



# 2005 Water Year SCHUYLKILL RIVER BASIN

01470960 Tulpehocken Cr at Blue Marsh Damsite near Reading

Latitude: 40° 22 ' 14"

Longitude: 076° 01 ' 32"

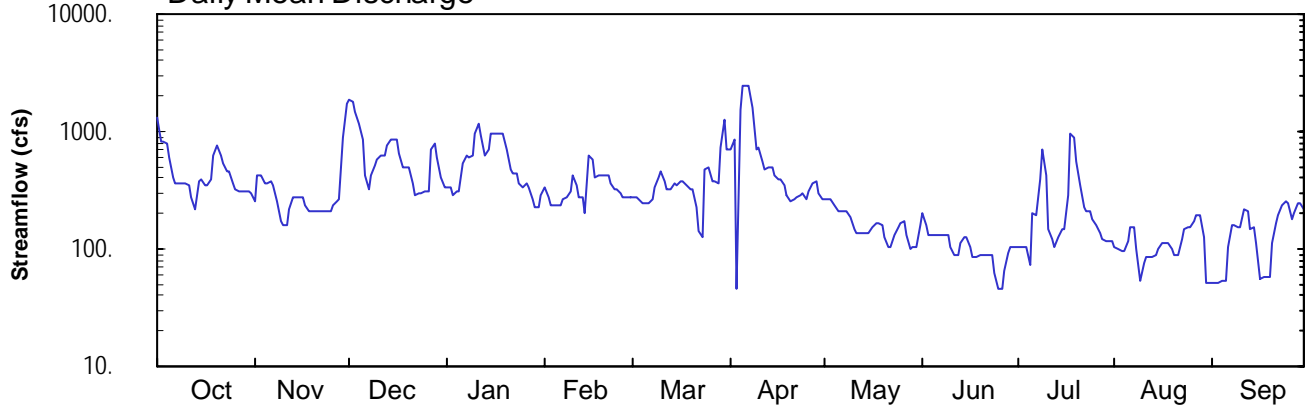
Hydrologic Unit Code: 02040203

Berks County

Datum: 230.06 feet

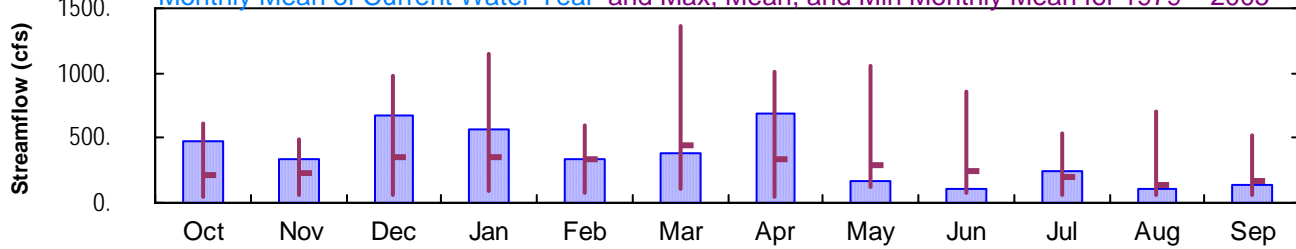
Drainage Area: 175. mi<sup>2</sup>

## Daily Mean Discharge

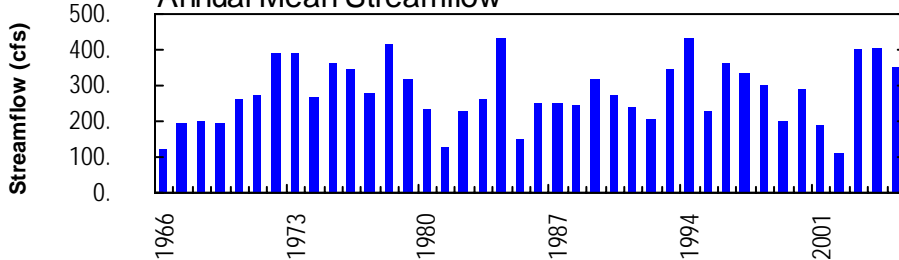


## Monthly Statistics

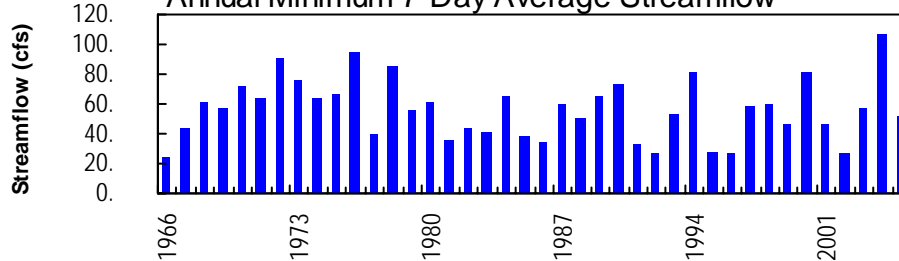
Monthly Mean of Current Water Year and Max, Mean, and Min Monthly Mean for 1979 – 2005



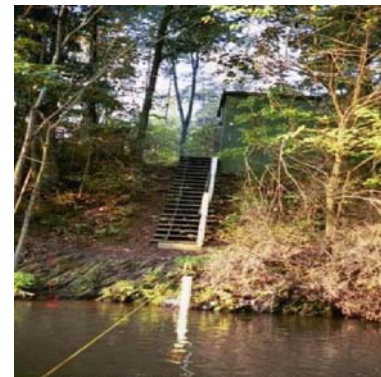
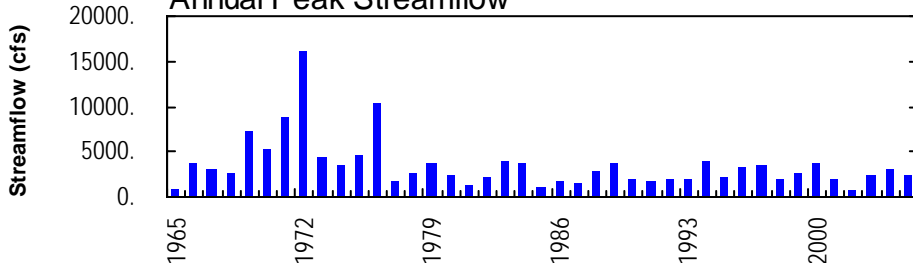
## Annual Mean Streamflow



## Annual Minimum 7-Day Average Streamflow



## Annual Peak Streamflow



01470960-Tulpehocken Creek at Blue Marsh Damsite near Reading

## SCHUYLKILL RIVER BASIN

## 01470960 TULPEHOCKEN CREEK AT BLUE MARSH DAMSITE NEAR READING, PA

**LOCATION.**--Lat 40°22'14", long 76°01'32", Berks County, Hydrologic Unit 02040203, on right bank 1.0 mi upstream from Rebers Bridge and Plum Creek, 1.0 mi east of Blue Marsh, 3.0 mi north of Sinking Spring, and 5.5 mi northeast of Reading.

**DRAINAGE AREA.**--175 mi<sup>2</sup>.

**PERIOD OF RECORD.**--May 1965 to current year.

**REVISED RECORDS.**--WDR PA-72-1: 1969-71 (M).

**GAGE.**--Water-stage recorder. Datum of gage is 230.06 ft above National Geodetic Vertical Datum of 1929 (Western Berks Water Authority datum). Prior to Nov. 25, 1974, water-stage recorder at site 0.3 mi downstream at same datum.

**REMARKS.**--No estimated daily discharges. Records good. Flow regulated since April 1979 by Blue Marsh Lake (station 01470870) 0.8 mi upstream. Satellite and landline telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005  
DAILY MEAN VALUES

| DAY   | OCT   | NOV  | DEC   | JAN   | FEB  | MAR   | APR   | MAY  | JUN  | JUL  | AUG  | SEP  |
|-------|-------|------|-------|-------|------|-------|-------|------|------|------|------|------|
| 1     | 1290  | 251  | 1830  | 332   | 331  | 277   | 698   | 264  | 201  | 105  | 106  | 51   |
| 2     | 814   | 425  | 1810  | 332   | 275  | 277   | 869   | 264  | 159  | 105  | 100  | 51   |
| 3     | 809   | 418  | 1450  | 287   | 238  | 263   | 46    | 263  | 131  | 105  | 97   | 52   |
| 4     | 805   | 361  | 1150  | 307   | 240  | 248   | 1530  | 234  | 132  | 104  | 95   | 53   |
| 5     | 614   | 364  | 852   | 305   | 240  | 247   | 2480  | 214  | 133  | 72   | 119  | 53   |
| 6     | 413   | 371  | 419   | 529   | 240  | 247   | 2430  | 214  | 132  | 200  | 155  | 104  |
| 7     | 361   | 355  | 328   | 631   | 260  | 265   | 2430  | 214  | 131  | 196  | 156  | 157  |
| 8     | 361   | 255  | 430   | 610   | 273  | 336   | 1570  | 214  | 130  | 391  | 99   | 157  |
| 9     | 361   | 176  | 506   | 619   | 308  | 402   | 717   | 186  | 131  | 699  | 53   | 156  |
| 10    | 357   | 158  | 571   | 974   | 428  | 458   | 722   | 150  | 105  | 418  | 75   | 156  |
| 11    | 354   | 158  | 622   | 1170  | 352  | 377   | 564   | 137  | 88   | 145  | 86   | 214  |
| 12    | 273   | 217  | 629   | 927   | 277  | 325   | 484   | 138  | 88   | 121  | 86   | 208  |
| 13    | 219   | 280  | 757   | 634   | 277  | 325   | 497   | 139  | 113  | 105  | 87   | 150  |
| 14    | 372   | 280  | 857   | 709   | 203  | 356   | 500   | 139  | 128  | 128  | 88   | 153  |
| 15    | 398   | 279  | 852   | 970   | 635  | 345   | 426   | 139  | 128  | 146  | 101  | 111  |
| 16    | 355   | 278  | 842   | 971   | 585  | 372   | 391   | 154  | 103  | 147  | 111  | 56   |
| 17    | 354   | 235  | 641   | 968   | 408  | 372   | 400   | 164  | 86   | 285  | 111  | 58   |
| 18    | 385   | 208  | 497   | 959   | 431  | 348   | 354   | 164  | 87   | 950  | 111  | 58   |
| 19    | 617   | 208  | 497   | 954   | 431  | 317   | 285   | 162  | 88   | 880  | 98   | 58   |
| 20    | 763   | 210  | 491   | 700   | 430  | 317   | 260   | 128  | 88   | 561  | 90   | 111  |
| 21    | 628   | 211  | 369   | 481   | 430  | 226   | 264   | 104  | 88   | 348  | 90   | 165  |
| 22    | 543   | 211  | 290   | 438   | 362  | 142   | 275   | 103  | 88   | 229  | 123  | 191  |
| 23    | 462   | 211  | 295   | 438   | 317  | 126   | 289   | 133  | 88   | 208  | 150  | 235  |
| 24    | 456   | 211  | 303   | 359   | 317  | 473   | 297   | 156  | 63   | 208  | 154  | 251  |
| 25    | 367   | 211  | 304   | 339   | 301  | 492   | 266   | 168  | 46   | 178  | 154  | 248  |
| 26    | 317   | 238  | 306   | 361   | 277  | 376   | 316   | 175  | 46   | 157  | 172  | 179  |
| 27    | 315   | 254  | 709   | 334   | 277  | 376   | 368   | 130  | 65   | 135  | 192  | 203  |
| 28    | 314   | 270  | 805   | 263   | 277  | 362   | 374   | 102  | 93   | 123  | 192  | 247  |
| 29    | 312   | 874  | 600   | 226   | ---  | 728   | 298   | 103  | 104  | 118  | 127  | 244  |
| 30    | 310   | 1720 | 409   | 226   | ---  | 1260  | 265   | 103  | 105  | 115  | 51   | 220  |
| 31    | 304   | ---  | 332   | 290   | ---  | 695   | ---   | 162  | ---  | 115  | 51   | ---  |
| TOTAL | 14603 | 9898 | 20753 | 17643 | 9420 | 11730 | 20665 | 5120 | 3168 | 7797 | 3480 | 4350 |
| MEAN  | 471   | 330  | 669   | 569   | 336  | 378   | 689   | 165  | 106  | 252  | 112  | 145  |
| MAX   | 1290  | 1720 | 1830  | 1170  | 635  | 1260  | 2480  | 264  | 201  | 950  | 192  | 251  |
| MIN   | 219   | 158  | 290   | 226   | 203  | 126   | 46    | 102  | 46   | 72   | 51   | 51   |

SCHUYLKILL RIVER BASIN

01470960 TULPEHOCKEN CREEK AT BLUE MARSH DAMSITE NEAR READING, PA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1979 - 2005, BY WATER YEAR (WY) (SINCE REGULATION)

|      | OCT  | NOV  | DEC  | JAN  | FEB  | MAR  | APR  | MAY  | JUN  | JUL  | AUG  | SEP  |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 221  | 234  | 358  | 347  | 343  | 444  | 340  | 290  | 249  | 192  | 142  | 161  |
| MAX  | 612  | 484  | 986  | 1151 | 596  | 1365 | 1016 | 1058 | 863  | 543  | 705  | 521  |
| (WY) | 1980 | 1997 | 1997 | 1979 | 1979 | 1994 | 1993 | 1989 | 2003 | 1984 | 2004 | 2004 |
| MIN  | 51.4 | 61.7 | 61.3 | 84.5 | 75.2 | 106  | 49.8 | 123  | 69.9 | 64.9 | 55.4 | 54.0 |
| (WY) | 1996 | 2002 | 1999 | 2002 | 2002 | 2002 | 1985 | 1999 | 1979 | 2002 | 1981 | 1983 |

| SUMMARY STATISTICS       | FOR 2004 CALENDAR YEAR | FOR 2005 WATER YEAR | WATER YEARS 1979 - 2005 |        |
|--------------------------|------------------------|---------------------|-------------------------|--------|
| ANNUAL TOTAL             | 150367                 | 128627              |                         |        |
| ANNUAL MEAN              | 411                    | 352                 | 277                     |        |
| HIGHEST ANNUAL MEAN      |                        |                     | 435                     | 1994   |
| LOWEST ANNUAL MEAN       |                        |                     | 111                     | 2002   |
| HIGHEST DAILY MEAN       | 2970                   | Aug 15              | 2480                    | Apr 5  |
| LOWEST DAILY MEAN        | 93                     | Sep 15              | 46                      | Apr 3a |
| ANNUAL SEVEN-DAY MINIMUM | 107                    | Apr 7               | 52                      | Aug 30 |
| MAXIMUM PEAK FLOW        |                        |                     | 2510                    | Apr 4  |
| MAXIMUM PEAK STAGE       |                        |                     | 6.63                    | Apr 4  |
| 10 PERCENT EXCEEDS       | 785                    |                     | 719                     | 555    |
| 50 PERCENT EXCEEDS       | 314                    |                     | 265                     | 180    |
| 90 PERCENT EXCEEDS       | 128                    |                     | 96                      | 64     |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 1978, BY WATER YEAR (WY) (PRIOR TO REGULATION)

|      | OCT  | NOV  | DEC  | JAN  | FEB  | MAR  | APR  | MAY  | JUN  | JUL  | AUG  | SEP  |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 180  | 236  | 333  | 333  | 373  | 423  | 363  | 261  | 285  | 233  | 175  | 150  |
| MAX  | 701  | 464  | 827  | 761  | 790  | 832  | 706  | 423  | 1244 | 523  | 350  | 536  |
| (WY) | 1977 | 1976 | 1978 | 1978 | 1971 | 1978 | 1970 | 1973 | 1972 | 1969 | 1969 | 1975 |
| MIN  | 56.2 | 58.3 | 69.9 | 100  | 146  | 163  | 144  | 89.2 | 60.4 | 45.0 | 31.9 | 43.4 |
| (WY) | 1967 | 1966 | 1966 | 1966 | 1969 | 1969 | 1966 | 1965 | 1965 | 1966 | 1966 | 1966 |

SUMMARY STATISTICS WATER YEARS 1965 - 1978

|                          |        |             |
|--------------------------|--------|-------------|
| ANNUAL MEAN              | 283    |             |
| HIGHEST ANNUAL MEAN      | 416    | 1978        |
| LOWEST ANNUAL MEAN       | 122    | 1966        |
| HIGHEST DAILY MEAN       | 11000  | Jun 23 1972 |
| LOWEST DAILY MEAN        | 23     | Sep 12 1966 |
| ANNUAL SEVEN-DAY MINIMUM | 25     | Sep 7 1966  |
| MAXIMUM PEAK FLOW        | b16100 | Jun 22 1972 |
| MAXIMUM PEAK STAGE       | c18.70 | Jun 22 1972 |
| ANNUAL RUNOFF (CFSM)     | 1.62   |             |
| ANNUAL RUNOFF (INCHES)   | 22.00  |             |
| 10 PERCENT EXCEEDS       | 551    |             |
| 50 PERCENT EXCEEDS       | 178    |             |
| 90 PERCENT EXCEEDS       | 69     |             |

- a Also June 25, 26.
- b From rating curve extended above 3,540 ft<sup>3</sup>/s on basis of runoff comparison with downstream station.
- c From floodmark.

