

PINE CREEK BASIN

03049800 LITTLE PINE CREEK NEAR ETNA, PA

LOCATION.--Lat 40°31'13", long 79°56'18", Allegheny County, Hydrologic Unit 05010009, on right bank at downstream side of highway bridge on Saxonburg Boulevard, 0.7 mi upstream from mouth, and 1.5 mi northeast of Etna.

DRAINAGE AREA.--5.78 mi².

PERIOD OF RECORD.--October 1962 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 774.26 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1986 at datum 3.00 ft higher. Sept. 30, 1987 datum lowered 1.00 ft.

REMARKS.--Records fair 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 150 ft³/s and maximum (*):

| Date | Time | Discharge ft ³ /s | Gage Height (ft) | Date | Time | Discharge ft ³ /s | Gage Height (ft) |
|---------|------|---------------------------------|---------------------|--|------|---------------------------------|---------------------|
| Mar. 26 | 1130 | *164 | *3.63 | No other peak greater than base discharge. | | | |

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------|-------|-------|
| 1 | 0.48 | 0.78 | 4.0 | e1.1 | 14 | 2.7 | 7.0 | 10 | 3.5 | 0.95 | e1.1 | 0.22 |
| 2 | 0.47 | 1.6 | 2.4 | e1.2 | 8.1 | 2.9 | 5.9 | 19 | 2.5 | 1.1 | e1.1 | 0.22 |
| 3 | 0.44 | 2.0 | 1.7 | e1.2 | 5.7 | 6.1 | 5.7 | 12 | 2.1 | 0.94 | e0.80 | 0.22 |
| 4 | 0.40 | 0.79 | 1.5 | 1.4 | 4.8 | 4.4 | 4.5 | 8.4 | 2.2 | 1.5 | e3.4 | 0.23 |
| 5 | 0.38 | 0.60 | 1.2 | 1.3 | 4.6 | 4.7 | 4.0 | 6.6 | 4.9 | 1.1 | e1.7 | 0.43 |
| 6 | 0.62 | 0.51 | 1.3 | 1.4 | 3.9 | 3.3 | 3.7 | 5.6 | 40 | 0.72 | e2.8 | 0.18 |
| 7 | 0.54 | 0.46 | 1.2 | 1.6 | 3.3 | 3.0 | 3.4 | 5.9 | 18 | 0.67 | e8.0 | 0.13 |
| 8 | 0.48 | 0.47 | 1.6 | 1.3 | 2.9 | 2.9 | 3.3 | 5.6 | 7.6 | 0.67 | e1.7 | 0.11 |
| 9 | 0.47 | 0.62 | 1.6 | 1.7 | 2.6 | 2.8 | 3.6 | 7.3 | 4.9 | 0.82 | e0.54 | 0.10 |
| 10 | 0.48 | 0.46 | 1.3 | 2.7 | 3.7 | 2.7 | 2.9 | 4.9 | 4.1 | 0.71 | e1.1 | 0.09 |
| 11 | 0.48 | 0.42 | 1.1 | 4.0 | 8.1 | 2.5 | 2.7 | 3.8 | 3.6 | 0.60 | e1.7 | 0.08 |
| 12 | 1.3 | 0.40 | 1.0 | 3.4 | 5.3 | 2.5 | 2.6 | 5.2 | 2.8 | 0.54 | e0.60 | 0.06 |
| 13 | 0.91 | 0.40 | 2.1 | 2.9 | 4.2 | 2.4 | 8.4 | 18 | 2.5 | 0.52 | e0.50 | 0.05 |
| 14 | 1.3 | 0.41 | 1.8 | 2.4 | 3.9 | 2.3 | 10 | 17 | 4.3 | 0.53 | e0.55 | 0.05 |
| 15 | 1.2 | 0.41 | 1.5 | 2.3 | 3.5 | 2.2 | 14 | 11 | 3.1 | 0.53 | 0.61 | 1.1 |
| 16 | 1.3 | 0.39 | 1.3 | 2.0 | 3.2 | 8.5 | 9.3 | 7.5 | 2.4 | 0.46 | 0.49 | 0.47 |
| 17 | 2.0 | 0.37 | 62 | 2.0 | 3.0 | 7.4 | 7.1 | 7.7 | 2.1 | 0.45 | 18 | 0.29 |
| 18 | 1.4 | 0.37 | 36 | 1.6 | 2.6 | 8.4 | 5.7 | 40 | 2.1 | 0.55 | 1.4 | 0.22 |
| 19 | 1.4 | 0.56 | 13 | 1.6 | 2.5 | 6.3 | 4.9 | 17 | 2.0 | 2.7 | 0.62 | 0.88 |
| 20 | 1.4 | 1.3 | 6.5 | 1.7 | 3.4 | 29 | 4.6 | 12 | 1.6 | 0.83 | 0.46 | 0.35 |
| 21 | 1.4 | 0.56 | 4.0 | 1.9 | 5.8 | 21 | 4.2 | 8.5 | 1.3 | 0.61 | 0.40 | 0.31 |
| 22 | 1.4 | 0.47 | 3.0 | 1.8 | 4.5 | 14 | 5.4 | 6.6 | 1.3 | 0.56 | 0.36 | 0.29 |
| 23 | 3.9 | 0.44 | e2.6 | 2.3 | 3.9 | 10 | 3.8 | 5.4 | 1.3 | 0.46 | 1.8 | 0.19 |
| 24 | 9.0 | 0.45 | e2.3 | 8.0 | 3.6 | 7.2 | 3.4 | 4.8 | 1.2 | 0.43 | 2.1 | 0.15 |
| 25 | 2.1 | 4.3 | e2.1 | 5.7 | 3.4 | 7.9 | 3.4 | 4.2 | 1.2 | 0.90 | 0.98 | 1.0 |
| 26 | 1.4 | 1.5 | e1.9 | 4.0 | 3.7 | 73 | 2.8 | 3.6 | 1.1 | 3.4 | 0.59 | 0.30 |
| 27 | 1.4 | 5.2 | e2.0 | 3.3 | 3.1 | 43 | 2.7 | 3.1 | 1.2 | 3.6 | 0.50 | 0.16 |
| 28 | 1.2 | 4.9 | e1.7 | 3.0 | 3.0 | 21 | 22 | 4.7 | 1.3 | 1.2 | 0.38 | 1.1 |
| 29 | 0.93 | 6.6 | e1.5 | 2.7 | --- | 14 | 16 | 3.2 | 1.0 | 0.94 | 0.40 | 1.0 |
| 30 | 0.86 | 12 | e1.3 | 15 | --- | 12 | 13 | 2.7 | 0.95 | e7.4 | 0.35 | 0.77 |
| 31 | 0.77 | --- | e1.2 | 19 | --- | 8.4 | --- | 4.2 | --- | e4.5 | 0.26 | --- |
| TOTAL | 41.81 | 49.74 | 167.7 | 105.5 | 124.3 | 338.5 | 190.0 | 275.5 | 128.15 | 40.89 | 55.29 | 10.75 |
| MEAN | 1.35 | 1.66 | 5.41 | 3.40 | 4.44 | 10.9 | 6.33 | 8.89 | 4.27 | 1.32 | 1.78 | 0.36 |
| MAX | 9.0 | 12 | 62 | 19 | 14 | 73 | 22 | 40 | 40 | 7.4 | 18 | 1.1 |
| MIN | 0.38 | 0.37 | 1.0 | 1.1 | 2.5 | 2.2 | 2.6 | 2.7 | 0.95 | 0.43 | 0.26 | 0.05 |
| CFSM | 0.23 | 0.29 | 0.94 | 0.59 | 0.77 | 1.89 | 1.10 | 1.54 | 0.74 | 0.23 | 0.31 | 0.06 |
| IN. | 0.27 | 0.32 | 1.08 | 0.68 | 0.80 | 2.18 | 1.22 | 1.77 | 0.82 | 0.26 | 0.36 | 0.07 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 2002, BY WATER YEAR (WY)

| | | | | | | | | | | | | |
|------|-------|------|------|------|------|------|------|------|------|-------|------|-------|
| MEAN | 1.91 | 4.73 | 7.64 | 7.32 | 9.47 | 13.1 | 10.4 | 8.13 | 4.14 | 3.15 | 1.61 | 1.50 |
| MAX | 8.55 | 25.4 | 26.4 | 22.4 | 21.0 | 32.4 | 23.8 | 26.1 | 17.8 | 26.4 | 6.92 | 10.4 |
| (WY) | 1980 | 1986 | 1987 | 1965 | 1966 | 1994 | 1987 | 1968 | 1972 | 1990 | 1980 | 1990 |
| MIN | 0.010 | 0.51 | 0.69 | 0.82 | 2.17 | 1.30 | 2.33 | 1.74 | 0.42 | 0.016 | 0.10 | 0.040 |
| (WY) | 1964 | 1964 | 1964 | 1977 | 1980 | 1969 | 1971 | 1965 | 1965 | 1965 | 1965 | 1963 |

e Estimated.

PINE CREEK BASIN

03049800 LITTLE PINE CREEK NEAR ETNA, PA--Continued

| SUMMARY STATISTICS | FOR 2001 CALENDAR YEAR | | FOR 2002 WATER YEAR | | WATER YEARS 1963 - 2002 | |
|--------------------------|------------------------|--------|---------------------|-----------|-------------------------|-------------|
| ANNUAL TOTAL | 1439.76 | | 1528.13 | | | |
| ANNUAL MEAN | 3.94 | | 4.19 | | 6.07 | |
| HIGHEST ANNUAL MEAN | | | | | 10.8 | 1987 |
| LOWEST ANNUAL MEAN | | | | | 2.68 | 1969 |
| HIGHEST DAILY MEAN | 65 | Jan 31 | 73 | Mar 26 | 525 | May 30 1986 |
| LOWEST DAILY MEAN | 0.17 | Aug 7 | 0.05 | Sep 13,14 | 0.00 | Jul 13 1963 |
| ANNUAL SEVEN-DAY MINIMUM | 0.30 | Jul 18 | 0.08 | Sep 8 | 0.00 | Aug 26 1963 |
| MAXIMUM PEAK FLOW | | | 164 | Mar 26 | a 7190 | May 30 1986 |
| MAXIMUM PEAK STAGE | | | 3.63 | Mar 26 | b 10.28 | May 30 1986 |
| INSTANTANEOUS LOW FLOW | | | 0.04 | Sep 15 | 0.00 | Aug 30 1991 |
| ANNUAL RUNOFF (CFSM) | 0.68 | | 0.72 | | 1.05 | |
| ANNUAL RUNOFF (INCHES) | 9.27 | | 9.84 | | 14.28 | |
| 10 PERCENT EXCEEDS | 9.8 | | 8.5 | | 15 | |
| 50 PERCENT EXCEEDS | 1.4 | | 2.1 | | 2.6 | |
| 90 PERCENT EXCEEDS | 0.37 | | 0.41 | | 0.31 | |

a From rating curve extended above 2,000 ft³/s on basis of slope-area measurement of peak flow at site 0.6 mi downstream.
b Gage height 10.41 ft, from outside floodmark, datum then in use.

