

**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 since March 1930 (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 since construction of Great Sacandaga Lake, 118,000 ft<sup>3</sup>/s, Jan. 1, 1949; maximum gage height, 36.38 ft, May 30, 31, 1984; minimum daily discharge, 614 ft<sup>3</sup>/s, Feb. 1, 1931; minimum instantaneous discharge not determined.

EXTREMES FOR PERIOD PRIOR TO REGULATION.--Maximum discharge prior to construction of Great Sacandaga Lake, 120,000 ft<sup>3</sup>/s, Mar. 28, 1913.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 75,500 ft<sup>3</sup>/s, Aug. 29, gage height, 33.41 ft; maximum gage height, 34.60 ft, Aug. 29; minimum daily discharge, 3,120 ft<sup>3</sup>/s, Aug. 6; minimum instantaneous discharge not determined.

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

**DISCHARGE, CUBIC FEET PER SECOND**  
**WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**  
**DAILY MEAN VALUES**  
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	17,700	12,300	12,400	8,220	4,300	e5,600	12,700	42,900	20,800	11,900	4,870	16,600
2	26,600	11,100	27,400	8,870	4,710	e5,900	12,900	36,300	18,100	11,100	4,510	14,600
3	19,300	10,400	22,600	9,850	4,300	e5,800	13,200	34,500	15,700	11,000	4,140	13,000
4	13,300	11,200	17,800	8,730	4,410	e5,200	13,200	32,700	13,800	11,100	3,400	12,600
5	11,300	14,000	14,400	8,480	4,040	e5,300	15,200	35,000	12,800	10,700	3,520	e16,000
6	11,600	14,500	12,100	8,130	4,690	e12,000	15,400	34,000	12,400	10,400	3,120	e25,000
7	13,900	13,300	10,900	7,490	5,020	e27,000	12,900	29,800	11,400	10,500	3,400	e28,000
8	12,800	12,900	11,200	7,660	4,870	e18,000	14,500	28,700	9,220	9,420	3,960	e32,000
9	10,900	13,300	10,700	7,480	5,240	e14,000	13,300	26,300	10,200	8,820	4,020	e24,000
10	11,500	13,500	10,100	7,440	4,890	e13,000	14,300	23,300	9,820	8,190	3,950	e18,000
11	10,700	12,800	10,500	7,170	4,560	e16,000	17,500	22,000	10,300	7,870	4,220	e17,000
12	10,600	12,000	10,400	7,010	4,500	e19,000	25,400	e21,000	11,000	7,690	4,440	e16,000
13	10,700	11,200	16,400	6,780	4,250	e17,000	29,800	e19,000	10,500	6,220	4,230	17,100
14	10,000	10,300	16,200	7,490	3,920	e15,000	30,000	e13,000	10,600	5,280	4,170	15,800
15	11,200	10,700	12,000	7,310	4,610	e14,000	26,800	12,800	8,970	4,600	4,710	15,100
16	17,800	11,200	12,600	7,420	4,900	e14,000	22,200	16,500	8,990	3,880	7,840	15,000
17	15,500	11,500	11,500	7,260	4,280	e13,000	23,000	17,800	8,950	3,770	7,890	14,500
18	13,200	14,500	11,700	7,380	4,580	e15,000	26,900	17,200	9,810	3,910	6,650	12,500
19	12,000	12,900	11,000	7,550	e5,800	e19,000	22,900	18,100	8,950	3,400	5,320	12,100
20	11,300	12,100	10,700	7,050	e5,200	e18,000	19,900	22,600	7,620	3,600	5,040	11,600
21	11,500	12,200	10,100	7,110	e4,800	e16,000	23,400	25,400	6,240	3,830	4,820	11,700
22	11,000	11,500	9,550	7,690	e4,700	e15,000	23,900	23,800	5,640	4,070	5,690	11,800
23	10,800	e10,400	9,350	7,600	e4,900	e15,000	22,100	21,700	10,700	3,270	5,580	13,700
24	10,500	e11,000	9,390	7,560	e5,200	16,900	22,300	20,600	15,900	3,280	4,530	14,300
25	10,000	10,500	8,710	7,540	e4,700	15,700	20,800	19,500	14,500	3,540	5,540	13,900
26	12,000	10,700	8,040	7,690	e4,700	14,600	30,700	17,900	17,500	3,550	5,630	12,900
27	15,000	11,400	8,510	7,220	e4,400	13,400	33,600	16,200	15,400	3,320	8,540	12,100
28	17,300	10,400	7,840	5,950	e5,100	13,900	43,800	18,300	12,800	3,550	22,400	11,600
29	14,000	9,730	8,250	4,420	---	13,400	55,400	24,400	13,900	3,230	e60,000	12,600
30	13,200	9,980	8,300	4,060	---	13,200	54,800	23,200	13,600	3,740	e28,000	e18,000
31	12,900	---	8,260	3,960	---	12,300	---	22,600	---	3,880	23,000	---
<b>Total</b>	410,100	353,510	368,900	225,570	131,570	431,200	712,800	737,100	356,110	192,610	267,130	479,100
<b>Mean</b>	13,230	11,780	11,900	7,276	4,699	13,910	23,760	23,780	11,870	6,213	8,617	15,970
<b>Max</b>	26,600	14,500	27,400	9,850	5,800	27,000	55,400	42,900	20,800	11,900	60,000	32,000
<b>Min</b>	10,000	9,730	7,840	3,960	3,920	5,200	12,700	12,800	5,640	3,230	3,120	11,600

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 2011, BY WATER YEAR (WY)**

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Mean</b>	5,887	7,920	8,369	8,304	7,506	11,240	16,180	11,160	6,701	4,692	4,216	4,385
<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	15,970
<b>(WY)</b>	(1978)	(2006)	(1997)	(1949)	(1981)	(1936)	(1993)	(1996)	(1947)	(2006)	(2009)	(2011)
<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 2010		Water Year 2011		Water Years 1931 - 2011	
<b>Annual total</b>	3,152,330		4,665,700			
<b>Annual mean</b>	8,637		12,780		8,044	
<b>Highest annual mean</b>					12,780	2011
<b>Lowest annual mean</b>					4,240	1931
<b>Highest daily mean</b>	35,300	Mar 24	60,000	Aug 29	94,400	Dec 31, 1948
<b>Lowest daily mean</b>	2,400	Sep 24	3,120	Aug 6	614	Feb 1, 1931
<b>Annual seven-day minimum</b>	2,740	Sep 8	3,390	Jul 23	1,180	Feb 1, 1931
<b>10 percent exceeds</b>	15,300		23,000		15,800	
<b>50 percent exceeds</b>	7,900		11,400		5,960	
<b>90 percent exceeds</b>	3,240		4,410		2,900	

