



Water-Data Report 2008

01480675 MARSH CREEK NEAR GLENMOORE, PA

Lower Delaware Basin
Brandywine-Christina Subbasin

LOCATION.--Lat 40°05'52", long 75°44'31" referenced to North American Datum of 1927, Chester County, PA, Hydrologic Unit 02040205, on left bank 200 ft north of Pennsylvania Turnpike, 1.2 mi downstream from Lyons Run, 1.8 mi upstream from Black Horse Creek, and 3.0 mi northeast of Glenmoore.

DRAINAGE AREA.--8.57 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--July 1966 to current year.

REVISED RECORDS.--WDR PA-74-1: 1967(M), 1971-72(P) WDR PA-93-1: 1992.

GAGE.--Water-stage recorder, crest-stage gage, and concrete control. Elevation of gage is 450 ft above National Geodetic Vertical Datum of 1929, from topographic map. Satellite and landline telemetry at station.

COOPERATION.--Station established and maintained by the U.S. Geological Survey in cooperation with the Pennsylvania Department of Environmental Protection.

REMARKS.--Records good except those less than 2 ft³/s, which are fair, and those for estimated daily discharges, which are poor. Several measurements of water temperature were made during the year.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 130 ft³/s and (or) maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb 13	2330	151	2.36
Mar 20	1445	*166	*2.41

Minimum discharge, 0.87 ft³/s, on several days, gage height, 1.13 ft.

01480675 MARSH CREEK NEAR GLENMOORE, PA—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
DAILY MEAN VALUES
[*e*, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	0.87	3.4	4.9	15	36	11	13	11	13	2.9	4.4	1.9
2	0.87	3.0	4.6	9.6	95	10	13	11	9.2	2.7	4.2	1.6
3	0.92	2.7	15	6.0	21	10	10	10	7.3	2.4	3.7	1.5
4	0.91	2.4	13	5.4	11	11	17	9.8	9.3	2.7	3.4	1.3
5	1.00	2.3	8.1	5.5	10	35	16	9.0	15	3.6	3.2	1.3
6	1.0	3.2	5.7	7.1	11	27	11	8.3	12	3.4	3.0	18
7	0.97	3.3	4.5	8.9	12	17	11	7.8	8.6	5.6	2.7	49
8	0.87	2.8	5.5	8.8	9.9	58	10	8.0	7.0	5.0	2.7	24
9	1.1	2.5	7.1	8.3	8.4	53	10	28	5.8	6.5	2.5	11
10	2.3	2.4	8.0	7.2	7.8	18	9.9	37	e5.5	5.9	4.7	8.2
11	6.8	2.4	7.9	8.0	5.1	15	10	14	e10	4.9	9.2	6.2
12	5.3	2.5	6.9	8.6	4.7	13	89	13	e9.0	3.7	9.2	5.7
13	3.5	4.7	10	7.3	88	12	29	14	6.6	2.9	5.1	8.9
14	2.4	5.3	19	8.0	114	12	13	11	8.5	10	3.4	8.5
15	2.0	8.3	13	7.8	30	12	11	9.1	21	10	3.1	5.7
16	1.8	11	45	6.6	16	12	10	20	16	6.2	2.8	3.9
17	1.5	7.6	63	6.2	12	11	9.7	32	9.6	3.6	2.9	3.1
18	1.4	4.9	15	12	30	11	9.5	20	7.4	2.9	2.1	2.6
19	2.1	11	8.9	15	33	24	9.2	25	7.2	2.5	1.8	2.2
20	6.7	16	7.9	9.2	14	125	11	20	6.5	2.4	1.6	2.1
21	5.8	13	7.2	5.7	11	51	13	26	5.6	3.2	1.6	2.1
22	3.6	8.3	7.4	4.4	11	16	11	14	e5.0	2.4	1.5	2.0
23	2.5	5.8	9.7	5.2	11	14	9.6	11	e4.2	8.9	1.5	2.0
24	2.8	4.4	29	4.9	11	12	9.0	9.6	e3.7	60	1.4	1.9
25	5.0	3.9	16	4.2	12	12	8.4	8.6	3.5	43	1.4	1.9
26	7.3	14	10	4.0	16	12	9.0	8.0	3.4	10	1.4	3.0
27	52	33	15	4.5	28	11	16	8.2	3.3	6.3	1.3	3.9
28	52	15	12	4.6	13	12	32	9.5	3.3	6.2	1.3	7.3
29	14	7.9	18	4.9	10	11	70	8.3	3.1	6.3	1.6	10
30	7.0	5.9	17	8.1	---	10	20	7.4	3.0	5.0	2.6	7.4
31	4.5	---	20	7.2	---	11	---	9.1	---	4.6	2.4	---
Total	200.81	212.9	434.3	228.2	691.9	669	520.3	437.7	232.6	245.7	93.7	208.2
Mean	6.48	7.10	14.0	7.36	23.9	21.6	17.3	14.1	7.75	7.93	3.02	6.94
Max	52	33	63	15	114	125	89	37	21	60	9.2	49
Min	0.87	2.3	4.5	4.0	4.7	10	8.4	7.4	3.0	2.4	1.3	1.3
Cfsm	0.76	0.83	1.63	0.86	2.78	2.52	2.02	1.65	0.90	0.92	0.35	0.81
In.	0.87	0.92	1.89	0.99	3.00	2.90	2.26	1.90	1.01	1.07	0.41	0.90

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 2008, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	8.32	11.5	14.9	14.6	16.8	21.4	19.6	14.5	11.4	8.44	5.74	7.44
Max	27.5	25.6	49.9	35.9	44.8	58.4	47.4	36.7	46.0	34.0	22.1	29.2
(WY)	(2006)	(2004)	(1997)	(1978)	(1971)	(1994)	(1983)	(1989)	(2003)	(1984)	(1971)	(2003)
Min	1.71	2.45	2.07	1.19	3.75	6.58	4.84	4.97	2.30	0.83	0.58	0.88
(WY)	(2002)	(2002)	(1981)	(1981)	(2002)	(1981)	(1985)	(1969)	(1999)	(2002)	(2002)	(1980)

SUMMARY STATISTICS

	Calendar Year 2007	Water Year 2008	Water Years 1966 - 2008	
Annual total	4,773.08	4,175.31		
Annual mean	13.1	11.4	12.9	
Highest annual mean			23.2	1984
Lowest annual mean			4.37	2002
Highest daily mean	219 Mar 2	125 Mar 20	444 Jun 22, 1972	
Lowest daily mean	0.87 Sep 29 ^{a,b}	0.87 Oct 1 ^b	0.21 Aug 20, 2002	
Annual seven-day minimum	0.88 Sep 26	0.93 Oct 1	0.24 Aug 16, 2002	
Maximum peak flow		166 Mar 20	946 Jun 22, 1972	
Maximum peak stage		2.41 Mar 20	4.68 Jun 22, 1972	
Instantaneous low flow		0.87 Oct 1 ^d	0.21 Aug 6, 1999 ^e	
Annual runoff (cfsm)	1.53	1.33	1.50	
Annual runoff (inches)	20.72	18.12	20.41	
10 percent exceeds	21	20	25	
50 percent exceeds	7.9	8.1	7.9	
90 percent exceeds	1.6	2.1	2.1	

^a Also Sep 30, Oct 1.^b Also Oct 2, 8.^c From rating curve extended above 903 ft³/s based on straight-line extension.^d Also Oct 2-4, 8, 9.^e Also Aug 19-22, 2002.