Water-Data Report 2011

01589500 SAWMILL CREEK AT GLEN BURNIE, MD

Upper Chesapeake Basin
Gunpowder-Patapsco Subbasin

LOCATION.--Lat 39°10'12.0", long 76°37'50.2" referenced to North American Datum of 1983, Anne Arundel County, MD, Hydrologic Unit 02060003, on left bank 300 ft upstream from bridge on State Highway 648, 0.25 mi southeast of Interstate Highway 97, and 0.5 mi northwest of Glen Burnie.

DRAINAGE AREA.--4.97 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--May 1944 to September 1952. Annual maximum, water years 1965-70. September 1983 to current year.

REVISED RECORDS.--WDR MD-DE-89-1: 1984-88.

GAGE.--Water-stage recorder, crest-stage gage and concrete control. Datum of gage is 26.07 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for estimated daily discharges (ice effect), which are poor. Low flow affected by ground water diversions from Anne Arundel County municipal well fields upstream from station; spring and summer periods affected by discharge and withdrawal from unknown source. U.S. Geological Survey satellite collection platform at station. Several measurements of water temperature were made during the year.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of August 1933 reached a stage of about 4 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 30 ft^3/s and (or) maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct 1	0115	215	5.02
Mar 10	1745	120	3.84
Aug 15	1245	31	2.52
Aug 18	1900	81	3.34
Aug 21	1730	39	2.66
Aug 28	0330	256	5.23
Sep 6	0300	37	2.63
Sep 6	1745	70	3.18
Sep 7	1530	94	3.51
Sep 8	0130	*400	*6.39
Sep 23	1815	220	4.90
Sep 28	2345	40	2.69

Minimum discharge, 2.8 ft^3/s, July 31, Aug. 2.

Suggested citation: U.S. Geological Survey, 2012, Water-resources data for the United States, Water Year 2011: U.S. Geological Survey Water-Data Report WDR-US-2011, site 01589500, accessed at http://wdr.water.usgs.gov/wy2011/pdfs/01589500.2011.pdf

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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	96	5.2	13	4.9	4.8	7.8	7.2	5.8	4.5	4.0	3.2	5.9
2	11	5.1	7.8	5.1	17	5.9	6.4	5.8	4.4	4.0	3.2	5.9
3	7.5	5.2	5.9	4.8	9.8	5.4	6.0	5.7	4.3	5.6	4.1	5.7
4	17	15	5.6	4.8	6.1	5.3	6.0	11	4.5	4.7	4.8	5.6
5	8.8	10	5.4	4.7	7.6	5.3	8.2	6.6	4.7	4.2	3.7	7.3
6	6.8	6.2	5.3	4.7	7.4	9.6	6.5	6.4	5.0	4.1	4.1	40
7	6.4	5.6	5.1	4.8	6.4	14	6.0	6.4	4.5	4.0	4.7	58
8	6.1	5.5	5.0	4.7	5.9	6.8	6.9	5.7	4.1	6.5	3.8	189
9	5.8	5.3	4.8	4.5	5.3	6.0	7.1	5.6	4.4	5.8	3.8	39
10	5.3	5.3	4.9	4.5	5.1	54	6.2	5.4	4.7	4.3	3.6	16
11	5.4	5.2	5.1	4.6	5.0	31	6.0	5.3	4.3	4.1	3.3	14
12	5.8	5.1	11	4.8	5.1	8.8	7.4	5.3	6.3	4.1	3.3	14
13	5.9	5.1	10	4.5	5.1	7.5	7.6	5.5	5.1	4.5	8.8	11
14	9.7	5.2	5.9	4.5	5.1	6.9	6.5	5.8	4.2	4.2	13	9.6
15	7.1	5.2	5.2	4.6	4.8	6.8	5.9	8.6	4.0	3.9	14	9.4
16	6.1	6.2	5.2	4.6	4.8	13	12	7.3	5.6	3.8	5.7	8.9
17	5.5	7.1	5.1	4.5	4.8	7.6	15	5.9	13	3.7	4.3	8.7
18	5.6	5.6	5.1	6.7	5.0	6.9	7.3	7.2	6.1	3.7	21	8.6
19	6.5	5.2	5.1	6.1	4.7	6.5	6.8	6.4	5.4	5.8	18	8.4
20	5.9	5.1	5.1	5.2	4.6	6.2	6.5	6.6	5.4	5.5	6.6	8.6
21	5.5	5.1	5.1	e4.7	4.9	7.3	6.0	5.4	5.2	4.0	15	8.4
22	5.3	5.1	5.1	e4.4	5.6	6.8	6.4	5.2	5.0	3.6	10	8.3
23	5.1	5.3	5.0	e4.2	5.2	7.0	7.2	5.1	4.9	3.5	5.2	78
24	5.2	5.1	4.9	e4.2	5.3	8.0	8.3	5.0	4.8	3.4	4.8	44
25	5.3	5.2	5.0	4.6	11	6.5	8.2	4.8	4.6	4.6	5.6	13
26	5.3	5.3	5.1	6.6	7.3	6.2	6.4	4.7	4.5	4.5	5.1	11
27	9.4	5.1	5.0	7.7	5.6	6.1	6.2	4.8	4.6	3.5	32	10
28	7.1	5.0	4.9	6.3	8.3	6.0	6.3	4.8	4.9	3.5	131	13
29	5.7	4.8	4.8	5.5	---	6.0	5.9	4.6	4.8	3.4	13	21
30	5.4	5.1	4.8	5.2	---	6.2	5.7	4.6	4.2	3.3	7.2	11
31	5.5	---	4.8	5.0	---	6.6	---	4.5	---	3.2	6.3	---
Total	299.0	174.5	180.1	156.0	177.6	294.0	214.1	181.8	152.0	131.0	372.2	691.3
Mean	9.65	5.82	5.81	5.03	6.34	9.48	7.14	5.86	5.07	4.23	12.0	23.0
Max	96	15	13	7.7	17	54	15	11	13	6.5	131	189
Min	5.1	4.8	4.8	4.2	4.6	5.3	5.7	4.5	4.0	3.2	3.2	5.6
Cfsm	1.94	1.17	1.17	1.01	1.28	1.91	1.44	1.18	1.02	0.85	2.42	4.64
In.	2.24	1.31	1.35	1.17	1.33	2.20	1.60	1.36	1.14	0.98	2.79	5.17

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 – 1952, 1983 – 2011, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	4.31	4.66	5.17	5.20	5.44	6.47	6.19	6.11	5.40	4.88	4.75	5.43
Max	9.65	10.3	13.0	14.4	14.4	13.5	13.8	13.3	12.1	10.2	12.4	23.0
(WY)	(2011)	(1952)	(1949)	(1949)	(1949)	(1949)	(1952)	(1952)	(2003)	(2004)	(1948)	(2011)
Min	0.03	0.19	0.13	0.30	0.76	0.76	0.75	0.11	0.08	0.10	0.15	0.02
(WY)	(1987)	(1987)	(1989)	(1989)	(1989)	(1986)	(1985)	(1986)	(1986)	(1985)	(1986)	(1986)

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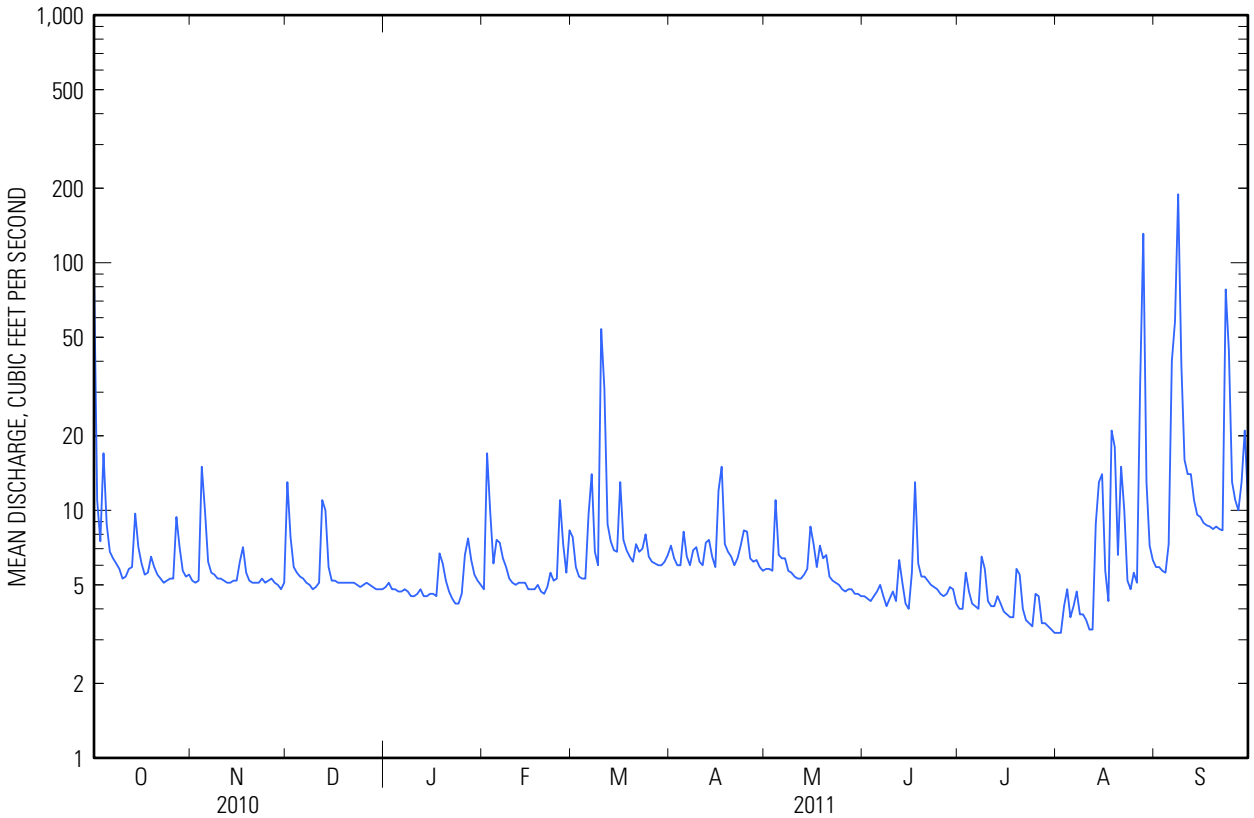
SUMMARY STATISTICS

	Calendar Year 2010		Water Year 2011		Water Years 1944 – 1952, 1983 – 2011	
Annual total	2,854.4		3,023.6			
Annual mean	7.82		8.28		5.32	
Highest annual mean					11.0	1949
Lowest annual mean					0.43	1986
Highest daily mean	96	Oct 1	189	Sep 8	189	Sep 8, 2011
Lowest daily mean	3.5	Sep 5[a]	3.2	Jul 31[b]	0.01	Sep 5, 1985[c]
Annual seven-day minimum	3.7	Sep 5	3.3	Jul 27	0.01	Jul 25, 1986
Maximum peak flow			[d]400	Sep 8	[d]400	Sep 8, 2011
Maximum peak stage			6.39	Sep 8	6.39	Sep 8, 2011
Instantaneous low flow			2.8	Jul 31[f]	0.00	Sep 6, 1985[g]
Annual runoff (cfsm)	1.57		1.67		1.07	
Annual runoff (inches)	21.36		22.63		14.55	
10 percent exceeds	11		11		9.4	
50 percent exceeds	6.5		5.5		4.5	
90 percent exceeds	4.3		4.2		0.90	

[a] Sept. 5, 9.
[b] July 31, Aug. 1, 2.
[c] Many days in 1985-1987.
[d] From rating curve extended above 95 ft³/s on basis of Culvert Type IV measurements of peak flow at 5.74 ft and 6.39 ft.
[f] July 31, Aug. 2.
[g] Sept. 6, 7, 1985, July 29, Aug. 2, 1986.