

## SCHUYLKILL RIVER BASIN

## 01471875 MANATAWNY CREEK NEAR SPANGSVILLE, PA

**LOCATION.**--Lat 40°20'22", long 75°44'33", Berks County, Hydrologic Unit 02040203, on left bank 200 ft north of powerline across stream, 1.2 mi south of Spangsville, and 1.3 mi north of SR 562 and Earlville.

**DRAINAGE AREA.**--56.9 mi<sup>2</sup>.

**PERIOD OF RECORD.**--October 1993 to current year.

**GAGE.**--Water-stage recorder and crest-stage gage. Elevation of gage is 265 ft above sea level, from topographic map.

**REMARKS.**--Records good except those for estimated daily discharges and those above 1,200 ft<sup>3</sup>/s, which are fair. Several measurements of water temperature were made during the year. Satellite telemetry at station.

**PEAK DISCHARGES FOR CURRENT YEAR.**--Peak discharges greater than base discharge of 1,300 ft<sup>3</sup>/s and maximum (\*):

| Date    | Time | Discharge<br>ft <sup>3</sup> /s | Gage Height<br>(ft) | Date     | Time | Discharge<br>ft <sup>3</sup> /s | Gage Height<br>(ft) |
|---------|------|---------------------------------|---------------------|----------|------|---------------------------------|---------------------|
| Jan. 18 | 2030 | 2,330                           | 7.11                | Sept. 16 | 2130 | *3,290                          | *8.03               |

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     | 25   | 36   | 25   | e17  | 52   | 138  | 80   | 57   | 31   | 21   | 11    | 10     |
| 2     | 25   | 36   | 24   | e16  | 216  | 79   | 82   | 55   | 31   | 21   | 9.4   | 9.5    |
| 3     | 25   | 36   | 23   | 345  | 135  | 68   | 73   | 55   | 39   | 21   | 8.8   | 9.5    |
| 4     | 40   | 35   | 23   | e35  | 88   | 124  | 71   | 55   | 33   | 18   | 9.1   | 9.5    |
| 5     | 38   | 35   | 23   | e22  | 77   | 81   | 71   | 55   | 30   | 17   | 9.5   | 12     |
| 6     | 28   | 35   | 23   | e16  | 70   | 87   | 67   | 52   | 27   | 16   | 9.5   | 41     |
| 7     | 27   | 35   | 23   | e15  | 67   | 93   | 65   | 53   | 27   | 15   | 9.5   | 60     |
| 8     | 280  | 35   | 22   | e14  | 75   | 66   | 63   | 81   | 27   | 14   | 14    | 28     |
| 9     | 160  | 34   | 25   | 178  | 72   | 64   | 85   | 69   | 25   | 13   | 17    | 17     |
| 10    | 364  | 34   | 23   | e50  | 69   | 66   | 183  | 57   | 25   | 15   | 11    | 62     |
| 11    | 85   | 57   | 22   | e23  | 63   | 64   | 107  | 52   | 25   | 17   | 10    | 22     |
| 12    | 46   | 48   | 21   | e19  | 65   | 61   | 126  | 50   | 24   | 15   | 9.8   | 16     |
| 13    | 38   | 36   | 21   | e22  | 101  | 59   | 88   | 47   | 25   | 15   | 10    | 15     |
| 14    | 38   | 36   | 21   | e21  | 69   | 61   | 79   | 47   | 29   | 15   | 57    | 14     |
| 15    | 34   | 35   | 21   | 61   | 61   | 88   | 74   | 45   | 47   | 15   | 19    | 18     |
| 16    | 31   | 31   | 21   | 50   | 60   | 88   | 85   | 45   | 26   | 14   | 15    | 1110   |
| 17    | 30   | 31   | 21   | 48   | 62   | 94   | 98   | 45   | 26   | 13   | 13    | 591    |
| 18    | 28   | 31   | 21   | 873  | 140  | 95   | 77   | 44   | 33   | 12   | 12    | 98     |
| 19    | 28   | 31   | 20   | 273  | 96   | 71   | 71   | 73   | 25   | 12   | 11    | 68     |
| 20    | 30   | 32   | 21   | 108  | 75   | 65   | 85   | 56   | 23   | 14   | 11    | 54     |
| 21    | 32   | 35   | 21   | 91   | 67   | 73   | 85   | 43   | 24   | 15   | 14    | 53     |
| 22    | 36   | 33   | e21  | 129  | e54  | 506  | 80   | 40   | 25   | 15   | 14    | 82     |
| 23    | 37   | 31   | e20  | 111  | e50  | 150  | 87   | 51   | 23   | 16   | 12    | 56     |
| 24    | 36   | 31   | e20  | 389  | e46  | 118  | 103  | 67   | 22   | 14   | 11    | 43     |
| 25    | 36   | 31   | 20   | 162  | e46  | 104  | 75   | 59   | 21   | 13   | 11    | 38     |
| 26    | 36   | 98   | 19   | 107  | e45  | 93   | 69   | 45   | 21   | 12   | 15    | 34     |
| 27    | 36   | 55   | e18  | 88   | e44  | 87   | 65   | 40   | 19   | 11   | 19    | 32     |
| 28    | 38   | 32   | e18  | 79   | 85   | 105  | 63   | 37   | 19   | 11   | 14    | 32     |
| 29    | 48   | 28   | e17  | 69   | ---  | 90   | 61   | 36   | 19   | 11   | 12    | 33     |
| 30    | 40   | 27   | e19  | 62   | ---  | 79   | 58   | 34   | 19   | 11   | 11    | 183    |
| 31    | 38   | ---  | e18  | 56   | ---  | 74   | ---  | 31   | ---  | 11   | 11    | ---    |
| TOTAL | 1813 | 1120 | 655  | 3549 | 2150 | 3091 | 2476 | 1576 | 790  | 453  | 420.6 | 2850.5 |
| MEAN  | 58.5 | 37.3 | 21.1 | 114  | 76.8 | 99.7 | 82.5 | 50.8 | 26.3 | 14.6 | 13.6  | 95.0   |
| MAX   | 364  | 98   | 25   | 873  | 216  | 506  | 183  | 81   | 47   | 21   | 57    | 1110   |
| MIN   | 25   | 27   | 17   | 14   | 44   | 59   | 58   | 31   | 19   | 11   | 8.8   | 9.5    |
| CFSM  | 1.03 | .66  | .37  | 2.01 | 1.35 | 1.75 | 1.45 | .89  | .46  | .26  | .24   | 1.67   |
| IN.   | 1.19 | .73  | .43  | 2.32 | 1.41 | 2.02 | 1.62 | 1.03 | .52  | .30  | .27   | 1.86   |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 1999, BY WATER YEAR (WY)

|      |      |      |      |      |      |      |      |      |      |      |      |      |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 65.9 | 80.7 | 114  | 128  | 108  | 173  | 137  | 91.8 | 64.9 | 49.5 | 36.8 | 42.3 |
| MAX  | 139  | 154  | 326  | 201  | 141  | 353  | 201  | 142  | 108  | 88.1 | 79.5 | 95.0 |
| (WY) | 1997 | 1997 | 1997 | 1996 | 1996 | 1994 | 1996 | 1998 | 1998 | 1996 | 1994 | 1999 |
| MIN  | 27.4 | 37.3 | 21.1 | 92.3 | 75.5 | 99.7 | 70.4 | 50.8 | 26.3 | 14.6 | 13.6 | 18.9 |
| (WY) | 1998 | 1999 | 1999 | 1998 | 1995 | 1999 | 1995 | 1999 | 1999 | 1999 | 1999 | 1995 |

e Estimated.

SCHUYLKILL RIVER BASIN

01471875 MANATAWNY CREEK NEAR SPANGSVILLE, PA--Continued

| SUMMARY STATISTICS       | FOR 1998 CALENDAR YEAR |        | FOR 1999 WATER YEAR |         | WATER YEARS 1994 - 1999 |              |
|--------------------------|------------------------|--------|---------------------|---------|-------------------------|--------------|
| ANNUAL TOTAL             | 29369                  |        | 20944.1             |         |                         |              |
| ANNUAL MEAN              | 80.5                   |        | 57.4                |         | 91.0                    |              |
| HIGHEST ANNUAL MEAN      |                        |        |                     |         | 125                     | 1994         |
| LOWEST ANNUAL MEAN       |                        |        |                     |         | 57.4                    | 1999         |
| HIGHEST DAILY MEAN       | 630                    | Apr 10 | 1110                | Sep 16  | 1620                    | Oct 19 1996  |
| LOWEST DAILY MEAN        | e17                    | Dec 29 | 8.8                 | Aug 3   | 8.8                     | Aug 3 1999   |
| ANNUAL SEVEN-DAY MINIMUM | a18                    | Dec 25 | 9.5                 | Aug 1   | 9.5                     | Aug 1 1999   |
| INSTANTANEOUS PEAK FLOW  |                        |        | b3290               | Sep 16  | b3380                   | Oct 19 1996  |
| INSTANTANEOUS PEAK STAGE |                        |        | 8.03                | Sep 16  | 8.11                    | Oct 19 1996  |
| INSTANTANEOUS LOW FLOW   |                        |        | 8.0                 | Aug 2,3 | 8.0                     | Aug 2,3 1999 |
| ANNUAL RUNOFF (CFSM)     | 1.41                   |        | 1.01                |         | 1.60                    |              |
| ANNUAL RUNOFF (INCHES)   | 19.20                  |        | 13.69               |         | 21.73                   |              |
| 10 PERCENT EXCEEDS       | 158                    |        | 94                  |         | 171                     |              |
| 50 PERCENT EXCEEDS       | 50                     |        | 36                  |         | 58                      |              |
| 90 PERCENT EXCEEDS       | 22                     |        | 13                  |         | 22                      |              |

- a Computed using estimated daily discharges.
- b From rating curve extended above 1,200 ft<sup>3</sup>/s.
- e Estimated.

