

Water-Data Report 2011

01589330 DEAD RUN AT FRANKLINTOWN, MD

 Upper Chesapeake Basin
 Gunpowder-Patapsco Subbasin

LOCATION.--Lat 39°18'40.4", long 76°42'59.9" referenced to North American Datum of 1983, Baltimore County, MD, Hydrologic Unit 02060003, on right bank at downstream side of bridge on Kernan Drive at Security Boulevard at Franklintown, 0.3 mi west of Baltimore City limits, and 1.2 mi southwest of Woodlawn, and 2.5 mi upstream from mouth.

DRAINAGE AREA.--5.52 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1959 to September 1987, July 1998 to current year.

REVISED RECORDS.--WDR MD-DE-80-1: 1979(M).

GAGE.--Water-stage recorder, crest-stage gage and concrete control. Elevation of gage is 310 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records fair except those for estimated daily discharges (erroneous record), which are poor. Occasional regulation at low flow from unknown source upstream from station. U.S. Geological Survey gage-height telemeter at station. Several measurements of water temperature were made during the year.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 650 ft³/s and (or) maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar 10	1645	1,350	6.09
Jun 10	1850	1,150	5.56
Jul 25	1430	854	4.76
Aug 6	1845	754	4.47
Aug 14	1005	1,750	7.08
Aug 27	2345	1,230	5.77
Sep 7	1240	*3,450	*9.78
Sep 8	0040	882	4.84

Minimum discharge, 0.30 ft³/s, Aug. 1.

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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	59	1.2	62	0.94	1.3	5.8	12	3.3	1.2	0.83	5.5	1.7
2	3.0	1.1	2.5	1.7	88	3.3	3.8	2.4	1.1	1.1	3.0	3.3
3	7.8	1.2	1.5	1.00	9.6	2.7	3.6	2.0	1.0	8.7	44	1.6
4	43	76	1.3	0.87	5.1	2.6	5.8	29	1.1	1.2	6.5	1.5
5	3.1	4.5	1.2	0.84	20	2.3	34	2.3	1.5	0.98	1.1	27
6	1.9	2.2	1.1	0.84	16	71	3.4	2.6	1.2	0.88	42	86
7	1.7	1.9	1.1	0.84	10	17	2.6	2.5	1.0	12	26	614
8	1.3	1.7	1.1	0.70	9.6	4.2	26	1.8	1.00	20	2.3	229
9	1.2	1.7	0.97	0.70	4.2	3.0	6.1	1.7	1.9	2.0	6.8	45
10	1.1	1.5	0.97	0.76	3.2	413	3.0	1.7	55	0.95	1.7	6.7
11	1.1	1.4	e1.1	e1.1	2.8	28	2.7	1.7	11	4.9	1.1	26
12	1.1	1.4	e49	e1.9	2.5	7.0	19	1.6	9.2	2.5	0.91	10
13	1.3	1.3	6.0	e1.3	2.6	4.5	19	1.5	1.8	1.1	21	3.3
14	43	1.3	e1.5	e1.1	7.3	3.5	3.9	16	1.3	0.92	165	2.6
15	2.8	1.3	e1.3	e1.1	3.8	3.9	2.5	34	1.2	0.72	69	3.4
16	1.7	9.4	e1.3	e1.1	2.7	49	101	3.7	1.1	0.75	4.0	2.2
17	1.5	21	e1.7	e1.1	3.3	5.0	18	2.9	1.3	0.77	1.7	2.1
18	1.4	1.4	e1.5	e12	3.7	4.2	4.8	17	1.5	0.77	1.4	1.9
19	20	1.2	1.3	5.9	2.9	3.4	16	7.0	1.1	0.73	3.0	1.9
20	1.9	1.1	1.3	1.5	2.6	3.0	4.6	4.0	1.2	0.79	1.2	2.1
21	1.6	0.98	1.2	2.4	e2.7	13	2.7	1.8	3.5	0.64	61	1.9
22	1.5	0.97	1.1	0.99	e8.1	3.4	6.9	1.8	1.1	0.57	3.1	12
23	1.4	0.97	0.88	0.97	4.7	21	13	1.7	1.1	6.0	1.4	70
24	1.6	0.85	0.84	e1.7	5.2	8.8	27	1.6	1.00	0.84	1.3	5.5
25	1.4	1.1	0.94	e2.0	74	3.5	6.8	1.5	0.94	56	3.4	3.1
26	1.6	0.95	0.99	e4.7	6.1	3.0	2.8	1.5	0.92	2.8	1.6	2.6
27	37	0.84	0.97	6.1	4.0	2.9	4.3	2.0	0.92	0.97	156	2.5
28	2.1	0.84	0.97	4.5	27	2.7	11	2.2	0.97	0.90	207	12
29	1.5	0.84	0.96	2.0	---	2.4	2.5	1.4	0.91	0.85	4.9	5.1
30	1.3	3.3	0.84	1.5	---	5.3	2.0	1.3	0.82	0.79	2.2	2.4
31	1.3	---	0.84	1.4	---	7.6	---	1.3	---	0.73	1.8	---
Total	251.2	145.44	150.27	65.55	333.0	710.0	370.8	156.8	108.88	133.68	850.91	1,188.4
Mean	8.10	4.85	4.85	2.11	11.9	22.9	12.4	5.06	3.63	4.31	27.4	39.6
Max	59	76	62	12	88	413	101	34	55	56	207	614
Min	1.1	0.84	0.84	0.70	1.3	2.3	2.0	1.3	0.82	0.57	0.91	1.5
Cfsm	1.47	0.88	0.88	0.38	2.15	4.15	2.24	0.92	0.66	0.78	4.97	7.18
In.	1.69	0.98	1.01	0.44	2.24	4.78	2.50	1.06	0.73	0.90	5.73	8.01

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 – 1987, 1998 – 2011, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	6.78	6.92	9.28	8.45	10.6	11.3	9.78	7.78	7.26	6.20	7.00	9.81
Max	30.4	20.6	28.0	38.1	31.3	25.9	29.6	22.4	28.4	27.7	33.9	39.6
(WY)	(2006)	(1973)	(2010)	(1979)	(1979)	(1983)	(1983)	(2003)	(1972)	(1975)	(1984)	(2011)
Min	0.33	0.69	0.57	0.67	1.16	1.77	1.27	1.15	1.56	0.66	0.68	0.67
(WY)	(1964)	(1966)	(1966)	(1981)	(2002)	(2006)	(1963)	(1963)	(2010)	(1963)	(2006)	(2007)

01589330 DEAD RUN AT FRANKLINTOWN, MD—Continued**SUMMARY STATISTICS**

	Calendar Year 2010	Water Year 2011	Water Years 1960 – 1987, 1998 – 2011	
Annual total	3,646.88	4,464.93		
Annual mean	9.99	12.2	8.44	
Highest annual mean			15.5	1979
Lowest annual mean			3.78	1963
Highest daily mean	381	Mar 13	614	Sep 7
Lowest daily mean	0.42	Sep 10	0.57	Jul 22
Annual seven-day minimum	0.70	Sep 19	0.72	Jul 16
Maximum peak flow			3,450	Sep 7
Maximum peak stage			9.78	Sep 7
Instantaneous low flow			0.30	Aug 1
Annual runoff (cfsm)	1.81	2.22		1.53
Annual runoff (inches)	24.58	30.09		20.76
10 percent exceeds	21	26		16
50 percent exceeds	2.0	2.1		2.0
90 percent exceeds	0.84	0.93		0.70

^a From rating curve extended above 1,600 ft³/s on basis of contracted-opening measurement of peak flow at bridge 0.6 mi downstream, adjusted for flow from intervening area.

^b From floodmarks.

^c Sept. 11, 12, 1966.

