

SCHUYLKILL RIVER BASIN

01472199 WEST BRANCH PERKIOMEN CREEK AT HILLEGASS, PA

LOCATION.--Lat 40°22'26", long 75°31'22", Montgomery County, Hydrologic Unit 02040203, on left bank 0.3 mi downstream from bridge on private road off Heffner Road, and 0.5 mi north of Hillegass.

DRAINAGE AREA.--23.0 mi².

PERIOD OF RECORD.--October 1981 to current year. Prior to October 1992, published as "Northwest Branch".

REVISED RECORDS: WDR PA-01-1: 1982-85, 1987, 1989, 1990, 1993-96 (P).

GAGE.--Water-stage recorder, crest-stage gage, and concrete control. Datum of gage is 290.00 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except those above 560 ft³/s, which are poor. Several measurements of water temperature were made during the year. Satellite and landline telemetry at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 800 ft³/s and maximum (*):

| Date | Time | Discharge ft ³ /s | Gage Height (ft) | Date | Time | Discharge ft ³ /s | Gage Height (ft) |
|--------|------|---------------------------------|---------------------|--|------|---------------------------------|---------------------|
| May 13 | 2315 | *2,130 | *5.54 | 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 | 9.4 | 6.4 | 9.2 | 6.7 | 36 | 7.0 | 26 | 44 | 26 | 12 | 5.8 | 16 |
| 2 | 9.0 | 6.5 | 7.8 | 6.3 | 38 | 7.1 | 17 | 74 | 21 | 11 | 5.6 | 20 |
| 3 | 8.5 | 6.5 | 7.3 | 6.5 | 20 | 66 | 17 | 59 | 18 | 10 | 5.7 | 7.8 |
| 4 | 8.3 | 6.4 | 7.1 | 6.6 | 17 | 25 | 18 | 37 | 18 | 9.7 | 5.9 | 6.6 |
| 5 | 7.8 | 6.5 | 7.0 | 6.8 | 15 | 13 | 14 | 31 | 19 | 9.1 | 5.8 | 5.9 |
| 6 | 7.7 | 6.4 | 6.9 | 7.1 | 13 | 11 | 12 | 26 | 48 | 8.5 | 6.1 | 5.5 |
| 7 | 7.6 | 6.2 | 7.0 | 11 | 12 | 11 | 11 | 23 | 93 | 8.4 | 5.7 | 5.3 |
| 8 | 7.2 | 6.3 | 7.7 | 10 | 12 | 10 | 11 | 19 | 35 | 8.6 | 5.3 | 5.2 |
| 9 | 7.0 | 6.2 | 24 | 9.0 | 10 | 9.6 | 11 | 33 | 28 | 8.3 | 5.1 | 5.1 |
| 10 | 7.1 | 6.1 | 11 | 9.0 | 10 | 10 | 15 | 31 | 23 | 8.7 | 5.0 | 5.1 |
| 11 | 7.4 | 6.1 | 8.9 | 21 | 11 | 9.0 | 11 | 19 | 19 | 8.0 | 4.9 | 4.7 |
| 12 | 7.4 | 6.0 | 8.2 | 29 | 9.9 | 8.7 | 11 | 28 | 19 | 7.7 | 5.0 | 4.4 |
| 13 | 7.3 | 6.1 | 8.2 | 18 | 9.5 | 10 | 11 | 571 | 28 | 7.7 | 4.9 | 4.3 |
| 14 | 6.9 | 6.1 | 13 | 13 | e8.0 | 10 | 15 | 414 | 34 | 8.0 | 4.8 | 4.3 |
| 15 | 13 | 6.3 | 20 | 12 | e8.0 | 9.4 | 54 | 96 | 36 | 8.1 | 4.7 | 5.0 |
| 16 | 8.8 | 6.3 | 10 | 13 | 9.0 | 9.2 | 26 | 65 | 28 | 7.6 | 4.8 | 10 |
| 17 | 8.9 | 6.1 | 9.2 | 11 | 8.8 | 8.8 | 16 | 55 | 19 | 7.1 | 4.8 | 6.4 |
| 18 | 8.1 | 6.1 | 29 | 11 | 8.1 | 36 | 13 | 183 | 17 | 7.0 | 4.5 | 5.3 |
| 19 | 7.0 | 6.2 | 17 | 9.1 | 7.8 | 40 | 12 | 76 | 24 | 7.2 | 4.2 | 5.1 |
| 20 | 7.0 | 7.0 | 11 | 11 | 8.2 | 141 | 12 | 58 | 18 | 8.3 | 5.1 | 5.0 |
| 21 | 6.8 | 7.3 | 9.2 | 9.8 | 8.4 | 77 | 11 | 51 | 16 | 7.4 | 5.0 | 4.8 |
| 22 | 6.5 | 7.0 | 8.5 | 9.5 | 7.9 | 42 | 19 | 47 | 15 | 7.0 | 4.8 | 4.7 |
| 23 | 6.5 | 6.7 | 8.2 | 9.7 | 7.6 | 31 | 17 | 43 | 14 | 11 | 5.2 | 4.9 |
| 24 | 6.6 | 6.9 | 13 | 59 | 7.3 | 25 | 12 | 40 | 14 | 9.9 | 6.0 | 4.8 |
| 25 | 6.4 | 12 | 11 | 50 | 7.3 | 20 | 14 | 37 | 13 | 7.7 | 7.9 | 4.7 |
| 26 | 6.1 | 25 | 8.8 | 26 | 7.4 | 21 | 18 | 35 | 14 | 7.0 | 5.7 | 5.2 |
| 27 | 6.0 | 9.4 | 8.7 | 18 | 7.9 | 58 | 12 | 35 | 22 | 7.0 | 5.1 | 51 |
| 28 | 6.1 | 8.1 | 8.0 | 15 | 7.4 | 31 | 99 | 33 | 99 | 7.4 | 5.2 | 34 |
| 29 | 6.0 | 7.7 | 7.9 | 13 | --- | 23 | 105 | 31 | 20 | 7.2 | 12 | 9.8 |
| 30 | 6.2 | 8.1 | 7.2 | 13 | --- | 19 | 47 | 30 | 14 | 6.5 | 8.5 | 7.6 |
| 31 | 6.3 | --- | 6.7 | 24 | --- | 17 | --- | 28 | --- | 5.9 | 6.2 | --- |
| TOTAL | 230.9 | 224.0 | 326.7 | 474.1 | 332.5 | 815.8 | 687 | 2352 | 812 | 255.0 | 175.3 | 268.5 |
| MEAN | 7.45 | 7.47 | 10.5 | 15.3 | 11.9 | 26.3 | 22.9 | 75.9 | 27.1 | 8.23 | 5.65 | 8.95 |
| MAX | 13 | 25 | 29 | 59 | 38 | 141 | 105 | 571 | 99 | 12 | 12 | 51 |
| MIN | 6.0 | 6.0 | 6.7 | 6.3 | 7.3 | 7.0 | 11 | 19 | 13 | 5.9 | 4.2 | 4.3 |
| CFSM | 0.32 | 0.32 | 0.46 | 0.66 | 0.52 | 1.14 | 1.00 | 3.30 | 1.18 | 0.36 | 0.25 | 0.39 |
| IN. | 0.37 | 0.36 | 0.53 | 0.77 | 0.54 | 1.32 | 1.11 | 3.80 | 1.31 | 0.41 | 0.28 | 0.43 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1982 - 2002, BY WATER YEAR (WY)

| | | | | | | | | | | | | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 20.6 | 30.9 | 44.7 | 43.4 | 46.4 | 62.0 | 59.1 | 47.4 | 29.7 | 21.7 | 15.3 | 18.6 |
| MAX | 66.9 | 60.6 | 165 | 140 | 93.8 | 171 | 146 | 114 | 83.7 | 99.0 | 35.3 | 52.5 |
| (WY) | 1997 | 1993 | 1984 | 1996 | 1984 | 1994 | 1983 | 1989 | 1982 | 1984 | 1994 | 1999 |
| MIN | 7.45 | 7.47 | 7.94 | 15.3 | 11.9 | 23.4 | 16.4 | 22.9 | 11.0 | 5.67 | 5.65 | 5.47 |
| (WY) | 2002 | 2002 | 1999 | 2002 | 2002 | 1985 | 1985 | 1995 | 1999 | 1999 | 2002 | 1983 |

e Estimated.

SCHUYLKILL RIVER BASIN

01472199 WEST BRANCH PERKIOMEN CREEK AT HILLEGASS, PA--Continued

| SUMMARY STATISTICS | FOR 2001 CALENDAR YEAR | | FOR 2002 WATER YEAR | | WATER YEARS 1982 - 2002 | |
|--------------------------|------------------------|---------------------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL | 10127.0 | | 6953.8 | | | |
| ANNUAL MEAN | 27.7 | | 19.1 | | 36.6 | |
| HIGHEST ANNUAL MEAN | | | | | 69.5 | 1984 |
| LOWEST ANNUAL MEAN | | | | | 19.1 | 2002 |
| HIGHEST DAILY MEAN | 264 | Mar 30 | 571 | May 13 | 1760 | Jan 19 1996 |
| LOWEST DAILY MEAN | 6.0 | Oct 27 ^a | 4.2 | Aug 19 | 3.0 | Aug 7 1999 |
| ANNUAL SEVEN-DAY MINIMUM | 6.1 | Nov 8 | 4.7 | Aug 13 | 3.2 | Aug 1 1999 |
| MAXIMUM PEAK FLOW | | | b2130 | May 13 | b3270 | Jan 19 1996 |
| MAXIMUM PEAK STAGE | | | 5.54 | May 13 | 6.34 | Jan 19 1996 |
| INSTANTANEOUS LOW FLOW | | | c3.4 | Dec 30 | c2.6 | Dec 31 1998 |
| ANNUAL RUNOFF (CFSM) | 1.21 | | 0.83 | | 1.59 | |
| ANNUAL RUNOFF (INCHES) | 16.38 | | 11.25 | | 21.62 | |
| 10 PERCENT EXCEEDS | 59 | | 36 | | 71 | |
| 50 PERCENT EXCEEDS | 17 | | 9.2 | | 22 | |
| 90 PERCENT EXCEEDS | 7.0 | | 5.4 | | 7.8 | |

a Also Oct. 29, Nov. 12.

b From rating curve extended above 560 ft³/s on basis of contracted-opening measurement at gage height 5.51 ft.

c Result of freeze-up.

