

WEST BRANCH SUSQUEHANNA RIVER BASIN

01545600 YOUNG WOMANS CREEK NEAR RENOVO, PA
(Hydrologic Bench-mark Station)

LOCATION.--Lat 41°23'22", long 77°41'28", Clinton County, Hydrologic Unit 02050203, on left bank on SR 4005, 0.3 mi downstream from Laurelly Fork, 1.5 mi upstream from Left Branch Young Womans Creek, 3.7 mi upstream from mouth, and 5.0 mi northeast of Renovo.

DRAINAGE AREA.--46.2 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--December 1964 to current year.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 780.41 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 telemetry at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than a base discharge of 460 ft³/s and maximum (*):

| Date | Time | Discharge ft ³ /s | Gage Height (ft) | Date | Time | Discharge ft ³ /s | Gage Height (ft) |
|---------|------|---------------------------------|---------------------|--|------|---------------------------------|---------------------|
| Jan. 24 | 1645 | *757 | *3.65 | No other peak greater than base discharge. | | | |

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 | 2.2 | 3.2 | 5.1 | e9.0 | 92 | 60 | 362 | 66 | 12 | 7.1 | 3.4 | 1.0 |
| 2 | 2.1 | 3.2 | 4.8 | e9.0 | 113 | 53 | 406 | 61 | 15 | 8.3 | 2.6 | .89 |
| 3 | 2.2 | 3.2 | 4.6 | e11 | 113 | 69 | 401 | 56 | 23 | 7.4 | 1.9 | .66 |
| 4 | 3.5 | 3.2 | 4.6 | e13 | 118 | 378 | 366 | 54 | 15 | 6.1 | 1.6 | .53 |
| 5 | 3.1 | 3.2 | 5.0 | e11 | 121 | 319 | 281 | 51 | 13 | 5.3 | 1.6 | .57 |
| 6 | 2.4 | 3.2 | 5.4 | e10 | 118 | 261 | 221 | 48 | 12 | 4.9 | 2.0 | 1.7 |
| 7 | 2.1 | 3.2 | 5.4 | e10 | 113 | 206 | 183 | 45 | 11 | 4.9 | 1.6 | 12 |
| 8 | 24 | 3.2 | 5.4 | e9.0 | 103 | e150 | 154 | 45 | 11 | 4.1 | 1.7 | 6.2 |
| 9 | 31 | 3.2 | 5.4 | e9.4 | 91 | 133 | 172 | 44 | 9.9 | 3.8 | 2.4 | 3.6 |
| 10 | 25 | 3.6 | 4.8 | e10 | 86 | 115 | 195 | 37 | 9.2 | 9.4 | 1.8 | 2.7 |
| 11 | 12 | 8.0 | 4.6 | e8.6 | 80 | 101 | 200 | 34 | 9.4 | 5.8 | 1.6 | 2.2 |
| 12 | 7.7 | 8.6 | 4.4 | e7.6 | 88 | 88 | 211 | 32 | 9.3 | 4.8 | 1.5 | 1.9 |
| 13 | 5.8 | 6.0 | 4.0 | e8.4 | 106 | 79 | 194 | 31 | 8.7 | 4.7 | 1.4 | 1.8 |
| 14 | 4.8 | 5.2 | 3.9 | e11 | 105 | 75 | 176 | 29 | 9.0 | 4.5 | 3.0 | 2.4 |
| 15 | 4.6 | 4.6 | 3.5 | e14 | 100 | 71 | 157 | 28 | 10 | 4.5 | 7.9 | 2.9 |
| 16 | 4.3 | 4.4 | 3.4 | e14 | 95 | 68 | 141 | 26 | 8.6 | 4.1 | 3.5 | 11 |
| 17 | 3.9 | 4.2 | 3.9 | e13 | 96 | 80 | 132 | 25 | 9.6 | 3.8 | 2.5 | 22 |
| 18 | 3.7 | 4.0 | 3.9 | e14 | 96 | 120 | 111 | 23 | 11 | 3.8 | 2.4 | 8.4 |
| 19 | 4.6 | 3.9 | 3.9 | e25 | 94 | 130 | 99 | 22 | 8.6 | 3.9 | 2.1 | 5.9 |
| 20 | 4.6 | 4.4 | 3.9 | e45 | 90 | 130 | 93 | 22 | 7.4 | 7.3 | 2.1 | 5.1 |
| 21 | 4.6 | 5.4 | 4.7 | e40 | 85 | 138 | 86 | 20 | 6.9 | 5.5 | 5.9 | 7.0 |
| 22 | 4.3 | 5.4 | 48 | e40 | e78 | 143 | 83 | 18 | 6.2 | 4.8 | 3.8 | 6.1 |
| 23 | 4.0 | 4.7 | 29 | e80 | e68 | 130 | 88 | 23 | 6.1 | 4.4 | 2.6 | 4.7 |
| 24 | 3.9 | 4.5 | 19 | e520 | e62 | 124 | 94 | 24 | 5.5 | 3.9 | 2.2 | 4.1 |
| 25 | 3.7 | 4.1 | e11 | 444 | 60 | 129 | 90 | 25 | 5.5 | 4.0 | 2.2 | 3.5 |
| 26 | 3.4 | 5.3 | e11 | 281 | 56 | 128 | 94 | 21 | 5.5 | 6.1 | 2.2 | 3.3 |
| 27 | 3.2 | 6.9 | e13 | 203 | 52 | 133 | 93 | 19 | 5.3 | 4.6 | 2.3 | 3.0 |
| 28 | 3.3 | 6.4 | e13 | 162 | 60 | 153 | 87 | 16 | 12 | 3.9 | 2.1 | 3.0 |
| 29 | 3.5 | 5.6 | e11 | 142 | --- | 202 | 79 | 15 | 11 | 3.0 | 1.8 | 4.9 |
| 30 | 3.5 | 5.4 | e10 | 120 | --- | 260 | 72 | 14 | 9.7 | 2.0 | 1.5 | 50 |
| 31 | 3.4 | --- | e8.0 | 104 | --- | 305 | --- | 13 | --- | 1.8 | 1.3 | --- |
| TOTAL | 194.4 | 139.4 | 267.6 | 2398.0 | 2539 | 4531 | 5121 | 987 | 296.4 | 152.5 | 76.5 | 183.05 |
| MEAN | 6.27 | 4.65 | 8.63 | 77.4 | 90.7 | 146 | 171 | 31.8 | 9.88 | 4.92 | 2.47 | 6.10 |
| MAX | 31 | 8.6 | 48 | 520 | 121 | 378 | 406 | 66 | 23 | 9.4 | 7.9 | 50 |
| MIN | 2.1 | 3.2 | 3.4 | 7.6 | 52 | 53 | 72 | 13 | 5.3 | 1.8 | 1.3 | .53 |
| CFSM | .14 | .10 | .19 | 1.67 | 1.96 | 3.16 | 3.69 | .69 | .21 | .11 | .05 | .13 |
| IN. | .16 | .11 | .22 | 1.93 | 2.04 | 3.65 | 4.12 | .79 | .24 | .12 | .06 | .15 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 1999, BY WATER YEAR (WY)

| | 1965 | 1966 | 1967 | 1968 | 1969 | 1970 | 1971 | 1972 | 1973 | 1974 | 1975 | 1976 | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--|--|
| MEAN | 39.9 | 77.7 | 82.4 | 67.9 | 89.9 | 138 | 159 | 96.8 | 60.1 | 34.5 | 22.7 | 24.0 | | | | | | | | | | | | | | | | | | | | | | | | | |
| MAX | 181 | 211 | 194 | 164 | 250 | 349 | 447 | 204 | 303 | 162 | 244 | 211 | | | | | | | | | | | | | | | | | | | | | | | | | |
| (WY) | 1991 | 1997 | 1973 | 1996 | 1984 | 1979 | 1993 | 1996 | 1972 | 1992 | 1994 | 1975 | | | | | | | | | | | | | | | | | | | | | | | | | |
| MIN | 4.05 | 4.65 | 8.63 | 8.25 | 19.6 | 44.7 | 60.9 | 31.8 | 9.09 | 4.64 | 2.47 | 2.17 | | | | | | | | | | | | | | | | | | | | | | | | | |
| (WY) | 1983 | 1999 | 1999 | 1981 | 1987 | 1969 | 1988 | 1999 | 1991 | 1966 | 1999 | 1998 | | | | | | | | | | | | | | | | | | | | | | | | | |

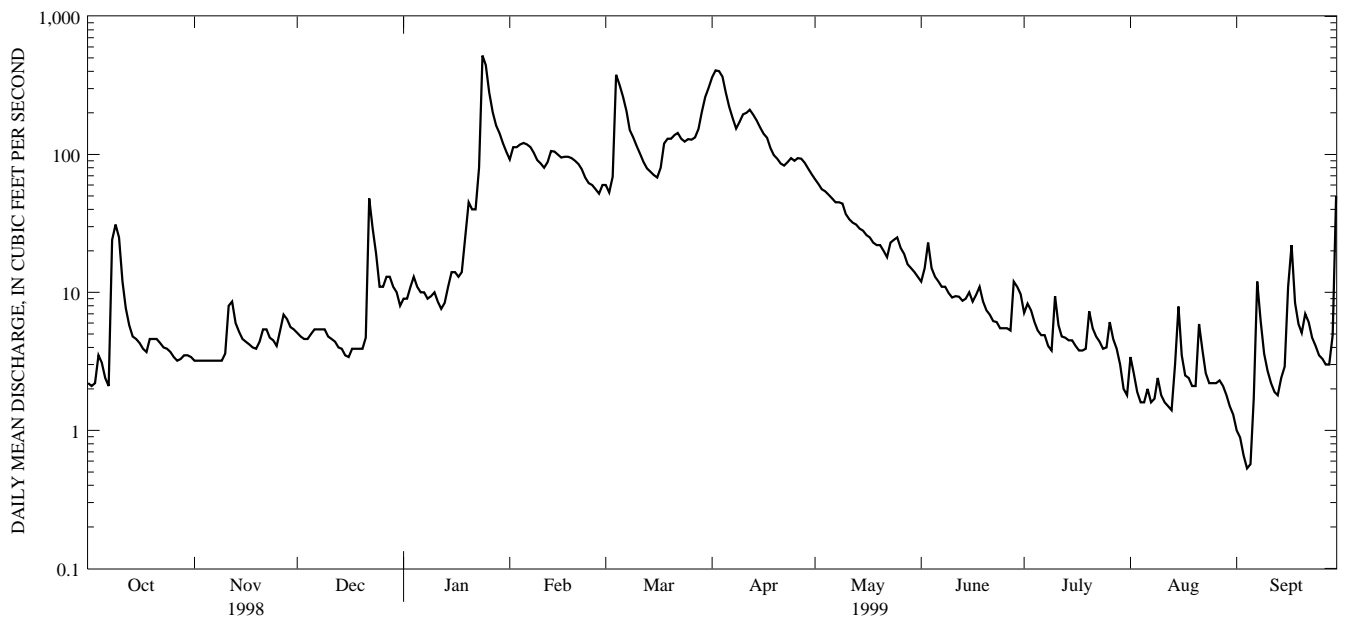
e Estimated.

WEST BRANCH SUSQUEHANNA RIVER BASIN

01545600 YOUNG WOMANS CREEK NEAR RENOVO, PA--Continued
(Hydrologic Bench-mark Station)

| SUMMARY STATISTICS | FOR 1998 CALENDAR YEAR | | FOR 1999 WATER YEAR | | WATER YEARS 1965 - 1999 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL | 24733.2 | | 16885.85 | | 74.9 | |
| ANNUAL MEAN | 67.8 | | 46.3 | | 118 | |
| HIGHEST ANNUAL MEAN | | | | | 1994 | |
| LOWEST ANNUAL MEAN | | | | | 1999 | |
| HIGHEST DAILY MEAN | 776 | Jan 8 | e520 | Jan 24 | 3310 | Jun 23 1972 |
| LOWEST DAILY MEAN | 1.1 | Sep 16 | .53 | Sep 4 | .53 | Sep 4 1999 |
| ANNUAL SEVEN-DAY MINIMUM | 1.6 | Sep 11 | .92 | Aug 30 | .92 | Aug 30 1999 |
| INSTANTANEOUS PEAK FLOW | | | 757 | Jan 24 | a5370 | Jun 23 1972 |
| INSTANTANEOUS PEAK STAGE | | | 3.65 | Jan 24 | 7.98 | Jun 23 1972 |
| ANNUAL RUNOFF (CFSM) | 1.47 | | 1.00 | | 1.62 | |
| ANNUAL RUNOFF (INCHES) | 19.92 | | 13.60 | | 22.03 | |
| 10 PERCENT EXCEEDS | 198 | | 131 | | 172 | |
| 50 PERCENT EXCEEDS | 16 | | 9.0 | | 41 | |
| 90 PERCENT EXCEEDS | 2.6 | | 2.4 | | 6.2 | |

a From rating curve extended above 1,000 ft³/s on basis of slope-area measurement of peak flow.
e Estimated.



1-YEAR HYDROGRAPH
OCTOBER 1, 1998 TO SEPTEMBER 30, 1999

WEST BRANCH SUSQUEHANNA RIVER BASIN

01545600 YOUNG WOMANS CREEK NEAR RENOVO, PA--Continued
(Hydrologic Bench-mark Station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1965 to current year.

PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT DISCHARGE: October 1980 to September 1981.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

| DATE | TIME | AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028) | AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027) | DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061) | PH WATER WHOLE LAB (STAND- ARD UNITS) (00403) | SPE- CIFIC CON- DUCT- ANCE LAB (µS/CM) (90095) | CALCIUM DIS- SOLVED (MG/L AS CA) (00915) | MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925) | SODIUM, DIS- SOLVED (MG/L AS NA) (00930) |
|-------------------|------|---|--|---|--|---|---|---|---|
| OCT 1998 15... | 0925 | 80020 | 1028 | 4.6 | 6.98 | 53 | 5.1 | 1.3 | 1.7 |
| JAN 1999 06... | 0930 | 80020 | 1028 | E10 | 7.27 | 56 | 5.1 | 1.3 | 1.6 |
| MAR 31... | 1200 | 80020 | 1028 | 297 | 6.58 | 34 | 3.0 | .81 | .7 |
| AUG 01... | 0915 | 80020 | 1028 | 3.2 | 7.21 | 63 | 5.1 | 1.3 | 3.6 |
| SEP 14... | 1120 | 80020 | 1028 | 2.4 | -- | 52 | 5.2 | 1.3 | 1.9 |

| DATE | POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935) | SULFATE DIS- SOLVED (MG/L AS SO4) (00945) | CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940) | FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950) | BROMIDE DIS- SOLVED (MG/L AS BR) (71870) | SILICA, DIS- SOLVED AS SIO2) (00955) | NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618) | PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671) | SILVER, TOTAL RECOV- ERABLE (µG/L AS AG) (01077) |
|-------------------|--|--|--|---|---|---|--|--|--|
| OCT 1998 15... | .97 | 9.4 | 2.4 | .02 | <.01 | 3.5 | .12 | <.01 | <1 |
| JAN 1999 06... | .67 | 10 | 2.4 | .08 | .02 | 3.7 | .52 | .02 | <1 |
| MAR 31... | .67 | 8.2 | 1.1 | .04 | <.01 | 3.5 | .28 | <.01 | <1 |
| AUG 01... | 1.0 | 7.5 | 5.3 | .04 | .02 | 2.9 | 1.4 | <.01 | <1 |
| SEP 14... | .93 | 7.8 | 2.5 | .08 | .01 | 3.1 | 1.2 | <.01 | <1 |