

SURFACE-WATER RECORDS

NORTH ATLANTIC SLOPE BASINS

SUSQUEHANNA RIVER BASIN

CHEMUNG RIVER BASIN

01516350 TIOGA RIVER NEAR MANSFIELD, PA

LOCATION.--Lat 41°47'49", long 77°04'50", Tioga County, Hydrologic Unit 02050104, on left bank on Township Route 754, 0.9 mi downstream from Slate Creek, and 0.7 mi south of Mansfield. Prior to May 25, 1999, at site 0.3 mi upstream.

DRAINAGE AREA.--153 mi².

PERIOD OF RECORD.--July 1976 to current year.

REVISED RECORDS.--WDR PA-84-2: 1980-83 (P).

GAGE.--Water-stage recorder. Datum of gage is 1,121.28 ft above National Geodetic Vertical Datum of 1929. Prior to May 25, 1999, at site 0.3 mi upstream at same datum.

REMARKS.--Records good 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.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in September 1975 reached an approximate stage of 20.1 ft, from floodmarks, site then in use, from original site 0.3 mi upstream, discharge, about 18,000 ft³/s.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than a base discharge of 3,000 ft³/s and maximum (*):

Date	Time	Discharge ft ³ /s	Gage Height (ft)	Date	Time	Discharge ft ³ /s	Gage Height (ft)
Mar. 20	2130	*5,890	*8.80	June 21	0530	4,070	7.97
Mar. 21	2230	3,440	7.61				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46	99	154	715	e40	e200	469	112	1460	130	445	64
2	38	94	135	688	e40	e200	1020	176	814	114	275	628
3	34	88	e120	393	e38	e190	807	159	520	100	177	383
4	32	82	e110	325	e70	e180	620	133	524	90	188	744
5	32	79	e120	280	e140	e170	1100	121	468	83	275	1030
6	31	89	e110	258	e110	e170	687	121	357	75	361	480
7	28	94	e110	236	e90	e170	550	118	429	71	226	302
8	25	83	e100	234	e78	e160	493	139	457	71	189	220
9	24	77	e90	318	e83	e160	467	131	336	76	347	178
10	22	75	e84	330	e67	e150	456	117	273	78	320	149
11	24	109	e90	240	e60	e150	571	118	248	102	300	126
12	48	131	e110	206	e56	e140	649	125	252	87	380	110
13	65	172	e120	e160	e54	e150	470	116	284	67	229	100
14	55	145	e240	e140	e52	e140	390	108	231	58	179	117
15	49	130	427	e130	e47	320	342	102	186	52	154	108
16	144	131	238	e120	e44	682	302	118	156	48	141	182
17	415	539	174	e100	e48	1110	265	241	136	44	156	118
18	197	482	e110	e80	e60	1320	237	173	141	49	113	95
19	151	319	e140	e85	e90	1170	230	143	144	62	98	175
20	136	270	940	e90	e80	1950	210	127	159	48	87	266
21	112	284	634	e72	e70	2940	191	135	2430	72	78	148
22	96	296	416	e66	e80	2110	209	129	1440	508	73	119
23	86	333	338	e66	e300	1340	191	117	756	228	70	1130
24	77	268	277	e64	e360	1040	174	186	470	492	64	542
25	73	246	259	e62	e300	899	155	230	336	246	60	416
26	206	220	238	e58	e260	909	154	204	261	158	58	360
27	183	205	207	e45	e240	767	155	201	212	132	60	312
28	136	181	185	e45	e220	584	136	175	180	170	55	909
29	118	168	183	e50	---	573	126	162	157	125	51	500
30	110	166	164	e45	---	582	119	145	148	101	54	361
31	105	---	224	e42	---	514	---	162	---	86	52	---
TOTAL	2898	5655	6847	5743	3177	21140	11945	4544	13965	3823	5315	10372
MEAN	93.5	188	221	185	113	682	398	147	466	123	171	346
MAX	415	539	940	715	360	2940	1100	241	2430	508	445	1130
MIN	22	75	84	42	38	140	119	102	136	44	51	64
CFSM	0.61	1.23	1.44	1.21	0.74	4.46	2.60	0.96	3.04	0.81	1.12	2.26
IN.	0.70	1.37	1.66	1.40	0.77	5.14	2.90	1.10	3.40	0.93	1.29	2.52

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 2003, BY WATER YEAR (WY)

	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	2001	2002	2003
MEAN	129	199	223	220	248	416	499	243	176	77.4	76.2	69.3																
MAX	653	620	666	943	682	832	1968	630	550	375	839	346																
(WY)	1991	1978	1997	1996	1996	1978	1993	1978	1989	1994	1994	2003																
MIN	13.3	17.5	20.5	36.2	57.2	148	156	77.9	25.1	17.5	12.5	12.6																
(WY)	1983	1999	1999	1981	1987	1981	1988	2001	1991	1999	1999	1980																

e Estimated.

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01516350 TIOGA RIVER NEAR MANSFIELD, PA--Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1976 - 2003	
ANNUAL TOTAL	69893		95424			
ANNUAL MEAN	191		261		214	
HIGHEST ANNUAL MEAN					388	1978
LOWEST ANNUAL MEAN					125	2001
HIGHEST DAILY MEAN	2680	Jun 6	2940	Mar 21	12200	Aug 18 1994
LOWEST DAILY MEAN	10	Sep 11-14	22	Oct 10	8.1	Sep 3 1999
ANNUAL SEVEN-DAY MINIMUM	10	Sep 8	27	Oct 5	8.7	Aug 31 1999
MAXIMUM PEAK FLOW			5890	Mar 20	a 38900	Jan 19 1996
MAXIMUM PEAK STAGE			8.80	Mar 20	b 18.87	Jan 19 1996
ANNUAL RUNOFF (CFSM)	1.25		1.71		1.40	
ANNUAL RUNOFF (INCHES)	16.99		23.20		19.00	
10 PERCENT EXCEEDS	422		558		468	
50 PERCENT EXCEEDS	129		155		100	
90 PERCENT EXCEEDS	20		56		21	

a From rating curve extended above 16,000 ft³/s.

b From floodmark, at site then in use.

