

MONONGAHELA RIVER BASIN

03072655 MONONGAHELA RIVER NEAR MASONTOWN, PA

LOCATION.--Lat 39°49'30", long 79°55'23", Greene County, Hydrologic Unit 05020005, on left bank, 84 ft upstream from Lock and Dam at Grays Landing, 0.9 mi upstream from Masontown, 1.2 mi upstream from Whitley Creek, 5.3 mi downstream from Dunkard Creek, 7.6 mi downstream from Cheat River, at mile 81.9.

DRAINAGE AREA.--4,440 mi².

PERIOD OF RECORD.--October 1938 to current year. Published as "at Greensboro" (Station 03072500) October 1938 to September 1995. Prior to January 1939 monthly discharge only, published in WSP 1305.

REVISED RECORDS.--WSP 1113: 1939 (M), 1941 (M). WSP 1435: 1939. WSP 1907: 1936 (M), 1955 (M).

GAGE.--Water-stage recorder and concrete dam control. Datum of gage is 769.00 ft above National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers bench mark). Prior to Nov. 9, 1990, at datum 1.45 ft lower.

REMARKS.--No estimated daily discharges. Records good above 5,000 ft³/s, fair below, except those below 1,000 ft³/s, which are poor. Flow regulated since 1926 by Lake Lynn 11 mi upstream, since May 1938 by Tygart Lake (station 03055500) 69 mi upstream, and since April 1989 by Stonewall Jackson Lake 120.6 mi upstream, combined capacity, 432,000 acre-ft. Several measurements of water temperature were made during the year. U.S. Army Corps of Engineers satellite telemetry at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 1888 reached a stage of about 36 ft, from high-water profile by U.S. Army Corps of Engineers. Flood of Mar. 18, 1936, reached a stage of 28.4 ft, discharge, 130,000 ft³/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 1 | 2250 | 12500 | 8170 | 12100 | 5700 | 19000 | 6470 | 4820 | 22800 | 2520 | 8060 | 7190 |
| 2 | 1220 | 9090 | 8470 | 24500 | 6760 | 17000 | 9790 | 4350 | 24600 | 2090 | 4480 | 24600 |
| 3 | 1310 | 7590 | 7880 | 25900 | 9130 | 22500 | 10300 | 5120 | 26400 | 2490 | 3530 | 24600 |
| 4 | 2080 | 8490 | 7800 | 28100 | 16300 | 23000 | 9640 | 6850 | 32300 | 2710 | 4490 | 31900 |
| 5 | 1500 | 5940 | 5460 | 23500 | 18600 | 23400 | 10700 | 11200 | 25900 | 2170 | 3880 | 31700 |
| 6 | 1120 | 9430 | 6590 | 19400 | 16800 | 38700 | 8750 | 15900 | 22200 | 3290 | 3470 | 23300 |
| 7 | 1330 | 12400 | 3750 | 18600 | 16000 | 39000 | 11800 | 14900 | 23100 | 4290 | 3520 | 12600 |
| 8 | 1230 | 13500 | 2610 | 12500 | 14200 | 28000 | 20400 | 16000 | 27800 | 20800 | 3490 | 9950 |
| 9 | 1170 | 10100 | 5200 | 11500 | 10400 | 32900 | 21100 | 24400 | 21600 | 28300 | 4560 | 7910 |
| 10 | 1400 | 9870 | 4350 | 10800 | 7650 | 30700 | 23100 | 40700 | 18900 | 29200 | 7750 | 7340 |
| 11 | 2790 | 7260 | 2910 | 9520 | 7310 | 25100 | 21400 | 51900 | 13900 | 33100 | 7440 | 4220 |
| 12 | 2310 | 10300 | 6720 | 8600 | 6570 | 22500 | 22700 | 30700 | 8940 | 18700 | 7340 | 2820 |
| 13 | 3500 | 11200 | 11600 | 8410 | 6010 | 20300 | 18700 | 27500 | 8030 | 14800 | 9220 | 2760 |
| 14 | 2850 | 10800 | 23300 | 8620 | 4950 | 27400 | 16900 | 27100 | 12500 | 10200 | 8480 | 2550 |
| 15 | 3380 | 11300 | 23700 | 7580 | 3870 | 26500 | 14900 | 24000 | 21200 | 6850 | 6430 | 3290 |
| 16 | 4600 | 8280 | 17300 | 4410 | 5720 | 23900 | 10400 | 22100 | 18800 | 6030 | 5310 | 3740 |
| 17 | 10000 | 12500 | 15900 | 3960 | 4200 | 24000 | 8650 | 15400 | 15700 | 5020 | 5320 | 3340 |
| 18 | 7890 | 19300 | 13300 | 2350 | 6610 | 20800 | 5050 | 12300 | 21700 | 3540 | 7560 | 5590 |
| 19 | 7580 | 15200 | 12600 | 2240 | 8270 | 16900 | 4510 | 10300 | 16800 | 4270 | 10400 | 21000 |
| 20 | 5770 | 18100 | 15400 | 2290 | 7520 | 15500 | 3780 | 12100 | 19500 | 3590 | 7480 | 25700 |
| 21 | 6810 | 16900 | 26600 | 3010 | 9070 | 15800 | 4810 | 12200 | 24800 | 3980 | 4170 | 19700 |
| 22 | 6130 | 13800 | 18500 | 3980 | 14500 | 14200 | 5030 | 10600 | 20300 | 2780 | 2220 | 17600 |
| 23 | 5460 | 9510 | 14900 | 4300 | 49400 | 12400 | 6000 | 10300 | 15300 | 2610 | 2640 | 17900 |
| 24 | 4790 | 9460 | 14700 | 5100 | 41800 | 7660 | 7470 | 17900 | 11100 | 4190 | 2420 | 16600 |
| 25 | 4750 | 8450 | 16000 | 1970 | 28300 | 8610 | 6070 | 14900 | 6720 | 2490 | 1910 | 12000 |
| 26 | 3110 | 8600 | 17200 | 2360 | 28500 | 10500 | 5350 | 11600 | 6440 | 2560 | 2020 | 10900 |
| 27 | 3490 | 8990 | 14000 | 3810 | 28500 | 6950 | 5260 | 8870 | 4620 | 1440 | 7650 | 7270 |
| 28 | 5640 | 5970 | 11400 | 2410 | 23600 | 5230 | 5180 | 7160 | 4090 | 3490 | 11900 | 8750 |
| 29 | 3410 | 8360 | 10000 | 4530 | --- | 3490 | 3600 | 5370 | 3180 | 7340 | 5760 | 10500 |
| 30 | 11400 | 7490 | 11400 | 3490 | --- | 3930 | 4070 | 6690 | 3310 | 6390 | 6100 | 8920 |
| 31 | 12700 | --- | 10000 | 3530 | --- | 5780 | --- | 7010 | --- | 4330 | 8350 | --- |
| TOTAL | 132970 | 320680 | 367710 | 283370 | 406240 | 591650 | 311880 | 490240 | 502530 | 245560 | 177350 | 386240 |
| MEAN | 4289 | 10690 | 11860 | 9141 | 14510 | 19090 | 10400 | 15810 | 16750 | 7921 | 5721 | 12870 |
| MAX | 12700 | 19300 | 26600 | 28100 | 49400 | 39000 | 23100 | 51900 | 32300 | 33100 | 11900 | 31900 |
| MIN | 1120 | 5940 | 2610 | 1970 | 3870 | 3490 | 3600 | 4350 | 3180 | 1440 | 1910 | 2550 |
| (†) | -52 | -419 | -216 | -40 | +1390 | -867 | +1110 | +188 | -93 | -17 | -70 | -470 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 2003, BY WATER YEAR (WY)

| | | | | | | | | | | | | |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| MEAN | 3376 | 6547 | 10860 | 11780 | 14170 | 16030 | 11920 | 9214 | 5977 | 4140 | 3840 | 2887 |
| MAX | 15260 | 29580 | 26520 | 24690 | 30880 | 37830 | 23180 | 29230 | 22100 | 13240 | 15120 | 12870 |
| (WY) | 1980 | 1986 | 1973 | 1952 | 1994 | 1963 | 1940 | 1996 | 1981 | 1958 | 1956 | 2003 |
| MIN | 439 | 369 | 1648 | 1840 | 3781 | 6192 | 3781 | 1836 | 926 | 676 | 592 | 482 |
| (WY) | 1954 | 1954 | 1966 | 1977 | 1941 | 1987 | 1946 | 1982 | 1965 | 1966 | 1965 | 1946 |

† Change in contents, equivalent in cubic feet per second, in Tygart Lake, Stonewall Jackson Lake and Lake Lynn. Records of contents in Lake Lynn furnished by Allegheny Energy Supply. Records of contents in Tygart Lake and Stonewall Jackson Lake furnished by U.S. Army Corps of Engineers.

MONONGAHELA RIVER BASIN

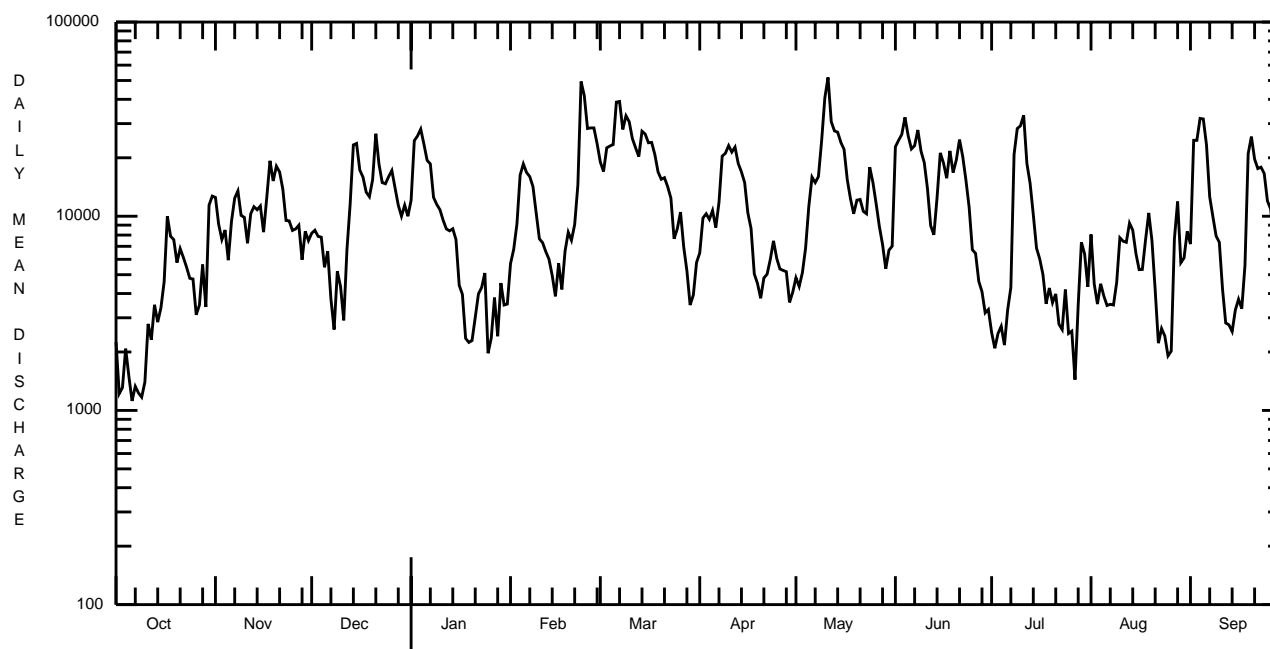
03072655 MONONGAHELA RIVER NEAR MASONTOWN, PA--Continued

| SUMMARY STATISTICS | FOR 2002 CALENDAR YEAR | | FOR 2003 WATER YEAR | | WATER YEARS 1939 - 2003 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL | 3045224 | | 4216420 | | | |
| ANNUAL MEAN | 8343 † +15 | | 11550 † +26 | | 8360 | |
| HIGHEST ANNUAL MEAN | | | | | 13010 | |
| LOWEST ANNUAL MEAN | | | | | 4995 | |
| HIGHEST DAILY MEAN | 53200 | Mar 21 | 51900 | May 11 | 154000 | Nov 5 1985 |
| LOWEST DAILY MEAN | 714 | Sep 22 | 1120 | Oct 6 | 177 | Sep 11 1988 |
| ANNUAL SEVEN-DAY MINIMUM | 919 | Sep 8 | 1390 | Oct 3 | 267 | Nov 4 1953 |
| MAXIMUM PEAK FLOW | | | 66800 | | a220000 | |
| MAXIMUM PEAK STAGE | | | 18.98 | | Feb 23 | |
| 10 PERCENT EXCEEDS | 19300 | | 24400 | | 20900 | |
| 50 PERCENT EXCEEDS | 5650 | | 8620 | | 4780 | |
| 90 PERCENT EXCEEDS | 1190 | | 2810 | | 1040 | |

† Change in contents, equivalent in cubic feet per second, in Tygart Lake, Stonewall Jackson Lake and Lake Lynn. Records of contents in Lake Lynn furnished by Allegheny Energy Supply. Records of contents in Tygart Lake and Stonewall Jackson Lake furnished by U.S. Army Corps of Engineers.

a From rating curve extended above 131,000 ft³/s.

b From outside floodmarks, datum then in use.



OCTOBER 1, 2002 TO SEPTEMBER 30, 2003