

**04237500 SENECA RIVER AT BALDWINVILLE, NY**

Oswego Basin  
Seneca Subbasin

LOCATION.--Lat 43°09'25", long 76°19'54" referenced to North American Datum of 1983, Onondaga County, NY, Hydrologic Unit 04140201, on left bank 200 ft downstream from bridge on State Highways 31 and 48 in Baldwinsville, and 400 ft downstream from navigation dam at Lock 24 of New York State Erie (Barge) Canal.

DRAINAGE AREA.--3,138 mi<sup>2</sup>.

**SURFACE-WATER RECORDS**

PERIOD OF RECORD.--November 1949 to current year. November 1898 to December 1908, prior to construction of Erie (Barge) Canal, not equivalent to later records at same site because of extensive development of Erie (Barge) Canal system. January 1909 to September 1925 (gage heights only) in reports of State Engineer and Surveyor.

REVISED RECORDS.--WDR NY-78-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 361.38 ft above NGVD of 1929 (362.60 ft Erie (Barge) Canal Datum). Prior to Dec. 31, 1908, nonrecording gage at same site at different datum. Auxiliary water-stage recorder 1,500 ft downstream from base gage at same datum.

COOPERATION.--Records of lockages at Lock 24 furnished by New York State Thruway Authority, Office of Canals.

REMARKS.--No estimated daily discharges. Records good except those below 500 ft<sup>3</sup>/s, which are poor. Discharge from 1898 to 1908 determined on basis of head on dam, flow through 10 mills nearby, lockages at Oswego Canal lock, estimated leakage of dam, wheel gates, flumes, and penstocks; not adjusted for inflow from Lake Erie through Erie (Barge) Canal. Discharge, from November 1949 to September 1996, computed by using fall as determined by auxiliary water-stage recorder. Records from October 1996 to current, computed by using standard stage-discharge methods. Published discharge represents the total flow at Baldwinsville and includes flow in Erie (Barge) Canal. A large amount of natural storage and some artificial regulation is afforded by many large lakes and the Erie (Barge) Canal system in the river basin. Large diurnal fluctuations at low and medium flows caused by powerplants upstream from station. Seneca River basin receives water from Erie (Barge) Canal through Lock 32 near Pittsford. During part of year, entire flow from 45.5 mi<sup>2</sup> of Mud Creek drainage area may be diverted from Chemung River basin into Keuka Lake in Oswego River basin. Telephone and satellite gage-height telemeters at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 18,100 ft<sup>3</sup>/s, Apr. 27, 1993, maximum gage height, 9.63 ft, Apr. 26, 27, 1993; minimum daily discharge, 34 ft<sup>3</sup>/s, Sept. 17, 1985, result of extreme regulation. Maximum and minimum instantaneous discharges not determined.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum daily discharge, 22,100 ft<sup>3</sup>/s on Mar. 25, 1936, provided by New York State Department of Transportation.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 9,170 ft<sup>3</sup>/s, Jan. 29, maximum gage height, 4.89 ft, Jan. 28; minimum daily discharge 144 ft<sup>3</sup>/s, July 21. Maximum and minimum instantaneous discharges not determined.

## 04237500 SENECA RIVER AT BALDWINVILLE, NY—Continued

**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	4,040	5,550	6,870	6,160	7,930	3,210	1,240	1,590	2,420	864	263	545
2	3,410	5,540	6,860	6,140	7,780	4,420	1,210	1,900	1,720	808	474	707
3	3,660	5,490	6,740	5,940	7,590	4,980	1,230	2,440	1,460	754	918	727
4	4,390	5,420	6,590	5,850	7,320	4,790	1,350	2,740	1,320	711	1,010	712
5	4,980	5,190	6,430	5,800	7,030	4,110	1,260	4,010	1,160	316	846	886
6	3,940	4,450	6,490	5,800	6,850	2,810	838	3,860	1,130	87	432	940
7	3,230	3,450	6,640	5,850	6,650	2,050	590	2,840	1,090	157	211	927
8	3,410	2,900	6,750	5,780	6,440	1,440	354	2,890	1,030	438	614	895
9	3,450	2,410	6,640	5,080	6,230	1,460	653	3,760	909	546	943	857
10	3,210	2,100	6,480	5,350	6,100	2,030	840	4,110	926	726	930	811
11	3,000	2,370	6,180	5,560	5,960	2,240	945	3,430	1,550	1,150	821	780
12	3,090	3,000	5,930	5,940	5,770	2,100	928	2,990	2,050	567	759	762
13	2,950	3,730	5,750	6,800	5,680	1,890	868	2,880	2,120	123	377	767
14	2,470	4,510	6,030	7,210	5,520	1,720	837	2,870	2,160	251	275	647
15	2,400	5,340	6,440	7,100	5,370	1,530	634	2,700	2,320	785	1,010	645
16	3,450	5,940	6,780	6,650	4,450	1,680	364	2,740	2,300	1,250	1,210	651
17	4,350	6,100	6,780	6,690	3,310	1,980	641	2,050	1,880	1,060	1,080	790
18	4,520	6,010	6,720	7,380	3,030	2,070	857	1,240	1,490	954	912	1,200
19	3,900	5,590	6,590	7,740	3,190	2,050	1,000	1,100	1,520	948	602	1,120
20	3,540	5,340	6,200	7,500	3,250	1,980	864	1,250	1,670	436	487	801
21	3,930	5,290	6,000	6,750	2,910	1,870	472	1,410	1,840	144	518	665
22	4,730	5,410	6,130	6,250	2,210	1,800	920	1,930	1,890	266	656	657
23	4,810	6,130	6,410	6,210	1,990	1,610	1,680	2,390	1,970	435	874	710
24	4,750	6,820	6,470	6,450	1,650	1,240	2,790	2,620	1,830	997	887	705
25	4,650	6,950	6,480	6,670	1,670	1,060	4,130	2,580	1,500	1,090	903	822
26	4,470	6,570	6,350	6,660	1,880	1,130	3,810	2,510	1,240	1,000	921	893
27	4,640	6,200	6,250	7,590	2,320	1,090	3,040	2,280	978	1,030	873	855
28	5,320	6,230	6,480	9,050	2,830	1,040	2,290	2,260	328	1,020	902	728
29	6,040	6,470	6,370	9,170	2,880	1,040	1,640	2,370	70	1,010	856	614
30	6,000	6,840	6,280	8,880	---	1,040	1,490	2,360	592	900	756	636
31	5,690	---	6,230	8,200	---	1,170	---	2,430	---	446	603	---
<b>Total</b>	126,420	153,340	199,340	208,200	135,790	64,630	39,765	78,530	44,463	21,269	22,923	23,455
<b>Mean</b>	4,078	5,111	6,430	6,716	4,682	2,085	1,326	2,533	1,482	686	739	782
<b>Max</b>	6,040	6,950	6,870	9,170	7,930	4,980	4,130	4,110	2,420	1,250	1,210	1,200
<b>Min</b>	2,400	2,100	5,750	5,080	1,650	1,040	354	1,100	70	87	211	545

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 2012, BY WATER YEAR (WY)**

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Mean</b>	2,230	3,436	4,582	4,214	4,098	5,879	5,946	4,036	2,701	1,969	1,524	1,549
<b>Max</b>	11,020	9,491	10,330	8,807	8,342	11,650	15,610	10,550	6,456	12,100	6,214	7,523
<b>(WY)</b>	(1978)	(1978)	(1978)	(1978)	(2006)	(1956)	(1993)	(2011)	(1972)	(1972)	(1992)	(2004)
<b>Min</b>	572	675	778	805	965	1,606	1,317	719	592	621	576	421
<b>(WY)</b>	(1986)	(1958)	(1961)	(1954)	(1980)	(1965)	(1981)	(1995)	(1995)	(1985)	(2001)	(1995)

04237500 SENECA RIVER AT BALDWINVILLE, NY—Continued

SUMMARY STATISTICS

	Calendar Year 2011		Water Year 2012		Water Years 1950 - 2012	
<b>Annual total</b>	1,883,056		1,118,125			
<b>Annual mean</b>	5,159		3,055		3,508	
<b>Highest annual mean</b>					5,998	1978
<b>Lowest annual mean</b>					1,357	1965
<b>Highest daily mean</b>	13,800	Apr 29	9,170	Jan 29	18,100	Apr 27, 1993
<b>Lowest daily mean</b>	355	Sep 1	70	Jun 29	34	Sep 17, 1985
<b>Annual seven-day minimum</b>	643	Jul 19	426	Jul 4	283	Sep 23, 1988
<b>10 percent exceeds</b>	11,000		6,590		7,780	
<b>50 percent exceeds</b>	4,520		2,250		2,440	
<b>90 percent exceeds</b>	1,060		644		835	

