

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 mi².

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 ft³/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	498	79	526	236	179	1790	413	461	274	159	73	35
2	245	81	440	228	e180	1390	403	421	235	148	73	35
3	207	79	395	269	e180	1050	1280	430	213	149	73	35
4	167	79	376	482	178	790	4780	378	232	150	72	35
5	196	79	394	609	179	811	5240	340	307	146	67	34
6	181	82	383	432	175	710	3960	313	512	137	59	34
7	146	89	358	318	168	577	1360	305	373	126	58	34
8	146	89	305	324	e170	519	2020	280	288	102	56	34
9	146	87	262	323	e170	481	3770	237	217	77	56	35
10	146	87	262	381	168	451	2800	199	167	77	56	35
11	146	86	246	578	171	485	1810	198	180	77	56	35
12	137	86	228	481	e170	1070	1400	237	287	78	56	38
13	115	86	227	400	e200	918	1030	267	402	77	55	37
14	122	86	537	e280	299	699	807	265	552	77	55	35
15	136	86	1940	e320	496	630	703	234	474	80	55	37
16	151	85	1090	e340	489	663	615	194	377	79	52	36
17	146	84	919	e300	392	1970	871	152	583	78	51	35
18	144	84	718	e250	326	939	2030	170	511	77	52	36
19	132	82	623	e220	322	852	1740	2280	880	77	51	36
20	123	75	539	256	303	789	1270	1360	638	69	51	37
21	103	78	543	e250	285	1210	1450	1070	424	54	51	42
22	101	78	521	e220	298	3010	2430	1030	474	53	51	42
23	102	80	467	e240	481	1330	2820	939	440	53	53	43
24	99	86	374	e230	1320	1130	1830	2290	308	53	51	44
25	99	88	296	e220	3050	1020	1190	1760	213	51	50	44
26	99	555	291	e200	4580	989	982	1190	712	51	46	45
27	94	3250	280	e200	4470	1030	827	769	808	51	36	44
28	80	1210	285	e190	5030	812	820	579	389	52	37	46
29	79	733	250	e190	3990	625	703	565	224	55	36	46
30	79	595	230	e200	---	589	578	469	168	74	35	46
31	79	---	240	180	---	523	---	320	---	72	35	---
TOTAL	4444	8424	14545	9347	28419	29852	51932	19702	11862	2659	1658	1150
MEAN	143	281	469	302	980	963	1731	636	395	85.8	53.5	38.3
MAX	498	3250	1940	609	5030	3010	5240	2290	880	159	73	46
MIN	79	75	227	180	168	451	403	152	167	51	35	34

e Estimated.

CHEMUNG RIVER BASIN

01518700 TIOGA RIVER AT TIOGA JUNCTION, PA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 2000, BY WATER YEAR (WY) (SINCE REGULATION)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	261	438	534	520	690	973	1318	602	416	183	180	113
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	157	51.4	38.4	29.6	26.3
(WY)	1992	1981	1999	1981	1989	1981	1988	1999	1980	1991	1980	1980

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1980 - 2000
ANNUAL TOTAL	142047	183994	
ANNUAL MEAN	389	503	517
HIGHEST ANNUAL MEAN			842
LOWEST ANNUAL MEAN			310
HIGHEST DAILY MEAN	4940	Jan 24	7210
LOWEST DAILY MEAN	35	Aug 31-Sep 6	16
ANNUAL SEVEN-DAY MINIMUM	35	Aug 31	21
INSTANTANEOUS PEAK FLOW		5740	11200
INSTANTANEOUS PEAK STAGE		13.12	15.42
10 PERCENT EXCEEDS	949		1200
50 PERCENT EXCEEDS	115		229
90 PERCENT EXCEEDS	41		49

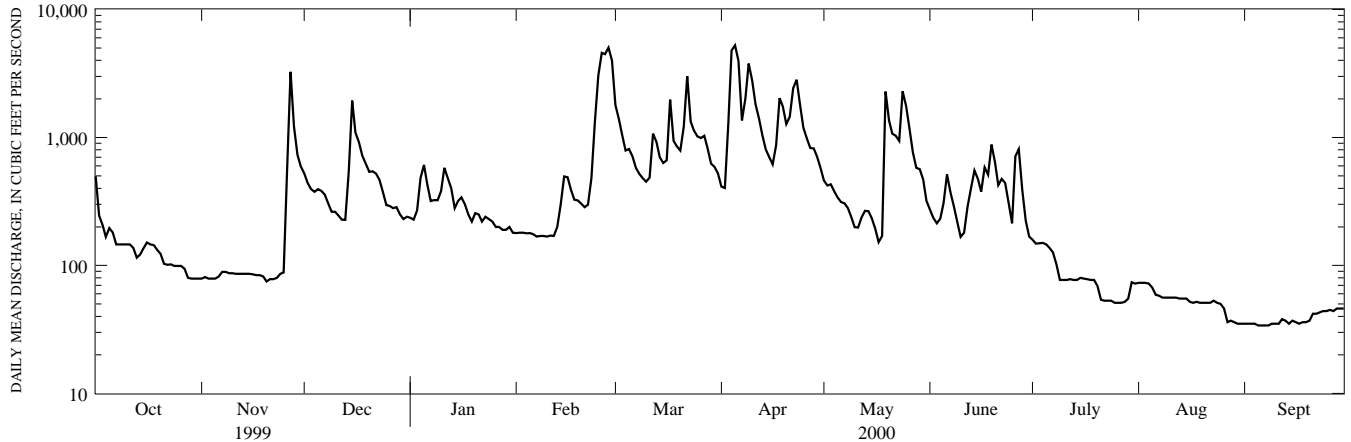
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 1979, BY WATER YEAR (WY) (PRIOR TO REGULATION)

	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	1978
LOWEST ANNUAL MEAN	429	1977
HIGHEST DAILY MEAN	8510	Jan 9 1978
LOWEST DAILY MEAN	28	Sep 11 1977
ANNUAL SEVEN-DAY MINIMUM	32	Sep 7 1977
INSTANTANEOUS PEAK FLOW	bc17900	Feb 25 1977
INSTANTANEOUS PEAK STAGE	d17.20	Jan 26 1978
INSTANTANEOUS LOW FLOW	26	Feb 13, Sep 12, 1977; Feb 3, 1979.
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 ft³/s.
- b From rating curve extended above 4,000 ft³/s.
- c Gage height 16.70 ft.
- d Backwater from ice.



1-YEAR HYDROGRAPH
OCTOBER 1, 1999 TO SEPTEMBER 30, 2000