

WEST BRANCH SUSQUEHANNA RIVER BASIN

01551500 WEST BRANCH SUSQUEHANNA RIVER AT WILLIAMSPORT, PA

LOCATION.--Lat 41°14'10", long 76°59'49", Lycoming County, Hydrologic Unit 02050206, on right bank 100 ft upstream from Market Street bridge at South Williamsport, and 350 ft upstream from Hagermans Run.

DRAINAGE AREA.--5,682 mi².

PERIOD OF RECORD.--March 1895 to current year.

REVISED RECORDS.--WSP 756: Drainage area. WSP 1302: 1925-28. WSP 1502: 1895-1904, 1912-13, 1919.

GAGE.--Water-stage recorder. Datum of gage is 494.98 ft above sea level. Mar. 1, 1895, to Sept. 30, 1928, nonrecording gage at bridge 100 ft downstream at same datum. Prior to July 1980, 100 ft downstream on left bank at same datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow slightly regulated by 6 flood-control reservoirs which have a combined capacity of 440,200 acre-ft. Several measurements of water temperature were made during the year. Satellite and landline telemetry at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known prior to 1895, 32.4 ft, June 1, 1889, discharge, about 252,000 ft³/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|--------|--------|--------|--------|--------|-------|-------|-------|-------|
| 1 | 764 | 990 | 1070 | e1400 | 12700 | 6840 | 20900 | 8440 | 2030 | 2100 | 717 | 998 |
| 2 | 681 | 916 | 943 | e1300 | 12400 | 6920 | 23500 | 7730 | 1930 | 2580 | 682 | 846 |
| 3 | 643 | 791 | 845 | e1200 | 14300 | 7080 | 24400 | 7200 | 1930 | 2240 | 698 | 716 |
| 4 | 760 | 772 | 828 | e1200 | 16200 | 28000 | 22800 | 6700 | 1950 | 2310 | 658 | 673 |
| 5 | 789 | 768 | 828 | e1200 | 16500 | 33300 | 21300 | 6290 | 1950 | 2040 | 661 | 644 |
| 6 | 790 | 768 | 806 | e1300 | 16100 | 27200 | 17700 | 5910 | 1890 | 1660 | 661 | 682 |
| 7 | 798 | 755 | 789 | e1300 | 15100 | 21800 | 16000 | 5510 | 1810 | 1350 | 628 | 4930 |
| 8 | 1080 | 715 | 761 | e1300 | 13800 | 16800 | 13800 | 5560 | 1720 | 1180 | 661 | 2630 |
| 9 | 1820 | 708 | 768 | e1400 | 12600 | 13600 | 12600 | 5770 | 1580 | 1110 | 663 | 1770 |
| 10 | 3070 | 747 | 760 | e1400 | 12600 | 12300 | 17100 | 5780 | 1520 | 1280 | 676 | 1630 |
| 11 | 3030 | 918 | 738 | e1500 | 11700 | 11400 | 25900 | 5330 | 1470 | 1200 | 678 | 1340 |
| 12 | 2580 | 887 | 741 | 1640 | 11400 | 10200 | 29100 | 4820 | 1410 | 1160 | 647 | 1130 |
| 13 | 1970 | 980 | 750 | 1760 | 12600 | 9280 | 27500 | 4500 | 1360 | 1200 | 704 | 1010 |
| 14 | 1640 | 1070 | 728 | 2060 | 13500 | 8720 | 22800 | 4200 | 1340 | 1110 | 808 | 968 |
| 15 | 1350 | 1130 | 726 | 2530 | 12800 | 8430 | 18600 | 3970 | 1280 | 1060 | 831 | 1000 |
| 16 | 1240 | 1050 | 706 | 2950 | 11900 | 8220 | 16000 | 3710 | 1220 | 960 | 786 | 1840 |
| 17 | 1170 | 1090 | 699 | 4360 | 11500 | 8400 | 14800 | 3490 | 1340 | 880 | 1000 | 6550 |
| 18 | 1110 | 1100 | 689 | 4460 | 11600 | 11000 | 14000 | 3310 | 1560 | 827 | 1250 | 4280 |
| 19 | 1030 | 1080 | 751 | e8000 | 11800 | 17000 | 12600 | 3180 | 1600 | 817 | 1050 | 3020 |
| 20 | 969 | 1090 | 752 | 9600 | 11400 | 20200 | 11800 | 3070 | 1420 | 846 | 1170 | 2530 |
| 21 | 913 | 1070 | 785 | 11400 | 10700 | 18400 | 11700 | 2970 | 1270 | 854 | 1080 | 2330 |
| 22 | 871 | 1050 | e900 | 12100 | 9430 | 18700 | 11200 | 2810 | 1190 | 975 | 975 | 2110 |
| 23 | 822 | 1080 | 2800 | 10200 | 8140 | 19500 | 11400 | 2920 | 1120 | 915 | 889 | 2000 |
| 24 | 925 | 1020 | 6320 | e40000 | 7250 | 18100 | 12700 | 3050 | 1060 | 846 | 856 | 1700 |
| 25 | 1510 | 997 | 4970 | 64600 | 6850 | 16800 | 14400 | 3230 | 1010 | 846 | 878 | 1510 |
| 26 | 1420 | 1100 | 2980 | 46100 | 6610 | 16500 | 13900 | 3530 | 988 | 881 | 836 | 1340 |
| 27 | e1300 | 1060 | 2170 | e32000 | 6380 | 15800 | 12900 | 3790 | 942 | 951 | 826 | 1250 |
| 28 | 1230 | 1080 | 1850 | e25000 | 6340 | 15500 | 11800 | 3360 | 1360 | 901 | 751 | 1220 |
| 29 | 1190 | 1100 | e1700 | 19500 | --- | 16500 | 10700 | 2770 | 1810 | 822 | 725 | 1190 |
| 30 | 1170 | 1100 | e1800 | 16900 | --- | 18500 | 9460 | 2390 | 1980 | 802 | 1030 | 3740 |
| 31 | 1090 | --- | e1800 | 15200 | --- | 20100 | --- | 2190 | --- | 752 | 1220 | --- |
| TOTAL | 39725 | 28982 | 43753 | 344860 | 324200 | 481090 | 503360 | 137480 | 45040 | 37455 | 25695 | 57577 |
| MEAN | 1281 | 966 | 1411 | 11120 | 11580 | 15520 | 16780 | 4435 | 1501 | 1208 | 829 | 1919 |
| MAX | 3070 | 1130 | 6320 | 64600 | 16500 | 33300 | 29100 | 8440 | 2030 | 2580 | 1250 | 6550 |
| MIN | 643 | 708 | 689 | 1200 | 6340 | 6840 | 9460 | 2190 | 942 | 752 | 628 | 644 |
| CFSM | .23 | .17 | .25 | 1.96 | 2.04 | 2.73 | 2.95 | .78 | .26 | .21 | .15 | .34 |
| IN. | .26 | .19 | .29 | 2.26 | 2.12 | 3.15 | 3.30 | .90 | .29 | .25 | .17 | .38 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1895 - 1999, BY WATER YEAR (WY)

| | | | | | | | | | | | | |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| MEAN | 4193 | 7097 | 8877 | 9837 | 10640 | 20050 | 18350 | 12330 | 7091 | 4064 | 2846 | 2749 |
| MAX | 20850 | 28330 | 24140 | 30210 | 29100 | 62970 | 51090 | 32030 | 37400 | 20080 | 16450 | 20280 |
| (WY) | 1991 | 1951 | 1928 | 1937 | 1981 | 1936 | 1993 | 1919 | 1972 | 1902 | 1994 | 1975 |
| MIN | 416 | 408 | 642 | 423 | 1965 | 5559 | 4633 | 2766 | 1501 | 847 | 592 | 425 |
| (WY) | 1931 | 1931 | 1931 | 1931 | 1931 | 1969 | 1946 | 1941 | 1999 | 1966 | 1910 | 1932 |

e Estimated.

WEST BRANCH SUSQUEHANNA RIVER BASIN

01551500 WEST BRANCH SUSQUEHANNA RIVER AT WILLIAMSPORT, PA--Continued

| SUMMARY STATISTICS | FOR 1998 CALENDAR YEAR | | | FOR 1999 WATER YEAR | | | WATER YEARS 1895 - 1999 | |
|--------------------------|------------------------|-----|----|---------------------|-----|----|-------------------------|-------------|
| ANNUAL TOTAL | 3194513 | | | 2069217 | | | 9010 | |
| ANNUAL MEAN | 8752 | | | 5669 | | | 14010 | |
| HIGHEST ANNUAL MEAN | | | | | | | 14010 | 1928 |
| LOWEST ANNUAL MEAN | | | | | | | 5357 | 1934 |
| HIGHEST DAILY MEAN | 89900 | Jan | 9 | 64600 | Jan | 25 | 240000 | Jun 23 1972 |
| LOWEST DAILY MEAN | 643 | Oct | 3 | 628 | Aug | 7 | 251 | Sep 13 1932 |
| ANNUAL SEVEN-DAY MINIMUM | 702 | Sep | 19 | 658 | Aug | 4 | 328 | Nov 25 1930 |
| INSTANTANEOUS PEAK FLOW | | | | e72000 | Jan | 24 | a279000 | Jun 23 1972 |
| INSTANTANEOUS PEAK STAGE | | | | b16.08 | Jan | 24 | 34.75 | Jun 23 1972 |
| INSTANTANEOUS LOW FLOW | | | | | | | 162 | Sep 17 1943 |
| ANNUAL RUNOFF (CFSM) | 1.54 | | | 1.00 | | | 1.59 | |
| ANNUAL RUNOFF (INCHES) | 20.91 | | | 13.55 | | | 21.54 | |
| 10 PERCENT EXCEEDS | 24600 | | | 16300 | | | 21000 | |
| 50 PERCENT EXCEEDS | 2980 | | | 1640 | | | 5040 | |
| 90 PERCENT EXCEEDS | 761 | | | 758 | | | 1040 | |

- a From rating curve extended above 210,000 ft³/s on basis of slope-area measurement at gage height 33.57 ft.
- b Ice jam.
- e Estimated.

