



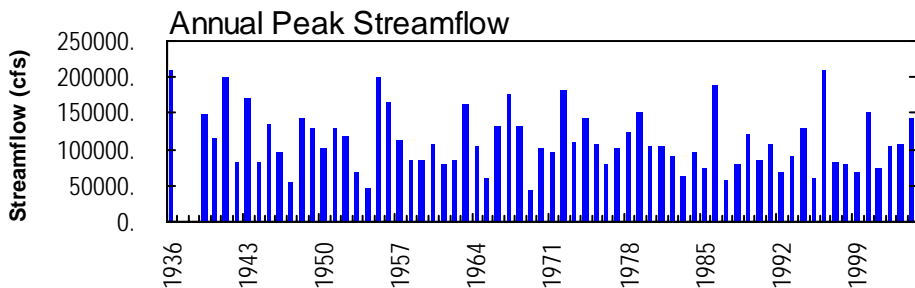
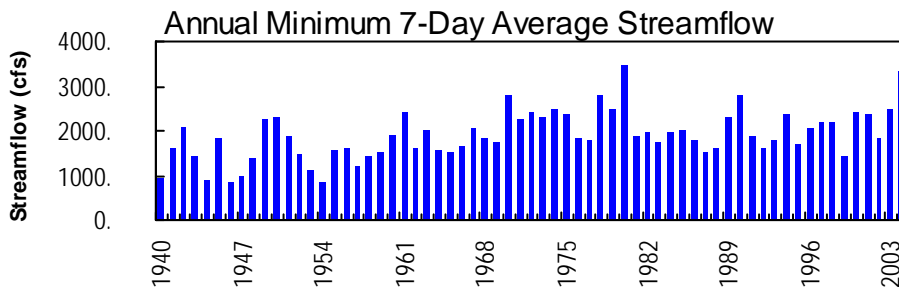
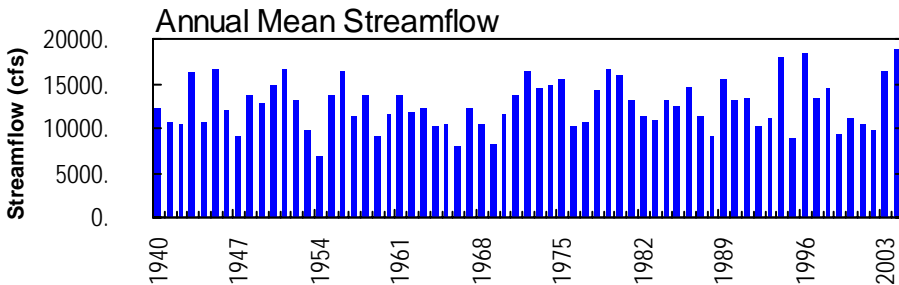
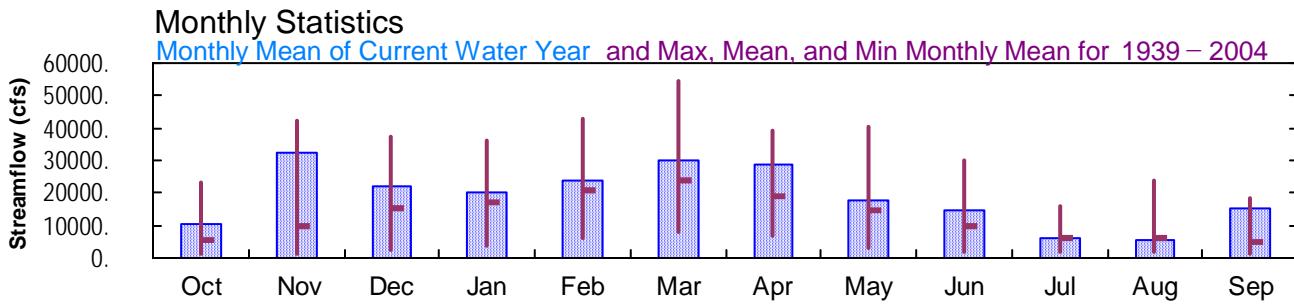
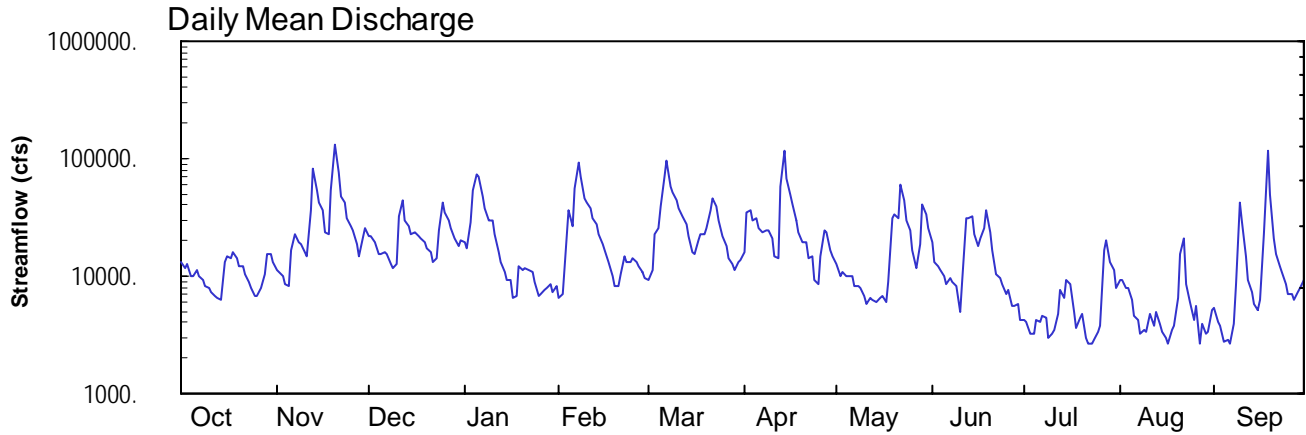
2004 Water Year YOUGHIOGHENY RIVER BASIN

03085000 Monongahela River at Braddock, PA

Latitude: 40° 23 ' 28"
Allegheny County

Longitude: 079° 51 ' 30"
Datum: 709.66 feet

Hydrologic Unit Code: 05020005
Drainage Area: 7337. mi²



NO PHOTOS AVAILABLE FOR THIS SITE

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 September 2004 (discontinued). 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 good except those for estimated daily discharges, which are poor. Mean daily discharges only for period Mar. 31 to Sept. 30 based on river summation due to removal of control structure. 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 Youghiogheny 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.

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 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12900	11200	22000	19600	6590	9110	e16000	e12400	e19500	e4200	e9100	e5300
2	11800	10800	22200	17500	6990	11000	e34400	e10000	e13400	e4000	e9100	e4100
3	12900	10100	19000	29200	12300	22800	e36200	e10800	e12000	e3200	e7900	e3700
4	10200	8530	15200	52800	36000	25800	e30200	e10000	e11200	e3200	e7800	e2800
5	10100	8230	15100	72300	26300	38600	e31600	e9900	e10100	e4200	e6300	e2900
6	11100	16500	15800	70600	e54900	69800	e25400	e10100	e8400	e4000	e4600	e2700
7	9810	22900	15200	47100	e91500	96600	e23300	e8300	e9700	e4600	e4300	e3900
8	9080	19300	12400	37300	e69900	59000	e24800	e8200	e8800	e4400	e3200	e8400
9	8390	18400	11800	30200	46700	51500	e24800	e8000	e8300	e3000	e3500	e41600
10	7870	15700	12500	29500	42000	e43300	e20900	e6700	e4900	e3200	e3400	e29800
11	7230	14800	31800	22500	38100	38000	e14800	e5800	e8900	e3500	e4700	e14500
12	6750	36100	43700	16300	31200	31900	e14400	e6600	e31200	e4700	e3800	e9200
13	6580	82000	29900	13400	27400	27700	e58500	e6200	e31100	e7600	e5000	e7200
14	6370	54200	26500	11000	22800	21400	e116000	e6100	e32400	e6600	e3900	e5900
15	13400	42700	23100	9320	18800	15800	e66900	e6500	e23100	e9400	e3400	e5200
16	15000	35900	23600	9130	16500	15500	e49600	e6700	e17800	e8600	e3000	e6300
17	14300	e23300	22200	6580	13300	20000	e40600	e6100	e20900	e5000	e2700	e22300
18	15700	e22800	21400	6860	9830	22400	e30000	e8800	e25900	e3600	e3500	e117000
19	14400	53100	19200	12100	8100	22800	e23500	e30900	e36600	e4400	e3800	e49500
20	12100	131000	17600	11400	8110	25500	e19300	e33900	e23700	e4700	e6600	e20700
21	12400	77000	16200	11800	10500	36400	e19200	e30600	e16400	e3000	e15600	e15500
22	10300	48200	13200	11500	15000	46100	e14400	e60400	e10600	e2700	e20800	e12300
23	9010	42000	14000	10600	13400	38700	e15000	e44700	e9800	e2700	e8600	e10700
24	7910	30700	24500	8810	13300	30100	e9200	e29700	e8500	e2900	e6090	e8400
25	6670	26300	41800	6700	14000	21600	e8700	e24100	e7100	e3400	e4200	e7100
26	6820	24300	35300	7030	13000	17700	e14700	e16400	e7600	e3800	e5500	e7000
27	7810	18500	29500	7570	12100	14400	e24700	e11500	e5500	e16400	e2700	e6200
28	10600	14700	25600	7790	10600	12600	e23400	e18900	e5600	e20000	e3900	e7400
29	15400	20800	21100	8560	9580	11200	e16700	e41500	e5900	e13200	e3200	e8000
30	15100	25400	17800	7230	---	e13100	e14700	e34000	e4300	e11300	e3300	e9300
31	13000	---	20300	8210	---	e13500	---	e25400	---	e8000	e5100	---
TOTAL	331000	965460	679500	620490	698800	923910	861900	549200	439200	183500	178590	454900
MEAN	10680	32180	21920	20020	24100	29800	28730	17720	14640	5919	5761	15160
MAX	15700	131000	43700	72300	91500	96600	116000	60400	36600	20000	20800	117000
MIN	6370	8230	11800	6580	6590	9110	8700	5800	4300	2700	2700	2700
CFSM	1.46	4.39	2.99	2.73	3.28	4.06	3.92	2.41	2.00	0.81	0.79	2.07
IN.	1.68	4.90	3.45	3.15	3.54	4.68	4.37	2.78	2.23	0.93	0.91	2.31

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 2004, BY WATER YEAR (WY)

MEAN	5378	9593	15410	17090	20740	24070	18950	14420	9520	6396	5835	4969
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.

MONONGAHELA RIVER BASIN

03085000 MONONGAHELA RIVER AT BRADDOCK, PA--Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1939 - 2004	
ANNUAL TOTAL	6946360		6886450			
ANNUAL MEAN	19030		18820		12650	
HIGHEST ANNUAL MEAN					18820	
LOWEST ANNUAL MEAN					6946	
HIGHEST DAILY MEAN	131000	Nov 20	131000	Nov 20	188000	Jan 20 1996
LOWEST DAILY MEAN	3050	Jul 28	a 2700	Jul 22	703	Sep 3 1946 b
ANNUAL SEVEN-DAY MINIMUM	4330	Jun 30	c 3310	Jul 20	839	Nov 17 1953
MAXIMUM PEAK FLOW			142000	Nov 20	d 210000	Jan 20 1996
MAXIMUM PEAK STAGE			23.10	Nov 20	f 29.07	Jan 20 1996
ANNUAL RUNOFF (CFSM)	2.59		2.56		1.72	
ANNUAL RUNOFF (INCHES)	35.22		34.92		23.43	
10 PERCENT EXCEEDS	39800		39300		29500	
50 PERCENT EXCEEDS	14500		13000		7800	
90 PERCENT EXCEEDS	5510		4200		2290	

- a** Based on river summation. Also July 23, Aug. 17, 27, Sept. 6.
- b** Also Sept. 4, 22, 1946.
- c** Based on river summation.
- d** From rating curve extended above 183,000 ft³/s.
- f** Maximum gage height, 31.39 ft, June 24, 1972 (backwater from Allegheny River). Datum then in use.

MONONGAHELA RIVER BASIN

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

WATER-QUALITY RECORDS

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

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 2003 TO SEPTEMBER 2004

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Instantaneous discharge, cfs (00061)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	pH, water, unfltrd lab, std units (00403)	Specif. conductance, wat unfltrd lab, µS/cm 25 degC (90095)	Specif. conductance, wat unfltrd lab, µS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Calcium water, unfltrd recover-able, mg/L (00916)	Magnesium, water, unfltrd recover-able, mg/L (00927)
OCT 2003													
02...	1330	1028	9813	11100	9.0	7.1	7.1	223	230	17.5	75	21.2	5.4
DEC													
04...	1000	1028	9813	15600	10.3	7.2	7.6	253	262	6.5	94	26.3	6.9
FEB 2004													
10...	1400	1028	9813	41000	15.2	6.4	7.4	310	310	3.0	87	24.8	6.0
APR													
12...	0915	1028	9813	E14400	11.4	7.4	7.4	264	265	10.0	88	24.5	6.4
JUN													
08...	1150	1028	9813	E8800	8.9	7.4	7.1	285	286	22.0	89	25.1	6.5
AUG													
10...	1300	1028	9813	E3400	9.1	7.9	7.9	435	428	26.0	130	36.5	10.2

Date	ANC, wat unfltrd end pt, lab, mg/L as CaCO3 (00417)	Fluoride, water, unfltrd mg/L (00951)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 105degC wat flt mg/L (00515)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia water, unfltrd mg/L as N (00610)	Nitrate water, unfltrd mg/L as N (00620)	Nitrite water, unfltrd mg/L as N (00615)	Ortho-phosphate, water, unfltrd mg/L as P (70507)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, unfltrd mg/L (00600)	Organic carbon, water, unfltrd mg/L (00680)	Aluminum, water, unfltrd recover-able, µg/L (01105)
OCT 2003													
02...	31	<.2	54.9	188	10	.040	.72	<.040	.02	.027	.98	2.6	600
DEC													
04...	35	<.2	68.9	186	2	.080	.72	<.040	.02	.019	.95	1.9	600
FEB 2004													
10...	28	.7	55.6	216	12	.120	1.06	<.040	.11	.072	1.5	2.0	2800
APR													
12...	30	<.2	62.8	168	10	.070	.83	<.040	.02	.017	1.1	1.3	400
JUN													
08...	36	.2	68.2	244	14	.090	.70	<.040	.04	.035	.88	2.4	600
AUG													
10...	53	<.2	111	330	<2	<.020	.72	<.040	.01	.022	.97	2.4	300

Date	Copper, water, unfltrd recover-able, µg/L (01042)	Cyanide amenable to chlorination wat unfltrd mg/L (00722)	Iron, water, unfltrd recover-able, µg/L (01045)	Lead, water, unfltrd recover-able, µg/L (01051)	Manganese, water, unfltrd recover-able, µg/L (01055)	Nickel, water, unfltrd recover-able, µg/L (01067)	Zinc, water, unfltrd recover-able, µg/L (01092)	Phenolic compounds, water, unfltrd µg/L (32730)
OCT 2003								
02...	<10	<1.00	1020	<1.0	120	<50	<10	<5
DEC								
04...	<10	<1.00	940	<1.0	190	<50	<10	<5
FEB 2004								
10...	<10	<1.00	4000	4.2	260	<50	50	<5
APR								
12...	<10	<1.00	600	<1.0	120	<50	10	<5
JUN								
08...	<10	<1.00	1220	1.2	130	<50	30	<5
AUG								
10...	<10	<1.00	830	1.0	70	<50	70	<5

MONONGAHELA RIVER BASIN

03085000 MONONGAHELA RIVER AT BRADDOCK, PA--Continued

BIOLOGICAL DATA
BENTHIC MACROINVERTEBRATES

REMARKS.--Samples were collected using a multiplate sampler that was deployed for 5 weeks. Samples represent counts per 100 animal (approximate) subsamples.

Date	10/16/03
Benthic Macroinvertebrate	Count
Platyhelminthes	
Turbellaria (FLATWORMS)	
Tricladida	
Planariidae	2
Annelida	
Oligochaeta (AQUATIC EARTHWORMS)	
Tubificida	
Naididae	16
Arthropoda	
Acariformes	
Hydrachnidia (WATER MITES)	1
Crustacea	
Amphipoda (SCUDS)	
Gammaridae	
<i>Gammarus</i>	4
Insecta	
Ephemeroptera (MAYFLIES)	
Heptageniidae	
<i>Stenonema</i>	1
Trichoptera (CADDISFLIES)	
Hydropsychidae	
<i>Cheumatopsyche</i>	4
<i>Hydropsyche</i>	6
Hydroptilidae	
<i>Hydroptila</i>	4
Polycentropodidae	
<i>Neureclipsis</i>	4
Coleoptera (BEETLES)	
Elmidae (RIFFLER BEETLES)	
<i>Stenelmis</i>	1
Diptera (TRUE FLIES)	
Chironomidae (MIDGES)	319
Empididae (DANCE FLIES)	
<i>Hemerodromia</i>	2
Total Organisms	364
Total Taxa	12