Water-Data Report 2013

01325000 SACANDAGA RIVER AT STEWARTS BRIDGE, NEAR HADLEY, NY

Upper Hudson Basin
Sacandaga Subbasin

LOCATION.--Lat 43°18′41″, long 73°52′02″ referenced to North American Datum of 1983, Saratoga County, NY, Hydrologic Unit 02020002, on left bank 1.0 mi downstream from Stewarts Bridge, 1.1 mi west of Hadley, 1.4 mi upstream from mouth, and 1.5 mi downstream from Stewarts Bridge hydroelectric plant.

DRAINAGE AREA.--1,055 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--September 1907 to current year. Published as "near Hadley" 1907-l910, "at Hadley" 1911-32 and "at Conklingville" 1932-52. Records published for both sites October 1951 to September 1952.

REVISED RECORDS.--WSP 1302: 1908. WSP 1432: 1910-12, 1916-21. WDR NY-83-1: 1968(M), 1971-72(M), 1976-77(M), 1979(M).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 582.00 ft above NGVD of 1929. Prior to Jan. 1, 1911, nonrecording gage at site about 1 mi upstream at different datum. Jan. 1, 1911 to Sept. 30, 1932, at site 0.8 mi downstream at datum 8.82 ft lower. Oct. 1, 1932 to Sept. 30, 1952, at site 3.6 mi upstream at datum 85.47 ft higher.

COOPERATION.--From Oct. 1, 1932 to Dec. 4, 1979, discharge computed by Board of Hudson River-Black River Regulating District from rating developed by U.S. Geological Survey. Since Dec. 4, 1979, discharge computed by U.S. Geological Survey.

REMARKS.--Records good except those below about 50 ft^3/s, which are fair. Flow regulated by Great Sacandaga Lake since Mar. 27, 1930 (see station 01323500); discharge over spillway, part or all of several days in 1983, 1990, 1993, 2000, 2003-04, 2006-08, 2011 (only spillage since completion of Conklingville Dam in 1930). Extensive diurnal fluctuation caused by release of water from Great Sacandaga Lake, through Elmer J. West hydroelectric station directed by Board of Hudson River-Black River Regulating District and through Stewarts Bridge hydroelectric station. Satellite and telephone gage-height telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge since construction of Great Sacandaga Lake, 16,500 ft^3/s, May 2, 2011, gage height, 10.40 ft; minimum, 4.2 ft^3/s, May 4, 1985, Mar. 30, 31, Apr. 1-10, 11, 13, 14, 15, 1992.

EXTREMES FOR PERIOD PRIOR TO REGULATION.--Maximum discharge prior to construction of Great Sacandaga Lake, about 35,500 ft^3/s, Mar. 28, 1913, gage height, 12.36 ft, site and datum then in use.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 11,000 ft^3/s, June 15, gage height, 8.84 ft; minimum discharge, 32 ft^3/s, Oct. 18, 19, gage height, 0.62 ft.

01325000 SACANDAGA RIVER AT STEWARTS BRIDGE, NEAR HADLEY, NY—Continued

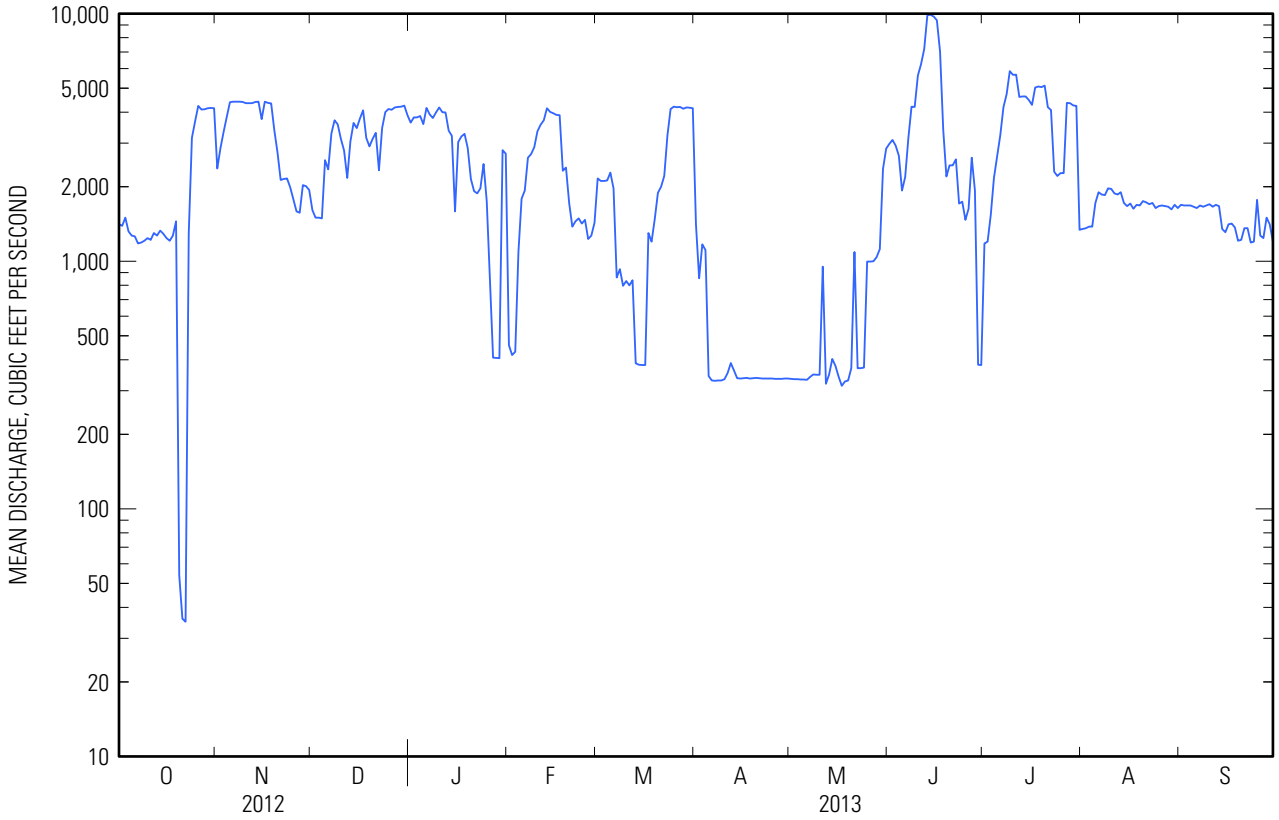
DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	1,410	2,370	1,610	3,630	458	2,160	1,410	335	2,980	1,180	1,350	1,690
2	1,390	2,860	1,500	3,810	418	2,110	854	e334	3,090	1,200	1,360	1,680
3	1,500	3,330	1,500	3,810	431	2,110	1,170	334	2,930	1,540	1,380	1,680
4	1,320	3,830	1,490	3,860	1,090	2,120	1,110	333	2,670	2,170	1,380	1,680
5	1,270	4,390	2,560	3,580	1,790	2,280	344	333	1,930	2,650	1,720	1,660
6	1,260	4,410	2,350	4,160	1,930	1,970	330	332	2,190	3,230	1,900	1,640
7	1,180	4,410	3,280	3,920	2,620	860	329	341	3,140	4,190	1,860	1,680
8	1,190	4,410	3,710	3,790	2,710	929	330	349	4,210	4,730	1,850	1,660
9	1,210	4,400	3,570	3,990	2,890	796	330	348	4,200	5,860	1,970	1,680
10	1,240	4,350	3,120	4,180	3,350	832	334	348	5,620	5,660	1,960	1,700
11	1,220	4,350	2,800	4,000	3,560	799	354	951	6,250	5,670	1,880	1,660
12	1,300	4,350	2,170	3,990	3,710	838	388	320	7,190	4,610	1,860	1,690
13	1,270	4,400	3,050	3,370	4,150	387	362	349	9,880	4,630	1,900	1,670
14	1,330	4,410	3,620	3,210	4,010	382	337	403	9,890	4,630	1,720	1,350
15	1,290	3,750	3,450	1,590	3,960	381	336	378	9,740	4,480	1,670	1,310
16	1,240	4,410	3,770	3,030	3,900	381	337	342	9,400	4,280	1,710	1,410
17	1,210	4,360	4,070	3,190	3,890	1,300	338	314	7,020	5,030	1,630	1,420
18	1,270	4,340	3,150	3,270	2,320	1,200	336	327	3,400	5,080	1,690	1,370
19	1,450	3,380	2,910	2,870	2,390	1,480	337	330	2,200	5,050	1,680	1,210
20	54	2,750	3,120	2,150	1,720	1,890	338	370	2,440	5,120	1,750	1,220
21	36	2,130	3,300	1,920	1,380	2,000	337	1,090	2,440	4,190	1,730	1,360
22	35	2,150	2,330	1,880	1,450	2,210	336	370	2,580	4,080	1,700	1,360
23	1,290	2,160	3,450	1,970	1,490	3,220	336	370	1,710	2,300	1,720	1,190
24	3,150	1,990	4,000	2,470	1,420	4,120	336	372	1,740	2,210	1,640	1,200
25	3,670	1,780	4,120	1,750	1,470	4,210	336	997	1,470	2,270	1,670	1,770
26	4,240	1,590	4,090	847	1,230	4,190	335	997	1,630	2,270	1,680	1,270
27	4,100	1,570	4,180	408	1,270	4,200	335	1,000	2,620	4,360	1,670	1,240
28	4,110	2,030	4,200	407	1,430	4,130	335	1,040	1,930	4,350	1,660	1,500
29	4,150	2,010	4,210	406	---	4,180	336	1,120	382	4,260	1,620	1,410
30	4,160	1,940	4,250	2,810	---	4,170	336	2,360	381	4,240	1,690	1,200
31	4,150	---	3,890	2,720	---	4,150	---	2,850	---	1,340	1,640	---
Total	57,695	98,610	98,820	86,988	62,437	65,985	13,362	20,037	117,253	116,860	52,640	44,560
Mean	1,861	3,287	3,188	2,806	2,230	2,129	445	646	3,908	3,770	1,698	1,485
Max	4,240	4,410	4,250	4,180	4,150	4,210	1,410	2,850	9,890	5,860	1,970	1,770
Min	35	1,570	1,490	406	418	381	329	314	381	1,180	1,350	1,190
Adjusted for change in contents in Great Sacandaga Lake and Stewarts Bridge Pool												
Mean	2,446	1,220	3,099	1,548	1,550	2,161	6,219	2,063	4,305	2,508	471	350
Cfsm	2.32	1.16	2.94	1.47	1.47	2.05	5.90	1.96	4.08	2.38	0.45	0.33
In	2.67	1.29	3.39	1.69	1.53	2.36	6.58	2.25	4.55	2.74	0.51	0.37

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 2013, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	1,962	2,323	2,599	2,848	2,834	2,004	1,210	2,424	2,103	1,966	1,921	1,849
Max	5,149	5,177	4,935	6,448	4,910	3,921	5,769	7,035	5,203	5,575	3,013	3,306
(WY)	(1946)	(1976)	(1960)	(2007)	(1973)	(1972)	(2008)	(1983)	(1947)	(2006)	(1935)	(2011)
Min	508	968	1,117	1,210	1,144	89.0	5.85	40.5	712	927	872	963
(WY)	(1996)	(1998)	(1965)	(1965)	(1931)	(1954)	(1985)	(1931)	(1987)	(1941)	(1995)	(1941)

01325000 SACANDAGA RIVER AT STEWARTS BRIDGE, NEAR HADLEY, NY—Continued

SUMMARY STATISTICS

	Calendar Year 2012		Water Year 2013		Water Years 1931 - 2013	
Annual total	708,262.9		835,247			
Annual mean	1,935		2,288		2,169	
Annual mean (adjusted)	1,836		2,327			
Highest annual mean					3,452	1976
Lowest annual mean					1,122	1965
Highest daily mean	4,410	Nov 6	9,890	Jun 14	13,800	Apr 28, 2008
Lowest daily mean	8.8	Mar 24	35	Oct 22	4.2	Mar 31, 1992
Annual seven-day minimum	8.8	Mar 27	334	Apr 30	4.2	Mar 31, 1992
Annual runoff (cfsm, adjusted)*	1.74		2.21			
Annual runoff (inches, adjusted)*	23.6		30.0			
10 percent exceeds	4,140		4,270		4,080	
50 percent exceeds	1,430		1,770		2,060	
90 percent exceeds	42		342		38