

WEST BRANCH SUSQUEHANNA RIVER BASIN

01545500 WEST BRANCH SUSQUEHANNA RIVER AT RENOVO, PA

LOCATION.--Lat 41°19'28", long 77°45'03", Clinton County, Hydrologic Unit 02050203, on right bank at abandoned Eighth Street bridge abutment at South Renovo, and 1.0 mi upstream from Paddy Run.

DRAINAGE AREA.--2,975 mi².

PERIOD OF RECORD.--October 1907 to current year. Gage height records collected July 1895 to December 1903 and October 1905 to September 1974 are contained in reports of U.S. Weather Bureau.

REVISED RECORDS.--WSP 756: Drainage area. WSP 1302: 1908-10, 1912-13, 1914-15(M). WSP 2103: 1968 (monthly mean). WDR PA-88-2: 1987.

GAGE.--Water-stage recorder. Datum of gage is 634.19 ft above National Geodetic Vertical Datum of 1929. Prior to Mar. 17, 1930, nonrecording gage at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow slightly regulated by 4 flood-control reservoirs which have a combined capacity of 316,000 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, 27.3 ft, June 1, 1889, from floodmark, discharge, about 211,000 ft³/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|--------|--------|-------|--------|--------|--------|--------|--------|--------|--------|
| 1 | 1090 | 1810 | 2650 | 4900 | e1700 | e4000 | 6510 | e2640 | 9990 | 2140 | 16100 | 6890 |
| 2 | 768 | 2000 | 2500 | 28200 | e2200 | e3600 | 7110 | e2650 | 11100 | 1910 | 24600 | 10100 |
| 3 | e590 | 1900 | 2300 | 26600 | e3200 | e3300 | 8420 | 2620 | 9780 | 1760 | 16800 | 12300 |
| 4 | e580 | 1620 | 1800 | 18900 | e4200 | e3000 | 8380 | 2360 | 9300 | 1610 | 18400 | 21400 |
| 5 | e560 | 1510 | 1600 | 13700 | e5600 | e3200 | 15200 | 2240 | 10200 | 1500 | 17900 | 18300 |
| 6 | 534 | 1590 | e1700 | 10300 | e4800 | e3100 | 24900 | 2580 | 9640 | 1450 | 14000 | 13100 |
| 7 | 520 | 2460 | e1800 | 8500 | e4200 | e3000 | 19400 | 3310 | 8810 | 1400 | 10600 | 9580 |
| 8 | 528 | 2720 | e1600 | 7290 | e3500 | e3200 | 14900 | 3840 | 9340 | 1600 | 8400 | 7650 |
| 9 | 501 | 2500 | e1700 | 6870 | e3000 | e3600 | 12100 | 4940 | 9490 | 1890 | 8920 | 6330 |
| 10 | 425 | 2220 | e1600 | 6770 | e2600 | e4000 | 10900 | 5750 | 8950 | 1700 | 20800 | 5270 |
| 11 | 398 | 2200 | e1900 | 6440 | e2200 | e4800 | 9880 | 6000 | 7990 | 1860 | 18900 | 4570 |
| 12 | 433 | 2130 | e3000 | 5610 | e2000 | e5600 | 10900 | 6780 | 7540 | 2730 | 14600 | 3990 |
| 13 | e500 | 2150 | 2500 | 4780 | e1800 | e6400 | 10600 | 6640 | 8540 | 2450 | 11300 | 3510 |
| 14 | 628 | 2260 | 2880 | e4200 | e1900 | e7300 | 9180 | 6180 | 8560 | 1680 | 8330 | 3370 |
| 15 | 606 | 2220 | 5010 | e3600 | e2000 | e10000 | 8110 | 5720 | 7570 | 1320 | 6430 | 3340 |
| 16 | 620 | 2250 | 5430 | e3200 | e1900 | 14600 | 7310 | 5820 | 6360 | 1210 | 5560 | 4390 |
| 17 | 709 | 3410 | 5090 | e2800 | e1600 | 23700 | 6660 | 6810 | 5350 | 1210 | 5200 | 4450 |
| 18 | 899 | 7530 | 4140 | e2600 | e1600 | 35300 | 5930 | 7010 | 4860 | 1180 | 4420 | 3380 |
| 19 | 1020 | 7130 | 3660 | e2400 | e1700 | 37700 | 5300 | 6550 | 5390 | 1180 | 3650 | 3300 |
| 20 | 1010 | 6000 | 4890 | e2600 | e2000 | 31500 | 4850 | 6220 | 5230 | 1800 | 3110 | 5550 |
| 21 | 1060 | 5240 | 12600 | e2500 | e2400 | 32400 | 4600 | 6460 | 5140 | 1650 | 2800 | 6350 |
| 22 | 960 | 4730 | 12800 | e2400 | e2700 | 27200 | 4600 | 7040 | 5830 | 4360 | 2470 | 5270 |
| 23 | 854 | 4470 | 9810 | e2200 | e3800 | 27600 | 4430 | 6300 | 5670 | 8880 | 2250 | 10600 |
| 24 | 743 | 4070 | 8060 | e2100 | 5720 | 23800 | 3950 | 6540 | 4960 | 9190 | 2030 | 13600 |
| 25 | 689 | 3760 | 7090 | e1900 | 7060 | 19200 | 3560 | 7470 | 4200 | 8820 | 1860 | 10800 |
| 26 | 836 | 3600 | 6190 | e2100 | 5750 | 14000 | 3500 | 8700 | 3640 | 6500 | 1730 | 9180 |
| 27 | 2400 | 3250 | 5220 | e1800 | 5020 | 11200 | 3350 | 8680 | 3180 | 4730 | 2260 | 7600 |
| 28 | 2540 | 3150 | 4420 | e1700 | e4600 | 9240 | e3120 | 9110 | 2840 | 14600 | 4070 | 18000 |
| 29 | 1830 | 2810 | 4040 | e1800 | --- | 8110 | e2910 | 8600 | 2450 | 12700 | 3310 | 21200 |
| 30 | 1450 | 2680 | 3850 | e1700 | --- | 7640 | e2730 | 7480 | 2270 | 8120 | 2720 | 14800 |
| 31 | 1390 | --- | 3660 | e1600 | --- | 6940 | --- | 6900 | --- | 5450 | 7230 | --- |
| TOTAL | 27671 | 95370 | 135490 | 192060 | 90750 | 398230 | 243290 | 179940 | 204170 | 118580 | 270750 | 268170 |
| MEAN | 893 | 3179 | 4371 | 6195 | 3241 | 12850 | 8110 | 5805 | 6806 | 3825 | 8734 | 8939 |
| MAX | 2540 | 7530 | 12800 | 28200 | 7060 | 37700 | 24900 | 9110 | 11100 | 14600 | 24600 | 21400 |
| MIN | 398 | 1510 | 1600 | 1600 | 1600 | 3000 | 2730 | 2240 | 2270 | 1180 | 1730 | 3300 |
| CFSM | 0.30 | 1.07 | 1.47 | 2.08 | 1.09 | 4.32 | 2.73 | 1.95 | 2.29 | 1.29 | 2.94 | 3.00 |
| IN. | 0.35 | 1.19 | 1.69 | 2.40 | 1.13 | 4.98 | 3.04 | 2.25 | 2.55 | 1.48 | 3.39 | 3.35 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1908 - 2003, BY WATER YEAR (WY)

| | | | | | | | | | | | | |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|
| MEAN | 2152 | 3842 | 4970 | 5657 | 6201 | 10840 | 9846 | 7033 | 3965 | 2100 | 1456 | 1520 |
| MAX | 10330 | 16700 | 13570 | 19060 | 16640 | 34360 | 25010 | 16670 | 18840 | 8100 | 8734 | 9220 |
| (WY) | 1912 | 1951 | 1928 | 1937 | 1915 | 1936 | 1940 | 1919 | 1972 | 1928 | 2003 | 1975 |
| MIN | 139 | 174 | 307 | 196 | 1078 | 3141 | 2456 | 1436 | 659 | 368 | 166 | 166 |
| (WY) | 1931 | 1931 | 1931 | 1931 | 1934 | 1969 | 1925 | 1941 | 1999 | 1965 | 1930 | 1908 |

e Estimated.

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| SUMMARY STATISTICS | FOR 2002 CALENDAR YEAR | | FOR 2003 WATER YEAR | | WATER YEARS 1908 - 2003 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL | 1625232 | | 2224471 | | | |
| ANNUAL MEAN | 4453 | | 6094 | | 4958 | |
| HIGHEST ANNUAL MEAN | | | | | 7683 | 1951 |
| LOWEST ANNUAL MEAN | | | | | 2579 | 1934 |
| HIGHEST DAILY MEAN | 38000 | May 14 | 37700 | Mar 19 | 201000 | Mar 18 1936 |
| LOWEST DAILY MEAN | 184 | Sep 14 | 398 | Oct 11 | 80 | Dec 6 1908 |
| ANNUAL SEVEN-DAY MINIMUM | 199 | Sep 9 | 472 | Oct 7 | 104 | Aug 29 1939 |
| MAXIMUM PEAK FLOW | | | 39900 | Mar 19 | ^a 236000 | Mar 18 1936 |
| MAXIMUM PEAK STAGE | | | 11.24 | Mar 19 | ^b 29.39 | Mar 18 1936 |
| INSTANTANEOUS LOW FLOW | | | | | 80 | Dec 6 1908 |
| ANNUAL RUNOFF (CFSM) | 1.50 | | 2.05 | | 1.67 | |
| ANNUAL RUNOFF (INCHES) | 20.32 | | 27.82 | | 22.64 | |
| 10 PERCENT EXCEEDS | 10200 | | 12900 | | 11700 | |
| 50 PERCENT EXCEEDS | 3000 | | 4200 | | 2740 | |
| 90 PERCENT EXCEEDS | 430 | | 1510 | | 478 | |

a From rating curve extended above 87,000 ft³/s on basis of slope-area measurement of peak flow.
b From floodmark in gage.

