

## SHERMAN CREEK BASIN

## 01568000 SHERMAN CREEK AT SHERMANS DALE, PA

**LOCATION.**--Lat 40°19'24", long 77°10'09", Perry County, Hydrologic Unit 02050305, on left bank on downstream side of bridge on State Highway 34 at Shermans Dale, and 1.2 mi upstream from Fishing Run.

**DRAINAGE AREA.**--207 mi<sup>2</sup>.

**PERIOD OF RECORD.**--October 1929 to current year. Prior to October 1962, published as "*at Shermandale*".

**REVISED RECORDS.**--WSP 1302: 1930(M). WSP 1502: 1933, 1934(M), 1935-36. WDR PA-97-2: Drainage area.

**GAGE.**--Water-stage recorder. Datum of gage is 422.63 ft above National Geodetic Vertical Datum of 1929. Prior to Jan. 29, 1930, nonrecording gage at same site and datum.

**REMARKS.**--Records good except those for estimated daily discharges, which are poor. Several measurements of water temperature were made during the year. Satellite and landline telemetry at station.

**EXTREMES OUTSIDE PERIOD OF RECORD.**--Flood of July 22, 1927, reached a stage of 20.34 ft, from floodmark, discharge, about 44,000 ft<sup>3</sup>/s.

**PEAK DISCHARGES FOR CURRENT YEAR.**--Peak discharges greater than a base discharge of 3,000 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) |
|--------|------|---------------------------------|---------------------|--|------|---------------------------------|---------------------|
| May 18 | 1500 | *3,110                          | *6.36               | 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     | 19   | 32   | 55   | e28  | 75   | 45   | 326  | 442   | 207  | 47   | 21    | 20   |
| 2     | 19   | 34   | 55   | e23  | 85   | 45   | 256  | 428   | 179  | 44   | 18    | 20   |
| 3     | 19   | 35   | 44   | e24  | 73   | 196  | 223  | 378   | 149  | 41   | 18    | 19   |
| 4     | 19   | 35   | 35   | e26  | 67   | 216  | 199  | 281   | 134  | 38   | 17    | 17   |
| 5     | 18   | 35   | 31   | e27  | 64   | 115  | 180  | 246   | 166  | 35   | 16    | 16   |
| 6     | 17   | 32   | 29   | e28  | 69   | 104  | 170  | 223   | 293  | 32   | 14    | 15   |
| 7     | 16   | 31   | 29   | e32  | 70   | 92   | 160  | 209   | 493  | 31   | 13    | 14   |
| 8     | 16   | 32   | 33   | e30  | 64   | 84   | 150  | 194   | 241  | 31   | 12    | 13   |
| 9     | 16   | 31   | 63   | e38  | 59   | 79   | 147  | 286   | 180  | 34   | 12    | 12   |
| 10    | 16   | 31   | 61   | e40  | 57   | 95   | 159  | 394   | 154  | 39   | 11    | 11   |
| 11    | 16   | 31   | 49   | e85  | 77   | 100  | 141  | 254   | 134  | 35   | 11    | 11   |
| 12    | 17   | 31   | 38   | e150 | 78   | 84   | 125  | 235   | 120  | 31   | 11    | 11   |
| 13    | 19   | 31   | 36   | e110 | 71   | 80   | 125  | 400   | 113  | 29   | 11    | 11   |
| 14    | 24   | 32   | 45   | e70  | 61   | 83   | 132  | 502   | 172  | 30   | 10    | 11   |
| 15    | 71   | 32   | 64   | e65  | 65   | 82   | 257  | 394   | 199  | 30   | 9.9   | 13   |
| 16    | 80   | 32   | 57   | e55  | 59   | 80   | 224  | 312   | 166  | 29   | 10    | 17   |
| 17    | 49   | 34   | 48   | e50  | 57   | 82   | 182  | 269   | 121  | 27   | 10    | 23   |
| 18    | 36   | 33   | 60   | e45  | 54   | 148  | 185  | 2050  | 104  | 26   | 11    | 23   |
| 19    | 31   | 32   | 63   | e40  | 50   | 312  | 226  | 1240  | 123  | 25   | 11    | 21   |
| 20    | 30   | 33   | 57   | e45  | 51   | 850  | 194  | 741   | 92   | 29   | 10    | 20   |
| 21    | 29   | 34   | 46   | e50  | 52   | 1110 | 175  | 556   | 82   | 26   | 10    | 19   |
| 22    | 25   | 31   | 39   | e45  | 51   | 544  | 311  | 446   | 74   | 24   | 10    | 25   |
| 23    | 27   | 31   | 36   | e45  | 48   | 376  | 338  | 371   | 68   | 24   | 15    | 84   |
| 24    | 25   | 32   | 37   | e90  | 47   | 297  | 252  | 320   | 64   | 26   | 18    | 38   |
| 25    | 27   | 57   | e36  | e120 | 45   | 246  | 234  | 277   | 61   | 24   | 21    | 27   |
| 26    | 26   | 174  | e35  | 108  | 45   | 268  | 223  | 267   | 59   | 22   | 21    | 26   |
| 27    | 29   | 79   | e33  | 79   | 48   | 683  | 187  | 310   | 56   | 23   | 18    | 135  |
| 28    | 29   | 47   | e36  | 67   | 47   | 420  | 365  | 308   | 58   | 29   | 18    | 186  |
| 29    | 27   | 38   | e34  | 61   | ---  | 338  | 943  | 343   | 57   | 27   | 20    | 73   |
| 30    | 28   | 41   | e30  | 58   | ---  | 291  | 549  | 260   | 51   | 25   | 19    | 44   |
| 31    | 29   | ---  | e27  | 63   | ---  | 253  | ---  | 220   | ---  | 24   | 19    | ---  |
| TOTAL | 849  | 1213 | 1341 | 1797 | 1689 | 7798 | 7338 | 13156 | 4170 | 937  | 445.9 | 975  |
| MEAN  | 27.4 | 40.4 | 43.3 | 58.0 | 60.3 | 252  | 245  | 424   | 139  | 30.2 | 14.4  | 32.5 |
| MAX   | 80   | 174  | 64   | 150  | 85   | 1110 | 943  | 2050  | 493  | 47   | 21    | 186  |
| MIN   | 16   | 31   | 27   | 23   | 45   | 45   | 125  | 194   | 51   | 22   | 9.9   | 11   |
| CFSM  | 0.13 | 0.20 | 0.21 | 0.28 | 0.29 | 1.22 | 1.18 | 2.05  | 0.67 | 0.15 | 0.07  | 0.16 |
| IN.   | 0.15 | 0.22 | 0.24 | 0.32 | 0.30 | 1.40 | 1.32 | 2.36  | 0.75 | 0.17 | 0.08  | 0.18 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 2002, BY WATER YEAR (WY)

|      |      |      |      |      |      |      |      |      |      |      |      |      |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 144  | 245  | 308  | 318  | 401  | 605  | 541  | 392  | 209  | 116  | 97.3 | 99.3 |
| MAX  | 905  | 924  | 968  | 1144 | 1253 | 1941 | 1675 | 1196 | 1969 | 1187 | 777  | 954  |
| (WY) | 1977 | 1971 | 1997 | 1996 | 1984 | 1936 | 1993 | 1978 | 1972 | 1989 | 1933 | 1996 |
| MIN  | 18.5 | 22.1 | 22.7 | 22.0 | 54.2 | 133  | 161  | 88.8 | 48.4 | 18.9 | 14.4 | 18.6 |
| (WY) | 1964 | 1931 | 1931 | 1981 | 1931 | 1931 | 1997 | 1941 | 1965 | 1966 | 2002 | 1930 |

e Estimated.

SHERMAN CREEK BASIN

01568000 SHERMAN CREEK AT SHERMANS DALE, PA--Continued

| SUMMARY STATISTICS       | FOR 2001 CALENDAR YEAR |         | FOR 2002 WATER YEAR |              | WATER YEARS 1930 - 2002 |             |
|--------------------------|------------------------|---------|---------------------|--------------|-------------------------|-------------|
| ANNUAL TOTAL             | 67404                  |         | 41708.9             |              |                         |             |
| ANNUAL MEAN              | 185                    |         | 114                 |              | 289                     |             |
| HIGHEST ANNUAL MEAN      |                        |         |                     |              | 544                     | 1972        |
| LOWEST ANNUAL MEAN       |                        |         |                     |              | 114                     | 2002        |
| HIGHEST DAILY MEAN       | 2270                   | Mar 30  | 2050                | May 18       | 18300                   | Jun 23 1972 |
| LOWEST DAILY MEAN        | 16                     | Sep 8,9 | 9.9                 | Aug 15       | 9.9                     | Aug 15 2002 |
| ANNUAL SEVEN-DAY MINIMUM | 16                     | Oct 6   | 10                  | Aug 14       | 10                      | Aug 14 2002 |
| MAXIMUM PEAK FLOW        |                        |         | 3110                | May 18       | <sup>a</sup> 27500      | Jun 23 1972 |
| MAXIMUM PEAK STAGE       |                        |         | 6.36                | May 18       | 18.09                   | Jun 23 1972 |
| INSTANTANEOUS LOW FLOW   |                        |         | 9.6                 | Aug 15,21,22 | 3.9                     | Dec 1 1930  |
| ANNUAL RUNOFF (CFSM)     | 0.89                   |         | 0.55                |              | 1.40                    |             |
| ANNUAL RUNOFF (INCHES)   | 12.11                  |         | 7.50                |              | 18.97                   |             |
| 10 PERCENT EXCEEDS       | 496                    |         | 288                 |              | 645                     |             |
| 50 PERCENT EXCEEDS       | 83                     |         | 47                  |              | 140                     |             |
| 90 PERCENT EXCEEDS       | 22                     |         | 17                  |              | 31                      |             |

a From rating curve extended above 18,000 ft<sup>3</sup>/s.

