

**01335754 HUDSON RIVER ABOVE LOCK 1 NEAR WATERFORD, NY**

Upper Hudson Basin  
Hudson-Hoosic Subbasin

LOCATION.--Lat 42°49'45", long 73°40'00" referenced to North American Datum of 1927, Saratoga County, NY, Hydrologic Unit 02020003, 0.4 mi upstream from dam at Lock 1 of the Champlain (Barge) Canal, 2.8 mi northeast of Waterford, and 3.4 mi downstream from dam at Lock 2 of the Champlain (Barge) Canal.

DRAINAGE AREA.--4,605 mi<sup>2</sup>.

**SURFACE-WATER RECORDS**

PERIOD OF RECORD.--October 1887 to September 1956, October 1976 to current year. Prior to October 1976, published as "at Mechanicville" (01335500, drainage area 4,500 mi<sup>2</sup>). Daily discharge records from October 1976 to September 1981 are published with suspended-sediment data as 01335770 Hudson River at Waterford, NY.

REVISED RECORDS.--WDR NY-99-1: 1998.

GAGE.--Water-stage recorder. Since October 1, 1998, supplementary water-stage and taintor gate-position recorders, 0.4 mi downstream at dam at Lock 1. Datum of gage is NGVD of 1929. Prior to October 1976, various gages at site 5.8 mi upstream at different datum. Prior to February 1978, nonrecording gage 200 ft downstream.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Flow regulated appreciably by Great Sacandaga Lake (see station 01323500) and Indian Lake (see station 01314500). Diurnal fluctuation caused by powerplants upstream from station. Water is diverted into St. Lawrence River basin through Glens Falls feeder, Bond Creek, and Champlain (Barge) Canal, and occasionally may be received from that basin through summit level of Champlain (Barge) Canal at Dunham Basin. Water-discharge data for July 1992 through May 1994 based on records for Hudson River at Stillwater (01331095) and Hoosic River near Eagle Bridge (01334500) due to reconstruction of dam at Lock 1. Satellite and telephone gage-height telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge prior to construction of Great Sacandaga Lake in 1930, 120,000 ft<sup>3</sup>/s, Mar. 28, 1913; maximum discharge since construction of lake, 118,000 ft<sup>3</sup>/s, Jan. 1, 1949; maximum gage height, 36.38 ft, May 30, 31, 1984; minimum daily discharge since construction of lake, 614 ft<sup>3</sup>/s, Feb. 1, 1931; minimum instantaneous discharge not determined.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 37,600 ft<sup>3</sup>/s, Mar. 24; maximum gage height, 32.84 ft, Oct. 25; minimum daily discharge, 2,400 ft<sup>3</sup>/s, Sept. 24; minimum instantaneous discharge not determined.

## 01335754 HUDSON RIVER ABOVE LOCK 1 NEAR WATERFORD, NY—Continued

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

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	5,540	14,000	11,100	9,670	e8,500	8,900	27,200	6,020	3,620	8,820	3,610	6,030
2	6,190	14,900	10,700	9,580	e8,900	8,720	23,400	5,700	3,520	7,360	3,430	6,280
3	6,470	13,000	15,400	8,910	e8,900	10,100	21,900	5,170	3,490	6,120	3,510	5,820
4	7,820	12,100	e15,000	8,470	e9,000	9,130	20,800	5,240	3,630	5,320	3,050	5,540
5	7,940	12,700	e13,800	9,100	e9,000	8,830	19,100	4,930	3,900	5,530	3,200	3,540
6	7,940	11,500	e12,000	e8,400	e9,100	9,270	15,900	5,340	4,540	5,020	3,950	2,880
7	8,130	11,200	e12,500	e6,900	e8,700	9,460	13,600	4,660	5,740	3,360	3,480	2,850
8	10,400	10,900	12,200	e6,500	e7,800	9,830	12,600	5,260	5,120	3,110	2,980	2,700
9	10,600	10,800	11,800	e6,200	e8,200	9,300	15,000	7,450	4,700	3,870	2,900	3,430
10	9,260	10,500	11,600	e5,500	e8,500	8,590	13,600	7,050	4,680	3,640	3,080	2,700
11	9,790	10,400	12,400	e5,400	e8,300	8,750	12,100	6,440	5,130	4,050	3,100	2,550
12	9,450	9,870	11,300	e5,300	e7,900	8,930	11,300	6,100	4,870	3,840	2,710	2,410
13	9,330	9,780	10,400	e5,900	e8,300	9,620	10,400	6,030	6,260	3,990	3,070	2,600
14	8,230	10,100	12,400	e5,200	e8,200	12,600	9,790	5,770	6,140	4,340	2,760	2,800
15	7,380	12,600	12,300	e5,100	e8,500	17,000	8,900	5,990	6,130	4,270	3,020	2,990
16	6,610	11,500	12,300	e5,500	e8,300	17,700	8,780	6,020	4,770	3,580	3,220	3,360
17	6,490	10,600	11,100	e5,200	e8,200	16,300	9,350	5,810	4,700	3,390	2,950	3,100
18	6,200	9,920	e9,700	e5,400	e8,400	15,700	12,900	4,930	4,700	3,480	2,840	3,160
19	5,930	9,580	e9,300	e5,600	e8,300	15,800	11,800	4,640	4,420	4,320	2,770	3,790
20	6,330	11,900	e9,400	e5,500	6,040	18,200	10,600	4,860	4,010	3,650	2,770	3,950
21	5,510	14,400	e9,200	e5,400	4,850	18,800	10,200	4,260	4,290	3,510	3,010	3,190
22	5,630	13,000	e8,600	e5,200	4,570	18,400	10,000	4,490	3,980	3,500	3,180	3,740
23	5,460	12,000	e8,200	e4,700	4,460	28,400	9,580	3,960	5,160	3,740	4,950	3,270
24	9,800	11,600	e7,700	4,380	e5,100	35,300	8,670	3,910	5,110	4,830	7,440	2,400
25	25,700	11,200	e8,300	7,890	6,040	29,500	6,990	4,070	4,270	4,110	8,250	2,880
26	16,000	10,500	e8,500	29,100	10,600	26,000	e7,800	3,910	4,750	4,170	6,670	3,050
27	14,100	10,500	e10,200	22,500	11,400	21,500	e8,000	3,630	4,860	3,830	7,540	2,990
28	14,700	10,700	e12,000	15,200	9,490	18,000	e7,100	3,650	5,060	3,670	6,970	3,000
29	18,200	11,200	e9,200	e11,500	---	17,000	6,410	3,730	6,150	3,450	6,600	3,770
30	14,600	10,600	e8,200	e9,700	---	22,400	5,700	2,990	9,340	3,260	6,410	5,890
31	13,800	---	9,020	e9,200	---	29,000	---	3,290	---	3,910	6,210	---
<b>Total</b>	299,530	343,550	335,820	258,100	223,550	497,030	369,470	155,300	147,040	133,040	129,630	106,660
<b>Mean</b>	9,662	11,450	10,830	8,326	7,984	16,030	12,320	5,010	4,901	4,292	4,182	3,555
<b>Max</b>	25,700	14,900	15,400	29,100	11,400	35,300	27,200	7,450	9,340	8,820	8,250	6,280
<b>Min</b>	5,460	9,580	7,700	4,380	4,460	8,590	5,700	2,990	3,490	3,110	2,710	2,400

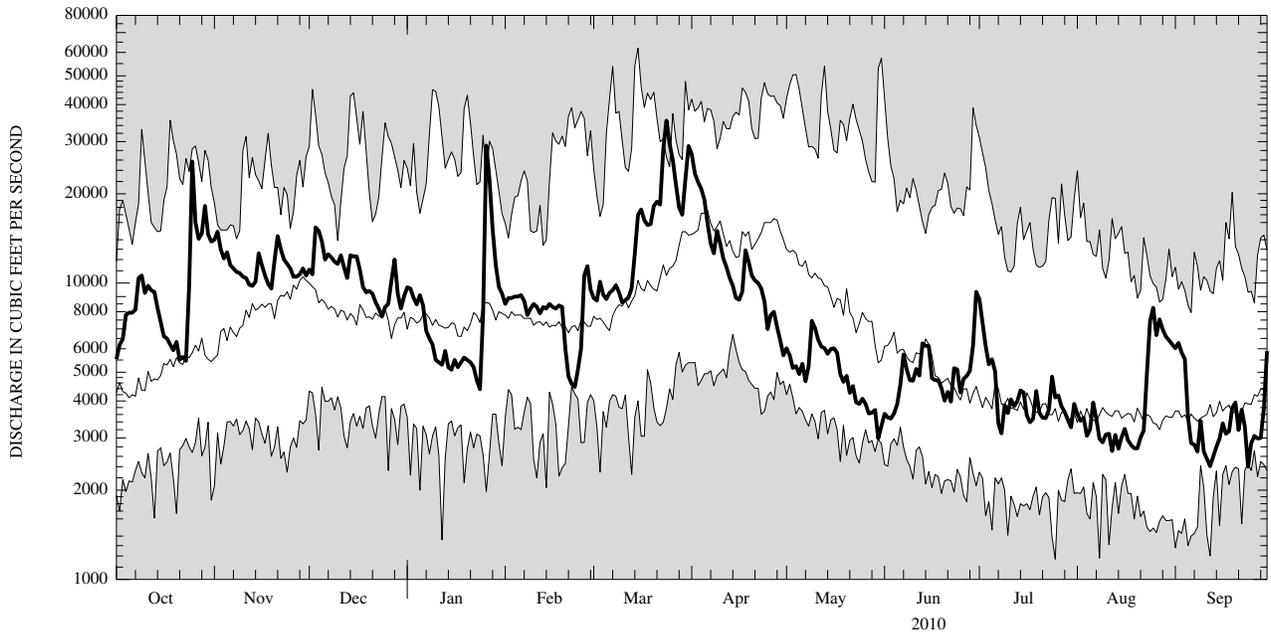
**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 2010, BY WATER YEAR (WY)**

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Mean</b>	5,765	7,856	8,310	8,322	7,552	11,200	16,060	10,950	6,615	4,666	4,143	4,192
<b>Max</b>	16,560	15,790	18,960	18,480	16,250	25,600	29,480	24,610	16,750	14,580	9,752	11,320
<b>(WY)</b>	(1978)	(2006)	(1997)	(1949)	(1981)	(1936)	(1993)	(1996)	(1947)	(2006)	(2009)	(1938)
<b>Min</b>	2,378	2,539	2,696	2,063	1,611	3,440	5,508	2,622	2,009	1,937	1,604	2,169
<b>(WY)</b>	(1942)	(1931)	(1931)	(1931)	(1931)	(1931)	(1995)	(1941)	(1941)	(1941)	(1941)	(1941)

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SUMMARY STATISTICS

	Calendar Year 2009		Water Year 2010		Water Years 1931 - 2010	
<b>Annual total</b>	3,652,020		2,998,720			
<b>Annual mean</b>	10,010		8,216		7,965	
<b>Highest annual mean</b>					12,330	2006
<b>Lowest annual mean</b>					4,240	1931
<b>Highest daily mean</b>	26,900	Apr 5	35,300	Mar 24	94,400	Dec 31, 1948
<b>Lowest daily mean</b>	3,200	Sep 20	2,400	Sep 24	614	Feb 1, 1931
<b>Annual seven-day minimum</b>	3,470	Sep 16	2,740	Sep 8	1,180	Feb 1, 1931
<b>10 percent exceeds</b>	14,500		14,200		15,600	
<b>50 percent exceeds</b>	9,700		6,990		5,900	
<b>90 percent exceeds</b>	5,420		3,240		2,890	



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.