Water-Data Report 2009

# 04232730 SENECA RIVER NEAR SENECA FALLS, NY

Oswego Basin
Seneca Subbasin

LOCATION.--Lat 42°56′20″, long 76°45′41″ referenced to North American Datum of 1927, Seneca County, NY, Hydrologic Unit 04140201, on right bank, 30 feet upstream of State Highway 89 bridge over Seneca River, about 2 miles downstream from the lock structure at Seneca Falls, NY.

DRAINAGE AREA.--785 $mi^2$.

## SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 2005 to current year.

GAGE.--Acoustic velocity meter and water-stage recorder. Elevation of gage is 376.81 ft above NGVD of 1929.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow regulated by Cayuga/Seneca canal locks 2-3 and Seneca Falls Power Project. Flow affected by backwater from Cayuaga Lake. Telephone and satellite gage height and velocity telemeters at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 2,580 $ft^3/s$, Mar. 27, 2007; minimum daily discharge, 31 $ft^3/s$, Mar. 18, 2006. Maximum and minimum instantaneous discharges not determined.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 2,120 $ft^3/s$, Apr. 1; minimum daily discharge, 67 $ft^3/s$, Sep. 16. Maximum and minimum instantaneous discharges not determined.

**04232730 SENECA RIVER NEAR SENECA FALLS, NY—Continued**

**DISCHARGE, CUBIC FEET PER SECOND**
**WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**
**DAILY MEAN VALUES**
[e, estimated]

| Day | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 86 | 112 | 793 | 1,400 | 216 | e1,100 | 2,120 | 359 | 480 | 605 | 308 | 118 |
| 2 | 81 | 108 | 1,110 | 1,580 | 133 | e1,200 | 1,650 | 143 | 407 | 1,020 | 313 | 145 |
| 3 | 100 | 116 | 1,080 | 1,260 | 358 | e125 | 992 | 109 | 105 | 862 | 254 | 121 |
| 4 | 128 | 130 | 1,160 | e1,350 | 427 | e125 | 877 | 252 | 364 | 407 | 271 | 148 |
| 5 | 107 | 124 | 1,160 | 1,530 | 453 | 132 | 485 | 457 | 310 | 480 | 160 | 202 |
| 6 | 100 | 122 | 937 | 1,390 | 136 | 120 | 1,010 | 120 | 324 | 710 | 152 | 206 |
| 7 | 124 | 125 | 108 | 1,210 | 137 | 237 | 1,090 | 196 | 305 | 658 | 175 | 207 |
| 8 | 187 | 128 | 915 | 1,570 | 200 | 615 | 1,300 | 528 | 112 | 710 | 197 | 169 |
| 9 | 157 | 91 | 1,090 | 1,350 | 533 | 1,150 | 1,410 | 138 | 389 | 550 | 141 | 110 |
| 10 | 156 | 69 | 1,520 | 458 | 934 | 1,160 | 1,040 | 80 | 119 | 525 | 338 | 105 |
| 11 | 140 | 82 | 1,270 | 508 | 1,260 | 1,350 | 118 | 496 | 539 | 393 | 549 | 106 |
| 12 | 144 | 88 | 885 | 832 | 1,700 | 837 | 108 | 406 | 735 | 405 | 329 | 148 |
| 13 | 104 | 92 | e520 | 1,190 | 1,610 | e500 | 1,050 | 451 | 641 | 478 | 163 | 150 |
| 14 | 109 | 113 | 131 | 1,200 | 1,610 | 122 | 780 | 466 | 449 | 418 | 170 | 136 |
| 15 | 143 | 116 | 1,100 | 1,380 | 1,050 | 129 | 513 | 444 | 665 | 406 | 218 | 107 |
| 16 | 192 | 119 | 1,050 | 856 | 924 | 848 | 413 | 155 | 616 | 295 | 307 | 67 |
| 17 | 116 | 302 | 1,080 | 261 | 819 | 802 | 499 | 135 | 582 | 174 | 286 | 114 |
| 18 | 111 | 239 | 1,500 | 384 | 949 | 1,070 | 98 | 705 | 722 | 312 | 118 | 122 |
| 19 | 115 | 357 | 920 | 420 | 1,220 | 1,050 | 105 | 552 | 621 | 359 | 276 | 147 |
| 20 | 105 | 346 | 526 | 377 | 1,130 | 903 | 558 | 571 | 263 | 295 | 357 | 147 |
| 21 | 101 | 459 | 141 | 528 | 1,120 | 118 | 630 | 557 | 325 | 155 | 298 | 147 |
| 22 | 96 | 105 | 1,110 | 536 | 579 | 114 | 101 | 432 | 193 | 256 | 241 | 129 |
| 23 | 103 | 110 | 1,470 | 237 | 408 | 603 | 76 | 179 | 297 | 253 | 133 | 105 |
| 24 | 106 | 517 | 623 | 137 | 433 | e810 | 371 | 178 | 421 | 258 | 262 | 151 |
| 25 | 177 | 913 | 392 | 166 | 277 | 1,010 | 102 | 162 | 562 | 171 | 140 | 115 |
| 26 | 138 | 1,100 | 831 | 541 | 460 | 1,120 | 125 | 560 | 629 | 184 | 221 | 144 |
| 27 | 110 | 121 | 1,530 | 543 | 126 | 939 | 446 | 685 | 359 | 140 | 108 | 129 |
| 28 | 239 | 647 | 1,520 | 699 | e125 | 117 | 112 | 808 | 376 | 397 | 129 | 80 |
| 29 | 105 | 116 | 1,630 | 667 | --- | 133 | 101 | 678 | 691 | 388 | 139 | 97 |
| 30 | 83 | 136 | 1,540 | 836 | --- | 1,120 | 584 | 281 | 660 | 198 | 128 | 101 |
| 31 | 105 | --- | 1,580 | 350 | --- | 1,590 | --- | 114 | --- | 300 | 91 | --- |
| Total | 3,868 | 7,203 | 31,222 | 25,746 | 19,327 | 21,249 | 18,864 | 11,397 | 13,261 | 12,762 | 6,972 | 3,973 |
| Mean | 125 | 240 | 1,007 | 831 | 690 | 685 | 629 | 368 | 442 | 412 | 225 | 132 |
| Max | 239 | 1,100 | 1,630 | 1,580 | 1,700 | 1,590 | 2,120 | 808 | 735 | 1,020 | 549 | 207 |
| Min | 81 | 69 | 108 | 137 | 125 | 114 | 76 | 80 | 105 | 140 | 91 | 67 |

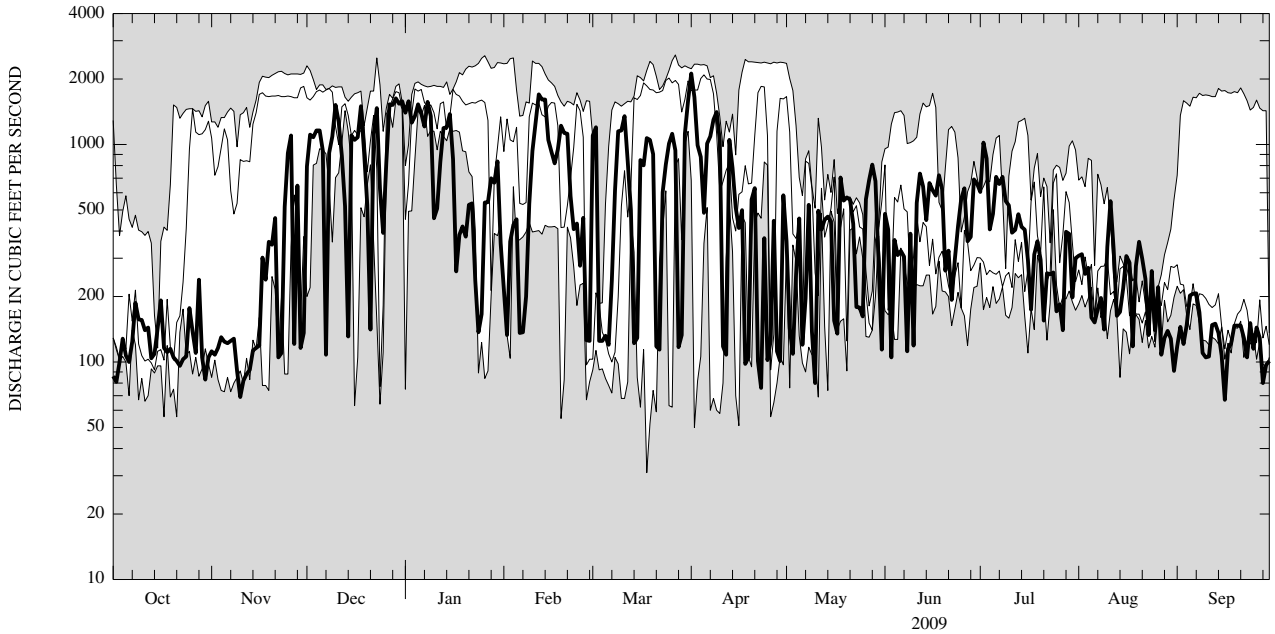
**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2006 - 2009, BY WATER YEAR (WY)**

| | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mean | 361 | 850 | 1,215 | 1,246 | 976 | 954 | 1,033 | 461 | 517 | 450 | 251 | 148 |
| Max | 840 | 1,661 | 1,461 | 1,948 | 1,422 | 1,577 | 2,015 | 665 | 1,052 | 793 | 365 | 161 |
| (WY) | (2007) | (2007) | (2006) | (2006) | (2006) | (2008) | (2007) | (2007) | (2006) | (2006) | (2006) | (2008) |
| Min | 117 | 152 | 1,007 | 831 | 452 | 255 | 460 | 327 | 254 | 222 | 175 | 132 |
| (WY) | (2008) | (2008) | (2009) | (2009) | (2007) | (2006) | (2006) | (2006) | (2008) | (2007) | (2007) | (2009) |

**04232730 SENECA RIVER NEAR SENECA FALLS, NY—Continued**

**SUMMARY STATISTICS**

| | Calendar Year 2008 | | Water Year 2009 | | Water Years 2006 - 2009 | |
|---|---|---|---|---|---|---|
| **Annual total** | 235,279 | | 175,844 | | | |
| **Annual mean** | 643 | | 482 | | 664 | |
| **Highest annual mean** | | | | | 858 | 2007 |
| **Lowest annual mean** | | | | | 482 | 2009 |
| **Highest daily mean** | 2,410 | Mar 19 | 2,120 | Apr 1 | 2,580 | Mar 27, 2007 |
| **Lowest daily mean** | 69 | Nov 10 | 67 | Sep 16 | 31 | Mar 18, 2006 |
| **Annual seven-day minimum** | 93 | Nov 9 | 93 | Nov 9 | 68 | Mar 15, 2006 |
| **10 percent exceeds** | 1,580 | | 1,150 | | 1,650 | |
| **50 percent exceeds** | 316 | | 324 | | 378 | |
| **90 percent exceeds** | 110 | | 107 | | 112 | |




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.