

## TOWANDA CREEK BASIN

01532000 TOWANDA CREEK NEAR MONROETON, PA  
(Pennsylvania Water-Quality Network Station)

**LOCATION.**--Lat 41°42'25", long 76°29'06", Bradford County, Hydrologic Unit 02050106, on left bank on Township Route 406, 0.8 mi southwest of Monroeton, and 1.0 mi upstream from South Branch Towanda Creek.

**DRAINAGE AREA.**--215 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

**PERIOD OF RECORD.**--February 1914 to current year.

**REVISED RECORDS.**--WSP 756: Drainage area. WSP 1051: 1943-44(M). WSP 1302: 1922(M), 1924, 1925-26(M), 1928, 1929(M), 1930-31. WSP 1432: 1921(M), 1932(M), 1933, 1934-35(M), 1936, 1938(M), 1940. WDR PA-78-2: 1972(M). WDR PA-87-2: 1978-79.

**GAGE.**--Water-stage recorder. Datum of gage is 765.53 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1942, nonrecording gage at present site at datum 8.62 ft higher. Water-stage recorder Oct. 1, 1942, to Sept. 25, 1975, 0.6 mi downstream at datum 11.82 ft lower. Nonrecording gage Sept. 26, 1975, to Aug. 26, 1976, at bridge 0.6 mi downstream at datum 11.82 ft lower. Nonrecording gage Aug. 27, 1976, to Oct. 20, 1977, at present site and datum.

**REMARKS.**--Records good October 1 to July 3; fair, July 4 to September 30, except those for estimated daily discharges, which are poor. Several measurements of water temperature were made during the year. Satellite and landline telemetry at station.

**PEAK DISCHARGES FOR CURRENT YEAR.**--Peak discharges greater than a base discharge of 4,300 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. 26	1930	*16,100	*14.06	No other peak greater than 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	178	65	916	e120	978	150	470	469	127	25	e12	5.2
2	149	64	515	e110	786	143	395	569	111	21	e10	4.7
3	126	64	355	e120	510	262	346	524	89	20	e12	e4.8
4	109	62	278	e100	392	246	299	390	77	e19	e9.0	e4.4
5	96	62	233	98	275	168	267	331	79	e18	e10	e4.4
6	90	60	205	93	e240	169	247	289	1140	e17	e16	e4.2
7	86	56	184	96	215	169	225	270	1080	e16	e12	e4.0
8	75	54	165	e100	201	158	209	245	378	e15	10	e3.8
9	67	53	175	e100	183	154	201	272	243	e16	7.9	e3.6
10	63	50	171	93	342	236	224	314	184	e17	e7.0	e3.6
11	60	49	153	104	2360	188	195	243	149	e15	e6.6	e3.4
12	57	47	148	104	1050	171	174	428	130	e14	e6.2	e3.4
13	54	46	167	100	778	167	172	1560	134	e13	e6.0	e3.4
14	52	45	214	e96	507	162	264	1930	165	e13	e5.6	e3.1
15	94	44	506	91	422	153	447	936	328	e12	e5.2	e6.0
16	101	44	294	91	382	307	359	614	294	e11	e5.5	12
17	134	43	304	87	338	276	294	488	208	e11	e5.5	15
18	120	41	1280	84	263	244	264	1390	166	e10	e5.9	11
19	96	40	790	e80	e220	243	246	935	143	e40	e5.8	7.9
20	86	43	551	e80	219	392	239	635	115	e18	e5.8	5.4
21	85	43	391	e82	328	543	227	526	96	e12	e5.6	3.7
22	76	41	297	e78	283	413	214	425	82	e10	e5.4	7.2
23	74	39	256	77	231	322	204	349	74	e14	e7.0	56
24	97	39	253	171	199	306	185	295	65	e19	15	42
25	113	112	218	404	186	285	176	256	57	e14	19	24
26	96	486	e170	236	179	4210	184	225	50	e13	13	18
27	86	234	e160	208	195	3770	163	198	43	e12	8.4	56
28	78	183	e160	228	172	1320	410	204	40	e19	6.2	239
29	73	208	e140	287	---	865	1020	200	36	e20	5.7	80
30	70	341	e130	628	---	653	592	154	30	e18	6.6	47
31	66	---	e120	766	---	511	---	136	---	e14	6.4	---
TOTAL	2807	2758	9899	5112	12434	17356	8912	15800	5913	506	262.3	686.2
MEAN	90.55	91.93	319.3	164.9	444.1	559.9	297.1	509.7	197.1	16.32	8.461	22.87
MAX	178	486	1280	766	2360	4210	1020	1930	1140	40	19	239
MIN	52	39	120	77	172	143	163	136	30	10	5.2	3.1
CFSM	0.42	0.43	1.49	0.77	2.07	2.60	1.38	2.37	0.92	0.08	0.04	0.11
IN.	0.49	0.48	1.71	0.88	2.15	3.00	1.54	2.73	1.02	0.09	0.05	0.12

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1914 - 2002, BY WATER YEAR (WY)

MEAN	147.1	272.6	310.0	286.8	345.6	654.0	623.3	369.0	185.1	93.79	79.97	85.12
MAX	1092	1326	1117	1542	1169	2287	1838	1262	1922	1376	986	950
(WY)	1991	1927	1997	1996	1984	1936	1993	1946	1972	1915	1915	1975
MIN	6.46	7.84	16.8	10.1	40.4	135	110	54.5	16.0	7.72	3.71	1.76
(WY)	1965	1931	1932	1931	1931	1965	1946	1926	1991	1955	1966	1964

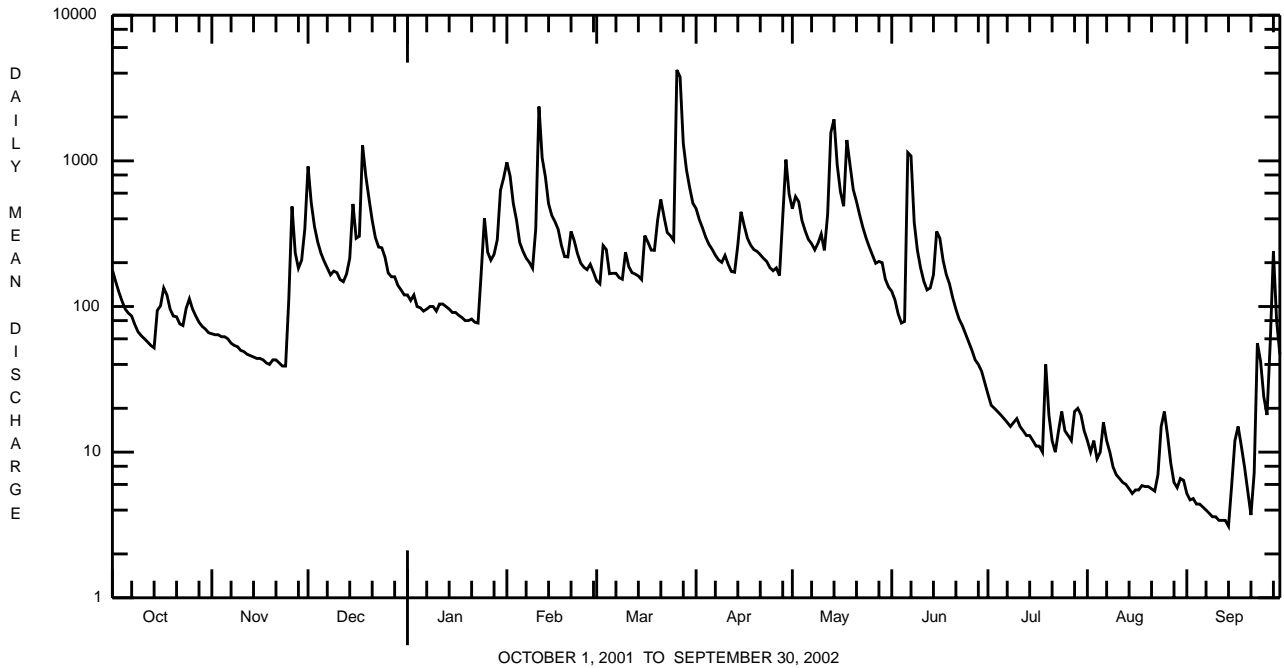
e Estimated.

TOWANDA CREEK BASIN

01532000 TOWANDA CREEK NEAR MONROETON, PA--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1914 - 2002	
ANNUAL TOTAL	85059.3		82445.5		287	
ANNUAL MEAN	233		226		502	
HIGHEST ANNUAL MEAN					1978	
LOWEST ANNUAL MEAN					1965	
HIGHEST DAILY MEAN	4860	Sep 25	4210	Mar 26	28700	Jun 22 1972
LOWEST DAILY MEAN	e9.0	Aug 16	e3.1	Sep 14	0.70	Sep 21 1932
ANNUAL SEVEN-DAY MINIMUM	a11	Aug 10	a3.5	Sep 8	0.87	Sep 16 1932
MAXIMUM PEAK FLOW			16100	Mar 26	74000	Jun 22 1972
MAXIMUM PEAK STAGE			14.06	Mar 26	b20.86	Jan 19 1996
INSTANTANEOUS LOW FLOW					0.70	Sep 15 1932c
ANNUAL RUNOFF (CFSM)	1.08		1.05		1.33	
ANNUAL RUNOFF (INCHES)	14.72		14.26		18.12	
10 PERCENT EXCEEDS	563		495		654	
50 PERCENT EXCEEDS	86		126		115	
90 PERCENT EXCEEDS	31		7.6		14	

- a Computed using estimated daily discharges.
- b From floodmark.
- c Also Sept. 17, 21, 22, 1932.
- e Estimated.



TOWANDA CREEK BASIN

01532000 TOWANDA CREEK NEAR MONROETON, PA--Continued  
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WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 2002 to current year.

REMARKS.--Other data for the Water-Quality Network can be found on pages 306-334.

COOPERATION.--Samples were collected as part of the Pennsylvania Department of Environmental Protection Water-Quality Network (WQN) with cooperation from the Pennsylvania Department of Environmental Protection.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY ANA-LYZING SAMPLE (CODE NUMBER)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SAM-PLING METHOD, CODES (82398)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (µS/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM TOTAL RECOV-ERABLE (MG/L AS CA) (00916)	MAGNE-SIUM, TOTAL RECOV-ERABLE (MG/L AS MG) (00927)	ANC WATER UNFLTRD FET LAB (MG/L AS CACO3) (00417)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)
APR 2002													
25...	0730	9813	170	30	11.4	7.5	94	8.9	36	10.5	2.4	30	13.0
JUN													
05...	1115	9813	78	30	10.6	8.1	115	18.9	45	13.5	2.8	28	15.2
AUG													
07...	1330	9813	E13	30	9.0	8.1	124	22.9	56	16.8	3.4	38	16.0

Date	RESIDUE AT 105 DEG. C, DIS-SOLVED (MG/L) (00515)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NITRATE TOTAL (MG/L AS N) (00620)	NITRO-GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHORUS ORTHO TOTAL (MG/L AS P) (70507)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	COPPER, TOTAL RECOV-ERABLE (µG/L AS CU) (01042)	IRON, TOTAL RECOV-ERABLE (µG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (µG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (µG/L AS MN) (01055)
APR 2002													
25...	72	18	<.020	.19	<.040	.32	.01	.010	1.7	<10	80	<1.0	20
JUN													
05...	68	<2	<.020	.26	<.040	.40	<.01	.020	1.9	40	60	<1.0	20
AUG													
07...	86	2	<.020	.12	<.040	.24	.01	.010	1.7	<10	50	<1.0	20

Date	NICKEL, TOTAL RECOV-ERABLE (µG/L AS NI) (01067)	ZINC, TOTAL RECOV-ERABLE (µG/L AS ZN) (01092)
APR 2002		
25...	<50	20
JUN		
05...	<50	20
AUG		
07...	<50	<10