

**01335770 HUDSON RIVER AT WATERFORD, NY**

Upper Hudson Basin  
Hudson-Hoosic Subbasin

LOCATION.--Lat 42°47'19", long 73°40'28" referenced to North American Datum of 1927, Saratoga County, NY, Hydrologic Unit 02020003, at bridge on U.S. Highway 4 in Waterford, 0.4 mi upstream from first branch of Mohawk River, and 2.8 mi downstream from dam at lock 1 of the Champlain (Barge) Canal.

DRAINAGE AREA.--4,616 mi<sup>2</sup>.

**WATER-QUALITY RECORDS**

PERIOD OF RECORD.--Water years 1970 to current year.

CHEMICAL DATA: 1970-71 (e), 1972-76 (d), 1978 (e), 1979 (d), 1980-82(e), 1987 (b), 1988-89 (c), 1990-91 (b), 1992 (a), 1993(c), 1994 (d), 1995 (c), 1996-97 (a).

MINOR ELEMENTS DATA: 1970-71 (e), 1972-76 (d), 1977-79 (e), 1980-81 (d), 1982 (a), 1983, 1987 (b), 1988-89 (c), 1990-91(b),1992-93 (a).

PESTICIDE DATA: 1975 (b), 1976 (d), 1977-79 (e), 1982, 1993-94, 1996 (a).

ORGANIC DATA: OC--1974 (c), 1975 (d), 1976 (c), 1978-79 (d), 1993(c), 1994 (d), 1995 (c), 1996 (a), 1997 (b). PCB--1975 (b), 1976 (d), 1977-84 (e), 1985 (c), 1986-87 (e), 1988 (d), 1989 (e), 1991 (d), 1992-94(e), 1995 (d), 1996-2001 (e), 2002(b). PCN--1977-79 (e), 1982, 1993 (a).

NUTRIENT DATA: 1970-71 (e), 1972-75 (d), 1976 (c), 1977-78 (e), 1979-81 (d), 1993 (c), 1994 (d), 1995 (c), 1996 (a).

BIOLOGICAL DATA: Bacteria--1978 (e), 1979-81 (d), 1993 (a). Phytoplankton--1974 (a), 1975 (b), 1976 (c), 1979 (d), 1993 (a).

SEDIMENT DATA: 1975 (b), 1976-2006 (e).

PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT DISCHARGE: October 1976 to current year.

REMARKS.--Water discharge data based on records obtained above Lock 1 near Waterford (station 01335754), 3.2 mi upstream. Sediment concentration reporting limit was lowered from 1 mg/L to 0.5 mg/L in water year 2002. A sampling method code of 920 indicates a depth-integrated single-vertical sample from a fixed bridge location, collected by an observer. A sampling method code of 30 indicates a single-vertical sample, collected by USGS personnel. A sampling method code of 10 indicates an equal-width-increment sample.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT CONCENTRATION: Maximum daily mean, 810 mg/L, March 14, 1977; minimum daily mean, <1 mg/L on many days during water years 1991, 1993-95, 1997-98, and Sept. 28, 2000; minimum daily mean since 2002 water year, 1 mg/L, Nov. 7, 2001, Jan. 6-9, 2002, on several days in 2005-06 water years.

SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 119,000 tons, March 14, 1977; minimum daily, 3.9 tons, Sept. 7, 1981.

EXTREMES FOR CURRENT YEAR.--

SUSPENDED-SEDIMENT CONCENTRATION: Maximum daily mean, 410 mg/L, Oct 9; minimum daily mean, 1 mg/L, on many days.

SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, about 36,500 tons, Oct 9; minimum daily, 10 tons, Sep 20.

## 01335770 HUDSON RIVER AT WATERFORD, NY—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2005 TO**  
**SEPTEMBER 2006**

Part 1 of 12

<b>Date</b>	<b>Time</b>	<b>Sam- pling method, code (82398)</b>	<b>Sus- pended sedi- ment concen- tration mg/L (80154)</b>
<b>Oct</b>			
01...	1740	30	3
02...	1830	30	2
03...	1235	30	2
04...	1000	30	3
05...	1445	30	2
06...	1015	30	3
07...	0555	30	3
08...	1705	30	14
09...	0815	30	217
09...	1225	30	445
09...	1640	30	708
10...	0315	30	396
10...	1515	30	113
11...	0315	30	52
11...	1020	920	40
11...	1045	10	37
11...	1105	920	35
11...	1550	30	33
12...	0315	30	21
12...	1550	30	18
13...	1340	30	17
14...	1025	30	16
15...	1140	30	19
16...	1155	30	52
17...	1350	30	21
18...	1240	30	14
19...	1205	30	11
20...	1000	920	9
21...	0605	920	6
22...	1040	920	6
23...	1235	920	54
24...	1235	920	52
25...	1015	920	27
26...	1150	920	133
26...	1155	920	131
26...	1215	10	154
26...	1240	920	131
27...	1015	920	42
28...	0615	920	22
29...	1510	920	8

## 01335770 HUDSON RIVER AT WATERFORD, NY—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2005 TO**  
**SEPTEMBER 2006**

Part 2 of 12

<b>Date</b>	<b>Time</b>	<b>Sam- pling method, code (82398)</b>	<b>Sus- pended sedi- ment concen- tration mg/L (80154)</b>
<b>Oct</b>			
30...	1300	920	7
31...	1210	920	6
<b>Nov</b>			
01...	1215	920	5
02...	1210	920	7
03...	1155	920	7
04...	0700	920	6
05...	1645	920	3
06...	1320	920	4
07...	1200	920	6
08...	1420	920	6
09...	1205	920	5
10...	1245	920	42
10...	1750	920	34
11...	0715	920	26
11...	1850	920	20
12...	1545	920	7
13...	1310	920	4
14...	1205	920	2
15...	1210	920	3
16...	1215	920	12
17...	1145	920	80
18...	0710	920	39
19...	1325	920	20
20...	1305	920	9
21...	1220	920	5
22...	1240	920	5
23...	1110	920	17
24...	1300	920	9
25...	1425	920	5
26...	1045	920	3
27...	1455	920	2
28...	1205	920	7
29...	1215	920	7
30...	1210	920	281
30...	1900	920	304

## 01335770 HUDSON RIVER AT WATERFORD, NY—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2005 TO**  
**SEPTEMBER 2006**

Part 3 of 12

<b>Date</b>	<b>Time</b>	<b>Sam- pling method, code (82398)</b>	<b>Sus- pended sedi- ment concen- tration mg/L (80154)</b>
<b>Dec</b>			
01...	1145	920	121
01...	1205	10	140
01...	1225	920	109
01...	1250	920	94
01...	2005	920	61
02...	0700	920	35
02...	1955	920	24
03...	1445	920	15
04...	1510	920	8
05...	1210	920	6
06...	1205	50	5
07...	1155	920	4
08...	1135	920	3
09...	1240	920	3
10...	1335	920	2
11...	1120	920	3
12...	1210	920	2
13...	1250	920	2
14...	1210	920	5
17...	1445	920	1
18...	1300	920	2
19...	1245	920	2
20...	1545	920	1
21...	1325	920	1
22...	1435	920	1
23...	1710	920	2
24...	1500	920	1
25...	1440	920	1
26...	2120	920	20
27...	1955	920	19
28...	1805	920	7
29...	2050	920	8
30...	1455	920	109
30...	2120	920	82
31...	1135	920	25

## 01335770 HUDSON RIVER AT WATERFORD, NY—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2005 TO**  
**SEPTEMBER 2006**

Part 4 of 12

<b>Date</b>	<b>Time</b>	<b>Sam- pling method, code (82398)</b>	<b>Sus- pended sedi- ment concen- tration mg/L (80154)</b>
<b>Jan</b>			
01...	1715	920	8
02...	1600	920	5
03...	1920	920	3
04...	1320	920	4
05...	1635	920	3
07...	1410	920	2
08...	2105	920	3
09...	2010	920	3
10...	2055	920	2
11...	2000	920	3
12...	1320	920	13
13...	1805	920	16
14...	1740	920	26
15...	1315	920	85
16...	1455	920	18
17...	1200	920	10
18...	1340	920	157
18...	2115	920	445
19...	0425	920	563
19...	1045	920	400
19...	1110	10	405
19...	1135	920	395
19...	1255	920	355
19...	2030	920	154
20...	0715	920	67
20...	1715	920	46
21...	1640	920	25
22...	1545	920	16
23...	1150	920	41
24...	1155	920	7
25...	1340	920	6
26...	1250	920	5
27...	1330	920	5
28...	1810	920	4
29...	1300	920	4
30...	1010	920	5
31...	1135	920	19

## 01335770 HUDSON RIVER AT WATERFORD, NY—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2005 TO**  
**SEPTEMBER 2006**

Part 5 of 12

<b>Date</b>	<b>Time</b>	<b>Sam- pling method, code (82398)</b>	<b>Sus- pended sedi- ment concen- tration mg/L (80154)</b>
<b>Feb</b>			
01...	1255	920	14
02...	1250	920	8
03...	1205	920	6
03...	1710	920	18
05...	1315	920	24
06...	1010	920	41
07...	1135	920	18
08...	1255	920	17
09...	1250	920	6
10...	1200	920	5
11...	1520	920	34
12...	1310	920	2
13...	1055	920	2
14...	1415	920	4
15...	1255	920	2
16...	1300	920	2
17...	0715	920	2
19...	1255	920	5
20...	1220	920	3
21...	1055	920	3
22...	1815	920	3
23...	1235	920	2
24...	1350	920	3
25...	1100	920	3
26...	1325	920	2

## 01335770 HUDSON RIVER AT WATERFORD, NY—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2005 TO**  
**SEPTEMBER 2006**

Part 6 of 12

<b>Date</b>	<b>Time</b>	<b>Sam- pling method, code (82398)</b>	<b>Sus- pended sedi- ment concen- tration mg/L (80154)</b>
<b>Mar</b>			
02...	1215	920	2
03...	1305	920	2
04...	1030	920	2
05...	1325	920	2
06...	1625	920	3
07...	1245	920	3
08...	1330	920	2
09...	1225	920	3
10...	1035	920	3
10...	1100	10	4
10...	1115	920	3
10...	1130	920	2
11...	1805	920	2
12...	1255	920	3
13...	1245	920	2
14...	1310	920	213
14...	2045	920	209
15...	1240	920	54
16...	1210	920	17
17...	0700	920	10
18...	1725	920	6
19...	1310	920	5
20...	1355	920	4
21...	1240	920	3
22...	1330	920	3
23...	1250	920	2
24...	0705	920	2
25...	1035	920	3
26...	1530	920	2
27...	1300	920	3
28...	0935	920	2
29...	1325	920	3
30...	1315	920	3
31...	0710	920	3

## 01335770 HUDSON RIVER AT WATERFORD, NY—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2005 TO**  
**SEPTEMBER 2006**

Part 7 of 12

<b>Date</b>	<b>Time</b>	<b>Sam- pling method, code (82398)</b>	<b>Sus- pended sedi- ment concen- tration mg/L (80154)</b>
<b>Apr</b>			
01...	0940	920	3
02...	0955	920	3
03...	1145	920	4
04...	1140	920	77
05...	1200	920	66
06...	1200	920	15
07...	0610	920	7
08...	1425	920	5
09...	1150	920	4
10...	1150	920	3
11...	1215	920	3
12...	1215	920	3
13...	1120	920	3
14...	1145	920	3
15...	1325	920	2
16...	1015	920	4
17...	1025	920	3
18...	1045	920	7
19...	1125	920	4
20...	1110	920	9
21...	1225	920	3
22...	1725	920	3
23...	1500	920	76
24...	1110	920	143
24...	1215	920	136
24...	1240	10	119
24...	1315	920	117
24...	2005	920	83
25...	1100	920	30
25...	2000	920	20
26...	1235	920	18
27...	1245	920	19
28...	0610	920	13
29...	1835	920	6
30...	1615	920	9



## 01335770 HUDSON RIVER AT WATERFORD, NY—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2005 TO**  
**SEPTEMBER 2006**

Part 8 of 12

<b>Date</b>	<b>Time</b>	<b>Sam- pling method, code (82398)</b>	<b>Sus- pended sedi- ment concen- tration mg/L (80154)</b>
<b>May</b>			
01...	0930	920	5
02...	1135	920	5
03...	1215	920	4
04...	1245	920	7
05...	0605	920	4
06...	1550	920	5
07...	1335	920	4
08...	1000	920	3
09...	1310	920	3
10...	1250	920	3
11...	1250	920	3
12...	1835	920	5
13...	1900	920	9
14...	1230	920	12
15...	0925	920	37
16...	1610	920	16
17...	1500	920	15
18...	1400	920	12
19...	1255	920	13
20...	1930	920	21
21...	1515	920	20
22...	1935	920	14
23...	1650	920	9
24...	1400	920	7
25...	1455	920	7
26...	2100	920	8
27...	2140	920	5
28...	1450	920	6
29...	1520	920	6
30...	1630	920	6
31...	2150	920	14

## 01335770 HUDSON RIVER AT WATERFORD, NY—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2005 TO**  
**SEPTEMBER 2006**

Part 9 of 12

<b>Date</b>	<b>Time</b>	<b>Sam- pling method, code (82398)</b>	<b>Sus- pended sedi- ment concen- tration mg/L (80154)</b>
<b>Jun</b>			
01...	2025	920	15
02...	1915	920	11
03...	1930	920	52
04...	1435	920	46
05...	2055	920	25
06...	1740	920	25
07...	1325	920	15
08...	1250	920	50
09...	0600	920	21
10...	0605	920	54
11...	1625	920	27
12...	1125	920	17
13...	1320	920	12
14...	1115	920	11
14...	1150	10	11
14...	1220	920	12
14...	1300	920	10
15...	0910	920	10
15...	1900	920	25
17...	1820	920	10
18...	1825	920	9
19...	1950	920	8
20...	2205	920	9
21...	2025	920	8
23...	2040	920	7
24...	1255	920	8
25...	2100	920	6
26...	1920	920	353
27...	1520	920	101
27...	2140	920	74
28...	1300	920	81
28...	1920	920	50
29...	1050	920	123
29...	1110	10	120
29...	1130	920	117
29...	1225	920	124
29...	2005	920	104
30...	1325	920	71
30...	2035	920	53

## 01335770 HUDSON RIVER AT WATERFORD, NY—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2005 TO**  
**SEPTEMBER 2006**

Part 10 of 12

<b>Date</b>	<b>Time</b>	<b>Sam- pling method, code (82398)</b>	<b>Sus- pended sedi- ment concen- tration mg/L (80154)</b>
<b>Jul</b>			
01...	1220	920	41
01...	2155	920	30
02...	1225	920	27
02...	2140	920	25
04...	2025	920	14
05...	2020	920	12
06...	1800	920	11
07...	1420	920	10
08...	2300	920	7
09...	1850	920	6
10...	2220	920	6
11...	2150	920	5
12...	1045	920	6
13...	2205	920	16
14...	2205	920	8
15...	1925	920	8
16...	2155	920	7
17...	2200	920	5
19...	2145	920	4
20...	2215	920	3
21...	1010	920	6
22...	1950	920	22
23...	2200	920	27
24...	2215	920	11
25...	1750	920	7
26...	2135	920	5
27...	2035	920	4
28...	2200	920	3
29...	2040	920	5
30...	2015	920	3
31...	1950	920	4

## 01335770 HUDSON RIVER AT WATERFORD, NY—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2005 TO**  
**SEPTEMBER 2006**

Part 11 of 12

<b>Date</b>	<b>Time</b>	<b>Sam- pling method, code (82398)</b>	<b>Sus- pended sedi- ment concen- tration mg/L (80154)</b>
<b>Aug</b>			
01...	2055	920	3
02...	1950	920	3
03...	2045	920	3
04...	2050	920	3
05...	2145	920	4
06...	2125	920	2
07...	2100	920	3
08...	2220	920	2
09...	2130	920	--
10...	2245	920	2
11...	2200	920	3
13...	2135	920	1
14...	2250	920	2
15...	2145	920	1
16...	2100	920	2
18...	2035	920	1
19...	2035	920	2
20...	2155	920	13
21...	1740	920	6
22...	1430	920	3
23...	2010	920	2
24...	2135	920	1
25...	1745	920	2
27...	1535	920	2
28...	1155	920	1
29...	1400	920	1
30...	1150	920	1
31...	1155	920	2

## 01335770 HUDSON RIVER AT WATERFORD, NY—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2005 TO**  
**SEPTEMBER 2006**

Part 12 of 12

<b>Date</b>	<b>Time</b>	<b>Sam- pling method, code (82398)</b>	<b>Sus- pended sedi- ment concen- tration mg/L (80154)</b>
<b>Sep</b>			
01...	0555	920	2
02...	1045	920	2
03...	1410	920	1
04...	1105	920	3
05...	1015	920	2
06...	1105	920	2
07...	0935	920	1
08...	0555	920	2
09...	1745	920	2
10...	1505	920	2
11...	1125	920	1
12...	1150	920	2
13...	1220	920	1
14...	1105	920	10
15...	0610	920	2
16...	1035	920	1
17...	1705	920	1
18...	1145	920	3
19...	1230	920	2
20...	1200	920	1
21...	1110	920	1
22...	0600	920	2
23...	0935	920	1
24...	1350	920	1
25...	1120	920	1
26...	1210	920	2
27...	1205	920	2
28...	1110	920	2
29...	1035	920	2
30...	1530	920	4

## 01335770 HUDSON RIVER AT WATERFORD, NY—Continued

**SUSPENDED-SEDIMENT**  
**WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006**

[e, estimated]

Day	Mean concen- tration (mg/l)	Sediment discharge (tons/ day)	Mean concen- tration (mg/l)	Sediment discharge (tons/ day)	Mean concen- tration (mg/l)	Sediment discharge (tons/ day)	Mean concen- tration (mg/l)	Sediment discharge (tons/ day)	Mean concen- tration (mg/l)	Sediment discharge (tons/ day)	Mean concen- tration (mg/l)	Sediment discharge (tons/ day)
	October		November		December		January		February		March	
1	4	48	5	210	161	12,700	10	397	14	606	e2	e46
2	2	30	7	278	32	2,310	6	204	9	328	2	45
3	2	22	7	249	17	1,070	4	124	11	419	2	43
4	3	27	6	190	9	495	4	121	e21	e1,000	2	42
5	2	22	4	117	6	284	3	99	25	1,370	2	42
6	3	30	4	127	5	220	e3	e77	36	2,120	3	56
7	5	50	6	197	4	150	2	61	20	1,310	3	62
8	16	e349	6	199	3	107	3	73	16	967	2	43
9	410	e36,500	7	231	3	90	3	79	7	295	3	58
10	209	e12,400	45	e1,980	2	68	2	63	10	378	2	57
11	39	e1,160	24	e1,040	3	80	3	76	29	1,040	2	41
12	20	e540	10	405	2	61	11	397	7	255	3	60
13	17	567	4	156	2	65	16	571	2	72	4	118
14	16	602	2	85	4	115	27	1,310	4	115	146	8,800
15	22	e1,020	4	139	e4	e100	80	5,470	2	72	70	3,860
16	50	e2,560	14	e605	e2	e58	18	866	2	58	19	756
17	24	e1,040	62	e4,350	1	36	12	533	2	66	10	318
18	15	e527	36	e2,720	2	49	175	15,100	e4	e117	7	205
19	11	e356	21	e1,360	2	49	371	39,500	5	122	5	140
20	8	e238	10	e432	1	28	63	5,300	3	87	4	113
21	6	191	6	e243	1	23	30	2,060	3	84	3	83
22	6	167	6	280	1	24	19	1,150	3	74	3	76
23	49	e2,250	17	e780	2	39	27	1,430	2	62	2	53
24	54	e2,330	10	e432	1	27	9	432	3	71	2	52
25	40	e2,110	6	e232	1	34	6	241	3	73	3	65
26	117	e9,160	3	e105	12	409	5	190	2	52	2	52
27	40	e2,750	3	e100	22	858	5	166	e2	e45	3	63
28	19	e975	6	e194	9	325	4	143	2	e47	2	51
29	9	e401	14	e567	8	257	4	142	---	---	3	50
30	7	282	227	17,400	71	4,210	7	271	---	---	3	60
31	6	231	---	---	30	1,470	17	708	---	---	3	44
<b>Total</b>	---	78,935	---	35,403	---	25,811	---	77,354	---	11,305	---	15,554

## 01335770 HUDSON RIVER AT WATERFORD, NY—Continued

**SUSPENDED-SEDIMENT**  
**WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006**

[e, estimated]

Day	Mean concen- tration (mg/l)	Sediment discharge (tons/ day)	Mean concen- tration (mg/l)	Sediment discharge (tons/ day)	Mean concen- tration (mg/l)	Sediment discharge (tons/ day)	Mean concen- tration (mg/l)	Sediment discharge (tons/ day)	Mean concen- tration (mg/l)	Sediment discharge (tons/ day)	Mean concen- tration (mg/l)	Sediment discharge (tons/ day)
	April		May		June		July		August		September	
1	3	e44	5	184	15	571	4	e3,430	3	e96	2	27
2	3	e37	5	155	12	459	127	e2,000	3	e92	2	31
3	4	117	4	141	33	1,500	e22	e1,460	3	80	1	19
4	55	e1,400	6	195	56	3,430	16	e886	3	85	3	27
5	63	e1,770	4	137	29	e1,530	13	e800	4	104	2	22
6	18	e747	5	148	25	e1,280	11	498	3	71	2	18
7	7	e343	4	121	18	893	10	395	3	63	1	13
8	5	e222	3	86	36	2,060	8	293	2	58	2	18
9	4	e210	3	40	25	1,300	6	207	2	44	2	18
10	3	e128	3	39	49	3,040	6	179	2	42	2	16
11	3	e68	3	44	31	1,720	5	160	3	53	1	11
12	3	e44	5	71	18	873	7	211	e2	e35	2	15
13	3	e42	8	214	13	550	13	568	1	16	2	18
14	3	e34	13	495	11	423	11	457	2	16	8	64
15	2	e26	29	1,360	16	563	8	300	1	14	2	24
16	4	e41	17	867	e14	e494	7	263	2	14	1	14
17	4	e51	15	769	11	354	6	e199	e2	e15	1	12
18	6	137	13	632	9	294	e5	e161	1	11	3	26
19	5	100	14	734	8	237	4	e124	2	14	2	20
20	8	155	19	1,270	9	240	4	e122	7	100	1	10
21	4	75	20	1,270	8	218	8	e246	10	195	1	11
22	4	74	16	965	e8	e196	19	e605	3	52	2	18
23	52	1,900	10	541	7	178	26	e1,140	2	28	1	12
24	108	7,260	7	331	8	184	17	e597	1	15	1	11
25	34	1,950	7	285	7	163	9	e296	2	14	1	15
26	19	1,080	8	299	130	6,800	6	e194	e2	e18	2	23
27	18	1,090	6	217	195	11,300	4	e124	2	18	2	17
28	12	569	6	182	67	3,510	4	e95	1	11	2	18
29	7	304	6	184	147	e15,500	3	e130	1	11	2	26
30	8	292	6	187	73	e6,700	4	e138	1	12	4	57
31	---	---	11	493	---	---	4	e119	2	24	---	---
<b>Total</b>	---	20,310	---	12,656	---	66,560	---	16,397	---	1,421	---	631
<b>Year</b>	---	362,337										