

WEST BRANCH SUSQUEHANNA RIVER BASIN

01549500 BLOCKHOUSE CREEK NEAR ENGLISH CENTER, PA

LOCATION.--Lat 41°28'25", long 77°13'52", Lycoming County, Hydrologic Unit 02050205, on right bank just downstream from bridge on State Highway 284, 0.7 mi upstream from Blacks Creek, 1.7 mi upstream from confluence with Texas Creek, and 5.0 mi northeast of English Center.

DRAINAGE AREA.--37.7 mi².

PERIOD OF RECORD.--October 1940 to current year.

REVISED RECORDS.--WSP 951: 1941. WSP 1031: 1942-44(M). WSP 1502: 1942. WDR PA-75-2: 1973(P), 1974(P).

GAGE.--Water-stage recorder. Datum of gage is 1,041.85 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Several measurements of water temperature were made during the year. Satellite telemetry at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 18, 1936 reached a stage of 9.0 ft. from floodmark, discharge, 5,780 ft³/s, from rating curve extended above 1,200 ft³/s on basis of contracted-opening measurement at gage height 8.81 ft.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than a base discharge of 1,100 ft³/s and maximum (*):

| Date | Time | Discharge ft ³ /s | Gage Height (ft) | Date | Time | Discharge ft ³ /s | Gage Height (ft) |
|---------|------|---------------------------------|---------------------|----------|------|---------------------------------|---------------------|
| Mar. 20 | 2115 | *1,380 | *5.16 | Sept. 23 | 0530 | 1,200 | 4.91 |
| Aug. 5 | 1715 | 1,110 | 4.77 | | | | |

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 | 7.7 | 45 | 47 | 125 | e22 | e46 | 85 | 24 | 134 | 31 | 112 | 37 |
| 2 | 6.2 | 42 | 43 | 192 | e22 | e42 | 120 | 24 | 96 | 29 | 72 | 93 |
| 3 | 5.3 | 39 | e37 | 116 | e21 | e38 | 113 | 23 | 84 | 27 | 61 | 62 |
| 4 | 4.7 | 37 | e32 | 98 | e32 | e36 | 110 | 21 | 84 | 25 | 62 | 173 |
| 5 | 5.0 | 35 | e34 | 85 | e44 | e34 | 200 | 21 | 79 | 23 | 286 | 145 |
| 6 | 4.8 | 53 | e32 | 77 | e32 | e34 | 153 | 22 | 64 | 22 | 252 | 92 |
| 7 | 4.1 | 46 | e30 | 70 | e30 | e32 | 134 | 21 | 77 | 30 | 163 | 76 |
| 8 | 3.5 | 43 | e30 | 68 | e27 | e33 | 113 | 23 | 77 | 29 | 128 | 65 |
| 9 | 3.1 | 43 | e26 | 77 | e26 | e34 | 95 | 21 | 66 | 26 | 101 | 57 |
| 10 | 3.0 | 43 | e26 | 77 | e25 | e34 | 97 | 20 | 59 | 25 | 82 | 50 |
| 11 | 5.1 | 69 | e28 | e60 | e24 | e32 | 128 | 21 | 55 | 37 | 99 | 45 |
| 12 | 62 | 66 | e30 | e56 | e23 | e34 | 147 | 22 | 60 | 26 | 116 | 41 |
| 13 | 36 | 78 | 34 | e50 | e22 | 42 | 120 | 21 | 59 | 22 | 79 | 42 |
| 14 | 27 | 70 | 70 | e42 | e21 | 38 | 102 | 20 | 50 | 19 | 73 | 46 |
| 15 | 21 | 67 | 70 | e40 | e19 | 49 | 87 | 19 | 44 | 18 | 60 | 53 |
| 16 | 89 | 69 | 61 | e38 | e17 | 144 | 73 | 22 | 39 | 18 | 73 | 88 |
| 17 | 115 | 157 | 50 | e36 | e18 | 299 | 62 | 31 | 36 | 17 | 92 | 53 |
| 18 | 69 | 145 | e44 | e34 | e22 | 480 | 53 | 25 | 39 | 20 | 64 | 47 |
| 19 | 58 | 122 | e46 | e36 | e24 | 436 | 49 | 23 | 36 | 21 | 57 | 164 |
| 20 | 49 | 106 | 197 | e38 | e22 | 555 | 44 | 22 | 38 | 17 | 51 | 167 |
| 21 | 40 | 94 | 164 | e32 | e20 | 735 | 41 | 24 | 366 | 23 | 46 | 125 |
| 22 | 34 | 92 | 129 | e30 | e24 | 571 | 41 | 23 | 240 | 80 | 42 | 103 |
| 23 | 31 | 85 | 107 | e30 | e94 | 393 | 37 | 22 | 156 | 39 | 39 | 587 |
| 24 | 27 | 73 | 88 | e30 | e110 | 278 | 33 | 33 | 102 | 64 | 35 | 290 |
| 25 | 27 | 67 | 83 | e32 | e80 | 214 | 31 | 34 | 75 | 43 | 33 | 197 |
| 26 | 75 | 62 | 72 | e28 | e60 | 195 | 32 | 33 | 59 | 33 | 32 | 142 |
| 27 | 58 | 59 | 63 | e24 | e52 | 153 | 30 | 33 | 49 | 62 | 32 | 110 |
| 28 | 49 | 54 | e52 | e24 | e48 | 114 | 27 | 32 | 42 | 105 | 29 | 161 |
| 29 | 46 | 52 | 55 | e26 | --- | 113 | 26 | 31 | 37 | 55 | 28 | 104 |
| 30 | 46 | 51 | 48 | e24 | --- | e110 | 25 | 29 | 35 | 43 | 32 | 90 |
| 31 | 46 | --- | 50 | e23 | --- | 95 | --- | 35 | --- | 37 | 28 | --- |
| TOTAL | 1057.5 | 2064 | 1878 | 1718 | 981 | 5443 | 2408 | 775 | 2437 | 1066 | 2459 | 3505 |
| MEAN | 34.1 | 68.8 | 60.6 | 55.4 | 35.0 | 176 | 80.3 | 25.0 | 81.2 | 34.4 | 79.3 | 117 |
| MAX | 115 | 157 | 197 | 192 | 110 | 735 | 200 | 35 | 366 | 105 | 286 | 587 |
| MIN | 3.0 | 35 | 26 | 23 | 17 | 32 | 25 | 19 | 35 | 17 | 28 | 37 |
| CFSM | 0.90 | 1.82 | 1.61 | 1.47 | 0.93 | 4.66 | 2.13 | 0.66 | 2.15 | 0.91 | 2.10 | 3.10 |
| IN. | 1.04 | 2.04 | 1.85 | 1.70 | 0.97 | 5.37 | 2.38 | 0.76 | 2.40 | 1.05 | 2.43 | 3.46 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 2003, BY WATER YEAR (WY)

| | | | | | | | | | | | | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 32.7 | 60.7 | 66.3 | 56.1 | 67.9 | 124 | 124 | 76.8 | 41.4 | 18.5 | 15.3 | 17.7 |
| MAX | 194 | 195 | 184 | 182 | 268 | 260 | 429 | 211 | 303 | 74.7 | 204 | 117 |
| (WY) | 1991 | 1978 | 1974 | 1996 | 1981 | 1945 | 1993 | 1946 | 1972 | 1990 | 1994 | 2003 |
| MIN | 1.36 | 3.25 | 4.34 | 6.18 | 12.8 | 16.5 | 24.8 | 15.7 | 5.42 | 1.98 | 1.21 | 0.43 |
| (WY) | 1965 | 1999 | 1999 | 1981 | 1941 | 1969 | 1946 | 1941 | 1991 | 1955 | 1966 | 1964 |

e Estimated.

WEST BRANCH SUSQUEHANNA RIVER BASIN

01549500 BLOCKHOUSE CREEK NEAR ENGLISH CENTER, PA--Continued

| SUMMARY STATISTICS | FOR 2002 CALENDAR YEAR | | FOR 2003 WATER YEAR | | WATER YEARS 1941 - 2003 | |
|--------------------------|------------------------|----------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL | 17058.6 | | 25791.5 | | | |
| ANNUAL MEAN | 46.7 | | 70.7 | | 58.3 | |
| HIGHEST ANNUAL MEAN | | | | | 104 | 1978 |
| LOWEST ANNUAL MEAN | | | | | 26.3 | 1965 |
| HIGHEST DAILY MEAN | 415 | May 14 | 735 | Mar 21 | 3180 | Jun 22 1972 |
| LOWEST DAILY MEAN | e1.6 | Sep 9,10 | 3.0 | Oct 10 | 0.00 | Aug 6 1962c |
| ANNUAL SEVEN-DAY MINIMUM | a1.7 | Sep 5 | 4.0 | Oct 4 | 0.19 | Aug 29 1962 |
| MAXIMUM PEAK FLOW | | | b1380 | Mar 20 | b6260 | Jun 23 1972 |
| MAXIMUM PEAK STAGE | | | 5.16 | Mar 20 | 9.34 | Jun 23 1972 |
| INSTANTANEOUS LOW FLOW | | | | | 0.00 | Aug 6 1962c |
| ANNUAL RUNOFF (CFSM) | 1.24 | | 1.87 | | 1.55 | |
| ANNUAL RUNOFF (INCHES) | 16.83 | | 25.45 | | 21.02 | |
| 10 PERCENT EXCEEDS | 100 | | 134 | | 131 | |
| 50 PERCENT EXCEEDS | 35 | | 45 | | 27 | |
| 90 PERCENT EXCEEDS | 3.2 | | 22 | | 3.7 | |

a Computed using estimated daily discharges.

b From rating curve extended above 1,200 ft³/s on basis of contracted-opening measurement at gage height 8.81 ft.

c Also Aug. 31, Sept. 1, 2, 1962.

e Estimated.

