

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 sea level (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 1938 by Tygart Lake (station 03055500) 69 mi upstream, since 1926 by Lake Lynn 11 mi upstream, and since 1990 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 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1710	996	1330	2840	7340	14200	7320	4040	3110	1140	1020	787
2	1660	3630	857	1900	7410	16400	11000	3740	2500	1130	965	1130
3	1490	5070	916	4110	7340	18000	8980	4120	2580	1090	783	477
4	1950	1230	1220	7680	7030	30400	6080	3300	2020	894	1230	331
5	1870	814	858	6910	5220	26400	6570	3120	1600	957	1300	613
6	1590	1010	1510	5180	7520	28600	6030	2270	940	943	557	557
7	1430	802	903	4740	10200	36800	6430	3130	2620	678	729	700
8	2350	1100	1580	4220	27000	26800	5020	2870	1410	768	652	1960
9	2960	767	1500	15300	23400	25100	8030	2150	1090	510	1000	1670
10	2820	988	1490	21900	20400	17200	16500	3080	742	774	994	1140
11	2060	1120	2770	17500	14800	12500	13600	1790	1030	789	910	942
12	2990	716	3870	15600	11700	9890	12400	2090	1040	693	1090	886
13	2710	1010	1650	18200	11200	10400	9420	1880	896	488	675	608
14	1480	817	4500	31300	7300	10000	9210	2190	1730	743	742	792
15	2100	1180	4020	44700	7810	11900	8560	3430	1270	515	671	935
16	1590	869	2880	31000	5750	12600	9720	1950	1150	898	659	611
17	1620	985	2250	25000	6160	14500	6140	3040	1550	470	622	757
18	1470	845	1880	22500	5820	13100	4270	2030	990	426	709	723
19	1890	857	2300	27500	4730	35800	7980	6390	836	638	743	785
20	1880	831	2350	23100	6170	26700	8800	5880	961	830	768	533
21	2030	1040	2240	19500	5430	23400	10800	4490	1020	646	758	888
22	1960	1270	3620	24700	5980	26200	16100	5850	821	1140	400	911
23	2100	803	5230	22700	4730	22500	13100	7890	992	890	730	698
24	1780	881	4970	30000	3780	19300	20800	16500	927	519	592	635
25	1770	847	4140	32600	4070	16700	15400	16900	662	650	812	859
26	1580	1080	2790	27000	2840	13000	13900	13600	430	939	1130	662
27	1840	1150	2690	26400	4580	14100	12000	8880	985	658	564	775
28	1610	1150	2600	22000	4000	9600	10400	6880	708	796	835	652
29	1480	1340	3030	16500	---	8290	7320	4690	1130	1970	996	979
30	1730	1140	3070	9620	---	6600	5210	3010	1230	1750	441	1610
31	1140	---	2350	8600	---	7550	---	2620	---	877	555	---
TOTAL	58640	36338	77364	570800	239710	582730	297090	153800	38970	26209	24632	25606
MEAN	1892	1211	2496	18410	8561	18800	9903	4961	1299	845	795	854
MAX	2990	5070	5230	44700	27000	36800	20800	16900	3110	1970	1300	1960
MIN	1140	716	857	1900	2840	6600	4270	1790	430	426	400	331
(†)	-683	-313	+84	+6.2	-20	+639	+981	+100	-225	-296	-370	-372

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 1999, BY WATER YEAR (WY)

MEAN	3416	6658	11070	12070	14190	16230	11790	9075	5785	4002	3835	2717
MAX	15260	29580	26520	24690	30880	37830	23180	29230	22100	13240	15120	12470
(WY)	1980	1986	1973	1952	1994	1963	1940	1996	1981	1958	1956	1971
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.

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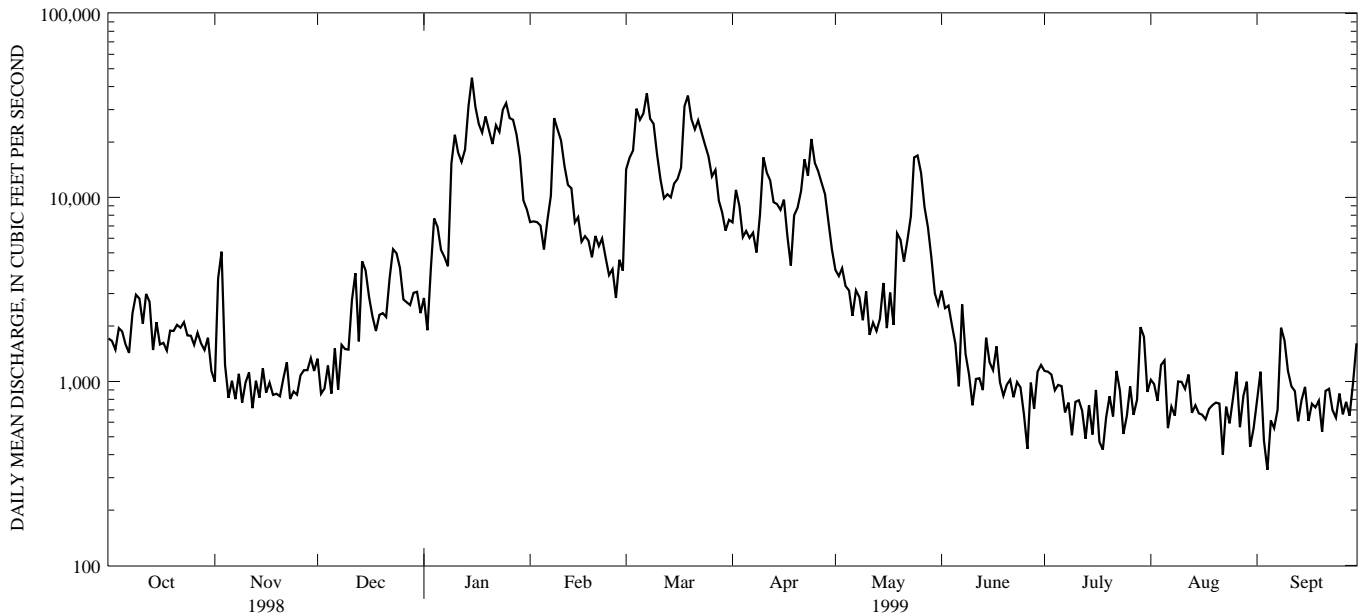
03072655 MONONGAHELA RIVER NEAR MASONTOWN, PA--Continued

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1939 - 1999	
ANNUAL TOTAL	3199048		2131889			
ANNUAL MEAN	8765	† +3.8	5841	† -40	8368	
HIGHEST ANNUAL MEAN					13010	1994
LOWEST ANNUAL MEAN					4995	1966
HIGHEST DAILY MEAN	49400	Jun 20	44700	Jan 15	154000	Nov 5 1985
LOWEST DAILY MEAN	677	Aug 9	331	Sep 4	177	Sep 11 1988
ANNUAL SEVEN-DAY MINIMUM	912	Nov 14	597	Jul 13	267	Nov 4 1953
INSTANTANEOUS PEAK FLOW			47600	Jan 15	a 220000	Nov 5 1985
INSTANTANEOUS PEAK STAGE			16.97	Jan 15	b 39.39	Nov 5 1985
10 PERCENT EXCEEDS	23000		17300		21000	
50 PERCENT EXCEEDS	4140		1970		4760	
90 PERCENT EXCEEDS	1150		699		1010	

† 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.



1-YEAR HYDROGRAPH
OCTOBER 1, 1998 TO SEPTEMBER 30, 1999