

Water-Data Report 2011

01583580 BAISMAN RUN AT BROADMOOR, MD

Upper Chesapeake Basin
Gunpowder-Patapsco Subbasin

LOCATION.--Lat 39°28'46.1", long 76°40'40.9" referenced to North American Datum of 1983, Baltimore County, MD, Hydrologic Unit 02060003, on right bank at upstream side of bridge on Ivy Hill Road, 0.3 mi upstream from mouth, 0.6 mi southwest of Broadmoor, and 1.8 mi west of Cockeysville.

DRAINAGE AREA.--1.47 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--August 1964 to September 1969, annual maximums water years 1970-76, November 1999 to current year.

GAGE.--Water-stage recorder, crest-stage gage and sharp-crested weir plate. Elevation of gage is 330 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records fair except those for estimated daily discharges (ice effect, missing record), 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 25 ft³/s and (or) maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar 10	1645	57	2.48
Jul 8	0000	44	2.35
Jul 25	1445	44	2.34
Sep 7	1145	*604	*4.54
Sep 8	0015	53	2.44
Sep 9	0415	30	2.17

Minimum discharge, 0.24 ft³/s, on several days.

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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	2.6	0.56	3.0	0.55	e0.47	1.1	1.9	1.5	0.91	0.48	0.35	0.62
2	0.66	0.55	1.1	0.53	e2.8	1.0	1.5	1.5	0.81	0.45	0.38	0.53
3	0.60	0.56	0.80	0.45	e1.5	0.93	1.3	1.4	0.80	1.6	0.45	0.52
4	1.2	1.6	0.73	0.51	e0.83	0.92	1.3	2.1	0.81	0.58	1.1	0.52
5	0.73	0.86	0.69	0.51	e0.98	0.92	1.6	1.5	0.88	0.50	0.47	1.3
6	0.65	0.70	0.67	0.59	e1.4	2.3	1.3	1.6	0.77	0.41	1.1	3.1
7	0.61	0.69	0.67	0.46	e1.1	1.9	1.2	1.6	0.71	1.3	1.7	38
8	0.58	0.66	0.70	0.46	e1.0	1.2	1.7	1.3	0.68	3.4	0.58	24
9	0.57	0.67	0.87	e0.42	e0.78	1.2	1.6	1.3	0.64	0.80	0.59	17
10	0.55	0.67	0.79	e0.42	e0.72	12	1.4	1.3	0.65	0.54	0.49	8.9
11	0.54	0.67	0.63	e0.43	e0.68	6.2	1.3	1.2	0.71	0.63	0.39	7.4
12	0.53	0.67	1.7	e0.45	e0.68	3.3	2.3	1.2	1.5	0.55	0.36	4.7
13	0.52	0.67	1.1	e0.43	0.71	2.5	e1.9	1.2	0.86	0.45	1.7	2.4
14	0.91	0.67	0.83	e0.42	0.92	2.1	e1.6	1.4	0.79	0.40	2.8	2.1
15	0.61	0.67	e0.74	e0.43	0.88	1.8	1.4	1.7	0.74	0.36	2.5	2.0
16	0.56	0.81	e0.71	e0.44	0.84	2.8	4.8	1.2	0.82	0.34	0.81	1.8
17	0.55	1.2	e0.69	e0.43	1.0	1.7	4.0	1.4	1.1	0.33	0.62	1.7
18	0.56	0.78	e0.67	e0.59	1.2	1.5	2.9	1.7	0.81	0.31	0.54	1.6
19	0.73	0.71	e0.66	e0.91	0.92	1.4	2.9	3.8	0.77	0.37	0.51	1.6
20	0.66	0.69	e0.63	e0.56	0.85	1.2	2.5	e2.4	0.78	0.46	0.45	1.7
21	0.61	0.67	e0.62	e0.52	0.84	1.5	2.1	1.5	0.81	0.32	0.52	1.7
22	0.58	0.67	e0.60	e0.46	0.87	1.2	2.1	1.4	0.71	0.29	0.49	1.6
23	0.57	0.68	0.56	e0.44	e0.82	2.1	2.2	1.4	0.70	0.64	0.41	2.7
24	0.58	0.67	0.56	e0.43	0.87	1.9	2.1	1.3	0.66	0.32	0.40	1.9
25	0.60	0.78	0.55	e0.44	2.8	1.4	2.0	1.3	0.61	3.2	0.52	1.7
26	0.65	0.70	0.55	e0.51	1.4	1.4	1.7	1.2	0.66	0.72	0.46	1.6
27	1.3	0.67	0.51	e0.58	1.1	1.4	1.8	1.1	0.73	0.46	1.9	1.6
28	0.71	0.67	0.57	e0.51	1.4	1.4	2.1	1.2	0.69	0.44	6.3	2.0
29	0.58	0.67	0.54	e0.48	---	1.4	1.7	1.1	0.61	0.43	1.0	2.0
30	0.59	0.78	0.60	e0.47	---	1.6	1.5	0.97	0.56	0.36	0.78	1.7
31	0.59	---	0.58	e0.46	---	1.7	---	0.93	---	0.33	0.65	---
Total	22.28	22.02	24.62	15.29	30.36	64.97	59.7	45.70	23.28	21.77	31.32	139.99
Mean	0.72	0.73	0.79	0.49	1.08	2.10	1.99	1.47	0.78	0.70	1.01	4.67
Max	2.6	1.6	3.0	0.91	2.8	12	4.8	3.8	1.5	3.4	6.3	38
Min	0.52	0.55	0.51	0.42	0.47	0.92	1.2	0.93	0.56	0.29	0.35	0.52
Cfsm	0.49	0.50	0.54	0.34	0.74	1.43	1.35	1.00	0.53	0.48	0.69	3.17
In.	0.56	0.56	0.62	0.39	0.77	1.64	1.51	1.16	0.59	0.55	0.79	3.54

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 – 1969, 2000 – 2011, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	0.93	1.07	1.50	1.43	1.62	2.04	2.21	1.86	1.44	1.00	0.88	1.14
Max	1.90	2.11	4.11	3.63	4.01	4.69	4.05	3.17	4.16	2.67	3.08	4.67
(WY)	(2010)	(2004)	(2010)	(2010)	(2004)	(2010)	(2010)	(2010)	(2003)	(2003)	(1967)	(2011)
Min	0.39	0.43	0.41	0.46	0.50	0.78	0.64	0.71	0.32	0.10	0.11	0.20
(WY)	(2002)	(2008)	(1966)	(1966)	(2002)	(2002)	(2002)	(2002)	(2002)	(2002)	(2002)	(2007)

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	Calendar Year 2010	Water Year 2011	Water Years 1964 – 1969, 2000 – 2011	
Annual total	776.67	501.30		
Annual mean	2.13	1.37	1.43	
Highest annual mean			2.62	2010
Lowest annual mean			0.45	2002
Highest daily mean	10	Mar 13	38	Sep 7
Lowest daily mean	0.27	Sep 25	0.29	Jul 22
Annual seven-day minimum	0.36	Sep 5	0.35	Jul 16
Maximum peak flow		b604	Sep 7	b604
Maximum peak stage			4.54	Sep 7, 2011
Instantaneous low flow			0.24	Jan 21 ^c
Annual runoff (cfsm)	1.45	0.934		0.972
Annual runoff (inches)	19.65	12.69		13.21
10 percent exceeds	4.1	2.1		2.8
50 percent exceeds	1.5	0.79		1.1
90 percent exceeds	0.56	0.45		0.40

^a No flow Aug. 28-31, Sept. 1-4, 7-12, 1966, July 31, Aug. 1, 2, 8-23, 2002.

^b From rating curve extended above 30 ft³/s on basis of culvert and flow-over-road measurement at gage height of 5.43 ft and on basis of slope-area measurement at gage height of 2.87 ft.

^c On several days.

^d No flow Aug. 27 to Sept. 13, 1966, July 23, 30, 31, Aug. 1-3, 7-24, 2002.

