01509000 TIOUGHNIOGA RIVER AT CORTLAND, NY

LOCATION.--Lat 42°36'10", long 76°09'35", Cortland County, 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.

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

REVISED RECORDS.--WSP 2103: Drainage area. WDR NY 1974: 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, 13,000 ft^3/s, Mar. 5, 1964, gage height, 12.49 ft; maximum gage height, 13.82 ft, present datum, Apr. 5, 1950; 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 maximum (*):

	Time	Discharge (ft^3/s)	Gage height (ft)	Time	Discharge (ft^3/s)	Gage height (ft)
Mar 6	1915	*5,310	*9.19	0045	4,530	8.61

Minimum discharge, 113 ft^3/s, July 6, 7.

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	256	1,050	1,250	994	253	217	1,330	607	469	129	910	1,840
2	238	849	1,080	867	e240	317	1,500	604	443	126	691	1,150
3	240	798	912	1,040	e250	817	1,220	1,100	377	122	559	858
4	277	730	805	1,470	255	1,130	1,080	897	329	117	481	702
5	523	657	746	1,260	e240	2,090	958	783	295	117	436	603
6	378	621	700	1,040	246	4,310	841	787	270	115	373	530
7	322	557	638	811	e260	4,250	812	695	256	141	330	461
8	287	489	591	e650	e260	2,600	749	623	244	641	300	448
9	258	432	561	e580	e255	1,760	676	590	226	505	273	1,420
10	236	394	536	e520	252	1,340	608	581	253	302	245	1,530
11	217	387	1,890	e490	236	1,140	557	546	243	227	260	1,030
12	203	439	3,760	e480	228	1,080	512	512	221	200	256	776
13	189	590	2,510	e460	221	906	851	478	203	206	1,050	658
14	181	618	1,530	e440	213	765	2,000	443	195	300	808	568
15	554	571	1,190	e420	e200	765	1,470	478	200	542	498	476
16	843	543	1,050	e390	e195	693	1,070	494	190	480	399	425
17	530	617	972	e390	e195	632	902	433	190	617	430	536
18	417	781	972	e380	e190	610	866	359	234	636	396	2,030
19	411	1,120	859	e360	e185	544	991	368	218	474	340	1,840
20	422	2,850	772	e350	181	564	872	332	194	435	339	1,170
21	404	2,700	691	e330	199	999	781	349	178	333	1,010	863
22	407	1,610	656	e320	234	834	936	312	176	291	1,250	695
23	368	1,180	694	e310	e210	686	945	463	181	604	775	591
24	363	962	1,480	e300	e200	729	885	746	167	400	584	504
25	364	1,030	2,530	e290	e190	1,130	800	744	150	299	468	453
26	352	896	1,870	e290	e190	1,540	1,170	665	147	275	393	415
27	1,160	792	1,340	280	e190	3,580	1,020	550	141	1,770	343	375
28	2,290	822	1,080	280	e190	3,790	857	599	135	2,760	327	356
29	2,030	1,690	932	e270	e200	2,610	758	504	137	2,010	445	336
30	2,180	1,500	1,150	e270	---	1,890	668	414	133	1,210	2,360	315
31	1,450	---	1,260	261	---	1,480	---	378	---	961	3,020	---
TOTAL	18,350	28,275	37,007	16,593	6,358	45,798	28,685	17,434	6,795	17,345	20,349	23,954
MEAN	592	942	1,194	535	219	1,477	956	562	226	560	656	798
MAX	2,290	2,850	3,760	1,470	260	4,310	2,000	1,100	469	2,760	3,020	2,030
MIN	181	387	536	261	181	217	512	312	133	115	245	315
CFSM	2.03	3.23	4.09	1.83	0.75	5.06	3.27	1.93	0.78	1.92	2.25	2.73
IN.	2.34	3.60	4.71	2.11	0.81	5.83	3.65	2.22	0.87	2.21	2.59	3.05

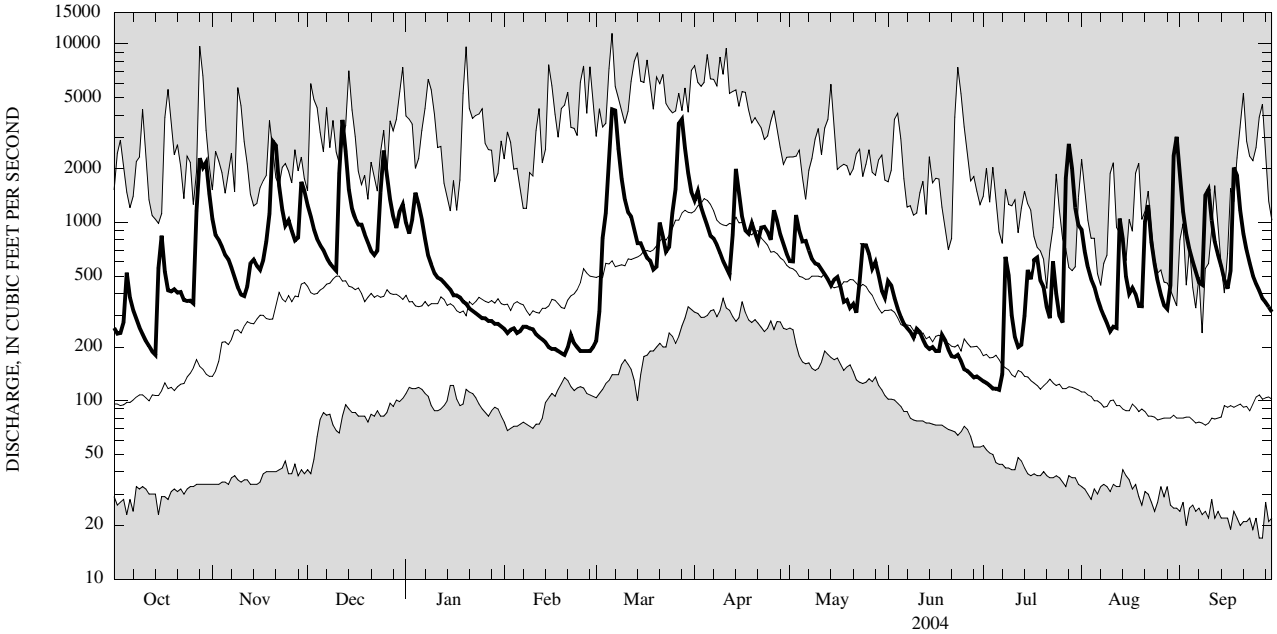
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 2004, BY WATER YEAR (WY)

MEAN	250	430	578	523	560	1,053	1,245	583	336	190	141	163
MAX	1,553	1,119	1,537	1,415	1,469	2,432	3,487	1,539	1,674	560	656	1,125
(WY)	(1978)	(1969)	(1997)	(1998)	(1976)	(1945)	(1993)	(2000)	(1972)	(2004)	(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)

01509000 TIOUGHNIOGA RIVER AT CORTLAND, NY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1938 - 2004	
ANNUAL TOTAL	250,776		266,943			
ANNUAL MEAN	687		729		503	
HIGHEST ANNUAL MEAN					729	2004
LOWEST ANNUAL MEAN					303	1965
HIGHEST DAILY MEAN	5,330	Mar 22	4,310	Mar 6	11,500	Mar 6, 1979
LOWEST DAILY MEAN	118	Sep 22	115	Jul 6	17	Sep 26, 1959
ANNUAL SEVEN-DAY MINIMUM	135	Sep 16	123	Jun 30	21	Sep 19, 1939
ANNUAL RUNOFF (CFSM)	2.35		2.50		1.72	
ANNUAL RUNOFF (INCHES)	31.95		34.01		23.41	
10 PERCENT EXCEEDS	1,490		1,480		1,120	
50 PERCENT EXCEEDS	432		539		290	
90 PERCENT EXCEEDS	184		200		71	

e Estimated



2004 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.