



2004 Water Year CHEMUNG RIVER BASIN

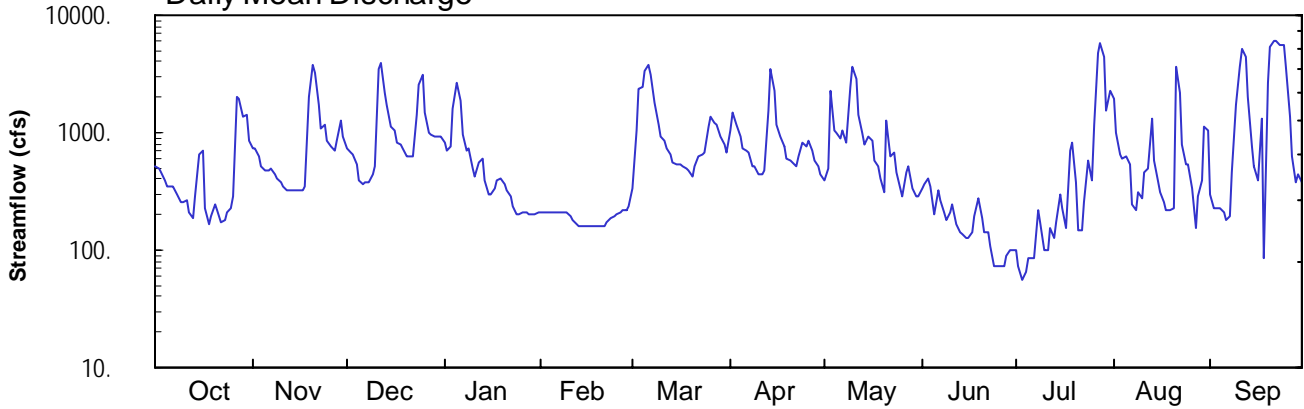
01518000 Tioga River at Tioga, PA

Latitude: 41° 54' 30"
Tioga County

Longitude: 077° 07' 47"
Datum: 1021.07 feet

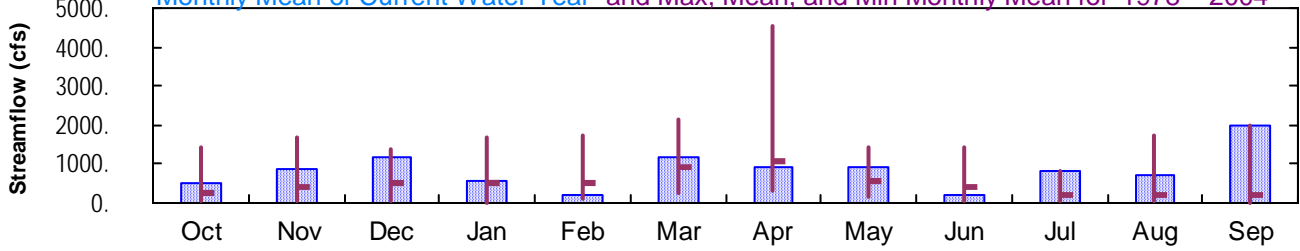
Hydrologic Unit Code: 02050104
Drainage Area: 282. mi²

Daily Mean Discharge

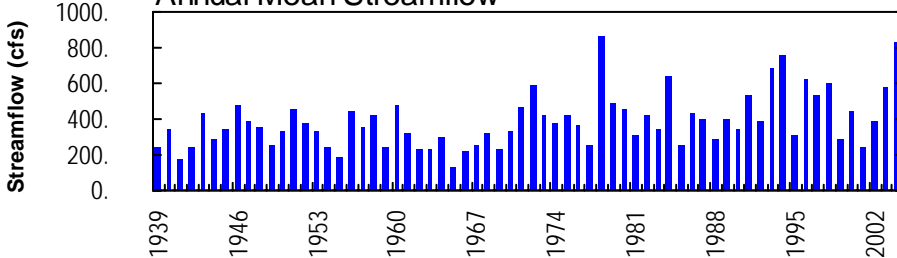


Monthly Statistics

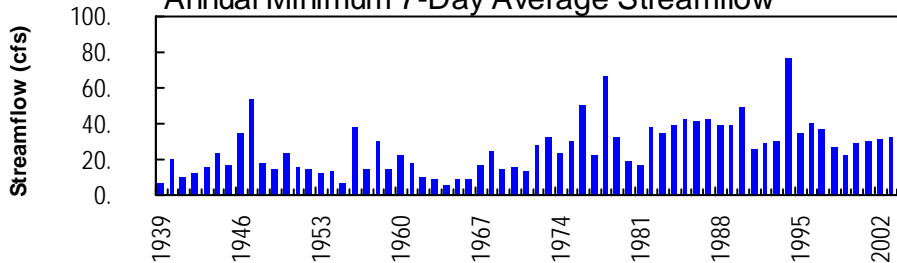
Monthly Mean of Current Water Year and Max, Mean, and Min Monthly Mean for 1978 – 2004



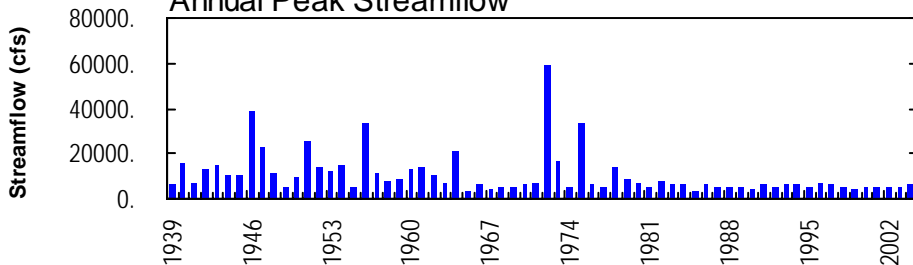
Annual Mean Streamflow



Annual Minimum 7-Day Average Streamflow



Annual Peak Streamflow



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.--No estimated daily discharges. Record good. 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 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	510	743	725	823	213	341	1050	393	341	101	1940	302
2	489	738	665	717	212	1030	1480	489	360	73	989	225
3	452	619	646	770	213	2330	1190	2230	407	57	649	226
4	392	520	528	1580	210	2440	938	1040	354	65	607	224
5	353	469	398	2630	210	3340	741	1010	199	85	637	207
6	354	473	362	1850	210	3740	705	890	322	85	531	178
7	354	495	370	947	210	3110	683	1020	265	85	250	196
8	294	438	380	716	210	1780	520	830	209	222	222	450
9	253	412	448	730	210	1160	510	2420	180	174	314	1730
10	260	377	524	504	198	928	448	3610	213	99	277	3600
11	268	353	3500	421	182	845	449	2810	249	98	465	5130
12	213	319	3940	558	169	744	478	1450	166	155	491	4390
13	188	322	2210	599	162	642	1560	993	143	127	1300	1990
14	284	322	1710	399	162	547	3530	783	137	175	583	765
15	663	322	1130	293	163	532	2280	915	127	296	388	512
16	699	321	1030	296	161	527	1180	843	127	226	310	387
17	225	321	829	334	161	508	938	577	140	156	250	1300
18	168	350	790	399	161	489	750	509	196	717	220	85
19	191	2050	725	405	161	471	599	405	278	822	220	2660
20	245	3840	621	356	161	419	580	310	187	383	224	5460
21	217	3170	615	324	161	521	553	1270	143	148	3670	5900
22	175	1710	616	285	169	624	517	626	143	148	2190	5960
23	181	1070	1410	237	184	655	637	685	110	255	780	5530
24	206	1180	2560	200	195	686	823	467	73	577	543	5490
25	231	842	3080	200	202	1130	757	330	73	388	527	3670
26	290	763	1470	208	209	1390	848	281	73	1180	335	1380
27	1980	703	998	208	222	1200	708	455	73	4780	151	615
28	1970	848	976	199	216	1190	571	505	90	5760	291	373
29	1360	1290	916	199	240	935	520	338	101	4350	390	444
30	1410	930	914	199	---	803	444	284	101	1540	1130	381
31	841	---	938	208	---	690	---	285	---	2240	1060	---
TOTAL	15716	26310	36024	17794	5537	35747	26987	29053	5580	25567	21934	59760
MEAN	507	877	1162	574	191	1153	900	937	186	825	708	1992
MAX	1980	3840	3940	2630	240	3740	3530	3610	407	5760	3670	5960
MIN	168	319	362	199	161	341	444	281	73	57	151	85

CHEMUNG RIVER BASIN

01518000 TIOGA RIVER AT TIOGA, PA--Continued

REMARKS--Those data in the first set of statistics (1978-2004) 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 - 2004, BY WATER YEAR (WY) (SINCE REGULATION)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	253	422	501	492	528	941	1072	544	394	183	187	201
MAX (WY)	1454	1684	1377	1709	1716	2161	4544	1433	1404	825	1747	1992
MIN (WY)	1991	1978	1997	1996	1981	1979	1993	1989	1989	2004	1994	2004
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 2003 CALENDAR YEAR FOR 2004 WATER YEAR WATER YEARS 1978 - 2004

ANNUAL TOTAL	262342	306009	
ANNUAL MEAN	719	836	476
HIGHEST ANNUAL MEAN			862
LOWEST ANNUAL MEAN			241
HIGHEST DAILY MEAN	5080	Mar 25	5960
LOWEST DAILY MEAN	55	Aug 30	57
ANNUAL SEVEN-DAY MINIMUM	82	Aug 25	79
MAXIMUM PEAK FLOW			6230
MAXIMUM PEAK STAGE			7.03
INSTANTANEOUS LOW FLOW			a0.00
10 PERCENT EXCEEDS	1700	2010	1090
50 PERCENT EXCEEDS	392	472	194
90 PERCENT EXCEEDS	141	161	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	c59000	Jun 22 1972
MAXIMUM PEAK STAGE	d19.70	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 Result of shutoff at Tioga Dam.

b Also Aug. 29, 1980.

c 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.

d From floodmark.