

Water-Data Report 2010

**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 mi<sup>2</sup>.

**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.--Records good above 5,000 ft<sup>3</sup>/s, fair below, except those below 1,000 ft<sup>3</sup>/s, and those for estimated daily discharges, which are poor. 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 ft<sup>3</sup>/s.

## 03072655 MONONGAHELA RIVER NEAR MASONTOWN, PA—Continued

**DISCHARGE, CUBIC FEET PER SECOND**  
**WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010**  
**DAILY MEAN VALUES**

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	1,650	9,800	5,580	11,000	11,000	10,100	12,800	6,430	2,940	957	865	724
2	3,440	6,880	5,690	10,800	7,910	10,900	10,200	6,340	2,860	716	1,050	899
3	2,040	8,180	6,510	6,810	7,240	9,440	7,840	22,300	2,600	637	900	988
4	1,420	7,370	8,570	8,100	6,060	7,440	8,720	25,400	2,420	1,020	1,670	696
5	1,410	4,530	6,780	8,210	6,270	7,460	6,250	17,500	2,910	894	2,170	963
6	1,800	4,900	7,540	6,700	11,800	7,260	6,020	13,300	8,190	476	1,780	776
7	1,660	4,910	8,300	5,400	12,300	7,650	6,100	10,600	12,900	813	2,750	519
8	1,360	5,090	8,290	4,590	8,930	9,360	5,550	7,430	7,560	405	3,630	812
9	1,570	3,490	32,200	4,710	6,280	12,200	5,650	5,650	6,250	1,400	1,710	959
10	5,400	2,560	36,800	3,160	8,860	17,400	5,910	4,320	7,580	2,430	1,940	831
11	4,990	2,030	23,300	2,780	10,900	28,600	5,510	5,050	7,260	825	2,230	735
12	3,710	2,470	19,100	2,220	9,040	47,100	4,870	5,320	5,930	856	2,080	839
13	3,330	2,210	17,200	2,930	6,770	54,700	4,270	6,740	4,480	1,480	1,590	908
14	2,250	1,510	16,100	2,660	6,240	51,400	3,460	7,720	5,200	3,540	1,770	632
15	2,230	1,230	12,400	2,840	7,500	31,300	3,740	8,790	3,520	2,260	1,120	517
16	2,170	1,120	10,200	2,940	5,820	31,600	3,890	7,390	3,680	1,760	1,420	1,170
17	5,210	1,120	9,360	7,310	5,610	30,000	2,850	7,280	3,310	1,400	2,160	1,780
18	4,220	959	8,410	23,400	4,750	26,900	2,780	13,200	3,130	1,100	2,820	1,520
19	3,890	1,060	3,480	26,100	3,540	23,800	4,320	16,400	1,370	1,000	1,580	1,010
20	2,700	1,940	2,850	22,600	4,680	23,000	4,200	18,100	2,120	1,150	1,820	805
21	2,420	1,540	5,280	21,700	4,590	19,300	3,400	13,800	2,090	2,130	1,490	1,200
22	3,620	1,160	6,340	22,000	4,980	18,800	3,700	11,500	1,800	1,480	1,350	900
23	2,570	1,940	7,650	20,900	7,520	19,300	3,970	9,460	1,180	1,190	1,420	e1,000
24	5,820	2,480	3,210	18,100	10,700	18,700	3,640	8,830	1,980	1,280	1,150	e1,200
25	16,100	2,410	3,310	57,300	12,900	13,100	1,780	7,200	1,760	1,400	990	e900
26	13,100	1,470	8,680	56,700	14,900	15,300	3,500	5,550	2,120	2,940	1,250	e1,300
27	10,700	2,010	8,980	31,500	13,800	18,700	9,260	4,670	1,650	2,270	1,010	e810
28	11,500	1,290	10,400	26,100	9,410	16,600	6,670	3,980	3,000	1,920	1,040	e1,000
29	14,600	974	12,300	22,100	---	18,100	7,530	2,750	2,170	1,300	854	1,420
30	12,200	1,240	11,200	18,300	---	18,600	7,100	2,910	1,970	1,400	1,480	1,880
31	10,600	---	10,700	13,600	---	15,100	---	2,530	---	456	1,330	---
<b>Total</b>	159,680	89,873	336,710	473,560	230,300	639,210	165,480	288,440	115,930	42,885	50,419	29,693
<b>Mean</b>	5,151	2,996	10,860	15,280	8,225	20,620	5,516	9,305	3,864	1,383	1,626	990
<b>Max</b>	16,100	9,800	36,800	57,300	14,900	54,700	12,800	25,400	12,900	3,540	3,630	1,880
<b>Min</b>	1,360	959	2,850	2,220	3,540	7,260	1,780	2,530	1,180	405	854	517

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 2010, BY WATER YEAR (WY)**

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Mean</b>	3,467	6,754	11,130	12,070	13,990	15,900	11,960	9,384	6,028	4,128	3,732	2,825
<b>Max</b>	15,260	29,580	26,520	24,690	30,880	37,830	23,180	29,230	22,100	13,240	15,120	12,870
<b>(WY)</b>	(1980)	(1986)	(1973)	(1952)	(1994)	(1963)	(1940)	(1996)	(1981)	(1958)	(1956)	(2003)
<b>Min</b>	439	369	1,648	1,840	3,781	4,887	3,781	1,836	926	676	592	482
<b>(WY)</b>	(1954)	(1954)	(1966)	(1977)	(1941)	(2009)	(1946)	(1982)	(1965)	(1966)	(1965)	(1946)

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SUMMARY STATISTICS

	Calendar Year 2009		Water Year 2010		Water Years 1939 - 2010	
<b>Annual total</b>	2,895,213		2,622,180			
<b>Annual mean</b>	7,932		7,184		8,415	
<b>Highest annual mean</b>					13,010	1994
<b>Lowest annual mean</b>					4,995	1966
<b>Highest daily mean</b>	65,800	May 5	57,300	Jan 25	154,000	Nov 5, 1985
<b>Lowest daily mean</b>	546	Jul 22	405	Jul 8	177	Sep 11, 1988
<b>Annual seven-day minimum</b>	929	Jul 14	709	Jul 2	267	Nov 4, 1953
<b>Maximum peak flow</b>			89,100	Jan 25	<sup>a</sup> 220,000	Nov 5, 1985
<b>Maximum peak stage</b>			20.35	Jan 25	<sup>b</sup> 39.39	Nov 5, 1985
<b>10 percent exceeds</b>	19,800		18,100		20,900	
<b>50 percent exceeds</b>	4,990		4,220		4,880	
<b>90 percent exceeds</b>	1,120		1,000		1,060	

<sup>a</sup> From rating curve extended above 131,000 ft<sup>3</sup>/s.

<sup>b</sup> From outside floodmarks, datum then in use.

