

MONONGAHELA RIVER BASIN

03085000 MONONGAHELA RIVER AT BRADDOCK, PA
(Pennsylvania Water-Quality Network Station)

LOCATION.--Lat 40°23'28", long 79°51'30", Allegheny County, Hydrologic Unit 05020005, near right bank on river guide wall 300 ft upstream from dam at lock 2 at Braddock, 1,700 ft downstream from Turtle Creek, and 11.2 mi upstream of confluence with Allegheny River.

DRAINAGE AREA.--7,337 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1938 to current year. Monthly discharge only for some periods, published in WSP 1305.

GAGE.--Water-stage recorder and fixed-crest concrete dam control with streamward lock chamber usable as floodway during high flow since 1951. Datum of gage is 709.66 ft above National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers benchmark). Prior to Aug. 13, 1951, at site 700 ft upstream, and Aug. 13, 1951 to Nov. 8, 1990 at present site at datum 2.50 ft lower.

REMARKS.--Records fair. Many estimated daily discharges due to construction of new lock and dam. Flow regulated by locks and hydroelectric plants, since January 1925 by Deep Creek Reservoir (station 03076000), since 1926 by Lake Lynn, since May 1938 by Tygart Lake (station 03055500), since December 1942 by Youghioghny River Lake (station 03077000), and since April 1989 by Stonewall Jackson Lake, combined capacity, 779,000 acre-ft. Figures of daily discharge include slight diversion from Beaver Run Reservoir in the Kiskiminetas River Basin to the borough of Jeannette in the Monongahela River Basin. U.S. Army Corps of Engineers satellite telemetry at station. Other data for this station can be found on pages 189-190.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 18, 1936 reached a stage of 38.8 ft from floodmarks, discharge, 210,000 ft³/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2480	2790	3780	e3890	13300	7070	24300	39600	6410	2940	e4990	2010
2	2660	2280	3220	2780	11000	3870	24100	30000	6220	2830	e5150	2030
3	3040	2790	3480	e3090	9360	e5820	20400	35100	7020	2950	e3910	2300
4	2870	3090	3490	e4300	7980	e11200	22500	33400	e5670	3150	e2740	1970
5	2680	2320	7560	2750	10700	e10200	19400	28000	7120	2290	e2830	1780
6	2640	4210	3220	2520	7660	e8350	16700	21900	12900	2860	e4910	2040
7	2710	2350	2540	2330	5240	6080	11900	19400	21800	2190	2670	1670
8	2370	2520	2530	2720	6240	e7090	9780	21500	17100	e2560	2270	2090
9	2560	2750	3190	2710	4300	5020	9630	37800	12200	e3640	2760	2100
10	3190	2280	5020	e3960	3940	e4890	7660	34000	9410	e6270	2260	1640
11	2470	1810	6120	e13800	6110	e6540	9390	33700	7660	e12800	1900	1700
12	2530	1870	4990	24600	13000	6380	8340	29500	5580	8940	2150	1980
13	2850	2400	e4900	14800	9730	e6000	4950	26500	e7200	6370	3260	1720
14	2700	1990	e4330	12700	9810	4510	8520	31500	15200	e6420	2700	1880
15	2370	2080	e3370	12400	9630	e4200	e15200	28800	15000	e8020	2060	2050
16	3180	2080	3300	11500	9060	6870	31600	27500	12000	9040	2290	2000
17	2810	1990	e6100	9580	5510	12000	23600	25100	e11100	e6750	2520	2270
18	2850	2060	11000	9810	6900	17700	24100	37900	e9200	e5910	1990	2170
19	2830	2230	15300	9640	5920	22100	23600	47200	e7900	e5530	2200	2480
20	2580	1700	11600	6310	5240	e35000	19800	38000	e5980	e6160	2850	2040
21	2530	1780	8210	e5720	5560	e94600	e18200	29300	e4910	e5660	2340	1760
22	2070	1750	e7200	e5720	8390	e56100	e35700	22200	e4910	e5740	2470	2220
23	2850	1930	e7500	e8190	8680	e37900	e49000	19000	e4450	e4900	2300	1860
24	2420	1970	e6550	e17800	4450	30500	38200	13800	e3380	e5490	3960	1810
25	3230	2600	e7750	e41200	4040	25600	34100	10600	e3070	e4480	3540	1930
26	2310	2990	e6800	e36000	7500	30500	29400	11100	e3530	e4900	3490	2040
27	2010	4080	e7150	26500	9140	49900	23600	8750	e3680	e9540	2750	6370
28	2610	4080	e5050	22300	8670	34300	e28700	8640	5650	e15000	3390	6590
29	2480	5100	e4450	19300	---	23500	51200	7380	3670	11100	2130	8750
30	2040	4200	e4850	16600	---	18000	45000	7790	3390	8730	1770	4550
31	2220	---	e4400	16700	---	14600	---	6780	---	6160	2300	---
TOTAL	81140	78070	178950	372220	217060	606390	688570	771740	243310	189320	88850	77800
MEAN	2617	2602	5773	12010	7752	19560	22950	24890	8110	6107	2866	2593
MAX	3230	5100	15300	41200	13300	94600	51200	47200	21800	15000	5150	8750
MIN	2010	1700	2530	2330	3940	3870	4950	6780	3070	2190	1770	1640
CFSM	0.36	0.35	0.79	1.64	1.06	2.67	3.13	3.39	1.11	0.83	0.39	0.35
IN.	0.41	0.40	0.91	1.89	1.10	3.07	3.49	3.91	1.23	0.96	0.45	0.39

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 2002, BY WATER YEAR (WY)

MEAN	5295	9185	15310	17080	20700	23890	18860	14230	9197	6321	5807	4619
MAX	23130	42130	37600	36150	43120	54500	39180	40310	30240	15620	23720	18290
(WY)	1980	1986	1973	1952	1956	1963	1940	1996	1981	1958	1956	1971
MIN	1200	971	2748	3389	6387	8042	6473	3352	2107	1765	1531	1005
(WY)	1954	1954	1954	1977	1954	1969	1971	1982	1965	1966	1957	1946

e Estimated.

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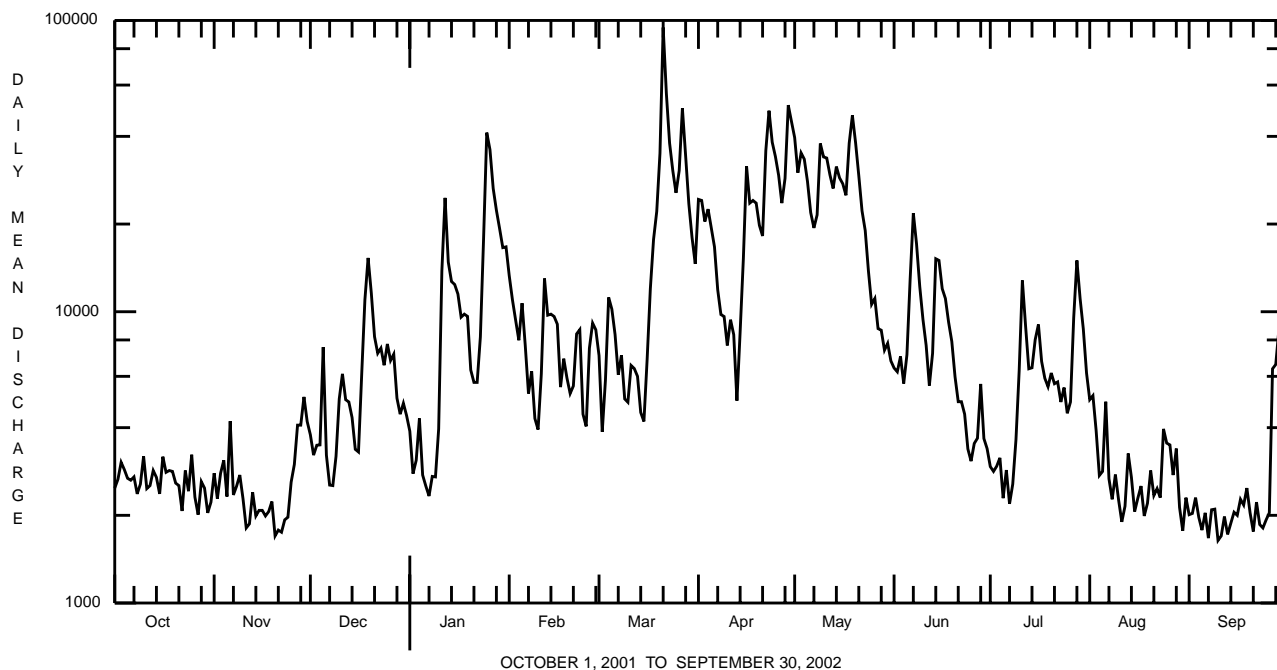
SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1939 - 2002	
ANNUAL TOTAL	3608380		3593420		12490	
ANNUAL MEAN	9886		9845		18440	
HIGHEST ANNUAL MEAN					1996	
LOWEST ANNUAL MEAN					1954	
HIGHEST DAILY MEAN	64600	Jan 31	a94600	Mar 21	188000	Jan 20 1996
LOWEST DAILY MEAN	1700	Nov 20	1640	Sep 10	703	Sep 3 1946
ANNUAL SEVEN-DAY MINIMUM	1920	Nov 18	1840	Sep 7	839	Nov 17 1953
MAXIMUM PEAK FLOW			a105000	Mar 21	c210000	Jan 20 1996
MAXIMUM PEAK STAGE			a20.10	Mar 21	d29.07	Jan 20 1996
ANNUAL RUNOFF (CFSM)	1.35		1.34		1.70	
ANNUAL RUNOFF (INCHES)	18.30		18.22		23.13	
10 PERCENT EXCEEDS	23400		26500		29100	
50 PERCENT EXCEEDS	5980		5530		7640	
90 PERCENT EXCEEDS	2480		2080		2250	

a Based on river summation.

b Also Sept. 4, 22, 1946.

c From rating curve extended above 183,000 ft³/s.

d Maximum gage height, 31.39 ft, June 24, 1972 (backwater from Allegheny River). Datum then in use.



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(Pennsylvania Water-Quality Network Station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 2002 to current year.

REMARKS.--Other data for the Water-Quality Network can be found on pages 210-233.

COOPERATION.--Samples were collected as part of the Pennsylvania Department of Environmental Protection Water Quality Network (WQN) with cooperation from the Pennsylvania Department of Environmental Protection.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY ANA-LYZING SAMPLE NUMBER (00028)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SAM-PLING METHOD, CODES (82398)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (µS/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM TOTAL RECOV-ERABLE (MG/L AS CA) (00916)	MAGNE-SIUM, TOTAL RECOV-ERABLE (MG/L AS MG) (00927)	ANC WATER UNFLTRD FET LAB (MG/L AS CACO3) (00417)	FLUO-RIDE, TOTAL (MG/L AS F) (00951)	
APR 2002	10...	0930	9813	8040	40	7.0	7.5	172	11.8	170	45.0	13.6	10	--
JUN	05...	0845	9813	6880	40	8.5	7.7	347	23.0	120	34.6	9.4	42	<.2
AUG	01...	0815	9813	4280	40	7.3	7.5	181	23.0	110	29.5	8.3	30	<.2

Date	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	RESIDUE AT 105 DEG. C, DIS-SOLVED (MG/L) (00515)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NITRATE TOTAL (MG/L AS N) (00620)	NITRO-GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHORUS ORTHO TOTAL (MG/L AS P) (70507)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	COPPER, TOTAL RECOV-ERABLE (µG/L AS CU) (01042)	CYANIDE AMEN-ABLE TO CHLOR-INATION UNFLTRD (MG/L) (00722)	IRON, TOTAL RECOV-ERABLE (µG/L AS FE) (01045)
APR 2002	146	398	6	.210	.98	<.040	1.4	<.01	<.010	1.3	<10	--	480
JUN	95.8	194	12	.060	.73	<.040	.95	.02	.020	2.0	<10	1.65	510
AUG	104	278	4	.030	.78	<.040	1.0	.01	.030	2.4	<10	1.42	420

Date	LEAD, TOTAL RECOV-ERABLE (µG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (µG/L AS MN) (01055)	NICKEL, TOTAL RECOV-ERABLE (µG/L AS NI) (01067)	ZINC, TOTAL RECOV-ERABLE (µG/L AS ZN) (01092)	PHENOLS TOTAL (µG/L) (32730)
APR 2002	<1.0	750	<50	60	--
JUN	<1.0	140	<50	100	<5
AUG	<1.0	110	<50	10	<5