

04237500 SENECA RIVER AT BALDWINVILLE, NY

LOCATION.--Lat 43°09'25", long 76°19'55", Onondaga County, 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>.

PERIOD OF RECORD.--November 1949 to current year in reports of Geological Survey. 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.

REMARKS.--Records good except those for estimated daily discharges, which are fair. 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, since November 1949, computed by using fall as determined by auxiliary water-stage recorder. 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.

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

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 discharge not determined.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 11,000 ft<sup>3</sup>/s, Sept. 12, maximum gage height, 5.71 ft, Sept. 12; minimum daily discharge, 188 ft<sup>3</sup>/s, Oct. 13. Maximum and minimum instantaneous discharge not determined.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3,290	4,750	7,760	9,780	3,540	1,940	7,210	6,550	8,230	876	5,960	5,390
2	3,260	4,450	7,500	9,520	2,840	2,460	7,220	6,520	8,170	980	4,990	5,980
3	2,780	4,480	6,940	9,360	2,490	5,070	7,440	7,090	8,150	980	4,610	6,040
4	2,530	4,780	6,250	9,220	3,470	7,290	7,920	7,520	7,930	973	4,360	6,090
5	2,560	4,730	5,730	9,100	3,430	8,800	8,270	7,530	7,740	957	4,190	5,790
6	2,510	4,640	5,280	9,010	3,450	9,790	8,230	7,350	7,130	938	3,600	5,550
7	1,990	4,570	4,830	8,790	3,430	9,800	8,100	7,230	6,240	425	3,290	5,540
8	1,610	4,440	4,600	8,480	2,930	9,570	7,880	7,040	5,540	790	3,430	5,750
9	1,220	4,350	4,560	7,760	2,680	9,170	7,110	7,000	5,010	1,180	3,470	7,830
10	909	3,540	4,580	7,640	3,130	8,600	5,910	6,960	4,820	1,360	3,250	10,100
11	955	3,120	5,190	8,210	3,390	7,680	5,010	6,800	4,140	1,350	2,790	10,800
12	548	3,160	6,410	8,520	3,140	7,170	3,760	6,670	3,950	1,970	2,310	11,000
13	188	3,550	6,830	8,030	2,980	6,610	3,500	6,560	3,940	2,350	2,400	10,900
14	221	3,880	6,990	7,320	3,150	6,040	5,510	6,560	4,080	2,810	2,650	10,600
15	1,130	4,090	6,870	6,750	3,270	5,740	7,290	6,420	3,960	4,200	2,350	9,760
16	922	4,150	6,180	7,130	2,860	5,520	8,460	6,590	3,380	4,470	2,140	8,600
17	735	4,190	6,170	7,270	2,250	5,320	8,790	6,690	2,460	4,180	2,090	7,080
18	496	4,290	6,590	7,560	e2,200	5,140	8,710	6,800	2,190	3,440	1,710	6,540
19	282	4,450	6,770	7,950	e2,000	5,110	8,550	6,780	2,300	3,430	1,850	6,790
20	723	5,820	6,910	7,670	e1,900	5,020	8,320	6,430	2,610	3,500	2,240	7,620
21	1,000	6,940	6,780	7,300	e1,900	5,150	8,220	5,750	2,750	3,480	2,490	7,990
22	1,010	7,490	6,390	6,960	e1,900	5,260	8,160	5,430	2,270	3,570	2,990	7,950
23	662	7,290	6,140	6,550	e1,900	5,420	7,960	5,430	1,670	3,620	2,480	8,170
24	531	6,740	7,410	5,920	e2,000	5,350	8,040	7,300	1,460	3,540	2,990	7,990
25	819	6,470	9,420	6,000	e2,100	5,300	7,910	8,870	1,500	3,420	3,420	7,670
26	779	6,110	10,100	6,330	2,070	5,440	7,580	9,210	1,680	2,810	3,190	7,160
27	1,170	5,630	10,300	6,350	2,130	6,900	7,320	9,410	1,670	3,670	2,490	6,820
28	2,400	5,540	10,300	6,220	2,040	7,590	7,130	9,700	1,410	6,920	1,990	6,490
29	4,470	6,550	10,200	4,980	2,320	7,790	7,030	9,320	1,400	8,620	2,410	6,160
30	5,280	7,230	10,100	4,430	---	7,710	6,840	8,840	1,130	8,110	3,650	5,550
31	4,990	---	10,000	3,830	---	7,490	---	8,370	---	7,090	5,030	---
TOTAL	51,970	151,420	220,080	229,940	76,890	201,240	219,380	224,720	118,910	96,009	96,810	225,700
MEAN	1,676	5,047	7,099	7,417	2,651	6,492	7,313	7,249	3,964	3,097	3,123	7,523
MAX	5,280	7,490	10,300	9,780	3,540	9,800	8,790	9,700	8,230	8,620	5,960	11,000
MIN	188	3,120	4,560	3,830	1,900	1,940	3,500	5,430	1,130	425	1,710	5,390

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 2004, BY WATER YEAR (WY)

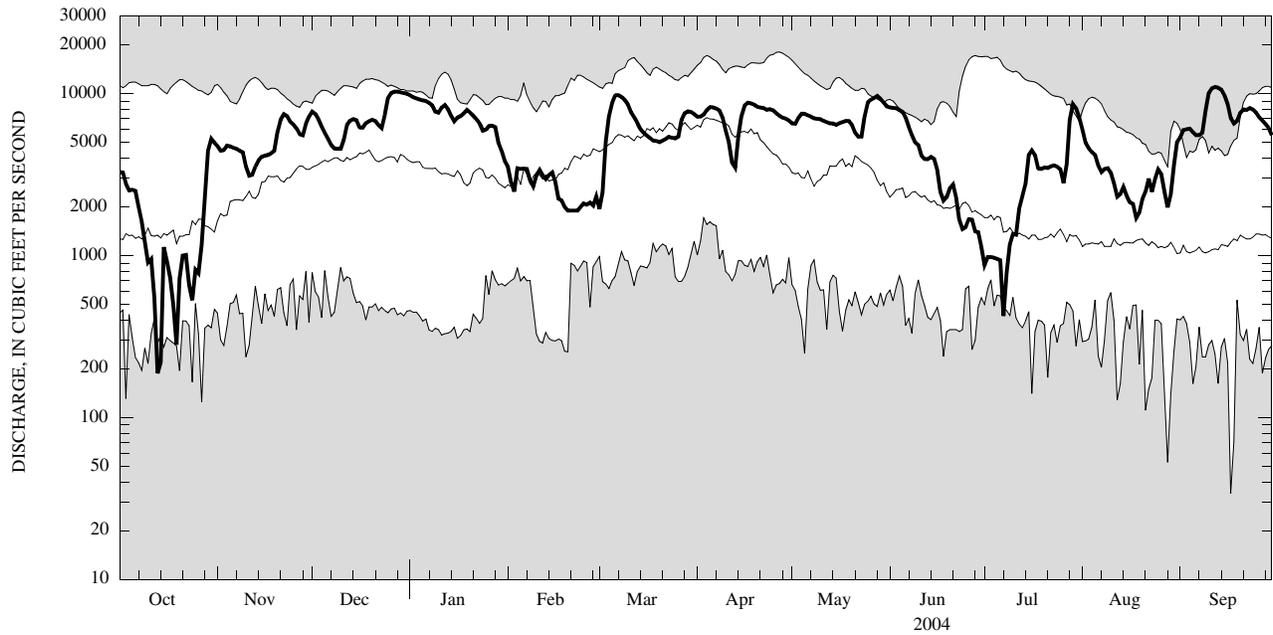
MEAN	2,125	3,339	4,393	3,939	3,890	5,856	6,005	4,078	2,748	1,933	1,552	1,532
MAX	11,020	9,491	10,330	8,807	8,313	11,650	15,610	9,778	6,456	12,100	6,214	7,523
(WY)	(1978)	(1978)	(1978)	(1978)	(1976)	(1956)	(1993)	(1996)	(1972)	(1972)	(1992)	(2004)
MIN	572	675	778	805	965	1,606	1,317	719	592	621	576	421
(WY)	(1986)	(1958)	(1961)	(1954)	(1980)	(1965)	(1981)	(1995)	(1995)	(1985)	(2001)	(1995)

STREAMS TRIBUTARY TO LAKE ONTARIO

04237500 SENECA RIVER AT BALDWINVILLE, NY—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1950 - 2004	
ANNUAL TOTAL	1,508,806		1,913,069		3,444	
ANNUAL MEAN	4,134		5,227		5,998	
HIGHEST ANNUAL MEAN					1,357	
LOWEST ANNUAL MEAN					18,100	
HIGHEST DAILY MEAN	11,500	Apr 7	11,000	Sep 12	1,357	1965
LOWEST DAILY MEAN	188	Oct 13	188	Oct 13	34	Sep 17, 1985
ANNUAL SEVEN-DAY MINIMUM	568	Oct 13	568	Oct 13	283	Sep 23, 1988
10 PERCENT EXCEEDS	8,530		8,560		7,660	
50 PERCENT EXCEEDS	3,860		5,420		2,380	
90 PERCENT EXCEEDS	985		1,650		840	

e Estimated



2004 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.