01509000 TIOUGHNIOGA RIVER AT CORTLAND, NY

Upper Susquehanna Basin
Chenango Subbasin

LOCATION.--Lat 42°36′10″, long 76°09′35″ referenced to North American Datum of 1927, Cortland County, NY, Hydrologic Unit 02050102, on right bank at east end of Elm Street at Cortland, 0.4 mi downstream from confluence of East and West Branches.

DRAINAGE AREA.--292 mi^2, including 14.0 mi^2, the flow from which may be diverted into De Ruyter Reservoir in Oswego River basin.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--May 1938 to current year.

REVISED RECORDS.--WSP 2103: Drainage area. WDR NY-74-1: 1973.

GAGE.--Water-stage recorder. Datum of gage is 1,084.92 ft above NGVD of 1929. Prior to Oct. 1, 1939, water-stage recorder at datum 4.00 ft higher; Oct. 1, 1939 to Sept. 30, 1963, water-stage recorder at datum 3.00 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Diurnal fluctuation at low and medium flow caused by powerplants in mills on West Branch. Slight diversion from East Branch for operation of Erie (Barge) Canal. Slight diversion from Gate House Pond on West Branch 17 mi upstream from station into Onondaga Creek basin (St. Lawrence River basin) for manufacturing purposes by Linden Chlorine Process Co. Telephone and satellite gage-height telemeters at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,200 ft^3/s, Apr. 3, 2005, gage height, 14.07 ft; minimum discharge, 9.8 ft^3/s, Sept. 20, 1939, Sept. 29, 1959.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,400 ft^3/s and (or) maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Mar 15	2130	*5,930	*9.85
Mar 27	0815	5,490	9.54

Minimum discharge, 51 ft^3/s, Sept. 7, 8, gage height, 2.75 ft.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	331	1,050	493	650	355	172	1,400	855	145	85	84	62
2	304	884	565	689	340	210	1,470	817	136	80	82	59
3	275	773	502	592	332	444	1,310	707	130	78	78	55
4	271	684	450	547	e300	453	1,210	621	174	81	76	55
5	314	612	406	555	e290	376	1,260	563	234	82	75	54
6	291	555	370	1,410	e280	e280	1,030	510	199	82	75	53
7	258	518	366	1,350	e270	e320	886	465	169	79	70	52
8	238	539	342	1,500	e260	e320	802	428	156	77	75	59
9	225	512	328	1,490	e250	e310	731	394	196	83	74	80
10	211	462	325	1,150	e240	e300	677	373	187	93	96	172
11	202	458	318	930	e235	335	626	382	151	90	93	162
12	200	1,170	322	833	e230	344	721	350	138	86	82	163
13	198	1,040	348	980	e230	416	859	317	254	83	76	122
14	e198	1,400	370	1,060	e165	1,260	774	293	185	79	71	115
15	e197	1,350	340	1,650	e200	4,510	795	274	143	79	69	117
16	e196	1,500	318	2,450	e230	4,700	950	286	123	75	68	127
17	196	3,320	307	1,660	e230	2,770	977	296	113	74	84	110
18	282	2,850	315	1,220	229	1,900	1,090	266	105	82	72	95
19	314	1,780	310	1,070	223	1,440	1,740	252	121	89	71	87
20	1,680	1,360	291	914	220	1,170	2,380	237	223	96	69	83
21	2,920	1,100	280	769	219	936	2,350	229	198	101	67	83
22	2,140	924	282	743	223	1,100	e1,800	216	161	90	67	78
23	1,280	819	451	677	215	2,280	e1,600	204	135	90	70	77
24	959	741	501	630	206	2,210	1,400	194	117	102	e72	76
25	998	670	450	571	206	2,880	1,240	186	110	98	e100	73
26	1,010	613	901	e450	200	3,140	1,330	180	105	90	e110	75
27	858	564	1,030	e445	193	5,230	1,090	173	105	94	e85	75
28	1,340	521	838	e440	184	4,390	1,200	161	101	114	e80	90
29	2,220	487	738	434	---	3,080	1,110	150	96	112	73	104
30	1,880	462	672	401	---	2,090	984	145	91	99	67	92
31	1,300	---	628	376	---	1,630	---	142	---	90	64	---
Total	23,286	29,718	14,157	28,636	6,755	50,996	35,792	10,666	4,501	2,733	2,395	2,705
Mean	751	991	457	924	241	1,645	1,193	344	150	88.2	77.3	90.2
Max	2,920	3,320	1,030	2,450	355	5,230	2,380	855	254	114	110	172
Min	196	458	280	376	165	172	626	142	91	74	64	52
Cfsm	2.57	3.39	1.56	3.16	0.83	5.63	4.09	1.18	0.51	0.30	0.26	0.31
In.	2.97	3.79	1.80	3.65	0.86	6.50	4.56	1.36	0.57	0.35	0.31	0.34

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 2007, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	261	445	585	544	559	1,054	1,248	572	340	196	142	162
Max	1,553	1,119	1,537	1,415	1,469	2,432	3,487	1,539	1,674	854	656	1,125
(WY)	(1978)	(1969)	(1997)	(1998)	(1976)	(1945)	(1993)	(2000)	(1972)	(2006)	(2004)	(1977)
Min	33.2	44.3	86.7	112	127	359	305	205	77.7	43.5	34.6	23.8
(WY)	(1965)	(1965)	(1961)	(1961)	(1963)	(1941)	(1946)	(1999)	(1999)	(1962)	(1939)	(1939)

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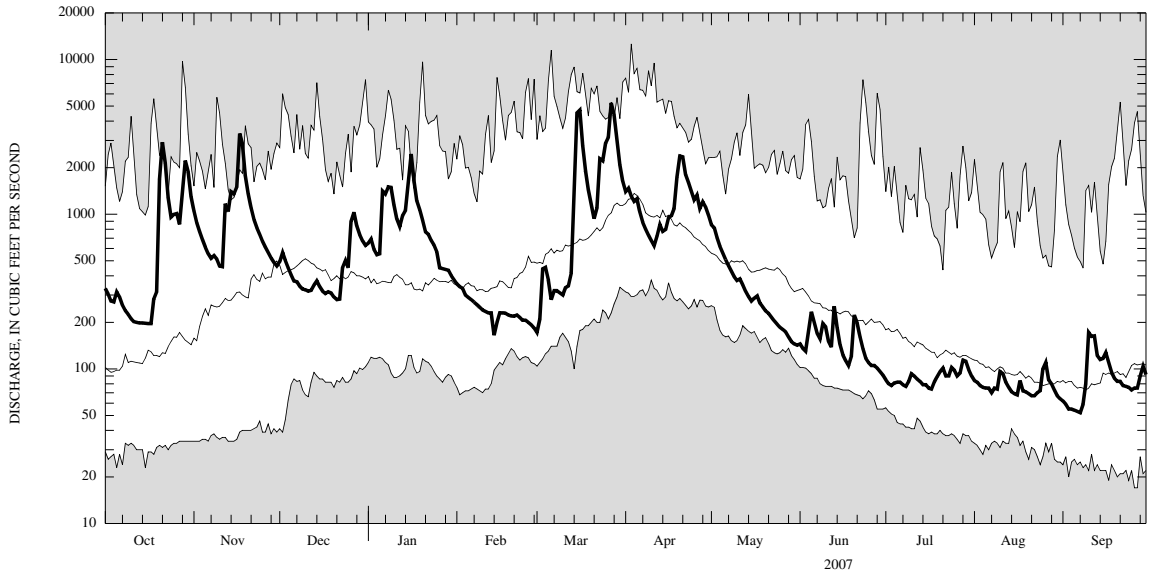
SUMMARY STATISTICS

	Calendar Year 2006		Water Year 2007		Water Years 1938 - 2007	
Annual total	255,878		212,340			
Annual mean	701		582		508	
Highest annual mean					729	2004
Lowest annual mean					303	1965
Highest daily mean	6,050	Jun 28	5,230	Mar 27	12,600	Apr 3, 2005
Lowest daily mean	146	Sep 22	52	Sep 7	17	Sep 26, 1959
Annual seven-day minimum	162	Sep 17	55	Sep 2	21	Sep 19, 1939
Annual runoff (cfsm)	2.40		1.99		1.74	
Annual runoff (inches)	32.60		27.05		23.64	
10 percent exceeds	1,340		1,400		1,130	
50 percent exceeds	521		291		292	
90 percent exceeds	207		78		71	



CURRENT WATER YEAR DAILY MEAN DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.
SHADED AREAS SHOW HIGHEST AND LOWEST DAILY MEAN FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.