

CHEMUNG RIVER BASIN

01518000 TIOGA RIVER AT TIOGA, PA

LOCATION.--Lat 41°54'30", long 77°07'47", Tioga County, Hydrologic Unit 02050104, on left bank 130 ft upstream from highway bridge on Township Route 667 at Tioga, 0.8 mi upstream from Crooked Creek, and 0.9 mi downstream from Tioga Dam.

DRAINAGE AREA.--282 mi².

PERIOD OF RECORD.--June 1938 to current year. Prior to October 1938 monthly discharge only, published in WSP 1302.

REVISED RECORDS.--WSP 871: 1938.

GAGE.--Water-stage recorder. Datum of gage is 1,021.07 ft above National Geodetic Vertical Datum of 1929. Prior to Sept. 9, 1953, at site 20 ft upstream at datum 2.11 ft higher. Sept. 9, 1953, to Aug. 10, 1954, at site 130 ft downstream at present datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Discharges include flow diverted from Crooked Creek into Tioga River since Oct. 1, 1977. Flow regulated since November 1979 by Tioga Dam (station 01517900). Several measurements of water temperature were made during the year. Satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	167	68	595	168	940	261	781	895	304	113	53	32
2	115	68	607	154	996	261	652	1060	268	93	53	32
3	115	68	356	125	661	324	616	865	209	94	40	32
4	115	68	231	115	521	328	513	621	188	94	32	32
5	115	69	274	127	428	270	400	550	1040	68	50	32
6	116	68	306	145	431	239	359	520	4070	53	32	32
7	107	68	266	154	361	253	359	543	5070	53	32	32
8	85	68	246	141	346	240	359	504	3900	53	32	32
9	85	69	246	141	335	225	319	454	1380	65	32	32
10	84	68	215	141	404	227	315	637	732	76	31	32
11	84	69	174	141	1730	237	322	516	561	68	31	32
12	83	68	162	141	798	253	276	1250	472	68	31	32
13	83	68	182	141	657	247	266	3540	438	68	31	32
14	83	68	263	141	476	238	493	4010	708	67	32	32
15	83	68	611	141	501	238	1840	2270	2440	53	32	33
16	84	68	e520	141	558	239	907	1180	2020	41	32	33
17	84	68	e450	137	522	280	695	1010	1080	39	32	32
18	105	68	1690	127	467	288	596	2820	831	39	32	32
19	115	68	1060	115	401	270	554	2180	556	39	33	32
20	115	58	696	108	365	271	474	1110	456	39	32	31
21	115	52	652	122	373	314	e450	871	359	39	32	31
22	115	52	571	147	411	336	e460	899	344	53	32	32
23	114	52	471	163	398	335	e360	775	306	62	32	31
24	115	51	370	201	333	335	316	659	e200	67	32	31
25	115	51	306	453	291	335	309	539	e180	79	32	31
26	115	186	274	330	270	1450	306	436	193	78	32	50
27	94	230	273	268	261	3020	306	346	204	58	32	84
28	81	230	246	278	262	1600	977	356	204	67	32	289
29	81	240	210	317	---	1240	2490	529	170	107	32	291
30	76	291	187	666	---	1140	1160	516	136	81	32	147
31	68	---	167	873	---	1010	---	411	---	53	32	---
TOTAL	3112	2788	12877	6562	14497	16304	18230	32872	29019	2027	1057	1658
MEAN	100.4	92.93	415.4	211.7	517.8	525.9	607.7	1060	967.3	65.39	34.10	55.27
MAX	167	291	1690	873	1730	3020	2490	4010	5070	113	53	291
MIN	68	51	162	108	261	225	266	346	136	39	31	31

e Estimated.

CHEMUNG RIVER BASIN

01518000 TIOGA RIVER AT TIOGA, PA--Continued

REMARKS--Those data in the first set of statistics (1978-2002) represent flow past the gage including streamflow diverted into Tioga River from the adjacent Crooked Creek Basin since October 1977, and are not equivalent to natural streamflow conditions prior to this date.

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 2002, BY WATER YEAR (WY) (SINCE REGULATION)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	248.0	411.1	475.8	490.9	553.4	907.3	1087	538.8	376.3	151.4	150.5	110.5
MAX (WY)	1454	1684	1377	1709	1716	2161	4544	1433	1404	682	1747	386
MIN (WY)	1991	1978	1997	1996	1981	1979	1993	1989	1989	1994	1994	1996
MIN (WY)	34.5	31.2	36.2	22.7	111	238	323	136	41.5	32.5	28.4	20.8
(WY)	1999	1981	1999	1981	1989	1981	1988	2001	1991	1991	1980	1980

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1978 - 2002

ANNUAL TOTAL	99601	141003	
ANNUAL MEAN	272.9	386.3	457.3
HIGHEST ANNUAL MEAN			862 1978
LOWEST ANNUAL MEAN			241 2001
HIGHEST DAILY MEAN	3520 Apr 8	5070 Jun 7	8360 Jan 9 1978
LOWEST DAILY MEAN	30 Aug 11-14	31 Aug 10-13a	16 Aug 26-28 1980
ANNUAL SEVEN-DAY MINIMUM	30 Aug 11	31 Sep 19	16 Jan 15 1981
MAXIMUM PEAK FLOW		5210 Jun 7	14300 Nov 4 1977
MAXIMUM PEAK STAGE		6.50 Jun 7	8.84 Nov 4 1977
INSTANTANEOUS LOW FLOW			b0.00 Mar 6 1979c
10 PERCENT EXCEEDS	687	882	1050
50 PERCENT EXCEEDS	110	204	179
90 PERCENT EXCEEDS	52	32	39

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 1977, BY WATER YEAR (WY) (PRIOR TO REGULATION)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	145	291	350	271	346	790	753	516	254	93.4	77.0	89.9
MAX (WY)	1084	1061	978	787	814	1694	2124	1534	2397	471	380	1083
MIN (WY)	1956	1971	1974	1952	1976	1964	1958	1946	1972	1972	1947	1975
MIN (WY)	9.26	12.8	22.0	37.9	59.2	169	132	87.6	44.3	16.5	12.2	6.68
(WY)	1964	1965	1965	1961	1963	1969	1946	1941	1962	1955	1966	1964

SUMMARY STATISTICS WATER YEARS 1939 - 1977

ANNUAL MEAN	331
HIGHEST ANNUAL MEAN	583 1972
LOWEST ANNUAL MEAN	138 1965
HIGHEST DAILY MEAN	26900 Jun 23 1972
LOWEST DAILY MEAN	5.0 Sep 11 1964
ANNUAL SEVEN-DAY MINIMUM	5.3 Sep 8 1964
MAXIMUM PEAK FLOW	d59000 Jun 22 1972
MAXIMUM PEAK STAGE	f19.70 Jun 22 1972
INSTANTANEOUS LOW FLOW	4.5 Aug 10,11 1955
ANNUAL RUNOFF (CFSM)	1.17
ANNUAL RUNOFF (INCHES)	15.95
10 PERCENT EXCEEDS	780
50 PERCENT EXCEEDS	130
90 PERCENT EXCEEDS	23

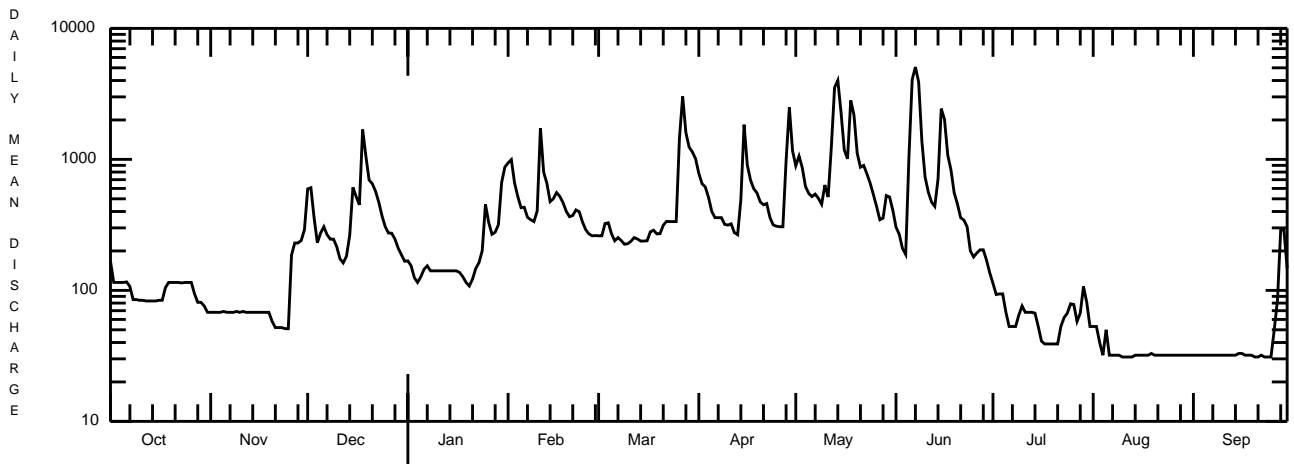
a Also Sept. 20, 21, 23-25.

b Result of shutoff at Tioga Dam.

c Also Aug. 29, 1980.

d From rating curve extended above 8,000 ft³/s on basis of slope-area and contracted-opening measurement at gage height 15.47 ft, and slope-area measurement of peak flow.

f From floodmark.



OCTOBER 1, 2001 TO SEPTEMBER 30, 2002