

OHIO RIVER MAIN STEM

03049500 ALLEGHENY RIVER AT NATRONA, PA

LOCATION.--Lat 40°36'55", long 79°43'07", Allegheny County, Hydrologic Unit 05010009, on right bank 520 ft upstream from dam at lock 4 at Natrona, 5.8 mi downstream from Kiskiminetas River, at mile 24.3.

DRAINAGE AREA.--11,410 mi², approximately.

PERIOD OF RECORD.--October 1938 to current year.

REVISED RECORDS.--WSP 1435: 1939.

GAGE.--Water-stage recorder and concrete dam control. Datum of gage is 736.36 ft above National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers bench mark). Prior to Apr. 14, 1940, nonrecording gage and Apr. 15, 1940 to Oct. 22, 1990, water-stage recorder at same site at datum 0.75 ft higher.

REMARKS.--Records good except those for estimated daily discharges and those below 2,000 ft³/s, which are poor. Sharp rises and drops in discharge during periods of low flow may be caused by hydroelectric power production. Flow regulated since 1924 by Piney Reservoir, since May 1940 by Crooked Creek Lake, since December 1940 by Tionesta Lake, since June 1941 by Mahoning Creek Lake, since June 1942 by Loyalhanna Lake, since November 1949 by Chautauqua Lake (station 03013946), since November 1951 by Conemaugh River Lake, 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), 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. 18, 1936 reached a stage of 32.06 ft, discharge, 365,000 ft³/s, determined by U.S. Army Corps of Engineers.

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	6040	5690	12200	30900	7010	28400	32400	6800	19900	6280	37100	20500
2	4880	6360	13100	57800	7780	26000	27400	7140	23800	5800	36800	33700
3	4340	6710	12600	51500	7890	22900	26400	8050	24400	5480	34700	45700
4	3870	6910	11200	49800	11300	22700	24900	9320	24600	5820	32100	45600
5	3900	7540	8990	51000	16700	22200	29100	9200	29800	5420	31500	37900
6	3530	7530	7920	47500	19400	22400	61900	8410	31100	5280	30700	31300
7	3190	8900	7020	43200	22600	22700	53000	12100	25100	6560	28900	24700
8	3180	10400	8010	38100	21000	23800	47300	14400	22700	8030	24500	18700
9	3300	11200	7400	34400	19600	27300	43300	15400	27000	7740	24900	16800
10	3520	10600	7590	29800	16700	33300	48400	19900	28700	8000	26300	15200
11	3450	11900	6340	24200	15000	34300	48100	21300	28800	9370	30800	13400
12	3350	14600	7520	21000	13100	30400	46000	20300	26700	14200	30600	12700
13	3890	15100	11300	17600	11500	27000	45200	23800	43300	13400	29900	10700
14	3630	14300	18800	15300	10700	32900	42000	28000	54700	11900	29500	9580
15	3640	12600	33800	15100	9860	35800	36900	31700	42600	9030	28500	8930
16	3740	11400	37800	12600	9110	35800	29500	32300	37500	6320	26100	11300
17	5370	13400	34700	11100	e9070	46800	23800	26900	31700	6340	19800	10900
18	4730	16500	31200	9110	e8320	59200	19800	27200	29000	7010	16100	10500
19	5080	19200	26800	6980	e7940	64300	16000	25500	27100	7070	14900	12800
20	5170	20900	28600	7500	e8170	58600	14200	23700	23500	8770	11900	13400
21	5810	21600	42100	7990	e8800	55100	14300	25700	19800	8150	9590	15600
22	6540	20900	41800	8840	e11200	60900	15500	28600	16100	39900	7900	15800
23	6070	20600	39200	7900	e17300	63000	16300	26600	16700	72500	6220	17500
24	5210	20300	38000	6280	21800	60400	16400	26000	15900	58100	6260	21400
25	5070	19600	34500	5890	24300	53700	14600	25600	12000	55300	5860	23300
26	5660	17700	31700	5860	25000	48600	12300	24100	10300	49600	8200	20500
27	5860	17600	28500	6070	27600	44300	11200	20400	9270	43200	20500	18800
28	6720	16400	24300	6730	28600	43200	10100	18100	7700	58400	15400	18700
29	6900	13400	21500	6690	---	40400	10800	17300	7230	56700	14500	20800
30	6320	12600	20500	7120	---	37100	7550	13900	6940	46100	20100	20200
31	6000	---	18900	6710	---	36600	---	13600	---	39200	19600	---
TOTAL	147960	412440	673890	650570	417350	1220100	844650	611320	723940	684970	679730	596910
MEAN	4773	13750	21740	20990	14910	39360	28160	19720	24130	22100	21930	19900
MAX	6900	21600	42100	57800	28600	64300	61900	32300	54700	72500	37100	45700
MIN	3180	5690	6340	5860	7010	22200	7550	6800	6940	5280	5860	8930
CFSM	0.42	1.20	1.91	1.84	1.31	3.45	2.47	1.73	2.11	1.94	1.92	1.74
IN.	0.48	1.34	2.20	2.12	1.36	3.98	2.75	1.99	2.36	2.23	2.22	1.95

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 2003, BY WATER YEAR (WY)

MEAN	9551	16210	23730	24290	27190	38020	35420	22870	14800	9104	6813	6972
MAX	34470	45220	48690	68600	53390	87030	83780	48400	45820	34630	23020	22690
(WY)	1991	1986	1978	1952	1976	1945	1940	1943	1989	1972	1956	1990
MIN	1227	2686	2316	4520	7167	10410	9000	6129	3759	1944	1786	1444
(WY)	1964	1954	1961	1961	1963	1969	1946	1941	1991	1966	1962	1939

e Estimated.

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03049500 ALLEGHENY RIVER AT NATRONA, PA--Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1939 - 2003	
ANNUAL TOTAL	6628830		7663830			
ANNUAL MEAN	18160		21000		19540	
HIGHEST ANNUAL MEAN					27810	1956
LOWEST ANNUAL MEAN					12680	1999
HIGHEST DAILY MEAN	88600	May 14	72500	Jul 23	206000	Dec 31 1942
LOWEST DAILY MEAN	2950	Sep 1	3180	Oct 8	949	Oct 26 1963
ANNUAL SEVEN-DAY MINIMUM	3250	Aug 31	3360	Oct 6	1030	Oct 25 1963
MAXIMUM PEAK FLOW			87200	Jul 22	a 238000	Dec 30 1942
MAXIMUM PEAK STAGE			17.46	Jul 22	b 27.46	Dec 30 1942
INSTANTANEOUS LOW FLOW					985	Oct 22 1963
ANNUAL RUNOFF (CFSM)	1.59		1.84		1.71	
ANNUAL RUNOFF (INCHES)	21.61		24.99		23.26	
10 PERCENT EXCEEDS	40300		43200		44800	
50 PERCENT EXCEEDS	13200		17600		13100	
90 PERCENT EXCEEDS	3580		6070		3190	

a From rating curve extended above 172,000 ft³/s.

b Datum then in use.

