

03072655 MONONGAHELA RIVER NEAR MASONTOWN, PA

Monongahela Basin
Lower Monongahela Subbasin

LOCATION.--Lat 39°49'30", long 79°55'23" referenced to North American Datum of 1927, Greene County, PA, 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 river mile 81.9.

DRAINAGE AREA.--4,440 mi².

SURFACE-WATER RECORDS

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. Satellite telemetry at station.

COOPERATION.--Station established and maintained by the U.S. Geological Survey National Streamflow Information Program in cooperation with the U.S. Army Corps of Engineers, Pittsburgh District and the Pennsylvania Department of Environmental Protection.

REMARKS.--No estimated daily discharges. Records good for daily discharges greater than 5,000 ft³/s and fair for daily discharges less than 5,000 ft³/s. Flow regulated since 1926 by Lake Lynn 11 mi upstream, since May 1938, by Tygart Lake 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.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Jul 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.

03072655 MONONGAHELA RIVER NEAR MASONTOWN, PA—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	6,440	2,350	40,900	3,940	5,480	52,600	6,810	14,200	5,980	2,620	1,870	2,610
2	5,810	2,560	30,000	12,000	21,500	32,600	7,610	10,300	4,090	2,230	1,550	2,160
3	4,020	2,320	22,800	14,200	28,000	31,100	8,640	9,930	2,270	3,160	1,360	1,270
4	2,730	2,530	19,600	14,400	25,300	28,800	11,000	12,300	2,260	3,850	1,500	2,450
5	2,440	2,720	15,800	12,700	22,400	20,600	34,400	12,000	1,830	3,910	1,270	7,460
6	2,490	4,030	11,100	11,500	19,700	26,500	38,100	12,600	2,540	4,300	1,320	28,500
7	3,760	4,740	6,610	9,190	16,800	36,300	28,700	12,500	2,030	3,320	9,940	49,200
8	5,010	3,910	6,240	7,460	14,900	28,900	24,300	12,900	1,980	3,200	8,480	21,500
9	3,790	3,700	4,690	6,770	14,100	31,000	21,300	11,800	1,800	5,480	4,910	15,900
10	1,760	3,970	4,650	4,850	12,300	41,200	17,500	10,600	3,620	5,990	4,640	10,000
11	2,560	3,460	3,370	2,790	10,800	59,200	16,300	10,500	4,000	4,010	3,780	6,480
12	2,970	3,640	3,300	2,220	6,010	41,600	13,300	5,330	3,460	4,180	2,610	6,110
13	1,830	1,800	9,240	1,920	4,210	36,000	45,100	5,840	2,780	3,610	1,640	3,650
14	1,220	1,860	9,710	2,780	7,630	33,400	36,200	10,200	2,200	2,790	2,400	3,400
15	1,870	1,950	10,200	2,900	7,150	30,300	30,400	11,500	2,180	3,090	5,390	5,040
16	1,890	3,080	7,630	1,620	7,070	23,600	30,900	9,130	2,010	3,150	3,220	7,210
17	1,500	4,910	7,540	3,210	5,330	16,700	28,800	10,400	2,040	2,120	2,550	6,220
18	2,770	5,850	5,810	3,070	11,400	13,900	25,400	38,400	4,450	1,140	2,700	3,380
19	1,510	4,190	2,910	4,650	13,800	14,400	32,100	37,200	10,000	2,490	1,180	3,650
20	2,070	2,870	3,680	6,170	13,400	12,300	62,200	27,000	12,000	3,050	1,820	3,360
21	1,810	2,700	3,910	8,110	15,200	11,200	32,900	23,200	10,500	2,270	1,380	4,220
22	1,630	2,930	4,440	7,160	25,200	15,400	27,300	17,900	6,480	2,950	2,330	3,430
23	1,160	4,070	3,990	4,820	27,100	19,800	20,100	12,800	5,890	2,920	1,920	3,580
24	1,650	4,870	4,880	6,480	23,100	23,100	27,000	8,940	4,470	2,530	2,290	3,360
25	2,220	5,130	2,250	5,850	29,400	25,400	29,400	6,590	3,540	9,350	2,630	3,180
26	2,740	5,880	2,090	4,030	36,000	23,300	26,700	7,470	1,710	6,500	5,210	3,070
27	1,780	7,770	3,010	4,940	21,800	20,100	25,500	6,450	3,530	5,650	3,550	4,710
28	2,220	6,740	3,040	5,750	25,500	12,100	28,700	7,890	3,770	4,020	3,050	6,520
29	2,430	8,440	2,320	6,110	---	12,200	35,000	8,780	4,280	2,410	1,270	5,320
30	1,930	12,200	1,610	5,660	---	5,990	24,600	7,340	3,330	1,920	2,190	4,080
31	1,420	---	2,050	5,740	---	5,720	---	6,620	---	1,830	1,560	---
Total	79,430	127,170	259,370	192,990	470,580	785,310	796,260	398,610	121,020	110,040	91,510	231,020
Mean	2,562	4,239	8,367	6,225	16,810	25,330	26,540	12,860	4,034	3,550	2,952	7,701
Max	6,440	12,200	40,900	14,400	36,000	59,200	62,200	38,400	12,000	9,350	9,940	49,200
Min	1,160	1,800	1,610	1,620	4,210	5,720	6,810	5,330	1,710	1,140	1,180	1,270

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 2011, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	3,455	6,719	11,090	11,990	14,030	16,030	12,160	9,431	6,001	4,120	3,721	2,892
Max	15,260	29,580	26,520	24,690	30,880	37,830	26,540	29,230	22,100	13,240	15,120	12,870
(WY)	(1980)	(1986)	(1973)	(1952)	(1994)	(1963)	(2011)	(1996)	(1981)	(1958)	(1956)	(2003)
Min	439	369	1,648	1,840	3,781	4,887	3,781	1,836	926	676	592	482
(WY)	(1954)	(1954)	(1966)	(1977)	(1941)	(2009)	(1946)	(1982)	(1965)	(1966)	(1965)	(1946)

03072655 MONONGAHELA RIVER NEAR MASONTOWN, PA—Continued

SUMMARY STATISTICS

	Calendar Year 2010		Water Year 2011		Water Years 1939 - 2011	
Annual total	2,501,887		3,663,310			
Annual mean	6,854		10,040		8,437	
Highest annual mean					13,010	1994
Lowest annual mean					4,995	1966
Highest daily mean	57,300	Jan 25	62,200	Apr 20	154,000	Nov 5, 1985
Lowest daily mean	405	Jul 8	1,140	Jul 18	177	Sep 11, 1988
Annual seven-day minimum	709	Jul 2	1,530	Jul 31	267	Nov 4, 1953
Maximum peak flow			77,900	Apr 20	^a 220,000	Nov 5, 1985
Maximum peak stage			19.07	Apr 20	^b 39.39	Nov 5, 1985
10 percent exceeds	18,100		27,600		21,000	
50 percent exceeds	3,700		5,330		4,880	
90 percent exceeds	1,010		1,920		1,070	

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

^b From outside floodmarks, datum then in use.

