

**ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
STREAM CONDITIONS OF CHESTER COUNTY BIOLOGICAL MONITORING NETWORK**

Water-quality and benthic macroinvertebrate samples were collected from selected streams in Chester County in October and November 2000 as part of the Stream Conditions of Chester County Biological Monitoring Network. The biological monitoring program was initiated in 1969 with the goals of evaluating stream quality and long-term changes in stream quality of selected streams in Chester County. Benthic macroinvertebrates are macroscopic animals that inhabit the bottoms of aquatic habitats. Freshwater forms include aquatic insects, clams, crustaceans, snails, and worms. Samples are collected annually from similar habitats of the selected streams. By sampling in similar habitats with similar physical conditions it can be assumed that water quality is the determining factor controlling community structure. Benthic macroinvertebrate sampling was conducted following a single habitat approach. A cobble riffle habitat was used because macroinvertebrate diversity and abundance is usually highest there. Samples were collected using a Hess sampler with a mesh size of 500 mm. Four samples were collected from areas of various velocities from within the riffle. Samples were composited and the entire sample was sorted and identified. Identification were made to the lowest practical level (family or genus) by a U.S. Geological Survey biologist.

TABLE 4.--Stream conditions of Chester County biological monitoring network station list.

STATION NUMBER	STATION NAME	LATITUDE	LONGITUDE	DRAINAGE AREA (mi ²)
01472080	PIGEON CREEK NEAR SLONAKER, PA	40°12'03"	75°37'10"	12.0
01472126	FRENCH CREEK AT TRYTHALL, PA	40°12'00"	75°45'53"	5.06
^a 01472157	FRENCH CREEK NEAR PHOENIXVILLE, PA	40°09'05"	75°36'06"	59.1
01472190	PICKERING CREEK NEAR PHOENIXVILLE, PA	40°06'33"	75°31'42"	31.4
01473154	VALLEY CREEK AT MILL LANE, PA	40°03'03"	75°33'17"	4.14
01473155	VALLEY CREEK AT RT. 202 AT MILL LANE, PA	40°03'05"	75°33'03"	5.10
01473160	VALLEY CREEK NEAR DEVAULT, PA	40°03'37"	75°31'44"	6.22
01473163	VALLEY CREEK AT CEDAR HOLLOW, PA	40°04'03"	75°31'01"	9.23
01473167	LITTLE VALLEY CREEK AT HOWELLVILLE, PA	40°04'00"	75°28'22"	6.45
01473168	VALLEY CREEK NEAR VALLEY FORGE, PA	40°04'11"	75°28'25"	12.7
^a 01473169	VALLEY CREEK AT PA TURNPIKE BRIDGE NEAR VALLEY FORGE, PA	40°04'45"	75°27'40"	20.8
01473170	VALLEY CREEK AT WILSON ROAD NEAR VALLEY FORGE, PA	40°04'53"	75°27'25"	22.0
01473180	VALLEY CREEK AT VALLEY FORGE, PA	40°06'00"	75°27'47"	23.4
01473197	TROUT CREEK AT PA. TURNPIKE BRIDGE NEAR VALLEY FORGE, PA	40°05'22"	75°25'25"	3.67
^a 01475850	CRUM CREEK AT NEWTOWN SQUARE, PA	39°58'35"	75°26'13"	15.8
01476435	RIDLEY CREEK AT DUTTON MILL NEAR WEST CHESTER, PA	39°58'50"	75°31'00"	9.71
01476835	EAST BRANCH CHESTER CREEK AT WESTTOWN, PA	39°56'26"	75°32'30"	10.4
01478120	EAST BRANCH WHITE CLAY CREEK AT AVONDALE, PA	39°49'42"	75°46'52"	11.3
01478230	MIDDLE BRANCH WHITE CLAY CREEK NEAR AVONDALE, PA	39°45'02"	75°46'19"	25.5
01479700	WEST BRANCH RED CLAY CR NR KENNETT SQUARE, PA	39°48'39"	75°42'18"	16.9
01479800	EAST BRANCH RED CLAY CREEK NEAR FIVE POINTS, PA	39°49'10"	75°41'29"	10.2
^a 01480300	WEST BRANCH BRANDYWINE CR NR HONEY BROOK, PA	40°04'22"	75°55'40"	18.7
^a 01480617	WEST BRANCH BRANDYWINE CREEK AT MODENA, PA	39°57'42"	75°48'06"	
01480629	BUCK RUN AT DOE RUN, PA	39°55'46"	75°49'24"	22.6
01480653	EAST BRANCH BRANDYWINE CR AT GLENMOORE, PA	40°05'48"	75°46'44"	16.5
^a 01480870	EAST BRANCH BRANDYWINE CR BL DOWNINGTOWN, PA	39°58'07"	75°40'25"	89.9
01494953	BIG ELK CREEK AT MAPLE GROVE, PA	39°45'44"	75°55'16"	26.6

^a Other data for this station can be found in the continuous station records section of this report.

ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
 STREAM CONDITIONS OF CHESTER COUNTY BIOLOGICAL MONITORING NETWORK--Continued

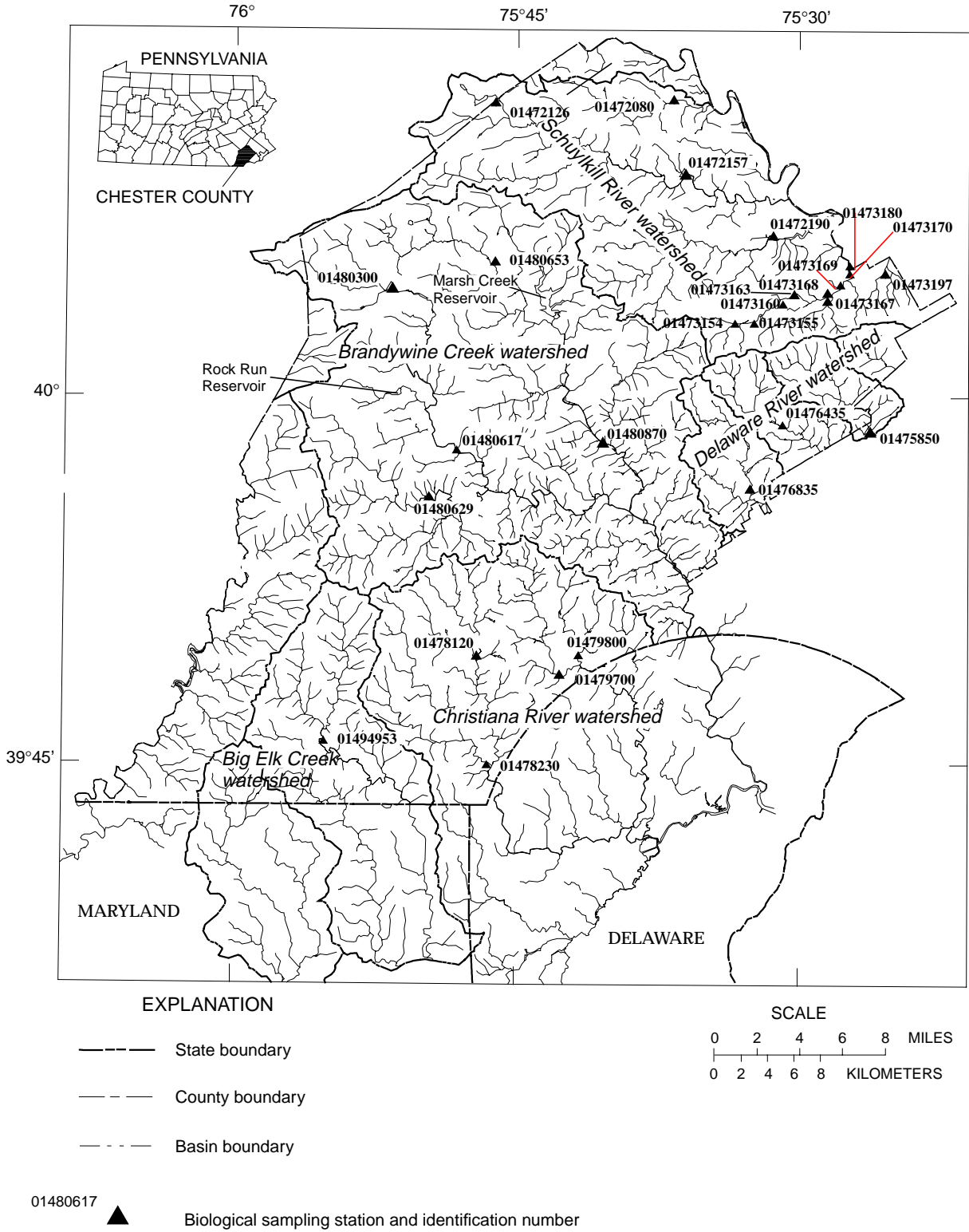


Figure 14.--Biological sampling locations and major drainage basin divides in Chester County, Pa.

**ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
STREAM CONDITIONS OF CHESTER COUNTY BIOLOGICAL MONITORING NETWORK--Continued**

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
MISCELLANEOUS STATION ANALYSES

DATE	TIME	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	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)	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)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)
		01472080 PIGEON CREEK NEAR SLONAKER, PA (LAT 40 12 03N LONG 075 37 10W)										
OCT 2000 03...	0830	80020	1028	5.3	10.1	7.5	188	13.5	14.6	4.74	1.44	8.2
		01472126 FRENCH CREEK AT TRYTHALL, PA (LAT 40 12 00N LONG 075 45 53W)										
OCT 2000 25...	0900	80020	1028	1.2	8.6	6.7	86	14.0	7.39	2.11	1.00	6.7
		01472190 PICKERING CREEK NEAR PHOENIXVILLE, PA (LAT 40 06 33N LONG 075 31 42W)										
OCT 2000 03...	1230	80020	1028	23	10.4	7.4	273	16.0	22.2	7.17	2.02	10.7
		01473154 VALLEY CREEK AT MILL LANE, PA (LAT 40 03 03N LONG 075 33 17W)										
OCT 2000 16...	1300	80020	1028	1.7	9.0	7.9	698	13.5	54.5	24.1	2.98	44.3
		01473155 VALLEY CREEK AT RT 202 AT MILL LANE, PA (LAT 40 03 05N LONG 075 33 03W)										
OCT 2000 19...	1230	80020	1028	2.2	9.9	8.0	656	13.0	57.9	24.4	3.18	42.7
		01473160 VALLEY CREEK NEAR DEVALT, PA (LAT 40 03 37N LONG 075 31 44W)										
OCT 2000 24...	1130	80020	1028	3.9	7.2	7.6	860	12.0	55.8	34.4	5.44	59.6
		01473163 VALLEY CREEK AT CEDAR HOLLOW, PA (LAT 40 04 03N LONG 075 31 01W)										
OCT 2000 24...	0900	80020	1028	8.9	10.2	8.1	640	11.0	48.9	32.6	3.54	29.6
		01473167 LITTLE VALLEY CREEK AT HOWELLVILLE, PA (LAT 40 04 00N LONG 075 28 22W)										
OCT 2000 16...	0800	80020	1028	4.4	9.3	7.7	650	13.0	60.8	19.9	2.41	34.1
		01473168 VALLEY CREEK NEAR VALLEY FORGE, PA (LAT 40 04 11N LONG 075 28 25W)										
OCT 2000 16...	1015	80020	1028	11	10.8	8.1	634	13.0	51.2	33.7	3.47	29.6
		01473170 VALLEY CREEK AT WILSON ROAD NEAR VALLEY FORGE, PA (LAT 40 04 53N LONG 075 27 25W)										
OCT 2000 20...	0845	80020	1028	20	10.2	7.8	632	7.0	54.4	29.6	3.28	31.1
		01473180 VALLEY CREEK AT VALLEY FORGE, PA (LAT 40 06 00N LONG 075 27 47W)										
OCT 2000 23...	1130	80020	1028	21	9.6	8.0	629	10.0	52.0	28.8	3.08	28.4
		01473197 TROUT CREEK AT PA TURNPIKE BRDG NR VALLEY FORGE (LAT 40 05 22N LONG 075 25 25W)										
NOV 2000 06...	1100	80020	1028	1.1	10.8	7.5	475	8.5	42.9	19.1	2.31	17.2
		01476435 RIDLEY CREEK AT DUTTON MILL NEAR WEST CHESTER, PA (LAT 39 58 50N LONG 075 31 00W)										
OCT 2000 04...	1200	80020	1028	8.6	10.1	7.3	287	16.5	18.6	10.1	2.57	16.8

ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
STREAM CONDITIONS OF CHESTER COUNTY BIOLOGICAL MONITORING NETWORK--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
 MISCELLANEOUS STATION ANALYSES

DATE	ANC WATER UNFLTRD IT FIELD (MG/L AS CACO3) (00419)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	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, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	ALUM- INUM, DIS- SOLVED (µG/L AS AL) (01106)	ARSENIC DIS- SOLVED (µG/L AS AS) (01000)	BORON, DIS- SOLVED (µG/L AS B) (01020)
	01472080 PIGEON CREEK NEAR SLONAKER, PA (LAT 40 12 03N LONG 075 37 10W)										
OCT 2000 03...	42	10.6	18.6	15.8	<.041	2.42	E.003	.036	--	--	17
	01472126 FRENCH CREEK AT TRYTHALL, PA (LAT 40 12 00N LONG 075 45 53W)										
OCT 2000 25...	30	6.7	3.7	6.3	<.041	E.042	<.006	<.018	--	--	<13
	01472190 PICKERING CREEK NEAR PHOENIXVILLE, PA (LAT 40 06 33N LONG 075 31 42W)										
OCT 2000 03...	56	24.0	19.1	17.5	<.041	1.76	E.003	E.014	--	--	15
	01473154 VALLEY CREEK AT MILL LANE, PA (LAT 40 03 03N LONG 075 33 17W)										
OCT 2000 16...	259	70.0	7.6	30.4	<.041	2.78	E.005	.067	--	--	273
	01473155 VALLEY CREEK AT RT 202 AT MILL LANE, PA (LAT 40 03 05N LONG 075 33 03W)										
OCT 2000 19...	215	63.7	9.3	28.3	<.041	2.75	.011	.063	--	--	215
	01473160 VALLEY CREEK NEAR DEVALT, PA (LAT 40 03 37N LONG 075 31 44W)										
OCT 2000 24...	340	89.6	8.0	30.0	.848	2.27	.056	E.014	<15	<2.0	179
	01473163 VALLEY CREEK AT CEDAR HOLLOW, PA (LAT 40 04 03N LONG 075 31 01W)										
OCT 2000 24...	233	55.8	8.2	25.1	E.025	1.99	.019	<.018	<15	<2.0	71
	01473167 LITTLE VALLEY CREEK AT HOWELLVILLE, PA (LAT 40 04 00N LONG 075 28 22W)										
OCT 2000 16...	218	70.4	7.5	29.2	<.041	1.99	<.006	<.018	<15	<2.0	32
	01473168 VALLEY CREEK NEAR VALLEY FORGE, PA (LAT 40 04 11N LONG 075 28 25W)										
OCT 2000 16...	217	51.5	7.4	25.1	<.041	1.82	.007	<.018	--	--	68
	01473170 VALLEY CREEK AT WILSON ROAD NEAR VALLEY FORGE, PA (LAT 40 04 53N LONG 075 27 25W)										
OCT 2000 20...	221	55.9	8.1	25.7	.061	1.52	.055	.086	--	--	55
	01473180 VALLEY CREEK AT VALLEY FORGE, PA (LAT 40 06 00N LONG 075 27 47W)										
OCT 2000 23...	223	55.5	7.4	25.1	<.041	1.67	E.003	<.018	E8	<2.0	50
	01473197 TROUT CREEK AT PA TURNPIKE BRDG NR VALLEY FORGE (LAT 40 05 22N LONG 075 25 25W)										
NOV 2000 06...	161	38.2	7.7	17.5	<.041	1.94	E.004	<.018	<15	<2.0	E9
	01476435 RIDLEY CREEK AT DUTTON MILL NEAR WEST CHESTER, PA (LAT 39 58 50N LONG 075 31 00W)										
OCT 2000 04...	54	30.6	13.2	16.0	<.041	4.13	E.005	.250	--	--	46

ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
STREAM CONDITIONS OF CHESTER COUNTY BIOLOGICAL MONITORING NETWORK--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
 MISCELLANEOUS STATION ANALYSES

DATE	CADMIUM DIS- SOLVED (µG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (µG/L AS CR) (01030)	COPPER, DIS- SOLVED (µG/L AS CU) (01040)	IRON, DIS- SOLVED (µG/L AS FE) (01046)	LEAD, DIS- SOLVED (µG/L AS PB) (01049)	MANGA- NESE, DIS- SOLVED (µG/L AS MN) (01056)	MERCURY DIS- SOLVED (µG/L AS HG) (71890)	MOLYB- DENUM, DIS- SOLVED (µG/L AS MO) (01060)	NICKEL, DIS- SOLVED (µG/L AS NI) (01065)	ZINC, DIS- SOLVED (µG/L AS ZN) (01090)
	01472080 PIGEON CREEK NEAR SLONAKER, PA (LAT 40 12 03N LONG 075 37 10W)									
OCT 2000 03...	--	--	--	40	--	--	--	--	--	--
	01472126 FRENCH CREEK AT TRYTHALL, PA (LAT 40 12 00N LONG 075 45 53W)									
OCT 2000 25...	--	--	--	470	--	--	--	--	--	--
	01472190 PICKERING CREEK NEAR PHOENIXVILLE, PA (LAT 40 06 33N LONG 075 31 42W)									
OCT 2000 03...	--	--	--	70	--	--	--	--	--	--
	01473154 VALLEY CREEK AT MILL LANE, PA (LAT 40 03 03N LONG 075 33 17W)									
OCT 2000 16...	--	--	--	M	--	--	--	--	--	--
	01473155 VALLEY CREEK AT RT 202 AT MILL LANE, PA (LAT 40 03 05N LONG 075 33 03W)									
OCT 2000 19...	--	--	--	<10	--	--	--	--	--	--
	01473160 VALLEY CREEK NEAR DEVALT, PA (LAT 40 03 37N LONG 075 31 44W)									
OCT 2000 24...	<.14	3.1	E.6	M	<1.00	30.3	<.23	<1.8	E1.33	<20
	01473163 VALLEY CREEK AT CEDAR HOLLOW, PA (LAT 40 04 03N LONG 075 31 01W)									
OCT 2000 24...	<.14	1.3	E.9	<10	<1.00	6.0	<.23	<1.8	<2.40	<20
	01473167 LITTLE VALLEY CREEK AT HOWELLVILLE, PA (LAT 40 04 00N LONG 075 28 22W)									
OCT 2000 16...	<.14	<.8	<1.3	<10	<1.00	3.3	<.23	<1.8	<2.40	<20
	01473168 VALLEY CREEK NEAR VALLEY FORGE, PA (LAT 40 04 11N LONG 075 28 25W)									
OCT 2000 16...	--	--	--	20	--	--	--	--	--	--
	01473170 VALLEY CREEK AT WILSON ROAD NEAR VALLEY FORGE, PA (LAT 40 04 53N LONG 075 27 25W)									
OCT 2000 20...	--	--	--	10	--	--	--	--	--	--
	01473180 VALLEY CREEK AT VALLEY FORGE, PA (LAT 40 06 00N LONG 075 27 47W)									
OCT 2000 23...	<.14	E.5	<1.3	M	<1.00	4.6	<.23	E1.2	<2.40	<20
	01473197 TROUT CREEK AT PA TURNPIKE BRDG NR VALLEY FORGE (LAT 40 05 22N LONG 075 25 25W)									
NOV 2000 06...	<.14	<.8	1.9	<10	<1.00	E2.2	<.23	3.1	<2.40	<20
	01476435 RIDLEY CREEK AT DUTTON MILL NEAR WEST CHESTER, PA (LAT 39 58 50N LONG 075 31 00W)									
OCT 2000 04...	--	--	--	50	--	--	--	--	--	--

ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
STREAM CONDITIONS OF CHESTER COUNTY BIOLOGICAL MONITORING NETWORK--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
 MISCELLANEOUS STATION ANALYSES

DATE	TIME	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	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)	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)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	
		01476835 EAST BRANCH CHESTER CREEK AT WESTTOWN, PA (LAT 39 56 26N LONG 075 32 30W)											
OCT 2000	02...	0915	80020	1028	8.2	9.2	7.5	349	14.0	27.3	12.5	2.97	15.3
		01478120 EAST BRANCH WHITE CLAY CREEK AT AVONDALE, PA (LAT 39 49 42N LONG 075 46 52W)											
OCT 2000	05...	0845	80020	1028	7.5	8.9	7.6	372	16.0	36.4	15.3	2.77	8.4
		01478230 MIDDLE BRANCH WHITE CLAY CREEK NEAR AVONDALE, PA (LAT 39 45 02N LONG 075 46 19W)											
OCT 2000	05...	1200	80020	1028	16	10.1	7.2	217	16.5	17.7	7.15	3.38	9.8
		01479700 WEST BRANCH RED CLAY CREEK NEAR KENNETT SQUARE, PA (LAT 39 48 39N LONG 075 42 18W)											
OCT 2000	27...	1130	80020	1028	9.2	6.4	7.3	454	13.5	41.0	16.8	8.00	16.4
		01479800 EAST BRANCH RED CLAY CREEK NEAR FIVE POINTS, PA (LAT 39 49 10N LONG 075 41 29W)											
OCT 2000	27...	0945	80020	1028	4.4	10.0	7.5	385	11.0	37.2	14.4	4.41	13.4
		01480629 BUCK RUN AT DOE RUN, PA (LAT 39 55 46N LONG 075 49 24W)											
OCT 2000	11...	1115	80020	1028	13	9.5	7.6	249	9.5	22.9	7.74	2.32	8.3
		01480653 EAST BRANCH BRANDYWINE CREEK AT GLENMOORE, PA (LAT 40 05 48N LONG 075 46 44W)											
OCT 2000	04...	0845	80020	1028	9.9	9.6	7.5	202	14.0	18.6	5.94	2.51	7.8
		01494953 BIG ELK CREEK AT MAPLE GROVE, PA (LAT 39 45 44N LONG 075 55 16W)											
OCT 2000	26...	1030	80020	1028	13	9.6	7.2	198	12.5	13.1	6.58	3.10	10.3

ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
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WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
 MISCELLANEOUS STATION ANALYSES

DATE	ANC WATER UNFLTRD IT FIELD (MG/L AS CACO3) (00419)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	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, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	BORON, DIS- SOLVED (µG/L AS B) (01020)	IRON, DIS- SOLVED (µG/L AS FE) (01046)
01476835 EAST BRANCH CHESTER CREEK AT WESTTOWN, PA (LAT 39 56 26N LONG 075 32 30W)										
OCT 2000 02...	74	47.5	16.5	19.1	<.041	2.59	.008	.099	31	220
01478120 EAST BRANCH WHITE CLAY CREEK AT AVONDALE, PA (LAT 39 49 42N LONG 075 46 52W)										
OCT 2000 05...	129	19.3	14.6	25.2	<.041	4.71	.011	E.016	E12	20
01478230 MIDDLE BRANCH WHITE CLAY CREEK NEAR AVONDALE, PA (LAT 39 45 02N LONG 075 46 19W)										
OCT 2000 05...	51	16.0	13.4	16.6	<.041	4.04	E.005	.051	14	M
01479700 WEST BRANCH RED CLAY CREEK NEAR KENNETT SQUARE, PA (LAT 39 48 39N LONG 075 42 18W)										
OCT 2000 27...	146	32.7	15.7	41.0	1.92	2.83	.362	.835	27	60
01479800 EAST BRANCH RED CLAY CREEK NEAR FIVE POINTS, PA (LAT 39 49 10N LONG 075 41 29W)										
OCT 2000 27...	101	31.8	16.6	37.5	<.041	3.29	.009	<.018	E9	30
01480629 BUCK RUN AT DOE RUN, PA (LAT 39 55 46N LONG 075 49 24W)										
OCT 2000 11...	64	18.1	9.6	15.7	<.041	4.86	.012	E.011	27	140
01480653 EAST BRANCH BRANDYWINE CREEK AT GLENMOORE, PA (LAT 40 05 48N LONG 075 46 44W)										
OCT 2000 04...	63	12.9	18.8	12.3	<.041	3.36	E.004	E.015	20	60
01494953 BIG ELK CREEK AT MAPLE GROVE, PA (LAT 39 45 44N LONG 075 55 16W)										
OCT 2000 26...	32	18.6	10.9	8.9	<.041	5.22	.009	.031	<13	20

ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
STREAM CONDITIONS OF CHESTER COUNTY BIOLOGICAL MONITORING NETWORK--Continued

BIOLOGICAL DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
 BENTHIC MACROINVERTEBRATES

REMARKS.--Samples were collected using a Hess sampler with a mesh size of 500 µm. Each sample covered a total area of 3.2 m². A dash (--) indicates there were no observations of the organism in the sample.

Station Number	01472080	01472126	01472190	01473154	01473155	01473160
Date	10/03/00	10/25/00	10/03/00	10/16/00	10/19/00	10/24/00
Benthic Macroinvertebrate	Count	Count	Count	Count	Count	Count
Platyhelminthes						
Turbellaria (FLATWORMS)						
Tricladida						
Planariidae	--	--	--	1	1	--
Nematoda (NEMATODES)	4	--	3	5	1	--
Nemertea (PROBOSAS WORMS)						
Enopla						
Hoplonemertea						
Tetrastemmatidae						
<u>Prostoma</u> sp	--	--	4	--	--	--
Mollusca						
Gastropoda (SNAILS)						
Basommatophora						
Ancyliidae						
<u>Ferrissia</u> sp	--	--	4	--	--	--
Lymnaeidae						
<u>Fossaria</u> sp	--	--	--	34	--	--
<u>Lymnaea</u> sp	--	--	--	2	--	--
Annelida						
Oligochaeta (AQUATIC EARTHWORMS)						
Tubificida	1	15	12	5	11	--
Naididae						
Naididae	--	--	--	--	--	55
Hirudinea (LEECHES)						
Arhynchobdellidae						
Erpobdellidae	--	--	--	2	--	--
Arthropoda						
Acariformes						
Hydrachnidia (WATER MITES)	69	34	92	40	--	1
Crustacea						
Amphipoda (SCUDS)						
Crangonyctidae						
<u>Crangonyx</u> sp	--	2	--	2	--	--
<u>Stygonectes</u> sp	--	--	--	--	--	--
Gammaridae						
<u>Gammarus</u> sp	--	--	--	--	--	1
Isopoda (AQUATIC SOWBUGS)						
Asellidae						
<u>Caecidotea</u> sp	--	--	--	70	42	8
Decapoda						
Cambaridae (CRAYFISH)	2	--	--	1	--	--
Insecta						
Ephemeroptera (MAYFLIES)						
Baetidae						
<u>Baetis</u> sp	69	2	20	--	23	36
<u>Pseudocloeon</u> sp	21	--	17	--	6	--

ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
STREAM CONDITIONS OF CHESTER COUNTY BIOLOGICAL MONITORING NETWORK--Continued

BIOLOGICAL DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
 BENTHIC MACROINVERTEBRATES--Continued

01473163	01473167	01473168	01473170	01473180	Station Number
10/24/00	10/16/00	10/16/00	10/20/00	10/23/00	Date
Count	Count	Count	Count	Count	Benthic Macroinvertebrate
					Platyhelminthes
					Turbellaria (FLATWORMS)
					Tricladida
1	--	1	9	--	Planariidae
--	--	2	--	--	Nematoda (NEMATODES)
					Nemertea (PROBOSAS WORMS)
					Enopla
					Hoplonemertea
					Tetrastemmatidae
--	--	--	2	--	<u>Prostoma</u> sp
					Mollusca
					Gastropoda (SNAILS)
					Basommatophora
					Ancyliidae
--	--	--	--	--	<u>Ferrissia</u> sp
					Lymnaeidae
--	--	--	--	--	<u>Fossaria</u> sp
--	--	--	--	--	<u>Lymnaea</u> sp
					Annelida
1	1	--	5	15	Oligochaeta (AQUATIC EARTHWORMS)
					Tubificida
--	--	--	--	--	Naididae
					Hirudinea (LEECHES)
					Arhynchobdellidae
--	--	--	--	--	Erpobdellidae
					Arthropoda
					Acariformes
3	5	23	27	107	Hydrachnidia (WATER MITES)
					Crustacea
					Amphipoda (SCUDS)
					Crangonyctidae
--	--	--	--	--	<u>Crangonyx</u> sp
5	--	--	2	--	<u>Stygonectes</u> sp
					Gammaridae
2	23	2	3	20	<u>Gammarus</u> sp
					Isopoda (AQUATIC SOWBUGS)
					Asellidae
6	--	6	--	5	<u>Caecidotea</u> sp
					Decapoda
1	--	--	--	--	Cambaridae (CRAYFISH)
					Insecta
					Ephemeroptera (MAYFLIES)
					Baetidae
34	35	4	4	8	<u>Baetis</u> sp
--	7	--	--	--	<u>Pseudocloeon</u> sp

ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
STREAM CONDITIONS OF CHESTER COUNTY BIOLOGICAL MONITORING NETWORK--Continued

BIOLOGICAL DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
 BENTHIC MACROINVERTEBRATES--Continued

01473163	01473167	01473168	01473170	01473180	Station Number
10/24/00	10/16/00	10/16/00	10/20/00	10/23/00	Date
Count	Count	Count	Count	Count	Benthic Macroinvertebrate
					Ephemeroptera (MAYFLIES)
					Ephemerebellidae
--	--	--	--	--	<u>Attenella</u> sp
--	8	--	24	--	<u>Eurylophella</u> sp
8	21	1	62	232	<u>Serratella</u> sp
					Heptageniidae
--	--	--	--	--	<u>Epeorus</u> sp
--	--	--	--	--	<u>Stenonema</u> sp
					Isonychiidae
--	--	--	--	--	<u>Isonychia</u> sp
					Odonata (DRAGONFLIES AND DAMSELFLIES)
					Aeshnidae
--	--	--	--	--	<u>Boyeria</u> sp
					Coenagrionidae
--	--	--	--	--	<u>Argia</u> sp
					Gomphidae
--	--	--	--	--	<u>Stylogomphus</u> sp
					Plecoptera (STONEFLIES)
					Capniidae
--	3	--	--	--	<u>Allocaenia</u> sp
					Chloroperlidae
--	5	--	1	--	<u>Haploperla</u> sp
					Perlidae
--	--	--	--	--	<u>Acroneuria</u> sp
--	--	--	--	--	<u>Agnetina</u> sp
--	--	--	--	--	<u>Beloneuria</u> sp
--	--	--	--	--	<u>Paragnetina</u> sp
					Taeniopterygidae
--	--	--	--	--	<u>Strophopteryx</u> sp
1	--	--	1	--	<u>Taeniopteryx</u> sp
					Megaloptera
					Corydalidae (FISHFLIES AND DOBSONFLIES)
--	--	--	--	--	<u>Corydalus</u> sp
					Sialidae (ALDERFLIES)
--	--	4	1	--	<u>Sialis</u> sp
					Trichoptera (CADDISFLIES)
					Apataniidae
--	--	--	--	--	<u>Apatania</u> sp
					Brachycentridae
--	--	--	--	--	<u>Micrasema</u> sp
					Glossosomatidae
5	11	--	4	6	<u>Glossosoma</u> sp
					Hydropsychidae
98	2	254	196	291	<u>Cheumatopsyche</u> sp
442	40	52	318	343	<u>Hydropsyche</u> sp
--	--	--	--	--	<u>Potamyia</u> sp

ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
STREAM CONDITIONS OF CHESTER COUNTY BIOLOGICAL MONITORING NETWORK--Continued

BIOLOGICAL DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
 BENTHIC MACROINVERTEBRATES--Continued

Station Number	01472080	01472126	01472190	01473154	01473155	01473160
Date	10/03/00	10/25/00	10/03/00	10/16/00	10/19/00	10/24/00
Benthic Macroinvertebrate	Count	Count	Count	Count	Count	Count
Trichoptera (CADDISFLIES)						
Hydroptilidae						
<u>Hydroptila</u> sp	2	5	3	--	--	--
<u>Leucotrichia</u> sp	--	--	10	--	--	--
Leptoceridae						
<u>Oecetis</u> sp	--	8	--	--	--	--
Philopotamidae						
<u>Chimarra</u> sp	136	76	133	--	--	--
<u>Dolophilodes</u> sp	37	--	1	--	--	--
<u>Wormaldia</u> sp	--	--	--	--	3	--
Polycentropodidae						
<u>Polycentropus</u> sp	--	2	1	--	--	--
Psychomyiidae						
<u>Psychomyia</u> sp	--	--	17	--	--	--
Rhyacophilidae						
<u>Rhyacophila</u> sp	13	--	1	--	--	--
Coleoptera (BEETLES)						
Drypoidae						
<u>Helichus</u> sp	--	--	--	1	1	--
Elmidae (RIFFLE BEETLES)						
<u>Ancyronyx</u> sp	4	--	--	--	--	--
<u>Dubiraphia</u> sp	--	--	--	1	--	--
<u>Macronychus</u> sp	--	7	--	--	--	--
<u>Optioservus</u> sp	200	39	138	358	117	64
<u>Oulimnius</u> sp	136	--	43	50	32	9
<u>Promoresia</u> sp	1	1	--	--	--	--
<u>Stenelmis</u> sp	127	--	23	177	13	8
Psephenidae (WATER PENNIES)						
<u>Ectopria</u> sp	1	--	--	--	1	--
<u>Psephenus</u> sp	26	--	16	14	7	--
Diptera (TRUE FLIES)						
Athericidae						
<u>Atherix</u> sp	15	--	--	--	--	--
Chironomidae (MIDGES)						
	121	339	66	350	387	505
Empididae (DANCE FLIES)						
<u>Hemerodromia</u> sp	7	63	3	2	--	--
Muscidae						
	--	--	--	--	--	1
Simuliidae (BLACK FLIES)						
<u>Simulium</u> sp	24	47	27	92	40	160
Tipulidae (CRANE FLIES)						
<u>Antocha</u> sp	25	36	30	--	2	--
<u>Hexatoma</u> sp	1	--	--	--	--	--
<u>Tipula</u> sp	4	2	--	2	--	1
Total organisms	2279	1776	1260	1425	1149	880
Total number of taxa	41	26	37	25	23	18

ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
STREAM CONDITIONS OF CHESTER COUNTY BIOLOGICAL MONITORING NETWORK--Continued

BIOLOGICAL DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
 BENTHIC MACROINVERTEBRATES--Continued

01473163	01473167	01473168	01473170	01473180	Station Number
10/24/00	10/16/00	10/16/00	10/20/00	10/23/00	Date
Count	Count	Count	Count	Count	Benthic Macroinvertebrate
					Trichoptera (CADDISFLIES)
					Hydroptilidae
--	--	--	--	--	<u>Hydroptila</u> sp
--	--	--	--	--	<u>Leucotrichia</u> sp
					Leptoceridae
--	--	--	--	--	<u>Oecetis</u> sp
					Philopotamidae
--	--	1	12	19	<u>Chimarra</u> sp
--	4	--	1	--	<u>Dolophilodes</u> sp
--	--	--	--	--	<u>Wormaldia</u> sp
					Polycentropodidae
--	--	--	--	--	<u>Polycentropus</u> sp
					Psychomyiidae
--	--	--	--	--	<u>Psychomyia</u> sp
					Rhyacophilidae
--	--	--	--	--	<u>Rhyacophila</u> sp
					Coleoptera (BEETLES)
					Drypoidae
--	--	--	--	--	<u>Helichus</u> sp
					Elmidae (RIFFLE BEETLES)
--	--	--	--	--	<u>Ancyronyx</u> sp
--	--	--	--	--	<u>Dubiraphia</u> sp
--	--	--	--	--	<u>Macronychus</u> sp
1122	162	480	215	596	<u>Optioservus</u> sp
97	32	36	32	45	<u>Oulimnius</u> sp
--	--	--	--	--	<u>Promoresia</u> sp
64	2	126	25	86	<u>Stenelmis</u> sp
					Psephenidae (WATER PENNIES)
--	1	1	--	--	<u>Ectopria</u> sp
1	--	2	2	10	<u>Psephenus</u> sp
					Diptera (TRUE FLIES)
					Athericidae
--	--	--	--	--	<u>Atherix</u> sp
125	41	162	290	506	Chironomidae (MIDGES)
					Empididae (DANCE FLIES)
2	--	--	2	6	<u>Hemerodromia</u> sp
--	--	--	--	--	Muscidae
					Simuliidae (BLACK FLIES)
80	32	11	60	43	<u>Simulium</u> sp
--	--	--	--	--	Tipulidae (CRANE FLIES)
12	--	13	31	52	<u>Antocha</u> sp
--	--	--	--	--	<u>Hexatoma</u> sp
--	1	1	--	1	<u>Tipula</u> sp
2110	436	1182	1329	2391	Total organisms
21	20	20	25	19	Total number of taxa

ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
STREAM CONDITIONS OF CHESTER COUNTY BIOLOGICAL MONITORING NETWORK--Continued

BIOLOGICAL DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
 BENTHIC MACROINVERTEBRATES--Continued

Station Number	01473197	01476435	01476835	01478120	01478230
Date	11/06/00	10/04/00	10/02/00	10/05/00	10/05/00
Benthic Macroinvertebrate	Count	Count	Count	Count	Count
Platyhelminthes					
Turbellaria (FLATWORMS)					
Tricladida					
Planariidae	1	--	3	--	--
Nematoda (NEMATODES)	11	7	8	2	10
Nemertea (PROBOSAS WORMS)					
Enopla					
Hoploneurata					
Tetrastemmatidae					
<u>Prostoma</u> sp	9	--	2	--	--
Mollusca					
Gastropoda (SNAILS)					
Basommatophora					
Ancyliidae					
<u>Ferrissia</u> sp	--	--	1	--	2
Planorbidae					
<u>Gyraulus</u> sp	--	--	1	--	--
Bivalvia (CLAMS)					
Veneroida					
Sphaeriidae	--	7	4	--	--
Annelida					
Oligochaeta (AQUATIC EARTHWORMS)					
Tubificida					
Tubificidae	--	--	--	--	--
Naididae	--	--	15	--	--
Hirudinea (LEECHES)					
Arhynchobdellidae					
Erpobdellidae	--	1	--	--	--
Rhynchobdellidae					
Glossiphoniidae					
<u>Helobdella</u> sp	--	--	--	--	--
Arthropoda					
Acariformes					
Hydrachnidia (WATER MITES)	9	42	4	28	132
Crustacea					
Amphipoda (SCUDS)					
Crangonyctidae					
<u>Crangonyx</u> sp	--	7	12	--	--
<u>Stygonectes</u> sp	--	--	--	9	--
Gammaridae					
<u>Gammarus</u> sp	4	--	--	--	--
Isopoda (AQUATIC SOWBUGS)					
Asellidae					
<u>Caecidotea</u> sp	5	--	--	--	--
Decapoda					
Cambaridae (CRAYFISH)	--	--	1	1	--

ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
STREAM CONDITIONS OF CHESTER COUNTY BIOLOGICAL MONITORING NETWORK--Continued

BIOLOGICAL DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
 BENTHIC MACROINVERTEBRATES--Continued

01479700	01479800	01480629	01480653	01494953	Station Number
10/27/00	10/27/00	10/11/00	10/04/00	10/26/00	Date
Count	Count	Count	Count	Count	Benthic Macroinvertebrate
					Platyhelminthes
					Turbellaria (FLATWORMS)
					Tricladida
					Planariidae
51	--	--	--	--	
23	1	4	8	4	Nematoda (NEMATODES)
					Nemertea (PROBOSAS WORMS)
					Enopla
					Hoplonemertea
					Tetrastemmatidae
--	1	--	--	--	<u>Prostoma</u> sp
					Mollusca
					Gastropoda (SNAILS)
					Basommatophora
					Ancyliidae
--	1	1	1	--	<u>Ferrissia</u> sp
					Planorbidae
1	--	1	--	--	<u>Gyraulus</u> sp
					Bivalvia (CLAMS)
					Veneroida
1	1	20	--	--	Sphaeriidae
					Annelida
9	8	1	8	--	Oligochaeta (AQUATIC EARTHWORMS)
					Tubificida
51	--	--	--	--	Tubificidae
--	1	--	--	1	Naididae
					Hirudinea (LEECHES)
					Arhynchobdellidae
--	--	--	--	--	Erpobdellidae
					Rhynchobdellidae
					Glossiphoniidae
1	--	--	--	--	<u>Helobdella</u> sp
					Arthropoda
					Acariformes
31	24	166	178	48	Hydrachnidia (WATER MITES)
					Crustacea
					Amphipoda (SCUDS)
					Crangonyctidae
--	--	--	1	--	<u>Crangonyx</u> sp
1	15	5	--	--	<u>Stygonectes</u> sp
					Gammaridae
--	8	--	--	--	<u>Gammarus</u> sp
					Isopoda (AQUATIC SOWBUGS)
					Asellidae
--	2	--	--	--	<u>Caecidotea</u> sp
					Decapoda
--	--	--	--	--	Cambaridae (CRAYFISH)

ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
STREAM CONDITIONS OF CHESTER COUNTY BIOLOGICAL MONITORING NETWORK--Continued

BIOLOGICAL DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
 BENTHIC MACROINVERTEBRATES--Continued

Station Number	01473197	01476435	01476835	01478120	01478230
Date	11/06/00	10/04/00	10/02/00	10/05/00	10/05/00
Benthic Macroinvertebrate	Count	Count	Count	Count	Count
Insecta					
Ephemeroptera (MAYFLIES)					
Baetidae					
<u>Baetis</u> sp	24	35	26	25	15
<u>Pseudocloeon</u> sp	--	--	--	14	28
Caenidae					
<u>Caenis</u> sp	--	1	--	--	--
Ephemerellidae					
<u>Eurylophella</u> sp	--	2	--	--	--
<u>Serratella</u> sp	--	5	--	292	3
Heptageniidae					
<u>Epeorus</u> sp	--	--	--	--	--
<u>Stenonema</u> sp	1	95	4	43	3
Isonychiidae sp					
<u>Isonychia</u> sp	--	45	--	15	14
Leptohyphidae					
<u>Tricorythodes</u> sp	--	8	--	--	--
Leptophlebiidae					
	--	--	--	--	--
Odonata (DRAGONFLIES AND DAMSELFLIES)					
Coenagrionidae					
<u>Argia</u> sp	--	1	--	--	--
Gomphidae					
<u>Stylogomphus</u> sp	--	3	--	--	--
Plecoptera (STONEFLIES)					
Capniidae					
<u>Allocapnia</u> sp	4	--	--	--	--
Perlidae					
<u>Acroneuria</u> sp	--	1	--	--	--
Taeniopterygidae					
<u>Strophopteryx</u> sp	1	--	--	--	--
<u>Taeniopteryx</u> sp	--	--	--	--	1
Hemiptera (TRUE BUGS)					
Velidae					
<u>Rhagovelia</u> sp	--	--	--	10	--
Megaloptera					
Corydalidae (FISHFLIES AND DOBSONFLIES)					
<u>Corydalus</u> sp	--	--	--	--	12
<u>Nigronia</u> sp	--	--	--	--	--
Sialidae (ALDERFLIES)					
<u>Sialis</u> sp	--	--	--	--	--

ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
STREAM CONDITIONS OF CHESTER COUNTY BIOLOGICAL MONITORING NETWORK--Continued

BIOLOGICAL DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
 BENTHIC MACROINVERTEBRATES--Continued

01479700	01479800	01480629	01480653	01494953	Station Number
10/27/00	10/27/00	10/11/00	10/04/00	10/26/00	Date
Count	Count	Count	Count	Count	Benthic Macroinvertebrate
Insecta					
Ephemeroptera (MAYFLIES)					
Baetidae					
--	1	25	5	--	<u>Baetis</u> sp
--	--	3	3	38	<u>Pseudocloeon</u> sp
Caenidae					
--	--	--	13	--	<u>Caenis</u> sp
Ephemerellidae					
--	1	13	--	1	<u>Eurylophella</u> sp
--	1	470	38	--	<u>Serratella</u> sp
Heptageniidae					
--	--	5	1	--	<u>Epeorus</u> sp
--	73	225	107	5	<u>Stenonema</u> sp
Isonychiidae					
--	--	356	118	34	<u>Isonychia</u> sp
Leptohyphidae					
--	--	--	2	--	<u>Tricorythodes</u> sp
--	--	--	1	--	Leptophlebiidae
Odonata (DRAGONFLIES AND DAMSELFLIES)					
Coenagrionidae					
--	--	2	1	--	<u>Argia</u> sp
--	--	1	2	--	Gomphidae
--	--	--	--	--	<u>Stylogomphus</u> sp
Plecoptera (STONEFLIES)					
Capniidae					
--	4	--	--	--	<u>Allocapnia</u> sp
--	--	--	--	--	Perlidae
--	--	--	4	--	<u>Acroneuria</u> sp
Taeniopterygidae					
--	--	--	--	--	<u>Strophopteryx</u> sp
--	--	2	7	3	<u>Taeniopteryx</u> sp
Hemiptera (TRUE BUGS)					
Velidae					
--	--	--	--	--	<u>Rhagovelia</u> sp
Megaloptera					
Corydalidae (FISHFLIES AND DOBSONFLIES)					
--	--	7	--	5	<u>Corydalus</u> sp
1	1	--	3	11	<u>Nigronia</u> sp
Sialidae (ALDERFLIES)					
--	--	--	4	--	<u>Sialis</u> sp

ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
STREAM CONDITIONS OF CHESTER COUNTY BIOLOGICAL MONITORING NETWORK--Continued

BIOLOGICAL DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
 BENTHIC MACROINVERTEBRATES--Continued

Station Number	01473197	01476435	01476835	01478120	01478230
Date	11/06/00	10/04/00	10/02/00	10/05/00	10/05/00
Benthic Macroinvertebrate	Count	Count	Count	Count	Count
Trichoptera (CADDISFLIES)					
Apataniidae					
<u>Apatania</u> sp	--	--	--	--	--
Brachycentridae					
<u>Micrasema</u> sp	--	--	--	--	--
Glossosomatidae					
<u>Glossosoma</u> sp	--	1	--	--	22
Helicopsychidae					
<u>Helicopsyche</u> sp	--	--	--	--	--
Hydropsychidae					
<u>Cheumatopsyche</u> sp	42	107	125	171	129
<u>Hydropsyche</u> sp	49	72	35	1062	486
Hydroptilidae					
<u>Hydroptila</u> sp	1	4	--	--	--
<u>Leucotrichia</u> sp	--	8	--	9	2
Leptoceridae					
<u>Oecetis</u> sp	--	--	2	--	--
Philopotamidae					
<u>Chimarra</u> sp	41	21	48	370	18
<u>Dolophilodes</u> sp	31	--	--	--	--
Polycentropodidae					
<u>Nyctiophylax</u> sp	--	--	--	--	--
<u>Polycentropus</u> sp	2	3	--	--	--
Psychomyiidae					
<u>Psychomyia</u> sp	--	--	--	--	--
Rhyacophilidae					
<u>Rhyacophila</u> sp	--	--	--	--	--
Lepidoptera					
Pyralididae (MOTHS)					
<u>Petrophila</u> sp	--	--	--	--	--
Coleoptera (BEETLES)					
Dryopidae					
<u>Helichus</u> sp	--	1	--	--	--
Dytiscidae					
	--	--	--	2	--
Elmidae (RIFFLE BEETLES)					
<u>Ancyronyx</u> sp	--	--	1	--	--
<u>Dubiraphia</u> sp	--	7	--	1	--
<u>Optioservus</u> sp	72	103	86	352	54
<u>Oulimnius</u> sp	30	44	9	82	20
<u>Promoresia</u> sp	--	1	--	--	--
<u>Stenelmis</u> sp	14	108	276	439	4
Hydrophilidae					
<u>Berosus</u> sp	--	1	--	--	--
Psephenidae (WATER PENNIES)					
<u>Psephenus</u> sp	20	74	2	69	1

**ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
STREAM CONDITIONS OF CHESTER COUNTY BIOLOGICAL MONITORING NETWORK--Continued**

BIOLOGICAL DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
BENTHIC MACROINVERTEBRATES--Continued

01479700	01479800	01480629	01480653	01494953	Station Number
10/27/00	10/27/00	10/11/00	10/04/00	10/26/00	Date
Count	Count	Count	Count	Count	Benthic Macroinvertebrate
					Trichoptera (CADDISFLIES)
					Apataniidae
--	--	--	14	--	<u>Apatania</u> sp
					Brachycentridae
--	--	--	6	--	<u>Micrasema</u> sp
					Glossosomatidae
--	3	4	17	--	<u>Glossosoma</u> sp
					Helicopsychidae
--	--	--	1	--	<u>Helicopsyche</u> sp
					Hydropsychidae
47	135	124	215	144	<u>Cheumatopsyche</u> sp
44	363	517	300	261	<u>Hydropsyche</u> sp
					Hydroptilidae
--	--	1	--	1	<u>Hydroptila</u> sp
--	--	7	7	11	<u>Leucotrichia</u> sp
					Leptoceridae
--	--	--	--	--	<u>Oecetis</u> sp
					Philopotamidae
--	1	380	6	2	<u>Chimarra</u> sp
--	1	--	--	--	<u>Dolophilodes</u> sp
					Polycentropodidae
--	--	1	--	--	<u>Nyctiophylax</u> sp
--	--	1	6	--	<u>Polycentropus</u> sp
					Psychomyiidae
--	--	1	4	--	<u>Psychomyia</u> sp
					Rhyacophilidae
--	--	--	25	--	<u>Rhyacophila</u> sp
					Lepidoptera
					Pyralididae (MOTHS)
--	--	--	1	--	<u>Petrophila</u> sp
					Coleoptera (BEETLES)
					Dryopidae
--	--	--	--	--	<u>Helichus</u> sp
--	--	--	--	--	Dytiscidae
					Elmidae (RIFFLE BEETLES)
--	--	--	--	--	<u>Ancyronyx</u> sp
--	--	1	--	--	<u>Dubiraphia</u> sp
5	298	141	175	2	<u>Optioservus</u> sp
1	13	34	60	2	<u>Oulimnius</u> sp
--	--	--	--	--	<u>Promoresia</u> sp
--	96	69	29	3	<u>Stenelmis</u> sp
					Hydrophilidae
--	--	--	--	--	<u>Berosus</u> sp
					Psephenidae (WATER PENNIES)
--	66	83	11	1	<u>Psephenus</u> sp

ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
STREAM CONDITIONS OF CHESTER COUNTY BIOLOGICAL MONITORING NETWORK--Continued

BIOLOGICAL DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
 BENTHIC MACROINVERTEBRATES--Continued

Station Number	01473197	01476435	01476835	01478120	01478230
Date	11/06/00	10/04/00	10/02/00	10/05/00	10/05/00
Benthic Macroinvertebrate	Count	Count	Count	Count	Count
Diptera (TRUE FLIES)					
Athericidae					
<u>Atherix</u> sp	--	--	--	--	--
Ceratopogonidae					
Ceratopogonidae	--	--	--	--	--
Chironomidae (MIDGES)					
Chironomidae	942	91	160	100	32
Empididae (DANCE FLIES)					
<u>Hemerodromia</u> sp	1	--	--	7	5
Simuliidae (BLACK FLIES)					
<u>Simulium</u> sp	55	2	86	7	11
Tipulidae (CRANE FLIES)					
<u>Antocha</u> sp	33	53	--	60	20
<u>Diranota</u> sp	--	3	1	--	--
<u>Hexatoma</u> sp	--	--	4	--	--
<u>Tipula</u> sp	--	--	--	--	--
Total organisms	1403	969	930	3172	1025
Total number of taxa	25	35	27	26	24

ANALYSIS OF SAMPLES COLLECTED AT SPECIAL-STUDY SITES
STREAM CONDITIONS OF CHESTER COUNTY BIOLOGICAL MONITORING NETWORK--Continued

BIOLOGICAL DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
 BENTHIC MACROINVERTEBRATES--Continued

01479700	01479800	01480629	01480653	01494953	Station Number
10/27/00	10/27/00	10/11/00	10/04/00	10/26/00	Date
Count	Count	Count	Count	Count	Benthic Macroinvertebrate
					Diptera (TRUE FLIES)
					Athericidae
--	--	--	4	--	<u>Atherix</u> sp
5	--	--	--	--	Ceratopogonidae
960	272	50	44	120	Chironomidae (MIDGES)
					Empididae (DANCE FLIES)
326	12	2	6	3	<u>Hemerodromia</u> sp
					Simuliidae (BLACK FLIES)
13	24	12	44	13	<u>Simulium</u> sp
					Tipulidae (CRANE FLIES)
--	39	26	38	91	<u>Antocha</u> sp
--	--	--	--	--	<u>Diranota</u> sp
--	--	--	--	--	<u>Hexatoma</u> sp
4	1	--	2	--	<u>Tipula</u> sp
1575	1467	2761	1520	804	Total organisms
19	30	36	42	23	Total number of taxa