

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. Funding for this station is provided by the U.S. Army Corps of Engineers, Pittsburgh District, the Pennsylvania Department of Environmental Protection and the U.S. Geological Survey through the Cooperative Water Program and the National Streamflow Information Program.

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 (from floodmark), discharge, 130,000 ft³/s.

03072655 MONONGAHELA RIVER NEAR MASONTOWN, PA—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	4,960	15,000	17,200	11,100	10,100	67,400	10,200	5,430	1,880	1,130	3,050	806
2	8,180	14,400	14,600	10,300	10,600	32,500	7,520	10,200	1,870	1,180	4,970	894
3	16,400	11,700	12,800	10,200	7,510	28,600	6,560	16,000	2,030	1,120	4,510	2,050
4	20,100	8,700	12,600	7,980	7,350	31,800	6,990	16,800	1,960	912	2,960	1,080
5	18,500	6,730	8,520	10,700	10,300	25,700	7,780	19,900	1,600	846	3,010	840
6	13,600	7,200	8,320	5,820	6,020	24,000	5,500	22,700	1,510	979	2,890	788
7	10,900	5,090	24,000	6,360	5,480	21,900	2,810	18,000	1,100	845	3,240	1,540
8	9,590	4,770	44,400	5,790	5,690	13,300	2,560	17,000	1,110	759	3,030	1,220
9	7,700	5,030	30,100	6,000	5,490	12,000	4,000	20,000	966	804	4,010	972
10	5,560	4,780	25,000	5,360	5,600	9,610	3,160	15,500	934	775	4,590	1,000
11	4,380	4,060	19,900	7,060	5,420	7,690	3,140	12,900	1,810	870	4,180	1,060
12	4,250	2,520	18,300	9,140	5,180	8,270	3,130	10,700	1,340	1,020	2,340	1,020
13	8,080	4,020	14,800	11,400	3,810	7,720	2,040	8,220	1,220	832	2,250	1,840
14	18,500	3,690	13,500	13,200	5,140	7,910	1,720	7,930	1,200	1,010	2,090	1,320
15	18,100	4,170	12,600	12,500	5,270	7,860	1,850	16,700	1,040	1,150	1,590	962
16	12,300	10,400	10,500	7,750	8,290	7,320	2,400	19,000	598	1,910	1,140	1,110
17	11,000	23,600	8,390	14,900	11,700	7,340	1,740	15,700	998	2,550	964	1,050
18	9,920	17,300	13,800	30,700	14,500	4,310	2,490	11,100	1,040	2,020	1,110	1,660
19	9,220	15,100	7,850	23,200	13,800	9,860	1,600	6,610	1,100	2,310	1,060	1,510
20	8,740	14,300	8,720	19,800	12,000	11,400	1,930	4,690	2,490	3,520	1,400	4,750
21	9,120	14,400	7,990	18,100	11,800	9,520	1,450	3,460	2,000	3,600	1,040	2,770
22	6,190	21,300	7,400	18,400	8,560	8,810	1,380	3,070	1,730	5,480	1,090	1,930
23	7,270	78,500	6,530	16,400	7,260	6,400	2,860	4,030	723	3,390	1,030	1,440
24	5,940	47,000	12,100	15,800	5,500	6,170	3,010	3,830	774	2,490	1,040	1,210
25	4,990	30,300	12,700	13,300	7,810	7,890	2,000	3,450	1,110	4,140	929	1,180
26	5,410	25,300	11,700	13,800	7,440	8,250	2,700	3,390	1,070	5,870	976	1,420
27	17,800	23,400	14,900	24,500	11,300	8,730	4,760	2,770	841	6,140	846	1,500
28	28,900	17,800	28,300	24,500	11,200	7,020	4,670	2,530	915	3,990	876	2,590
29	22,000	16,600	21,100	17,200	18,900	6,540	4,780	2,590	910	3,640	825	2,750
30	22,300	21,200	15,400	16,000	---	5,960	4,750	2,140	1,170	2,260	942	1,920
31	19,700	---	12,900	11,600	---	7,760	---	2,580	---	2,060	871	---
Total	369,600	478,360	476,920	418,860	249,020	429,540	111,480	308,920	39,039	69,602	64,849	46,182
Mean	11,920	15,950	15,380	13,510	8,587	13,860	3,716	9,965	1,301	2,245	2,092	1,539
Max	28,900	78,500	44,400	30,700	18,900	67,400	10,200	22,700	2,490	6,140	4,970	4,750
Min	4,250	2,520	6,530	5,360	3,810	4,310	1,380	2,140	598	759	825	788

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 2012, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	3,571	6,846	11,150	12,010	13,950	16,000	12,050	9,438	5,938	4,095	3,699	2,873
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	3,716	1,836	926	676	592	482
(WY)	(1954)	(1954)	(1966)	(1977)	(1941)	(2009)	(2012)	(1982)	(1965)	(1966)	(1965)	(1946)

03072655 MONONGAHELA RIVER NEAR MASONTOWN, PA—Continued

SUMMARY STATISTICS

	Calendar Year 2011		Water Year 2012		Water Years 1939 - 2012	
Annual total	4,522,220		3,062,372			
Annual mean	12,390		8,367		8,436	
Highest annual mean					13,010	1994
Lowest annual mean					4,995	1966
Highest daily mean	78,500	Nov 23	78,500	Nov 23	154,000	Nov 5, 1985
Lowest daily mean	1,140	Jul 18	598	Jun 16	177	Sep 11, 1988
Annual seven-day minimum	1,530	Jul 31	840	Jul 5	267	Nov 4, 1953
Maximum peak flow			92,200	Nov 23	^a 220,000	Nov 5, 1985
Maximum peak stage			20.16	Nov 23	^b 39.39	Nov 5, 1985
10 percent exceeds	28,700		18,900		21,000	
50 percent exceeds	8,320		5,580		4,900	
90 percent exceeds	2,280		1,030		1,060	

^a From rating curve extended above 131,000 ft³/s, based on non-linear extension at site 03072500 "at Greensboro".

^b From outside floodmarks, datum then in use.

