04260500 BLACK RIVER AT WATERTOWN, NY

Northeastern Lake Ontario Basin
Black Subbasin

LOCATION.--Lat 43°59′08″, long 75°55′30″ referenced to North American Datum of 1927, Jefferson County, NY, Hydrologic Unit 04150101, on right bank 200 ft downstream from Vanduzee Street bridge at Watertown, and 3.5 mi upstream from Philomel Creek.

DRAINAGE AREA.--1,864 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--July 1920 to current year.

REVISED RECORDS.--WDR NY-77-1: 1974. WDR NY-85-1: Drainage area. WDR NY-93-1: 1955, 1958-60, 1962-64, 1969, 1971-72, 1974, 1976-77, 1979-82, 1984-87, 1989-92.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 373.88 ft above NGVD of 1929. Prior to Sept. 3, 1921, nonrecording gage, and from Sept. 3, 1921 to Mar. 15, 1977, recording gage at same site at datum 1.00 ft higher. Prior to June 13, 1992, at site 200 ft upstream at same datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow regulated by Stillwater Reservoir (see station 04256500), Fulton Chain of Lakes, and other reservoirs. Extensive diurnal fluctuation at low and medium flow caused by mills and powerplants in and above Watertown. During canal season, water is diverted out of basin through Forestport feeder and Black River Canal (flowing south). Satellite and telephone gage-height and rain-gage telemeter and Hudson River-Black River Regulating District telephone gage-height telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 55,500 ft^3/s, Jan. 10, 1998, gage height, 16.02 ft; minimum discharge, 10 ft^3/s, Sept. 2, 1934, gage height, 0.81 ft, present datum.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge, about 39,700 ft^3/s, Apr. 23, 1869 (from New York State Museum Bulletin 85).

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 17,000 ft^3/s and (or) maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Mar 16	1715	17,100	8.60
Jun 30	2315	*23,000	*9.83

Minimum discharge, 705 ft^3/s, Oct 7, gage height, 2.11 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	5,190	6,150	14,200	6,940	9,620	e3,700	5,940	3,740	3,000	21,500	5,480	2,140
2	4,420	6,030	15,100	6,710	9,300	e3,600	7,420	3,130	3,350	16,800	4,190	1,770
3	3,220	5,750	14,100	6,150	8,950	e3,500	8,320	2,770	3,310	12,400	3,820	1,770
4	2,700	5,730	11,600	5,690	9,870	e3,700	9,230	2,750	4,280	9,710	3,410	1,770
5	2,370	5,290	9,410	5,250	11,100	3,640	9,630	2,590	4,990	7,860	3,430	1,830
6	2,270	4,830	7,770	5,070	12,500	3,380	9,360	2,530	4,570	6,510	2,960	1,700
7	2,010	4,730	6,540	4,700	12,700	3,330	8,840	2,400	3,830	5,340	3,000	1,620
8	4,500	5,290	5,320	3,990	11,900	3,280	8,120	2,580	3,170	4,100	2,590	1,650
9	7,750	5,920	4,220	4,150	10,300	3,260	7,470	2,630	2,940	3,390	2,350	1,610
10	8,300	8,150	4,280	4,090	8,490	4,110	6,910	2,450	3,740	3,010	2,070	1,570
11	8,560	9,670	4,640	4,030	6,960	7,570	6,390	2,310	4,670	3,090	2,110	1,540
12	7,890	10,400	4,750	5,040	5,880	8,650	5,890	2,210	4,200	3,300	1,840	1,480
13	7,880	10,200	4,170	6,730	5,020	10,200	5,590	2,410	3,680	4,630	1,850	1,560
14	11,400	9,090	3,740	9,000	4,700	13,700	5,810	3,450	3,100	6,210	1,870	1,660
15	12,500	7,940	3,610	10,200	5,150	14,900	5,860	4,830	2,730	6,810	1,840	2,210
16	12,400	8,340	3,640	9,070	5,410	16,200	5,790	4,380	2,400	6,750	1,820	2,470
17	11,600	10,000	4,000	8,220	5,720	14,500	5,420	3,880	3,220	5,730	1,770	2,580
18	10,600	11,300	4,170	8,270	6,760	11,400	4,930	3,960	7,330	4,170	1,580	2,450
19	9,740	13,000	4,030	9,340	5,920	9,070	4,220	4,460	7,500	3,320	1,690	2,100
20	8,830	12,100	3,850	10,500	6,070	7,190	3,800	4,590	7,490	2,890	1,470	1,760
21	7,920	10,500	e3,700	13,200	6,400	5,700	3,070	4,550	6,710	2,720	1,740	1,920
22	7,080	8,830	e3,700	13,900	6,150	5,020	3,070	4,190	5,540	3,130	2,470	1,890
23	6,610	7,430	3,690	13,000	6,090	4,870	5,520	4,030	4,210	3,540	2,390	1,860
24	6,830	6,290	3,770	11,300	5,810	4,630	7,050	3,830	3,430	4,160	1,860	1,790
25	7,380	5,420	4,000	9,580	5,200	4,470	7,830	3,550	3,290	3,700	1,700	1,810
26	8,690	4,930	4,580	8,010	4,550	4,560	8,550	3,080	2,920	2,820	1,660	2,030
27	9,230	4,850	5,480	6,570	e3,600	4,680	8,110	2,990	3,390	2,860	1,650	2,110
28	9,300	5,130	6,040	5,630	e3,900	4,650	6,900	3,040	7,780	2,730	1,560	2,070
29	8,890	7,450	6,550	6,160	---	4,640	5,470	2,780	11,000	4,620	1,700	3,770
30	7,980	12,700	6,980	7,320	---	4,840	4,350	2,770	20,000	5,900	1,770	5,550
31	7,090	---	7,000	9,260	---	5,130	---	2,800	---	6,180	2,160	---
Total	231,130	233,440	188,630	237,070	204,020	202,070	194,860	101,660	151,770	179,880	71,800	62,040
Mean	7,456	7,781	6,085	7,647	7,286	6,518	6,495	3,279	5,059	5,803	2,316	2,068
Max	12,500	13,000	15,100	13,900	12,700	16,200	9,630	4,830	20,000	21,500	5,480	5,550
Min	2,010	4,730	3,610	3,990	3,600	3,260	3,070	2,210	2,400	2,720	1,470	1,480

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1920 - 2006, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	3,196	4,424	4,525	4,167	3,691	6,108	9,958	5,414	2,815	2,082	1,799	2,204
Max	9,058	8,677	9,944	12,040	9,181	13,590	19,180	12,790	8,235	5,803	4,083	5,076
(WY)	(1946)	(2004)	(1997)	(1998)	(1981)	(1921)	(1993)	(1943)	(1947)	(2006)	(1986)	(2004)
Min	1,149	1,116	1,403	1,173	1,289	1,776	3,460	1,600	991	925	730	919
(WY)	(1964)	(1931)	(1923)	(1961)	(1931)	(1940)	(1995)	(1941)	(1941)	(1965)	(1923)	(1923)

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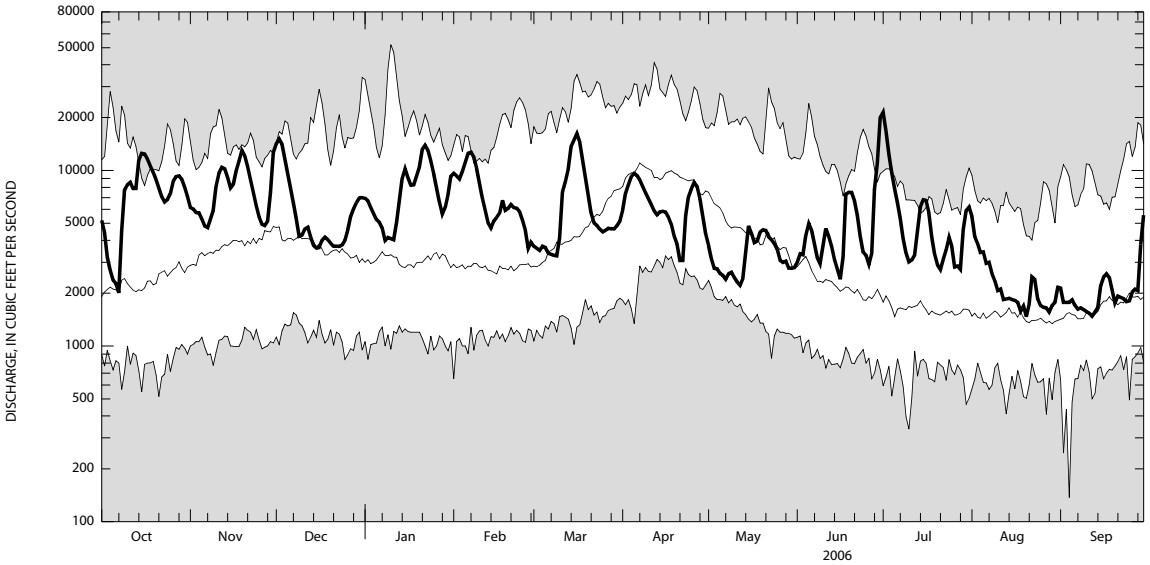
SUMMARY STATISTICS

	Calendar Year 2005		Water Year 2006		Water Years 1920 - 2006	
Annual total	1,733,480		2,058,370			
Annual mean	4,749		5,639		4,197	
Highest annual mean					6,392	1976
Lowest annual mean					2,579	1931
Highest daily mean	27,400	Apr 5	21,500	Jul 1	52,000	Jan 10, 1998
Lowest daily mean	1,060	Aug 18	1,470	Aug 20	137	Sep 4, 1939
Annual seven-day minimum	1,140	Aug 15	1,580	Sep 7	637	Aug 15, 1923
10 percent exceeds	9,170		10,200		8,940	
50 percent exceeds	3,640		4,730		2,890	
90 percent exceeds	1,400		1,970		1,290	



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.