04216000 NIAGARA RIVER AT BUFFALO, NY

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

DRAINAGE AREA.--263,700 mi^2.

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.

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, February 1936. Maximum and minimum instantaneous discharge not determined.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 261,000 ft^3/s, Nov. 13; minimum daily discharge, 160,000 ft^3/s, Jan. 26, Mar. 16. Maximum and minimum instantaneous discharge not determined.

COOPERATION.--Records of daily discharge furnished by Detroit District Corps of Engineers and Canada Department of the Environment.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

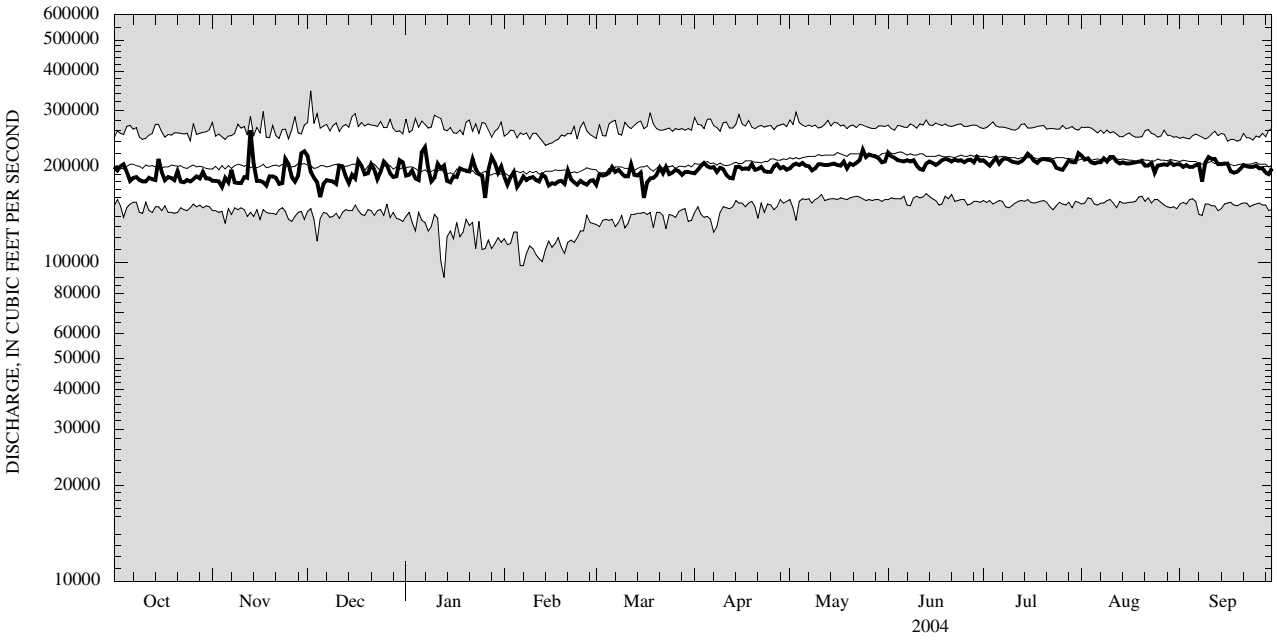
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	200,000	181,000	217,000	188,000	187,000	176,000	191,000	198,000	222,000	210,000	217,000	204,000
2	195,000	181,000	193,000	189,000	176,000	190,000	196,000	203,000	216,000	206,000	211,000	200,000
3	201,000	180,000	185,000	195,000	186,000	188,000	202,000	205,000	214,000	202,000	213,000	203,000
4	204,000	173,000	179,000	184,000	193,000	189,000	206,000	203,000	210,000	208,000	207,000	200,000
5	193,000	185,000	161,000	182,000	173,000	192,000	201,000	206,000	209,000	214,000	205,000	200,000
6	181,000	179,000	177,000	223,000	179,000	200,000	199,000	202,000	208,000	205,000	207,000	203,000
7	185,000	196,000	182,000	231,000	187,000	193,000	200,000	201,000	210,000	211,000	207,000	204,000
8	186,000	179,000	181,000	198,000	182,000	196,000	193,000	195,000	208,000	213,000	213,000	180,000
9	182,000	178,000	180,000	180,000	185,000	191,000	199,000	198,000	210,000	211,000	208,000	207,000
10	180,000	178,000	177,000	185,000	186,000	187,000	197,000	204,000	202,000	208,000	215,000	215,000
11	180,000	186,000	202,000	205,000	182,000	187,000	189,000	204,000	197,000	207,000	215,000	212,000
12	185,000	185,000	201,000	198,000	180,000	204,000	185,000	203,000	196,000	206,000	208,000	212,000
13	183,000	261,000	187,000	202,000	189,000	189,000	184,000	203,000	205,000	208,000	205,000	204,000
14	182,000	205,000	178,000	181,000	186,000	188,000	200,000	204,000	208,000	213,000	207,000	204,000
15	212,000	181,000	189,000	179,000	175,000	192,000	201,000	205,000	206,000	220,000	205,000	205,000
16	193,000	181,000	184,000	187,000	178,000	160,000	197,000	203,000	203,000	216,000	205,000	205,000
17	182,000	179,000	209,000	186,000	177,000	179,000	198,000	202,000	206,000	209,000	206,000	194,000
18	186,000	175,000	202,000	198,000	180,000	184,000	197,000	208,000	210,000	206,000	207,000	192,000
19	185,000	187,000	190,000	196,000	181,000	185,000	204,000	198,000	212,000	211,000	208,000	193,000
20	182,000	187,000	191,000	195,000	177,000	189,000	196,000	205,000	211,000	212,000	208,000	197,000
21	194,000	185,000	204,000	194,000	195,000	199,000	197,000	203,000	208,000	211,000	202,000	203,000
22	180,000	177,000	196,000	212,000	183,000	191,000	200,000	206,000	211,000	210,000	202,000	201,000
23	179,000	178,000	183,000	197,000	179,000	200,000	194,000	210,000	209,000	208,000	206,000	200,000
24	182,000	212,000	193,000	190,000	176,000	190,000	193,000	227,000	210,000	199,000	192,000	200,000
25	180,000	204,000	208,000	188,000	181,000	192,000	193,000	215,000	207,000	197,000	202,000	202,000
26	183,000	186,000	203,000	160,000	178,000	196,000	201,000	219,000	210,000	196,000	203,000	198,000
27	187,000	180,000	191,000	196,000	176,000	194,000	204,000	217,000	211,000	203,000	204,000	198,000
28	184,000	188,000	186,000	215,000	181,000	189,000	198,000	216,000	207,000	210,000	203,000	192,000
29	193,000	221,000	187,000	206,000	182,000	193,000	200,000	213,000	215,000	207,000	207,000	190,000
30	184,000	224,000	210,000	192,000	---	193,000	196,000	207,000	209,000	207,000	203,000	198,000
31	184,000	---	207,000	201,000	---	192,000	---	208,000	---	221,000	204,000	---
TOTAL	5,807,000	5,692,000	5,933,000	6,033,000	5,270,000	5,888,000	5,911,000	6,391,000	6,260,000	6,465,000	6,405,000	6,016,000
MEAN	187,300	189,700	191,400	194,600	181,700	189,900	197,000	206,200	208,700	208,500	206,600	200,500
MAX	212,000	261,000	217,000	231,000	195,000	204,000	206,000	227,000	222,000	221,000	217,000	215,000
MIN	179,000	173,000	161,000	160,000	173,000	160,000	184,000	195,000	196,000	196,000	192,000	180,000

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1926 - 2004, BY WATER YEAR (WY)

MEAN	200,200	200,400	201,000	195,200	192,700	198,800	207,500	216,100	215,700	211,900	208,100	203,700
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)

04216000 NIAGARA RIVER AT BUFFALO, NY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1926 - 2004	
ANNUAL TOTAL	68,210,000		72,071,000			
ANNUAL MEAN	186,900		196,900		204,700	
HIGHEST ANNUAL MEAN					249,600	1986
LOWEST ANNUAL MEAN					155,300	1934
HIGHEST DAILY MEAN	261,000	Nov 13	261,000	Nov 13	347,000	Dec 2, 1985
LOWEST DAILY MEAN	145,000	Jan 17	160,000	Jan 26	90,000	Jan 13, 1964
ANNUAL SEVEN-DAY MINIMUM	160,000	Jan 16	177,000	Dec 4	105,000	Feb 6, 1936
10 PERCENT EXCEEDS	201,000		211,000		239,000	
50 PERCENT EXCEEDS	186,000		198,000		205,000	
90 PERCENT EXCEEDS	171,000		180,000		171,000	



2004 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.