Water-Data Report 2012

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-I910, "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, water-stage recorder at site 0.8 mi downstream at datum 8.82 ft lower than present datum. Oct. 1, 1932 to Sept. 30, 1952, water-stage recorder at site 3.6 mi upstream at datum 85.47 ft higher than present datum.

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.--No estimated daily discharges. 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, 5,440 ft^3/s, Nov. 17, gage height, 6.22 ft; minimum discharge, 8.8 ft^3/s, part or all of each day Mar. 23 - Apr. 5; minimum gage height, 0.37 ft, part or all of each day Mar. 26 – Apr. 5.

Suggested citation: U.S. Geological Survey, 2013, Water-resources data for the United States, Water Year 2012: U.S. Geological Survey Water-Data Report WDR-US-2012, site 01325000, accessed at http://wdr.water.usgs.gov/wy2012/pdfs/01325000.2012.pdf

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	3,190	4,250	2,050	4,250	2,850	1,560	8.8	38	4,030	1,310	1,390	1,430
2	3,030	3,810	2,070	4,200	2,690	1,540	8.8	38	3,980	1,370	1,510	1,410
3	3,050	4,130	2,380	4,220	3,130	2,560	8.8	38	2,710	1,330	1,440	1,420
4	3,290	4,180	2,730	4,270	3,200	2,460	8.8	104	2,030	1,360	1,440	1,360
5	3,870	4,150	3,260	4,280	3,230	2,440	345	37	2,400	1,340	1,430	1,580
6	4,310	4,120	4,130	4,280	3,250	2,700	341	36	2,580	1,310	1,380	1,450
7	4,270	4,150	4,100	4,330	3,750	1,610	631	36	3,200	1,310	1,400	1,360
8	4,280	4,140	4,070	4,250	3,370	550	706	41	3,670	1,300	1,390	1,370
9	4,270	4,170	3,860	4,150	3,680	540	497	174	3,600	1,360	1,560	1,390
10	4,330	4,230	3,970	4,140	3,850	513	813	37	3,090	1,360	1,300	1,430
11	4,420	4,360	4,080	4,160	3,840	663	1,090	36	3,120	1,360	1,360	1,390
12	4,290	4,190	4,080	4,170	4,080	1,030	1,100	35	3,040	1,400	1,470	1,210
13	4,130	4,200	4,070	4,130	3,950	53	1,020	35	2,010	1,410	1,380	1,390
14	4,110	4,190	4,080	4,230	4,160	52	1,000	35	2,310	1,560	1,420	1,190
15	2,390	4,170	4,160	4,230	3,950	52	636	1,370	2,180	1,330	1,380	1,440
16	1,260	4,220	4,080	4,310	4,090	127	656	1,690	2,590	1,470	1,420	1,430
17	1,220	4,310	4,090	4,090	4,040	156	735	1,960	1,970	1,430	1,400	1,450
18	1,220	3,740	4,080	4,110	2,140	139	469	2,060	1,280	1,350	1,390	1,420
19	2,590	4,100	4,070	4,110	1,880	83	420	1,850	1,290	1,330	1,310	1,260
20	3,050	3,980	4,150	4,070	1,860	50	436	1,170	1,360	1,320	1,280	1,250
21	2,860	3,940	4,070	4,110	1,550	53	441	41	1,780	1,370	1,290	1,370
22	3,060	3,950	4,020	4,120	1,510	47	453	1,030	1,340	1,360	1,400	1,360
23	3,370	4,080	4,020	4,100	1,360	28	47	42	1,320	1,320	1,390	1,380
24	4,010	4,140	4,050	4,090	1,220	8.8	41	41	1,350	1,300	1,360	1,370
25	4,210	4,120	4,130	4,030	1,580	9.0	40	976	1,270	1,810	1,580	1,370
26	4,060	4,070	4,170	4,090	1,530	8.9	39	1,020	1,400	1,420	1,580	1,380
27	4,060	4,140	4,130	4,100	1,700	8.8	38	993	1,310	1,400	1,450	1,420
28	4,050	4,120	4,190	2,230	1,740	8.8	37	1,040	1,350	1,430	1,410	1,390
29	4,100	4,150	4,230	3,810	1,640	8.8	37	869	1,340	1,510	1,410	1,430
30	4,100	2,960	4,260	2,210	---	8.8	36	2,270	1,390	1,300	1,390	1,410
31	4,100	---	4,270	2,520	---	8.8	---	4,020	---	1,460	1,450	---
Total	108,550	122,460	119,100	123,390	80,820	19,076.7	12,139.2	23,162	66,290	42,990	43,760	41,510
Mean	3,502	4,082	3,842	3,980	2,787	615	405	747	2,210	1,387	1,412	1,384
Max	4,420	4,360	4,270	4,330	4,160	2,700	1,100	4,020	4,030	1,810	1,580	1,580
Min	1,220	2,960	2,050	2,210	1,220	8.8	8.8	35	1,270	1,300	1,280	1,190
Adjusted for change in contents in Great Sacandaga Lake and Stewarts Bridge Pool												
Mean	2,972	2,070	2,752	2,114	1,434	3,924	1,618	3,254	1,762	219	432	707
Cfsm	2.82	1.96	2.61	2.00	1.36	3.72	1.53	3.08	1.67	0.21	0.41	0.67
In	3.25	2.19	3.01	2.31	1.47	4.29	1.71	3.56	1.86	0.24	0.47	0.75

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 2012, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	1,963	2,311	2,592	2,849	2,841	2,003	1,220	2,446	2,081	1,944	1,924	1,853
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)

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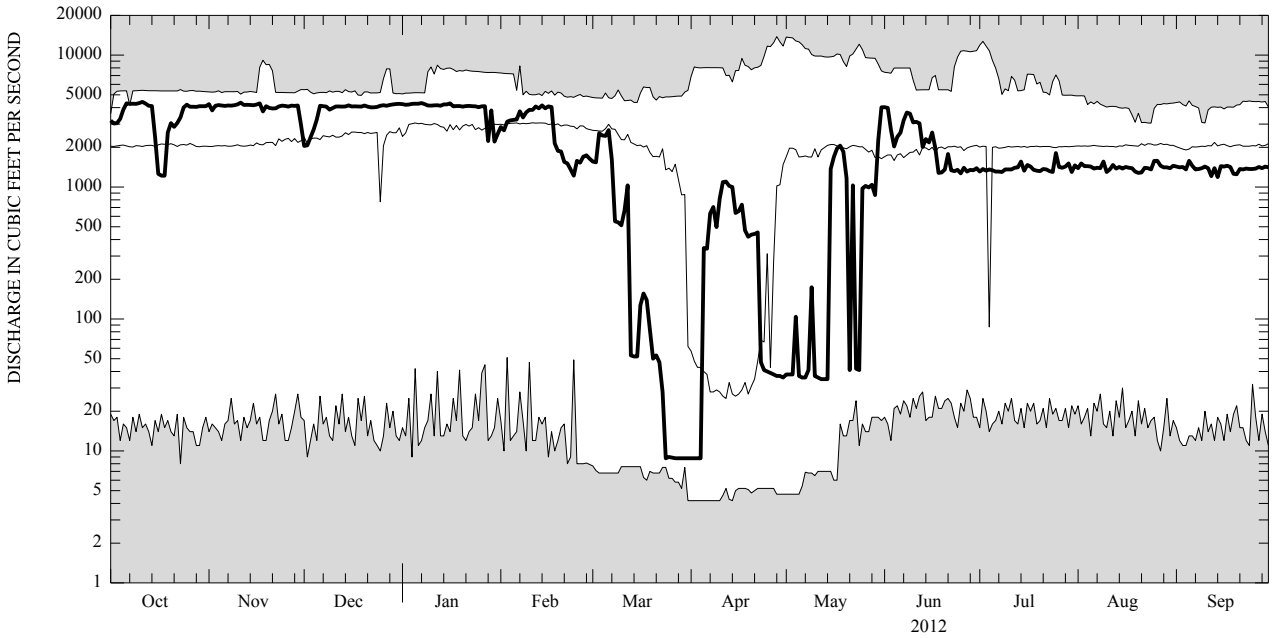
SUMMARY STATISTICS

	Calendar Year 2011		Water Year 2012		Water Years 1931 - 2012	
Annual total	1,121,902		803,247.9			
Annual mean	3,074		2,195		2,167	
Annual mean (adjusted)	3,048		1,929			
Highest annual mean					3,452	1976
Lowest annual mean					1,122	1965
Highest daily mean	12,300	May 3	4,420	Oct 11	13,800	Apr 28, 2008
Lowest daily mean	35	Apr 6	8.8	Mar 24	4.2	Mar 31, 1992
Annual seven-day minimum	62	Apr 15	8.8	Mar 27	4.2	Mar 31, 1992
Annual runoff (cfsm, adjusted)*	2.89		1.83			
Annual runoff (inches, adjusted)*	39.21		24.89			
50 percent exceeds	3,740		1,520		2,070	
90 percent exceeds	983		47		38	

***** Water years 1908 to current, adjusted for storage in Great Sacandaga Lake since 1930 and in Stewarts Bridge pool since 1953.



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.