OHIO RIVER MAIN STEM

03031500 ALLEGHENY RIVER AT PARKER, PA
(Pennsylvania Water-Quality Network Station)

LOCATION.--Lat 41°06'02", long 79°40'53", Armstrong County, Hydrologic Unit 05010006, on right bank 500 ft downstream from bridge on State Highway 368 at Parker, 1.1 mi downstream from Clarion River, at mile 83.4.

DRAINAGE AREA.--7,671 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1932 to current year. Prior to October 1963, published as "*at Parkers Landing*." Gage height records collected at same site since 1885 are contained in reports of U.S. Weather Bureau.

GAGE.--Water-stage recorder. Datum of gage is 845.14 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1932, U.S. Weather Bureau gages at different datums. Oct. 1-28, 1932, nonrecording gage at datum 27.00 ft lower.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow regulated since 1924 by Piney Reservoir, since December 1940 by Tionesta Lake, since November 1949 by Chautauqua Lake (station 03013946), since June 1952 by East Branch Clarion River Lake (station 03027000), since October 1965 by Allegheny Reservoir (station 03012520), since July 1970 by Union City Reservoir (station 03021518), and since January 1974 by Woodcock Creek Lake (station 03022550). Several measurements of water temperature were made during the year. U.S. Army Corps of Engineers satellite telemetry at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 17, 1865 reached a stage of 29.4 ft, present datum, discharge, about 250,000 ft^3/s, from rating curve extended above 137,000 ft^3/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4010	3570	9370	27200	e6220	e17700	24900	5070	16700	4390	31700	6770
2	3500	3930	9710	42500	e6220	e16400	20900	5640	15800	4040	30700	26200
3	3170	4590	9520	33900	e6830	e14800	20000	6840	16300	3840	25000	25900
4	3270	4840	8320	30600	e9870	e14400	17200	7030	15800	3780	22700	21900
5	2890	5200	7120	28800	e12900	e13800	36900	7200	14700	3770	21700	17100
6	2820	5370	6530	26100	e16600	e13700	51000	7120	13400	3950	23800	13400
7	2670	6610	6900	23400	e18100	e13600	41200	9270	11400	4800	18300	11400
8	2980	7150	6280	21200	e16600	e14400	35400	9940	11100	4030	20400	10300
9	3380	7480	6470	19800	e15200	e15800	34800	10500	14000	3950	18600	10600
10	3100	7150	6330	18500	e13700	e18200	38100	12200	14600	4140	22300	9430
11	3370	8690	5410	15700	e11800	e19800	36400	12200	13900	5700	25500	9060
12	3160	10800	6500	13400	e10200	e18200	35300	12200	15100	5800	24100	8250
13	3750	11200	9770	11800	e8990	e15400	34000	14100	44600	4890	25400	7400
14	3390	10200	17500	11600	e8430	e16900	30400	19000	41100	4730	26500	6010
15	3150	8690	29200	10100	e8280	18400	24900	23800	32600	4030	24100	6440
16	3770	7830	26400	8570	e7730	21000	19500	21700	29200	3790	19800	7960
17	3610	8880	24600	7750	e8350	31000	15300	19400	24900	4340	14600	7560
18	3940	10800	21900	e6220	e7330	42700	12300	20000	21700	4430	12700	8120
19	3220	13200	18900	e5800	e7170	49100	10100	18200	18300	4520	10900	9410
20	3380	14700	23900	e6080	e7800	44800	8960	15900	15300	5540	8160	9400
21	4450	14500	35900	e6220	e7490	42600	9850	21300	12500	6340	6850	9720
22	5220	14000	31000	e7050	e8360	45900	10900	18600	10200	69300	5760	9720
23	4260	14700	26500	e6500	e10100	47500	12500	17100	9850	60300	5060	12100
24	4070	15000	25400	e4840	e12000	47300	11500	16800	8600	48900	4840	17000
25	3930	13800	24000	e5390	e13300	45000	9710	17100	7320	48200	4340	15800
26	3770	13600	22000	e4980	e15900	41100	8300	14800	6850	42700	8760	14300
27	4120	13400	19700	e4700	e17700	38800	7710	12600	5690	38100	12400	13400
28	5110	11700	17100	e5250	e18700	36700	8070	11500	4980	56700	6950	15300
29	4380	9560	16000	e5390	---	32400	6850	10200	4800	46500	6470	17100
30	4100	9210	13500	e5940	---	31900	5850	7810	4500	39400	7690	15400
31	3850	---	13900	e5670	---	29900	---	8750	---	35000	6970	---
TOTAL	113790	290350	505630	430950	311870	869200	638800	413870	475790	579900	503050	372450
MEAN	3671	9678	16310	13900	11140	28040	21290	13350	15860	18710	16230	12420
MAX	5220	15000	35900	42500	18700	49100	51000	23800	44600	69300	31700	26200
MIN	2670	3570	5410	4700	6220	13600	5850	5070	4500	3770	4340	6010
CFSM	0.48	1.26	2.13	1.81	1.45	3.66	2.78	1.74	2.07	2.44	2.12	1.62
IN.	0.55	1.41	2.45	2.09	1.51	4.22	3.10	2.01	2.31	2.81	2.44	1.81

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1933 - 2003, BY WATER YEAR (WY)

MEAN	6916	12220	17000	17460	17840	26280	24800	15570	9993	6197	4658	5033
MAX	28650	33760	38040	53560	40460	63020	58110	36220	35340	26090	16890	21370
(WY)	1991	1986	1978	1937	1976	1936	1940	1943	1989	1972	1994	1977
MIN	802	1655	1332	2111	3788	7746	5651	3610	1508	1069	1034	950
(WY)	1964	1961	1961	1961	1934	1969	1946	1934	1934	1934	1934	1936

e Estimated.

OHIO RIVER MAIN STEM

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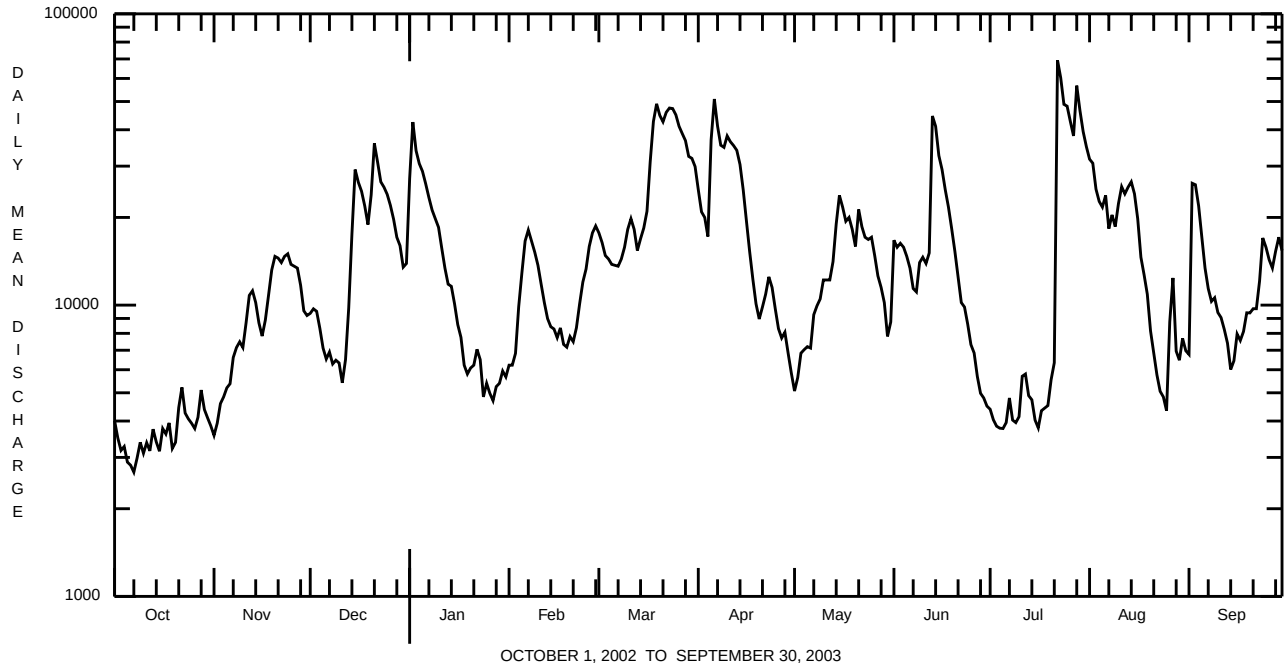
SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1933 - 2003	
ANNUAL TOTAL	4986320		5505650			
ANNUAL MEAN	13660		15080		13640	
HIGHEST ANNUAL MEAN					19640	1956
LOWEST ANNUAL MEAN					8175	1934
HIGHEST DAILY MEAN	74400	May 14	69300	Jul 22	160000	Jan 22 1959
LOWEST DAILY MEAN	2670	Oct 7	2670	Oct 7	454	Jul 28 1934
ANNUAL SEVEN-DAY MINIMUM	3020	Oct 4	3020	Oct 4	508	Jul 25 1934
MAXIMUM PEAK FLOW			91100	Jul 22	**ab**175000	Jan 22 1959
MAXIMUM PEAK STAGE			15.76	Jul 22	**c**29.60	Jan 21 1959
INSTANTANEOUS LOW FLOW					409	Jul 30 1934
ANNUAL RUNOFF (CFSM)	1.78		1.97		1.78	
ANNUAL RUNOFF (INCHES)	24.18		26.70		24.16	
10 PERCENT EXCEEDS	29400		32500		31600	
50 PERCENT EXCEEDS	10200		11600		8830	
90 PERCENT EXCEEDS	3320		4110		2220	

a About.
b From rating curve extended above 137,000 ft^3/s.
c Backwater from ice.



OCTOBER 1, 2002 TO SEPTEMBER 30, 2003

03031500 ALLEGHENY RIVER AT PARKER, PA--Continued
(Pennsylvania Water-Quality Network Station)

WATER-QUALITY RECORDS

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

REMARKS.--Some values for "*dissolved*" parameters exceed values for the corresponding "*total*" parameter. These results are within the limits of analytical precision and methods. Other data for the Water-Quality Network can be found on pages 242-289.

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 2002 TO SEPTEMBER 2003

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf µS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water unfltrd recoverable, mg/L (00916)	Magnesium, water, unfltrd recoverable, mg/L (00927)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (00417)
OCT 2002													
22...	0915	1028	9813	5300	40	10.3	7.8	242	10.1	87	25.1	5.9	56
NOV													
21...	0800	1028	9813	14300	40	11.7	7.8	181	5.5	69	19.9	4.7	40
APR 2003													
15...	0900	1028	9813	25000	40	12.6	8.2	126	8.8	42	12.3	2.7	24
JUN													
10...	1015	1028	9813	12200	40	9.5	7.9	164	18.5	56	16.2	3.8	37
JUL													
15...	1215	1028	9813	4000	40	8.7	8.3	221	--	81	22.8	5.8	56
AUG													
26...	1400	1028	9813	E8760	40	12.3	7.3	200	--	68	19.6	4.6	47
SEP													
17...	1000	1028	9813	7300	40	10.3	7.3	163	18.0	58	17.2	3.6	42

Date	Chloride, water, fltrd, mg/L (00940)	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)	Orthophosphate, water, unfltrd mg/L as P (70507)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, unfltrd mg/L (00600)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	Fecal coliform, M-FC 0.45uMF col/ 100 mL (31616)
OCT 2002													
22...	20.8	<.2	34.0	182	<2	.050	.23	<.040	<.01	.012	.62	.9	100
NOV													
21...	17.9	<.2	24.5	134	36	.030	.48	<.040	.02	.036	1.1	1.3	100
APR 2003													
15...	12.8	<.2	13.5	100	8	<.020	.55	<.040	.02	.019	.58	1.4	180
JUN													
10...	14.9	<.2	18.5	110	16	<.020	.34	<.040	.01	.022	.65	<.2	200
JUL													
15...	20.5	<.2	19.5	134	<2	<.020	.25	<.040	.01	.012	.53	1.4	20
AUG													
26...	16.2	<.2	19.4	120	<2	<.020	.11	<.040	.01	.024	.38	1.6	260
SEP													
17...	13.6	<.2	13.1	106	8	<.020	.25	<.040	<.01	.024	.53	1.5	160

OHIO RIVER MAIN STEM

03031500 ALLEGHENY RIVER AT PARKER, PA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Alum-inum, water, fltrd, µg/L (01106)	Alum-inum, water, unfltrd recover-able, µg/L (01105)	Arsenic water, fltrd, µg/L (01000)	Cadmium water, fltrd, µg/L (01025)	Copper, water, fltrd, µg/L (01040)	Copper, water, unfltrd recover-able, µg/L (01042)	Iron, water, fltrd, µg/L (01046)	Iron, water, unfltrd recover-able, µg/L (01045)	Lead, water, fltrd, µg/L (01049)	Lead, water, unfltrd recover-able, µg/L (01051)	Mangan-ese, water, fltrd, µg/L (01056)	Mangan-ese, water, unfltrd recover-able, µg/L (01055)	Nickel, water, fltrd, µg/L (01065)
OCT 2002													
22...	57	86	<4.0	<.20	<4	<4	50	260	<1.0	<1.0	190	240	<4.0
NOV													
21...	28	300	<4.0	<.20	<4	<4	50	910	<1.0	1.2	120	260	<4.0
APR 2003													
15...	25	300	<4.0	<.20	<4	<4	40	530	<1.0	<1.0	50	90	<4.0
JUN													
10...	14	200	<4.0	<.20	<4	<4	40	530	<1.0	<1.0	70	140	<4.0
JUL													
15...	17	37	<4.0	<.20	<4	<4	30	100	<1.0	<1.0	40	70	<4.0
AUG													
26...	66	100	<4.0	<.20	<4	<4	140	280	<1.0	<1.0	60	80	<4.0
SEP													
17...	18	76	<4.0	<.20	<4	<4	40	200	<1.0	<1.0	10	50	<4.0

Date	Nickel, water, unfltrd recover-able, µg/L (01067)	Zinc, water, fltrd, µg/L (01090)	Zinc, water, unfltrd recover-able, µg/L (01092)	Phen-olic com-pounds, water, unfltrd µg/L (32730)
OCT 2002				
22...	<4.0	--	--	<5
NOV				
21...	4.2	--	--	5
APR 2003				
15...	<4.0	6.1	7.9	--
JUN				
10...	<4.0	<5.0	<5.0	<5
JUL				
15...	<4.0	<5.0	<5.0	<5
AUG				
26...	<4.0	5.7	<5.0	<5
SEP				
17...	<4.0	<5.0	<5.0	<5

OHIO RIVER MAIN STEM

03031500 ALLEGHENY RIVER AT PARKER, PA--Continued

BIOLOGICAL DATA
BENTHIC MACROINVERTEBRATES

REMARKS.--Samples were collected using rapid bioassessment protocols for benthic macroinvertebrates using a D-Frame net with a mesh size of 500 µm. Samples represent counts per 200 (approximate) subsamples.

Date	5/31/02
Benthic Macroinvertebrate	Count
Platyhelminthes	
Turbellaria (FLATWORMS)	
Tricladida	
Planariidae	2
Mollusca	
Gastropoda (SNAILS)	
Basommatophora	
Ancylidae	
Ferrissia sp	1
Hydrobiidae	2
Amnicola sp	4
Annelida	
Oligochaeta (AQUATIC EARTHWORMS)	
Lumbricina	3
Tubificidae	5
Arthropoda	
Acariformes	
Hydrachnidia (WATER MITES)	5
Crustacea	
Amphipoda (SCUDS)	
Gammaridae	
Gammarus sp	5
Isopoda (AQUATIC SOWBUGS)	
Asellidae	
Caecidotea sp	42
Insecta	
Ephemeroptera (MAYFLIES)	
Caenidae	
Caenis sp	1
Ephemerellidae	
Ephemerella sp	10
Eurylophella sp	3
Heptageniidae	3
Stenonema sp	18
Isonychiidae	
Isonychia sp	1
Odonata (DRAGONFLIES AND DAMSELFLIES)	
Coenagrionidae	
Argia sp	1
Plecoptera (STONEFLIES)	
Perlidae	
Perlesta sp	4
Hemiptera	
Corixidae	1
Trichoptera (CADDISFLIES)	
Brachycentridae	5
Glossosomatidae	
Protoptila sp	1
Hydropsychidae	
Hydropsyche sp	2
Leptoceridae	
Mystacides sp	1
Polycentropodidae	
Polycentropus sp	2

03031500 ALLEGHENY RIVER AT PARKER, PA--Continued

BIOLOGICAL DATA
BENTHIC MACROINVERTEBRATES--Continued

Date	5/31/02
Benthic Macroinvertebrate	Count
Coleoptera (BEETLES)	
Elmidae (RIFFLE BEETLES)	
Dubiraphia sp	1
Optioservus sp	2
Psephenidae (WATER PENNIES)	
Psephenus sp	1
Diptera (TRUE FLIES)	
Chironomidae (MIDGES)	96
Total Organisms	222