

JUNIATA RIVER BASIN

01563500 JUNIATA RIVER AT MAPLETON DEPOT, PA

LOCATION.--Lat 40°23'32", long 77°56'07", Huntingdon County, Hydrologic Unit 02050304, on right bank 0.2 mi downstream from Scrub Run, and 0.3 mi downstream from bridge on State Highway 655 at Mapleton Depot.

DRAINAGE AREA.--2,030 mi².

PERIOD OF RECORD.--October 1937 to current year.

REVISED RECORDS.--WDR PA-73-1: 1936(M).

GAGE.--Water-stage recorder. Datum of gage is 557.31 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Flow regulated since October 1972 by Raystown Dam (station 01563100) 12 mi upstream. Several measurements of water temperature were made during the year. Satellite and landline telemetry at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 18, 1936, reached a stage of 38.2 ft, from floodmark, discharge, 165,000 ft³/s from rating curve extended above 39,000 ft³/s on basis of runoff comparison with upstream and downstream stations.

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 | 3750 | 1920 | 11900 | 2160 | 2360 | 3040 | 10500 | 1740 | 1090 | 706 | 687 | 924 |
| 2 | 3730 | 1830 | 10800 | 2120 | 1960 | 2940 | 10000 | 1670 | 1030 | 701 | 506 | 769 |
| 3 | 3910 | 1860 | 8010 | 2400 | 1670 | 2770 | 9830 | 1570 | 998 | 691 | 670 | 674 |
| 4 | 3120 | 1840 | 6330 | 3970 | 1730 | 2510 | 7050 | 1550 | 1060 | 664 | 480 | 503 |
| 5 | 3090 | 2080 | 5460 | 4790 | 1750 | 2380 | 7690 | 1500 | 1040 | 659 | 747 | 690 |
| 6 | 2640 | 2040 | 4500 | 19200 | 1750 | 2410 | 7920 | 1460 | 1070 | 702 | 507 | 680 |
| 7 | 2160 | 1910 | 4240 | 21300 | 1800 | 3180 | 6750 | 1440 | 1340 | 717 | 469 | 511 |
| 8 | 2080 | 1820 | 4940 | 16600 | 2220 | 5630 | 5280 | 1430 | 1340 | 910 | 688 | 632 |
| 9 | 2020 | 1700 | 4590 | 14500 | 3380 | 5350 | 4400 | 1410 | 1250 | 1000 | 711 | 450 |
| 10 | 1980 | 1650 | 7630 | 10100 | 6790 | 4350 | 4150 | 1390 | 1250 | 809 | 789 | 514 |
| 11 | 1930 | 1630 | 10900 | 8340 | 5760 | 4140 | 3710 | 1370 | 1690 | 709 | 769 | 445 |
| 12 | 1630 | 1970 | 10100 | 12500 | 5120 | 3990 | 3230 | 1350 | 1960 | 669 | 743 | 661 |
| 13 | 1710 | 2760 | 8660 | 14100 | 4590 | 3810 | 3110 | 1320 | 1620 | 660 | 504 | 602 |
| 14 | 1690 | 2240 | 5790 | 12800 | 3970 | 3620 | 2810 | 1300 | 1300 | 667 | 500 | 438 |
| 15 | 1730 | 2250 | 5310 | 10500 | 5610 | 3140 | 2510 | 1370 | 1160 | 712 | 738 | 485 |
| 16 | 1840 | 2290 | 4560 | 8760 | 5740 | 2630 | 2380 | 1280 | 956 | 714 | 690 | 486 |
| 17 | 1850 | 2390 | 3840 | 6550 | 5870 | 2570 | 2300 | 992 | 939 | 875 | 671 | 581 |
| 18 | 1830 | 2370 | 3620 | 5680 | 4900 | 2540 | 2250 | 943 | 924 | 930 | 633 | 459 |
| 19 | 2330 | 2300 | 3470 | 5110 | 3930 | 2520 | 2090 | 924 | 902 | 909 | 749 | 685 |
| 20 | 2510 | 2370 | 3210 | 4280 | 3780 | 2540 | 1850 | 1040 | 845 | 869 | 468 | 466 |
| 21 | 2160 | 2530 | 2830 | 3970 | 3800 | 2530 | 1830 | 1350 | 750 | 1060 | 515 | 518 |
| 22 | 2090 | 2550 | 2670 | 3550 | 3910 | 2370 | 2060 | 1220 | 750 | 1090 | 758 | 470 |
| 23 | 2030 | 2780 | 3050 | e3200 | 4550 | 3360 | 2560 | 1350 | 733 | 948 | 668 | 582 |
| 24 | 1980 | 3170 | 3870 | e2800 | 4670 | 9570 | 2620 | 1450 | 724 | 781 | 486 | 351 |
| 25 | 1900 | 7250 | 3190 | e2900 | 4140 | 8900 | 2340 | 1480 | 713 | 850 | 516 | 434 |
| 26 | 1700 | 8250 | 2960 | 3090 | 3780 | 8360 | 2210 | 1370 | 702 | 1010 | 697 | 585 |
| 27 | 1650 | 6720 | 2620 | 2890 | 3350 | 7160 | 2130 | 1290 | 690 | 830 | 445 | 534 |
| 28 | 1660 | 9220 | 1970 | 2590 | 3290 | 12400 | 2070 | 1230 | 680 | 774 | 488 | 620 |
| 29 | 1700 | 10200 | 2000 | 2560 | --- | 27700 | 1890 | 1260 | 704 | 767 | 741 | 551 |
| 30 | 2180 | 9500 | 2110 | 2670 | --- | 23600 | 1690 | 1200 | 714 | 761 | 730 | 486 |
| 31 | 2150 | --- | 2150 | 2590 | --- | 17200 | --- | 1100 | --- | 753 | 576 | --- |
| TOTAL | 68730 | 103390 | 157280 | 218570 | 106170 | 189210 | 121210 | 41349 | 30924 | 24897 | 19339 | 16786 |
| MEAN | 2217 | 3446 | 5074 | 7051 | 3792 | 6104 | 4040 | 1334 | 1031 | 803 | 624 | 560 |
| MAX | 3910 | 10200 | 11900 | 21300 | 6790 | 27700 | 10500 | 1740 | 1960 | 1090 | 789 | 924 |
| MIN | 1630 | 1630 | 1970 | 2120 | 1670 | 2370 | 1690 | 924 | 680 | 659 | 445 | 351 |

e Estimated.

JUNIATA RIVER BASIN

01563500 JUNIATA RIVER AT MAPLETON DEPOT, PA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1973 - 2005, BY WATER YEAR (WY) (SINCE REGULATION)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|-------|-------|------|------|------|------|-------|
| MEAN | 1627 | 2355 | 3017 | 2964 | 3659 | 5470 | 5049 | 3385 | 2129 | 1283 | 970 | 1474 |
| MAX | 7397 | 7196 | 8006 | 8972 | 8159 | 14040 | 15970 | 7725 | 6743 | 6123 | 2488 | 11000 |
| (WY) | 1977 | 1998 | 1973 | 1996 | 1984 | 1994 | 1993 | 1978 | 2003 | 1989 | 2003 | 2004 |
| MIN | 459 | 578 | 872 | 481 | 1269 | 1612 | 1781 | 1309 | 679 | 557 | 490 | 484 |
| (WY) | 2002 | 1979 | 1981 | 1981 | 1993 | 1990 | 1997 | 1976 | 1991 | 1999 | 2002 | 1995 |

| SUMMARY STATISTICS | FOR 2004 CALENDAR YEAR | | FOR 2005 WATER YEAR | | WATER YEARS 1973 - 2005 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL | 1597314 | | 1097855 | | | |
| ANNUAL MEAN | 4364 | | 3008 | | 2775 | |
| HIGHEST ANNUAL MEAN | | | | | 4650 2004 | |
| LOWEST ANNUAL MEAN | | | | | 1360 1992 | |
| HIGHEST DAILY MEAN | 52500 | Sep 18 | 27700 | Mar 29 | 52500 | Sep 18 2004 |
| LOWEST DAILY MEAN | 824 | Jul 11 | 351 | Sep 24 | 351 | Sep 24 2005 |
| ANNUAL SEVEN-DAY MINIMUM | 924 | Jun 28 | 487 | Sep 20 | 395 | Sep 13 2002 |
| MAXIMUM PEAK FLOW | | | 30600 | Mar 29 | a64000 | Sep 18 2004 |
| MAXIMUM PEAK STAGE | | | 16.11 | Mar 29 | 23.76 | Sep 18 2004 |
| 10 PERCENT EXCEEDS | 9610 | | 7090 | | 6110 | |
| 50 PERCENT EXCEEDS | 2600 | | 1930 | | 1600 | |
| 90 PERCENT EXCEEDS | 1200 | | 633 | | 562 | |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 1972, BY WATER YEAR (WY) (PRIOR TO REGULATION)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|------|------|------|------|------|------|------|------|-------|------|------|------|
| MEAN | 925 | 1473 | 2124 | 2500 | 3303 | 5542 | 4766 | 3324 | 2215 | 1058 | 812 | 664 |
| MAX | 3136 | 6057 | 6058 | 6342 | 8327 | 8641 | 9845 | 7044 | 14450 | 3864 | 2638 | 3073 |
| (WY) | 1938 | 1951 | 1951 | 1949 | 1971 | 1967 | 1940 | 1960 | 1972 | 1972 | 1956 | 1945 |
| MIN | 245 | 377 | 374 | 610 | 826 | 1763 | 1697 | 849 | 540 | 317 | 244 | 262 |
| (WY) | 1964 | 1958 | 1966 | 1940 | 1963 | 1969 | 1968 | 1941 | 1965 | 1966 | 1966 | 1964 |

SUMMARY STATISTICS WATER YEARS 1938 - 1972

| | | |
|--------------------------|---------|-------------|
| ANNUAL MEAN | 2387 | |
| HIGHEST ANNUAL MEAN | 4479 | 1972 |
| LOWEST ANNUAL MEAN | 1329 | 1969 |
| HIGHEST DAILY MEAN | 115000 | Jun 23 1972 |
| LOWEST DAILY MEAN | 101 | Aug 21 1966 |
| ANNUAL SEVEN-DAY MINIMUM | 203 | Sep 7 1964 |
| MAXIMUM PEAK FLOW | a125000 | Jun 23 1972 |
| MAXIMUM PEAK STAGE | 33.07 | Jun 23 1972 |
| INSTANTANEOUS LOW FLOW | 68 | Sep 13 1964 |
| ANNUAL RUNOFF (CFSM) | 1.18 | |
| ANNUAL RUNOFF (INCHES) | 15.97 | |
| 10 PERCENT EXCEEDS | 5520 | |
| 50 PERCENT EXCEEDS | 1210 | |
| 90 PERCENT EXCEEDS | 393 | |

a From rating curve extended above 39,000 ft³/s on basis of runoff comparison with upstream and downstream stations.

