Water-Data Report 2007

01325000 SACANDAGA RIVER AT STEWARTS BRIDGE, NEAR HADLEY, NY

Upper Hudson Basin
Sacandaga Subbasin

LOCATION.--Lat 43°18′41″, long 73°52′04″ referenced to North American Datum of 1927, 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, 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, 2006-07 (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, about 35,500 ft^3/s, Mar. 28, 1913, gage height, 12.36 ft, site and datum then in use; minimum, 4.2 ft^3/s, May 4, 1985, Mar. 30, 31, Apr. 1-10, 11, 13, 14, 15, 1992. Maximum discharge since construction of Conklingville Dam in 1930, 14,200 ft^3/s, Feb. 7, 2006, May 3, 2007; maximum gage height, 9.78 ft, May 3, 2007.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 14,200 ft^3/s, May 3, gage height, 9.78 ft; minimum discharge, 12 ft^3/s, Apr. 13, 14, 15, gage height, 0.44 ft.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	1,560	144	4,230	4,520	7,320	4,060	50	8,200	913	1,620	1,550	1,740
2	1,450	39	736	4,070	7,270	4,070	52	8,550	1,030	1,580	1,590	1,720
3	1,640	39	1,050	4,110	7,240	4,040	53	7,970	2,330	1,690	1,720	1,650
4	1,760	1,190	2,380	4,100	7,230	4,030	59	8,330	3,040	1,710	1,810	1,720
5	2,470	2,050	3,640	4,180	7,190	4,040	55	7,600	2,090	1,700	1,750	1,680
6	3,900	2,790	4,050	3,120	5,410	4,050	50	7,420	1,520	1,690	1,690	1,730
7	3,100	3,430	4,190	74	4,060	4,050	49	4,750	1,200	1,680	1,690	1,670
8	3,070	3,910	4,350	155	4,050	3,550	47	4,250	1,190	1,680	1,740	1,690
9	3,170	3,240	4,370	7,480	4,040	4,050	47	4,400	1,020	1,710	1,700	1,390
10	2,130	3,060	4,190	8,120	4,040	4,030	47	4,200	1,070	1,700	1,690	1,460
11	1,600	3,210	4,430	7,190	4,040	4,030	46	3,820	1,220	1,860	1,730	1,400
12	2,070	3,370	4,670	8,390	4,050	4,040	34	3,330	1,220	1,400	1,780	1,410
13	1,910	2,020	4,560	7,900	4,050	4,040	13	3,230	1,350	1,380	1,750	1,290
14	2,070	1,960	4,750	7,790	4,060	4,050	12	3,340	1,290	1,400	1,670	1,330
15	2,090	2,860	4,500	7,950	4,040	4,040	14	4,090	1,400	1,380	1,730	1,410
16	1,930	3,980	4,260	7,980	4,040	4,050	252	4,130	1,670	1,420	1,710	1,400
17	1,960	8,110	4,250	7,790	4,040	4,040	363	3,600	1,540	1,460	1,710	1,410
18	3,110	9,140	4,310	7,510	4,040	4,050	17	3,270	1,700	1,490	1,720	1,370
19	3,020	8,460	4,500	7,630	4,050	2,540	140	3,710	1,680	1,420	1,790	1,380
20	2,330	8,490	4,480	7,570	4,050	2,930	285	3,680	1,660	1,450	1,710	1,400
21	50	7,610	4,730	7,710	4,050	2,410	17	3,870	1,570	1,490	1,720	1,430
22	170	4,100	3,870	7,610	4,050	2,590	16	3,950	1,440	1,440	1,760	1,400
23	41	3,890	4,500	7,550	4,050	4,030	119	2,500	1,530	1,440	1,670	1,400
24	1,170	4,370	4,060	7,530	4,040	4,090	256	1,120	1,520	1,440	1,740	1,400
25	1,970	4,430	3,730	7,500	4,040	4,020	157	1,110	1,550	1,420	1,670	1,550
26	2,390	4,300	3,810	7,450	4,040	2,080	4,450	1,050	1,730	1,400	1,720	1,530
27	2,720	4,440	3,280	7,400	4,060	1,560	7,560	1,050	1,550	1,420	1,710	1,570
28	2,220	4,450	3,140	7,380	4,090	144	8,490	876	1,590	1,410	1,720	1,380
29	64	4,190	3,570	7,390	---	230	8,530	849	1,600	1,410	1,690	1,360
30	58	4,180	4,060	7,390	---	51	8,270	1,260	1,610	1,410	1,730	1,380
31	89	---	4,240	7,350	---	51	---	853	---	1,590	1,730	---
Total	57,282	117,452	120,886	199,889	130,730	99,036	39,550	120,358	45,823	47,290	53,090	44,650
Mean	1,848	3,915	3,900	6,448	4,669	3,195	1,318	3,883	1,527	1,525	1,713	1,488
Max	3,900	9,140	4,750	8,390	7,320	4,090	8,530	8,550	3,040	1,860	1,810	1,740
Min	41	39	736	74	4,040	51	12	849	913	1,380	1,550	1,290
Adjusted for change in contents in Great Sacandaga Lake and Stewarts Bridge Pool												
Mean	4871	4136	3392	4409	872	3428	8589	2198	367	544	139	189
Cfsm	4.62	3.92	3.22	4.18	0.83	3.25	8.14	2.08	0.35	0.52	0.13	0.18
In	5.32	4.37	3.71	4.82	0.86	3.75	9.08	2.40	0.39	0.59	0.15	0.20

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 2007, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	1,938	2,237	2,549	2,821	2,859	2,034	1,149	2,437	2,079	1,957	1,920	1,839
Max	5,149	5,177	4,935	6,448	4,910	3,921	5,691	7,035	5,203	5,575	3,013	2,846
(WY)	(1946)	(1976)	(1960)	(2007)	(1973)	(1972)	(1979)	(1983)	(1947)	(2006)	(1935)	(1994)
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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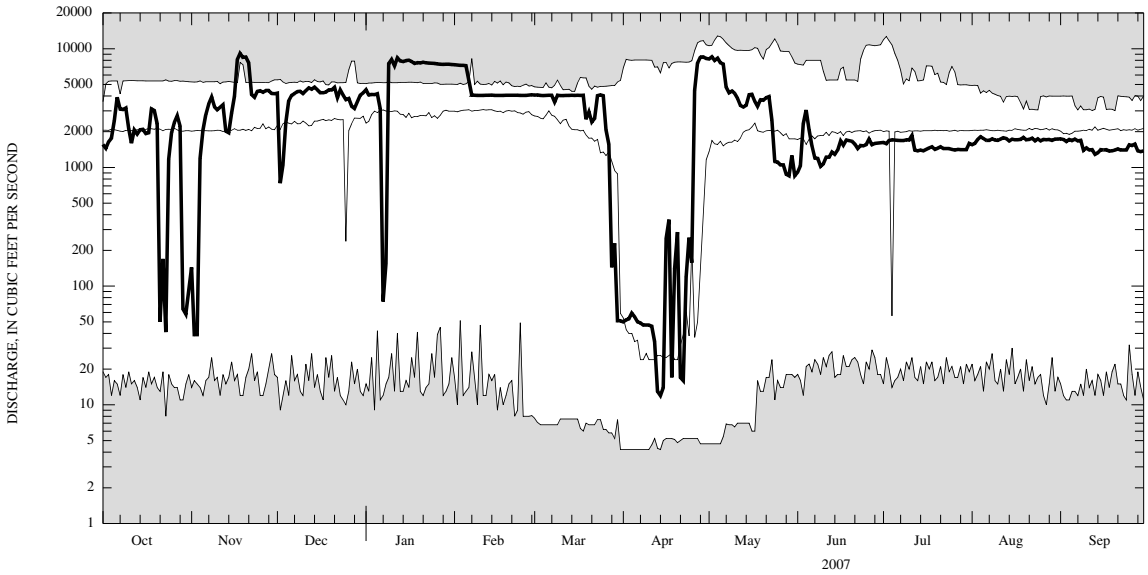
SUMMARY STATISTICS

	Calendar Year 2006		Water Year 2007		Water Years 1931 - 2007	
Annual total	1,187,768		1,076,036			
Annual mean	3,254		2,948		2,150	
Annual mean (adjusted)	3,333		2,770			
Highest annual mean					3,452	1976
Lowest annual mean					1,122	1965
Highest daily mean	12,700	Jul 2	9,140	Nov 18	12,800	May 4, 1983
Lowest daily mean	10	May 10	12	Apr 14	4.2	Mar 31, 1992
Annual seven-day minimum	171	Jan 19	30	Apr 9	4.2	Mar 31, 1992
Annual runoff (cfsm, adjusted)*	3.16		2.63			
Annual runoff (inches, adjusted)*	42.88		35.65			
10 percent exceeds	4,950		7,360		4,070	
50 percent exceeds	3,640		2,020		2,070	
90 percent exceeds	1,060		243		35	

* 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.