

Water-Data Report 2011

01644371 LITTLE SENECA CREEK TRIBUTARY NEAR CLARKSBURG, MD

Potomac Basin
Middle Potomac-Catoctin Subbasin

LOCATION.--Lat 39°13'53", long 77°15'22" referenced to North American Datum of 1927, Montgomery County, MD, Hydrologic Unit 02070008, on left bank 950 ft upstream from confluence with Little Seneca Creek, and 1.4 mi east-southeast of Clarksburg.

DRAINAGE AREA.--0.43 mi².

SURFACE-WATER RECORDS

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

REVISED RECORDS.--WDR US 2006: 2004-05.

GAGE.--Water-stage recorder. Elevation of gage is 510 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to April 22, 2010, gage located on left bank, 50 ft downstream at same datum.

REMARKS.--Records poor, including those for estimated daily discharges (backwater, construction, and 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 50 ft³/s and (or) maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Aug 14	2133	231	7.26
Sep 8	1735	*444	*8.35

Minimum discharge, 0.14 ft³/s, July 22-24, 29-31, Aug. 1-6.

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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	3.2	e0.41	1.5	0.40	0.25	0.81	0.84	1.1	0.53	0.28	0.15	0.39
2	0.97	e0.40	0.46	0.40	1.5	0.68	0.60	1.0	0.49	0.28	0.15	0.39
3	0.77	e0.39	0.41	0.40	0.43	0.58	0.59	0.99	0.49	0.35	0.16	0.85
4	0.85	1.2	0.36	0.35	0.31	0.52	0.59	1.3	0.47	0.29	0.16	0.38
5	0.76	0.54	0.35	0.31	0.44	0.52	1.5	0.99	0.47	0.28	0.15	3.3
6	0.65	0.44	e0.38	e0.31	0.56	6.6	0.84	0.98	0.45	0.27	0.32	5.1
7	0.61	0.40	e0.38	e0.30	0.54	3.2	0.75	0.95	0.43	0.26	1.5	5.8
8	0.55	0.40	e0.37	e0.29	0.49	1.8	0.89	0.89	0.42	0.76	0.39	29
9	0.49	0.39	e0.37	e0.28	0.39	1.5	0.83	0.82	0.39	0.32	0.31	7.2
10	0.46	0.35	e0.37	e0.28	0.35	6.3	0.75	0.79	0.38	0.30	0.22	2.8
11	0.43	0.35	e0.37	e0.27	0.31	3.3	0.70	0.72	0.38	1.0	0.21	2.4
12	0.43	0.35	0.85	e0.27	0.32	1.7	2.1	0.66	0.38	0.72	0.20	2.0
13	0.43	0.35	0.68	e0.26	0.32	1.4	2.7	0.59	0.38	0.43	0.21	1.3
14	1.0	0.34	e0.49	0.25	0.51	1.3	1.2	0.97	0.39	0.34	6.7	2.7
15	0.47	0.33	e0.43	e0.25	e0.43	1.2	1.0	2.7	0.38	0.29	3.3	2.8
16	0.46	0.71	e0.42	e0.24	0.40	1.5	4.8	1.5	0.39	0.23	0.64	1.6
17	0.44	0.52	e0.41	0.23	0.40	1.0	3.3	0.99	0.44	0.21	0.36	1.3
18	0.42	0.40	e0.41	0.30	0.40	0.95	1.8	1.5	0.42	0.20	0.33	1.1
19	0.59	0.40	e0.41	0.41	0.40	0.85	1.6	1.1	0.38	0.19	0.40	0.98
20	0.46	0.40	e0.40	0.37	0.39	0.78	1.4	0.98	0.39	0.19	0.30	0.91
21	0.43	0.35	e0.40	0.34	0.36	0.93	1.2	0.88	0.38	0.19	0.30	0.78
22	0.40	0.35	e0.40	0.28	0.37	0.78	1.1	0.80	0.37	0.17	0.27	0.79
23	0.40	0.35	e0.39	0.26	0.36	1.0	1.2	0.81	0.34	0.16	0.26	3.9
24	0.40	0.35	e0.39	e0.23	0.41	0.95	1.6	1.00	0.33	0.16	0.26	1.7
25	0.40	0.35	e0.39	e0.23	1.7	0.79	1.4	0.80	0.33	0.85	0.26	1.5
26	0.39	0.35	e0.39	e0.43	0.83	0.75	1.1	0.71	0.32	0.19	0.26	1.1
27	1.1	0.32	e0.39	e0.36	0.71	0.70	1.1	0.70	0.33	0.18	0.53	0.85
28	0.45	0.30	e0.38	0.25	1.1	0.67	2.0	0.66	0.32	0.17	2.4	0.89
29	e0.44	0.30	e0.37	0.24	---	0.59	1.3	0.63	0.29	0.16	0.42	0.78
30	e0.42	0.34	0.35	0.24	---	0.64	1.1	0.58	0.29	0.16	0.38	0.71
31	e0.41	---	0.39	0.23	---	0.63	---	0.56	---	0.15	0.37	---
Total	19.68	12.43	14.06	9.26	14.98	44.92	41.88	29.65	11.75	9.73	21.87	85.30
Mean	0.63	0.41	0.45	0.30	0.54	1.45	1.40	0.96	0.39	0.31	0.71	2.84
Max	3.2	1.2	1.5	0.43	1.7	6.6	4.8	2.7	0.53	1.0	6.7	29
Min	0.39	0.30	0.35	0.23	0.25	0.52	0.59	0.56	0.29	0.15	0.15	0.38
Cfsm	1.48	0.96	1.05	0.69	1.24	3.37	3.25	2.22	0.91	0.73	1.64	6.61
In.	1.70	1.08	1.22	0.80	1.30	3.89	3.62	2.57	1.02	0.84	1.89	7.38

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	0.57	0.75	0.63	0.57	0.89	0.91	0.75	0.52	0.48	0.40	0.71
Max	0.71	1.35	1.58	0.94	0.77	1.45	1.40	1.42	0.98	0.92	0.82	2.84
(WY)	(2010)	(2007)	(2010)	(2007)	(2010)	(2011)	(2011)	(2008)	(2006)	(2006)	(2009)	(2011)
Min	0.21	0.30	0.45	0.30	0.31	0.32	0.31	0.28	0.18	0.20	0.16	0.09
(WY)	(2008)	(2008)	(2011)	(2011)	(2005)	(2006)	(2006)	(2006)	(2005)	(2010)	(2005)	(2005)

01644371 LITTLE SENECA CREEK TRIBUTARY NEAR CLARKSBURG, MD—Continued**SUMMARY STATISTICS**

	Calendar Year 2010	Water Year 2011	Water Years 2004 - 2011	
Annual total	220.77	315.51		
Annual mean	0.60	0.86	0.65	
Highest annual mean			0.86	2011
Lowest annual mean			0.44	2005
Highest daily mean	9.9 Sep 30	29 Sep 8	29 Sep 8, 2011	
Lowest daily mean	0.15 Aug 10 ^a	0.15 Jul 31 ^b	0.05 Sep 13, 2005	
Annual seven-day minimum	0.16 Jul 3	0.15 Jul 30	0.07 Sep 7, 2005	
Maximum peak flow		c444 Sep 8	c444 Sep 8, 2011	
Maximum peak stage		8.35 Sep 8	8.35 Sep 8, 2011	
Instantaneous low flow		0.14 Jul 22 ^d	0.04 Sep 13, 2005	
Annual runoff (cfsm)	1.41	2.01	1.50	
Annual runoff (inches)	19.10	27.30	20.39	
10 percent exceeds	1.0	1.5	1.1	
50 percent exceeds	0.48	0.43	0.43	
90 percent exceeds	0.21	0.26	0.19	

^a Aug. 10, 11.^b July 31, Aug. 1, 2, 5.^c From rating curve extended above 65 ft³/s on basis of slope-area measurement at gage-height 7.26 ft.^d July 22-24, 29-31, Aug. 1-6.