

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 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	48	44	e44	420	329	1060	312	64	73	44	35
2	40	47	45	e50	501	317	1460	284	72	78	43	35
3	39	50	44	e84	824	390	1260	260	75	63	43	35
4	38	68	44	e110	771	4630	1260	236	73	43	42	35
5	36	63	44	e100	666	4900	1500	227	66	43	43	35
6	36	59	44	e82	500	2690	1140	197	59	44	42	35
7	35	56	44	e76	463	1170	874	193	53	45	40	82
8	37	51	44	e62	458	879	651	201	43	44	41	50
9	37	47	44	e64	387	738	1140	279	41	46	40	45
10	40	45	44	e66	471	736	2230	309	41	47	40	41
11	35	63	43	e66	535	668	1500	254	38	44	40	40
12	93	57	43	e66	631	598	1450	179	38	44	40	38
13	86	58	41	e66	675	544	1140	176	41	44	40	38
14	84	61	40	e68	591	527	725	167	45	43	42	39
15	74	62	40	e70	504	526	619	136	43	43	41	39
16	40	50	40	e68	480	499	647	114	43	43	40	112
17	35	45	40	e100	596	735	765	113	43	43	40	1520
18	31	42	40	e150	718	2120	696	111	43	43	41	541
19	31	51	40	e160	596	1450	535	109	48	43	41	227
20	31	55	40	243	458	1040	505	105	58	43	42	173
21	32	54	40	316	393	1060	508	79	58	43	41	176
22	31	53	46	322	348	1240	431	79	58	43	41	166
23	42	53	43	2400	307	1080	685	81	53	43	39	153
24	59	53	43	4940	286	1090	1450	89	43	43	37	97
25	54	49	e40	4480	267	1130	780	132	43	44	37	96
26	49	44	e39	3530	235	971	749	99	43	45	43	91
27	48	44	40	2030	219	851	699	97	43	43	38	66
28	48	44	40	1360	263	845	512	80	49	43	37	75
29	48	46	38	934	---	898	405	59	53	43	36	83
30	48	45	e36	564	---	844	361	59	74	47	36	456
31	48	---	e35	484	---	925	---	59	---	45	35	---
TOTAL	1427	1563	1288	23155	13563	36420	27737	4875	1544	1441	1245	4654
MEAN	46.0	52.1	41.5	747	484	1175	925	157	51.5	46.5	40.2	155
MAX	93	68	46	4940	824	4900	2230	312	75	78	44	1520
MIN	31	42	35	44	219	317	361	59	38	43	35	35

e Estimated.

CHEMUNG RIVER BASIN

01518700 TIOGA RIVER AT TIOGA JUNCTION, PA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 1999, BY WATER YEAR (WY) (SINCE REGULATION)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	267	446	537	531	675	973	1297	600	417	188	186	116
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 1998 CALENDAR YEAR

FOR 1999 WATER YEAR

WATER YEARS 1980 - 1999

ANNUAL TOTAL		222687		118912								
ANNUAL MEAN		610		326						518		
HIGHEST ANNUAL MEAN										842		1994
LOWEST ANNUAL MEAN										310		1985
HIGHEST DAILY MEAN				5910	Feb 19	4940	Jan 24	7210	Apr 27	1993		
LOWEST DAILY MEAN				31	Oct 18 ^a	31	Oct 18 ^a	16	Aug 26-28	1980		
ANNUAL SEVEN-DAY MINIMUM				33	Oct 16	33	Oct 16	21	Jan 23	1981		
INSTANTANEOUS PEAK FLOW						5380	Mar 5	b11200	Aug 18	1994		
INSTANTANEOUS PEAK STAGE						12.91	Mar 5	15.42	Aug 18	1994		
10 PERCENT EXCEEDS				1540		876		1210				
50 PERCENT EXCEEDS				203		59		203				
90 PERCENT EXCEEDS				40		39		49				

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

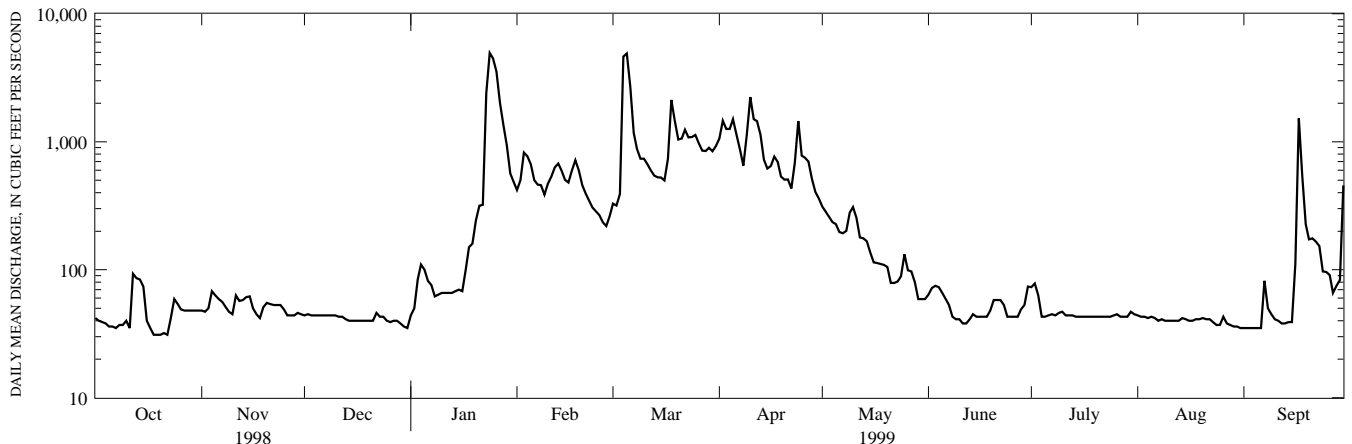
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	581	746	635	963	453	1993	1010	663	210	123	177	160
MAX (WY)	838	1764	1324	1484	597	2355	1404	1365	318	181	288	278
MIN (WY)	1978	1978	1978	1979	1977	1979	1978	1978	1978	1976	1976	1977
MIN (WY)	198	181	229	97.2	380	1478	807	311	153	78.3	65.2	80.3
(WY)	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		cd17900		Feb 25	1977							
INSTANTANEOUS PEAK STAGE		f17.20		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 Also Oct. 19, 20, 22.
- b From rating curve extended above 6,000 ft³/s.
- c From rating curve extended above 4,000 ft³/s.
- d Gage height 16.70 ft.
- f Backwater from ice.



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