

## CHEMUNG RIVER BASIN

## 01518700 TIOGA RIVER AT TIOGA JUNCTION, PA

**LOCATION.**--Lat 41°57'09", long 77°06'56", Tioga County, Hydrologic Unit 02050104, on left bank 0.3 mi upstream from bridge on Township Route 722 at Tioga Junction, 3.3 mi downstream from Crooked Creek, and 5.0 mi downstream from Tioga and Hammond Dams.

**DRAINAGE AREA.**--446 mi<sup>2</sup>.

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

**GAGE.**--Water-stage recorder. Datum of gage is 990.43 ft above sea level.

**REMARKS.**--Records good except those for estimated daily discharges, which are poor. Flow regulated since November 1979 by Tioga Dam (station 01517900) and Hammond Dam (station 01518498). Several measurements of water temperature were made during the year. Satellite and landline telemetry at station.

**EXTREMES OUTSIDE PERIOD OF RECORD.**--Flood of September 1975 reached a stage of about 22.1 ft, from floodmarks, discharge, about 48,000 ft<sup>3</sup>/s.

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	46	60	60	e110	122	130	1100	316	103	146	46	66
2	46	60	58	e110	156	139	1170	280	104	257	46	65
3	47	60	57	e99	e120	157	923	234	104	161	46	64
4	52	60	55	94	101	159	1080	221	107	112	46	66
5	57	60	53	94	118	159	2030	229	129	156	46	64
6	194	60	53	94	120	156	2370	219	111	191	46	63
7	171	59	53	94	119	143	4200	176	101	158	46	63
8	113	59	54	94	119	141	4810	144	90	130	45	63
9	93	59	e53	94	122	154	4470	125	59	123	45	63
10	76	61	e52	102	169	158	e4100	125	59	103	43	63
11	54	60	52	109	205	150	e3600	118	70	97	36	63
12	53	60	53	109	152	141	e3200	94	70	75	36	63
13	53	60	e52	109	164	208	1370	106	59	74	35	64
14	53	60	e52	109	178	332	1140	127	58	74	35	69
15	55	60	69	109	328	484	1070	124	63	74	35	64
16	57	60	92	107	369	547	1260	95	79	69	38	64
17	60	60	860	96	254	406	1140	57	124	61	41	64
18	62	60	935	99	200	373	968	89	170	60	37	64
19	61	59	314	102	184	400	878	122	141	56	48	64
20	62	59	260	101	217	442	680	117	156	64	64	65
21	61	59	255	101	213	858	1210	117	e200	61	63	64
22	60	59	e210	e100	155	1450	2110	118	e150	59	57	64
23	60	59	e140	e100	119	1140	1250	115	578	59	41	64
24	60	59	e110	99	140	1270	1040	104	1390	59	41	234
25	60	59	e110	100	174	913	850	103	502	59	40	3430
26	59	60	e110	e98	196	677	580	143	223	62	50	1430
27	60	59	e120	89	179	535	499	194	148	60	65	597
28	60	60	e120	75	159	468	462	252	108	59	67	379
29	60	61	e100	78	---	494	393	197	106	59	65	327
30	60	61	e110	129	---	3820	354	131	105	54	64	248
31	60	---	e110	173	---	2040	---	104	---	48	66	---
TOTAL	2125	1792	4782	3177	4852	18644	50307	4696	5467	2880	1479	8121
MEAN	68.5	59.7	154	102	173	601	1677	151	182	92.9	47.7	271
MAX	194	61	935	173	369	3820	4810	316	1390	257	67	3430
MIN	46	59	52	75	101	130	354	57	58	48	35	63

e Estimated.

CHEMUNG RIVER BASIN

01518700 TIOGA RIVER AT TIOGA JUNCTION, PA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 2001, BY WATER YEAR (WY) (SINCE REGULATION)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	252	421	517	501	666	956	1334	581	405	179	174	120
MAX (WY)	1515	1626	1632	1975	1837	2009	5667	1723	1619	697	1836	368
MIN (WY)	1991	1997	1997	1996	1981	1994	1993	1989	1989	1994	1994	1996
MIN (WY)	41.4	49.0	41.5	29.5	127	259	352	151	51.4	38.4	29.6	26.3
(WY)	1992	1981	1999	1981	1989	1981	1988	2001	1980	1991	1980	1980

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1980 - 2001	
ANNUAL TOTAL	165280		108322			
ANNUAL MEAN	452		297		507	
HIGHEST ANNUAL MEAN					842	
LOWEST ANNUAL MEAN					297	
HIGHEST DAILY MEAN	5240		Apr 5		4810	
LOWEST DAILY MEAN	34		Sep 5-8		35	
ANNUAL SEVEN-DAY MINIMUM	34		Sep 2		37	
MAXIMUM PEAK FLOW					a6240	
MAXIMUM PEAK STAGE					13.38	
10 PERCENT EXCEEDS	1090				748	
50 PERCENT EXCEEDS	170				101	
90 PERCENT EXCEEDS	46				53	

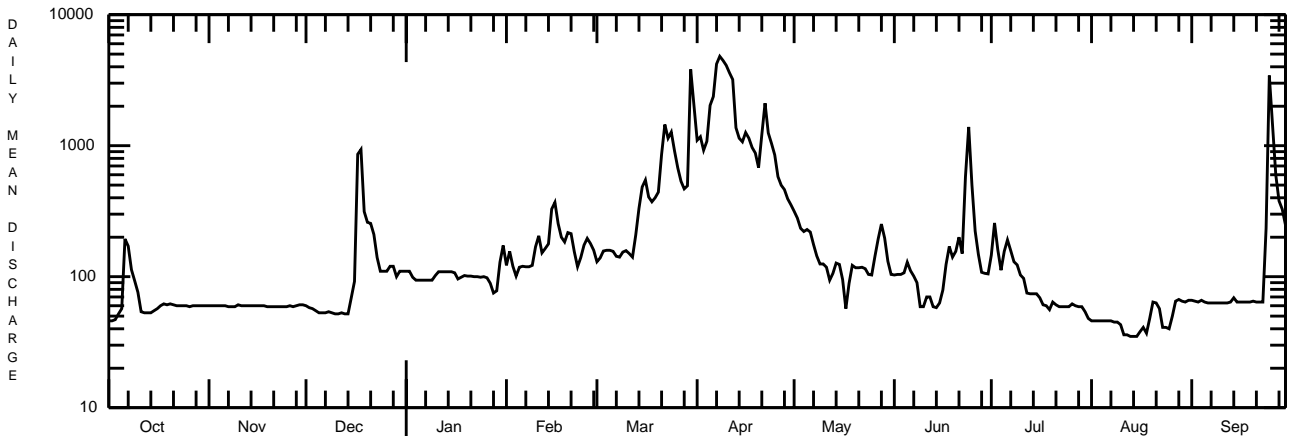
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 1979, BY WATER YEAR (WY) (PRIOR TO REGULATION)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	581	746	635	963	453	1993	1010	663	210	123	177	160
MAX (WY)	838	1764	1324	1484	597	2355	1404	1365	318	181	288	278
MIN (WY)	1978	1978	1978	1979	1977	1979	1978	1978	1978	1976	1976	1977
MIN (WY)	198	181	229	97.2	380	1478	807	311	153	78.3	65.2	80.3
(WY)	1979	1979	1977	1977	1978	1977	1979	1979	1977	1979	1979	1976

SUMMARY STATISTICS WATER YEARS 1976 - 1979

ANNUAL MEAN	643	
HIGHEST ANNUAL MEAN	955	
LOWEST ANNUAL MEAN	429	
HIGHEST DAILY MEAN	8510	
LOWEST DAILY MEAN	28	
ANNUAL SEVEN-DAY MINIMUM	32	
INSTANTANEOUS PEAK FLOW	bc17900	
INSTANTANEOUS PEAK STAGE	d17.20	
INSTANTANEOUS LOW FLOW	26	
ANNUAL RUNOFF (CFSM)	1.44	
ANNUAL RUNOFF (INCHES)	19.59	
10 PERCENT EXCEEDS	1520	
50 PERCENT EXCEEDS	232	
90 PERCENT EXCEEDS	69	

- a From rating curve extended above 6,000 ft<sup>3</sup>/s.
- b From rating curve extended above 4,000 ft<sup>3</sup>/s.
- c Gage height 16.70 ft.
- d Backwater from ice.



OCTOBER 1, 2000 TO SEPTEMBER 30, 2001