

Water-Data Report 2011

01647850 TURKEY BRANCH NEAR ROCKVILLE, MD

Potomac Basin
Middle Potomac-Anacostia-Occoquan Subbasin

LOCATION.--Lat 39°04'06.5", long 77°04'54.3" referenced to North American Datum of 1983, Montgomery County, MD, Hydrologic Unit 02070010, on right bank approximately 1.2 mi upstream from confluence with Rock Creek, 1.7 mi east of Rockville, and 2.5 mi northwest of Kensington.

DRAINAGE AREA.--2.74 mi².

SURFACE-WATER RECORDS

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

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 265 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records fair except those for estimated daily discharges (erroneous record, backwater and 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.--Maximum discharge, 1,150 ft³/s, Sept. 8, gage height, 8.95 ft; minimum discharge, 0.18 ft³/s, July 31, Aug. 1, 10-12.

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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	e18	0.48	33	e0.41	0.71	2.6	2.2	0.87	0.58	0.32	2.0	0.52
2	e5.3	0.46	5.3	e0.41	27	1.0	2.4	0.89	0.56	0.29	0.93	12
3	e9.3	0.47	1.4	e0.39	4.6	0.82	1.0	0.80	0.53	12	0.27	0.78
4	15	25	0.66	e0.40	2.4	0.80	1.1	6.7	0.53	1.5	0.25	0.43
5	1.3	4.7	0.46	0.40	6.9	0.75	6.7	1.1	0.55	0.51	0.22	7.6
6	0.84	0.93	e0.43	e0.39	4.5	46	1.1	1.1	0.53	0.38	0.43	19
7	0.70	0.56	e0.41	e0.38	2.5	15	0.91	0.96	0.52	0.33	2.7	56
8	0.49	0.43	e0.39	e0.36	1.8	4.2	6.8	0.77	0.50	38	0.45	106
9	0.43	0.43	e0.37	0.35	0.95	1.6	2.2	0.71	0.49	e7.9	0.23	e13
10	0.40	0.40	e0.37	e0.35	0.86	61	1.2	0.67	0.49	e2.3	0.20	e4.1
11	0.45	0.40	0.41	e0.36	0.74	12	1.1	0.69	0.51	e1.5	0.19	e2.7
12	0.48	0.44	15	e0.38	0.69	5.1	7.0	0.63	0.56	1.5	0.22	e2.2
13	0.40	e0.46	3.1	e0.38	0.75	2.6	16	0.77	0.44	3.2	2.0	0.78
14	14	e0.47	0.80	e0.38	1.3	1.5	2.9	5.3	0.43	0.87	9.7	0.71
15	2.3	0.47	e0.63	0.38	0.88	2.1	1.4	5.8	0.43	0.37	4.0	0.75
16	0.63	5.8	e0.57	0.37	0.68	12	27	1.9	2.7	0.31	0.66	0.60
17	0.53	6.2	e0.54	0.38	0.67	1.7	8.7	1.3	3.5	0.28	0.27	0.53
18	0.46	0.62	e0.52	4.1	0.71	1.3	2.8	5.0	6.3	0.26	6.6	0.53
19	1.9	0.57	e0.50	1.4	0.68	1.1	1.8	2.3	0.95	0.27	1.7	0.53
20	0.50	0.53	e0.49	0.58	e0.85	1.0	1.4	1.3	3.2	0.26	0.37	1.1
21	0.49	0.50	e0.47	e0.45	e1.0	4.3	1.2	1.0	0.83	0.25	3.8	0.53
22	0.51	0.63	e0.46	e0.39	e1.6	1.2	4.4	0.90	0.63	0.24	0.67	3.5
23	0.53	0.54	e0.44	e0.37	e1.1	4.6	2.8	1.7	0.49	0.22	0.25	5.2
24	0.53	0.51	e0.44	e0.36	0.75	2.8	2.1	0.96	0.44	0.22	0.22	1.1
25	0.56	0.90	e0.43	e0.37	8.3	1.1	1.9	0.92	0.38	4.8	3.0	0.58
26	0.77	0.50	e0.44	7.5	1.2	0.90	1.0	e0.85	0.38	0.95	0.47	0.54
27	15	0.43	e0.41	6.2	0.79	0.85	1.0	e0.79	0.38	0.30	24	0.53
28	3.1	0.41	e0.40	2.1	13	0.79	3.1	e0.73	1.9	0.24	26	12
29	1.1	0.42	e0.40	1.1	---	0.79	1.0	e0.68	0.64	0.26	3.4	3.1
30	0.66	0.59	e0.42	1.0	---	2.0	0.85	e0.63	0.37	0.23	1.3	0.82
31	0.59	---	e0.39	0.81	---	1.6	---	e0.60	---	0.20	0.67	---
Total	97.25	55.25	70.05	33.20	87.91	195.10	115.06	49.32	30.74	80.26	97.17	257.76
Mean	3.14	1.84	2.26	1.07	3.14	6.29	3.84	1.59	1.02	2.59	3.13	8.59
Max	18	25	33	7.5	27	61	27	6.7	6.3	38	26	106
Min	0.40	0.40	0.37	0.35	0.67	0.75	0.85	0.60	0.37	0.20	0.19	0.43
Cfsm	1.14	0.67	0.82	0.39	1.15	2.30	1.40	0.58	0.37	0.94	1.14	3.14
In.	1.32	0.75	0.95	0.45	1.19	2.65	1.56	0.67	0.42	1.09	1.32	3.50

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	2.49	1.95	3.69	2.00	2.91	4.32	4.45	4.02	2.93	2.02	3.01	4.15
Max	3.14	3.57	8.71	2.83	4.92	6.29	6.00	7.71	6.36	3.29	7.42	8.59
(WY)	(2011)	(2010)	(2010)	(2009)	(2008)	(2011)	(2008)	(2008)	(2009)	(2010)	(2010)	(2011)
Min	1.49	1.01	1.38	1.07	0.72	2.16	2.25	0.92	1.02	0.86	0.79	0.52
(WY)	(2009)	(2008)	(2007)	(2011)	(2009)	(2009)	(2010)	(2007)	(2011)	(2007)	(2008)	(2007)

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SUMMARY STATISTICS

	Calendar Year 2010	Water Year 2011	Water Years 2007 - 2011
Annual total	1,193.38	1,169.07	
Annual mean	3.27	3.20	3.39
Highest annual mean			3.95 2010
Lowest annual mean			3.00 2009
Highest daily mean	111 Sep 30	106 Sep 8	111 Sep 30, 2010
Lowest daily mean	0.27 Sep 25	0.19 Aug 11	e0.16 Oct 9, 2007 ^a
Annual seven-day minimum	0.34 Sep 4	0.25 Jul 18	0.17 Oct 7, 2007
Maximum peak flow		1,150 Sep 8	b3,360 Aug 12, 2010
Maximum peak stage		8.95 Sep 8	c12.78 Aug 12, 2010
Instantaneous low flow		0.18 Jul 31 ^d	0.07 Oct 10, 2007 ^f
Annual runoff (cfsm)	1.19	1.17	1.24
Annual runoff (inches)	16.20	15.87	16.81
10 percent exceeds	6.7	6.7	7.8
50 percent exceeds	1.1	0.77	0.91
90 percent exceeds	0.41	0.37	0.32

^e Estimated.^a Oct. 9-11, 2007 (Oct. 10, 11 estimated).^b From rating curve extended above 160 ft³/s on basis of slope-area measurement at gage-height 12.78 ft.^c From high-water marks.^d July 31, Aug. 1, 10-12.^f Oct. 10-12, 2007, as a result of stream restoration work.