

MONONGAHELA RIVER BASIN

03075070 MONONGAHELA RIVER AT ELIZABETH, PA

LOCATION.--Lat 40°15'44", long 79°54'05", Allegheny County, Hydrologic Unit 05020005, on right bank 30 ft landward from upstream end of guide wall, 1,050 ft upstream from dam at lock 3 at Elizabeth, 0.4 mi downstream from Lobbs Creek, at mile 24.0.

DRAINAGE AREA.--5,340 mi².

PERIOD OF RECORD.--October 1933 to current year. Published as "*at Charleroi*" (station 03075000) October 1933 to September 1976. Monthly discharge prior to 1940, adjusted for reservoir contents, published in WSP 1305. Records for March 1886 to March 1905 (high-water periods, only), published in WSP 169, are unreliable and should not be used (peak discharge of July 11, 1888, as published in WSP 183, is still considered reliable).

REVISED RECORDS.--WSP 758: Drainage area. WSP 783: 1888 (M). WSP 1435: 1934, 1936. See also "*PERIOD OF RECORD.*"

GAGE.--Water-stage recorder and concrete dam control. Datum of gage is 717.90 ft above sea level (U.S. Army Corps of Engineers bench mark). From Oct. 1, 1967 to Sept. 30, 1976, at site 17.5 mi upstream at datum 15.70 ft higher. Prior to Oct. 1, 1967, water-stage recorder at site 17.9 mi upstream at datum 17.43 ft higher. Oct. 1, 1965 to Sept. 30, 1967, auxiliary staff gage, Apr. 14, 1966 to Sept. 30, 1967, auxiliary water-stage recorder and Oct. 1, 1967 to Nov. 4, 1990, water-stage recorder at present site at datum 7.60 ft higher.

REMARKS.--No estimated daily discharges. Records good, except those below 2,500 ft³/s, which are poor. Flow regulated by locks above station, since 1938 by Tygart Lake (station 03055500), since May 1926 by Lake Lynn, and since April 1989 by Stonewall Jackson Lake, 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.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9250	2170	5670	1930	33600	3890	11300	3630	6740	2430	16000	2960
2	8290	3620	3470	1630	24800	3810	9640	2390	5700	2330	13700	3820
3	7790	3490	4020	2830	21200	3890	9370	2670	8080	4820	8440	2490
4	4460	2000	3830	2500	19500	4890	8860	3390	6370	4720	4750	3430
5	3280	1190	2880	2610	16900	6720	8460	2440	5020	7000	3810	2320
6	3070	1560	3570	1680	11700	8200	10100	2110	9110	9980	2100	2370
7	2610	2300	4560	1870	13800	9360	19200	1970	25500	7560	2780	1300
8	2270	1150	2450	2630	11000	11200	19200	2620	30300	9520	2930	1420
9	1310	2090	1880	2250	9880	11300	16600	2200	19900	15700	2380	985
10	2640	1790	2190	2180	7740	9670	20100	1170	15800	8420	1850	1400
11	2610	2160	2100	2210	12400	8400	28700	3230	13300	18500	2070	2000
12	1570	3040	1900	2370	12100	7010	45900	2730	8940	13900	1660	1460
13	1960	1440	1790	1160	11700	9100	29600	891	5360	10100	9970	1490
14	1260	3440	3330	1650	10200	19200	18000	1530	6480	6190	8350	1360
15	1710	4610	15000	1820	11600	19400	11500	2710	5210	4420	4300	594
16	1250	3400	13700	2030	22000	19200	15300	1810	5420	2960	3730	1410
17	2000	2950	15300	2310	37600	22400	11400	771	5310	2500	3470	1580
18	2390	3970	20700	3750	32900	21500	12400	2730	5420	2320	1910	1550
19	4430	2180	17100	7290	24800	17300	12200	5750	3340	9290	1310	1560
20	4390	1540	13500	14600	24300	13700	9730	16700	3860	8100	1400	1650
21	2430	2000	12300	16300	19900	12400	6240	17600	3660	5610	1290	2560
22	1820	2330	11200	15300	18800	19200	5320	17800	3110	4950	1750	2340
23	2870	2560	9190	13400	11400	15300	7460	26800	4960	3760	2650	1630
24	2140	1720	5230	11900	10600	12100	8720	28200	8340	2030	1790	1350
25	1650	1910	3350	11100	8640	12200	5550	20400	5660	3030	2010	5310
26	1750	1530	2510	10900	7560	9870	2650	21600	7130	4060	1640	6030
27	1960	1740	4100	7050	5720	8380	3230	20900	3900	5680	2860	3370
28	1940	3780	3410	6970	5490	6990	2980	15600	2350	5170	4450	2650
29	1440	4880	3500	5960	---	6350	2090	10800	2770	10300	3940	3600
30	1100	3390	4660	15000	---	5660	2180	9700	2120	34900	4000	1740
31	2000	---	1940	51500	---	9220	---	6040	---	19600	2990	---
TOTAL	89640	75930	200330	226680	457830	347810	373980	258882	239160	249850	126280	67729
MEAN	2892	2531	6462	7312	16350	11220	12470	8351	7972	8060	4074	2258
MAX	9250	4880	20700	51500	37600	22400	45900	28200	30300	34900	16000	6030
MIN	1100	1150	1790	1160	5490	3810	2090	771	2120	2030	1290	594
(†)	-108	-113	-284	+316	+609	+584	+295	+172	-96	-107	+22	+155

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1934 - 2001, BY WATER YEAR (WY)

MEAN	3588	6680	11570	13560	15590	18080	13430	10150	6352	4380	4155	2954
MAX	16770	33750	29760	37480	33170	41930	26500	33610	24840	13570	17890	13300
(WY)	1980	1986	1973	1937	1994	1963	1940	1996	1981	1958	1956	1945
MIN	475	400	1991	2249	3210	6636	4478	2128	1009	915	812	581
(WY)	1954	1954	1966	1977	1934	1987	1971	1982	1936	1966	1957	1936

† 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

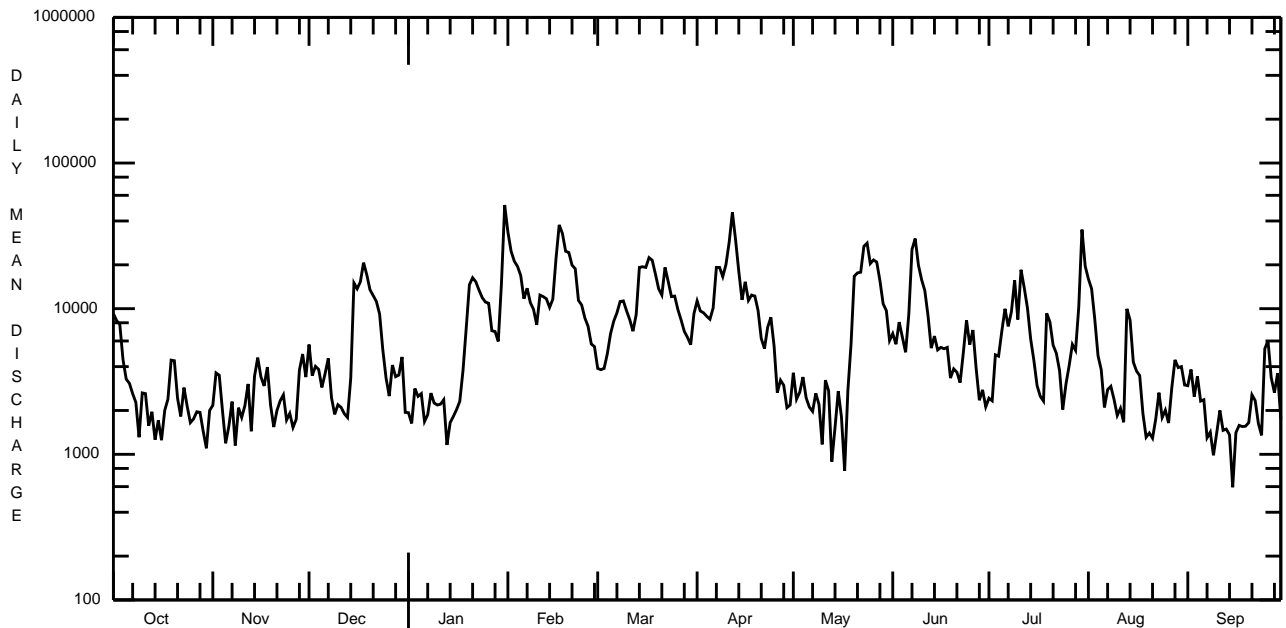
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SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR			FOR 2001 WATER YEAR			WATER YEARS 1934 - 2001	
ANNUAL TOTAL	2794580			2714101				
ANNUAL MEAN	7635 † -30			7436 † +119			9179	
HIGHEST ANNUAL MEAN							14400	
LOWEST ANNUAL MEAN							5282	
HIGHEST DAILY MEAN	109000 Feb 19			51500 Jan 31			158000 Jan 20 1996	
LOWEST DAILY MEAN	930 Feb 6			594 Sep 15			206 Jun 29 1936	
ANNUAL SEVEN-DAY MINIMUM	1690 Oct 25			1330 Sep 9			301 Oct 1 1936	
MAXIMUM PEAK FLOW				56100 Jan 31			ab178000 Nov 6 1985	
MAXIMUM PEAK STAGE				17.35 Jan 31			30.39 Jan 20 1996	
10 PERCENT EXCEEDS	16300			18200			22200	
50 PERCENT EXCEEDS	4100			4100			5140	
90 PERCENT EXCEEDS	1930			1650			1140	

† 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 110,000 ft³/s.

b Gage height 23.60 ft, datum then in use.



OCTOBER 1, 2000 TO SEPTEMBER 30, 2001