

## 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 mi<sup>2</sup>.

**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 sea level. 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.

**PEAK DISCHARGES FOR CURRENT YEAR**--Peak discharges greater than a base discharge of 150 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge ft <sup>3</sup> /s	Gage Height (ft)	Date	Time	Discharge ft <sup>3</sup> /s	Gage Height (ft)
Mar. 22	0030	161	4.71	June 15	1530	205	4.89
Apr. 22	1230	*285	*5.25				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.7	1.2	7.4	4.8	e3.7	33	12	13	21	3.9	1.5	.82
2	3.7	4.0	6.3	4.6	e3.7	26	12	13	16	3.3	1.7	.68
3	2.6	7.5	5.6	4.4	e3.7	21	13	10	12	3.7	1.7	.50
4	4.1	4.8	4.9	4.4	e3.7	17	53	8.9	9.2	5.0	2.3	.40
5	5.3	4.1	4.3	4.0	e3.6	14	46	8.2	8.6	3.4	1.3	.27
6	4.1	3.7	4.1	3.5	e3.6	12	35	7.3	42	2.7	5.7	.19
7	3.3	3.4	3.4	3.4	e3.5	10	28	6.6	27	2.4	5.5	.16
8	2.7	3.1	2.9	3.6	e3.5	9.4	27	6.1	21	1.8	3.9	.16
9	2.4	3.0	2.7	3.3	e3.4	8.7	24	5.7	16	1.6	3.0	.18
10	19	2.9	4.2	5.1	e3.4	7.9	19	5.4	12	2.1	2.4	.15
11	14	2.8	4.2	6.1	e3.5	17	17	4.9	8.8	1.7	1.8	.21
12	8.2	2.6	3.4	5.2	e3.5	59	16	4.6	7.5	1.4	1.4	.30
13	6.0	2.4	3.6	5.0	e3.5	41	14	4.6	8.8	1.2	1.1	.39
14	5.4	2.3	20	5.2	30	31	13	4.1	11	4.4	.99	.23
15	4.0	2.2	29	5.1	34	25	12	3.5	39	6.3	.68	.14
16	3.1	2.0	24	4.8	28	22	11	3.3	43	3.2	.53	.12
17	2.5	2.0	18	e5.1	23	25	16	3.1	36	2.7	.39	.11
18	1.9	1.9	14	e4.6	22	18	25	2.9	29	2.0	.54	.10
19	1.6	1.8	11	e4.5	63	17	34	4.7	22	2.4	.73	.23
20	2.4	1.7	11	e4.4	53	17	33	8.5	16	2.9	.37	.43
21	2.0	1.8	12	e4.6	41	63	53	5.9	14	1.9	.28	.24
22	1.8	1.7	9.4	e4.4	37	139	215	16	12	1.5	.24	.16
23	1.6	1.7	8.6	e4.3	34	81	155	22	8.2	1.2	.25	.13
24	1.5	1.7	e8.0	e4.4	32	48	73	54	6.5	2.3	.67	.14
25	1.3	2.5	e7.5	e4.3	31	35	43	32	5.6	2.3	.39	1.5
26	1.3	16	e7.0	e4.1	27	27	31	21	5.0	1.6	.24	4.8
27	1.3	25	e6.0	e4.0	25	23	26	18	10	1.4	1.1	1.7
28	1.2	18	e5.7	e3.8	45	23	22	43	7.4	1.7	1.7	.85
29	1.2	12	e5.4	e3.7	39	20	18	72	5.4	2.7	.71	.56
30	1.2	9.2	e5.1	e3.7	---	16	15	44	4.9	1.8	.78	.43
31	1.2	---	e5.0	e3.7	---	14	---	29	---	1.5	.65	---
TOTAL	117.6	149.0	263.7	136.1	610.3	920.0	1111	485.3	484.9	78.0	44.54	16.28
MEAN	3.79	4.97	8.51	4.39	21.0	29.7	37.0	15.7	16.2	2.52	1.44	.54
MAX	19	25	29	6.1	63	139	215	72	43	6.3	5.7	4.8
MIN	1.2	1.2	2.7	3.3	3.4	7.9	11	2.9	4.9	1.2	.24	.10

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 2000, BY WATER YEAR (WY)

	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000				
MEAN	6.17	11.8	15.0	14.6	22.1	28.4	24.0	17.3	10.6	4.39	2.03	3.75																											
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	.13	.26	.23	.54	3.89	5.44	5.19	3.53	.38	.065	.000	.002																											
(WY)	1992	1999	1999	1981	1980	1990	1968	1976	1991	1966	1966	1991																											

e Estimated.

TONOLOWAY CREEK BASIN

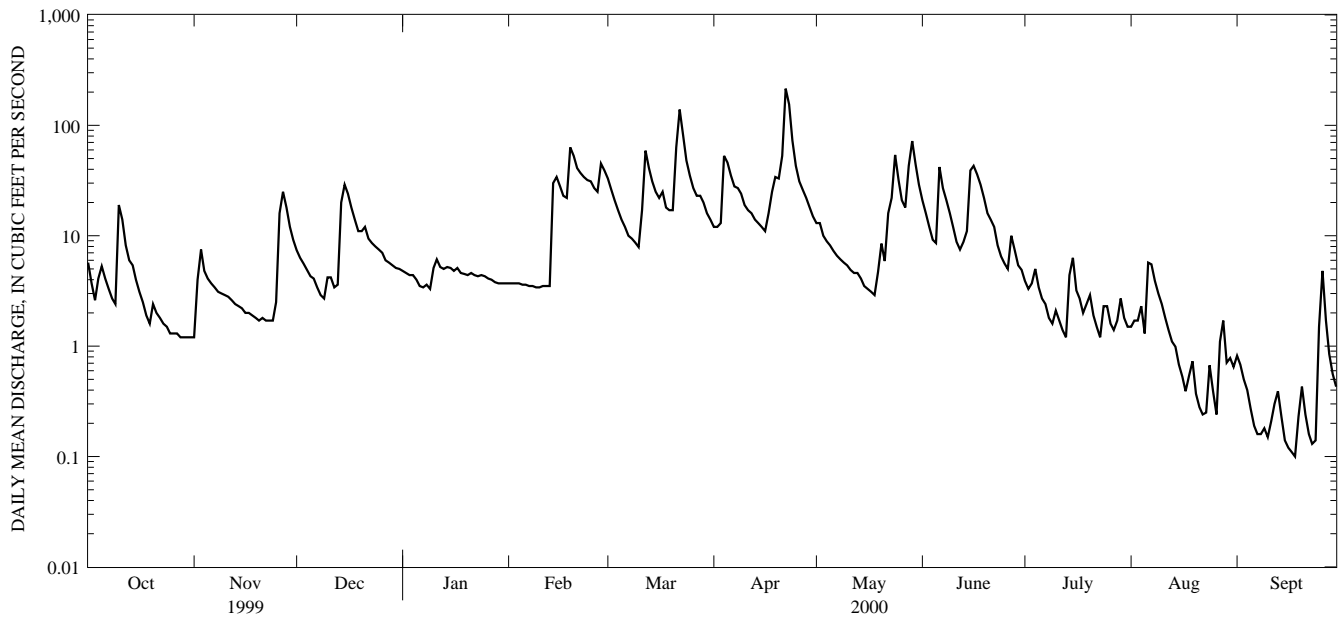
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SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1966 - 2000	
ANNUAL TOTAL	3137.99		4416.72		13.2	
ANNUAL MEAN	8.60		12.1		28.3	
HIGHEST ANNUAL MEAN					1996	
LOWEST ANNUAL MEAN					5.21	
HIGHEST DAILY MEAN	122	Mar 18	215	Apr 22	868	Jun 22 1972
LOWEST DAILY MEAN	.01	Jul 27	.10	Sep 18	.00	Jun 25 1966 <sup>a</sup>
ANNUAL SEVEN-DAY MINIMUM	.02	Jul 25	.19	Sep 5	.00	Jul 1 1966
INSTANTANEOUS PEAK FLOW			285	Apr 22	bc1300	Jun 22 1972
INSTANTANEOUS PEAK STAGE			5.25	Apr 22	9.48	Jan 19 1996
INSTANTANEOUS LOW FLOW			.10	Sep 16-19	.00	Jul 18 1991 <sup>a</sup>
10 PERCENT EXCEEDS	22		31		33	
50 PERCENT EXCEEDS	2.9		4.6		4.9	
90 PERCENT EXCEEDS	.07		.68		.30	

a No flow many days throughout period of record.

b Gage height 9.17 ft.

c From rating curve extended above 540 ft<sup>3</sup>/s on basis of contracted-opening and slope-area measurement of peak flow.



1-YEAR HYDROGRAPH  
OCTOBER 1, 1999 TO SEPTEMBER 30, 2000