

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 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. 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)
Apr. 9	2315	*109	*4.47	(No peaks above base discharge.)			

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.39	.51	1.9	e2.6	23	5.8	25	6.2	3.3	1.1	.39	.06
2	.34	.55	1.7	e2.5	20	5.8	21	5.8	5.2	1.4	.29	.04
3	.33	.53	1.5	e2.3	16	5.7	17	5.3	3.6	.90	.18	.03
4	.28	.57	e1.3	e2.2	12	6.1	14	4.8	3.0	5.3	.36	.02
5	.25	.56	e1.3	e2.1	10	6.6	11	4.4	2.5	6.6	.97	.02
6	.28	.56	e1.2	e2.0	8.9	6.4	11	4.0	2.7	3.6	.40	.02
7	.27	.56	e1.1	e1.9	8.1	6.4	14	3.7	3.6	2.3	.24	.02
8	.22	.57	e1.1	e1.8	7.4	8.7	12	3.5	3.5	2.1	.12	.02
9	.22	.87	e1.1	e1.7	7.9	13	63	3.6	3.1	1.6	.06	.02
10	.49	9.4	e1.0	e1.7	13	14	70	3.1	2.8	1.2	.04	.02
11	.43	3.1	e.98	e1.6	14	14	62	2.9	2.6	1.1	.05	.02
12	.26	2.2	e.97	e1.6	12	13	55	2.7	2.5	.87	.11	.01
13	.24	1.7	.97	e1.6	10	41	43	2.5	2.4	.76	.60	.01
14	.21	1.5	1.5	e1.5	9.2	46	31	2.3	2.2	.68	.61	.01
15	.21	1.3	2.1	e1.5	9.4	36	30	2.3	2.7	.61	.25	.01
16	.22	1.1	2.8	e1.5	13	31	86	2.3	11	.56	.12	.01
17	.43	1.1	11	e1.5	16	27	73	2.3	10	.55	.58	.01
18	2.9	.91	19	e10	16	23	48	2.4	4.4	.52	.33	.01
19	1.2	.83	15	e9.2	16	21	33	2.4	1.4	.53	1.3	.01
20	.69	.83	16	e8.8	12	18	25	3.4	1.3	.45	2.0	.01
21	.58	.70	8.8	e12	9.7	32	21	7.0	3.7	.36	.53	.01
22	.50	.57	e4.6	e9.7	10	45	17	8.8	4.1	.29	.38	.01
23	.41	.52	e4.3	e7.4	11	36	15	18	15	.24	.36	.01
24	.40	.50	e4.0	e6.0	9.1	29	13	9.4	6.5	.21	.65	.01
25	.43	.62	e3.8	e5.0	6.8	22	11	7.7	3.8	.18	.39	.46
26	.47	3.6	e3.6	e4.2	7.4	18	9.9	7.0	2.7	.53	.26	.30
27	.45	3.0	e3.4	e3.8	6.3	14	9.1	6.4	2.0	.69	.23	.13
28	.47	2.3	e3.2	e3.2	6.0	11	8.1	6.0	1.7	.31	.22	.06
29	.45	2.0	e3.0	e4.2	---	11	7.0	4.6	1.3	.33	.15	.05
30	.46	2.2	e2.9	22	---	31	6.6	3.8	1.1	.63	.07	.04
31	.49	---	e2.7	28	---	27	---	3.3	---	.54	.04	---
TOTAL	14.97	45.26	127.82	165.1	320.2	624.5	861.7	151.9	115.7	37.04	12.28	1.46
MEAN	.48	1.51	4.12	5.33	11.4	20.1	28.7	4.90	3.86	1.19	.40	.049
MAX	2.9	9.4	.19	.28	.23	.46	.86	.18	.15	.66	2.0	.46
MIN	.21	.50	.97	1.5	6.0	5.7	6.6	2.3	1.1	.18	.04	.01

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 2001, BY WATER YEAR (WY)

	6.02	11.5	14.7	14.4	21.8	28.2	24.1	17.0	10.4	4.30	1.98	3.65
MEAN	6.02	11.5	14.7	14.4	21.8	28.2	24.1	17.0	10.4	4.30	1.98	3.65
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.

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SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1966 - 2001	
ANNUAL TOTAL	4074.47		2477.93			
ANNUAL MEAN	11.1		6.79		13.1	
HIGHEST ANNUAL MEAN					28.3	1996
LOWEST ANNUAL MEAN					5.21	1966
HIGHEST DAILY MEAN	215	Apr 22	86	Apr 16	868	Jun 22 1972
LOWEST DAILY MEAN	.10	Sep 18	.01	Sep 12-24	.00	Jun 25 1966 ^a
ANNUAL SEVEN-DAY MINIMUM	.19	Sep 5	.01	Sep 12	.00	Jul 1 1966
MAXIMUM PEAK FLOW			109	Apr 9	bc1300	Jun 22 1972
MAXIMUM PEAK STAGE			4.47	Apr 9	9.48	Jan 19 1996
INSTANTANEOUS LOW FLOW			.01	Sep 12-24	.00	Jul 18 1991 ^a
10 PERCENT EXCEEDS	31		18		33	
50 PERCENT EXCEEDS	3.7		2.3		4.9	
90 PERCENT EXCEEDS	.38		.14		.30	

a No flow many days throughout period of record.

b Gage height 9.17 ft.

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

