

**04216000 NIAGARA RIVER AT BUFFALO, NY**

Eastern Lake Erie Basin  
Niagara Subbasin

LOCATION.--Lat 42°52'40", long 78°55'00" referenced to North American Datum of 1927, Erie County, NY, Hydrologic Unit 04120104, at head of Niagara River at Buffalo, and 34.3 mi upstream from mouth.

DRAINAGE AREA.--263,700 mi<sup>2</sup>.

**SURFACE-WATER RECORDS**

PERIOD OF RECORD.--January 1860 to September 1960 (monthly discharges only published in WSP 1912), October 1960 to current year. Records of January 1926 to September 1960 daily discharges available in files of U.S. Department of Commerce and U.S. Geological Survey.

REVISED RECORDS.--WSP 1912: 1862 (M), 1955 (M), 1936 (M), WDR NY-77-1: Drainage area.

GAGE.--Discharge determined from several powerplants at Niagara Falls and discharge over the falls. Discharge before 1926 determined from records of Corps of Engineers gages at Buffalo and Cleveland.

COOPERATION.--Records of daily discharge provided by Detroit District, U.S. Army Corps of Engineers and Canada Department of the Environment, not reviewed by the USGS.

REMARKS.--Records do not include water diverted from Lake Michigan by Illinois and Michigan Canal during period of its operation prior to 1910 and by Chicago Sanitary and Ship Canal, which began operation in 1900, and from Lake Erie by Welland and New York State Canals before 1918. Records include water diverted into Lake Superior from Hudson Bay drainage by the Long Lake project, which began operation in July 1939, and by the Ogoki project, which began operation in July 1943. Figures of monthly mean discharge for 1860 to 1960 and daily discharge for 1961 to 1965, published in WSP 1912, are the official records of the U.S. Lake Survey, and have been coordinated with and concurred by the counterpart Canadian agencies, as have been the extremes for period of record through December 1976 and records October 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 347,000 ft<sup>3</sup>/s, Dec. 2, 1985, result of high, storm-generated Lake Erie level; minimum daily, 90,000 ft<sup>3</sup>/s, Jan. 13, 1964, Aug. 29, 1984. Maximum monthly mean discharge, 268,400 ft<sup>3</sup>/s, June 1986; minimum monthly mean, 116,200 ft<sup>3</sup>/s, Feb. 1936. Maximum and minimum instantaneous discharge not determined.

EXTREMES FOR CURRENT YEAR.-- Maximum daily discharge, 253,000 ft<sup>3</sup>/s, Dec. 2; minimum daily discharge, 159,000 ft<sup>3</sup>/s, Feb. 13. Maximum and minimum instantaneous discharge not determined.

## 04216000 NIAGARA RIVER AT BUFFALO, NY—Continued

**DISCHARGE, CUBIC FEET PER SECOND**  
**WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**  
**DAILY MEAN VALUES**

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	198,000	206,000	228,000	219,000	215,000	182,000	205,000	213,000	209,000	182,000	188,000	188,000
2	193,000	208,000	253,000	214,000	225,000	206,000	216,000	218,000	210,000	180,000	189,000	190,000
3	196,000	210,000	231,000	215,000	236,000	218,000	205,000	213,000	209,000	185,000	192,000	195,000
4	197,000	201,000	228,000	210,000	214,000	212,000	235,000	211,000	208,000	186,000	186,000	190,000
5	183,000	199,000	223,000	209,000	196,000	212,000	237,000	211,000	218,000	186,000	186,000	189,000
6	184,000	198,000	225,000	225,000	185,000	202,000	223,000	208,000	208,000	190,000	192,000	190,000
7	190,000	196,000	218,000	214,000	181,000	207,000	218,000	215,000	205,000	189,000	191,000	193,000
8	192,000	196,000	222,000	251,000	192,000	200,000	219,000	216,000	209,000	190,000	196,000	192,000
9	193,000	202,000	237,000	233,000	197,000	198,000	210,000	215,000	206,000	194,000	189,000	188,000
10	188,000	192,000	224,000	227,000	201,000	204,000	207,000	216,000	204,000	189,000	191,000	189,000
11	195,000	194,000	204,000	218,000	200,000	205,000	196,000	216,000	202,000	193,000	192,000	202,000
12	237,000	193,000	198,000	221,000	200,000	203,000	194,000	212,000	198,000	193,000	193,000	202,000
13	243,000	194,000	213,000	213,000	159,000	207,000	173,000	212,000	199,000	194,000	193,000	191,000
14	230,000	198,000	205,000	212,000	181,000	215,000	172,000	213,000	193,000	192,000	191,000	194,000
15	211,000	192,000	218,000	215,000	202,000	215,000	177,000	220,000	190,000	190,000	195,000	193,000
16	198,000	199,000	204,000	226,000	199,000	192,000	199,000	222,000	193,000	188,000	192,000	186,000
17	203,000	217,000	206,000	229,000	194,000	213,000	203,000	215,000	193,000	187,000	195,000	186,000
18	207,000	205,000	203,000	228,000	204,000	217,000	209,000	215,000	190,000	186,000	185,000	183,000
19	203,000	202,000	206,000	249,000	200,000	213,000	208,000	220,000	194,000	193,000	188,000	186,000
20	201,000	201,000	208,000	230,000	203,000	209,000	208,000	215,000	194,000	193,000	177,000	184,000
21	206,000	200,000	202,000	213,000	199,000	203,000	211,000	212,000	197,000	186,000	186,000	183,000
22	219,000	195,000	196,000	218,000	205,000	218,000	208,000	210,000	191,000	188,000	190,000	189,000
23	223,000	196,000	229,000	238,000	200,000	213,000	210,000	211,000	190,000	185,000	193,000	182,000
24	216,000	197,000	219,000	220,000	195,000	213,000	206,000	212,000	192,000	185,000	197,000	182,000
25	204,000	199,000	201,000	215,000	187,000	211,000	202,000	214,000	189,000	186,000	202,000	186,000
26	196,000	199,000	206,000	219,000	202,000	217,000	199,000	209,000	188,000	188,000	195,000	187,000
27	190,000	199,000	221,000	224,000	200,000	216,000	214,000	214,000	190,000	189,000	193,000	183,000
28	226,000	197,000	212,000	221,000	200,000	205,000	218,000	214,000	190,000	188,000	194,000	190,000
29	247,000	199,000	195,000	224,000	---	204,000	220,000	208,000	184,000	184,000	193,000	181,000
30	205,000	200,000	203,000	220,000	---	209,000	221,000	209,000	189,000	185,000	190,000	181,000
31	209,000	---	195,000	234,000	---	202,000	---	210,000	---	189,000	189,000	---
<b>Total</b>	6,383,000	5,984,000	6,633,000	6,904,000	5,572,000	6,441,000	6,223,000	6,619,000	5,932,000	5,833,000	5,923,000	5,655,000
<b>Mean</b>	205,900	199,500	214,000	222,700	199,000	207,800	207,400	213,500	197,700	188,200	191,100	188,500
<b>Max</b>	247,000	217,000	253,000	251,000	236,000	218,000	237,000	222,000	218,000	194,000	202,000	202,000
<b>Min</b>	183,000	192,000	195,000	209,000	159,000	182,000	172,000	208,000	184,000	180,000	177,000	181,000

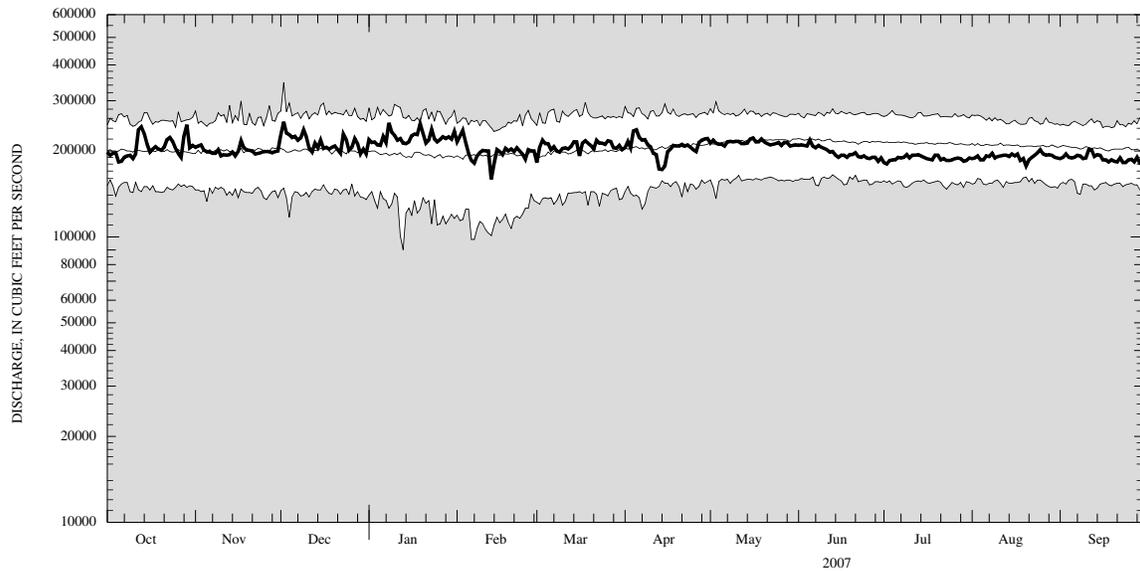
**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1926 - 2007, BY WATER YEAR (WY)**

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Mean</b>	200,000	200,300	201,000	195,700	193,200	199,000	207,500	215,900	215,100	211,400	207,600	203,200
<b>Max</b>	254,000	248,000	260,900	254,000	241,600	255,500	264,200	264,700	268,400	265,200	253,500	243,700
<b>(WY)</b>	(1987)	(1987)	(1986)	(1987)	(1987)	(1986)	(1985)	(1974)	(1986)	(1986)	(1986)	(1986)
<b>Min</b>	152,700	148,100	149,800	138,500	116,200	142,700	152,000	159,100	158,000	154,100	155,000	153,900
<b>(WY)</b>	(1935)	(1935)	(1965)	(1964)	(1936)	(1934)	(1935)	(1934)	(1934)	(1934)	(1934)	(1934)

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SUMMARY STATISTICS

	Calendar Year 2006		Water Year 2007		Water Years 1926 - 2007	
<b>Annual total</b>	73,051,000		74,102,000			
<b>Annual mean</b>	200,100		203,000		204,600	
<b>Highest annual mean</b>					249,600	1986
<b>Lowest annual mean</b>					155,300	1934
<b>Highest daily mean</b>	253,000	Dec 2	253,000	Dec 2	347,000	Dec 2, 1985
<b>Lowest daily mean</b>	171,000	Sep 2	159,000	Feb 13	90,000	Jan 13, 1964
<b>Annual seven-day minimum</b>	182,000	Aug 27	184,000	Sep 18	105,000	Feb 6, 1936
<b>10 percent exceeds</b>	214,000		221,000		238,000	
<b>50 percent exceeds</b>	198,000		202,000		204,000	
<b>90 percent exceeds</b>	189,000		186,000		172,000	



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.