

## OHIO RIVER MAIN STEM

03049625 ALLEGHENY RIVER AT NEW KENSINGTON, PA  
(National Water-Quality Assessment Station)

**LOCATION.**--Lat 40°33'52", long 79°46'22", Allegheny County, Hydrologic Unit 05010009, at New Kensington highway bridge, 5.1 mi downstream from dam at Lock 4 at Natrona, 5.3 mi downstream from gaging station at Natrona, and at mile 19.0 upstream from mouth.

**DRAINAGE AREA.**--11,500 mi<sup>2</sup>.

**PERIOD OF RECORD.**--July 1972 to December 1973, October 1974 to current year.

**PERIOD OF DAILY RECORD.**--

SPECIFIC CONDUCTANCE: October 1974 to September 1981.

WATER TEMPERATURE: October 1974 to September 1981 and October 1996 to September 1998.

SUSPENDED SEDIMENT DISCHARGES: October 1976 to September 1979.

**INSTRUMENTATION.**--From October 1974 to September 1981, specific conductance and water temperature were once daily readings by an observer. From October 1976 to September 1979, suspended-sediment samples were collected daily and more often during storm events by an observer. From October 1996 to September 1998, daily records of water temperature were measured and collected at hourly intervals with an in-situ probe and electronic data logger.

**REMARKS.**--Records of discharge are given for 03049500 Allegheny River at Natrona, Pa. All water-quality samples were collected and analyzed by the U.S. Geological Survey. An explanation of selected abbreviations used in the water-quality tables are given on pages 36-37. Throughout the period of record, samples for this site have been collected at both the New Kensington highway bridge and the Hulton bridge in Oakmont (6.0 mi. downstream of the New Kensington highway bridge) due to factors such as bridge construction, highway detours, ice cover, etc. From April 1996 to the current year, all samples have been collected at the Hulton bridge in Oakmont because this location is downstream of Deer Creek. Deer Creek near Dorseyville, Pa., was an intensive fixed site for the NAWQA study unit.

**EXTREMES FOR PERIOD OF DAILY RECORD.**--

SPECIFIC CONDUCTANCE: Maximum, 440 micromhos, February 20, 1980; minimum 120 micromhos, March 11, 1979.

WATER TEMPERATURE: Maximum, 30.0°C, August 1, 2, 1975; minimum, 0.0°C, on many days during winter period.

SEDIMENT CONCENTRATIONS: Maximum daily, 805 mg/L, January 2, 1979; minimum daily, 1 mg/L, August 4, 5, 1979.

SEDIMENT DISCHARGES: Maximum daily, 192,000 tons, January 2, 1979; minimum daily, 22 tons, August 5, 1979.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	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 DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)
OCT											
27...	0845	2690	741	9.8	7.7	370	16.0	110	29	8.1	2.4
NOV											
17...	0945	2680	760	10.3	7.5	390	11.0	120	33	8.9	2.1
DEC											
10...	1045	3850	750	10.7	7.4	367	9.0	190	52	15	3.4
JAN											
26...	1030	61500	753	14.6	6.8	159	2.0	45	12	3.4	1.5
FEB											
22...	1030	17600	750	13.1	7.1	215	3.5	65	18	5.0	1.3
MAR											
25...	1045	24700	745	12.5	7.1	223	5.5	68	19	5.3	1.3
APR											
30...	0830	22100	747	9.9	7.8	200	13.0	69	19	5.5	1.3
MAY											
27...	1015	19600	742	9.1	7.8	304	17.5	100	27	8.2	1.6
JUN											
15...	0930	3410	743	7.2	7.9	346	25.5	110	30	8.7	1.7
JUL											
26...	1000	2870	735	7.4	7.7	358	30.0	110	30	8.8	2.2
AUG											
31...	1100	2550	748	8.0	7.5	333	25.5	100	28	8.1	2.1
SEP											
17...	1055	2800	745	8.3	7.6	359	22.5	110	30	8.4	2.2

## ALLEGHENY RIVER BASIN

## 03049625 ALLEGHENY R AT NEW KENSINGTON, PA--Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)
OCT 27...	25	41	26	.16	2.0	85	.085	.23	.28	.764	.028
NOV 17...	25	48	27	.13	.90	82	.055	<.10	.19	.528	.013
DEC 10...	61	62	28	<.10	3.1	70	.082	.21	.28	.538	.016
JAN 26...	8.9	12	16	<.10	4.3	25	.084	.24	.65	1.05	.012
FEB 22...	9.8	21	16	<.10	5.0	43	.054	.15	.22	.736	<.010
MAR 25...	11	20	18	<.10	4.6	45	.042	.16	.20	.963	.012
APR 30...	8.3	22	12	<.10	4.4	46	.040	.14	.21	.516	<.010
MAY 27...	14	28	17	.12	3.7	76	.087	.21	.39	.555	<.010
JUN 15...	18	37	19	.11	3.3	85	.056	.24	.33	.580	.017
JUL 26...	21	41	24	.12	3.5	76	<.020	E.10	.20	.605	.025
AUG 31...	20	41	26	.12	2.0	69	.031	.14	.24	.322	<.010
SEP 17...	21	38	26	.14	2.5	81	.062	.22	.33	.674	.019

DATE	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	IRON, DIS- SOLVED (µG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (µG/L AS MN) (01056)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C) (00689)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT 27...	<.050	.015	<.050	214	E7.2	5.3	2.0	.20	4	82
NOV 17...	<.050	<.010	<.050	224	14	55	1.9	.30	4	88
DEC 10...	<.050	.025	<.050	209	19	97	2.1	.30	4	86
JAN 26...	.005	<.010	.127	88	34	211	2.5	.70	76	90
FEB 22...	<.004	<.010	.019	125	31	203	--	--	15	68
MAR 25...	.005	<.010	.021	124	29	224	--	--	6	93
APR 30...	.004	.013	.019	122	39	216	--	--	8	89
MAY 27...	.004	<.010	.024	176	16	138	--	--	10	93
JUN 15...	<.004	.010	.018	218	<10	E2.4	--	--	5	70
JUL 26...	.021	<.010	.010	210	E9.5	<3.0	--	--	1	50
AUG 31...	<.004	<.010	.022	191	<10	<3.0	--	--	4	75
SEP 17...	.007	<.010	.018	212	<10	2.5	--	--	7	85

## ALLEGHENY RIVER BASIN

## 03049625 ALLEGHENY R AT NEW KENSINGTON, PA--Continued

**REMARKS.**--The following data are for analytes from the National Water Quality Laboratory (NWQL) schedule 2010--pesticides in filtered water. Samples are filtered through a glass-fiber membrane filter with openings that are 0.7 microns in size to remove sediment and microorganisms. A surrogate is then added to the sample. The filtered water is then field extracted on C-18 Solid Phase Extraction Cartridges and analyzed by a gas chromatography/mass spectrometric detector.

The method detection limit (MDL) provides an index to indicate where measurement uncertainty is increased. When an analyte is detected and all criteria for a positive result are met, the concentration is reported. If the concentration is less than the MDL, an 'E' code will be reported with the value. If the analyte is qualitatively identified as present, but the quantitative determination is substantially more uncertain, the NWQL will identify the result with an 'E' code even though the measured value is greater than the MDL. A value reported with an 'E' code should be used with caution. When no analyte is detected in a sample, the default reporting value is the MDL preceded by a less-than sign (<). The abbreviations SRG, SURROGT, or SURROG indicate surrogate recovery in percent.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 µ GF, REC (82660)	ACETO- CHLOR, WATER FLTRD 0.7 µ REC (49260)	ALA- CHLOR, WATER, DISS, REC, (46342)	ALPHA BHC DIS- SOLVED (34253)	ATRA- ZINE, WATER, DISS, REC (39632)	BEN- FLUR- ALIN WAT FLD 0.7 µ GF, REC (82673)	BUTYL- ATE, WATER, FLTRD 0.7 µ REC (04028)	CAR- BARYL WATER FLTRD 0.7 µ GF, REC (82680)	CARBO- FURAN WATER FLTRD 0.7 µ GF, REC (82674)
FEB											
22...	1030	17600	<.0030	<.0020	<.010	<.0020	.086	<.0020	<.0020	<.0030	<.0030
MAR											
25...	1045	24700	<.0030	<.0020	<.002	<.0020	.012	<.0020	<.0020	<.0030	<.0030
APR											
30...	0830	22100	<.0030	<.0020	<.002	<.0020	.010	<.0020	<.0020	<.0030	<.0800
MAY											
27...	1015	19600	<.0030	<.0020	<.002	<.0020	.104	<.0020	<.0020	<.0030	<.0030
JUN											
15...	0930	3410	<.0030	<.0020	<.002	<.0020	.084	<.0020	<.0020	<.0030	<.0030
JUL											
26...	1000	2870	<.0030	<.0020	<.002	<.0020	.045	<.0020	<.0020	<.0030	<.0030
AUG											
31...	1100	2550	<.0030	<.0020	<.002	<.0020	<.020	<.0020	<.0020	<.0030	<.0030
SEP											
17...	1055	2800	<.0030	<.0020	<.002	<.0020	.015	<.0020	<.0020	<.0030	<.0030

DATE	CHLOR- PYRIFOS DIS- SOLVED (µG/L) (38933)	CYANA- ZINE, WATER, DISS, REC (04041)	DCPA WATER FLTRD 0.7 µ GF, REC (82682)	DEETHYL ATRA- ZINE, WATER, DISS, REC (04040)	DIAZ- INON D10 SRG WAT FLT 0.7 µ GF, REC PERCENT (91063)	DI- AZINON, DIS- SOLVED (µG/L) (39572)	DI- ELDRIN DIS- SOLVED (µG/L) (39381)	DISUL- FOTON WATER FLTRD 0.7 µ GF, REC (82677)	EPTC WATER FLTRD 0.7 µ GF, REC (82668)	ETHAL- FLUR- ALIN WAT FLT 0.7 µ GF, REC (82663)	ETHO- PROP WATER FLTRD 0.7 µ GF, REC (82672)
FEB											
22...	<.0040	.0061	<.0020	E.0098	103	.005	<.001	<.0170	<.0020	<.0040	<.0030
MAR											
25...	<.0040	<.0040	<.0020	E.0034	149	<.002	<.001	<.0170	<.0020	<.0040	<.0030
APR											
30...	<.0040	<.0040	<.0020	<.0020	E171	<.002	<.001	<.0170	<.0020	<.0040	<.0030
MAY											
27...	<.0040	<.0040	<.0020	E.0054	169	<.002	<.001	<.0170	<.0020	<.0040	<.0030
JUN											
15...	<.0040	<.0040	<.0020	E.0075	E199	<.002	<.001	<.0170	<.0020	<.0040	<.0030
JUL											
26...	<.0040	<.0040	<.0020	E.0051	117	<.002	<.001	<.0170	<.0020	<.0040	<.0030
AUG											
31...	<.0040	<.0040	<.0020	<.0020	E178	<.002	<.001	<.0170	<.0020	<.0040	<.0030
SEP											
17...	<.0040	<.0040	<.0020	E.0054	E10.3	<.002	<.001	<.0170	<.0020	<.0040	<.0030

DATE	FONOFOS WATER DISS REC (µG/L) (04095)	HCH ALPHA D6 SRG WAT FLT 0.7 µ GF, REC PERCENT (91065)	LINDANE DIS- SOLVED (µG/L) (39341)	LIN- URON WATER FLTRD 0.7 µ GF, REC (82666)	MALA- THION, DIS- SOLVED (µG/L) (39532)	METHYL AZIN- PHOS WAT FLT 0.7 µ GF, REC (82686)	METHYL PARA- THION WAT FLT 0.7 µ GF, REC (82667)	METO- LACHLOR WATER DISSOLV (µG/L) (39415)	METRI- BUZIN SENCOR WATER DISSOLV (µG/L) (82630)	MOL- INATE WATER FLTRD 0.7 µ GF, REC (82671)	NAPROP- AMIDE WATER FLTRD 0.7 µ GF, REC (82684)
FEB											
22...	<.0030	96.1	<.004	<.0020	<.005	<.0010	<.0060	.010	<.004	<.0040	<.0030
MAR											
25...	<.0030	134	<.004	<.0020	<.005	<.0010	<.0060	.009	<.004	<.0040	<.0030
APR											
30...	<.0030	E168	<.004	<.0020	<.020	<.0010	<.0060	.006	<.004	<.0040	<.0030
MAY											
27...	<.0030	160	<.004	<.0020	<.010	<.0010	<.0060	.053	<.004	<.0040	<.0030
JUN											
15...	<.0030	E165	<.004	<.0020	<.010	<.0010	<.0060	.036	<.004	<.0040	<.0030
JUL											
26...	<.0030	104	<.004	<.0020	<.005	<.0010	<.0060	.010	<.004	<.0040	<.0030
AUG											
31...	<.0030	136	<.004	<.0020	<.005	<.0010	<.0060	<.002	<.004	<.0040	<.0030
SEP											
17...	<.0030	E6.40	<.004	<.0020	<.005	<.0010	<.0060	.005	<.004	<.0040	<.0030

## ALLEGHENY RIVER BASIN

03049625 ALLEGHENY R AT NEW KENSINGTON, PA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	P, P' DDE DISSOLV (µG/L) (34653)	PARA- THION, DIS- SOLVED (µG/L) (39542)	PEB-	PENDI-	PER-	PHORATE WATER FLTRD (µG/L) (82664)	PRO- METON, WATER, DISS, REC (µG/L) (04037)	PRON-	PROP-	PRO-
			ULATE WATER FILTRD 0.7 µ GF, REC (µG/L) (82669)	METH- ALIN WAT FLT 0.7 µ GF, REC (µG/L) (82683)	METHRIN CIS WAT FLT 0.7 µ GF, REC (µG/L) (82687)			AMIDE WATER FLTRD 0.7 µ GF, REC (µG/L) (82676)	CHLOR, WATER, DISS, REC (µG/L) (04024)	PANIL WATER FLTRD 0.7 µ GF, REC (µG/L) (82679)
FEB 22...	<.0060	<.004	<.0040	<.0040	<.0050	<.0020	E.0176	<.0030	<.0070	<.0040
MAR 25...	<.0060	<.004	<.0040	<.0040	<.0050	<.0020	<.0180	<.0030	<.0070	<.0040
APR 30...	<.0060	<.004	<.0300	<.0040	<.0050	<.0020	<.0180	<.0030	<.0070	<.0040
MAY 27...	<.0060	<.004	<.0040	<.0040	<.0050	<.0020	<.0180	<.0030	<.0070	<.0040
JUN 15...	<.0060	<.004	<.0040	<.0040	<.0050	<.0020	<.0180	<.0030	<.0070	<.0040
JUL 26...	<.0060	<.004	<.0040	<.0040	<.0050	<.0020	<.0180	<.0030	<.0070	<.0040
AUG 31...	<.0060	<.004	<.0040	<.0040	<.0050	<.0020	<.0180	<.0030	<.0070	<.0040
SEP 17...	<.0060	<.004	<.0040	<.0040	<.0050	<.0020	<.0180	<.0030	<.0070	<.0040
DATE	PRO- PARGITE WATER FLTRD 0.7 µ GF, REC (µG/L) (82685)	SI- MAZINE, WATER, DISS, REC (µG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 µ GF, REC (µG/L) (82670)	TER- BACIL WATER FLTRD 0.7 µ GF, REC (µG/L) (82665)	TER- BUFOS WATER FLTRD 0.7 µ GF, REC (µG/L) (82675)	TERBUTH YLAZINE SURROGT WAT FLT 0.7 µ GF, REC PERCENT (91064)	THIO- BENCARB WATER FLTRD 0.7 µ GF, REC (µG/L) (82681)	TRIAL- LATE WATER FLTRD 0.7 µ GF, REC (µG/L) (82678)	TRI- FLUR- ALIN WAT FLT 0.7 µ GF, REC (µG/L) (82661)	SAMPLE VOLUME SCHED- ULE 2010 (ML) (99857)
	FEB 22...	<.0130	.0085	<.0100	<.0070	<.0130	101	<.0020	<.0010	<.0020
MAR 25...	<.0130	<.0050	<.0100	<.0070	<.0130	144	<.0020	<.0010	<.0020	980
APR 30...	<.0400	<.0100	<.0100	<.0070	<.0130	E194	<.0200	<.0010	<.0020	961
MAY 27...	<.0130	<.0200	<.0100	<.0070	<.0130	E.120	<.0020	<.0010	<.0020	980
JUN 15...	<.0130	<.0200	<.0100	<.0070	<.0130	E.138	<.0020	<.0010	<.0020	952
JUL 26...	<.0130	<.0050	<.0100	<.0070	<.0130	E.0237	<.0020	<.0010	<.0020	943
AUG 31...	<.0130	<.0050	<.0100	<.0070	<.0130	--	<.0020	<.0010	<.0020	952
SEP 17...	<.0130	<.0050	<.0100	<.0070	<.0130	E.0534	<.0020	<.0010	<.0020	980