

**04260500 BLACK RIVER AT WATERTOWN, NY**

Northeastern Lake Ontario Basin  
Black Subbasin

LOCATION.--Lat 43°59'08", long 75°55'29" referenced to North American Datum of 1983, 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<sup>2</sup>.

**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, water-stage recorder, at site 200 ft upstream at datum 1.00 ft higher. Mar. 16, 1977 to June 12, 1992, at site 200 ft upstream at present datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow regulated by Stillwater Reservoir (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<sup>3</sup>/s, Jan. 10, 1998, gage height, 16.02 ft; minimum discharge, 10 ft<sup>3</sup>/s, Sept. 2, 1934, gage height, 0.81 ft, present datum.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge, about 39,700 ft<sup>3</sup>/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<sup>3</sup>/s and (or) maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Apr 22	0500	*17,000	*8.59

Minimum discharge, 756 ft<sup>3</sup>/s, May 21, Aug. 21, gage height, 2.24 ft.

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**DISCHARGE, CUBIC FEET PER SECOND**  
**WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013**  
**DAILY MEAN VALUES**

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	1,400	2,320	1,710	e2,730	10,300	3,930	5,840	4,430	3,650	7,620	2,420	1,360
2	1,670	2,850	1,770	e2,770	14,900	3,940	7,170	3,860	3,530	9,080	2,240	1,400
3	2,340	3,140	2,790	e2,780	15,000	3,620	7,080	3,410	3,460	9,560	2,890	1,700
4	2,470	3,300	3,710	e2,780	12,100	3,320	6,560	3,020	3,410	9,090	2,830	2,170
5	2,140	3,260	4,430	2,780	9,660	3,190	5,640	2,730	3,010	9,300	2,510	2,220
6	2,010	2,700	4,870	2,770	7,690	2,770	4,760	2,510	2,450	9,090	2,410	2,000
7	2,220	2,490	4,890	e2,760	6,520	2,920	4,300	2,260	3,570	8,330	2,190	1,760
8	2,420	2,280	4,230	e2,720	5,420	2,830	4,720	2,190	5,190	7,330	2,060	1,610
9	2,460	2,020	3,600	2,580	4,380	2,630	6,170	2,130	5,650	6,180	2,080	1,350
10	2,550	2,030	3,460	2,540	4,010	2,640	8,190	2,060	5,530	5,490	2,820	1,370
11	2,250	2,020	4,820	2,630	3,950	3,160	9,960	2,320	5,750	5,130	2,620	1,470
12	2,080	1,940	5,920	2,740	3,670	6,230	12,400	3,210	7,240	5,340	2,410	1,550
13	2,280	2,070	6,190	4,040	3,510	8,720	15,200	3,590	7,890	5,420	2,130	1,570
14	2,960	2,590	5,770	7,490	3,490	9,100	15,200	3,250	8,450	4,800	2,010	1,650
15	3,790	2,860	4,760	e7,850	3,380	9,070	13,700	2,810	8,590	3,700	2,070	1,650
16	4,890	2,600	3,840	8,750	3,230	8,270	11,900	2,450	8,510	2,850	2,010	1,540
17	4,410	2,210	3,380	7,880	3,270	7,310	11,500	2,450	7,910	2,770	1,740	1,630
18	3,510	2,100	3,450	6,220	2,780	6,080	11,500	2,250	7,110	2,400	1,540	1,480
19	3,020	1,840	4,900	4,300	2,940	4,550	12,600	2,040	6,370	2,050	1,530	1,440
20	4,650	1,750	5,510	4,040	2,570	4,250	13,800	1,890	5,210	2,040	1,380	1,450
21	6,030	1,770	5,890	3,040	2,560	4,070	15,200	1,750	3,870	2,090	1,210	1,390
22	6,450	1,860	6,630	e3,120	2,760	3,930	16,300	1,930	3,270	2,080	1,140	1,670
23	6,010	1,690	6,700	3,260	2,770	3,470	13,600	2,340	2,880	1,990	1,130	2,300
24	5,120	1,600	6,280	e3,510	2,750	3,280	10,800	4,020	2,690	1,990	1,380	2,430
25	4,080	1,710	5,630	3,230	2,760	3,120	8,830	4,830	2,630	2,070	1,660	1,790
26	3,440	1,810	4,370	2,900	2,750	3,070	7,670	5,100	2,560	2,060	1,660	1,790
27	2,810	1,880	2,470	2,410	2,940	3,100	7,190	5,530	2,850	2,000	1,630	1,590
28	2,710	1,930	1,980	2,240	3,370	3,370	6,740	5,970	3,870	2,070	1,560	1,300
29	2,410	1,840	e2,560	2,190	---	3,970	6,030	5,680	5,740	2,940	1,660	1,280
30	2,430	1,730	e2,700	2,720	---	4,100	5,170	4,610	6,820	3,630	1,410	1,320
31	2,210	---	e2,750	7,400	---	4,400	---	3,870	---	2,800	1,370	---
<b>Total</b>	99,220	66,190	131,960	119,170	145,430	138,410	285,720	100,490	149,660	143,290	59,700	49,230
<b>Mean</b>	3,201	2,206	4,257	3,844	5,194	4,465	9,524	3,242	4,989	4,622	1,926	1,641
<b>Max</b>	6,450	3,300	6,700	8,750	15,000	9,100	16,300	5,970	8,590	9,560	2,890	2,430
<b>Min</b>	1,400	1,600	1,710	2,190	2,560	2,630	4,300	1,750	2,450	1,990	1,130	1,280

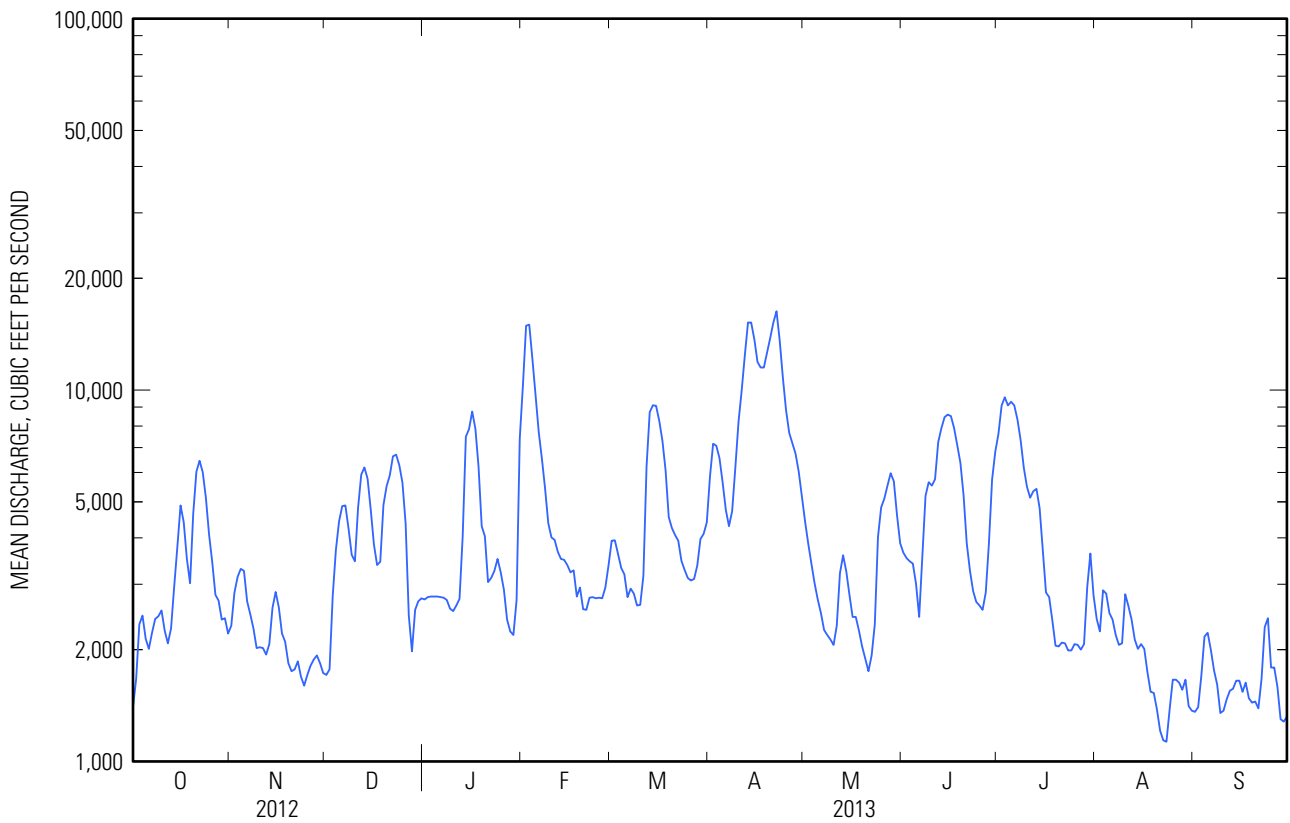
**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1920 - 2013, BY WATER YEAR (WY)**

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Mean</b>	3,347	4,486	4,623	4,250	3,728	6,209	9,929	5,381	2,829	2,120	1,840	2,185
<b>Max</b>	9,325	9,483	9,944	12,040	9,181	13,590	19,180	12,790	8,235	5,803	4,385	5,076
<b>(WY)</b>	(2011)	(2007)	(1997)	(1998)	(1981)	(1921)	(1993)	(1943)	(1947)	(2006)	(2008)	(2004)
<b>Min</b>	1,149	1,116	1,403	1,173	1,289	1,776	3,460	1,600	991	925	730	919
<b>(WY)</b>	(1964)	(1931)	(1923)	(1961)	(1931)	(1940)	(1995)	(1941)	(1941)	(1965)	(1923)	(1923)

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SUMMARY STATISTICS

	Calendar Year 2012		Water Year 2013		Water Years 1920 - 2013	
<b>Annual total</b>	1,263,632		1,488,470			
<b>Annual mean</b>	3,453		4,078		4,242	
<b>Highest annual mean</b>					6,392	1976
<b>Lowest annual mean</b>					2,579	1931
<b>Highest daily mean</b>	13,000	Mar 19	16,300	Apr 22	52,000	Jan 10, 1998
<b>Lowest daily mean</b>	782	Aug 27	1,130	Aug 23	137	Sep 4, 1939
<b>Annual seven-day minimum</b>	818	Aug 23	1,330	Aug 18	637	Aug 15, 1923
<b>10 percent exceeds</b>	6,790		7,900		9,030	
<b>50 percent exceeds</b>	2,780		2,940		2,930	
<b>90 percent exceeds</b>	1,010		1,670		1,300	



**04260500 BLACK RIVER AT WATERTOWN, NY—Continued****WATER-QUALITY RECORDS**

PERIOD OF RECORD.--

CHEMICAL DATA: 2012 (c), 2013 (d).

NUTRIENT DATA: 2012 (c), 2013 (d).

COOPERATION.--In cooperation with the U.S. Environmental Protection Agency's Great Lakes Restoration Initiative (GLRI).

**WATER-QUALITY DATA****WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013**[P, phosphorus; ft<sup>3</sup>/s, cubic feet per second; mg/L, milligrams per liter; °C, degrees Celsius; µS/cm, microsiemens per centimeter; --, no data; <, less than]

Begin date	Begin time	Discharge, instantaneous, ft <sup>3</sup> /s (00061)	pH, water, unfiltered, field, standard units (00400)	Specific conductance, water, unfiltered, µS/cm at 25°C (00095)	Temperature, water, °C (00010)	Dissolved solids dried at 180°C, water, filtered, mg/L (70300)	Suspended solids, water, unfiltered, mg/L (00530)	Orthophosphate, water, filtered, mg/L as P (00671)	Phosphorus, water, unfiltered, mg/L as P (00665)
<b>10-01-2012</b>	1200	1,390	--	--	15.5	78	< 15	0.004	0.01
<b>10-17-2012</b>	1245	4,370	7.9	91	10.1	56	< 15	< .004	.02
<b>11-05-2012</b>	1245	3,310	--	96	8.9	68	< 15	< .004	.02
<b>12-03-2012</b>	1130	2,840	--	133	3.4	95	< 15	< .004	.02
<b>01-07-2013</b>	1220	2,830	--	--	.1	96	< 15	< .004	< .01
<b>02-04-2013</b>	1400	12,200	--	26	.1	40	< 15	.007	.04
<b>03-04-2013</b>	1230	3,380	--	--	.6	92	< 15	< .004	.02
<b>04-01-2013</b>	1145	5,600	--	--	4.3	92	< 15	.004	.02
<b>04-15-2013</b>	1400	13,700	--	--	5.1	59	< 15	< .004	.04
<b>05-06-2013</b>	1200	2,490	--	102	18.2	68	< 15	< .004	.01
<b>05-20-2013</b>	1230	1,910	--	102	16.3	65	< 15	< .004	< .01
<b>06-03-2013</b>	1115	3,420	--	--	20.2	62	< 15	< .004	.03
<b>06-17-2013</b>	1130	7,830	--	--	18.2	63	< 15	< .004	.03
<b>07-03-2013</b>	0940	9,710	--	91	21.0	62	21	.008	.13
<b>07-16-2013</b>	1130	2,940	--	88	25.8	72	< 15	.008	.03
<b>08-05-2013</b>	1210	2,380	--	107	22.4	65	< 15	.006	.02
<b>08-19-2013</b>	1250	1,440	--	106	22.6	61	< 15	.006	.02
<b>09-04-2013</b>	0945	2,330	--	102	22.3	80	< 15	.004	.03
<b>09-16-2013</b>	1135	1,530	--	94	17.4	67	< 15	.007	.02