

EAST MAHANTANGO CREEK BASIN

01555400 EAST MAHANTANGO CREEK AT KLINGERSTOWN, PA
(National Water-Quality Assessment Station)

LOCATION.--Lat 40°39'48", long 76°41'30", Schuylkill County, Hydrologic Unit 02050301, on left bank at Klingerstown, 400 ft upstream from highway bridge on State Route 4002, and 0.2 mi upstream from Pine Creek.

DRAINAGE AREA.--44.7 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1992 to December 1994, October 1996 to current year.

GAGE.--Water-stage recorder. Datum of gage is 520 ft above sea level, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Intake out of water all or part of July 9-11, 14-18, 27-31, Aug. 2-13. Discharges for periods when intake out of water were determined from once-daily staff readings provided by U.S. Department of Agriculture staff in Klingerstown. Satellite telemetry at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than a base discharge of 1,000 ft³/s and maximum (*):

Date	Time	Discharge ft ³ /s	Gage Height (ft)	Date	Time	Discharge ft ³ /s	Gage Height (ft)
Jan. 9	----	Unknown	Ice jam	Sept. 16	2200	*1,320	4.88
Jan. 18	1800	Ice jam	*9.81				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.9	4.1	4.1	e2.7	53	38	56	31	9.3	3.1	2.0	2.0
2	2.7	3.8	3.8	e2.7	72	31	52	29	9.5	5.5	e.50	1.8
3	2.7	3.7	3.7	e60	67	28	46	28	9.8	4.8	e.40	1.5
4	5.4	3.7	3.7	e65	61	110	43	28	8.5	3.3	e.30	1.4
5	6.2	3.7	3.9	e60	57	111	41	26	7.2	2.8	e.30	1.4
6	4.5	3.5	3.7	e30	52	e92	36	25	6.6	2.1	e.30	5.2
7	3.8	3.5	3.8	e18	50	e86	34	24	6.3	1.6	e.20	40
8	20	3.4	3.8	e16	54	e78	31	40	6.6	1.1	e.80	24
9	27	3.4	3.9	e90	49	77	43	33	5.8	e.90	e.20	14
10	68	3.7	3.7	e100	47	e70	68	27	4.9	e1.0	e.50	9.5
11	34	6.1	3.5	e50	45	65	63	24	5.8	e1.0	e.30	7.2
12	17	7.1	3.3	e45	53	58	71	23	5.0	1.5	e.30	5.4
13	11	4.8	3.3	e40	69	51	68	22	4.9	1.0	e2.0	4.2
14	12	4.2	3.3	e40	62	53	67	21	6.0	e.90	82	3.6
15	9.5	4.2	3.3	e45	59	58	63	19	9.8	e.80	17	4.2
16	7.3	3.9	3.5	e60	56	57	62	18	5.5	e.80	7.5	354
17	6.2	3.8	3.6	e110	57	86	56	17	7.3	e.70	4.4	656
18	5.9	3.7	3.7	e800	54	141	49	17	15	e2.0	3.0	201
19	5.9	3.5	3.4	e670	47	134	43	25	8.0	4.2	2.1	97
20	5.4	3.9	3.3	e500	42	107	47	20	6.3	2.7	2.2	62
21	5.1	5.0	3.3	e320	39	117	42	16	5.8	1.5	4.0	68
22	4.9	4.6	3.8	e350	e37	239	43	16	5.1	.99	2.6	107
23	4.7	3.8	3.7	e300	e35	217	43	18	4.8	1.0	1.7	111
24	4.6	3.7	e3.2	616	e33	171	45	19	4.0	.91	1.5	76
25	4.5	3.6	e3.0	354	e31	133	39	18	2.8	2.2	1.3	54
26	4.4	5.0	2.8	196	e29	106	39	15	3.0	1.7	1.6	39
27	4.2	7.7	2.8	135	29	90	37	14	3.0	e.90	27	31
28	4.4	5.5	e3.0	107	36	82	35	12	3.5	e.40	12	29
29	4.7	4.6	e2.9	83	---	72	34	11	5.5	e.30	6.4	28
30	4.5	4.3	e2.8	65	---	61	32	11	4.2	e.80	3.7	592
31	4.2	---	e2.8	52	---	54	---	9.7	---	e.90	2.5	---
TOTAL	307.6	129.5	106.4	5382.4	1375	2873	1428	656.7	189.8	53.40	190.60	2630.4
MEAN	9.92	4.32	3.43	174	49.1	92.7	47.6	21.2	6.33	1.72	6.15	87.7
MAX	68	7.7	4.1	800	72	239	71	40	15	5.5	82	656
MIN	2.7	3.4	2.8	2.7	29	28	31	9.7	2.8	.30	.20	1.4
CFSM	.22	.10	.08	3.88	1.10	2.07	1.06	.47	.14	.04	.14	1.96
IN.	.26	.11	.09	4.48	1.14	2.39	1.19	.55	.16	.04	.16	2.19

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 1999, BY WATER YEAR (WY)

MEAN	41.1	81.5	102	113	95.5	170	139	64.3	33.0	15.6	16.6	37.9
MAX	145	133	242	223	224	327	294	153	62.6	24.7	38.5	87.7
(WY)	1997	1993	1997	1998	1998	1994	1993	1998	1998	1994	1999	1999
MIN	8.01	4.32	3.43	20.9	29.2	66.5	43.3	15.1	6.33	1.72	5.87	4.07
(WY)	1998	1999	1999	1994	1993	1997	1997	1997	1999	1999	1998	1998

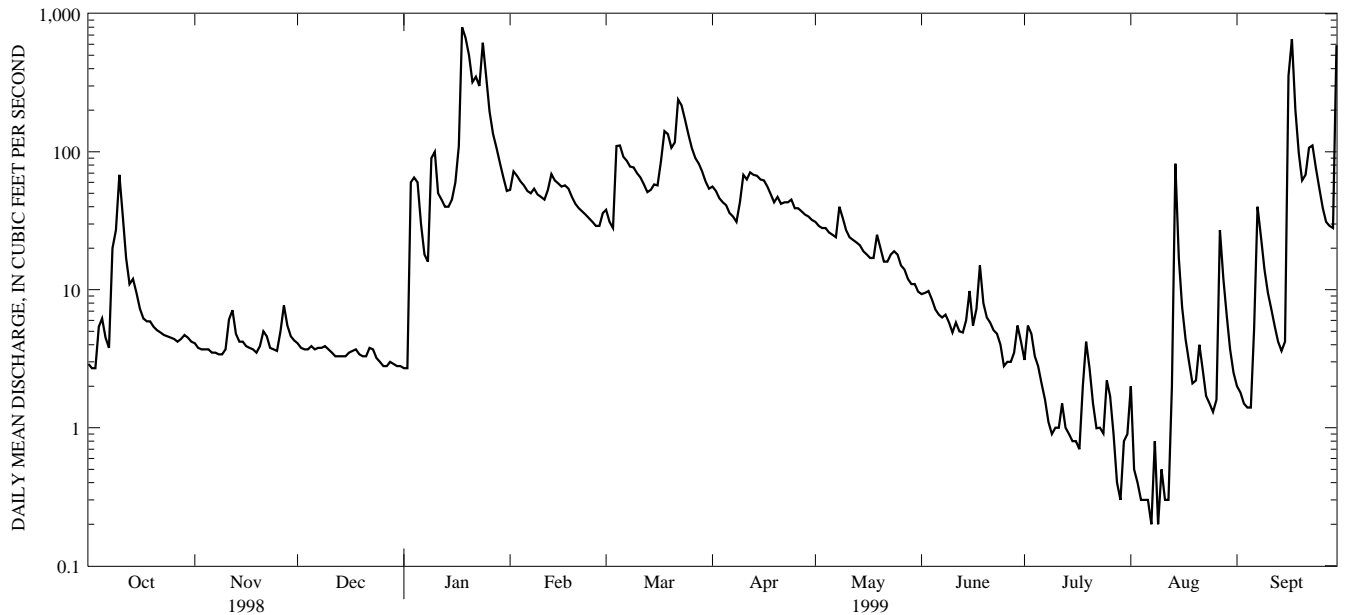
e Estimated.

EAST MAHANTANGO CREEK BASIN

01555400 EAST MAHANTANGO CREEK AT KLINGERSTOWN, PA--Continued

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR			FOR 1999 WATER YEAR			WATER YEARS 1993 - 1999		
ANNUAL TOTAL	29205.6			15322.80					
ANNUAL MEAN	80.0			42.0			76.2		
HIGHEST ANNUAL MEAN							93.6		
LOWEST ANNUAL MEAN							42.0		
HIGHEST DAILY MEAN	1020	Jan	9	800	Jan	18	2290	Nov	28
LOWEST DAILY MEAN	2.7	Oct	2,3	e.20	Aug	7,9	.20	Aug	7
ANNUAL SEVEN-DAY MINIMUM	a2.9	Dec	25	a.36	Aug	3	.36	Aug	3
INSTANTANEOUS PEAK FLOW				bc1320	Sep	16	cd3470	Nov	28
INSTANTANEOUS PEAK STAGE				f9.81	Jan	18	f9.81	Jan	18
INSTANTANEOUS LOW FLOW				e.20	Aug	9	e.20	Aug	9
ANNUAL RUNOFF (CFSM)	1.79			.94			1.70		
ANNUAL RUNOFF (INCHES)	24.31			12.75			23.16		
10 PERCENT EXCEEDS	220			84			179		
50 PERCENT EXCEEDS	22			9.5			34		
90 PERCENT EXCEEDS	3.4			1.6			4.4		

- a Computed using estimated daily discharges.
- b Gage height 4.88 ft.
- c From rating curve extended above 450 ft³/s.
- d Gage height 9.07 ft.
- e Estimated.
- f Ice jam.



1-YEAR HYDROGRAPH
OCTOBER 1, 1998 TO SEPTEMBER 30, 1999

EAST MAHANTANGO CREEK BASIN

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(National Water-Quality Assessment Station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--March 1993 to September 1995, April 1997 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: April 1993 to December 1994.

TEMPERATURE: April 1993 to December 1994, April 1997 to current year.

INSTRUMENTATION.--Daily record measured and collected with in-situ probes and electronic data logger.

REMARKS.--From October 1998 to March 1999, water-quality samples were collected monthly for nutrients, major ions, and suspended sediment, and from April to September 1999, samples were collected semi-monthly for pesticides and monthly for nutrients, major ions, and suspended sediment. Habitat characterization and ecological samples for invertebrates, algae, moss, fish-community, chlorophyll-a, chlorophyll-b, and periphyton biomass were collected June 28-29. Ecological data shown in this report include fish community and periphyton biomass (ash weight and total dry weight).

Quality-control data for sequentially-collected replicate samples using natural water are shown for May 11, 1999 at 0841 (pesticides) and June 30, 1999 at 0921 (nutrients, major ions, and suspended sediment).

The remark code "E" indicates an estimated value with uncertain accuracy and precision for the analyte. Some values for "dissolved" parameters exceed values for the corresponding "total" parameter. These results are within the limits of analytical precision and methods.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 206 microsiemens, Sept. 20, 1993; minimum, 50 microsiemens, Sept. 17, 1994.

TEMPERATURE: Maximum, 31.0°C, July 5, 6, 1999; minimum, 0.0°C, several days during winters.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 31.0°C, July 5, 6; minimum, 0.0°C, several days during winter.

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

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	PROJECT NUMBER (00029)	PURPOSE SITE VISIT, (CODE) (50280)	SAMPLE PURPOSE CODE (71999)	SAMPLER TYPE (CODE) (84164)	SAM- PLING METHOD, CODES (82398)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (µS/CM) (00095)	PH WATER FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)
OCT												
27...	0940	1028	80020	20703	1001	15.00	3045	10	4.2	171	7.4	13.9
NOV												
24...	0950	1028	80020	20703	1001	15.00	3045	10	3.7	159	7.8	13.4
DEC												
22...	0940	1028	80020	20703	1001	15.00	3045	10	3.7	149	7.8	4.1
JAN												
26...	0945	1028	80020	20703	1001	15.00	3045	10	198	149	7.3	3.0
FEB												
23...	0945	1028	80020	20703	1001	15.00	8010	10	E35	147	7.0	-6.3
MAR												
30...	0950	1028	80020	20703	1001	15.00	3045	10	63	128	8.0	11.2
APR												
13...	0950	1028	80020	20703	1001	15.00	3045	10	69	144	7.4	8.1
27...	1010	1028	80020	20703	1001	15.00	3045	10	38	131	7.7	12.3
MAY												
11...	0840	1028	80020	20703	1001	15.00	3045	10	25	134	7.5	12.7
11...	0841	1028	80020	20703	1098	15.00	3045	10	--	--	--	--
24...	1030	1028	80020	20703	1001	15.00	3045	10	18	127	7.6	17.6
JUN												
16...	1000	1028	80020	20703	1001	15.00	3045	10	5.9	132	7.9	16.3
28...	1015	1028	80020	20703	1099	15.00	--	--	--	--	--	--
30...	0920	1028	80020	20703	1001	15.00	3045	10	4.1	136	7.7	19.3
30...	0921	1028	80020	20703	1098	15.00	3045	10	--	--	--	--
JUL												
13...	0930	1028	80020	20703	1001	15.00	3045	10	1.1	138	7.9	19.6
27...	1020	1028	80020	20703	1001	15.00	3045	10	E.91	139	7.7	21.8
AUG												
10...	0945	1028	80020	20703	1001	15.00	8010	10	E.44	153	7.7	16.3
24...	0915	1028	80020	20703	1001	15.00	3045	10	1.7	173	7.7	19.1
SEP												
14...	0940	1028	80020	20703	1001	15.00	3045	10	3.5	197	7.9	19.6
28...	0915	1028	80020	20703	1001	15.00	3045	10	28	188	7.6	18.9

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

DATE	TEMPER- ATURE WATER (DEG C) (00010)	BARO- METRIC PRES- SURE (MM HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)
OCT 27...	10.8	746	9.8	90	63	24	15	6.0	5.7	16	.3	2.3
NOV 24...	5.6	739	12.0	98	58	22	14	5.5	5.7	17	.3	2.3
DEC 22...	6.7	736	10.2	86	52	19	13	4.9	4.9	16	.3	1.8
JAN 26...	3.5	748	12.2	94	50	40	12	4.7	4.2	15	.3	2.8
FEB 23...	-.1	748	14.8	103	49	35	12	4.8	4.7	17	.3	1.7
MAR 30...	7.4	743	13.1	112	43	32	10	4.3	4.1	16	.3	1.5
APR 13...	7.2	735	12.0	103	--	--	--	--	--	--	--	--
27...	10.9	739	11.7	109	44	30	10	4.3	4.5	18	.3	1.6
MAY 11...	13.8	743	9.5	94	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--	--	--
24...	16.6	724	9.0	97	43	21	10	4.1	4.6	18	.3	1.9
JUN 16...	18.4	741	8.5	93	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--
30...	21.4	737	7.3	85	48	12	12	4.6	5.3	18	.3	2.4
30...	--	--	--	--	48	--	12	4.6	5.2	18	.3	2.4
JUL 13...	18.7	743	8.5	93	--	--	--	--	--	--	--	--
27...	22.5	735	8.0	96	52	19	13	4.8	5.1	17	.3	2.9
AUG 10...	18.3	735	6.1	67	--	--	--	--	--	--	--	--
24...	19.8	739	7.8	88	62	29	15	5.7	6.6	18	.4	3.5
SEP 14...	18.5	739	7.7	85	--	--	--	--	--	--	--	--
28...	16.9	745	8.8	93	67	49	16	6.4	5.9	15	.3	2.6
DATE	BICAR- BONATE WAT.DIS FET FIELD HCO3 (MG/L) (29804)	CAR- BONATE WAT.DIS FET FIELD CO3 (MG/L) (29807)	ALKA- LINITY WAT DIS FIX END FIELD CAC03 (MG/L) (39036)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	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)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)
OCT 27...	48	.0	39	48	0	39	12	11	.60	1.4	95	92
NOV 24...	45	.0	37	44	0	36	10	9.8	<.10	.85	92	82
DEC 22...	41	.0	33	40	0	33	10	8.6	<.10	.73	84	76
JAN 26...	13	.0	10	11	0	9	14	11	<.10	5.2	90	87
FEB 23...	17	.0	14	16	0	13	13	10	<.10	4.7	93	86
MAR 30...	14	.0	12	13	0	10	9.9	9.2	<.10	3.9	76	72
APR 13...	18	.0	14	16	0	14	--	--	--	--	--	--
27...	17	.0	14	16	0	13	11	9.0	<.10	3.5	79	69
MAY 11...	22	.0	18	21	0	17	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--	--	--
24...	28	.0	23	26	0	21	9.9	9.1	<.10	4.0	80	69
JUN 16...	37	.0	31	35	0	29	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--
30...	46	.0	38	44	0	36	7.9	9.5	<.10	2.1	99	70
30...	--	--	--	--	--	--	7.9	9.3	.11	2.1	98	--
JUL 13...	49	.0	40	48	0	40	--	--	--	--	--	--
27...	41	.0	33	40	0	33	7.7	9.2	<.10	1.5	81	66
AUG 10...	54	.0	45	54	0	44	--	--	--	--	--	--
24...	41	.0	34	40	0	33	10	12	<.10	2.5	84	84
SEP 14...	38	.0	31	37	0	30	--	--	--	--	--	--
28...	23	.0	19	21	0	17	14	11	<.10	5.8	107	108

EAST MAHANTANGO CREEK BASIN

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

DATE	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3) (71851)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2) (71856)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, AM- MONIA + ORGANIC DIS- SOLVED TOTAL (MG/L AS N) (00607)	NITRO- GEN, AM- MONIA + ORGANIC DIS- SOLVED TOTAL (MG/L AS N) (00625)
OCT 27...	.13	1.13	3.13	14	.022	.07	3.15	.020	.03	.19	.23	.21
NOV 24...	.13	.94	2.61	12	.061	.20	2.67	.022	.03	.16	.18	.18
DEC 22...	.11	.86	--	--	<.010	--	2.62	.029	.04	.18	.20	.21
JAN 26...	.12	47.4	6.22	28	.017	.06	6.24	.101	.13	.38	.24	.49
FEB 23...	.13	14.3	--	--	<.010	--	6.10	<.020	--	--	--	.20
MAR 30...	.10	12.9	5.03	22	.012	.04	5.04	<.020	--	--	--	.20
APR 13...	--	--	--	--	--	--	--	--	--	--	--	--
27...	.11	8.32	3.82	17	.013	.04	3.83	.034	.04	.15	.14	.19
MAY 11...	--	--	--	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--	--	--
24...	.11	3.89	2.80	12	.019	.06	2.82	.061	.08	.34	.24	.41
JUN 16...	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--
30...	.13	1.12	--	--	<.010	--	.918	.030	.04	.37	.26	.40
30...	--	--	--	--	<.010	--	.909	.032	.04	.45	.27	.48
JUL 13...	--	--	--	--	--	--	--	--	--	--	--	--
27...	.11	.10	--	--	<.010	--	.389	.025	.03	.46	.22	.49
AUG 10...	--	--	--	--	--	--	--	--	--	--	--	--
24...	.11	.86	--	--	<.010	--	1.71	.110	.14	.23	.12	.34
SEP 14...	--	--	--	--	--	--	--	--	--	--	--	--
28...	.15	9.24	--	--	<.010	--	8.07	<.020	--	--	--	.38
DATE	NITRO- GEN,AM- MONIA + ORGANIC DIS- (MG/L AS N) (00623)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	NITRO- GEN, DIS- SOLVED (MG/L AS N) (00602)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	IRON, DIS- SOLVED (MG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (MG/L AS MN) (01056)	STRON- TIUM, DIS- SOLVED (MG/L AS SR) (01080)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)
OCT 27...	.25	3.4	3.4	.027	.032	.020	.06	26	6.0	83	8	.10
NOV 24...	.20	2.8	2.9	.016	<.050	<.010	--	23	E3.7	78	9	.09
DEC 22...	.23	2.8	2.9	.021	<.050	<.010	--	30	4.6	73	9	.09
JAN 26...	.34	6.7	6.6	.100	.066	.052	.16	16	26	54	15	7.9
FEB 23...	.12	6.3	6.2	.018	.009	.012	.04	14	20	59	5	.77
MAR 30...	.17	5.2	5.2	.014	.008	<.010	--	16	14	52	5	.85
APR 13...	--	--	--	--	--	--	--	--	--	--	--	--
27...	.17	4.0	4.0	.014	.015	.017	.05	29	14	56	5	.53
MAY 11...	--	--	--	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--	--	--
24...	.31	3.2	3.1	.050	.026	.027	.08	29	16	56	8	.39
JUN 16...	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--
30...	.29	1.3	1.2	.060	.039	.026	.08	32	18	62	9	.10
30...	.30	1.4	1.2	.060	.038	.025	.08	42	18	61	9	--
JUL 13...	--	--	--	--	--	--	--	--	--	--	--	--
27...	.25	.87	.63	.050	.027	.015	.05	31	39	66	13	.02
AUG 10...	--	--	--	--	--	--	--	--	--	--	--	--
24...	.23	2.0	1.9	.039	.022	.019	.06	15	18	80	4	.04
SEP 14...	--	--	--	--	--	--	--	--	--	--	--	--
28...	.28	8.5	8.3	.027	.022	.014	.04	E8.5	9.0	82	4	.35

EAST MAHANTANGO CREEK BASIN

01555400 EAST MAHANTANGO CREEK AT KLINGERSTOWN, PA--Continued

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

DATE	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	ACETO-CHLOR, WATER FLTRD REC (µG/L) (49260)	ALA-CHLOR, WATER, DISS, REC (µG/L) (46342)	ALPHA BHC DIS-SOLVED (µG/L) (34253)	ATRA-ZINE, WATER, DISS, REC (µG/L) (39632)	BEN-FLUR-ALIN, WAT FLD 0.7 µ GF, REC (µG/L) (82673)	BUTYL-ATE, WATER, DISS, REC (µG/L) (04028)	CAR-BARYL, WATER FLTRD 0.7 µ GF, REC (µG/L) (82680)	CARBO-FURAN, WATER FLTRD 0.7 µ GF, REC (µG/L) (82674)	CHLOR-PYRIFOS, DIS-SOLVED (µG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (µG/L) (04041)	DCPA, WATER FLTRD 0.7 µ GF, REC (µG/L) (82682)
OCT 27...	65	--	--	--	--	--	--	--	--	--	--	--
NOV 24...	78	--	--	--	--	--	--	--	--	--	--	--
DEC 22...	75	--	--	--	--	--	--	--	--	--	--	--
JAN 26...	91	--	--	--	--	--	--	--	--	--	--	--
FEB 23...	53	--	--	--	--	--	--	--	--	--	--	--
MAR 30...	83	--	--	--	--	--	--	--	--	--	--	--
APR 13...	--	<.0020	.008	<.0020	.036	<.0020	<.0020	<.0030	<.0030	<.0040	<.0040	<.0020
27...	67	<.0020	.006	<.0020	.034	<.0020	<.0020	<.0030	<.0030	<.0040	<.0040	<.0020
MAY 11...	--	.0236	E.003	<.0020	.281	<.0020	<.0020	<.0030	E.0104	<.0040	<.0040	<.0020
11...	--	.0238	E.003	<.0020	.281	<.0020	<.0020	<.0030	E.0098	<.0040	<.0040	<.0020
24...	89	.0566	<.002	<.0020	.265	<.0020	<.0020	E.0031	<.0030	<.0040	<.0090	<.0020
JUN 16...	--	.0150	.010	<.0020	.412	<.0020	<.0020	<.0030	<.0030	<.0040	<.0080	<.0020
28...	--	--	--	--	--	--	--	--	--	--	--	--
30...	92	<.0020	<.002	<.0020	.258	<.0020	<.0020	<.0030	<.0030	<.0040	<.0040	<.0020
30...	88	--	--	--	--	--	--	--	--	--	--	--
JUL 13...	--	<.0020	<.002	<.0020	.297	<.0020	<.0020	<.0030	<.0030	<.0040	<.0040	<.0020
27...	80	<.0020	<.002	<.0020	.576	<.0020	<.0020	<.0030	<.0030	<.0040	<.0200	<.0020
AUG 10...	--	<.0020	<.002	<.0020	.295	<.0020	<.0020	<.0030	<.0030	<.0040	.0060	<.0020
24...	64	<.0116	<.002	<.0020	.179	<.0020	<.0020	<.0030	<.0030	<.0040	<.0040	<.0020
SEP 14...	--	<.0020	<.002	<.0020	.118	<.0020	<.0020	<.0030	<.0030	<.0040	<.0040	<.0020
28...	67	<.0020	<.002	<.0020	.060	<.0020	<.0020	E.0054	<.0030	<.0040	<.0040	<.0020
DATE	DEETHYL ATRA-ZINE, WATER, DISS, REC (µG/L) (04040)	DI-AZINON, DIS-SOLVED (µG/L) (39572)	DI-ELDRIN, DIS-SOLVED (µG/L) (39381)	2,6-DI-ETHYL ANILINE, WAT FLT 0.7 µ GF, REC (µG/L) (82660)	DISUL-FOTON, WATER FLTRD 0.7 µ GF, REC (µG/L) (82677)	EPTC, WATER FLTRD 0.7 µ GF, REC (µG/L) (82668)	ETHAL-FLUR-ALIN, WAT FLT 0.7 µ GF, REC (µG/L) (82663)	ETHO-PROP, WATER FLTRD 0.7 µ GF, REC (µG/L) (82672)	FONOFOS, WATER REC (µG/L) (04095)	LINDANE, DIS-SOLVED (µG/L) (39341)	LIN-URON, WATER FLTRD 0.7 µ GF, REC (µG/L) (82666)	
OCT 27...	--	--	--	--	--	--	--	--	--	--	--	
NOV 24...	--	--	--	--	--	--	--	--	--	--	--	
DEC 22...	--	--	--	--	--	--	--	--	--	--	--	
JAN 26...	--	--	--	--	--	--	--	--	--	--	--	
FEB 23...	--	--	--	--	--	--	--	--	--	--	--	
MAR 30...	--	--	--	--	--	--	--	--	--	--	--	
APR 13...	E.0544	<.002	<.001	<.0030	<.0170	<.0020	<.0040	<.0030	<.0030	<.004	<.0020	
27...	E.0559	<.002	<.001	<.0030	<.0170	<.0020	<.0040	<.0030	<.0030	<.004	<.0020	
MAY 11...	E.0874	<.002	<.001	<.0030	<.0170	.0057	<.0040	<.0030	<.0030	<.004	.0081	
11...	E.0699	<.002	<.001	<.0030	<.0170	.0049	<.0040	<.0030	<.0030	<.004	.0080	
24...	E.0884	<.002	<.001	<.0030	<.0170	<.0020	<.0040	<.0030	<.0030	<.004	<.0020	
JUN 16...	E.0532	<.002	<.001	<.0030	<.0170	<.0020	<.0040	<.0030	<.0030	<.004	<.0020	
28...	--	--	--	--	--	--	--	--	--	--	--	
30...	E.0749	<.002	<.001	<.0030	<.0170	<.0020	<.0040	<.0030	<.0030	<.004	<.0020	
30...	--	--	--	--	--	--	--	--	--	--	--	
JUL 13...	E.0747	<.002	<.001	<.0030	<.0170	<.0020	<.0040	<.0030	<.0030	<.004	<.0020	
27...	E.0799	<.002	<.001	<.0030	<.0170	<.0020	<.0040	<.0030	<.0030	<.004	<.0020	
AUG 10...	E.0738	<.002	<.001	<.0030	<.0170	<.0020	<.0040	<.0030	<.0030	<.004	<.0020	
24...	E.0745	<.002	<.001	<.0030	<.0170	<.0020	<.0040	<.0030	<.0030	<.004	<.0020	
SEP 14...	E.120	<.002	<.001	<.0030	<.0170	<.0020	<.0040	<.0030	<.0030	<.004	<.0020	
28...	E.142	<.002	<.001	<.0030	<.0170	<.0020	<.0040	<.0030	<.0030	<.004	<.0020	

EAST MAHANTANGO CREEK BASIN

01555400 EAST MAHANTANGO CREEK AT KLINGERSTOWN, PA--Continued

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

DATE	MALA- THION, DIS- SOLVED ($\mu\text{G/L}$) (39532)	METHYL AZIN- PHOS WAT FLT 0.7 μ GF, REC ($\mu\text{G/L}$) (82686)	METHYL PARA- THION WAT FLT 0.7 μ GF, REC ($\mu\text{G/L}$) (82667)	METO- LACHLOR WATER DISSOLV ($\mu\text{G/L}$) (39415)	METRI- BUZIN WATER DISSOLV ($\mu\text{G/L}$) (82630)	MOL- INATE WATER FLTRD 0.7 μ GF, REC ($\mu\text{G/L}$) (82671)	NAPROP- AMIDE WATER FLTRD 0.7 μ GF, REC ($\mu\text{G/L}$) (82684)	P, P' DDE DISSOLV ($\mu\text{G/L}$) (34653)	PARA- THION, DIS- SOLVED ($\mu\text{G/L}$) (39542)	PEB- ULATE WATER FILTRD 0.7 μ GF, REC ($\mu\text{G/L}$) (82669)	PENDI- METH- ALIN WAT FLT 0.7 μ GF, REC ($\mu\text{G/L}$) (82683)
OCT 27...	--	--	--	--	--	--	--	--	--	--	--
NOV 24...	--	--	--	--	--	--	--	--	--	--	--
DEC 22...	--	--	--	--	--	--	--	--	--	--	--
JAN 26...	--	--	--	--	--	--	--	--	--	--	--
FEB 23...	--	--	--	--	--	--	--	--	--	--	--
MAR 30...	--	--	--	--	--	--	--	--	--	--	--
APR 13...	<.005	<.0010	<.0060	.041	<.004	<.0040	<.0030	<.0060	<.004	<.0040	<.0040
27...	<.005	<.0010	<.0060	.026	<.004	<.0040	<.0030	<.0060	<.004	<.0040	<.0040
MAY 11...	<.005	<.0010	<.0060	.209	<.004	<.0040	<.0030	<.0060	<.004	<.0040	.0092
11...	<.005	<.0010	<.0060	.211	<.004	<.0040	<.0030	<.0060	<.004	<.0040	.0102
24...	<.005	<.0010	<.0060	.275	<.004	<.0040	<.0030	<.0060	<.004	<.0040	.0244
JUN 16...	<.005	<.0010	<.0060	.116	<.004	<.0040	<.0030	<.0060	<.004	<.0040	<.0040
28...	--	--	--	--	--	--	--	--	--	--	--
30...	<.005	<.0010	<.0060	.089	<.004	<.0040	<.0030	<.0060	<.004	<.0040	<.0040
30...	--	--	--	--	--	--	--	--	--	--	--
JUL 13...	<.005	<.0010	<.0060	.056	<.004	<.0040	<.0030	<.0060	<.004	<.0040	<.0040
27...	<.005	<.0010	<.0060	.358	<.004	<.0040	<.0030	<.0060	<.004	<.0040	<.0040
AUG 10...	<.005	<.0010	<.0060	.095	<.004	<.0040	<.0030	<.0060	<.004	<.0040	<.0040
24...	<.005	<.0010	<.0060	.162	<.004	<.0040	<.0030	<.0060	<.004	<.0040	<.0040
SEP 14...	<.005	<.0010	<.0060	.131	<.004	<.0040	<.0030	<.0060	<.004	<.0040	<.0040
28...	<.005	<.0010	<.0060	.071	<.004	<.0040	<.0030	<.0060	<.004	<.0040	<.0040
DATE	PER- METHRIN CIS WAT FLT 0.7 μ GF, REC ($\mu\text{G/L}$) (82687)	PHORATE WATER FLTRD 0.7 μ GF, REC ($\mu\text{G/L}$) (82664)	PRO- METON, WATER, DISS, REC ($\mu\text{G/L}$) (04037)	PRON- AMIDE WATER FLTRD 0.7 μ GF, REC ($\mu\text{G/L}$) (82676)	PROP- CHLOR, WATER, DISS, REC ($\mu\text{G/L}$) (04024)	PRO- PANIL WATER FLTRD 0.7 μ GF, REC ($\mu\text{G/L}$) (82679)	PRO- PARGITE WATER FLTRD 0.7 μ GF, REC ($\mu\text{G/L}$) (82685)	SI- MAZINE, WATER, DISS, REC ($\mu\text{G/L}$) (04035)	TEBU- THIURON WATER FLTRD 0.7 μ GF, REC ($\mu\text{G/L}$) (82670)	TER- BACIL WATER FLTRD 0.7 μ GF, REC ($\mu\text{G/L}$) (82665)	TER- BUFOS WATER FLTRD 0.7 μ GF, REC ($\mu\text{G/L}$) (82675)
OCT 27...	--	--	--	--	--	--	--	--	--	--	--
NOV 24...	--	--	--	--	--	--	--	--	--	--	--
DEC 22...	--	--	--	--	--	--	--	--	--	--	--
JAN 26...	--	--	--	--	--	--	--	--	--	--	--
FEB 23...	--	--	--	--	--	--	--	--	--	--	--
MAR 30...	--	--	--	--	--	--	--	--	--	--	--
APR 13...	<.0050	<.0020	<.0180	<.0030	<.0070	<.0040	<.0130	.0102	<.0100	<.0070	<.0130
27...	<.0050	<.0020	<.0180	<.0030	<.0070	<.0040	<.0130	.0090	<.0100	<.0070	<.0130
MAY 11...	<.0050	<.0020	<.0180	<.0030	<.0070	<.0040	<.0130	.0135	<.0100	<.0070	<.0130
11...	<.0050	<.0020	E.0052	<.0030	<.0070	<.0040	<.0130	.0130	<.0100	<.0070	<.0130
24...	<.0050	<.0020	<.0180	<.0030	<.0070	<.0040	<.0130	.0238	<.0100	<.0070	<.0130
JUN 16...	<.0050	<.0020	<.0180	<.0030	<.0070	<.0040	<.0130	.0127	<.0100	<.0070	<.0130
28...	--	--	--	--	--	--	--	--	--	--	--
30...	<.0050	<.0020	<.0180	<.0030	<.0070	<.0040	<.0130	.0321	<.0100	<.0070	<.0130
30...	--	--	--	--	--	--	--	--	--	--	--
JUL 13...	<.0050	<.0020	<.0180	<.0030	<.0070	<.0040	<.0130	.0362	<.0100	<.0070	<.0130
27...	<.0050	<.0020	<.0180	<.0030	<.0070	<.0040	<.0130	.0685	<.0100	E.125	<.0130
AUG 10...	<.0050	<.0020	E.0046	<.0030	<.0070	<.0040	<.0130	.0352	<.0100	E.0132	<.0130
24...	<.0050	<.0020	E.0034	<.0030	<.0070	<.0040	<.0130	.0397	<.0100	E.0126	<.0130
SEP 14...	<.0050	<.0020	<.0180	<.0030	<.0070	<.0040	<.0130	.0248	<.0100	<.0070	<.0130
28...	<.0050	<.0020	<.0180	<.0030	<.0070	<.0040	<.0130	.0126	<.0100	E.0099	<.0130

EAST MAHANTANGO CREEK BASIN

01555400 EAST MAHANTANGO CREEK AT KLINGERSTOWN, PA--Continued

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

DATE	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)	DIAZ- INON D10 SRG WAT FLT 0.7 µ GF, REC PERCENT (91063)	TERBUTH YLAZINE SURROGT WAT FLT 0.7 µ GF, REC PERCENT (91064)	HCH ALPHA D6 SRG WAT FLT 0.7 µ GF, REC PERCENT (91065)	REP- LICATE TYPE (CODE) (99105)	QUALITY ASSUR- ANCE DATA INDICA- TOR CODE (99111)	PERI- PHYTON BIOMASS ASH WEIGHT G/SQ M (00572)	PERI- PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M (00573)
OCT 27...	--	--	--	--	--	--	--	1	--	--
NOV 24...	--	--	--	--	--	--	--	1	--	--
DEC 22...	--	--	--	--	--	--	--	1	--	--
JAN 26...	--	--	--	--	--	--	--	1	--	--
FEB 23...	--	--	--	--	--	--	--	1	--	--
MAR 30...	--	--	--	--	--	--	--	1	--	--
APR 13...	<.0020	<.0010	<.0020	99.4	95.6	70.1	--	1	--	--
27...	<.0020	<.0010	<.0020	73.0	100	84.1	--	1	--	--
MAY 11...	<.0020	<.0010	<.0020	95.2	105	99.1	20.00	100	--	--
11...	<.0020	<.0010	<.0020	92.3	102	95.7	20.00	--	--	--
24...	<.0020	<.0010	<.0020	97.1	--	98.7	--	1	--	--
JUN 16...	<.0020	<.0010	<.0020	116	--	111	--	10	--	--
28...	--	--	--	--	--	--	--	--	376.5	390.1
30...	<.0020	<.0010	<.0020	115	--	86.3	20.00	30	--	--
30...	--	--	--	--	--	--	20.00	--	--	--
JUL 13...	<.0020	<.0010	<.0020	109	--	105	--	10	--	--
27...	<.0020	<.0010	<.0020	123	--	91.9	--	1	--	--
AUG 10...	<.0020	<.0010	<.0020	97.9	--	99.1	--	1	--	--
24...	<.0020	<.0010	<.0020	107	--	101	--	1	--	--
SEP 14...	<.0020	<.0010	<.0020	128	--	110	--	1	--	--
28...	<.0020	<.0010	<.0020	110	--	101	--	1	--	--

EAST MAHANTANGO CREEK BASIN

01555400 EAST MAHANTANGO CREEK AT KLINGERSTOWN, PA--Continued

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

DATE	LINDANE DIS- SOLVED (µG/L) (39341)	LIN- URON WATER FLTRD 0.7 µ GF, REC (µG/L) (82666)	MALA- THION, DIS- SOLVED (µG/L) (39532)	METHYL AZIN- PHOS WAT FLT 0.7 µ GF, REC (µG/L) (82686)	METHYL PARA- THION WAT FLT 0.7 µ GF, REC (µG/L) (82667)	METO- LACHLOR WATER DISSOLV (µG/L) (39415)	METRI- BUZIN WATER DISSOLV (µG/L) (82630)	MOL- INATE WATER FLTRD 0.7 µ GF, REC (µG/L) (82671)	NAPROP- AMIDE WATER FLTRD 0.7 µ GF, REC (µG/L) (82684)	P, P' DDE DISSOLV (µG/L) (34653)	PARA- THION, DIS- SOLVED (µG/L) (39542)
JUN 16...	<.004	<.0020	<.005	<.0010	<.0060	<.002	<.004	<.0040	<.0030	<.0060	<.004
JUL 13...	--	--	--	--	--	--	--	--	--	--	--
DATE	PEB- ULATE WATER FILTRD 0.7 µ GF, REC (µG/L) (82669)	PENDI- METH- ALIN WAT FLT 0.7 µ GF, REC (µG/L) (82683)	PER- METHRIN CIS WAT FLT 0.7 µ GF, REC (µG/L) (82687)	PHORATE WATER FLTRD 0.7 µ GF, REC (µG/L) (82664)	PRO- METON, WATER, DISS, REC (µG/L) (04037)	PRON- AMIDE WATER FLTRD 0.7 µ GF, REC (µG/L) (82676)	PROP- CHLOR, WATER, DISS, REC (µG/L) (04024)	PRO- PANIL WATER FLTRD 0.7 µ GF, REC (µG/L) (82679)	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)
JUN 16...	<.0040	<.0040	<.0050	<.0020	<.0180	<.0030	<.0070	<.0040	<.0130	<.0050	<.0100
JUL 13...	--	--	--	--	--	--	--	--	--	--	--
DATE	TER- BACIL WATER FLTRD 0.7 µ GF, REC (µG/L) (82665)	TER- BUFOS WATER FLTRD 0.7 µ GF, REC (µG/L) (82675)	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)	DIAZ- INON D10 SRG WAT FLT 0.7 µ GF, REC PERCENT (91063)	HCH ALPHA D6 SRG WAT FLT 0.7 µ GF, REC PERCENT (91065)	BLANK, TYPE OF SOLU- TION (CODE) (99100)	BLANK, SOURCE OF SOLU- TION (CODE) (99101)	BLANK, TYPE OF SAMPLE (CODE) (99102)	REF- ERENCE MA- TERIAL/ SPIKE SOURCE (CODE) (99104)
JUN 16...	<.0070	<.0130	<.0020	<.0010	<.0020	111	109	40.00	10.00	100.00	98002
JUL 13...	--	--	--	--	--	--	--	10.00	80.00	100.00	99070

EAST MAHANTANGO CREEK BASIN

01555400 EAST MAHANTANGO CREEK AT KLINGERSTOWN, PA--Continued

REMARKS.--Concentrations of pesticides and herbicides in replicate and spiked replicate from East Mahantango Creek at Klingerstown, Pa., May 11, 1999 and calculated recoveries, in percent; "<" = less than. Less-than values were set equal to zero for calculations; E = estimated value.

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

Parameter code	Constituent	Concentration, in micrograms per liter				Recovery in percent [(B-A)/C] x 100
		Laboratory results		a Calculated concentration in replicate 2 C		
		Replicate 1 (not spiked) (05/11/99 @ 0841) A	Replicate 2 (spiked) (05/11/99 @ 0842) B			
49260	Acetochlor	0.024	0.141	.108	108	
46342	Alachlor	0.003	0.121	.108	109	
34253	Alpha BHC	<0.002	0.117	.108	108	
39632	Atrazine	0.281	0.394	.108	105	
82673	Benfluralin	<0.002	0.097	.108	90	
04028	Butylate	<0.002	0.107	.108	99	
82680	Carbaryl	<0.003	E0.144	.108	131	
82674	Carbofuran	E0.010	E0.144	.108	124	
38933	Chlorpyrifos	<0.004	0.110	.108	102	
04041	Cyanazine	<0.004	0.112	.108	104	
82682	DCPA	<0.002	0.118	.108	109	
04040	Desethyl Atrazine	E0.070	E0.122	.108	48	
39572	Diazinon	<0.002	0.112	.108	104	
39381	Dieldrin	<0.001	0.121	.108	112	
82660	2,6-Diethyl Aniline	<0.003	0.100	.108	93	
82677	Disulfoton	<0.017	0.105	.108	97	
82668	EPTC	0.005	0.106	.108	94	
82663	Ethalfuralin	<0.004	0.110	.108	102	
82672	Ethoprop	<0.003	0.102	.108	94	
04095	Fonofos	<0.003	0.079	.108	73	
39341	Lindane	<0.004	0.121	.108	112	
82666	Linuron	0.008	0.111	.108	95	
39532	Malathion	<0.005	0.108	.108	100	
82686	Methyl Azinphos	<0.001	E0.145	.108	134	
82667	Methyl Parathion	<0.006	0.111	.108	103	
39415	Metolachlor	0.211	0.323	.108	104	
82630	Metribuzin	<0.004	0.105	.108	97	
82671	Molinate	<0.004	0.106	.108	98	
82684	Napropamide	<0.003	0.099	.108	92	
34653	P, P' DDE	<0.006	0.067	.108	62	
39542	Parathion	<0.004	0.105	.108	97	
82669	Pebulate	<0.004	0.098	.108	91	
82683	Pendimethalin	0.010	0.132	.108	113	
82687	Permethrin	<0.005	0.053	.108	49	
82664	Phorate	<0.002	0.099	.108	92	
04037	Prometon	E0.005	0.104	.108	92	
82676	Pronamide	<0.003	0.118	.108	109	
04024	Propachlor	<0.007	0.121	.108	112	
82679	Propanil	<0.004	0.124	.108	115	
82685	Propargite	<0.013	0.100	.108	93	
04035	Simazine	0.013	0.124	.108	103	
82670	Tebuthiuron	<0.010	0.136	.108	126	
82665	Terbacil	<0.007	E0.127	.108	118	
82675	Terbufos	<0.013	0.091	.108	84	
82681	Thiobencarb	<0.002	0.119	.108	110	
82678	Triallate	<0.001	0.116	.108	107	
82661	Trifluralin	<0.002	0.088	.108	82	
					Mean recovery	100
					Standard deviation	17
					Median recovery	102

a Calculated concentration of spike in sample equals the concentration of the spike solution, in micrograms per milliliter multiplied times the amount of spike added, in milliliters, divided by the spiked sample volume, in liters

EAST MAHANTANGO CREEK BASIN

01555400 EAST MAHANTANGO CREEK AT KLINGERSTOWN, PA--Continued

ECOLOGICAL SURVEY OF FIXED SITES--FISH SPECIES TAXONOMIC LIST

REMARKS.--A fish-community survey was conducted at East Mahantango Creek at Klingerstown, Pa. (01555400) on June 29, 1999. Fish were collected by electrofishing using a pulsed-DC current. Two electrofishing passes were conducted in an upstream pattern covering the 200 meter reach. Fish were identified, sorted by species, measured for total and standard length, weighed, and checked for external anomalies. Additional information can be obtained from the U.S. Geological Survey, Lemoyne, Pa.

Explanation of table--Fish family names are in uppercase; scientific names are in italics; and common names are in parentheses. Common names follow those of the American Fisheries Society (1991).

FISH SPECIES AND NUMBER, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

SPECIES NAME	NUMBER OF FISH
CYPRINIDAE (carp and minnows)	
<i>Campostoma anomalum</i> (central stoneroller)	231
<i>Cyprinella spiloptera</i> (spotfin shiner)	3
<i>Exoglossum maxillingua</i> (cutlips minnow)	118
<i>Luxilus cornutus</i> (common shiner)	55
<i>Nocomis micropogon</i> (river chub)	208
<i>Notropis hudsonius</i> (spottail shiner)	46
<i>Notropis rubellus</i> (rosyface shiner)	28
<i>Pimephales notatus</i> (bluntnose minnow)	7
<i>Rhinichthys atratulus</i> (blacknose dace)	7
<i>Rhinichthys cataractae</i> (longnose dace)	52
<i>Semotilus atromaculatus</i> (creek chub)	95
<i>Semotilus corporalis</i> (fallfish)	114
CATASTOMIDAE (suckers)	
<i>Catostomus commersoni</i> (white sucker)	46
<i>Hypentelium nigricans</i> (northern hog sucker)	1
ICTALURIDAE (bullhead catfishes)	
<i>Ameiurus natalis</i> (yellow bullhead)	1
<i>Noturus insignis</i> (margined madtom)	57
SALMONIDAE (trouts)	
<i>Salmo trutta</i> (brown trout)	1
CENTRARCHIDAE (sunfishes)	
<i>Ambloplites rupestris</i> (rock bass)	67
<i>Lepomis cyanellus</i> (green sunfish)	4
<i>Lepomis gibbosus</i> (pumpkinseed)	1
<i>Micropterus dolomieu</i> (smallmouth bass)	39
PERCIDAE (perches)	
<i>Etheostoma olmstedii</i> (tessellated darter)	94
<i>Etheostoma zonale</i> (banded darter)	70
<i>Percina peltata</i> (shield darter)	18

EAST MAHANTANGO CREEK BASIN

01555400 EAST MAHANTANGO CREEK AT KLINGERSTOWN, PA--Continued

WATER TEMPERATURE, DEGREES CELSIUS, OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	18.0	14.0	16.5	8.0	5.5	7.0	9.0	5.5	7.0	.0	.0	.0
2	15.0	11.5	13.0	9.5	6.5	7.5	7.0	4.0	5.5	.0	.0	.0
3	12.0	11.0	11.5	7.5	4.5	6.0	7.5	4.5	6.0	.0	.0	.0
4	11.5	11.0	11.0	6.5	3.5	5.0	9.5	6.0	8.0	.0	.0	.0
5	13.5	11.0	12.0	5.5	3.0	4.5	11.5	9.0	10.0	.0	.0	.0
6	12.5	10.5	11.5	6.0	4.5	5.0	12.0	9.5	11.0	.0	.0	.0
7	14.0	12.5	13.0	6.5	5.0	5.5	12.5	10.5	11.5	.0	.0	.0
8	15.5	14.0	15.0	7.0	6.0	6.5	11.0	9.0	10.0	.0	.0	.0
9	15.5	14.0	14.5	7.5	5.5	6.5	9.0	5.0	7.5	.0	.0	.0
10	14.0	13.5	14.0	8.0	5.5	6.0	5.0	3.0	4.0	.0	.0	.0
11	15.5	13.0	14.0	10.5	7.5	9.0	5.5	2.5	3.5	.0	.0	.0
12	16.0	13.5	15.0	7.5	5.0	6.5	3.5	1.5	2.5	.0	.0	.0
13	15.5	14.5	15.0	6.0	4.5	5.0	3.5	2.0	2.5	.0	.0	.0
14	15.0	13.5	14.5	7.0	4.5	6.0	3.5	.5	2.5	.0	.0	.0
15	13.5	12.0	13.0	8.5	6.0	7.0	2.5	.0	1.0	.0	.0	.0
16	12.0	10.0	11.5	7.5	5.0	6.0	2.0	.0	1.0	.0	.0	.0
17	12.0	9.5	11.0	8.0	6.5	7.0	2.5	1.5	2.0	.0	.0	.0
18	14.0	10.5	12.5	7.5	4.5	6.5	3.0	.5	1.5	.0	.0	.0
19	15.0	13.5	14.0	5.5	3.5	4.5	2.5	.5	2.0	.0	.0	.0
20	13.5	11.0	12.0	6.0	5.5	6.0	4.5	2.5	3.5	.0	.0	.0
21	12.0	10.0	11.0	6.0	4.5	5.0	7.0	4.5	5.5	.5	.0	.0
22	10.0	8.5	9.0	6.0	4.0	4.5	8.0	1.5	5.5	3.0	.5	2.0
23	9.5	6.5	8.0	6.0	3.0	4.5	1.5	.0	.5	5.5	3.0	3.5
24	---	---	---	7.5	5.0	6.0	1.0	.0	.0	5.0	4.5	5.0
25	10.0	7.0	8.5	5.5	3.5	4.5	.5	.0	.0	4.5	4.0	4.0
26	11.0	8.0	9.5	7.0	5.0	6.0	.5	.0	.0	4.5	3.5	4.0
27	11.5	10.5	11.0	7.0	4.5	6.0	.5	.0	.0	4.0	2.5	3.5
28	13.0	10.5	11.5	6.0	3.0	4.5	.0	.0	.0	6.0	3.5	5.0
29	12.5	9.5	11.0	7.0	3.5	5.5	.0	.0	.0	5.5	3.0	4.5
30	10.0	7.5	8.5	8.5	6.0	7.0	.5	.0	.0	3.0	2.0	2.5
31	9.5	6.0	7.5	---	---	---	.0	.0	.0	2.0	.0	1.0
MONTH	18.0	6.0	12.0	10.5	3.0	5.9	12.5	.0	3.7	6.0	.0	1.1
	FEBRUARY			MARCH			APRIL			MAY		
1	2.0	.0	.5	4.0	3.0	3.5	11.5	9.0	9.5	---	---	---
2	4.0	2.0	3.0	5.0	2.0	3.5	12.5	9.5	10.5	---	---	---
3	5.5	3.5	4.5	7.0	3.0	4.5	14.5	11.0	12.5	---	---	---
4	---	---	---	7.5	3.5	6.0	14.5	12.5	13.5	---	---	---
5	5.0	3.0	4.0	4.0	.5	2.5	14.0	9.5	11.5	---	---	---
6	3.5	2.5	3.0	3.5	2.0	3.0	13.0	8.5	10.5	---	---	---
7	3.5	2.5	3.0	3.0	.5	2.0	14.5	9.0	11.5	---	---	---
8	3.5	2.0	2.5	2.0	.0	1.0	16.5	10.5	13.0	17.5	15.5	16.0
9	3.5	1.0	2.5	2.0	.0	1.0	15.5	10.0	12.5	17.0	14.0	15.5
10	4.0	1.5	3.0	4.5	1.0	2.5	12.5	7.5	10.0	19.0	13.0	16.0
11	4.5	1.5	3.0	4.0	1.0	2.5	11.5	7.0	8.5	20.0	14.0	17.0
12	7.5	4.5	5.5	3.5	.5	2.0	11.5	7.0	8.5	21.0	14.5	18.0
13	6.5	3.0	4.0	4.0	.5	2.0	12.0	7.0	9.5	18.5	14.0	15.5
14	3.0	.5	1.5	4.0	1.5	3.0	13.0	7.5	10.0	17.0	12.5	15.0
15	3.0	.0	1.0	4.0	.5	1.5	12.0	8.5	10.0	19.0	12.5	16.0
16	4.5	1.0	2.5	5.5	1.0	3.0	11.5	9.5	10.5	18.5	13.5	16.0
17	5.0	4.0	4.5	7.5	3.0	4.5	10.5	8.5	9.5	19.5	14.0	17.0
18	5.5	4.5	5.0	8.0	5.5	6.5	10.0	8.0	9.0	21.0	15.5	18.5
19	5.0	3.5	4.0	7.5	4.5	6.0	10.0	7.0	8.5	21.0	18.0	19.5
20	4.5	2.0	3.0	8.0	4.5	6.0	9.5	7.5	8.5	21.0	16.0	18.5
21	3.0	.5	1.5	7.5	4.5	5.5	9.5	6.5	8.0	20.5	14.5	17.5
22	1.0	.0	.0	5.0	4.0	4.5	14.0	8.5	10.5	20.5	15.5	18.0
23	.0	.0	.0	7.5	3.5	5.0	13.5	11.0	12.0	19.5	17.5	18.0
24	.5	.0	.0	7.5	5.0	6.5	13.5	7.5	10.5	18.5	16.5	17.5
25	.5	.0	.0	8.0	5.5	6.5	14.0	7.5	11.0	16.5	14.5	15.5
26	1.0	.0	.5	8.0	4.5	6.5	15.5	8.5	12.0	15.5	13.5	15.0
27	2.0	.0	.5	8.5	4.5	6.5	16.0	10.0	13.0	18.5	13.5	16.0
28	3.0	2.0	2.5	8.5	6.5	7.5	15.0	10.5	12.5	19.5	14.0	17.0
29	---	---	---	11.0	6.5	8.5	---	---	---	21.5	15.5	19.0
30	---	---	---	11.0	6.5	9.0	---	---	---	23.5	17.5	20.5
31	---	---	---	12.0	6.5	9.0	---	---	---	23.5	19.0	21.5
MONTH	7.5	.0	2.4	12.0	.0	4.6	16.5	6.5	10.6	23.5	12.5	17.2

EAST MAHANTANGO CREEK BASIN

01555400 EAST MAHANTANGO CREEK AT KLINGERSTOWN, PA--Continued

CROSS-SECTION ANALYSES, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND (00060)	TEMPER- ATURE WATER (DEG C) (00010)	GAGE HEIGHT (FEET) (00065)	SAMPLE LOC- ATION, CROSS SECTION (FT FM R BK) (72103)	SAM- PLING DEPTH (FEET) (00003)
APR 1999						
29...	1006	35	--	1.34	0	.0
29...	1007	35	11.5	1.34	5	.7
29...	1008	35	11.5	1.34	10	1.1
29...	1009	35	11.4	1.34	15	.9
29...	1010	35	11.5	1.34	20	.8
29...	1011	35	11.5	1.34	22	.6
29...	1012	35	11.5	1.34	25	.4
29...	1013	35	11.6	1.34	30	.4
29...	1014	35	11.6	1.34	35	.4
29...	1015	35	11.7	1.34	40	.3
29...	1016	35	11.7	1.34	45	.2
29...	1017	35	--	1.34	48	.0
JUL						
27...	1105	.44	--	.62	33	.0
27...	1106	.44	23.3	.62	28	.1
27...	1107	.44	23.2	.62	23	.1
27...	1108	.44	23.2	.62	20	.1
27...	1109	.44	23.0	.62	18	.1
27...	1110	.44	23.0	.62	13	.3
27...	1111	.44	22.9	.62	8	.2
27...	1112	.44	22.8	.62	3	.2
27...	1113	.44	--	.62	0	.0