

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 sea level. 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)
Jan. 24	0915	*5,260	*14.71	May 4	0730	3,230	13.59

**DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	15	18	e14	183	109	515	168	35	28	20	8.9
2	12	15	18	e13	319	94	649	153	35	26	16	8.5
3	12	14	17	e20	334	340	519	142	38	23	14	8.1
4	13	13	17	e30	300	2200	555	133	35	24	13	8.4
5	12	13	17	e26	284	909	468	125	32	22	12	8.4
6	12	13	17	e24	241	634	384	117	30	19	11	9.1
7	12	13	17	e22	216	460	349	111	30	19	11	359
8	31	13	17	e21	199	352	313	121	37	16	11	111
9	63	13	17	e22	183	333	541	165	32	15	11	48
10	77	13	16	e23	195	320	556	139	28	24	9.9	36
11	62	22	16	e24	181	281	411	114	27	22	10	29
12	38	25	15	e25	244	261	429	100	26	19	10	25
13	29	23	e14	e27	282	233	358	90	25	17	9.8	22
14	24	20	e14	e29	204	221	317	84	26	16	18	25
15	22	19	e13	e38	182	213	290	78	29	14	17	30
16	20	18	e15	e40	197	217	288	73	25	14	12	240
17	19	17	17	e40	238	401	316	68	28	13	9.9	855
18	18	17	16	e50	260	613	297	63	43	14	9.2	293
19	17	17	16	e210	212	429	274	59	43	15	9.0	174
20	16	17	16	e150	e170	359	283	56	34	15	15	129
21	16	20	16	e100	e140	384	258	52	27	13	16	149
22	17	21	55	e120	e120	411	234	51	24	12	12	130
23	16	20	e58	e500	e110	370	308	52	22	12	11	101
24	16	18	e40	3720	e110	365	422	54	22	12	9.8	80
25	16	17	e30	1070	e100	386	310	62	21	12	9.5	66
26	15	19	e23	565	e92	334	282	57	20	21	16	57
27	15	21	e21	400	e82	320	258	51	18	15	15	52
28	15	21	e19	387	92	343	231	46	25	13	13	50
29	15	20	e18	351	---	388	207	42	33	12	14	50
30	15	19	e16	279	---	426	185	39	37	22	12	487
31	15	---	e15	200	---	428	---	36	---	24	9.8	---
TOTAL	692	526	634	8540	5470	13134	10807	2701	887	543	386.9	3649.4
MEAN	22.3	17.5	20.5	275	195	424	360	87.1	29.6	17.5	12.5	122
MAX	77	25	58	3720	334	2200	649	168	43	28	20	855
MIN	12	13	13	13	82	94	185	36	18	12	9.0	8.1
CFSM	.15	.11	.13	1.80	1.28	2.77	2.35	.57	.19	.11	.08	.80
IN.	.17	.13	.15	2.08	1.33	3.19	2.63	.66	.22	.13	.09	.89

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 1999, 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	
MEAN	138	213	228	238	256	421	500	248	158	79.9	79.2	57.8													
MAX	653	620	666	943	682	832	1968	630	550	375	839	196													
(WY)	1991	1978	1997	1996	1996	1978	1993	1978	1989	1994	1994	1996													
MIN	13.3	17.5	20.5	36.2	57.2	148	156	84.4	25.1	17.5	12.5	12.6													
(WY)	1983	1999	1999	1981	1987	1981	1988	1987	1991	1999	1999	1980													

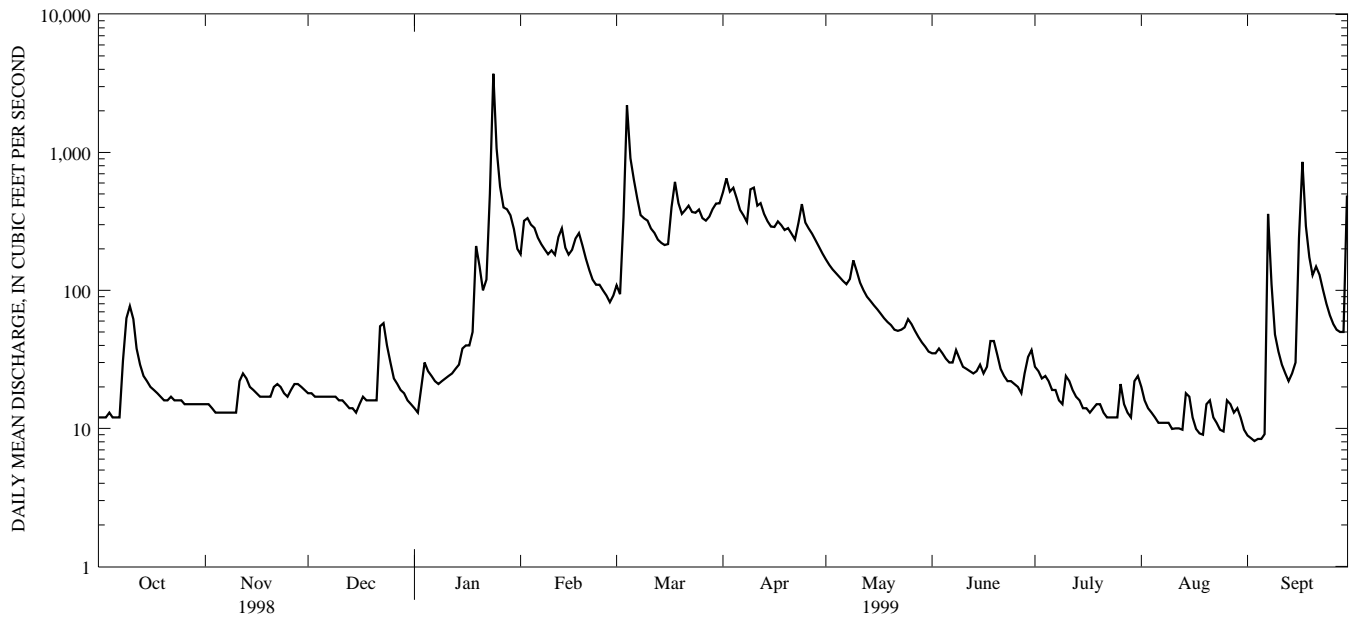
e Estimated.

CHEMUNG RIVER BASIN

01516350 TIOGA RIVER NEAR MANSFIELD, PA--Continued

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1976 - 1999	
ANNUAL TOTAL	80700		47970.3			
ANNUAL MEAN	221		131		217	
HIGHEST ANNUAL MEAN					388	1978
LOWEST ANNUAL MEAN					131	1985
HIGHEST DAILY MEAN	e3400	Jan 8	3720	Jan 24	12200	Aug 18 1994
LOWEST DAILY MEAN	12	Sep 19 ^a	8.1	Sep 3	8.1	Sep 3 1999
ANNUAL SEVEN-DAY MINIMUM	12	Oct 1	8.7	Aug 31	8.7	Aug 31 1999
INSTANTANEOUS PEAK FLOW			5260	Jan 24	b38900	Jan 19 1996
INSTANTANEOUS PEAK STAGE			14.71	Jan 24	c18.87	Jan 19 1996
ANNUAL RUNOFF (CFSM)	1.45		.86		1.42	
ANNUAL RUNOFF (INCHES)	19.62		11.66		19.31	
10 PERCENT EXCEEDS	523		358		469	
50 PERCENT EXCEEDS	86		29		98	
90 PERCENT EXCEEDS	15		13		21	

- a Also Sept. 20, 23-26, Oct. 1-3, 5-7.
- b From rating curve extended above 16,000 ft³/s.
- c From floodmark, at site then in use.
- e Estimated.



1-YEAR HYDROGRAPH
OCTOBER 1, 1998 TO SEPTEMBER 30, 1999