

POTOMAC RIVER BASIN

TONOLOWAY CREEK BASIN

01613050 TONOLOWAY CREEK NEAR NEEDMORE, PA

LOCATION.--Lat 39°53'54", long 78°07'57", Fulton County, Hydrologic Unit 02070004, on left bank 10 ft downstream from bridge on SR 3008, 0.2 mi upstream from Foster Creek, and 3.5 mi north of Needmore.

DRAINAGE AREA.--10.7 mi².

PERIOD OF RECORD.--Occasional discharge measurements and annual maximums, water years 1963-65. October 1965 to current year.

REVISED RECORDS.--WSP 2103: 1966-68(M).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 688.94 ft above National Geodetic Vertical Datum of 1929. Prior to Sept. 2, 1965, crest-stage gage at same site at datum 2.0 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Several measurements of water temperature were made during the year. Satellite telemetry at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than a base discharge of 150 ft³/s and maximum (*):

Date	Time	Discharge ft ³ /s	Gage Height (ft)	Date	Time	Discharge ft ³ /s	Gage Height (ft)
Mar. 20	1400	*146	*4.65	(No peaks above base discharge.)			

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.04	0.74	1.1	e0.45	3.6	0.94	16	25	5.0	0.60	0.38	0.07
2	0.04	0.74	0.85	e0.47	3.4	1.1	13	23	3.8	0.52	0.30	0.08
3	0.03	0.26	0.72	e0.46	3.5	7.1	13	16	3.2	0.47	0.24	0.11
4	0.03	0.23	0.68	e0.52	3.5	5.0	11	13	2.9	0.38	0.19	0.06
5	0.03	0.20	0.65	e0.60	3.5	5.6	9.3	10	3.0	0.30	0.19	0.03
6	0.03	0.19	0.62	e0.62	3.1	5.8	8.2	9.1	6.4	0.19	0.79	0.02
7	0.02	0.19	0.66	e0.62	2.8	3.6	6.8	12	5.6	0.15	0.35	0.02
8	0.02	0.19	0.80	e0.61	2.5	3.2	6.1	10	3.4	0.14	0.17	0.02
9	0.02	0.21	1.8	e0.96	2.2	3.0	6.8	13	2.7	0.12	0.10	0.02
10	0.02	0.19	1.1	e1.5	2.0	2.9	7.3	11	2.3	0.17	0.04	0.02
11	0.02	0.20	0.98	e2.5	2.4	2.5	5.4	9.5	2.0	0.14	0.03	0.01
12	0.02	0.20	0.90	e4.3	2.0	2.5	4.8	10	1.8	0.06	0.02	0.01
13	0.02	0.19	0.85	e2.8	1.8	2.5	5.3	13	3.1	0.03	0.02	0.01
14	0.44	0.20	1.5	e2.2	1.6	2.4	6.7	13	4.5	0.52	0.02	0.01
15	2.5	0.23	1.8	2.2	1.7	2.2	19	11	3.3	0.59	0.02	0.01
16	0.71	0.24	1.2	1.8	1.6	2.6	17	9.4	2.4	0.36	0.02	0.02
17	1.1	0.24	1.1	1.5	1.6	2.9	16	8.9	1.8	0.18	0.02	0.01
18	0.84	0.24	1.5	1.3	1.3	11	15	69	1.5	0.09	0.01	0.01
19	0.68	0.24	1.3	1.3	1.3	12	17	54	1.3	0.63	0.01	0.93
20	0.64	0.24	1.1	1.4	1.3	83	14	36	1.1	1.4	0.01	0.67
21	0.62	0.24	0.96	1.3	1.3	80	14	26	0.94	0.57	0.01	0.27
22	0.62	0.24	0.88	1.3	1.2	38	16	20	0.84	0.36	0.01	1.7
23	0.59	0.24	0.85	1.8	1.1	24	13	15	0.76	12	0.01	3.9
24	0.62	0.26	0.99	e2.4	1.1	17	11	13	0.71	3.6	1.5	0.85
25	0.64	3.6	e0.78	e3.2	1.1	13	11	11	0.69	1.4	0.46	0.56
26	0.65	2.6	e0.64	e3.9	1.1	13	9.4	9.2	0.66	2.0	0.17	1.2
27	0.63	1.1	e0.60	4.0	1.3	16	8.2	8.1	0.63	1.4	0.10	12
28	0.63	0.89	e0.57	3.4	1.0	12	29	6.8	1.0	1.2	0.08	9.0
29	0.70	0.78	e0.44	3.0	---	12	35	6.1	1.5	0.79	0.24	4.3
30	0.69	0.87	e0.42	2.9	---	10	31	5.3	0.71	0.60	0.20	2.6
31	0.73	---	e0.42	3.7	---	12	---	4.8	---	0.49	0.14	---
TOTAL	14.37	16.18	28.76	59.01	55.9	408.84	395.3	501.2	69.54	31.45	5.85	38.52
MEAN	0.46	0.54	0.93	1.90	2.00	13.2	13.2	16.2	2.32	1.01	0.19	1.28
MAX	2.5	3.6	1.8	4.3	3.6	83	35	69	6.4	12	1.5	12
MIN	0.02	0.19	0.42	0.45	1.0	0.94	4.8	4.8	0.63	0.03	0.01	0.01

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 2002, BY WATER YEAR (WY)

MEAN	5.87	11.2	14.3	14.0	21.3	27.8	23.8	17.0	10.2	4.21	1.93	3.59
MAX	37.7	58.2	43.8	62.1	59.5	78.2	72.4	51.5	85.6	39.7	9.93	50.0
(WY)	1991	1998	1997	1996	1986	1994	1993	1988	1972	1989	1989	1996
MIN	0.13	0.26	0.23	0.54	2.00	5.44	5.19	3.53	0.38	0.065	0.000	0.002
(WY)	1992	1999	1999	1981	2002	1990	1968	1976	1991	1966	1966	1991

e Estimated.

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01613050 TONOLOWAY CREEK NEAR NEEDMORE, PA--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1966 - 2002	
ANNUAL TOTAL	2349.19		1624.92			
ANNUAL MEAN	6.44		4.45		12.8	
HIGHEST ANNUAL MEAN					28.3	1996
LOWEST ANNUAL MEAN					4.45	2002
HIGHEST DAILY MEAN	86	Apr 16	83	Mar 20	868	Jun 22 1972
LOWEST DAILY MEAN	0.01	Sep 12-24	0.01	Aug 18 ^a	0.00	Jun 25 1966 ^b
ANNUAL SEVEN-DAY MINIMUM	0.01	Sep 12	0.01	Aug 17	0.00	Jul 1 1966
MAXIMUM PEAK FLOW			146	Mar 20	cd1300	Jun 22 1972
MAXIMUM PEAK STAGE			4.65	Mar 20	9.48	Jan 19 1996
INSTANTANEOUS LOW FLOW			0.01	Aug 17 ^f	0.00	Jul 18 1991 ^b
10 PERCENT EXCEEDS	17		13		32	
50 PERCENT EXCEEDS	1.6		1.1		4.7	
90 PERCENT EXCEEDS	0.04		0.03		0.28	

a Also Aug. 19-23, Sept. 11-15, 17, 18.

b No flow many days throughout period of record.

c Gage height 9.17 ft.

d From rating curve extended above 540 ft³/s on basis of contracted-opening and slope-area measurement of peak flow.

f Also Aug. 18-24, Sept. 11-19.

