

JUNIATA RIVER BASIN

01566000 TUSCARORA CREEK NEAR PORT ROYAL, PA

LOCATION.--Lat 40°30'55", long 77°25'10", Juniata County, Hydrologic Unit 02050304, at single-span bridge on SR 3008, 2.0 mi southwest of Port Royal, and 3.5 mi upstream from mouth.

DRAINAGE AREA.--214 mi².

PERIOD OF RECORD.--October 2001 to current year. October 1910 to September 1958; October 1981 to September 1987, low-flow partial record; October 1987 to September 1990, crest-stage partial-record; October 1991 to September 1995, miscellaneous measurements; October 1995 to September 2001, crest-stage partial-record and miscellaneous measurements.

GAGE.--Water-stage recorder. Datum of gage is 420.47 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Satellite telemetry at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known prior to 1911, 20.5 ft, June 1, 1889 (backwater from Juniata River). Flood of June 23, 1972, reached a stage of 25.10 ft, discharge not determined.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than a base discharge of 3,700 ft³/s and maximum (*):

| Date | Time | Discharge ft ³ /s | Gage Height (ft) | Date | Time | Discharge ft ³ /s | Gage Height (ft) |
|--------|------|---------------------------------|---------------------|---------|------|---------------------------------|---------------------|
| Jan. 2 | 1330 | *4,900 | *10.76 | Mar. 21 | 0800 | 4,730 | 10.58 |

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 | 31 | 432 | 168 | 718 | e90 | e220 | 420 | 160 | 375 | 96 | 73 | 61 |
| 2 | 25 | 292 | e140 | 3960 | e100 | e210 | 448 | 167 | 327 | 91 | 150 | 69 |
| 3 | 22 | 220 | e130 | 1630 | e110 | e230 | 419 | 151 | 362 | 92 | 87 | 140 |
| 4 | 21 | 175 | e120 | 1010 | e170 | e210 | 384 | 134 | 2780 | 106 | 106 | 887 |
| 5 | 23 | 152 | e110 | 716 | e200 | e200 | 588 | 134 | 1430 | 86 | 79 | 480 |
| 6 | 22 | 236 | e100 | 568 | e130 | e600 | 663 | 184 | 848 | 81 | 63 | 273 |
| 7 | 22 | 275 | e95 | 474 | e100 | e700 | 550 | 160 | 1330 | 135 | 55 | 191 |
| 8 | 23 | 217 | e90 | 447 | e90 | e500 | 551 | 173 | 2240 | 143 | 50 | 147 |
| 9 | 23 | 188 | e85 | 606 | e80 | e700 | 626 | 286 | 1250 | 95 | 63 | 123 |
| 10 | 24 | 168 | e100 | 692 | e75 | e800 | 761 | 400 | 819 | 96 | 341 | 107 |
| 11 | 49 | 164 | e160 | 528 | e70 | e470 | 838 | 600 | 602 | 159 | 235 | 93 |
| 12 | 198 | 202 | e660 | 397 | e65 | e360 | 862 | 474 | 484 | 155 | 1130 | 83 |
| 13 | 169 | 546 | 715 | e320 | e65 | e700 | 656 | 374 | 410 | 95 | 328 | 81 |
| 14 | 97 | 393 | 1070 | e270 | e60 | e1100 | 519 | 294 | 355 | 79 | 195 | 101 |
| 15 | 67 | 289 | 1300 | e220 | e50 | e1000 | 438 | 244 | 306 | 71 | 139 | 99 |
| 16 | 183 | 239 | 969 | e170 | e50 | e1200 | 385 | 1120 | 262 | 67 | 113 | 82 |
| 17 | 678 | 602 | 638 | e140 | e45 | e1600 | 336 | 1700 | 231 | 62 | 347 | 72 |
| 18 | 280 | 863 | 437 | e120 | e55 | e1700 | 298 | 1210 | 269 | 61 | 192 | 65 |
| 19 | 172 | 562 | 343 | e110 | e70 | 1440 | 293 | 1020 | 285 | 72 | 122 | 1180 |
| 20 | 130 | 405 | 414 | e110 | e100 | 1700 | 272 | 730 | 323 | 108 | 97 | 1640 |
| 21 | 107 | 313 | 434 | e100 | e110 | 3830 | 247 | 606 | 289 | 75 | 84 | 623 |
| 22 | 90 | 330 | 326 | e100 | e130 | 1820 | 369 | 491 | 248 | 101 | 76 | 386 |
| 23 | 79 | 336 | 292 | e90 | e800 | 1200 | 313 | 426 | 213 | 119 | 71 | 2280 |
| 24 | 72 | 266 | 260 | e80 | e1000 | 885 | 259 | 695 | 178 | 87 | 63 | 1180 |
| 25 | 69 | 237 | 264 | e90 | e600 | 692 | 240 | 723 | 158 | 94 | 56 | e720 |
| 26 | 150 | 215 | 255 | e80 | e400 | 577 | 241 | 540 | 143 | 66 | 55 | e540 |
| 27 | 239 | 207 | 218 | e75 | e300 | 530 | 239 | 451 | 131 | 57 | 75 | e400 |
| 28 | 160 | 198 | 194 | e70 | e240 | 419 | 203 | 400 | 120 | 54 | 83 | 1200 |
| 29 | 133 | 179 | 195 | e70 | --- | 376 | 184 | 371 | 111 | 49 | 63 | 741 |
| 30 | 302 | 174 | 184 | e75 | --- | 414 | 175 | 303 | 102 | 45 | 60 | 473 |
| 31 | 590 | --- | 181 | e80 | --- | 449 | --- | 275 | --- | 44 | 68 | --- |
| TOTAL | 4250 | 9075 | 10647 | 14116 | 5355 | 26832 | 12777 | 14996 | 16981 | 2741 | 4719 | 14517 |
| MEAN | 137 | 302 | 343 | 455 | 191 | 866 | 426 | 484 | 566 | 88.4 | 152 | 484 |
| MAX | 678 | 863 | 1300 | 3960 | 1000 | 3830 | 862 | 1700 | 2780 | 159 | 1130 | 2280 |
| MIN | 21 | 152 | 85 | 70 | 45 | 200 | 175 | 134 | 102 | 44 | 50 | 61 |
| CFSM | 0.64 | 1.41 | 1.60 | 2.13 | 0.89 | 4.04 | 1.99 | 2.26 | 2.65 | 0.41 | 0.71 | 2.26 |
| IN. | 0.74 | 1.58 | 1.85 | 2.45 | 0.93 | 4.66 | 2.22 | 2.61 | 2.95 | 0.48 | 0.82 | 2.52 |

STATISTICS OF MONTHLY MEAN DATA FOR PERIOD OF DAILY RECORD, BY WATER YEAR (WY)

| | | | | | | | | | | | | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 124 | 208 | 241 | 290 | 354 | 580 | 492 | 376 | 176 | 102 | 80.9 | 85.8 |
| MAX | 832 | 934 | 829 | 746 | 1016 | 2347 | 1071 | 1052 | 1141 | 438 | 363 | 484 |
| (WY) | 1928 | 1951 | 1951 | 1915 | 1915 | 1936 | 1937 | 1919 | 1916 | 1928 | 1933 | 2003 |
| MIN | 7.51 | 10.1 | 10.8 | 21.1 | 44.3 | 135 | 107 | 64.4 | 46.3 | 26.0 | 8.15 | 6.53 |
| (WY) | 1931 | 1931 | 1931 | 1931 | 2002 | 1931 | 1925 | 1941 | 1957 | 2002 | 1930 | 1930 |

e Estimated.

JUNIATA RIVER BASIN

01566000 TUSCARORA CREEK NEAR PORT ROYAL, PA--Continued

| SUMMARY STATISTICS | FOR 2002 CALENDAR YEAR | | FOR 2003 WATER YEAR | | FOR PERIOD OF DAILY RECORD | |
|--------------------------|------------------------|--------|---------------------|-------|----------------------------|-------------|
| ANNUAL TOTAL | 60022.8 | | 137006 | | | |
| ANNUAL MEAN | 164 | | 375 | | 258 | |
| HIGHEST ANNUAL MEAN | | | | | 448 | |
| LOWEST ANNUAL MEAN | | | | | 106 | |
| HIGHEST DAILY MEAN | 2320 | May 18 | 3960 | Jan 2 | 12000 | Mar 18 1936 |
| LOWEST DAILY MEAN | e 2.5 | Sep 14 | 21 | Oct 4 | 2.2 | Sep 29 1930 |
| ANNUAL SEVEN-DAY MINIMUM | a 2.8 | Sep 12 | 22 | Oct 3 | a 2.8 | Sep 12 2002 |
| MAXIMUM PEAK FLOW | | | 4900 | Jan 2 | bc 25000 | Sep 7 1996 |
| MAXIMUM PEAK STAGE | | | 10.76 | Jan 2 | d 21.60 | Mar 19 1936 |
| ANNUAL RUNOFF (CFSM) | 0.77 | | 1.75 | | 1.21 | |
| ANNUAL RUNOFF (INCHES) | 10.43 | | 23.82 | | 16.39 | |
| 10 PERCENT EXCEEDS | 406 | | 854 | | 593 | |
| 50 PERCENT EXCEEDS | 79 | | 213 | | 114 | |
| 90 PERCENT EXCEEDS | 9.0 | | 66 | | 24 | |

a Computed using estimated daily discharges.

b Gage height 21.27 ft.

c From rating curve extended above 5,000 ft³/s.

d From floodmark, backwater from Juniata River, discharge 14,400 ft³/s.

e Estimated.

