USGS
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Water-Data Report 2010

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^2.

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

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 292,000 ft^3/s, Dec. 10; minimum daily discharge, 155,000 ft^3/s, Jan. 30, Feb. 6. Maximum and minimum instantaneous discharge not determined.

04216000 NIAGARA RIVER AT BUFFALO, NY—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	200,000	201,000	217,000	210,000	182,000	182,000	194,000	202,000	203,000	212,000	202,000	193,000
2	198,000	198,000	196,000	207,000	178,000	182,000	193,000	202,000	202,000	208,000	205,000	193,000
3	206,000	205,000	213,000	211,000	189,000	183,000	199,000	204,000	204,000	210,000	208,000	204,000
4	213,000	195,000	223,000	200,000	186,000	183,000	192,000	207,000	201,000	209,000	206,000	222,000
5	209,000	207,000	199,000	200,000	177,000	183,000	197,000	203,000	207,000	208,000	212,000	206,000
6	199,000	196,000	206,000	202,000	155,000	184,000	192,000	208,000	214,000	206,000	207,000	195,000
7	245,000	200,000	199,000	199,000	185,000	186,000	198,000	195,000	218,000	206,000	201,000	196,000
8	206,000	197,000	192,000	195,000	185,000	186,000	210,000	235,000	213,000	204,000	209,000	208,000
9	199,000	198,000	225,000	194,000	179,000	185,000	214,000	213,000	212,000	205,000	205,000	195,000
10	201,000	191,000	292,000	208,000	191,000	185,000	203,000	203,000	215,000	208,000	202,000	186,000
11	206,000	181,000	247,000	208,000	191,000	185,000	200,000	191,000	212,000	207,000	200,000	183,000
12	195,000	187,000	207,000	193,000	188,000	187,000	197,000	202,000	214,000	206,000	199,000	193,000
13	199,000	189,000	200,000	190,000	189,000	172,000	196,000	199,000	212,000	207,000	195,000	194,000
14	190,000	191,000	196,000	183,000	193,000	184,000	196,000	216,000	212,000	205,000	200,000	191,000
15	176,000	196,000	206,000	195,000	188,000	198,000	198,000	212,000	205,000	205,000	203,000	186,000
16	182,000	186,000	209,000	193,000	187,000	200,000	204,000	209,000	217,000	212,000	210,000	188,000
17	191,000	175,000	196,000	186,000	188,000	199,000	208,000	202,000	212,000	213,000	205,000	185,000
18	195,000	185,000	187,000	196,000	188,000	199,000	202,000	197,000	211,000	206,000	197,000	189,000
19	202,000	196,000	180,000	194,000	189,000	197,000	200,000	208,000	212,000	212,000	200,000	185,000
20	203,000	209,000	194,000	189,000	185,000	192,000	199,000	211,000	213,000	206,000	192,000	182,000
21	195,000	198,000	196,000	180,000	183,000	187,000	199,000	206,000	209,000	211,000	194,000	187,000
22	201,000	191,000	194,000	176,000	173,000	172,000	197,000	205,000	212,000	208,000	197,000	190,000
23	178,000	189,000	192,000	181,000	187,000	190,000	196,000	206,000	211,000	214,000	187,000	182,000
24	217,000	194,000	181,000	186,000	183,000	198,000	192,000	204,000	221,000	215,000	190,000	195,000
25	203,000	197,000	180,000	216,000	187,000	195,000	186,000	205,000	212,000	209,000	197,000	198,000
26	194,000	204,000	199,000	233,000	191,000	186,000	193,000	204,000	211,000	212,000	196,000	183,000
27	198,000	207,000	202,000	230,000	187,000	189,000	198,000	205,000	212,000	211,000	196,000	177,000
28	191,000	202,000	228,000	202,000	185,000	189,000	205,000	202,000	222,000	213,000	196,000	190,000
29	193,000	198,000	203,000	172,000	---	194,000	202,000	200,000	215,000	208,000	192,000	188,000
30	194,000	199,000	198,000	155,000	---	196,000	200,000	200,000	214,000	207,000	193,000	186,000
31	230,000	---	202,000	176,000	---	195,000	---	199,000	---	204,000	193,000	---
Total	6,209,000	5,862,000	6,359,000	6,060,000	5,169,000	5,843,000	5,960,000	6,355,000	6,348,000	6,467,000	6,189,000	5,750,000
Mean	200,300	195,400	205,100	195,500	184,600	188,500	198,700	205,000	211,600	208,600	199,600	191,700
Max	245,000	209,000	292,000	233,000	193,000	200,000	214,000	235,000	222,000	215,000	212,000	222,000
Min	176,000	175,000	180,000	155,000	155,000	172,000	186,000	191,000	201,000	204,000	187,000	177,000

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1926 - 2010, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	199,700	199,900	201,000	195,700	193,100	199,200	207,600	215,800	214,900	211,400	207,500	202,900
Max	254,000	248,000	260,900	254,000	241,600	255,500	264,200	264,700	268,400	265,200	253,500	243,700
(WY)	(1987)	(1987)	(1986)	(1987)	(1987)	(1986)	(1985)	(1974)	(1986)	(1986)	(1986)	(1986)
Min	152,700	148,100	149,800	138,500	116,200	142,700	152,000	159,100	158,000	154,100	155,000	153,900
(WY)	(1935)	(1935)	(1965)	(1964)	(1936)	(1934)	(1935)	(1934)	(1934)	(1934)	(1934)	(1934)

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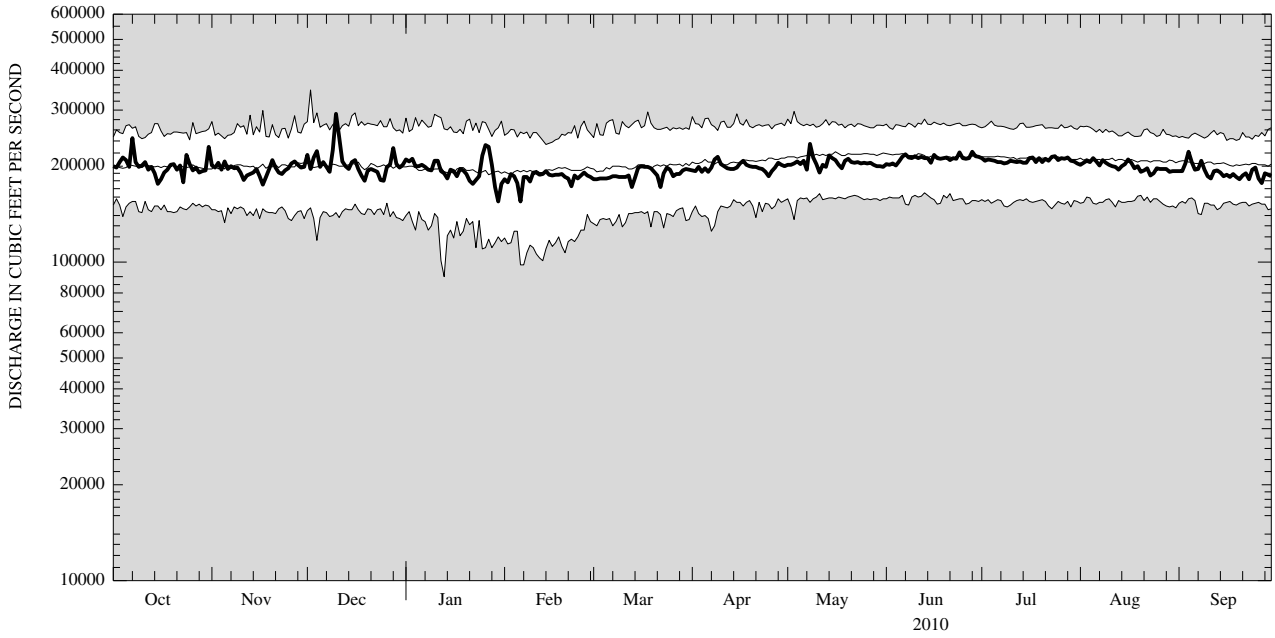
SUMMARY STATISTICS

	Calendar Year 2009		Water Year 2010		Water Years 1926 - 2010	
Annual total	75,762,000		72,571,000			
Annual mean	207,600		198,800		204,500	
Highest annual mean					249,600	1986
Lowest annual mean					155,300	1934
Highest daily mean	292,000	Dec 10	292,000	Dec 10	347,000	Dec 2, 1985
Lowest daily mean	175,000	Nov 17	155,000	Jan 30	90,000	Jan 13, 1964
Annual seven-day minimum	186,000	Nov 11	177,000	Jan 29	105,000	Feb 6, 1936
10 percent exceeds	222,000		212,000		238,000	
50 percent exceeds	207,000		199,000		204,000	
90 percent exceeds	191,000		184,000		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.