3, 5-13, 16-18, 23-25.

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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	e3.8	e0.56	3.2	e0.48	e0.42	1.4	1.1	0.82	e0.54	0.27	0.19	0.28
2	0.57	e0.50	1.1	e0.54	3.8	0.94	1.0	0.82	e0.54	0.25	0.19	0.28
3	0.50	e0.44	0.80	e0.50	1.4	0.82	1.0	0.82	e0.50	0.65	0.19	0.28
4	1.1	e4.0	e0.70	e0.48	0.82	0.74	0.93	1.2	e0.50	0.32	0.22	0.28
5	0.65	0.95	e0.60	e0.48	1.3	0.73	1.9	0.88	e0.50	0.26	0.21	0.33
6	0.54	0.73	e0.54	e0.46	1.7	5.8	1.1	0.82	e0.46	0.25	0.19	1.9
7	0.51	0.65	e0.50	e0.44	1.3	3.8	0.93	0.82	e0.42	0.24	0.20	6.6
8	0.51	e0.60	e0.48	e0.46	1.2	1.2	1.5	0.82	0.39	2.6	0.21	11
9	0.45	e0.56	e0.46	e0.44	0.86	0.91	1.3	0.82	0.37	0.61	0.19	2.9
10	0.40	e0.56	e0.44	e0.44	0.72	16	1.0	0.79	0.36	0.35	0.19	0.84
11	e0.36	e0.52	e0.44	e0.44	0.65	5.2	0.93	0.73	0.36	0.39	0.19	0.81
12	e0.34	e0.52	2.0	e0.50	0.65	2.1	1.6	0.65	0.36	0.42	0.19	0.77
13	e0.34	e0.52	1.1	e0.46	0.65	1.6	2.8	0.65	0.36	0.81	0.50	0.53
14	0.75	e0.52	0.74	e0.44	0.92	1.5	1.3	0.86	0.35	0.41	1.2	0.44
15	0.52	e0.52	e0.62	e0.44	0.95	1.3	1.0	1.2	0.31	0.28	0.72	0.40
16	0.45	1.0	e0.56	e0.44	0.74	3.6	4.4	1.2	0.40	0.28	0.23	0.43
17	0.45	1.3	e0.52	e0.44	0.73	1.7	3.1	0.94	0.50	0.28	0.20	0.45
18	0.41	0.81	e0.52	e0.80	0.73	1.5	1.5	1.5	0.57	0.28	0.26	0.45
19	0.47	e0.64	e0.52	1.0	e0.70	1.4	1.3	0.96	0.34	0.28	0.34	0.45
20	0.51	e0.56	e0.50	e0.74	e0.70	1.3	1.1	0.79	0.43	0.28	0.30	0.45
21	e0.46	e0.52	e0.50	e0.60	e0.80	1.7	1.0	0.73	0.35	0.28	0.67	0.45
22	e0.42	e0.50	e0.50	e0.52	1.0	1.4	1.1	0.69	0.32	0.26	0.33	0.73
23	e0.40	e0.50	e0.48	e0.46	1.0	1.5	1.4	0.65	0.32	0.23	0.22	0.95
24	e0.40	e0.50	e0.48	e0.42	1.1	1.9	1.3	0.63	0.32	0.23	0.19	0.87
25	e0.38	e0.60	e0.48	e0.40	2.5	1.3	1.3	0.58	0.30	0.41	0.34	0.74
26	e0.38	e0.52	e0.48	e0.70	1.1	1.2	1.0	0.61	0.28	0.32	0.31	0.73
27	3.6	e0.50	e0.48	e0.80	0.93	1.2	0.93	0.59	0.28	0.24	3.1	0.73
28	1.2	e0.48	e0.48	e0.80	2.3	1.1	1.0	0.63	0.28	0.22	7.9	2.2
29	e0.90	e0.48	e0.48	e0.70	---	0.93	0.89	0.58	0.28	0.22	0.82	1.3
30	e0.74	0.52	e0.48	e0.54	---	0.93	0.82	0.58	0.28	0.21	0.36	0.40
31	e0.64	---	e0.48	e0.46	---	0.93	---	0.58	---	0.20	0.31	---
Total	23.15	21.58	21.66	16.82	31.67	67.63	41.53	24.94	11.57	12.33	20.66	38.97
Mean	0.75	0.72	0.70	0.54	1.13	2.18	1.38	0.80	0.39	0.40	0.67	1.30
Max	3.8	4.0	3.2	1.0	3.8	16	4.4	1.5	0.57	2.6	7.9	11
Min	0.34	0.44	0.44	0.40	0.42	0.73	0.82	0.58	0.28	0.20	0.19	0.28
Cfsm	0.72	0.69	0.67	0.52	1.09	2.10	1.33	0.77	0.37	0.38	0.64	1.25
In.	0.83	0.77	0.77	0.60	1.13	2.42	1.49	0.89	0.41	0.44	0.74	1.39

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2007 - 2011, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	0.66	0.65	1.17	0.89	1.04	1.51	1.40	1.25	0.89	0.44	0.50	0.63
Max	0.99	1.15	2.81	1.27	1.25	2.18	1.57	1.96	2.34	0.76	0.97	1.30
(WY)	(2010)	(2010)	(2010)	(2009)	(2008)	(2011)	(2007)	(2009)	(2009)	(2010)	(2010)	(2011)
Min	0.42	0.29	0.59	0.52	0.56	0.77	1.29	0.59	0.39	0.29	0.13	0.12
(WY)	(2008)	(2008)	(2008)	(2008)	(2009)	(2009)	(2008)	(2007)	(2011)	(2008)	(2008)	(2007)

01649150 PAINT BRANCH TRIBUTARY NEAR COLESVILLE, MD—Continued**SUMMARY STATISTICS**

	Calendar Year 2010	Water Year 2011	Water Years 2007 - 2011	
Annual total	369.28	332.51		
Annual mean	1.01	0.91	0.95	
Highest annual mean			1.25	2010
Lowest annual mean			0.70	2008
Highest daily mean	e21 Sep 30	16 Mar 10	23 Nov 16, 2006	
Lowest daily mean	e0.18 Sep 21 ^a	0.19 Aug 1 ^b	0.08 Aug 22, 2008 ^c	
Annual seven-day minimum	0.22 Jul 1	0.19 Aug 6	0.08 Aug 22, 2008	
Maximum peak flow		52 Sep 8	d397 Sep 30, 2010	
Maximum peak stage		2.64 Sep 8	4.19 Sep 30, 2010	
Instantaneous low flow		0.19 Jul 30 ^f	0.08 Aug 21, 2008 ^g	
Annual runoff (cfsm)	0.973	0.876	0.918	
Annual runoff (inches)	13.21	11.89	12.47	
10 percent exceeds	1.7	1.5	1.6	
50 percent exceeds	0.70	0.56	0.58	
90 percent exceeds	0.28	0.28	0.22	

^e Estimated.^a Sept. 21, 26.^b Aug. 1-3, 6, 9-12, 24.^c Aug. 22-27, 2008.^d From rating curve extended above 15 ft³/s on basis of slope-area measurement at gage height 3.67 ft.^f July 30, 31, Aug. 1-3, 5-13, 16-18, 23-25.^g Aug. 21-28, 2008.