

WEST BRANCH SUSQUEHANNA RIVER BASIN

01544500 KETTLE CREEK AT CROSS FORK, PA

LOCATION.--Lat 41°28'33", long 77°49'34", Clinton County, Hydrologic Unit 02050203, on right bank just upstream from abutment of former highway bridge on Township Route 318, 0.2 mi downstream from Potter-Clinton County line, and 0.7 mi southeast of Cross Fork.

DRAINAGE AREA.--136 mi².

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

GAGE.--Water-stage recorder. Datum of gage is 1,027.12 ft above sea level.

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

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, about 14.0 ft, Mar. 18, 1936, from information by local residents, discharge, about 20,000 ft³/s, from rating curve extended above 9,200 ft³/s on basis of slope-area measurement of peak flow.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than a base discharge of 2,400 ft³/s and maximum (*):

| Date | Time | Discharge ft ³ /s | Gage Height (ft) | Date | Time | Discharge ft ³ /s | Gage Height (ft) |
|--------|------|---------------------------------|---------------------|----------------------------------|------|---------------------------------|---------------------|
| Apr. 4 | 2130 | *1,730 | *4.37 | (No peaks above base discharge.) | | | |

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|------|------|------|-------|-------|------|------|------|-------|-------|
| 1 | 71 | 15 | 298 | 111 | e80 | 864 | 153 | 214 | 190 | 124 | 26 | 9.7 |
| 2 | 49 | 18 | 242 | 107 | e72 | 641 | 147 | 202 | 167 | 108 | 24 | 9.2 |
| 3 | 39 | 116 | 205 | 109 | e64 | 494 | 312 | 171 | 152 | 98 | 22 | 8.8 |
| 4 | 34 | 83 | 182 | 173 | e62 | 410 | 1350 | 158 | 122 | 95 | 20 | 8.5 |
| 5 | 30 | 70 | 157 | 199 | e58 | 352 | 1360 | 147 | 136 | 81 | 17 | 7.5 |
| 6 | 25 | 64 | 162 | 227 | e54 | 297 | 905 | 132 | 168 | 71 | 22 | 6.9 |
| 7 | 22 | 58 | 139 | 249 | e50 | 256 | 639 | 122 | 126 | 64 | 43 | 6.6 |
| 8 | 21 | 54 | 124 | 243 | e46 | 232 | 556 | 115 | 110 | 58 | 29 | 6.6 |
| 9 | 22 | 50 | 117 | 231 | e44 | 213 | 572 | 108 | 102 | 55 | 22 | 6.7 |
| 10 | 25 | 48 | 118 | 238 | e50 | 195 | 597 | 111 | 94 | 61 | 20 | 6.8 |
| 11 | 27 | 48 | 116 | 243 | e62 | 188 | 540 | 105 | 89 | 51 | 17 | 7.6 |
| 12 | 22 | 43 | 109 | 221 | e80 | 215 | 467 | 95 | 121 | 46 | 16 | 43 |
| 13 | 20 | 40 | 106 | 221 | 107 | 202 | 386 | 102 | 132 | 42 | 18 | 59 |
| 14 | 36 | 39 | 184 | e190 | 190 | 206 | 332 | 96 | 150 | 40 | 16 | 25 |
| 15 | 34 | 38 | 410 | e170 | 239 | 209 | 290 | 84 | 234 | 41 | 14 | 19 |
| 16 | 27 | 37 | 481 | e150 | 217 | 227 | 257 | 79 | 445 | 43 | 15 | 17 |
| 17 | 25 | 34 | 470 | e130 | 212 | 367 | 284 | 76 | 524 | 47 | 12 | 14 |
| 18 | 24 | 33 | 421 | e120 | 216 | 440 | 380 | 111 | 586 | 38 | 12 | 12 |
| 19 | 23 | 31 | 359 | e130 | 231 | 452 | 499 | 519 | 713 | 33 | 12 | 11 |
| 20 | 22 | 32 | 327 | e160 | 213 | 403 | 536 | 595 | 669 | 31 | 11 | 11 |
| 21 | 21 | 34 | 303 | e120 | 196 | 378 | 563 | 529 | 553 | 30 | 9.9 | 12 |
| 22 | 20 | 30 | 268 | e110 | 190 | 371 | 659 | 443 | 450 | 31 | 9.6 | 12 |
| 23 | 23 | 29 | 250 | e94 | 202 | 375 | 867 | 410 | 345 | 26 | 21 | 11 |
| 24 | 23 | 28 | e210 | e130 | 272 | 384 | 836 | 1090 | 273 | 25 | 26 | 16 |
| 25 | 21 | 34 | e200 | e100 | e520 | 367 | 668 | 1240 | 225 | 23 | 15 | 17 |
| 26 | 19 | 586 | 221 | e90 | 1080 | 328 | 523 | 922 | 219 | 22 | 12 | 16 |
| 27 | 18 | 1240 | 190 | e72 | 1180 | 289 | 422 | 641 | 224 | 20 | 11 | 18 |
| 28 | 17 | 816 | 168 | e66 | 1530 | 258 | 353 | 473 | 183 | 20 | 11 | 15 |
| 29 | 17 | 543 | 158 | e60 | 1220 | 231 | 292 | 363 | 165 | 24 | 11 | 12 |
| 30 | 16 | 392 | 141 | e56 | --- | 196 | 245 | 282 | 146 | 24 | 10 | 11 |
| 31 | 16 | --- | 124 | e64 | --- | 170 | --- | 225 | --- | 25 | 10 | --- |
| TOTAL | 809 | 4683 | 6960 | 4584 | 8737 | 10210 | 15990 | 9960 | 7813 | 1497 | 534.5 | 435.9 |
| MEAN | 26.1 | 156 | 225 | 148 | 301 | 329 | 533 | 321 | 260 | 48.3 | 17.2 | 14.5 |
| MAX | 71 | 1240 | 481 | 249 | 1530 | 864 | 1360 | 1240 | 713 | 124 | 43 | 59 |
| MIN | 16 | 15 | 106 | 56 | 44 | 170 | 147 | 76 | 89 | 20 | 9.6 | 6.6 |
| CFSM | .19 | 1.15 | 1.65 | 1.09 | 2.22 | 2.42 | 3.92 | 2.36 | 1.91 | .36 | .13 | .11 |
| IN. | .22 | 1.28 | 1.90 | 1.25 | 2.39 | 2.79 | 4.37 | 2.72 | 2.14 | .41 | .15 | .12 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 2000, BY WATER YEAR (WY)

| | | | | | | | | | | | | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 109 | 214 | 245 | 226 | 260 | 485 | 506 | 319 | 163 | 83.5 | 57.5 | 62.4 |
| MAX | 700 | 868 | 552 | 663 | 800 | 1055 | 1303 | 721 | 797 | 436 | 581 | 699 |
| (WY) | 1991 | 1951 | 1973 | 1952 | 1981 | 1945 | 1993 | 1946 | 1972 | 1992 | 1994 | 1975 |
| MIN | 6.23 | 9.53 | 18.8 | 18.4 | 52.1 | 132 | 112 | 63.8 | 22.1 | 12.8 | 7.07 | 6.32 |
| (WY) | 1965 | 1965 | 1961 | 1961 | 1963 | 1981 | 1946 | 1941 | 1991 | 1962 | 1971 | 1964 |

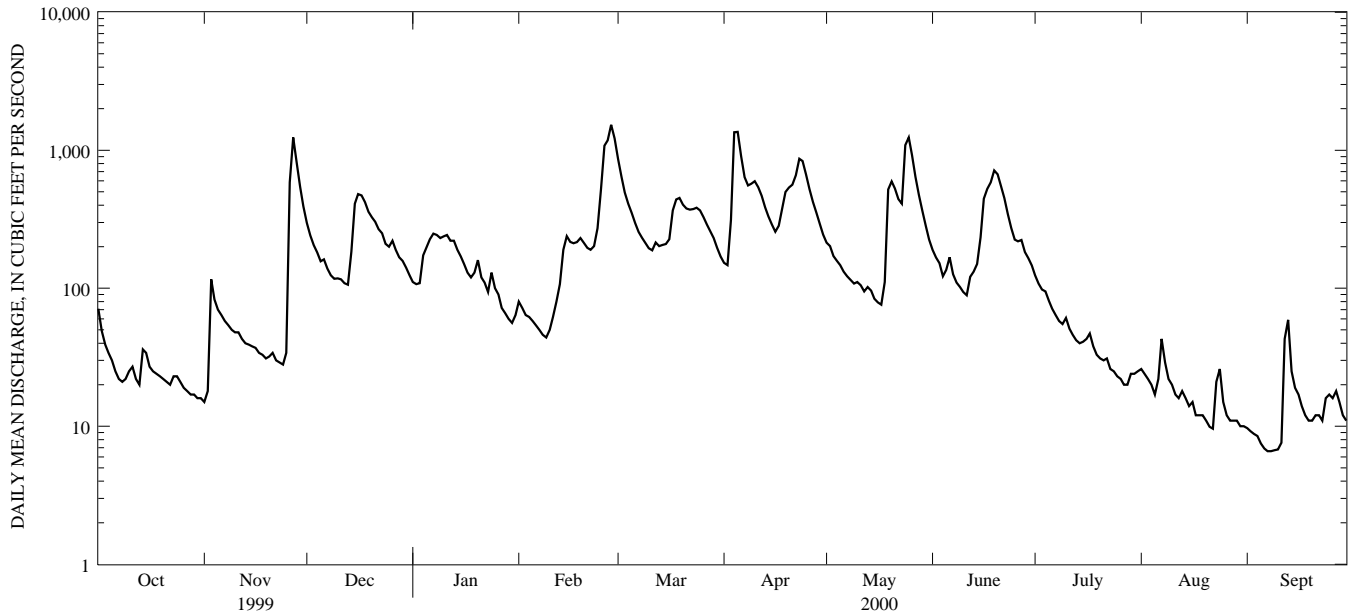
e Estimated.

WEST BRANCH SUSQUEHANNA RIVER BASIN

01544500 KETTLE CREEK AT CROSS FORK, PA--Continued

| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | | FOR 2000 WATER YEAR | | WATER YEARS 1941 - 2000 | |
|--------------------------|------------------------|--------|---------------------|---------|-------------------------|--------------|
| ANNUAL TOTAL | 61809.2 | | 72213.4 | | | |
| ANNUAL MEAN | 169 | | 197 | | 227 | |
| HIGHEST ANNUAL MEAN | | | | | 351 | 1951 |
| LOWEST ANNUAL MEAN | | | | | 125 | 1941 |
| HIGHEST DAILY MEAN | e2200 | Jan 24 | 1530 | Feb 28 | 10500 | Jun 23 1972 |
| LOWEST DAILY MEAN | 2.6 | Sep 5 | 6.6 | Sep 7,8 | 1.2 | Sep 2-4 1971 |
| ANNUAL SEVEN-DAY MINIMUM | 3.4 | Aug 31 | 7.0 | Sep 5 | 1.4 | Sep 1 1971 |
| INSTANTANEOUS PEAK FLOW | | | 1730 | Apr 4 | a14300 | Jun 23 1972 |
| INSTANTANEOUS PEAK STAGE | | | 4.37 | Apr 4 | b11.76 | Jun 23 1972 |
| ANNUAL RUNOFF (CFSM) | 1.25 | | 1.45 | | 1.67 | |
| ANNUAL RUNOFF (INCHES) | 16.91 | | 19.75 | | 22.70 | |
| 10 PERCENT EXCEEDS | 446 | | 521 | | 540 | |
| 50 PERCENT EXCEEDS | 46 | | 110 | | 109 | |
| 90 PERCENT EXCEEDS | 8.4 | | 15 | | 16 | |

- a From rating curve extended above 9,200 ft³/s on basis of slope-area measurement of peak flow.
- b From floodmark in gage.
- e Estimated.



1-YEAR HYDROGRAPH
OCTOBER 1, 1999 TO SEPTEMBER 30, 2000