

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 mi².

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 ft³/s, which are poor. Discharge from November 1898 to December 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 mi² 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 ft³/s, Apr. 27, 1993, maximum gage height, 9.63 ft, Apr. 26, 27, 1993; minimum daily discharge, 34 ft³/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 ft³/s, Mar. 25, 1936, provided by New York State Department of Transportation.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 8,760 ft³/s, Apr. 15, maximum gage height, 4.74 ft, Apr. 15; minimum daily discharge 306 ft³/s, Oct. 5. Maximum and minimum instantaneous discharges not determined.

04237500 SENECA RIVER AT BALDWINVILLE, NY—Continued

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

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	1,060	2,090	1,280	5,020	5,440	3,440	1,460	1,750	3,800	3,950	3,270	1,220
2	1,190	1,640	1,130	5,020	5,640	3,920	1,640	1,290	3,560	3,910	2,540	1,310
3	941	1,500	993	5,060	4,940	3,720	1,780	1,150	3,440	4,520	2,260	1,270
4	658	1,390	2,390	5,380	4,460	3,320	2,020	1,460	2,560	5,780	2,020	1,630
5	306	1,440	3,270	5,540	4,100	2,900	1,640	1,480	1,940	6,430	1,180	2,470
6	747	1,660	3,290	5,720	4,240	2,440	1,280	1,400	3,020	6,000	515	2,440
7	1,040	1,310	3,220	5,740	4,300	2,080	1,220	1,430	6,250	5,350	677	2,250
8	881	1,420	3,160	5,680	4,320	2,060	1,280	1,680	7,250	4,930	961	2,230
9	631	1,360	2,920	5,600	4,480	2,140	1,220	1,680	7,520	4,970	2,080	2,250
10	1,200	1,450	3,020	5,540	4,420	2,300	1,640	2,080	7,250	5,090	4,450	2,400
11	1,040	1,610	3,540	5,540	4,420	2,800	3,720	2,620	6,820	5,000	4,770	2,530
12	689	1,620	3,700	5,980	4,480	3,940	6,080	3,130	6,720	4,620	4,590	1,820
13	526	1,950	3,720	6,940	4,700	4,360	7,860	3,120	7,220	3,410	3,870	1,270
14	1,180	2,710	3,640	7,600	4,740	4,300	8,570	2,640	8,260	2,570	3,100	1,480
15	1,300	1,980	3,400	7,460	4,380	3,840	8,760	1,810	8,420	2,380	3,120	1,810
16	975	1,360	3,200	7,220	4,400	3,100	8,370	1,420	8,250	1,660	2,820	1,330
17	914	1,150	3,200	6,900	4,540	2,320	7,920	1,560	7,500	1,350	1,690	1,020
18	1,100	969	4,060	6,460	4,440	2,020	7,540	1,630	6,080	1,870	1,440	1,150
19	952	900	5,080	6,180	3,080	1,940	7,060	1,600	4,960	1,790	1,710	1,160
20	1,030	2,330	5,140	6,120	2,400	1,840	6,660	1,570	3,600	1,560	1,790	1,100
21	986	2,530	5,400	5,880	1,800	1,740	6,310	1,600	2,780	1,630	1,850	1,100
22	1,020	1,680	5,740	5,760	1,660	1,740	6,100	2,020	2,110	1,570	1,820	1,610
23	1,080	1,550	5,720	5,220	1,540	1,720	5,970	2,890	1,540	1,540	1,360	2,400
24	726	1,450	5,620	5,040	1,540	1,660	6,000	3,490	2,170	1,470	883	2,230
25	981	1,460	5,500	3,040	1,840	1,720	5,770	3,660	3,720	1,240	967	2,090
26	1,990	1,520	5,260	1,480	1,620	1,800	3,800	3,300	4,420	1,270	1,050	1,680
27	3,650	2,820	5,160	1,380	1,460	1,900	2,320	2,430	4,740	1,440	1,260	1,300
28	4,460	3,880	4,940	1,540	2,100	1,860	1,810	1,730	4,280	1,740	1,640	1,240
29	5,050	3,830	4,920	2,180	---	1,760	1,770	2,640	3,790	1,900	1,260	1,280
30	5,230	2,020	4,980	3,200	---	1,640	1,770	4,490	3,740	1,820	1,180	1,390
31	3,150	---	5,080	4,200	---	1,620	---	4,810	---	2,580	1,210	---
Total	46,683	54,579	121,673	159,620	101,480	77,940	129,340	69,560	147,710	95,340	63,333	50,460
Mean	1,506	1,819	3,925	5,149	3,624	2,514	4,311	2,244	4,924	3,075	2,043	1,682
Max	5,230	3,880	5,740	7,600	5,640	4,360	8,760	4,810	8,420	6,430	4,770	2,530
Min	306	900	993	1,380	1,460	1,620	1,220	1,150	1,540	1,240	515	1,020

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 2013, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	2,218	3,411	4,572	4,229	4,091	5,826	5,921	4,008	2,736	1,986	1,532	1,551
Max	11,020	9,491	10,330	8,807	8,342	11,650	15,610	10,550	6,456	12,100	6,214	7,523
(WY)	(1978)	(1978)	(1978)	(1978)	(2006)	(1956)	(1993)	(2011)	(1972)	(1972)	(1992)	(2004)
Min	572	675	778	805	965	1,606	1,317	719	592	621	576	421
(WY)	(1986)	(1958)	(1961)	(1954)	(1980)	(1965)	(1981)	(1995)	(1995)	(1985)	(2001)	(1995)

04237500 SENECA RIVER AT BALDWINVILLE, NY—Continued

SUMMARY STATISTICS

	Calendar Year 2012		Water Year 2013		Water Years 1950 - 2013	
Annual total	861,960		1,117,718			
Annual mean	2,355		3,062		3,501	
Highest annual mean					5,998 1978	
Lowest annual mean					1,357 1965	
Highest daily mean	9,170	Jan 29	8,760	Apr 15	18,100	Apr 27, 1993
Lowest daily mean	70	Jun 29	306	Oct 5	34	Sep 17, 1985
Annual seven-day minimum	426	Jul 4	743	Oct 3	283	Sep 23, 1988
10 percent exceeds	5,820		5,920		7,750	
50 percent exceeds	1,500		2,320		2,440	
90 percent exceeds	633		1,150		838	

