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 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, 14,200 ft^3/s, Apr 3, 2005, gage height, 14.07 ft; minimum discharge, 9.8 ft^3/s, Sep 20, 1939, Sep 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 14	1600	5,350	9.22
Jun 28	1545	*7,620	*10.95

Minimum discharge, 67 ft^3/s, Oct 6, 7, gage height, 2.85 ft.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	108	699	2,700	812	1,210	e370	516	352	491	1,320	782	393
2	93	781	1,690	736	1,030	e330	583	336	543	929	624	372
3	83	674	1,270	802	1,340	e320	523	290	741	761	531	458
4	76	595	1,000	841	1,730	e310	649	270	1,320	723	993	394
5	72	536	861	892	1,960	e300	661	259	1,010	651	930	342
6	69	480	778	925	1,720	e280	613	258	728	527	635	315
7	78	527	694	795	1,360	e270	653	260	592	443	521	295
8	231	467	e590	726	1,140	e250	849	247	546	382	455	270
9	245	524	e580	670	e950	337	708	235	520	369	388	244
10	199	1,430	577	648	e850	683	627	223	575	446	345	216
11	173	1,220	554	648	e800	980	581	214	575	697	314	200
12	157	924	520	1,170	e750	839	540	341	470	958	286	194
13	319	770	e430	1,240	e670	1,430	512	330	395	2,700	261	203
14	716	658	e380	2,020	657	4,540	542	325	347	1,930	242	211
15	610	733	e400	2,360	616	3,310	585	302	309	e1,100	218	199
16	551	1,130	e420	1,540	632	1,930	506	317	273	e900	209	191
17	529	1,940	e450	1,200	896	1,400	455	286	254	e740	200	182
18	456	1,430	e400	2,160	875	1,080	422	273	246	594	191	172
19	385	1,060	e380	3,170	652	921	392	294	243	504	189	165
20	319	873	e350	2,090	e650	832	364	281	262	436	235	160
21	271	764	e340	1,660	619	729	352	304	231	435	260	152
22	296	698	341	1,470	591	701	426	399	211	1,060	222	146
23	904	656	336	1,220	578	633	774	345	203	1,110	200	157
24	770	597	347	1,080	541	596	693	304	194	701	187	185
25	1,010	533	397	973	485	605	646	276	185	576	178	182
26	2,120	479	746	e850	e430	593	584	274	382	627	186	170
27	2,000	444	768	e740	e410	564	512	602	2,100	584	203	157
28	1,450	531	672	e720	e380	548	451	542	6,050	948	205	160
29	1,100	807	715	e720	---	521	408	416	4,760	980	789	541
30	915	2,890	1,100	1,090	---	491	379	362	2,360	1,220	897	433
31	785	---	932	1,270	---	465	---	314	---	1,110	550	---
Total	17,090	25,850	21,718	37,238	24,522	27,158	16,506	9,831	27,116	26,461	12,426	7,459
Mean	551	862	701	1,201	876	876	550	317	904	854	401	249
Max	2,120	2,890	2,700	3,170	1,960	4,540	849	602	6,050	2,700	993	541
Min	69	444	336	648	380	250	352	214	185	369	178	146
Cfsm	1.89	2.95	2.40	4.11	3.00	3.00	1.88	1.09	3.10	2.92	1.37	0.85
In.	2.18	3.29	2.77	4.74	3.12	3.46	2.10	1.25	3.45	3.37	1.58	0.95

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 2006, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	254	437	587	539	564	1,045	1,249	575	343	198	143	163
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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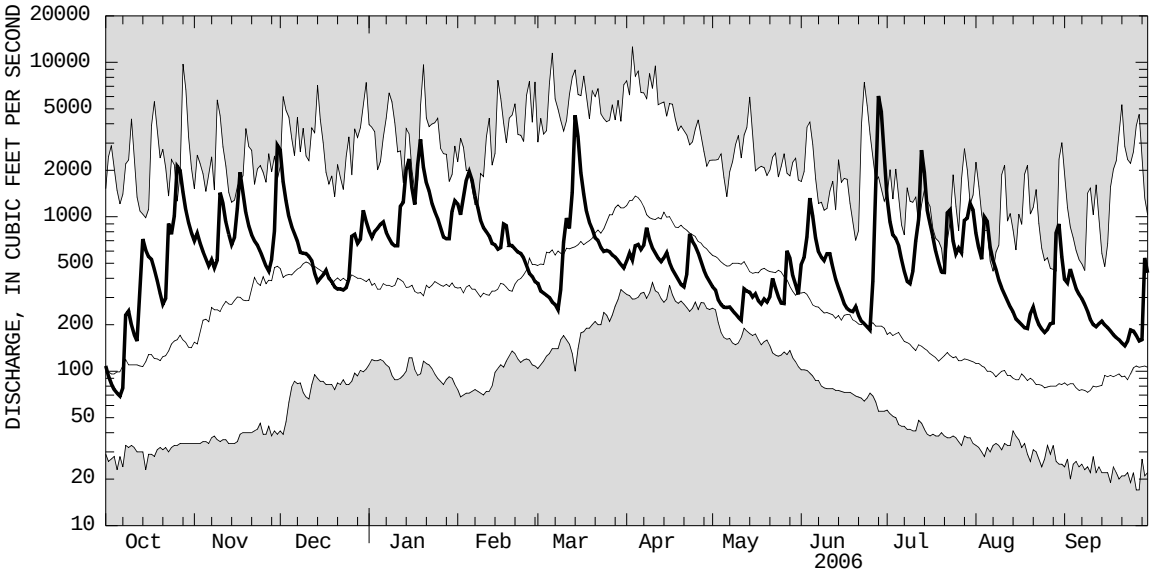
SUMMARY STATISTICS

	Calendar Year 2005		Water Year 2006		Water Years 1938 - 2006	
Annual total	219,661		253,375			
Annual mean	602		694		507	
Highest annual mean					729	2004
Lowest annual mean					303	1965
Highest daily mean	12,600	Apr 3	6,050	Jun 28	12,600	Apr 3, 2005
Lowest daily mean	47	Aug 27	69	Oct 6	17	Sep 26, 1959
Annual seven-day minimum	49	Aug 23	83	Oct 1	21	Sep 19, 1939
Annual runoff (cfsm)	2.06		2.38		1.74	
Annual runoff (inches)	27.98		32.28		23.59	
10 percent exceeds	1,100		1,270		1,120	
50 percent exceeds	375		542		292	
90 percent exceeds	63		203		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.