LIMNOLOGICAL DATA FOR THE MAJOR STREAMS IN CHESTER COUNTY, PENNSYLVANIA

U.S. GEOLOGICAL SURVEY

Open-File Report

Prepared in cooperation with the

Chester County Water Resources Authority,
Chester County Department of Health, and
Chester County Board of Commissioners

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

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By Bruce W. Lium

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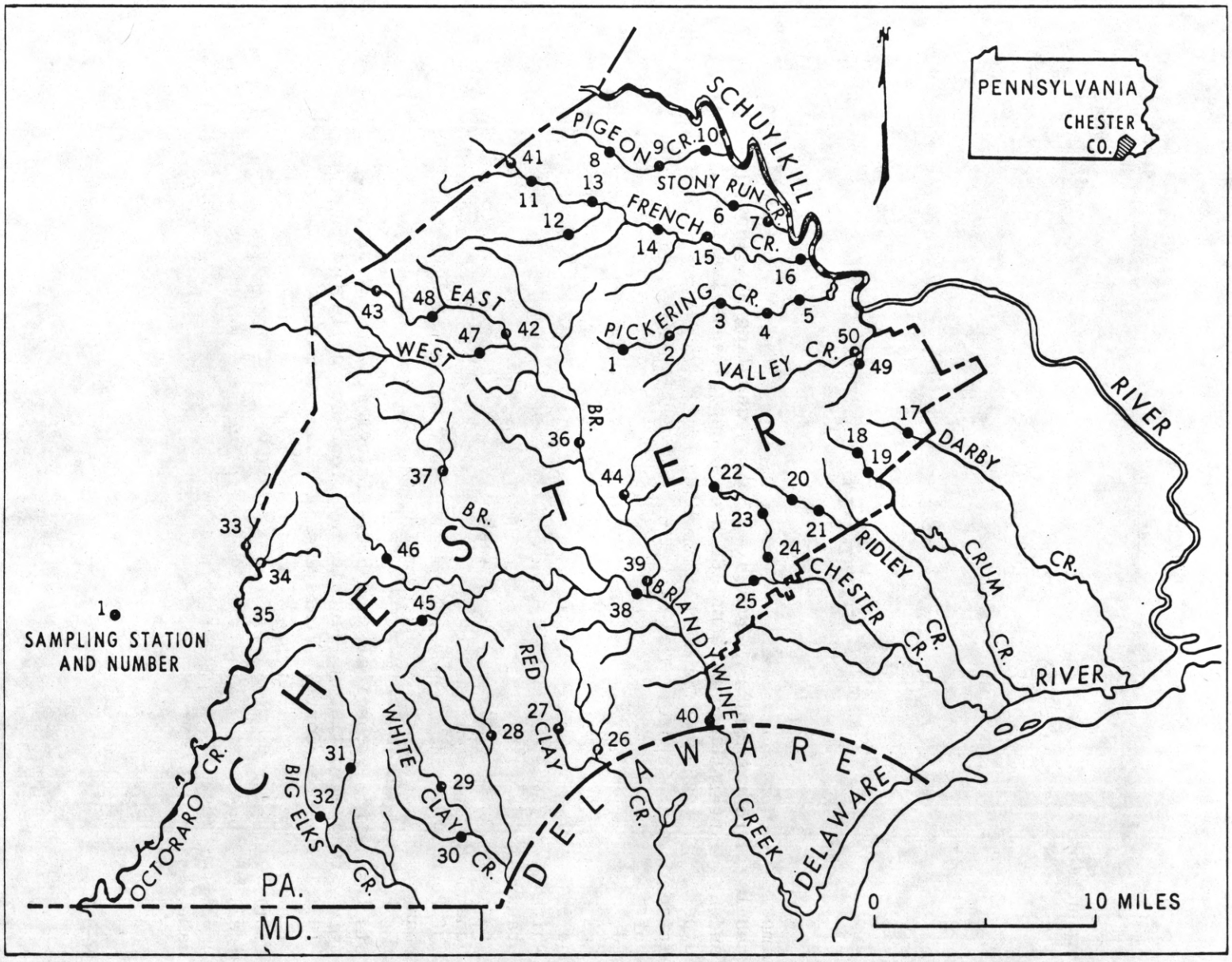

MAP SHOWING U.S. GEOLOGICAL SURVEY SAMPLING STATIONS AND RELATED STREAMS, CHESTER COUNTY, PENNSYLVANIA

LIMNOLOGICAL DATA FOR THE MAJOR STREAMS IN CHESTER COUNTY, PENNSYLVANIA

By Bruce W. Lium

Limnological data on major streams in Chester County, Pennsylvania are tabulated to provide a base line as to the present stream conditions. As land-use patterns change and further urbanization takes place, it is anticipated that these data will serve as a basis for comparison of conditions in the future. The 13 basins encompass a total drainage area of 1,812 km^2 (697 mi^2) of the 1,976 km^2 (760 mi^2) within Chester County. Four of the streams are tributaries to the Schuylkill River and include Pickering, Stony Run, Pigeon, and French Creek. Tributaries to the Delaware River include Darby, Crum, Ridley, Chester, Red Clay, and White Clay Creeks. The Elk Creeks flow into the Chesapeake Bay. The Brandywine is a tributary to the Christiana River, itself a tributary to the Delaware. The Octoraro Creek is a tributary to the Susquehanna River. Chester County, which is located in the Piedmont area of Pennsylvania, is undergoing rapid transition from a rural to suburban condition as the population increases.

This basic-data report contains the chemical, physical, and biological information collected for the period fall 1969 through fall 1974. The network of 50 stations is shown in figure 1, which is followed by a listing (table 1) of station numbers and a brief description of station locations. Table 2 shows the physical, chemical, and bacteriological data collected by station and date. Table 3 shows the benthic invertebrate data collected by station and date.

Table 1.--Station numbers and descriptions

USGS Station number	Station number	Name
01472170	1	Pickering Creek near Eagle
01472174	2	Pickering Creek near Chester Springs
01472186	3	Pickering Creek near Marlin
01472188	4	Pickering Creek near Charlestown
01472191	5	Pickering Creek near Phoenixville
01472109	6	Stony Run near Spring City
01472110	7	Stony Run at Spring City
01472054	8	Pigeon Creek near Bucktown
01472065	9	Pigeon Creek near Porters Mill
01472080	10	Pigeon Creek near Parker Ford
01472129	11	French Creek near Knaurertown
01472140	12	South Branch French Creek at Coventryville
01472138	13	French Creek near Coventryville
01472154	14	French Creek near Pughtown
01472157	15	French Creek near Phoenixville
01472161	16	French Creek at Phoenixville
01475300	17	Darby Creek at Waterloo Mills near Devon
01475830	18	East Branch Crum Creek near Paoli
01475840	19	West Branch Crum Creek near Paoli
01476430	20	Ridley Creek near Goshenville
01476435	21	Ridley Creek near Dutton Mill
01476790	22	Chester Creek near West Chester
01476830	23	Chester Creek near Milltown
01476835	24	Chester Creek at Westtown School
01476840	25	Goose Creek near West Chester
01479800	26	Red Clay Creek near Five Point
01479780	27	Red Clay Creek near Kennett Square
01478120	28	White Clay Creek near Avondale
01478190	29	White Clay Creek near Wickerton
01478220	30	West Branch White Clay Creek near Chesterville
01494900	31	Elk Creek at Elkview
01494950	32	Elk Creek near Oxford
01578340	33	Octoraro Creek near Atglen
01578343	34	Valley Creek near Atglen
01578345	35	Octoraro Creek near Steelville

Table 1.--Station numbers and descriptions--Continued

USGS station number	Station number	Name
01480700	36	East Branch Brandywine Creek near Downingtown
01480430	37	West Branch Brandywine Creek near Coatesville
01480640	38	West Branch Brandywine Creek at Wawaset
01480950	39	East Branch Brandywine Creek at Wawaset
01481000	40	Brandywine Creek at Chadds Ford
01472126	41	French Creek near Trythall
01480655	42	East Branch Brandywine Creek near Glenmore
01480647	43	East Branch Brandywine Creek near Struble Dam
01480903	44	Valley Creek at Mullsteins Meadows
01480632	45	Doe Run near Springdale
01480629	46	Buck Run near Doe Run
01480656	47	Indian Creek near Springton
01480648	48	East Branch Brandywine Creek near Cupola
01473167	49	Little Valley Creek near Valley Forge
01473168	50	Valley Creek near Valley Forge

Table 2.--Physical, chemical, and bacteriological data

STATION 1

U.S. Geological Survey station designation: 01472170
Name: Pickering Creek near Eagle
Latitude: 40°04'39" Longitude: 75°39'14"

Drainage area: 3.0 sq mi
Gages: Crest stage

DISCHARGE, SEDIMENT, AND CHEMICAL DATA
[Results in milligrams per litre, except as noted]

Date	Discharge (cfs)	Sediment Concentration mg/l	Sediment Yield tons/day	Temperature (°C) Air	Temperature (°C) Water	pH	Specific conductance (micromhos at 25°C)	Chemical oxygen demand	Total PO_4 as P	Ortho PO_4 as P	Organic nitrogen as N
10-22-69	3.0	----	----	10.0	11.0	6.9	160	4.0	-----	0.022	----
2-18-70	4.7	----	----	5.0	3.0	7.6	150	22.0	-----	.052	----
5- 4-70	2.4	11.0	0.07	12.0	12.0	7.8	111	99.0	-----	.013	----
9-28-70	1.5	5.0	.02	10.0	13.0	8.0	100	11.0	.032	.006	----
5- 3-71	2.3	12.0	.07	13.9	10.0	7.9	165	1.0	.049	.009	0.37
9-27-71	1.6	5.0	.02	16.0	14.0	7.4	150	24.0	.049	.016	.52
10- 3-72	2.4	20.0	.13	9.0	9.5	6.9	161	15.0	.030	.020	.28
10- 2-73	---	----	----	----	14.5	7.5	184	13.0	.040	.010	.88
10-23-74	---	----	----	----	10.5	7.7	135	----	.040	.020	.78

Date	NH_3 as N	NO_2 as N	NO_3 as N	SO_4	Cl	Dissolved solids	Na	Ca	Mg	Mn	K
10-22-69	-----	-----	0.248	15.6	15.0	112	-----	----	---	0.50	3.25
2-18-70	-----	-----	.474	16.9	31.0	144	15.84	11.6	4.2	.50	1.90
5- 4-70	-----	-----	.390	20.2	21.3	120	7.48	13.2	4.8	.00	1.50
9-28-70	-----	0.003	1.264	13.7	17.5	136	8.13	17.5	5.3	.20	3.45
5- 3-71	0.28	.009	1.580	14.8	11.8	105	6.50	16.8	5.1	.10	1.30
9-27-71	.01	.001	2.212	14.8	11.6	144	7.70	15.0	4.9	.05	2.48
10- 3-72	.06	.004	2.680	30.2	15.0	110	5.51	19.4	5.2	.08	1.51
10- 2-73	-----	-----	2.000	11.0	17.0	104	6.50	17.0	5.9	.07	2.00
10-23-74	-----	-----	1.900	13.0	17.0	123	6.00	16.0	5.8	.04	2.00

BACTERIOLOGICAL DATA

[Number per 100 millilitre]

Date	Total coliform	Fecal coliform	Fecal streptococci
10-22-69	16	-----	0
2-18-70	0	-----	0
5- 4-70	190	-----	24
9-28-70	32,000	-----	2,725
5- 3-71	1,000	630	90
9-27-71	28,000	630	1,800
10- 3-72	11,700	1,200	720
10- 2-73	43,300	1,580	1,200

STATION 2

U.S. Geological Survey station designation: 01472174
Name: Pickering Creek near Chester Springs
Latitude: 40°05'22" Longitude: 75°37'50"

Drainage area: 5.90 sq mi
Gages: Surface water recorder, crest stage, wire weight, rain

DISCHARGE, SEDIMENT, AND CHEMICAL DATA
[Results in milligrams per litre, except as noted]

Date	Discharge (cfs)	Sediment Concentration mg/l	Sediment Yield tons/day	Temperature (°C) Air	Temperature (°C) Water	pH	Specific conductance (micromhos at 25°C)	Chemical oxygen demand	Total PO_4 as P	Ortho PO_4 as P	Organic nitrogen as N
10-22-69	8.7	----	----	12.0	12.0	7.2	125	6.0	-----	-----	----
2-18-70	10.9	----	----	8.0	5.0	7.4	140	11.0	-----	-----	----
5- 5-70	9.3	6.0	0.15	16.0	13.0	7.9	112	109.0	-----	-----	----
9-28-70	2.9	2.0	.02	16.0	13.0	8.2	145	11.0	0.022	0.013	----
5- 3-71	7.8	8.0	.16	13.3	10.5	8.1	165	1.0	.071	.006	0.14
9-27-71	10.6	6.0	.17	15.0	14.0	7.5	150	19.0	.098	.006	.36
10- 3-72	3.8	7.0	.07	14.3	11.0	7.0	157	10.0	.040	.010	.23
10- 2-73	----	----	----	----	15.0	7.6	177	20.0	.040	.015	.81
10-23-74	----	----	----	----	9.5	7.5	125	----	.020	.010	.57

Date	NH_3 as N	NO_2 as N	NO_3 as N	SO_4	Cl	Dissolved solids	Na	Ca	Mg	Mn	K
10-22-69	-----	-----	0.067	89.30	5.0	106	-----	----	---	0	0.75
2-18-70	-----	-----	.496	12.60	25.0	126	12.20	12.7	4.1	.10	1.90
5- 5-70	-----	-----	.498	17.20	6.3	106	7.88	13.8	7.6	0	1.60
9-28-70	-----	0.003	1.647	9.10	14.0	137	2.50	17.0	4.8	0	3.35
5- 3-71	0.21	.015	1.948	13.97	9.1	120	6.25	17.8	4.9	.10	1.35
9-27-71	.12	.001	2.560	14.52	13.5	121	6.90	15.2	4.7	.05	2.20
10- 3-72	.01	.005	2.900	29.35	11.4	187	5.34	17.9	4.4	.08	1.43
10- 2-73	-----	-----	2.300	13.00	12.0	100	6.50	17.0	5.0	.03	1.90
10-23-74	-----	-----	2.000	13.00	15.0	107	6.00	18.0	5.0	.04	1.80

BACTERIOLOGICAL DATA

[Number per 100 millilitre]

Date	Total coliform	Fecal coliform	Fecal streptococci
10-22-69	38	-----	0
2-18-70	2	-----	13
5- 5-70	112	-----	8
9-28-70	300,000	-----	1,690
5- 3-71	10,000	2,900	960
9-27-71	34,000	520	1,220
10- 3-72	9,000	600	1,040
10- 2-73	29,300	520	2,000

STATION 3

U.S. Geological Survey station designation: 01472186
Name: Pickering Creek near Marlin
Latitude: 40°06'25" Longitude: 75°35'34"

Drainage area: 20.1 sq mi
Gages:

DISCHARGE, SEDIMENT, AND CHEMICAL DATA
[Results in milligrams per litre, except as noted]

Date	Discharge (cfs)	Sediment Concentration mg/l	Sediment Yield tons/day	Temperature (°C) Air	Temperature (°C) Water	pH	Specific conductance (micromhos at 25°C)	Chemical oxygen demand	Total PO_4 as P	Ortho PO_4 as P	Organic nitrogen as N
11-10-69	24.5	----	----	14.0	12.0	7.0	175	----	-----	-----	----
2-18-70	27.4	----	----	11.0	5.0	7.3	120	55.0	-----	0.022	----
5- 5-70	29.3	7.0	0.55	26.0	16.0	8.7	109	11.0	-----	.003	----
9-28-70	11.2	3.0	.09	21.0	14.0	8.4	120	16.0	.009	-----	----
5- 3-71	22.0	4.0	.24	13.3	13.3	8.3	160	1.0	.071	.003	0.07
9-27-71	28.1	3.0	.23	16.0	15.0	7.3	155	23.0	.114	.003	.24
10- 3-72	18.5	6.0	.30	19.5	12.0	6.1	149	1.0	.020	.004	.07
10- 2-73	----	----	----	----	15.0	7.5	174	4.0	.029	.017	.72
10-23-74	----	----	----	----	8.5	8.2	125	----	.040	.020	.90

Date	NH_3 as N	NO_2 as N	NO_3 as N	SO_4	Cl	Dissolved solids	Na	Ca	Mg	Mn	K
11-10-69	-----	-----	-----	-----	----	---	-----	----	---	----	----
2-18-70	-----	-----	0.36	14.80	26.5	98	13.68	12.6	4.10	0.10	1.60
5- 5-70	-----	-----	1.11	17.80	8.4	101	8.10	15.2	5.60	0	1.40
9-28-70	-----	0.003	.83	13.70	11.4	129	4.50	17.3	2.90	0	2.23
5- 3-71	0.02	.006	.95	14.24	12.3	167	7.13	15.8	4.80	.10	1.20
9-27-71	.05	.001	1.58	11.23	14.4	118	7.10	15.0	4.60	.05	2.20
10- 3-72	.01	.002	1.58	29.35	10.8	105	5.39	16.1	4.03	.08	1.51
10- 2-73	-----	-----	1.50	13.00	13.0	103	9.00	16.0	5.20	.02	2.40
10-23-74	-----	-----	1.60	15.00	14.0	109	6.40	18.0	5.20	.04	2.00

BACTERIOLOGICAL DATA

[Number per 100 millilitre]

Date	Total coliform	Fecal coliform	Fecal streptococci
11-10-69	-----	-----	-----
2-18-70	6	-----	2
5- 5-70	8	-----	0
9-28-70	300,000	-----	3,000
5- 3-71	1,000	130	41
9-27-71	32,000	440	1,160
10- 3-72	6,800	120	1,080
10- 2-73	17,000	200	1,020

STATION 4

U.S. Geological Survey station designation: 01472188 Drainage area: 26.0 sq mi
Name: Pickering Creek near Charlestown Gages:
Latitude: 40°05'57" Longitude: 75°33'20"

DISCHARGE, SEDIMENT, AND CHEMICAL DATA
[Results in milligrams per litre, except as noted]

Date	Discharge (cfs)	Sediment Concentration mg/l	Sediment Yield tons/day	Temperature (°C) Air	Temperature (°C) Water	pH	Specific conductance (micromhos at 25°C)	Chemical oxygen demand	Total PO_4 as P	Ortho PO_4 as P	Organic nitrogen as N
11-11-69	18.4	----	----	13.0	18.0	7.0	175	14.0	-----	0.143	----
2-18-70	41.4	----	----	12.0	4.0	7.0	120	11.0	-----	-----	----
5- 3-71	25.2	4.0	0.27	11.6	11.6	8.2	160	2.0	0.137	.003	0.17
9-27-71	49.4	3.0	.40	16.0	15.0	7.4	160	12.0	.039	.006	.64
10- 3-72	24.1	5.0	.33	20.0	15.0	6.6	142	1.0	.040	.003	.10
10- 1-73	----	----	----	----	15.0	7.5	176	4.0	.390	.390	.94
10-23-74	----	----	----	----	9.0	7.7	130	----	.020	.030	.72

Date	NH_3 as N	NO_2 as N	NO_3 as N	SO_4	Cl	Dissolved solids	Na	Ca	Mg	Mn	K
11-11-69	-----	-----	0.16	11.50	10.00	288	0.75	4.2	0.9	----	2.60
2-18-70	-----	-----	.41	7.70	25.00	76	13.60	7.2	4.0	----	1.70
5- 3-71	-----	0.006	1.52	16.44	10.50	105	6.88	16.3	5.2	0.10	1.25
9-27-71	0.03	.002	1.83	14.25	12.30	132	6.90	14.5	4.5	.05	2.08
10- 3-72	.01	.003	1.55	20.58	12.43	105	5.79	16.4	4.2	.08	1.46
10- 1-73	-----	-----	1.60	15.00	14.00	102	6.70	17.0	5.5	.04	2.10
10-23-74	-----	-----	1.50	15.00	14.00	115	6.60	17.0	5.4	.04	2.00

BACTERIOLOGICAL DATA

[Number per 100 millilitre]

Date	Total coliform	Fecal coliform	Fecal streptococci
11-11-69	21	-----	0
2-18-70	0	-----	0
5- 3-71	1,000	140	10
9-27-71	27,000	400	760
10- 3-72	2,620	225	800
10- 1-73	16,000	72	460

STATION 5

U.S. Geological Survey station designation: 01472191
Name: Pickering Creek near Phoenixville
Latitude: 40°06'33" Longitude: 75°31'42"

Drainage area: 21.4 sq mi
Gages: Surface water recorder, wire weight

DISCHARGE, SEDIMENT, AND CHEMICAL DATA
[Results in milligrams per litre, except as noted]

Date	Discharge (cfs)	Sediment Concentration mg/l	Sediment Yield tons/day	Temperature (°C) Air	Temperature (°C) Water	pH	Specific conductance (micromhos at 25°C)	Chemical oxygen demand	Total PO_4 as P	Ortho PO_4 as P	Organic nitrogen as N
11-12-69	17.5	----	-----	9.0	8.0	7.5	165	30.0	-----	-----	----
2-18-70	45.0	19.0	2.31	10.0	4.0	7.2	150	54.0	-----	-----	----
5- 5-70	46.0	5.0	.62	20.0	17.0	8.8	109	3.0	-----	-----	----
9-28-70	19.0	4.0	.21	16.0	15.0	8.0	125	30.0	0.009	-----	----
5- 3-71	30.0	4.0	.32	12.2	11.6	8.2	165	2.0	.049	.003	0.03
9-27-71	74.0	3.0	.60	16.0	15.0	7.5	150	27.0	.058	.009	.18
10- 3-72	32.5	4.0	.35	21.7	15.0	6.7	150	15.0	.030	.010	.07
10- 1-73	----	----	----	----	16.5	7.6	176	3.0	.027	.020	.63
10-23-74	----	----	----	----	6.5	7.6	185	----	.030	.020	.73

Date	NH_3 as N	NO_2 as N	NO_3 as N	SO_4	Cl	Dissolved solids	Na	Ca	Mg	Mn	K
11-12-69	-----	-----	0.15	12.30	10.00	105	0.79	4.7	0.9	0.14	2.30
2-18-70	-----	-----	.38	17.50	20.00	153	13.68	12.8	3.0	.40	1.75
5- 5-70	-----	-----	.25	19.20	7.40	114	6.60	13.6	5.0	----	1.45
9-28-70	-----	0.006	.85	4.10	11.90	122	7.13	17.3	5.3	----	3.05
5- 3-71	0.11	.018	.84	16.71	10.50	104	7.50	16.3	5.3	.10	1.34
9-27-71	.01	.002	1.30	15.34	13.80	134	7.18	14.6	5.1	.05	2.10
10- 3-72	.01	.002	1.62	30.58	11.91	103	5.77	15.7	4.2	.08	1.38
10- 1-73	-----	-----	1.40	16.00	14.00	102	7.20	16.0	5.5	.01	2.20
10-23-74	-----	-----	1.60	18.00	14.00	124	7.00	18.0	5.6	0	1.70

BACTERIOLOGICAL DATA

[Number per 100 millilitre]

Date	Total coliform	Fecal coliform	Fecal streptococci
11-12-69	1,900	-----	0
2-18-70	21	-----	2
5- 5-70	20	-----	2
9-28-70	21,000	-----	2,500
5- 3-71	1,000	260	182
9-27-71	15,000	415	720
10- 3-72	2,100	90	420
10- 1-73	18,700	36	192

STATION 6

U.S. Geological Survey station designation: 01472109
Name: Stony Run near Spring City
Latitude: 40°10'11" Longitude: 75°34'45"

Drainage area: 2.1 sq mi
Gages:

DISCHARGE, SEDIMENT, AND CHEMICAL DATA
[Results in milligrams per litre, except as noted]

Date	Discharge (cfs)	Sediment Concentration mg/l	Sediment Yield tons/day	Temperature (°C) Air	Temperature (°C) Water	pH	Specific conductance (micromhos at 25°C)	Chemical oxygen demand	Total PO_4 as P	Ortho PO_4 as P	Organic nitrogen as N
11-12-69	0.5	----	----	7.0	7.0	6.9	262	----	-----	0.578	----
2-19-70	5.2	----	----	9.0	7.0	7.2	160	12.1	-----	.137	----
5- 6-70	6.9	43.0	0.80	17.3	13.0	8.1	110	4.0	-----	-----	----
9-29-70	.7	14.0	.03	13.0	15.0	8.4	285	8.0	0.790	.666	----
5- 4-71	1.0	15.0	.04	17.8	5.6	8.9	270	15.0	.352	.294	0.18
9-28-71	1.9	9.0	.05	18.0	16.0	7.3	210	8.0	.160	.071	.82
10- 9-72	2.2	----	----	11.0	11.5	6.4	221	25.0	.470	.360	.61
10- 2-73	----	----	----	----	17.0	7.7	253	4.0	.740	.740	1.00
12-24-74	----	----	----	----	5.0	7.6	430	----	4.700	1.200	.76

Date	NH_3 as N	NO_2 as N	NO_3 as N	SO_4	Cl	Dissolved solids	Na	Ca	Mg	Mn	K
11-12-69	-----	-----	0.99	16.40	10.00	212	1.85	5.9	1.2	0.14	2.65
2-19-70	-----	-----	1.35	24.10	16.58	209	9.80	10.0	5.7	----	3.50
5- 6-70	-----	-----	1.66	11.10	11.59	282	10.80	14.4	6.2	----	3.50
9-29-70	-----	0.048	3.21	21.90	45.97	248	35.76	20.6	6.6	.20	5.80
5- 4-71	0.30	.054	5.33	32.60	14.56	137	16.30	18.3	6.9	----	----
9-28-71	.01	.045	7.05	17.54	17.15	171	11.50	17.3	6.8	.08	3.57
10- 9-72	.02	.060	5.33	27.16	18.61	136	12.70	17.3	5.6	.11	4.56
10- 2-73	-----	-----	5.40	23.00	18.00	145	22.00	18.0	7.0	.05	4.56
10-24-74	-----	-----	3.80	25.00	64.00	249	36.00	33.0	9.0	.00	7.00

BACTERIOLOGICAL DATA

[Number per 100 millilitre]

Date	Total coliform	Fecal coliform	Fecal streptococci
11-12-69	4,000	-----	400
2-19-70	50	-----	0
5- 6-70	630	-----	12
9-29-70	21,000	-----	1,300
5- 4-71	930	80	55
9-28-71	50,000	760	1,520
10- 9-72	38,000	1,500	2,600
10- 2-73	40,300	330	440

STATION 7

U.S. Geological Survey station designation: 01472110
Name: Stony Run at Spring City
Latitude: 40°10'00" Longitude: 75"32'56"

Drainage area: 3.9 sq mi
Gages: Wire weight

DISCHARGE, SEDIMENT, AND CHEMICAL DATA
[Results in milligrams per litre, except as noted]

Date	Discharge (cfs)	Sediment Concentration mg/l	Sediment Yield tons/day	Temperature (°C) Air	Temperature (°C) Water	pH	Specific conductance (micromhos at 25°C)	Chemical oxygen demand	Total PO_4 as P	Ortho PO_4 as P	Organic nitrogen as N
11-13-69	0.7	----	----	12.0	15.0	6.9	190	12.0	-----	-----	----
2-19-70	7.1	25.0	0.48	8.0	5.0	7.6	150	3.9	-----	-----	----
5- 6-70	9.4	9.0	.23	17.0	13.0	8.1	109	12.0	-----	-----	----
9-29-70	9.1	8.0	.20	15.0	15.0	7.9	195	41.0	0.591	0.500	----
5- 4-71	2.3	15.0	.09	20.0	16.1	8.7	220	13.0	.254	.192	0.20
9-28-71	3.6	13.0	.13	18.0	17.0	7.5	205	19.0	.225	.078	.96
10- 9-72	3.7	----	----	7.5	12.0	6.5	240	25.0	.480	.360	.86
10- 2-73	----	----	----	----	17.0	7.8	238	12.0	.520	.520	.81
10-24-74	----	----	----	----	4.0	7.7	165	----	.440	.400	.58

Date	NH_3 as N	NO_2 as N	NO_3 as N	SO_4	Cl	Dissolved solids	Na	Ca	Mg	Mn	K
11-13-69	-----	-----	0.32	9.30	-----	153	0.66	5.2	0.5	0.70	1.45
2-19-70	-----	-----	1.30	38.20	17.58	238	10.88	17.4	5.9	.50	2.90
5- 6-70	-----	-----	2.65	42.20	12.70	141	11.60	18.4	6.6	---	2.10
9-29-70	0.13	0.300	1.90	16.70	23.24	192	17.88	19.3	6.0	---	6.35
5- 4-71	.30	.054	5.53	32.60	14.56	137	16.30	18.3	6.9	.10	1.90
9-28-71	.01	.033	6.48	30.14	14.41	164	11.50	17.3	6.8	.06	3.22
10- 9-72	.08	.037	3.63	34.29	22.75	163	14.90	20.4	6.6	.17	7.85
10- 2-73	-----	-----	5.00	23.00	16.00	134	19.00	17.0	6.9	.04	----
10-24-74	-----	-----	4.10	29.00	21.00	175	15.00	22.0	6.5	.05	4.9

BACTERIOLOGICAL DATA

[Number per 100 millilitre]

Date	Total coliform	Fecal coliform	Fecal streptococci
11-13-69	40	-----	0
2-19-70	2,000	-----	900
5- 6-70	8	-----	0
9-29-70	6,360	-----	550
5- 4-71	4,200	1,010	130
9-28-71	32,000	840	4,100
10- 9-72	66,000	4,100	4,500
10- 2-73	28,300	620	284

STATION 8

U.S. Geological Survey station designation: 01472054
Name: Pigeon Creek near Bucktown
Latitude: 40°11'50" Longitude: 75°40'10"

Drainage area: 3.9 sq mi
Gages:

DISCHARGE, SEDIMENT, AND CHEMICAL DATA
[Results in milligrams per litre, except as noted]

Date	Discharge (cfs)	Sediment Concentration mg/l	Sediment Yield tons/day	Temperature (°C) Air	Temperature (°C) Water	pH	Specific conductance (micromhos at 25°C)	Chemical oxygen demand	Total PO_4 as P	Ortho PO_4 as P	Organic nitrogen as N
11-14-69	1.3	----	----	11.0	5.0	7.0	140	56.0	-----	-----	----
2-19-70	4.2	----	----	7.0	5.0	7.2	80	39.0	-----	0.026	----
5- 6-70	4.3	7.0	0.08	12.0	13.0	7.4	105	95.0	-----	.016	----
9-29-70	1.5	3.0	.01	12.0	12.0	8.4	100	25.0	0.029	.019	----
5- 4-71	4.5	6.0	.07	9.4	9.4	7.6	110	1.0	.163	.016	0.34
9-28-71	6.2	5.0	.08	19.0	16.0	6.9	100	1.0	.127	.009	.26
10- 9-72	3.6	----	----	13.5	12.9	6.0	102	17.0	.04	.03	.01
10- 3-73	----	----	----	----	16.0	7.2	109	3.0	.03	.03	.41
10-24-74	----	----	----	----	7.5	7.2	80	----	.03	.02	.27

Date	NH_3 as N	NO_2 as N	NO_3 as N	SO_4	Cl	Dissolved solids	Na	Ca	Mg	Mn	K
11-14-69	-----	-----	0.60	17.80	5.00	148	1.95	2.7	0.5	----	5.90
2-19-70	-----	-----	1.13	15.90	13.47	146	8.80	5.9	2.9	----	1.20
5- 6-70	-----	-----	.57	22.40	-----	74	4.68	6.6	2.7	----	.90
9-29-70	0.01	0.012	0.81	13.70	4.13	83	3.25	8.8	1.5	----	.88
5- 4-71	.16	.003	.93	18.08	5.46	42	5.00	8.3	2.8	0.10	2.75
9-28-71	.01	.006	1.10	10.96	2.55	90	5.68	8.7	2.8	.08	1.45
10- 9-72	.01	.004	.87	13.72	4.14	62	4.80	9.0	2.7	.08	1.06
10- 3-73	-----	-----	.90	14.00	4.20	67	6.00	9.5	3.3	.07	1.40
10-24-74	-----	-----	.79	18.00	3.90	79	5.40	12.0	3.5	.06	1.10

BACTERIOLOGICAL DATA

[Number per 100 millilitre]

Date	Total coliform	Fecal coliform	Fecal streptococci
11-14-69	1,000	-----	800
2-19-70	620	-----	122
5- 6-70	580	-----	32
9-29-70	8,000	-----	780
5- 4-71	700	90	30
9-28-71	13,000	265	580
10- 9-72	12,750	185	1,020
10- 3-73	14,300	240	304

STATION 9

U.S. Geological Survey station designation: 01472065
Name: Pigeon Creek near Porters Mill
Latitude: 40°11'27" Longitude: 75°38'10"

Drainage area: 7.7 sq mi
Gages:

DISCHARGE, SEDIMENT, AND CHEMICAL DATA
[Results in milligrams per litre, except as noted]

Date	Discharge (cfs)	Sediment Concentration mg/l	Sediment Yield tons/day	Temperature (°C) Air	Temperature (°C) Water	pH	Specific conductance (micromhos at 25°C)	Chemical oxygen demand	Total PO_4 as P	Ortho PO_4 as P	Organic nitrogen as N
11-14-69	2.4	----	----	10.0	6.0	7.0	140	4.0	-----	0.052	----
2-19-70	8.8	----	----	8.0	6.0	7.3	95	24.0	-----	.075	----
5- 5-70	8.3	9.0	0.200	16.0	14.0	7.7	106	45.0	-----	.016	----
9-29-70	2.7	1.0	.007	12.0	12.0	8.2	90	19.0	0.003	.032	----
5- 4-71	8.8	5.0	.120	13.9	10.5	7.6	120	5.0	.068	.019	----
9-28-71	12.3	6.0	.170	19.0	16.0	7.3	110	11.0	.081	.013	0.15
10- 9-72	7.1	----	----	13.0	12.5	6.8	115	11.0	.050	.030	.23
10- 3-73	----	----	----	----	16.0	7.6	125	3.0	.050	.050	----
10-24-74	----	----	----	----	9.5	7.5	75	----	.030	.020	.35

Date	NH_3 as N	NO_2 as N	NO_3 as N	SO_4	Cl	Dissolved solids	Na	Ca	Mg	Mn	K
11-14-69	-----	-----	0.38	15.30	11.00	61	0.72	3.5	0.6	----	1.40
2-19-70	-----	-----	1.49	16.40	14.79	113	7.20	10.6	2.6	----	1.10
5- 5-70	-----	-----	.30	16.10	17.90	102	6.80	8.2	2.8	0.50	1.40
9-29-70	-----	0.012	1.16	8.80	7.75	81	3.88	9.7	1.5	.50	0.80
5- 4-71	-----	.003	1.01	16.98	6.37	83	6.75	9.3	3.1	.10	3.10
9-28-71	0.01	.008	2.77	12.06	6.20	94	6.05	8.2	5.2	.05	1.44
10- 9-72	.01	.002	1.43	11.80	7.24	71	5.51	9.0	2.7	.08	1.09
10- 3-73	-----	-----	1.00	15.00	6.20	77	6.50	11.0	3.6	.05	2.20
10-24-74	-----	-----	1.10	17.00	5.00	90	6.00	12.0	3.9	.05	.09

BACTERIOLOGICAL DATA

[Number per 100 millilitre]

Date	Total coliform	Fecal coliform	Fecal streptococci
11-14-69	940	-----	670
2-19-70	650	-----	490
5- 5-70	80	-----	8
9-29-70	6,250	-----	1,230
5- 4-71	1,280	230	67
9-28-71	19,300	380	1,080
10- 9-72	17,700	1,900	1,620
10- 3-73	35,660	4,770	5,700

STATION 10

U.S. Geological Survey station designation: 01472080
Name: Pigeon Creek near Parker Ford
Latitude: 40°12'01" Longitude: 75°37'11"

Drainage area: 11.8 sq mi
Gages: Wire weight

DISCHARGE, SEDIMENT, AND CHEMICAL DATA
[Results in milligrams per litre, except as noted]

Date	Discharge (cfs)	Sediment Concentration mg/l	Sediment Yield tons/day	Temperature (°C) Air	Temperature (°C) Water	pH	Specific conductance (micromhos at 25°C)	Chemical oxygen demand	Total PO_4 as P	Ortho PO_4 as P	Organic nitrogen as N
11-14-69	4.2	----	----	6.0	8.0	7.0	145	4.0	-----	-----	----
2-19-70	12.0	19.0	.62	8.0	6.0	7.7	105	19.0	-----	-----	----
5- 6-70	11.7	9.0	.28	16.0	13.0	8.0	106	7.0	-----	-----	----
9-29-70	3.0	1.0	.01	14.0	12.0	8.1	90	8.0	0.016	0.049	----
5- 4-71	13.5	5.0	.18	16.0	12.2	7.9	130	11.0	.202	.026	0.03
9-28-71	19.0	7.0	.36	19.0	16.0	7.4	120	4.0	.130	.009	.46
10- 9-72	10.9	----	----	13.5	12.5	6.1	120	11.0	.08	.050	.10
10- 3-73	----	----	----	----	16.5	7.3	143	5.0	.13	.070	.92
10-24-74	----	----	----	----	5.5	7.3	85	----	.05	.000	.40

Date	NH_3 as N	NO_2 as N	NO_3 as N	SO_4	Cl	Dissolved solids	Na	Ca	Mg	Mn	K
11-14-69	-----	-----	0.85	-----	14.70	---	0.27	3.6	0.5	----	----
2-19-70	-----	-----	1.68	20.80	15.50	78	6.84	8.0	3.1	0.4	1.65
5- 6-70	-----	-----	1.38	43.90	10.00	188	6.60	7.8	3.4	----	1.50
9-29-70	0.15	0.018	1.42	8.50	8.78	101	8.25	13.5	4.0	----	2.45
5- 4-71	.06	.006	1.18	13.42	5.46	101	7.10	12.5	3.5	.1	3.45
9-28-71	.01	.006	2.77	13.70	6.20	84	9.48	9.7	5.7	.12	1.80
10- 9-72	.01	.009	2.01	15.09	6.98	71	5.80	10.1	3.3	.08	1.57
10- 3-73	-----	-----	1.40	17.00	7.70	85	7.50	12.0	4.3	.06	2.70
10-24-74	-----	-----	1.60	20.00	6.20	95	6.90	14.0	4.5	.06	1.50

BACTERIOLOGICAL DATA

[Number per 100 millilitre]

Date	Total coliform	Fecal coliform	Fecal streptococci
11-14-69	1,150	-----	100
2-19-70	920	-----	690
5- 6-70	44	-----	2
9-29-70	995	-----	1,500
5- 4-71	656	100	45
9-28-71	26,000	480	680
10- 9-72	28,000	1,500	2,500
10- 3-73	26,300	2,500	2,400

STATION 11

U.S. Geological Survey station designation: 01472129 Drainage area: 11.7 sq mi
Name: French Creek near Knaurertown Gages:
Latitude: 40°11'09" Longitude: 75°45'28"

DISCHARGE, SEDIMENT, AND CHEMICAL DATA
[Results in milligrams per litre, except as noted]

Date	Discharge (cfs)	Sediment Concentration mg/l	Sediment Yield tons/day	Temperature (°C) Air	Temperature (°C) Water	pH	Specific conductance (micromhos at 25°C)	Chemical oxygen demand	Total PO_4 as P	Ortho PO_4 as P	Organic nitrogen as N
12- 9-69	9.7	----	----	10.0	5.0	6.9	95	14.0	-----	-----	----
2-24-70	15.8	----	----	12.0	3.0	7.6	35	----	-----	-----	----
5- 7-70	17.2	2.0	0.09	14.0	12.0	8.1	103	3.0	-----	-----	----
10- 5-70	5.6	3.0	.05	10.0	9.0	7.8	50	2.0	0.006	0.009	0.01
5-10-71	14.9	7.0	.28	12.0	11.0	7.2	80	14.0	.032	.019	.27
10- 4-71	11.3	4.0	.12	20.0	17.0	7.6	85	11.0	.045	.006	.31
10-30-72	11.7	8.0	.25	6.0	9.5	6.0	75	23.0	.030	.004	.18
10- 3-73	----	----	----	----	17.5	7.5	86	5.0	.030	.010	.60
10-24-74	----	----	----	----	9.0	8.2	55	----	.030	.010	.26

Date	NH_3 as N	NO_2 as N	NO_3 as N	SO_4	Cl	Dissolved solids	Na	Ca	Mg	Mn	K
12- 9-69	-----	-----	0.27	15.90	9.00	102	0.28	2.3	0.5	----	----
2-24-70	-----	-----	.10	6.60	6.21	37	4.14	7.2	1.8	0.35	0.80
5- 7-70	-----	-----	.39	19.20	1.05	69	3.00	4.8	2.2	----	1.30
10- 5-70	-----	0.001	.49	7.10	3.50	63	3.50	9.0	2.5	.20	1.45
5-10-71	0.11	.003	----	9.86	4.55	33	3.13	5.7	1.7	.10	.95
10- 4-71	.06	.001	.36	8.22	3.78	59	6.75	12.7	6.2	.12	4.54
10-30-72	.05	.002	.05	5.48	4.06	63	2.74	5.5	1.9	.16	1.34
10- 3-73	-----	-----	.40	7.10	3.50	55	3.50	8.0	2.8	.07	1.60
10-24-74	-----	-----	.25	9.10	3.10	55	3.00	10.0	3.1	.06	1.00

BACTERIOLOGICAL DATA

[Number per 100 millilitre]

Date	Total coliform	Fecal coliform	Fecal streptococci
12- 9-69	2,800	-----	1,500
2-24-70	1,850	-----	1,200
5- 7-70	96	-----	12
10- 5-70	1,605	-----	210
5-10-71	4,500	380	590
10- 4-71	13,600	300	800
10-30-72	1,300	156	216
10- 3-73	9,660	340	272

STATION 12

U.S. Geological Survey station designation: 01472140 Drainage area:
Name: South Branch French Creek at Coventryville Gages:
Latitude: 40°09'17" Longitude: 75°42'51"

DISCHARGE, SEDIMENT, AND CHEMICAL DATA
[Results in milligrams per litre, except as noted]

Date	Discharge (cfs)	Sediment Concentration mg/l	Sediment Yield tons/day	Temperature (°C) Air	Temperature (°C) Water	pH	Specific conductance (micromhos at 25°C)	Chemical oxygen demand	Total PO_4 as P	Ortho PO_4 as P	Organic nitrogen as N
12- 9-69	12.6	----	----	9.0	4.0	6.9	175	36.0	-----	0.029	----
2-24-70	16.4	----	----	14.0	6.0	7.8	90	----	-----	.003	----
5- 7-70	16.2	4.0	0.17	17.0	13.0	8.8	106	3.0	-----	.055	----
10- 5-70	5.8	1.0	.02	17.0	11.0	7.4	45	21.0	0.029	.026	----
5-10-71	15.7	6.0	.25	14.0	12.0	7.4	145	13.0	.068	.032	0.28
10- 4-71	11.8	2.0	.06	19.0	17.0	7.8	140	15.0	.091	.035	.49
10-30-72	9.6	4.0	.10	10.0	9.0	7.3	150	8.0	.050	.030	.28
10- 3-73	----	----	----	----	18.0	7.5	129	4.0	.030	.020	.51
10-24-74	----	----	----	----	5.5	7.4	149	----	.030	.020	.39

Date	NH_3 as N	NO_2 as N	NO_3 as N	SO_4	Cl	Dissolved solids	Na	Ca	Mg	Mn	K
12- 9-69	-----	-----	0.14	13.20	10.00	57	0.55	4.1	0.6	----	2.40
2-24-70	-----	-----	.39	7.70	11.40	148	7.25	13.4	3.6	0.40	1.57
5- 7-70	-----	-----	.65	26.80	6.35	115	6.20	10.3	4.4	----	1.88
10- 5-70	-----	-----	1.81	7.70	1.00	112	6.88	12.0	4.5	----	2.27
5-10-71	0.05	0.015	2.06	18.35	8.19	72	6.70	12.0	4.6	.1	1.75
10- 4-71	.01	.003	2.22	10.14	11.33	111	6.15	12.0	5.6	.11	4.25
10-30-72	.01	.001	2.11	13.17	12.19	121	6.42	12.6	5.2	.05	3.23
10- 3-73	-----	-----	2.30	11.00	8.50	80	5.20	11.0	4.7	.02	1.40
10-24-74	-----	-----	2.70	12.00	7.60	92	4.50	13.0	5.0	.05	1.20

BACTERIOLOGICAL DATA

[Number per 100 millilitre]

Date	Total coliform	Fecal coliform	Fecal streptococci
12- 9-69	1,250	-----	150
2-24-70	1,560	-----	300
5- 7-70	-----	-----	8
10- 5-70	1,940	-----	425
5-10-71	3,900	480	176
10- 4-71	17,000	175	360
10-30-72	2,700	440	820
10- 3-73	9,660	290	288

STATION 13

U.S. Geological Survey station designation: 01472138
Name: French Creek near Coventryville
Latitude: 40°10'14" Longitude: 75°41'50"

Drainage area: 23.6 sq mi
Gages:

DISCHARGE, SEDIMENT, AND CHEMICAL DATA
[Results in milligrams per litre, except as noted]

Date	Discharge (cfs)	Sediment Concentration mg/l	Sediment Yield tons/day	Temperature (°C) Air	Temperature (°C) Water	pH	Specific conductance (micromhos at 25°C)	Chemical oxygen demand	Total PO_4 as P	Ortho PO_4 as P	Organic nitrogen as N
12- 9-69	24.1	----	----	7.0	5.0	7.0	120	2.0	-----	-----	----
2-24-70	28.3	----	----	11.0	6.0	7.4	60	----	-----	-----	----
5-20-70	30.0	6.0	0.49	21.0	16.0	8.0	70	7.0	-----	-----	----
10- 5-70	10.8	1.0	.03	12.9	9.0	7.2	60	16.0	0.019	0.029	----
5-10-71	30.2	7.0	.57	12.0	12.0	7.0	105	17.0	.032	.013	0.05
10- 4-71	22.7	2.0	.12	20.0	18.0	7.6	115	11.0	.058	.016	.24
10-30-72	18.4	6.0	.30	7.0	9.7	7.1	102	23.0	.040	.010	.31
10- 3-73	----	----	----	----	16.3	7.6	155	4.0	.020	.010	.17
10-25-74	----	----	----	----	10.0	7.8	100	----	.020	.010	.23

Date	NH_3 as N	NO_2 as N	NO_3 as N	SO_4	Cl	Dissolved solids	Na	Ca	Mg	Mn	K
12- 9-69	-----	-----	0.14	15.40	5.00	106	0.95	2.7	0.1	----	1.58
2-24-70	-----	-----	.13	7.70	11.22	80	7.40	10.0	2.9	0.40	.90
5-20-70	-----	-----	----	14.81	7.00	77	9.68	7.6	3.5	----	.92
10- 5-70	-----	-----	.68	9.90	9.50	77	3.00	9.0	2.5	.20	1.20
5-10-71	-----	0.009	.36	16.16	3.64	60	3.88	8.3	3.6	.10	.95
10- 4-71	0.02	.001	.72	7.40	7.55	93	6.45	11.8	3.9	.05	1.54
10-30-72	.02	.003	.08	8.50	6.60	82	3.41	11.9	6.2	.03	1.96
10- 3-73	-----	-----	.60	13.00	9.40	93	6.70	14.0	5.0	.00	2.00
10-25-74	-----	-----	.50	14.00	10.00	108	6.30	17.0	3.0	.04	1.70

BACTERIOLOGICAL DATA

[Number per 100 millilitre]

Date	Total coliform	Fecal coliform	Fecal streptococci
12- 9-69	1,650	-----	1,450
2-24-70	1,320	-----	940
5-20-70	-----	-----	84
10- 5-70	1,205	-----	245
5-10-71	7,200	580	248
10- 4-71	26,000	185	1,780
10-30-72	1,600	180	300
10- 4-74	11,300	-----	292

STATION 14

U.S. Geological Survey station designation: 01472154 Drainage area: 47.7 sq mi
Name: French Creek near Pughtown Gages:
Latitude: 40°09'14" Longitude: 75°38'25"

DISCHARGE, SEDIMENT, AND CHEMICAL DATA
[Results in milligrams per litre, except as noted]

Date	Discharge (cfs)	Sediment Concentration mg/l	Sediment Yield tons/day	Temperature (°C) Air	Temperature (°C) Water	pH	Specific conductance (micromhos at 25°C)	Chemical oxygen demand	Total PO_4 as P	Ortho PO_4 as P	Organic nitrogen as N
12-10-69	37.2	----	----	4.0	5.0	7.0	125	44.0	-----	0.003	----
2-24-70	42.2	----	----	11.0	5.0	7.6	70	----	-----	-----	----
5-20-70	42.5	6.0	0.69	26.0	16.0	7.7	55	18.0	-----	.013	----
10- 5-70	22.1	1.0	.06	17.0	11.0	7.6	40	13.0	0.065	.026	0.02
5-10-71	61.1	5.0	.82	22.0	13.0	7.3	120	21.0	.049	.013	.36
10- 4-71	45.8	4.0	.49	18.0	18.0	8.1	135	17.0	.078	.013	.58
10-30-72	37.1	5.0	.50	11.2	11.0	7.1	122	19.0	.060	.010	.25
10- 4-73	----	----	----	----	17.5	7.4	139	4.0	.020	.010	.36
	----	----	----	----	6.0	7.3	150	----	.020	.020	.36

Date	NH_3 as N	NO_2 as N	NO_3 as N	SO_4	Cl	Dissolved solids	Na	Ca	Mg	Mn	K
12-10-69	-----	-----	0.20	13.90	20.00	92	0.54	3.8	0.7	----	1.80
2-24-70	-----	-----	.32	13.40	13.15	85	6.80	10.2	3.4	0.50	1.20
5-20-70	-----	-----	.27	13.70	9.00	89	5.28	9.2	3.7	----	1.20
10- 5-70	-----	0.003	.93	6.90	7.00	90	8.25	15.5	4.0	----	2.00
5-10-71	0.57	.006	.50	18.35	6.37	78	5.50	12.5	3.9	.10	1.18
10- 4-71	.01	.002	1.33	.55	6.61	98	6.45	11.8	3.9	.05	1.99
10-30-72	.06	.002	.33	13.99	9.65	111	5.15	11.2	3.8	.02	3.00
10- 4-73	-----	-----	1.10	12.00	8.30	85	6.50	13.0	4.6	.01	1.50
	-----	-----	1.20	15.00	8.80	99	6.30	16.0	4.8	.04	1.60

BACTERIOLOGICAL DATA

[Number per 100 millilitre]

Date	Total coliform	Fecal coliform	Fecal streptococci
12-10-69	3,200	-----	2,600
2-24-70	2,700	-----	2,400
5-20-70	10	-----	0
10- 5-70	6,600	-----	180
5-10-71	6,500	300	90
10- 4-71	51,000	580	920
10-30-72	3,100	700	1,440
10- 4-73	9,300	-----	104

STATION 15

U.S. Geological Survey station designation: 01472157
Name: French Creek near Phoenixville
Latitude: 40°09'05" Longitude: 75°36'06"

Drainage area: 59.10 sq mi
Gages: Surface water recorder
wire weight

DISCHARGE, SEDIMENT, AND CHEMICAL DATA
[Results in milligrams per litre, except as noted]

Date	Discharge (cfs)	Sediment Concentration mg/l	Sediment Yield tons/day	Temperature (°C) Air	Temperature (°C) Water	pH	Specific conductance (micromhos at 25°C)	Chemical oxygen demand	Total PO_4 as P	Ortho PO_4 as P	Organic nitrogen as N
12-10-69	50.2	----	----	4.0	5.0	7.0	130	12.0	-----	0.029	----
2-24-70	64.0	----	----	9.0	5.0	7.8	80	----	-----	-----	----
5-21-70	50.2	12.0	1.62	26.0	20.0	7.4	80	13.0	-----	.052	----
10- 5-70	30.2	1.0	.08	----	----	---	---	----	-----	-----	----
5-10-71	76.1	18.0	3.70	23.0	16.0	7.2	175	17.0	.032	.016	0.26
10- 4-71	56.9	2.0	.31	18.0	18.0	8.0	130	16.0	.049	.035	.32
10-30-72	46.0	5.0	.62	11.9	11.5	7.3	125	20.0	.060	.010	.40
10- 4-73	----	----	----	----	16.5	7.8	136	4.0	.010	.010	.63
10-25-74	----	----	----	----	6.5	7.3	70	----	.020	.010	.38

Date	NH_3 as N	NO_2 as N	NO_3 as N	SO_4	Cl	Dissolved solids	Na	Ca	Mg	Mn	K
12-10-69	-----	-----	0.20	7.10	9.50	55	0.47	3.3	0.1	0.45	1.60
2-24-70	-----	-----	.40	13.10	11.22	118	6.88	12.6	3.2	.50	1.18
5-21-70	-----	-----	1.34	16.10	3.16	120	6.40	10.9	3.4	----	1.64
10- 5-70	-----	-----	----	-----	-----	---	----	----	---	----	----
5-10-71	0.21	0.006	1.29	38.80	5.46	81	6.13	10.0	3.9	.10	1.25
10- 4-71	.02	.001	1.12	12.60	6.61	85	5.90	10.8	3.5	.05	1.71
10-30-72	.01	.002	.34	15.91	10.67	102	5.04	11.5	3.8	.02	3.05
10- 4-73	-----	-----	1.20	12.00	7.50	82	6.00	12.0	4.5	.00	1.80
10-25-74	-----	-----	1.30	13.00	9.50	99	6.50	17.0	5.0	.02	1.70

BACTERIOLOGICAL DATA

[Number per 100 millilitre]

Date	Total coliform	Fecal coliform	Fecal streptococci
12-10-69	15	-----	0
2-24-70	0	-----	0
5-21-70	----	-----	0
10- 5-70	9,000	195	98
5-10-71	6,600	330	330
10- 4-71	6,600	330	330
10-30-72	1,850	740	1,140
10- 4-73	7,700	-----	148

STATION 16

U.S. Geological Survey station designation: 01472161
Name: French Creek at Phoenixville
Latitude: 40°08'08" Longitude: 75°30'41"

Drainage area: 71.0 sq mi
Gages:

DISCHARGE, SEDIMENT, AND CHEMICAL DATA
[Results in milligrams per litre, except as noted]

Date	Discharge (cfs)	Sediment Concentration mg/l	Sediment Yield tons/day	Temperature (°C) Air	Temperature (°C) Water	pH	Specific conductance (micromhos at 25°C)	Chemical oxygen demand	Total PO_4 as P	Ortho PO_4 as P	Organic nitrogen as N
5-21-70	----	----	----	----	----	---	---	----	-----	-----	----
10- 5-70	38.2	8.0	0.83	----	----	---	---	----	-----	-----	----
5-11-71	91.0	9.0	2.21	26.0	15.0	7.3	170	9.0	0.075	0.022	----
10- 4-71	68.3	3.0	.55	18.0	19.0	8.0	195	49.0	.075	.026	0.24
10-24-72	55.3	----	----	15.0	14.0	7.8	215	9.0	.070	.040	.15
10- 4-73	----	----	----	----	21.0	7.9	267	6.0	.100	.090	.45
10-25-74	----	----	----	----	14.5	7.4	245	----	.190	.130	.60

Date	NH_3 as N	NO_2 as N	NO_3 as N	SO_4	Cl	Dissolved solids	Na	Ca	Mg	Mn	K
5-21-70	-----	-----	----	-----	-----	---	-----	----	---	----	----
10- 5-70	-----	-----	----	-----	-----	---	-----	----	---	----	----
5-11-71	0.49	0.006	0.97	26.03	8.19	105	9.88	14.3	5.1	0.10	1.77
10- 4-71	.62	.003	1.48	23.56	13.22	136	11.65	18.3	5.6	.05	2.49
10-24-72	.36	.007	.98	36.49	17.92	152	16.50	21.6	6.5	.07	2.36
10- 4-73	-----	-----	1.70	46.00	16.00	155	14.00	24.0	9.0	1.40	2.90
10-25-74	-----	-----	2.20	70.00	37.00	259	28.00	35.0	11.0	.12	3.40

BACTERIOLOGICAL DATA

[Number per 100 millilitre]

Date	Total coliform	Fecal coliform	Fecal streptococci
5-21-70	-----	-----	-----
10- 5-70	-----	-----	-----
5-11-71	9,500	900	80
10- 4-71	54,000	2,900	480
10-24-72	1,270	12	25
10- 4-73	27,000	-----	87

STATION 17

U.S. Geological Survey station designation: 01475300
Name: Darby Creek at Waterloo Mills near Devon
Latitude: 40°01'20" Longitude: 75°25'18"

Drainage area: 5.2 sq mi
Gages:

DISCHARGE, SEDIMENT, AND CHEMICAL DATA
[Results in milligrams per litre, except as noted]

Date	Discharge (cfs)	Sediment Concentration mg/l	Sediment Yield tons/day	Temperature (°C) Air	Temperature (°C) Water	pH	Specific conductance (micromhos at 25°C)	Chemical oxygen demand	Total PO_4 as P	Ortho PO_4 as P	Organic nitrogen as N
2-10-70	14.4	249.0	9.68	5.0	3.0	7.8	120	----	-----	0.068	----
5-27-70	8.3	23.0	.52	16.0	16.0	8.1	145	19.0	-----	.192	----
10- 6-70	2.3	2.0	.01	23.0	14.0	7.6	145	6.0	.732	.771	----
5-10-71	6.6	5.0	.09	26.0	14.0	7.4	200	11.0	.232	.173	0.26
10- 5-71	6.1	4.0	.07	18.0	17.0	7.6	200	11.0	.369	.130	.66
10-16-72	4.1	6.0	.07	6.8	9.0	7.2	200	11.0	.440	.370	.26
10- 4-73	----	-----	----	----	17.5	7.4	212	6.0	.300	.250	.52
10-22-74	----	-----	----	----	7.5	7.2	210	----	.020	.010	.62

Date	NH_3 as N	NO_2 as N	NO_3 as N	SO_4	Cl	Dissolved solids	Na	Ca	Mg	Mn	K
2-10-70	-----	-----	0.38	7.90	2.11	240	2.60	6.7	1.3	----	0.50
5-27-70	-----	-----	2.23	7.90	11.50	162	8.80	12.8	6.1	----	2.00
10- 6-70	-----	0.027	3.29	18.90	26.50	146	15.50	-----	7.6	0.20	3.35
5-10-71	1.08	.057	2.37	34.52	13.65	144	11.50	17.0	7.8	.10	1.95
10- 5-71	.01	.069	2.90	14.52	16.31	153	11.95	18.0	7.5	.05	2.48
10-16-72	.33	.086	3.00	25.51	17.51	142	12.30	21.2	7.4	.04	2.42
10- 4-73	-----	-----	3.20	21.00	15.00	119	11.00	18.0	7.9	.03	3.30
10-22-74	-----	-----	2.00	12.00	11.00	101	6.50	16.0	6.0	.01	2.00

BACTERIOLOGICAL DATA

[Number per 100 millilitre]

Date	Total coliform	Fecal coliform	Fecal streptococci
2-10-70	1,560	-----	830
5-27-70	128	-----	300
10- 6-70	830	-----	160
5-10-71	5,000	150	52
10- 5-71	23,000	245	200
10-16-72	1,286	40	248
10- 4-73	44,300	-----	520

STATION 18

U.S. Geological Survey station designation: 01475830
Name: East Branch Crum Creek near Paoli
Latitude: 40°00'28" Longitude: 75°27'55"

Drainage area: 5.3 sq mi
Gages:

DISCHARGE, SEDIMENT, AND CHEMICAL DATA
[Results in milligrams per litre, except as noted]

Date	Discharge (cfs)	Sediment Concentration mg/l	Sediment Yield tons/day	Temperature (°C) Air	Temperature (°C) Water	pH	Specific conductance (micromhos at 25°C)	Chemical oxygen demand	Total PO_4 as P	Ortho PO_4 as P	Organic nitrogen as N
2-10-70	9.2	----	----	7.0	3.0	7.5	100	----	-----	0.042	----
5-27-70	8.1	12.0	0.260	21.0	21.0	7.9	120	6.0	-----	.029	----
10- 6-70	2.5	1.0	.007	21.0	14.0	7.8	110	1.0	0.003	0.003	----
5-11-71	6.8	6.0	.110	25.0	14.0	7.3	170	5.0	.039	.006	0.16
10- 5-71	6.2	3.0	.050	18.0	17.0	7.4	170	9.0	.039	.003	.92
10-16-72	4.2	3.0	.030	8.0	8.5	7.3	140	1.0	.020	.020	.12
10- 5-73	---	----	----	----	17.5	7.5	162	3.0	.030	.020	.46
10-22-74	---	----	----	----	7.0	7.4	167	---	.030	.010	.86

Date	NH_3 as N	NO_2 as N	NO_3 as N	SO_4	Cl	Dissolved solids	Na	Ca	Mg	Mn	K
2-10-70	-----	-----	1.39	19.40	5.27	179	8.80	8.0	3.2	----	1.40
5-27-70	-----	-----	2.65	7.40	10.54	137	7.80	10.0	6.1	----	1.68
10- 6-70	-----	0.006	2.37	7.70	16.50	67	7.38	----	6.3	0.20	1.58
5-11-71	0.10	.015	2.39	14.24	12.29	95	9.50	11.5	7.5	.10	1.55
10- 5-71	.06	.006	3.18	7.95	9.97	112	10.25	12.6	7.1	.05	1.91
10-16-72	.01	.001	2.98	26.61	10.30	109	7.96	13.7	6.6	.05	1.56
10- 5-73	-----	-----	2.70	11.00	11.00	91	8.00	12.0	7.4	.02	2.10
10-22-74	-----	-----	2.00	11.00	11.00	101	7.50	12.0	7.2	.05	1.30

BACTERIOLOGICAL DATA

[Number per 100 millilitre]

Date	Total coliform	Fecal coliform	Fecal streptococci
2-10-70	720	-----	210
5-27-70	5	-----	36
10- 6-70	200	-----	70
5-11-71	2,400	116	47
10- 5-71	9,000	140	240
10-16-72	692	45	192
10- 5-73	14,300	335	244

STATION 19

U.S. Geological Survey station designation: 01475840
Name: West Branch Crum Creek near Paoli
Latitude: 39°59'52" Longitude: 75°27'38"

Drainage area: 10.3 sq mi
Gages:

DISCHARGE, SEDIMENT, AND CHEMICAL DATA
[Results in milligrams per litre, except as noted]

Date	Discharge (cfs)	Sediment Concentration mg/l	Sediment Yield tons/day	Temperature (°C) Air	Temperature (°C) Water	pH	Specific conductance (micromhos at 25°C)	Chemical oxygen demand	Total PO_4 as P	Ortho PO_4 as P	Organic nitrogen as N
2-10-70	----	----	----	8.0	3.0	7.6	85	----	-----	0.016	----
5-27-70	11.5	11.0	0.34	21.0	17.0	7.8	100	48.0	-----	.035	----
10- 6-70	5.4	1.0	.01	22.0	15.0	7.7	100	4.0	0.045	0.009	----
5-11-71	13.2	4.0	.14	23.0	15.0	7.2	165	1.0	.022	.009	0.20
10- 5-71	12.1	3.0	.10	19.0	17.0	7.5	160	9.0	.032	.003	.37
10-16-72	8.0	----	----	9.1	8.5	7.4	155	8.0	.020	.010	.01
10- 5-73	----	----	----	----	17.5	7.5	167	3.0	.020	.020	.61
10-22-74	----	----	----	----	7.5	7.3	120	----	.020	.010	.95

Date	NH_3 as N	NO_2 as N	NO_3 as N	SO_4	Cl	Dissolved solids	Na	Ca	Mg	Mn	K
2-10-70	-----	-----	1.20	9.90	3.16	164	3.40	5.0	2.3	----	1.00
5-27-70	-----	-----	1.87	15.40	6.32	153	7.88	8.8	5.7	----	1.58
10- 6-70	-----	0.003	2.37	5.80	3.00	81	7.13	----	5.9	0.20	1.85
5-11-71	0.13	.006	1.72	11.78	11.38	113	8.88	11.3	7.1	.18	1.30
10- 5-71	.01	.004	2.53	5.48	11.32	105	8.42	11.7	6.4	.05	1.68
10-16-72	.01	.001	2.48	21.40	12.36	111	9.80	14.4	6.6	.02	1.62
10- 5-73	-----	-----	2.10	14.00	14.00	99	8.70	12.0	7.2	.02	2.20
10-22-74	-----	-----	2.00	15.00	12.00	99	8.30	12.0	7.2	.02	1.50

BACTERIOLOGICAL DATA

[Number per 100 millilitre]

Date	Total coliform	Fecal coliform	Fecal streptococci
2-10-70	490	-----	50
5-27-70	680	-----	406
10- 6-70	100	-----	145
5-11-71	37,000	190	110
10- 5-71	8,000	60	240
10-16-72	769	60	272
10- 5-73	17,300	245	264

STATION 20

U.S. Geological Survey station designation: 01476430 Drainage area: 4.5 sq mi
Name: Ridley Creek near Goshenville Gages:
Latitude: 39°59'26" Longitude: 75°32'38"

DISCHARGE, SEDIMENT, AND CHEMICAL DATA

[Results in milligrams per litre, except as noted]

Date	Discharge (cfs)	Sediment Concentration mg/l	Sediment Yield tons/day	Temperature (°C) Air	Temperature (°C) Water	pH	Specific conductance (micromhos at 25°C)	Chemical oxygen demand	Total PO_4 as P	Ortho PO_4 as P	Organic nitrogen as N
2-10-70	----	----	----	7.0	3.0	7.1	60	----	-----	0.026	----
5-28-70	5.5	6.0	0.09	15.0	15.0	8.1	80	45.0	-----	.029	----
10- 6-70	2.1	1.0	.005	15.0	13.0	7.5	95	2.0	0.098	0.091	----
Spring 71	----	----	----	22.0	18.0	7.8	140	8.0	.147	.029	0.03
10- 5-71	5.2	3.0	.04	19.0	17.0	7.2	115	13.0	.094	.029	.35
10-16-72	3.5	----	----	15.0	9.5	7.4	140	1.0	.240	.220	.18
10- 5-73	----	----	----	----	17.0	7.6	154	----	.150	.150	.73
10-23-74	----	----	----	----	4.0	7.0	146	----	.170	.150	.73

Date	NH_3 as N	NO_2 as N	NO_3 as N	SO_4	Cl	Dissolved solids	Na	Ca	Mg	Mn	K
2-10-70	-----	-----	1.20	4.90	5.27	172	3.24	4.5	3.0	----	4.30
5-28-70	-----	-----	2.29	3.30	8.43	93	6.28	7.2	4.8	----	1.32
10- 6-70	-----	.006	2.36	16.40	23.00	100	11.75	10.3	5.6	----	1.78
Spring 71	-----	.012	3.10	11.23	9.88	92	7.25	8.0	5.4	0.10	1.70
10- 5-71	0.01	.004	2.30	5.48	9.06	89	5.75	8.9	4.8	.05	1.42
10-16-72	.02	.001	2.98	21.95	15.96	103	11.00	11.5	5.2	.03	1.48
10- 5-73	-----	-----	2.50	12.00	14.00	84	9.00	10.0	6.1	.04	2.10
10-23-74	-----	-----	2.40	14.00	11.00	92	8.10	11.0	6.2	.03	1.20

BACTERIOLOGICAL DATA

[Number per 100 millilitre]

Date	Total coliform	Fecal coliform	Fecal streptococci
2-10-70	940	-----	560
5-28-70	86	-----	102
10- 6-70	6,000	-----	270
Spring 71	5,000	290	680
10- 5-71	9,800	61	170
10-16-72	-----	-----	-----
10- 5-73	18,300	205	212

STATION 21

U.S. Geological Survey station designation: 01476435
Name: Ridley Creek near Dutton Mill
Latitude: 39°58'50" Longitude: 75°31'00"

Drainage area: 9.7 sq mi
Gages:

DISCHARGE, SEDIMENT, AND CHEMICAL DATA

[Results in milligrams per litre, except as noted]

Date	Discharge (cfs)	Sediment Concentration mg/l	Sediment Yield tons/day	Temperature (°C) Air	Temperature (°C) Water	pH	Specific conductance (micromhos at 25°C)	Chemical oxygen demand	Total PO_4 as P	Ortho PO_4 as P	Organic nitrogen as N
2-10-70	----	460.0	----	7.0	3.0	6.8	95	----	-----	0.085	----
5-28-70	11.5	16.0	0.49	21.0	15.0	8.3	80	9.0	-----	.013	----
10- 6-70	4.6	8.0	.10	16.0	13.0	7.3	95	7.0	0.023	.019	----
Spring 71	----	-----	----	22.0	19.0	7.9	140	16.0	.114	.026	0.02
10- 5-71	----	4.0	----	19.0	18.0	7.4	125	5.0	.056	.009	.61
10-16-72	----	-----	----	14.0	9.0	7.4	135	7.0	.100	.080	.35
10- 5-73	----	-----	----	----	17.5	7.3	153	2.0	.060	.050	.36
10-22-74	----	-----	----	----	10.5	7.5	115	----	.090	.070	1.18

Date	NH_3 as N	NO_2 as N	NO_3 as N	SO_4	Cl	Dissolved solids	Na	Ca	Mg	Mn	K
2-10-70	-----	-----	2.90	11.80	7.37	99	5.88	8.8	3.9	----	1.39
5-28-70	-----	-----	2.40	32.10	6.32	166	6.28	8.0	5.0	----	1.28
10- 6-70	-----	0.012	2.08	19.50	14.00	80	8.38	10.3	5.7	----	1.75
Spring 71	0.15	.036	3.04	7.40	8.98	95	7.13	8.5	5.8	0.20	2.70
10- 5-71	.01	.006	2.28	9.86	9.51	90	6.55	10.1	3.0	.06	1.52
10-16-72	.01	.006	2.88	3.84	12.88	88	8.23	11.3	4.9	.06	1.65
10- 5-73	-----	-----	1.90	12.00	12.00	86	8.20	10.0	6.6	.05	1.80
10-22-74	-----	-----	2.10	13.00	12.00	89	7.10	10.0	6.4	.04	1.80

BACTERIOLOGICAL DATA

[Number per 100 millilitre]

Date	Total coliform	Fecal coliform	Fecal streptococci
2-10-70	580	-----	120
5-28-70	14	-----	52
10- 6-70	3,200	-----	280
Spring 71	34,000	670	660
10- 5-71	12,800	205	160
10-16-72	1,750	420	310
10- 5-73	30,300	1,120	232

STATION 22

U.S. Geological Survey station designation: 01476790
Name: Chester Creek near West Chester
Latitude: 39°59'49" Longitude: 75°35'40"

Drainage area: 2.0 sq mi
Gages:

DISCHARGE, SEDIMENT, AND CHEMICAL DATA
[Results in milligrams per litre, except as noted]

Date	Discharge (cfs)	Sediment Concentration mg/l	Sediment Yield tons/day	Temperature (°C) Air	Temperature (°C) Water	pH	Specific conductance (micromhos at 25°C)	Chemical oxygen demand	Total PO_4 as P	Ortho PO_4 as P	Organic nitrogen as N
3- 7-70	3.3	----	----	14.0	6.0	7.9	125	----	-----	-----	----
5-22-70	3.2	----	----	30.0	20.0	7.4	145	----	-----	0.023	----
10-26-70	.8	----	----	16.0	11.0	7.5	98	----	0.013	0.003	----
5-17-71	2.6	10.0	0.07	22.0	12.0	7.2	175	3.0	.045	.009	0.09
10-11-71	2.3	13.0	.08	10.0	12.0	6.7	170	30.0	.052	.003	.57
10-10-72	1.5	4.0	.02	.5	9.0	6.5	161	7.0	.020	.010	.12
10- 5-73	---	----	----	----	15.5	7.4	180	<1.0	.030	.020	.31
10-29-74	---	----	----	----	12.5	6.6	214	----	.030	.020	.38

Date	NH_3 as N	NO_2 as N	NO_3 as N	SO_4	Cl	Dissolved solids	Na	Ca	Mg	Mn	K
3- 7-70	-----	-----	----	-----	-----	102	-----	----	---	----	----
5-22-70	-----	-----	4.13	24.40	14.70	128	7.76	11.0	7.0	0.07	1.62
10-26-70	-----	0.003	3.26	21.90	19.42	56	7.50	10.3	5.6	----	1.75
5-17-71	0.05	.015	4.68	10.96	3.66	135	11.25	11.3	6.4	.10	2.03
10-11-71	.01	.005	3.16	14.80	19.93	132	7.00	11.3	3.5	.06	1.82
10-10-72	.01	.008	4.22	10.97	19.13	109	7.62	12.3	4.8	.08	1.29
10- 5-73	-----	-----	4.50	13.00	20.00	93	9.20	14.0	6.0	.03	1.70
10-29-74	-----	-----	4.70	16.00	23.00	124	8.60	20.0	6.2	.03	1.60

BACTERIOLOGICAL DATA

[Number per 100 millilitre]

Date	Total coliform	Fecal coliform	Fecal streptococci
3- 7-70	------	-----	-----
5-22-70	0	-----	6
10-26-70	2,250	-----	420
5-17-71	14,800	440	168
10-11-71	37,000	350	1,000
10-10-72	500	50	204
10- 5-73	8,300	64	136

STATION 23

U.S. Geological Survey station designation: 01476830
Name: Chester Creek near Milltown
Latitude: 39°58'21" Longitude: 75°32'57"

Drainage area: 6.0 sq mi
Gages:

DISCHARGE, SEDIMENT, AND CHEMICAL DATA
[Results in milligrams per litre, except as noted]

Date	Discharge (cfs)	Sediment Concentration mg/l	Sediment Yield tons/day	Temperature (°C) Air	Temperature (°C) Water	pH	Specific conductance (micromhos at 25°C)	Chemical oxygen demand	Total PO_4 as P	Ortho PO_4 as P	Organic nitrogen as N
2-28-70	10.2	----	----	0.0	2.0	7.3	110	----	-----	-----	----
5-16-70	12.6	----	----	15.0	16.0	---	160	----	-----	0.013	----
10-26-70	2.5	----	----	19.0	14.0	8.0	115	13.0	0.098	.039	0.18
5-17-71	7.6	27.0	0.55	27.0	16.0	7.1	185	5.0	.072	.013	.19
10-11-71	7.0	25.0	.47	14.0	15.0	7.2	165	59.0	.107	.039	.83
10-10-72	4.6	20.0	.25	3.4	9.0	6.9	171	1.0	.060	.030	.53
10- 5-73	----	----	----	----	19.5	7.3	204	4.0	.040	.010	.64
10-29-74	----	----	----	----	14.0	7.1	140	---	.020	.050	1.00

Date	NH_3 as N	NO_2 as N	NO_3 as N	SO_4	Cl	Dissolved solids	Na	Ca	Mg	Mn	K
2-28-70	-----	-----	----	-----	-----	121	-----	----	----	----	----
5-16-70	-----	-----	4.08	33.30	12.60	136	10.80	20.1	10.5	0.07	2.20
10-26-70	0.13	0.024	1.69	26.80	11.75	85	7.13	15.0	7.1	----	3.95
5-17-71	.07	.015	3.33	22.19	10.99	154	9.50	14.8	7.2	.10	2.90
10-11-71	.01	.018	1.42	19.45	10.87	140	3.70	8.1	2.4	.05	1.32
10-10-72	.03	.026	2.28	9.33	16.54	112	7.49	13.0	7.0	.18	2.85
10- 5-73	-----	-----	2.20	16.00	15.00	112	8.50	15.0	8.6	1.10	3.20
10-29-74	-----	-----	2.20	20.00	19.00	127	8.10	18.0	7.5	.10	4.00

BACTERIOLOGICAL DATA

[Number per 100 millilitre]

Date	Total coliform	Fecal coliform	Fecal streptococci
2-28-70	------	-----	-----
5-16-70	0	-----	0
10-26-70	4,250	-----	600
5-17-71	13,200	3,140	355
10-11-71	122,000	2,200	3,500
10-10-72	13,700	171	2,060
10- 5-73	21,670	1,240	360

STATION 24

U.S. Geological Survey station designation: 01476835
Name: Chester Creek at Westtown School
Latitude: 39°56'21" Longitude: 75°32'28"

Drainage area: 10.1 sq mi
Gages:

DISCHARGE, SEDIMENT, AND CHEMICAL DATA
[Results in milligrams per litre, except as noted]

Date	Discharge (cfs)	Sediment Concentration mg/l	Sediment Yield tons/day	Temperature (°C) Air	Temperature (°C) Water	pH	Specific conductance (micromhos at 25°C)	Chemical oxygen demand	Total PO_4 as P	Ortho PO_4 as P	Organic nitrogen as N
2-21-70	6.9	----	----	3.0	10.0	8.0	130	8.0	-----	0.095	----
5- 9-70	10.0	----	----	25.0	15.0	7.9	165	66.0	-----	.248	----
10-26-70	4.4	----	----	7.0	14.0	8.0	140	11.0	.049	.327	----
5-17-71	12.9	41.0	1.43	29.0	17.0	7.1	180	14.0	.160	.033	0.29
10-11-71	11.8	38.0	1.21	13.0	15.0	7.0	150	15.0	.193	.013	.70
10-10-72	7.8	5.0	.11	10.0	9.7	6.5	178	14.0	.230	.200	.18
10- 5-73	----	----	----	----	20.0	7.3	216	10.0	.510	.460	.74
10-29-74	----	----	----	----	13.5	6.8	235	----	.590	.480	.78

Date	NH_3 as N	NO_2 as N	NO_3 as N	SO_4	Cl	Dissolved solids	Na	Ca	Mg	Mn	K
2-21-70	-----	-----	2.20	22.50	20.00	146	11.24	12.8	5.3	----	2.60
5- 9-70	-----	-----	1.87	35.70	6.32	120	7.36	7.3	4.7	0.07	2.00
10-26-70	1.28	0.021	2.13	26.30	15.33	82	9.38	16.5	6.9	----	4.55
5-17-71	.32	.036	2.29	16.99	12.37	130	8.13	13.8	6.8	.28	3.20
10-11-71	.01	.026	1.38	19.18	11.78	129	6.95	14.3	4.5	.05	2.30
10-10-72	.01	.028	2.50	18.11	17.58	116	9.03	15.8	6.9	.11	2.68
10- 5-73	-----	-----	2.00	21.00	15.00	122	11.00	17.0	7.8	1.40	3.90
10-29-74	-----	-----	2.00	24.00	14.00	142	10.00	19.0	8.0	1.40	3.40

BACTERIOLOGICAL DATA

[Number per 100 millilitre]

Date	Total coliform	Fecal coliform	Fecal streptococci
2-21-70	20	-----	0
5- 9-70	0	-----	0
10-26-70	300,000	-----	625
5-17-71	20,400	3,000	750
10-11-71	348,000	7,200	12,000
10-10-72	28,000	400	660
10- 5-73	72,000	6,600	416

STATION 25

U.S. Geological Survey station designation: 01476840
Name: Goose Creek near West Chester
Latitude: 39° 56'01" Longitude: 75°33'31"

Drainage area: 4.3 sq mi
Gages:

DISCHARGE, SEDIMENT, AND CHEMICAL DATA
[Results in milligrams per litre, except as noted]

Date	Discharge (cfs)	Sediment Concentration mg/l	Sediment Yield tons/day	Temperature (°C) Air	Temperature (°C) Water	pH	Specific conductance (micromhos at 25°C)	Chemical oxygen demand	Total PO_4 as P	Ortho PO_4 as P	Organic nitrogen as N
3-14-70	9.1	-----	----	8.0	6.0	7.7	425	----	-----	-----	----
5- 1-70	13.8	-----	----	27.0	24.0	8.0	750	88.0	-----	4.314	----
10-26-70	2.0	-----	----	18.0	15.0	7.5	600	76.0	6.470	-----	0.02
5-17-71	----	273.0	----	28.0	18.0	7.6	980	53.0	2.320	2.255	1.03
10-11-71	----	18.0	----	15.0	15.0	7.6	460	41.0	.451	.346	1.68
10-10-72	----	-----	----	10.2	12.0	6.4	800	93.0	5.670	3.690	3.41
10- 5-73	----	-----	----	----	21.0	4.6	812	----	6.500	5.900	2.70
10-29-74	----	-----	----	----	16.0	7.3	700	----	6.300	5.100	4.80

Date	NH_3 as N	NO_2 as N	NO_3 as N	SO_4	Cl	Dissolved solids	Na	Ca	Mg	Mn	K
3-14-70	-----	-----	----	------	------	408	-----	----	----	----	-----
5- 1-70	-----	-----	3.82	------	95.90	425	61.12	19.2	10.2	0.10	1.00
10-26-70	3.69	0.638	5.50	102.50	107.82	487	66.52	38.6	12.1	.67	22.24
5-17-71	13.80	.182	5.87	72.88	58.62	144	42.50	36.3	12.7	.30	13.25
10-11-71	9.55	.240	3.95	59.73	40.77	315	27.70	42.0	14.7	.40	14.45
10-10-72	27.50	.535	2.30	110.30	97.71	462	57.80	32.2	11.3	.21	16.00
10- 5-73	-----	-----	7.00	94.00	110.00	382	76.00	38.0	13.0	2.90	26.00
10-29-74	-----	-----	7.90	99.00	150.00	564	100.00	44.0	14.0	.20	32.00

BACTERIOLOGICAL DATA

[Number per 100 millilitre]

Date	Total coliform	Fecal coliform	Fecal streptococci
3-14-70	------	-----	-----
5- 1-70	------	-----	6
10-26-70	4,800	-----	10
5-17-71	2,200	31	8
10-11-71	268,000	2,700	600
10-10-72	19,000	220	670

STATION 26

U.S. Geological Survey station designation: 01479800 Drainage area: 10.2 sq mi
Name: Red Clay Creek near Five Point Gages:
Latitude: 49°59'11" Longitude: 75°41'29"

DISCHARGE, SEDIMENT, AND CHEMICAL DATA

[Results in milligrams per litre, except as noted]

Date	Discharge (cfs)	Sediment Concentration mg/l	Sediment Yield tons/day	Temperature (°C) Air	Temperature (°C) Water	pH	Specific conductance (micromhos at 25°C)	Chemical oxygen demand	Total PO_4 as P	Ortho PO_4 as P	Organic nitrogen as N
6- 2-70	9.1	10.0	0.25	26.0	17.0	8.0	135	15.0	-----	0.013	----
10-27-70	4.6	----	----	13.0	11.0	8.1	170	60.0	.052	.026	0.01
5-18-71	13.1	14.0	.50	14.0	12.0	7.3	235	4.0	.072	.023	.24
10-12-71	11.9	6.0	.19	19.0	15.0	7.6	215	107.0	.101	.029	.94
10-17-72	8.0	5.0	.11	15.0	11.0	7.4	215	15.0	.070	.060	.26
10- 8-73	----	----	----	----	14.0	7.6	261	2.0	.030	.030	.80
10-30-74	----	----	----	----	11.0	7.0	260	-----	.030	.030	.49

Date	NH_3 as N	NO_2 as N	NO_3 as N	SO_4	Cl	Dissolved solids	Na	Ca	Mg	Mn	K
6- 2-70	-----	-----	2.23	-----	8.43	172	8.00	16.00	7.4	----	2.90
10-27-70	0.01	0.018	2.17	25.20	18.91	153	11.13	23.5	9.0	0.25	5.30
5-18-71	.07	.027	3.84	30.41	14.20	149	8.50	22.3	8.8	.30	4.50
10-12-71	.60	.016	3.25	29.87	12.03	178	7.50	21.8	8.2	.05	5.09
10-17-72	.02	.011	4.03	38.41	15.96	137	10.20	27.2	7.3	.05	3.00
10- 8-73	-----	-----	.70	27.00	17.00	144	12.00	21.0	9.6	.05	4.50
10-30-74	-----	-----	8.10	28.00	17.00	168	10.00	24.0	10.0	.02	3.20

BACTERIOLOGICAL DATA

[Number per 100 millilitre]

Date	Total coliform	Fecal coliform	Fecal streptococci
6- 2-70	-----	-----	-----
10-27-70	1,000	-----	285
5-18-71	38,000	850	320
10-12-71	68,000	3,900	3,200
10-17-72	3,700	533	660
10- 8-73	34,300	400	228

STATION 27

U.S. Geological Survey station designation: 01479780
Name: Red Clay Creek near Kennett Square
Latitude: 39°50'13" Longitude: 75°43'33"

Drainage area: 10.0 sq mi
Gages:

DISCHARGE, SEDIMENT, AND CHEMICAL DATA
[Results in milligrams per litre, except as noted]

Date	Discharge (cfs)	Sediment Concentration mg/l	Sediment Yield tons/day	Temperature (°C) Air	Temperature (°C) Water	pH	Specific conductance (micromhos at 25°C)	Chemical oxygen demand	Total PO_4 as P	Ortho PO_4 as P	Organic nitrogen as N
6- 2-70	11.6	5.0	0.16	27.0	20.0	7.5	150	10.0	-----	0.108	----
10-27-70	5.2	----	----	12.0	14.0	7.9	360	143.0	3.072	2.549	0.07
5-18-71	13.7	7.0	.26	18.0	5.0	7.6	215	4.0	.072	.023	.24
10-12-71	12.2	7.0	.23	10.0	12.0	7.5	225	569.0	.118	.033	.96
10-17-72	9.0	6.0	.15	17.0	11.5	7.5	215	12.0	.190	.140	.35
10- 8-73	----	----	----	----	15.0	7.4	257	4.0	.060	.050	.56
10-30-73	----	----	----	----	11.5	7.1	240	-----	.050	.030	.43

Date	NH_3 as N	NO_2 as N	NO_3 as N	SO_4	Cl	Dissolved solids	Na	Ca	Mg	Mn	K
6- 2-70	-----	-----	1.00	12.30	7.37	103	8.80	15.2	7.4	----	3.09
10-27-70	2.21	.228	1.81	52.30	32.70	361	19.50	33.0	15.1	0.42	18.90
5-18-71	-----	.015	3.67	43.29	10.99	166	7.88	18.3	8.8	.10	3.35
10-12-71	.59	.010	2.80	25.76	12.69	173	7.95	21.8	8.2	.09	5.85
10-17-72	.46	.019	3.83	27.71	14.42	130	9.68	23.4	9.7	.06	3.32
10- 8-73	-----	-----	1.00	20.00	15.00	134	9.50	21.0	10.0	.06	3.60
10-30-73	-----	-----	4.30	20.00	11.00	149	7.00	23.0	10.0	.03	2.80

BACTERIOLOGICAL DATA

[Number per 100 millilitre]

Date	Total coliform	Fecal coliform	Fecal streptococci
6- 2-70	------	------	------
10-27-70	300,000	------	190,000
5-18-71	38,000	27,600	320
10-12-71	58,000	1,600	1,380
10-17-72	35,000	9,800	1,560
10- 8-73	106,670	47,000	5,200

STATION 28

U.S. Geological Survey station designation: 01478120
Name: White Clay Creek near Avondale
Latitude: 39°49'39" Longitude: 75°46'52"

Drainage area: 10.3 sq mi
Gages:

DISCHARGE, SEDIMENT, AND CHEMICAL DATA

[Results in milligrams per litre, except as noted]

Date	Discharge (cfs)	Sediment Concentration mg/l	Sediment Yield tons/day	Temperature (°C) Air	Temperature (°C) Water	pH	Specific conductance (micromhos at 25°C)	Chemical oxygen demand	Total PO_4 as P	Ortho PO_4 as P	Organic nitrogen as N
6- 2-70	10.1	14.0	0.38	28.0	22.0	8.0	190	8.0	----	0.084	----
10-27-70	4.8	----	----	14.0	12.0	8.4	200	----	0.046	.033	0.03
5-18-71	12.4	11.0	.37	26.0	16.0	7.3	210	3.0	.056	.020	.03
10-12-71	10.1	4.0	.11	19.1	14.0	7.0	230	1.0	.114	.029	.66
10-17-72	8.3	5.0	.11	19.5	12.0	8.0	228	19.0	.080	.060	.16
10- 8-73	----	----	----	----	15.0	7.9	284	2.0	.090	.070	.43
10-30-74	----	----	----	----	11.5	7.1	293	----	.030	.020	.36

Date	NH_3 as N	NO_2 as N	NO_3 as N	SO_4	Cl	Dissolved solids	Na	Ca	Mg	Mn	K
6- 2-70	-----	-----	3.72	22.80	10.54	211	6.96	22.4	11.0	----	3.0
10-27-70	-----	0.021	2.51	31.50	16.86	144	6.63	22.2	10.6	0.25	3.65
5-18-71	-----	.009	4.23	24.11	11.45	58	6.25	26.3	11.7	.10	2.45
10-12-71	0.49	.006	3.45	23.84	12.88	199	6.60	28.8	12.2	.05	3.92
10-17-72	.01	.008	4.32	27.16	13.90	155	7.01	30.2	11.1	.05	2.40
10- 8-73	-----	-----	1.30	21.00	14.00	146	7.50	26.0	12.0	.02	2.70
10-30-74	-----	-----	4.50	23.00	13.00	173	6.20	29.0	12.0	.02	2.40

BACTERIOLOGICAL DATA

[Number per 100 millilitre]

Date	Total coliform	Fecal coliform	Fecal streptococci
6- 2-70	5,500	-----	12
10-27-70	900	-----	570
5-18-71	15,000	740	212
10-12-71	52,000	2,800	1,020
10-17-72	1,230	440	340
10- 8-73	16,000	360	440

STATION 29

U.S. Geological Survey station designation: 01478190 Drainage area: 10.0 sq mi
Name: White Clay Creek near Wickerton Gages:
Latitude: 39°47'44" Longitude: 75°49'27"

DISCHARGE, SEDIMENT, AND CHEMICAL DATA
[Results in milligrams per litre, except as noted]

Date	Discharge (cfs)	Sediment Concentration mg/l	Sediment Yield tons/day	Temperature (°C) Air	Temperature (°C) Water	pH	Specific conductance (micromhos at 25°C)	Chemical oxygen demand	Total PO_4 as P	Ortho PO_4 as P	Organic nitrogen as N
6- 2-70	9.2	16.0	0.40	29.0	22.0	7.2	110	4.0	-----	0.232	----
10-27-70	4.9	----	----	11.0	12.0	8.3	120	8.0	0.330	.290	0.04
5-18-71	11.7	6.0	.19	29.0	18.0	7.4	150	16.0	.183	.193	.08
10-12-71	10.3	5.0	.14	18.0	14.0	7.4	145	1.0	.206	.092	.76
10-17-72	8.8	3.0	.07	20.0	12.5	7.6	145	7.0	.570	.480	.37
10- 8-73	----	----	----	----	16.0	7.2	171	2.0	.020	.010	.66
10-30-74	----	----	----	----	12.5	7.0	180	----	.340	.290	.61

Date	NH_3 as N	NO_2 as N	NO_3 as N	SO_4	Cl	Dissolved solids	Na	Ca	Mg	Mn	K
6- 2-70	-----	-----	3.73	11.00	8.43	173	6.68	9.6	4.7	0	3.1
10-27-70	0.11	0.059	2.65	17.50	11.75	66	7.38	15.5	5.3	.45	3.75
5-18-71	.24	.042	3.75	25.21	9.62	87	6.50	12.3	5.5	.10	2.93
10-12-71	.96	.027	3.05	14.52	9.40	132	5.90	12.7	5.2	.05	4.32
10-17-72	.33	.121	4.77	18.38	11.84	85	8.65	13.0	5.7	.03	2.75
10- 8-73	-----	-----	.20	9.10	12.00	86	8.40	12.0	6.2	.03	3.00
10-30-74	-----	-----	4.20	13.00	12.00	113	7.50	13.0	5.5	.03	3.20

BACTERIOLOGICAL DATA

[Number per 100 millilitre]

Date	Total coliform	Fecal coliform	Fecal streptococci
6- 2-70	630	-----	16
10-27-70	1,300	-----	525
5-18-71	15,000	510	88
10-12-71	46,000	13,900	7,300
10-17-72	1,400	250	216
10- 8-73	9,375	225	200

STATION 30

U.S. Geological Survey station designation: 01478220
Name: West Branch White Clay Creek near Chesterville
Latitude: 39°45'56" Longitude: 75°47'47"

Drainage area: 10.0 sq mi
Gages:

DISCHARGE, SEDIMENT, AND CHEMICAL DATA

[Results in milligrams per litre, except as noted]

Date	Discharge (cfs)	Sediment Concentration mg/l	Sediment Yield tons/day	Temperature (°C) Air	Temperature (°C) Water	pH	Specific conductance (micromhos at 25°C)	Chemical oxygen demand	Total PO_4 as P	Ortho PO_4 as P	Organic nitrogen as N
6- 2-70	7.3	9.0	0.18	30.0	24.0	7.8	100	3.0	-----	0.131	----
10-27-70	3.9	----	----	13.0	11.0	7.3	90	4.0	0.009	.009	0.03
5-24-71	9.7	3.0	.08	22.0	18.0	7.3	130	8.0	.026	.003	.08
10-12-71	9.9	5.0	.13	19.0	15.0	7.4	115	30.0	.062	.009	.83
10-17-72	8.2	3.0	.07	23.0	13.5	7.8	100	14.0	.020	.020	.24
10- 8-73	----	----	----	----	17.5	7.1	124	2.0	.040	.020	.66
10-30-74	----	----	----	----	12.5	6.9	130	----	.020	.010	.53

Date	NH_3 as N	NO_2 as N	NO_3 as N	SO_4	Cl	Dissolved solids	Na	Ca	Mg	Mn	K
6- 2-70	-----	-----	2.44	18.90	7.37	94	6.60	6.8	3.1	----	2.55
10-27-70	0.13	0.009	1.86	15.60	12.26	50	6.63	9.0	3.5	0.50	4.25
5-24-71	-----	.003	2.78	13.42	9.06	64	6.75	9.0	3.6	.10	2.25
10-12-71	.52	.004	2.19	16.71	6.58	97	6.15	8.4	3.3	.05	3.62
10-17-72	.01	.001	3.42	17.56	8.76	62	5.98	8.7	3.4	.03	2.46
10- 8-73	-----	-----	2.30	10.00	11.00	69	6.50	9.0	3.9	.02	2.80
10-30-74	-----	-----	3.20	12.00	8.80	80	5.50	9.7	3.8	.04	2.60

BACTERIOLOGICAL DATA

[Number per 100 millilitre]

Date	Total coliform	Fecal coliform	Fecal streptococci
6- 2-70	22	-----	0
10-27-70	490	-----	125
5-24-71	2,000	200	130
10-12-71	29,000	1,100	2,200
10-17-72	600	84	148
10- 8-73	9,000	75	168

STATION 31

U.S. Geological Survey station designation: 01494900
Name: Elk Creek at Elkview
Latitude: 39°48'45" Longitude: 75°54'04"

Drainage area: 9.9 sq mi
Gages:

DISCHARGE, SEDIMENT, AND CHEMICAL DATA
[Results in milligrams per litre, except as noted]

Date	Discharge (cfs)	Sediment Concentration mg/l	Sediment Yield tons/day	Temperature (°C) Air	Temperature (°C) Water	pH	Specific conductance (micromhos at 25°C)	Chemical oxygen demand	Total PO_4 as P	Ortho PO_4 as P	Organic nitrogen as N
6- 3-70	9.1	7.0	0.17	24.0	19.0	7.0	75	8.0	-----	0.013	----
11- 3-70	5.1	----	----	16.0	11.0	6.8	60	10.0	0.016	.007	----
5-24-71	12.6	4.0	.14	21.0	17.0	7.2	115	8.0	.088	.039	0.28
10-18-71	11.5	2.0	.06	14.5	12.5	7.4	115	12.0	.049	.007	.33
10-23-72	7.2	----	----	6.5	8.5	6.5	105	1.0	.040	.030	.01
10- 9-73	----	----	----	----	15.0	7.1	107	2.0	.050	.040	.24
10-30-74	----	----	----	----	12.5	6.9	120	----	.090	.070	.54

Date	NH_3 as N	NO_2 as N	NO_3 as N	SO_4	Cl	Dissolved solids	Na	Ca	Mg	Mn	K
6- 3-70	-----	-----	2.63	13.40	5.29	157	7.20	19.4	3.7	----	3.08
11- 3-70	-----	0.006	1.86	36.40	7.70	91	5.00	6.5	3.1	0.25	4.25
5-24-71	0.20	.009	3.64	6.02	8.15	46	4.75	7.3	3.6	.13	3.66
10-18-71	.01	.006	3.70	2.74	6.10	64	4.95	10.5	3.3	.05	2.22
10-23-72	.05	.003	3.60	12.62	6.66	52	5.56	7.2	3.7	.04	2.19
10- 9-73	-----	-----	3.80	3.10	8.50	53	5.70	7.5	3.9	.02	2.10
10-30-74	-----	-----	3.80	5.00	8.50	71	5.00	8.5	3.6	.03	1.80

BACTERIOLOGICAL DATA

[Number per 100 millilitre]

Date	Total coliform	Fecal coliform	Fecal streptococci
6- 3-70	370	-----	10
11- 3-70	1,300	-----	200
5-24-71	670	90	265
10-18-71	44,000	340	170
10-23-72	933	152	200
10- 9-73	6,600	240	96

STATION 32

U.S. Geological Survey station designation: 01494950 Drainage area: 10.4 sq mi
Name: Elk Creek near Oxford Gages:
Latitude: 39°46'45" Longitude: 75°55'27"

DISCHARGE, SEDIMENT, AND CHEMICAL DATA
[Results in milligrams per litre, except as noted]

Date	Discharge (cfs)	Sediment Concentration mg/l	Sediment Yield tons/day	Temperature (°C) Air	Temperature (°C) Water	pH	Specific conductance (micromhos at 25°C)	Chemical oxygen demand	Total PO_4 as P	Ortho PO_4 as P	Organic nitrogen as N
6- 3-70	9.9	70.0	1.87	24.0	20.0	8.0	110	21.0	-----	0.013	----
11- 3-70	6.3	----	----	17.0	12.0	7.1	80	12.0	.150	.147	----
5-24-71	13.5	4.0	.15	22.0	17.0	7.5	120	26.0	.056	.020	0.05
10-18-71	11.8	4.0	.13	12.9	12.7	7.4	120	4.0	.108	.036	.72
10-23-72	7.2	----	----	11.6	9.0	7.2	110	5.0	.140	.110	.29
10- 9-73	----	----	----	----	15.0	7.3	140	2.0	.200	.190	.59
10-30-74	----	----	----	----	14.0	7.3	131	----	.180	.140	.56

Date	NH_3 as N	NO_2 as N	NO_3 as N	SO_4	Cl	Dissolved solids	Na	Ca	Mg	Mn	K
6- 3-70	-----	-----	2.87	2.70	7.37	138	6.00	6.6	3.9	0	4.08
11- 3-70	-----	0.027	2.22	18.40	9.75	101	6.50	7.8	3.4	0	2.83
5-24-71	0.15	.018	4.63	9.86	9.51	54	6.45	7.8	4.0	.10	2.35
10-18-71	.01	.011	4.00	6.30	10.16	64	6.70	8.7	3.5	.05	2.47
10-23-72	.06	.013	3.95	13.44	9.22	76	6.55	6.3	3.6	.04	2.08
10- 9-73	-----	-----	4.30	4.50	12.00	63	9.00	8.0	4.4	.02	2.40
10-30-74	-----	-----	4.70	5.00	11.00	77	6.00	8.0	3.9	.03	2.60

BACTERIOLOGICAL DATA

[Number per 100 millilitre]

Date	Total coliform	Fecal coliform	Fecal streptococci
6- 3-70	1,700	-----	0
11- 3-70	1,100	-----	115
5-24-71	95,000	3,600	3,500
10-18-71	14,000	460	380
10-23-72	2,100	225	176
10- 9-73	12,000	560	156

STATION 33

U.S. Geological Survey station designation: 01578340 Drainage area: 10.9 sq mi
Name: Octoraro Creek near Atglen Gages:
Latitude: 39°56'52" Longitude: 75°59'29"

DISCHARGE, SEDIMENT, AND CHEMICAL DATA
[Results in milligrams per litre, except as noted]

Date	Discharge (cfs)	Sediment Concentration mg/l	Sediment Yield tons/day	Temperature (°C) Air	Temperature (°C) Water	pH	Specific conductance (micromhos at 25°C)	Chemical oxygen demand	Total PO_4 as P	Ortho PO_4 as P	Organic nitrogen as N
6- 8-70	8.5	21.0	0.48	22.0	14.0	7.8	100	21.0	-----	0.023	----
11- 3-70	19.9	----	----	11.0	11.0	7.2	160	10.0	0.009	.009	----
5-24-71	13.7	12.0	.44	17.0	12.0	7.1	195	14.0	.049	.006	0.24
10-18-71	12.7	5.0	.17	12.8	12.9	7.6	195	13.0	.137	.052	1.48
10-23-72	8.3	----	----	13.5	9.7	7.3	180	1.0	.040	.020	.38
10- 9-73	----	----	----	----	15.5	7.2	221	3.0	.090	.060	.32
10-30-74	----	----	----	----	14.0	7.0	230	----	.040	.030	.56

Date	NH_3 as N	NO_2 as N	NO_3 as N	SO_4	Cl	Dissolved solids	Na	Ca	Mg	Mn	K
6- 8-70	-----	-----	4.74	32.40	10.54	170	6.48	15.3	6.2	----	3.58
11- 3-70	-----	0.015	3.91	27.90	13.85	138	7.50	16.0	6.8	----	3.61
5-24-71	0.31	.018	6.09	23.56	8.15	107	6.88	16.3	7.8	0.10	2.47
10-18-71	.01	.013	6.88	20.55	10.16	115	7.25	17.3	7.7	.05	3.25
10-23-72	.03	.017	6.08	34.02	12.29	141	7.51	15.0	7.6	.03	2.96
10- 9-73	-----	-----	6.30	24.00	14.00	110	8.00	17.0	8.3	.02	3.10
10-30-74	-----	-----	6.10	25.00	13.00	138	6.50	18.0	7.8	.03	3.10

BACTERIOLOGICAL DATA

[Number per 100 millilitre]

Date	Total coliform	Fecal coliform	Fecal streptococci
6- 8-70	10,000	-----	35
11- 3-70	8,600	-----	600
5-24-71	17,000	3,900	320
10-18-71	136,000	6,300	2,300
10-23-72	8,330	1,120	860
10- 9-73	>80,000	22,300	900

STATION 34

U.S. Geological Survey station designation: 01478343
Name: Valley Creek near Atglen
Latitude: 39°56'17" Longitude: 75°59'06"

Drainage area: 10.0 sq mi
Gages:

DISCHARGE, SEDIMENT, AND CHEMICAL DATA
[Results in milligrams per litre, except as noted]

Date	Discharge (cfs)	Sediment Concentration mg/l	Sediment Yield tons/day	Temperature (°C) Air	Temperature (°C) Water	pH	Specific conductance (micromhos at 25°C)	Chemical oxygen demand	Total PO_4 as P	Ortho PO_4 as P	Organic nitrogen as N
6- 8-70	9.1	24.0	0.59	23.0	17.0	7.9	145	----	-----	-----	----
11- 3-70	5.4	----	----	13.0	11.0	7.1	180	7.0	0.154	0.160	----
5-24-71	9.8	8.0	.21	19.0	14.0	7.4	200	22.0	.059	.023	0.11
10-18-71	10.1	11.0	.30	15.0	13.0	7.7	202	8.0	.176	.108	.60
10-23-72	7.8	----	----	17.3	9.5	7.9	200	12.0	.200	.180	.19
10- 9-73	----	----	----	----	16.0	7.5	222	2.0	.110	.100	.21
10-30-74	----	----	----	----	14.0	7.1	250	----	.130	.110	.51

Date	NH_3 as N	NO_2 as N	NO_3 as N	SO_4	Cl	Dissolved solids	Na	Ca	Mg	Mn	K
6- 8-70	-----	-----	----	-----	-----	---	----	----	---	----	----
11- 3-70	-----	0.030	3.43	24.90	11.80	161	6.50	22.0	6.5	0	3.35
5-24-71	0.25	.012	5.22	21.37	8.61	115	5.88	19.8	7.0	.10	2.10
10-18-71	.01	.016	6.09	16.44	11.18	111	5.75	21.0	7.0	.05	2.60
10-23-72	.02	.020	5.28	29.35	13.31	131	8.42	17.9	6.6	.02	2.68
10- 9-73	-----	-----	5.40	18.00	14.00	108	8.20	20.0	7.4	.01	2.80
10-30-74	-----	-----	5.20	21.00	15.00	143	6.90	24.0	7.2	.01	2.70

BACTERIOLOGICAL DATA

[Number per 100 millilitre]

Date	Total coliform	Fecal coliform	Fecal streptococci
6- 8-70	------	-----	-----
11- 3-70	1,250	-----	120
5-24-71	20,700	1,100	270
10-18-71	56,000	1,200	330
10-23-72	150	64	64
10- 9-73	8,000	800	240

STATION 35

U.S. Geological Survey station designation: 01578345
Name: Octoraro Creek near Steelville
Latitude: 39°54'44" Longitude: 75°59'44"

Drainage area: 31.0 sq mi
Gages:

DISCHARGE, SEDIMENT, AND CHEMICAL DATA
[Results in milligrams per litre, except as noted]

Date	Discharge (cfs)	Sediment Concentration mg/l	Sediment Yield tons/day	Temperature (°C) Air	Temperature (°C) Water	pH	Specific conductance (micromhos at 25°C)	Chemical oxygen demand	Total PO_4 as P	Ortho PO_4 as P	Organic nitrogen as N
6- 8-70	27.2	24.0	1.76	24.0	17.0	7.3	140	4.0	-----	0.007	----
11- 3-70	16.7	----	----	12.0	11.0	7.1	160	11.0	0.261	.248	0.02
5-24-71	39.6	14.0	1.50	19.0	14.0	7.2	190	17.0	.118	.052	----
10-18-71	36.2	3.0	.29	14.2	13.8	7.5	195	4.0	.160	.088	.50
10-23-72	24.2	----	----	21.5	11.0	7.9	185	6.0	.190	.160	.41
10- 9-73	----	----	----	----	16.5	7.4	219	3.0	.210	.190	.30
10-30-74	----	----	----	----	13.0	7.1	245	----	.100	.090	.59

Date	NH_3 as N	NO_2 as N	NO_3 as N	SO_4	Cl	Dissolved solids	Na	Ca	Mg	Mn	K
6- 8-70	-----	-----	3.95	24.70	4.22	196	7.68	19.8	5.5	0	2.7
11- 3-70	-----	0.021	3.20	18.40	12.83	149	7.76	19.5	6.0	0	3.4
5-24-71	0.10	.030	4.40	24.66	9.06	114	6.45	16.3	6.4	.1	2.15
10-18-71	.01	.019	6.30	16.44	13.21	102	6.50	17.6	6.5	.05	2.82
10-23-72	.05	.030	4.94	24.69	13.56	140	8.05	14.6	6.2	.04	2.83
10- 9-73	-----	-----	5.40	21.00	14.00	110	10.00	19.0	7.2	.01	3.00
10-30-74	-----	-----	4.30	23.00	20.00	144	7.50	21.0	7.0	.01	2.80

BACTERIOLOGICAL DATA

[Number per 100 millilitre]

Date	Total coliform	Fecal coliform	Fecal streptococci
6- 8-70	14	-----	6
11- 3-70	13,450	-----	250
5-24-71	7,300	-----	70
10-18-71	134,000	-----	100
10-23-72	3,100	460	236
10- 9-73	7,000	1,300	214

STATION 36

U.S. Geological Survey station designation: 01480700
Name: East Branch Brandywine Creek near Downingtown
Latitude: 40°02'05" Longitude: 75°42'32"

Drainage area: 60.6 sq mi
Gages: Surface water recorder, wire weight

DISCHARGE, SEDIMENT, AND CHEMICAL DATA
[Results in milligrams per litre, except as noted]

Date	Discharge (cfs)	Sediment Concentration mg/l	Sediment Yield tons/day	Temperature (°C) Air	Temperature (°C) Water	pH	Specific conductance (micromhos at 25°C)	Chemical oxygen demand	Total PO_4 as P	Ortho PO_4 as P	Organic nitrogen as N
11-11-70	45.4	8.0	0.98	17.0	11.0	6.9	100	10.0	0.016	0.009	----
5-25-71	64.0	3.0	.52	19.0	16.0	7.0	150	19.0	.023	.003	----
10-19-71	73.0	4.0	.79	6.9	10.2	7.4	150	12.0	.039	.013	0.47
10- 2-72	67.6	4.0	.73	12.0	10.5	6.8	150	1.0	.030	.010	.31
10-10-73	----	----	----	----	17.0	7.3	163	3.0	.010	.000	.49
10-29-74	----	----	----	----	9.5	6.9	90	----	.020	.010	.45

Date	NH_3 as N	NO_2 as N	NO_3 as N	SO_4	Cl	Dissolved solids	Na	Ca	Mg	Mn	K
11-11-70	-----	0.003	0.88	17.50	16.93	111	7.63	13.3	4.8	0.25	5.95
5-25-71	0.06	0.003	2.03	20.82	10.87	92	7.75	12.0	4.6	.10	1.55
10-19-71	.01	.003	2.44	21.92	12.12	110	7.10	12.0	4.4	.05	2.07
10- 2-72	.06	.004	2.10	30.18	11.91	81	6.12	14.3	4.3	.08	1.92
10-10-73	-----	-----	1.80	13.00	13.00	91	7.50	14.0	5.1	.02	2.20
10-29-74	-----	-----	1.40	15.00	13.00	109	7.50	14.0	5.0	.14	2.00

BACTERIOLOGICAL DATA

[Number per 100 millilitre]

Date	Total coliform	Fecal coliform	Fecal streptococci
11-11-70	22,000	-----	270
5-25-71	11,000	1,750	235
10-19-71	18,600	400	120
10- 2-72	15,700	410	1,160
10-10-73	15,300	460	276

STATION 37

U.S. Geological Survey station designation: 01480430
Name: West Branch Brandywine Creek near Coatsville
Latitude: 40°00'17" Longitude: 75°49'31"

Drainage area: 35.5 sq mi
Gages:

DISCHARGE, SEDIMENT, AND CHEMICAL DATA
[Results in milligrams per litre, except as noted]

Date	Discharge (cfs)	Sediment Concentration mg/l	Sediment Yield tons/day	Temperature (°C) Air	Temperature (°C) Water	pH	Specific conductance (micromhos at 25°C)	Chemical oxygen demand	Total PO_4 as P	Ortho PO_4 as P	Organic nitrogen as N
11-11-70	27.7	8.0	0.60	18.0	11.0	6.9	129	13.0	0.039	0.039	----
5-25-71	50.4	11.0	1.50	23.0	18.0	7.2	160	17.0	.049	.003	0.04
10-19-71	48.6	3.1	.41	11.5	12.0	7.5	155	24.0	.049	.020	.58
10- 2-72	17.10	6.0	.28	12.5	10.5	7.0	145	7.0	.030	.010	.17
10-10-73	----	----	----	----	17.0	7.6	157	4.0	.020	.010	.47
10-29-74	----	----	----	----	8.0	6.8	174	----	.020	.010	.38

Date	NH_3 as N	NO_2 as N	NO_3 as N	SO_4	Cl	Dissolved solids	Na	Ca	Mg	Mn	K
11-11-70	-----	0.009	1.85	20.80	11.80	122	6.50	12.8	5.5	0	4.45
5-25-71	0.14	.003	2.33	21.92	8.61	57	6.10	12.0	5.7	.1	1.83
10-19-71	.01	.001	2.78	21.37	13.05	117	6.55	13.2	5.7	.09	2.38
10- 2-72	.01	.003	2.02	29.08	10.88	85	5.43	14.5	5.6	.08	1.89
10-10-73	-----	-----	2.10	13.00	12.00	89	8.00	13.0	5.8	.05	2.60
10-29-74	-----	-----	2.10	15.00	13.00	115	6.30	16.0	6.2	.03	2.40

BACTERIOLOGICAL DATA

[Number per 100 millilitre]

Date	Total coliform	Fecal coliform	Fecal streptococci
11-11-70	1,900	-----	100
5-25-71	5,500	390	97
10-19-71	12,600	80	80
10- 2-72	12,700	92	740
10-10-73	60,000	1,900	1,480

STATION 38

U.S. Geological Survey station designation: 01480640
Name: West Branch Brandywine Creek at Wawaset
Latitude: 39°55'30" Longitude: 75°39'49"

Drainage area: 135.0 sq mi
Gages:

DISCHARGE, SEDIMENT, AND CHEMICAL DATA
[Results in milligrams per litre, except as noted]

Date	Discharge (cfs)	Sediment Concentration mg/l	Sediment Yield tons/day	Temperature (°C) Air	Temperature (°C) Water	pH	Specific conductance (micromhos at 25°C)	Chemical oxygen demand	Total PO_4 as P	Ortho PO_4 as P	Organic nitrogen as N
11-11-70	116.1	10.0	3.13	18.0	13.0	7.6	155	11.0	0.206	0.212	----
5-25-71	111.4	18.0	5.41	27.0	19.0	7.2	180	3.0	.203	.105	0.01
10-19-71	283.6	3.0	2.30	20.8	14.0	7.8	175	16.0	.196	.134	.44
10- 2-72	64.8	5.0	.87	13.8	13.0	6.6	184	1.0	.290	.260	.19
10-10-73	-----	----	----	----	16.5	7.5	210	4.0	.250	.250	.83
10-29-74	-----	----	----	----	11.0	7.0	201	----	.190	.170	.52

Date	NH_3 as N	NO_2 as N	NO_3 as N	SO_4	Cl	Dissolved solids	Na	Ca	Mg	Mn	K
11-11-70	-----	0.027	2.50	18.60	15.39	13	9.38	17.0	6.5	0.25	4.10
5-25-71	0.03	.033	3.36	21.92	11.33	93	8.63	14.8	6.4	.10	2.15
10-19-71	.01	.027	3.91	22.47	13.05	115	7.95	14.7	6.2	.05	2.68
10- 2-72	.04	.035	3.50	34.02	15.02	118	8.96	17.9	6.3	.08	2.54
10-10-73	-----	-----	2.90	18.00	15.00	109	11.00	17.0	7.2	.06	3.00
10-29-74	-----	-----	2.90	20.00	19.00	135	11.00	20.0	7.3	.03	3.20

BACTERIOLOGICAL DATA

[Number per 100 millilitre]

Date	Total coliform	Fecal coliform	Fecal streptococci
11-11-70	1,950	-----	30
5-25-71	6,800	620	146
10-19-71	48,000	300	120
10- 2-72	14,300	250	352
10-10-73	26,300	720	240

STATION 39

U.S. Geological Survey station designation: 01480950 Drainage area: 124.0 sq mi
Name: East Branch Brandywine Creek at Wawaset Gages:
Latitude: 39°55'27" Longitude: 75°38'56"

DISCHARGE, SEDIMENT, AND CHEMICAL DATA
[Results in milligrams per litre, except as noted]

Date	Discharge (cfs)	Sediment Concentration mg/l	Sediment Yield tons/day	Temperature (°C) Air	Temperature (°C) Water	pH	Specific conductance (micromhos at 25°C)	Chemical oxygen demand	Total PO_4 as P	Ortho PO_4 as P	Organic nitrogen as N
11-11-70	106.6	13.0	3.74	18.0	14.0	9.7	200	11.0	0.337	0.327	----
5-25-71	131.4	10.0	3.55	24.0	19.0	7.6	195	36.0	.219	.141	0.09
10-19-71	108.8	3.0	.88	20.5	14.5	7.8	215	50.0	.265	.144	.71
10- 2-72	92.0	3.0	.75	24.5	15.0	6.9	232	15.0	.550	.540	.76
10-10-73	-----	----	----	----	16.5	7.5	265	6.0	.640	.640	.78
10-29-74	-----	----	----	----	12.0	7.1	162	---	.530	.430	.84

Date	NH_3 as N	NO_2 as N	NO_3 as N	SO_4	Cl	Dissolved solids	Na	Ca	Mg	Mn	K
11-11-70	-----	0.060	1.43	28.80	18.47	188	13.00	22.2	8.6	0	3.65
5-25-71	0.37	.024	3.01	30.41	13.59	130	11.30	19.3	8.2	.10	1.90
10-19-71	.01	.017	3.86	26.58	13.98	165	8.75	18.5	8.4	.05	2.20
10- 2-72	.40	.114	2.80	45.26	19.68	149	13.20	24.5	8.3	.08	2.63
10-10-73	-----	-----	2.00	24.00	18.00	145	17.00	21.0	9.1	.08	3.10
10-29-74	-----	-----	1.70	27.00	19.00	177	15.00	25.0	10.0	.08	3.10

BACTERIOLOGICAL DATA

[Number per 100 millilitre]

Date	Total coliform	Fecal coliform	Fecal streptococci
11-11-70	2,650	-----	305
5-25-71	2,600	200	130
10-19-71	5,000	100	120
10- 2-72	41,000	150	204
10-10-73	23,000	760	220

STATION 40

U.S. Geological Survey station designation: 01481000
Name: Brandywine Creek at Chadds Ford
Latitude: 39°52'11" Longitude: 75°35'37"

Drainage area: 287.2 sq mi
Gages: Surface water recorder, wire weight, continuous water quality monitor

DISCHARGE, SEDIMENT, AND CHEMICAL DATA
[Results in milligrams per litre, except as noted]

Date	Discharge (cfs)	Sediment Concentration mg/l	Sediment Yield tons/day	Temperature (°C) Air	Temperature (°C) Water	pH	Specific conductance (micromhos at 25°C)	Chemical oxygen demand	Total PO_4 as P	Ortho PO_4 as P	Organic nitrogen as N
11-11-70	248.4	21.0	14.08	18.0	14.0	7.3	185	13.0	0.301	0.297	----
5-25-71	261.3	10.0	7.06	25.0	19.0	7.6	195	13.0	.173	.111	----
10-19-71	505.0	----	-----	21.0	14.7	7.9	315	4.0	.196	.124	0.60
10- 2-72	168.6	6.0	2.73	23.0	16.0	6.9	195	6.0	.330	.300	.47
10-10-73	-----	----	-----	----	16.0	7.5	233	6.0	.380	.370	.73
10-30-74	-----	----	-----	----	11.0	6.8	245	----	.280	.240	.60

Date	NH_3 as N	NO_2 as N	NO_3 as N	SO_4	Cl	Dissolved solids	Na	Ca	Mg	Mn	K
11-11-70	-----	0.055	1.90	23.60	16.42	156	12.63	20.5	7.4	0	4.25
5-25-71	0.26	.027	2.68	24.66	11.33	111	8.50	15.3	6.8	.10	2.14
10-19-71	.01	.020	3.23	24.66	9.32	116	8.05	17.3	6.9	.05	2.47
10- 2-72	.09	.047	2.68	38.16	15.54	122	10.00	20.1	7.1	.08	2.55
10-10-73	-----	-----	2.50	22.00	16.00	127	13.00	19.0	8.2	.06	3.20
10-30-74	-----	-----	2.30	23.00	17.00	150	12.00	20.0	8.0	.08	3.10

BACTERIOLOGICAL DATA

[Number per 100 millilitre]

Date	Total coliform	Fecal coliform	Fecal streptococci
11-11-70	2,750	-----	300
5-25-71	2,200	400	77
10-19-71	14,600	30	180
10- 2-72	17,300	217	144
10-10-73	23,000	760	220

STATION 41

U.S. Geological Survey station designation: 01472126
Name: French Creek near Trythall
Latitude: 40°12'00" Longitude: 75°45'53"

Drainage area: 4.5 sq mi
Gages:

DISCHARGE, SEDIMENT, AND CHEMICAL DATA
[Results in milligrams per litre, except as noted]

Date	Discharge (cfs)	Sediment Concentration mg/l	Sediment Yield tons/day	Temperature (°C) Air	Temperature (°C) Water	pH	Specific conductance (micromhos at 25°C)	Chemical oxygen demand	Total PO_4 as P	Ortho PO_4 as P	Organic nitrogen as N
10- 3-73	----	----	----	----	17.5	6.3	80	4	0.03	0.01	0.26
10-24-74	----	----	----	----	11.0	8.4	45	--	.02	.01	.20

Date	NH_3 as N	NO_2 as N	NO_3 as N	SO_4	Cl	Dissolved solids	Na	Ca	Mg	Mn	K
10- 3-73	-----	-----	0.02	6.4	2.7	43	3.50	6.0	2.2	0.07	1.0
10-24-74	-----	-----	.11	6.7	2.3	56	2.80	6.5	2.2	0.08	.7

BACTERIOLOGICAL DATA

[Number per 100 millilitre]

Date	Total coliform	Fecal coliform	Fecal streptococci
10- 3-73	8,300	310	104

STATION 42

U.S. Geological Survey station designation: 01480655
Name: East Branch Brandywine Creek near Glenmore
Latitude: 40°05'44" Longitude: 75°46'43"

Drainage area: 13.3 sq mi
Gages:

DISCHARGE, SEDIMENT, AND CHEMICAL DATA
[Results in milligrams per litre, except as noted]

Date	Discharge (cfs)	Sediment Concentration mg/l	Sediment Yield tons/day	Temperature (°C) Air	Temperature (°C) Water	pH	Specific conductance (micromhos at 25°C)	Chemical oxygen demand	Total PO_4 as P	Ortho PO_4 as P	Organic nitrogen as N
10-11-73	-----	----	----	----	14.0	7.8	165	5	0.03	0.01	.59
10-25-74	-----	----	----	----	9.0	7.8	156	--	.02	.01	.61

Date	NH_3 as N	NO_2 as N	NO_3 as N	SO_4	Cl	Dissolved solids	Na	Ca	Mg	Mn	K
10-11-73	-----	-----	2.2	10	8.8	89	7.00	14.0	5.1	0.00	2.3
10-25-74	-----	-----	2.7	9.6	8.6	106	6.00	17.0	5.0	0.02	1.4

BACTERIOLOGICAL DATA

[Number per 100 millilitre]

Date	Total coliform	Fecal coliform	Fecal streptococci
10-11-73	24,000	400	208

STATION 43

U.S. Geological Survey station designation: 01480647
Name: East Branch Brandywine Creek near Struble Dam
Latitude: 40°06'05" Longitude: 75°51'40"

Drainage area: 4.3 sq mi
Gages:

DISCHARGE, SEDIMENT, AND CHEMICAL DATA
[Results in milligrams per litre, except as noted]

Date	Discharge (cfs)	Sediment Concentration mg/l	Sediment Yield tons/day	Temperature (°C) Air	Temperature (°C) Water	pH	Specific conductance (micromhos at 25°C)	Chemical oxygen demand	Total PO_4 as P	Ortho PO_4 as P	Organic nitrogen as N
10-11-73	-----	----	----	----	15.0	7.8	200	6	0.04	0.01	1.18
10-25-74	-----	----	----	----	10.5	7.3	192	--	.07	.04	.56

Date	NH_3 as N	NO_2 as N	NO_3 as N	SO_4	Cl	Dissolved solids	Na	Ca	Mg	Mn	K
10-11-73	-----	-----	2.70	11.0	11.0	95	6.50	17.0	6.8	2.0	3.5
10-25-74	-----	-----	0.63	12.0	13.0	134	7.20	19.0	6.2	0.1	1.8

BACTERIOLOGICAL DATA

[Number per 100 millilitre]

Date	Total coliform	Fecal coliform	Fecal streptococci
10-11-73	69,000	5,300	660

STATION 44

U.S. Geological Survey station designation: 01480903
Name: Valley Creek at Millsteins Meadows
Latitude: 39°58'31" Longitude: 85°39'48"

Drainage area: 20.4 sq mi
Gages:

DISCHARGE, SEDIMENT, AND CHEMICAL DATA
[Results in milligrams per litre, except as noted]

Date	Discharge (cfs)	Sediment Concentration mg/l	Sediment Yield tons/day	Temperature (°C) Air	Temperature (°C) Water	pH	Specific conductance (micromhos at 25°C)	Chemical oxygen demand	Total PO_4 as P	Ortho PO_4 as P	Organic nitrogen as N
10-12-73	-----	----	----	----	13.0	7.8	320	6	0.34	0.35	0.58

Date	NH_3 as N	NO_2 as N	NO_3 as N	SO_4	Cl	Dissolved solids	Na	Ca	Mg	Mn	K
10-12-73	-----	-----	3.2	25.0	18.0	162	12.00	29.0	14	0	2.5

BACTERIOLOGICAL DATA

[Number per 100 millilitre]

Date	Total coliform	Fecal coliform	Fecal streptococci
10-12-73	14,000	245	76

STATION 45

U.S. Geological Survey station designation: 01480632
Name: Doe Run near Springdale
Latitude: 39°54'21" Longitude: 75°49'42"

Drainage area: 12.7 sq mi
Gages:

DISCHARGE, SEDIMENT, AND CHEMICAL DATA
[Results in milligrams per litre, except as noted]

Date	Discharge (cfs)	Sediment Concentration mg/l	Sediment Yield tons/day	Temperature (°C) Air	Temperature (°C) Water	pH	Specific conductance (micromhos at 25°C)	Chemical oxygen demand	Total PO_4 as P	Ortho PO_4 as P	Organic nitrogen as N
10-10-73	-----	----	----	----	16.5	7.6	140	3	0.02	0.00	0.58
10-29-74	-----	----	----	----	11.0	6.9	121	--	.01	.01	.41

Date	NH_3 as N	NO_2 as N	NO_3 as N	SO_4	Cl	Dissolved solids	Na	Ca	Mg	Mn	K
10-10-73	-----	-----	5.1	6.8	9.7	59	4.80	10.0	4.4	0.02	1.9
10-29-74	-----	-----	3.2	6.1	10.0	88	4.20	10.0	4.2	0.00	1.6

BACTERIOLOGICAL DATA

[Number per 100 millilitre]

Date	Total coliform	Fecal coliform	Fecal streptococci
10-10-73	35,000	1,740	540

STATION 46

U.S. Geological Survey station designation: 01480629
Name: Buck Run near Doe Run
Latitude: 39°55'45" Longitude: 75°49'47"

Drainage area: 44.1 sq mi
Gages:

DISCHARGE, SEDIMENT, AND CHEMICAL DATA
[Results in milligrams per litre, except as noted]

Date	Discharge (cfs)	Sediment Concentration mg/l	Sediment Yield tons/day	Temperature (°C) Air	Temperature (°C) Water	pH	Specific conductance (micromhos at 25°C)	Chemical oxygen demand	Total PO_4 as P	Ortho PO_4 as P	Organic nitrogen as N
10-10-73	-----	----	----	----	16.5	7.6	210	3	0.24	0.23	0.57
10-29-74	-----	----	----	----	9.5	6.9	197	--	.15	.13	.63

Date	NH_3 as N	NO_2 as N	NO_3 as N	SO_4	Cl	Dissolved solids	Na	Ca	Mg	Mn	K
10-10-73	-----	-----	7.5	16	16	94	9.00	17.0	6.3	0.04	2.6
10-29-74	-----	-----	3.8	15	16	123	8.10	17.0	6.2	.06	2.0

BACTERIOLOGICAL DATA

[Number per 100 millilitre]

Date	Total coliform	Fecal coliform	Fecal streptococci
10-10-73	21,000	580	200

STATION 47

U.S. Geological Survey station designation: 01480656 Drainage area: 4.1 sq mi
Name: Indian Creek near Springton Gages:
Latitude: 40°04'30" Longitude: 75°46'57"

DISCHARGE, SEDIMENT, AND CHEMICAL DATA
[Results in milligrams per litre, except as noted]

Date	Discharge (cfs)	Sediment Concentration mg/l	Sediment Yield tons/day	Temperature (°C) Air	Temperature (°C) Water	pH	Specific conductance (micromhos at 25°C)	Chemical oxygen demand	Total PO_4 as P	Ortho PO_4 as P	Organic nitrogen as N
10-11-73	-----	----	----	----	12.5	7.7	160	3	0.02	0.01	0.48
10-25-74	-----	----	----	----	9.5	7.7	80	--	.04	.03	.46

Date	NH_3 as N	NO_2 as N	NO_3 as N	SO_4	Cl	Dissolved solids	Na	Ca	Mg	Mn	K
10-11-73	-----	-----	5.78	7.4	8.1	91	7.50	15.0	4.0	0.01	1.6
10-25-74	-----	-----	2.70	7.9	7.3	130	7.10	16.0	4.0	.00	1.0

BACTERIOLOGICAL DATA

[Number per 100 millilitre]

Date	Total coliform	Fecal coliform	Fecal streptococci
10-11-73	7,670	80	136

STATION 48

U.S. Geological Survey station designation: 01480648
Name: East Branch Brandywine Creek near Cupola
Latitude: 40°05'41" Longitude: 75°51'14"

Drainage area: 5.8 sq mi
Gages:

DISCHARGE, SEDIMENT, AND CHEMICAL DATA
[Results in milligrams per litre, except as noted]

Date	Discharge (cfs)	Sediment Concentration mg/l	Sediment Yield tons/day	Temperature (°C) Air	Temperature (°C) Water	pH	Specific conductance (micromhos at 25°C)	Chemical oxygen demand	Total PO_4 as P	Ortho PO_4 as P	Organic nitrogen as N
10-11-73	-----	----	----	----	16.5	7.7	185	8	0.04	0.01	0.87
10-25-74	-----	----	----	----	9.5	8.1	161	--	.04	.02	.54

Date	NH_3 as N	NO_2 as N	NO_3 as N	SO_4	Cl	Dissolved solids	Na	Ca	Mg	Mn	K
10-11-73	-----	-----	5.7	10.0	9.9	94	7.00	16.0	6.0	0.09	2.9
10-25-74	-----	-----	3.4	9.3	9.2	129	7.10	17.0	5.1	.07	1.7

BACTERIOLOGICAL DATA

[Number per 100 millilitre]

Date	Total coliform	Fecal coliform	Fecal streptococci
10-11-73	28,000	1,880	940

STATION 49

U.S. Geological Survey station designation: 01473167
Name: Little Valley Creek near Valley Forge
Latitude: 40°03'51" Longitude: 75°28'22"

Drainage area: 7.1 sq mi
Gages:

DISCHARGE, SEDIMENT, AND CHEMICAL DATA
[Results in milligrams per litre, except as noted]

Date	Discharge (cfs)	Sediment Concentration mg/l	Sediment Yield tons/day	Temperature (°C) Air	Temperature (°C) Water	pH	Specific conductance (micromhos at 25°C)	Chemical oxygen demand	Total PO_4 as P	Ortho PO_4 as P	Organic nitrogen as N
10-12-73	-----	----	----	----	11.5	7.9	520	3	0.22	0.19	0.36
10-23-74	-----	----	----	----	6.5	7.7	350	--	.19	.17	1.12

Date	NH_3 as N	NO_2 as N	NO_3 as N	SO_4	Cl	Dissolved solids	Na	Ca	Mg	Mn	K
10-12-73	-----	-----	5.1	39	47	272	28.00	49.0	17	0.06	3.1
10-23-74	-----	-----	3.1	38	47	297	27.00	51.0	18	.03	2.4

BACTERIOLOGICAL DATA

[Number per 100 millilitre]

Date	Total coliform	Fecal coliform	Fecal streptococci
10-12-73	49,000	760	184

STATION 50

U.S. Geological Survey station designation: 01473168
Name: Valley Creek near Valley Forge
Latitude: 40°04'08" Longitude: 75°28'25"

Drainage area: 12.1 sq mi
Gages:

DISCHARGE, SEDIMENT, AND CHEMICAL DATA
[Results in milligrams per litre, except as noted]

Date	Discharge (cfs)	Sediment Concentration mg/l	Sediment Yield tons/day	Temperature (°C) Air	Temperature (°C) Water	pH	Specific conductance (micromhos at 25°C)	Chemical oxygen demand	Total PO_4 as P	Ortho PO_4 as P	Organic nitrogen as N
10-12-73	-----	----	----	----	12.0	8.4	520	6	0.04	0.01	0.26
10-23-74	-----	----	----	----	7.0	7.5	355	--	.08	.04	1.11

Date	NH_3 as N	NO_2 as N	NO_3 as N	SO_4	Cl	Dissolved solids	Na	Ca	Mg	Mn	K
10-12-73	-----	----	1.6	33	30	241	20.00	30.0	30	0.03	3.0
10-23-74	-----	----	2.0	34	29	250	20.00	30.0	28	.02	2.2

BACTERIOLOGICAL DATA

[Number per 100 millilitre]

Date	Total coliform	Fecal coliform	Fecal streptococci
10-12-73	28,000	425	224

Table 3.--Taxonomic list of benthic invertebrates collected in Chester County, Pennsylvania (Spring 1970 - Fall 1974)

Station 1.--Pickering Creek near Eagle, Pa.

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Spring 1970	Ephemeroptera		
	Baetis	3	5.0
	Centroptilum	1	2.0
	Ephemerella	17	28.0
	Tricoptera		
	Chimarra	1	2.0
	Hydropsyche	38	63.0
		60	100.0
Fall 1970	Diptera		
	Simuliidae	10	6.0
	Ephemeroptera		
	Baetis	38	24.0
	Tricoptera		
	Cheumatopsyche	26	16.0
	Hydropsyche	45	28.0
	Psychomyia	42	26.0
		161	100.0
Spring 1971	Diptera		
	Antocha	2	3.0
	Chironomidae	29	38.0
	Simuliidae	3	4.0
	Ephemeroptera		
	Baetis	2	3.0
	Ephemerella	12	16.0
	Paraleptophlebia	1	1.0
	Stenonema	3	4.0
	Tricoptera		
	Cheumatopsyche	5	6.0
	Glossosoma	3	4.0
	Hydropsyche	16	21.0
		76	100.0

Station 1.--Pickering Creek near Eagle, Pa.--Continued

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Fall 1971	Diptera		
	Simuliidae	13	35.0
	Ephemeroptera		
	Ephemerella	5	13.0
	Stenonema	8	22.0
	Tricoptera		
	Hydropsyche	11	30.0
		37	100.0
Fall 1972	Coleoptera		
	Optioservus	6	0.8
	Diptera		
	Antocha	4	0.5
	Chironomidae	33	4.0
	Empididae	5	0.7
	Simuliidae	27	3.6
	Ephemeroptera		
	Baetis	35	5.0
	Ephemerella	7	0.9
	Isonychia	4	0.5
	Stenonema	18	2.4
	Tricoptera		
	Cheumatopsyche	33	4.4
	Chimarra	7	0.9
	Glossosoma	3	0.4
	Hydropsyche	554	75.0
	Leucotrichia	7	0.9
		743	100.0
Fall 1973	Ephemeroptera		
	Baetis	4	2.3
	Stenonema	9	5.2
	Isonychia	3	1.7
	Tricoptera		
	Cheumatopsyche	6	3.5
	Chimarra	4	2.3
	Hydropsyche	147	85.0
		173	100.0
Fall 1974	No data		

Station 2.--Pickering Creek near Chester Springs

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Spring 1970	Diptera		
	Chironomidae	4	14.3
	Ephemeroptera		
	Ephemerella	9	32.0
	Tricoptera		
	Cheumatopsyche	1	3.6
	Hydropsyche	14	5.0
		28	100.0
Fall 1970	Diptera		
	Simuliidae	1	1.2
	Ephemeroptera		
	Baetis	9	10.7
	Stenonema	14	16.7
	Odonata		
	Argia	1	1.2
	Tricoptera		
	Cheumatopsyche	15	18.8
	Hydropsyche	35	42.0
	Psychomyia	9	10.7
		84	100.0
Spring 1971	Diptera		
	Antocha	5	6.0
	Chironomidae	15	17.0
	Tipulidae	1	1.0
	Ephemeroptera		
	Baetis	9	1.0
	Ephemerella	37	41.0
	Stenonema	3	3.0
	Tricoptera		
	Cheumatopsyche	16	18.0
	Hydropsyche	10	11.0
		90	100.0

Station 2.--Pickering Creek near Chester Springs--Continued

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Fall 1971	Diptera		
	Simuliidae	8	28.0
	Ephemeroptera		
	Ephemerella	5	17.0
	Stenonema	7	24.0
	Tricoptera		
	Hydropsyche	9	31.0
		29	100.0
Fall 1972	Coleoptera		
	Ectopria	1	0.2
	Optioservus	10	2.0
	Stenelmis	1	0.2
	Diptera		
	Antocha	5	1.0
	Chironomidae	11	3.0
	Empididae	2	0.5
	Simuliidae	9	2.0
	Ephemeroptera		
	Baetis	20	5.0
	Ephemerella	15	4.0
	Isonychia	7	2.0
	Stenonema	15	4.0
	Odonata		
	Lanthus	1	0.2
	Tricoptera		
	Cheumatopsyche	44	11.0
	Chimarra	25	6.0
	Glossosoma	7	2.0
	Hydropsyche	239	58.0
	Sortosa	1	0.2
		413	100.0

Station 2.--Pickering Creek near Chester Springs--Continued

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Fall 1973	Coleoptera		
	Optioservus	13	2.0
	Stenelmis	1	0.1
	Diptera		
	Antocha	1	0.1
	Chironomidae	2	0.3
	Simuliidae	5	0.8
	Tipula	1	0.1
	Limnophora	1	0.1
	Ephemeroptera		
	Ephemerella	2	0.3
	Isonychia	2	0.3
	Stenonema	4	0.6
	Gastropoda		
	Amphipoda	1	0.1
	Lepidoptera	2	0.3
	Odonata		
	Aeshna	1	0.1
	Gomphidae	1	0.1
	Plecoptera		
	Acroneuria	1	0.1
	Tricoptera		
	Cheumatopsyche	40	6.0
	Chimarra	12	2.0
	Glossosoma	2	0.3
	Helicopsyche	534	84.0
	Leucotrichia	3	.5
		633	100.0

Station 2.--Pickering Creek near Chester Springs--Continued

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Fall 1974	Coleoptera		
	Optioservus	14	8.0
	Psephenus	2	0.1
	Diptera		
	Anthocha	2	0.1
	Hemerodromia	1	0.5
	Simuliidae	1	0.5
	Ephemeroptera		
	Baetis	1	0.5
	Ephemerella	5	3.0
	Stenonema	2	0.1
	Gastropoda		
	Ferrissia	1	0.5
	Tricoptera		
	Cheumatopsyche	26	14.0
	Chimarra	11	6.0
	Glossosoma	3	2.0
	Helicopsyche	104	58.0
		179	100.0

Station 3.--Pickering Creek near Marlin

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Spring 1970	Diptera		
	Antocha	4	5.0
	Chironomidae	2	2.0
	Simuliidae	1	1.0
	Ephemeroptera		
	Baetis	4	5.0
	Epeorus	3	4.0
	Ephemerella	14	6.0
	Stenonema	4	5.0
	Tricoptera		
	Brachycentrus	1	1.0
	Cheumatopsyche	10	12.0
	Hydropsyche	42	49.0
		95	100.0
Fall 1970	Diptera		
	Chironomidae	3	4.0
	Simuliidae	2	2.0
	Ephemeroptera		
	Baetis	14	18.0
	Stenonema	2	2.0
	Megaloptera		
	Corydalus	2	2.0
	Plecoptera		
	Acroneuria	6	7.0
	Tricoptera		
	Cheumatopsyche	14	18.0
	Hydropsyche	21	26.0
	Molanna	4	5.0
	Psychomyia	11	14.0
		79	100.0
Spring 1971	Plecoptera		
	Acroneuria	2	4.0
	Tricoptera		
	Cheumatopsyche	14	3.0
	Glossosoma	10	22.0
	Hydropsyche	20	44.0
		46	100.0

Table 3.--Pickering Creek near Marlin--Continued

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Fall 1971	Ephemeroptera		
	Ephemerella	11	25.0
	Stenonema	9	20.0
	Plecoptera		
	Acroneuria	1	2.0
	Tricoptera		
	Cheumatopsyche	14	18.0
	Hydropsyche	21	26.0
	Molanna	4	5.0
	Psychomyia	11	14.0
		79	100.0
Fall 1972	Coleoptera		
	Gonielmis	2	2.0
	Psephenus	1	0.8
	Stenelmis	1	0.8
	Diptera		
	Antocha	1	0.8
	Chironomidae	6	5.0
	Empididae	1	0.8
	Simuliidae	7	0.6
	Ephemeroptera		
	Baetis	9	0.8
	Ephemerella	5	4.2
	Isonychia	1	0.8
	Stenonema	8	7.0
	Megaloptera		
	Nigronia	1	0.8
	Plecoptera		
	Acroneuria	2	2.0
	Paragnetina	10	8.0
	Tricoptera		
	Cheumatopsyche	15	13.0
	Chimarra	6	
	Gerridae	2	2.0
	Hydropsyche	34	28.0

Table 3.--Pickering Creek near Marlin--Continued

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Fall 1972 (continued)	Tricoptera		
	Macronemum	1	0.8
	Micrasema	1	0.8
	Nyctiophylax	1	0.8
	Oecetis	1	0.8
	Polycentropus	1	0.8
	Psychomyia	2	2.0
		119	100.0
Fall 1973	Coleoptera		
	Optioservus	21	4.0
	Psephenus	5	0.8
	Stenelmis	10	2.0
	Ordobrevia	17	3.0
	Diptera		
	Antocha	1	0.2
	Atherix	3	0.5
	Chironomidae	2	0.4
	Tipula	1	0.2
	Simuliidae	1	0.2
	Hydracarina	2	0.4
	Ephemeroptera		
	Baetis	2	0.4
	Stenonema	2	0.4
	Lepidoptera	1	0.2
	Plecoptera		
	Acroneuria	9	2.0
	Tricoptera		
	Cheumatopsyche	104	1.0
	Chimarra	3	0.5
	Glossosoma	4	0.7
	Hydropsyche	355	63.0
	Leucotrichia	1	0.2
	Macronemum	2	0.4
	Molanna	14	2.5
		560	100.0

Table 3.--Pickering Creek near Marlin--Continued

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Fall 1974	Coleoptera		
	Optioservus	3	2.0
	Psephenus	1	0.8
	Stenelmis	2	1.0
	Diptera		
	Antocha	7	5.0
	Atherix	2	1.0
	Chironomidae	17	13.0
	Hemerodromia	2	1.0
	Gastropoda		
	Ferrissa	2	1.0
	Annelida		
	Tricladida	2	1.0
	Plecoptera		
	Paragnetin	4	3.0
	Tricoptera		
	Cheumatopsyche	22	17.0
	Chimarra	3	2.0
	Hydropsyche	59	46.0
	Macronemum	2	1.0
		128	100.0

Station 4.--Pickering Creek near Charlestown

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Spring 1970	No data		
Fall 1970	No data		
Spring 1971	No data		
Fall 1971	No data		
Fall 1972	Coleoptera		
	Stenelmis	1	0.2
	Diptera		
	Antocha	1	0.2
	Chironomidae	55	11.0
	Simuliidae	2	0.4
	Ephemeroptera		
	Baetis	23	5.0
	Ephemerella	6	1.0
	Isonychia	20	4.0
	Stenonema	9	2.0
	Megaloptera		
	Corydalus	2	0.4
	Plecoptera		
	Acroneuria	4	0.8
	Paragnetina	2	0.4
	Tricoptera		
	Cheumatopsyche	101	21.0
	Chimarra	3	0.6
	Glossosoma	3	0.6
	Hydropsyche	248	51.0
	Leucotrichia	3	0.7
		483	100.0
Fall 1973	Coleoptera		
	Stenelmis	1	1.0
	Diptera		
	Antocha	1	1.0
	Chironomidae	1	1.0
	Simuliidae	4	4.0

Station 4.--Pickering Creek near Charlestown--Continued

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Fall 1973 (Continued)	Ephemeroptera		
	Baetis	2	2.0
	Isonychia	1	1.0
	Stenonema	1	1.0
	Tricoptera		
	Cheumatopsyche	10	10.0
	Hydropsyche	82	79.0
		104	100.0
Fall 1974	Coleoptera		
	Optioservus	2	0.5
	Diptera		
	Antocha	6	1.0
	Chironomidae	35	8.0
	Simuliidae	2	0.5
	Ephemeroptera		
	Ephemerella	11	3.0
	Isonychia	3	0.7
	Stenonema	1	0.2
	Gastropoda		
	Ferrissia	1	0.2
	Lymnaea	1	0.2
	Megaloptera		
	Corydolus	1	0.2
	Platyhelminthes		
	Tricladida	57	14.0
	Tricoptera		
	Cheumatopsyche	63	15.0
	Chimarra	24	6.0
	Glossosoma	1	0.2
	Hydropsyche	204	49.0
	Leucotrichia	1	0.2
	Psychomyia	2	0.5
		415	100.0

Station 5.--Pickering Creek near Phoenixville

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Spring 1970	Diptera		
	Antocha	2	5.0
	Chironomidae	5	13.0
	Ephemeroptera		
	Baetis	1	3.0
	Epeorus	4	10.0
	Stenonema	5	13.0
	Tricoptera		
	Chiumatopsyche	6	16.0
	Chimarra	1	3.0
	Hydropsyche	14	37.0
		38	100.0
Fall 1970	Diptera		
	Antocha	1	0.8
	Cheronomidae	3	2.0
	Ephemeroptera		
	Baetis	13	10.0
	Ephemerella	1	0.8
	Stenonema	10	8.0
	Odonata		
	Argia	1	0.8
	Plecoptera		
	Acroneuria	4	3.0
	Tricoptera		
	Cheumatopsyche	17	13.0
	Hydropsyche	37	29.0
	Molanna	40	31.0
		127	100.0
Spring 1971	Diptera		
	Chironomidae	39	62.0
	Ephemeroptera		
	Ephemerella	3	5.0
	Tricoptera		
	Cheumatopsyche	7	11.0
	Chimarra	3	5.0
	Hydropsyche	11	17.0
		63	100.0

Station 5.--Pickering Creek near Phoenixville--Continued

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Fall 1971	Ephemeroptera		
	Stenonema	3	43.0
	Tricoptera		
	Hydropsyche	4	57.0
		7	100.0
Fall 1972	Coleoptera		
	Optioservus	1	0.4
	Diptera		
	Antocha	2	0.8
	Chironomidae	38	16.0
	Empididae	2	0.8
	Ephemeroptera		
	Baetis	22	9.0
	Ephemerella	1	0.4
	Isonychia	3	1.2
	Pseudocloeon	1	0.4
	Stenonema	25	10.0
	Plecoptera		
	Acroneuria	6	2.4
	Tricoptera		
	Cheumatopsyche	61	25.0
	Chimarra	1	0.4
	Glossosoma	7	3.0
	Hydropsyche	54	22.0
	Leucotrichia	15	6.0
	Nyctiophylax	1	0.4
	Psychomyia	1	0.4
		241	100.0

Station 5.--Pickering Creek near Phoenixville--Continued

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Fall 1973	Coleoptera		
	Psephenus	1	0.6
	Diptera		
	Antocha	1	0.6
	Chironomidae	4	3.0
	Simuliidae	4	3.0
	Ephemeroptera		
	Baetis	3	2.0
	Isonychia	1	0.6
	Stenonema	9	6.0
	Tricoptera		
	Cheumatopsyche	38	24.0
	Chimarra	3	2.0
	Hydropsyche	90	58.0
	Leucotrichia	2	1.0
		156	100.0
Fall 1974	No data		

Station 6.--Stony Run near Spring City

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Spring 1970	Diptera	602	100.0
Fall 1970	Diptera		
	Simuliidae	92	74.0
	Tricoptera		
	Hydropsyche	32	26.0
		124	100.0
Spring 1971	Diptera		
	Chironomidae	35	58.0
	Simuliidae	8	13.0
	Tricoptera		
	Cheumatopsyche	10	16.0
	Hydropsyche	8	13.0
		61	100.0
Fall 1971	Diptera		
	Simuliidae	21	70.0
	Tricoptera		
	Hydropsyche	9	30.0
		30	100.0
Fall 1972	Coleoptera		
	Stenelmis	5	1.0
	Diptera		
	Antocha	3	0.6
	Chironomidae	16	3.0
	Empididae	2	0.4
	Simuliidae	7	1.4
	Ephemeroptera		
	Baetis	3	0.6
	Isonychia	2	0.4
	Stenonema	35	7.0
	Tricoptera		
	Cheumatopsyche	97	19.0
	Chimarra	1	0.2
	Hydropsyche	3	0.6
	Hydropsyche	334	66.0
		508	100.0

Station 6.--Stony Run near Spring City--Continued

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Fall 1973	Coleoptera		
	Stenelmis	2	0.5
	Ephemeroptera		
	Baetis	2	0.5
	Ephemerella	1	0.3
	Stenonema	6	1.5
	Tricoptera		
	Cheumatopsyche	67	17.0
	Hydropsyche	313	80.0
		391	100.0
Fall 1974	Coleoptera		
	Stenelmis	3	1.7
	Diptera		
	Antocha	3	1.7
	Chironomidae	29	16.0
	Simuliidae	3	1.7
	Isopoda		
	Asellus	1	0.6
	Tricoptera		
	Cheumatopsyche	41	23.0
	Chimarra	2	1.1
	Hydropsyche	95	54.0
		177	100.0

Station 7.--Stony Run at Spring City

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Spring 1970	Ephemeroptera		
	Ephemerella	19	19.0
	Stenonema	14	14.0
	Tricoptera		
	Cheumatopsyche	5	5.0
	Hydropsyche	31	31.0
	Diptera		
	Chironomidae	10	10.0
	Simuliidae	20	20.0
		99	99.0
Fall 1970	Ephemeroptera		
	Baetis	6	6.0
	Stenonema	24	26.0
	Odonata		
	Argia	1	1.0
	Tricoptera		
	Cheumatopsyche	2	2.0
	Hydropsyche	5	5.0
	Psychomyia	55	59.0
		93	100.0
Spring 1971	Diptera		
	Chironomidae	98	88.0
	Tricoptera		
	Cheumatopsyche	6	5.0
	Hydropsyche	4	3.0
	Psychomyia	4	3.0
		112	100.0
Fall 1971	Coleoptera		
	Psephenus	2	4.0
	Diptera		
	Chironomidae	8	17.0
	Simuliidae	37	79.0
		47	100.0

Station 7.--Stony Run at Spring City--Continued

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Fall 1972	Coleoptera		
	Stenelmis	2	2.0
	Diptera		
	Antocha	1	1.0
	Chironomidae	24	22.0
	Empididae	4	4.0
	Ephemeroptera		
	Baetis	4	4.0
	Ephemerella	1	1.0
	Stenonema	12	11.0
	Tricoptera		
	Cheumatopsyche	32	29.0
	Hydropsyche	24	22.0
	Hydroptila	4	4.0
	Leucotrichia	1	1.0
		109	100.0
Fall 1973	Platyhelminthes		
	Turbellaria	2	15.0
	Gastropoda		
	Physa	11	85.0
		13	100.0
Fall 1974	Coleoptera		
	Psephenus	4	3.0
	Stenelmis	2	1.0
	Diptera		
	Chironomidae	27	18.0
	Ephemeroptera		
	Baetis	4	3.0
	Ephemerella	2	1.0
	Stenonema	8	5.0
	Platyhelminthes		
	Turbellaria	9	6.0

Station 7.--Stony Run at Spring City--Continued

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Fall 1974 (Continued)	Gastropoda		
	Physa	1	0.7
	Ferrissia	1	0.7
	Helisoma	1	0.7
	Lymnaea	1	0.7
	Pelecypoda		
	Sphaerium	1	0.7
	Isopoda		
	Asellus	8	5.0
	Tricoptera		
	Psychomyia	5	3.0
	Cheumatopsyche	25	17.0
	Chimarra	22	15.0
	Hydropsyche	23	16.0
	Ochrotrichia	1	0.7
	Sortosa	1	0.7
		146	100.0

Station 8.--Pigeon Creek near Bucktown

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Spring 1970	Diptera		
	Chironomidae	14	13.0
	Ephemeroptera		
	Epeorus	1	0.9
	Ephemerella	54	
	Stenonema	8	.0
	Tricoptera		
	Cheumatopsyche	19	17.0
	Hydropsyche	13	12.0
	Molanna	1	0.9
		110	100.0
Fall 1970	Diptera		
	Simuliidae	6	6.0
	Ephemeroptera		
	Baetis	28	30.0
	Stenonema	11	12.0
	Tricoptera		
	Cheumatopsyche	9	10.0
	Hydropsyche	25	26.0
	Psychomyia	15	16.0
		94	100.0
Spring 1971	Diptera		
	Antocha	8	4.0
	Chironomidae	33	18.0
	Simuliidae	4	2.0
	Ephemeroptera		
	Ephemerella	93	50.0
	Stenonema	3	2.0
	Tricoptera		
	Cheumatopsyche	19	10.0
	Hydropsyche	26	14.0
		186	100.0

Station 8.--Pigeon Creek near Bucktown--Continued

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Fall 1971	Diptera		
	Simuliidae	10	38.0
	Ephemeroptera		
	Baetis	5	19.0
	Stenonema	4	16.0
	Tricoptera		
	Hydropsyche	7	27.0
		26	100.0
Fall 1972	Coleoptera		
	Optioservus	1	0.3
	Stenelmis	2	0.6
	Diptera		
	Antocha	2	0.6
	Chironomidae	14	5.0
	Cyclorrhapha	1	0.3
	Ephemeroptera		
	Baetis	3	1.0
	Ephemerella	3	10
	Isonychia	12	4.0
	Stenonema	75	26.0
	Plecoptera		
	Acroneuria	2	0.6
	Tricoptera		
	Cheumatopsyche	72	25.0
	Chimarra	9	3.0
	Glossosoma	2	0.6
	Hydropsyche	89	31.0
	Sortosa	1	0.3
		288	100.0

Station 8.--Pigeon Creek near Bucktown--Continued

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Fall 1973	Coleoptera		
	Ectopria	1	0.2
	Optioservus	14	3.0
	Stenelmis	10	2.0
	Diptera		
	Antocha	16	3.0
	Chironomidae	10	2.0
	Simuliidae	1	0.2
	Tipula	2	0.4
	Isopoda		
	Asellus	1	0.2
	Ephemeroptera		
	Baetis	4	0.8
	Ephemerella	6	1.2
	Stenonema	22	5.0
	Hydracarina	5	1.0
	Collembola	1	0.2
	Plecoptera		
	Perlodidae	2	0.4
	Tricoptera		
	Cheumatopsyche	78	16.0
	Chimarra	14	3.0
	Glossosoma	22	5.0
	Hydropsyche	271	56.0
	Trentonius	3	0.6
	Leucotrichia	3	0.6
		486	100.0
Fall 1974	No data		

Station 9.--Pigeon Creek near Porters Mill

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Spring 1970	Diptera		
	Antocha	1	0.9
	Chironomidae	21	18.0
	Ephemeroptera		
	Ephemerella	42	37.0
	Stenonema	4	3.0
	Tricoptera		
	Cheumatopsyche	4	3.0
	Hydropsyche	43	37.0
		115	100.0
Fall 1970	Diptera		
	Simuliidae	1	0.7
	Ephemeroptera		
	Baetis	26	20.0
	Stenonema	24	18.0
	Tricoptera		
	Cheumatopsyche	24	18.0
	Hydropsyche	29	22.0
	Molanna	8	6.0
	Psychomyia	20	15.0
		132	100.0
Spring 1971	Diptera		
	Antocha	3	10.0
	Chironomidae	8	26.0
	Ephemeroptera		
	Ephemerella	6	9.0
	Stenonema	3	10.0
	Tricoptera		
	Cheumatopsyche	1	3.0
	Hydropsyche	10	32.0
		31	100.0

Station 9.--Pigeon Creek near Porters Mill--Continued

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Fall 1971	Diptera		
	Simuliidae	16	43.0
	Ephemeroptera		
	Baetis	2	50
	Stenonema	6	16.0
	Tricoptera		
	Hydropsyche	13	35.0
		37	100.0
Fall 1972	Coleoptera		
	Limnius	1	0.8
	Diptera		
	Antocha	1	0.8
	Chironomidae	59	47.0
	Ephemeroptera		
	Baetis	20	16.0
	Ephemerella	3	2.4
	Stenonema	12	9.6
	Tricoptera		
	Cheumatopsyche	11	8.8
	Hydropsyche	4	3.2
	Sortosa	14	11.2
		125	100.0
Fall 1973	Coleoptera		
	Ectopria	1	0.3
	Optioservus	4	1.1
	Stenelmis	1	0.3
	Diptera		
	Antocha	3	0.8
	Atherix	1	0.3
	Chironomidae	2	0.5
	Ephemeroptera		
	Baetis	17	4.7
	Ephemerella	1	0.3
	Isonychia	2	0.5
	Stenonema	20	5.5

Station 9.--Pigeon Creek near Porters Mill--Continued

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Fall 1973 (Continued)	Collembola		
	Entomobryidae	4	1.1
	Tricoptera		
	Cheumatopsyche	86	24.0
	Chimarra	11	3.0
	Glossosoma	10	3.0
	Hydropsyche	198	55.0
		362	100.0
Fall 1974	Coleoptera		
	Ectopria	1	0.8
	Optioservus	3	2.0
	Diptera		
	Antocha	4	3.0
	Chironomidae	4	3.0
	Ephemeroptera		
	Ephemerella	4	30
	Isonychia	2	1.5
	Stenonema	7	50
	Tricoptera		
	Brachycentrus	1	0.8
	Cheumatopsyche	5	4.0
	Chimarra	9	7.0
	Hydropsyche	91	70.0
		131	100.0

Station 10.--Pigeon Creek near Parker Ford

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Spring 1970	Diptera		
	Antocha	3	6.0
	Chironomidae	16	33.0
	Ephemeroptera		
	Ephemerella	9	19.0
	Plecoptera		
	Acroneuria	2	4.0
	Tricoptera		
	Cheumatopsyche	1	2.0
	Hydropsyche	17	35.0
		48	100.0
Fall 1970	Diptera		
	Chironomidae	1	1.0
	Ephemeroptera		
	Baetis	27	26.0
	Stenonema	18	17.0
	Plecoptera		
	Acroneuria	4	4.0
	Tricoptera		
	Cheumatopsyche	10	10.0
	Hydropsyche	25	24.0
	Molanna	8	8.0
	Psychomyia	11	10.0
		104	100.0
Spring 1971	Coleoptera		
	Psephenus	1	0.9
	Diptera		
	Chironomidae	6	6.0
	Simuliidae	6	6.0
	Ephemeroptera		
	Ephemerella	27	26.0
	Stenonema	1	0.9
	Tricoptera		
	Cheumatopsyche	15	14.0
	Glossosoma	2	2.0
	Hydropsyche	45	43.0
	Psychomyia	2	2.0
		105	100.0

Station 10.--Pigeon Creek near Parker Ford--Continued

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Fall 1971	Diptera		
	Simuliidae	11	46.0
	Ephemeroptera		
	Ephemerella	2	8.0
	Stenonema	4	1.0
	Tricoptera		
	Hydropsyche	7	29.0
		24	100.0
Fall 1972	Coleoptera		
	Ectopria	1	0.2
	Stenmis	1	0.2
	Diptera		
	Antocha	7	1.3
	Atherix	1	0.2
	Chironomidae	15	2.7
	Empididae	4	0.7
	Ephemeroptera		
	Baetis	6	1.1
	Ephemerella	4	0.7
	Isonychia	6	1.1
	Stenonema	23	4.2
	Plecoptera		
	Paragnetina	8	1.4
	Tricoptera		
	Cheumatopsyche	83	15.0
	Chimarra	45	8.2
	Hydropsyche	343	62.0
	Leucotrichia	1	0.2
		548	100.0

Station 11.--French Creek near Knaurertown

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Fall 1972	Ephemeroptera		
	Isonychia	1	1.1
	Paraleptophlebia	3	3.3
	Stenonema	11	12.0
	Plecoptera		
	Acroneuria	1	1.1
	Taeniopteryx	2	2.2
	Tricoptera		
	Cheumatopsyche	13	14.0
	Chimarra	11	12.0
	Hydropsyche	11	12.0
	Neureclipsis	5	5.0
	Ochrotrichia	4	4.0
	Oecetis	2	2.0
		92	100.0
Fall 1973	Coleoptera		
	Optioservus	7	2.0
	Stenelmis	4	1.0
	Diptera		
	Antocha	1	0.3
	Chironomidae	5	1.0
	Tipula	1	0.3
	Simuliidae	3	0.9
	Ephemeroptera		
	Baetis	6	2.0
	Stenonema	4	1.0
	Hydracarina	1	0.3
	Plecoptera		
	Acroneuria	6	2.0
	Paragnetina	2	0.6
	Tricoptera		
	Cheumatopsyche	45	13.0
	Chimarra	21	6.0
	Glossosoma	4	1.0
	Hydropsyche	232	68.0
	Molanna	1	0.3
		343	100.0

Station 11.--French Creek near Knaurertown--Continued

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Fall 1974	Coleoptera		
	Optioservus	13	8.0
	Stenelmis	9	5.0
	Promoresia	1	1.0
	Diptera		
	Antocha	5	3.0
	Chironomidae	23	14.0
	Ephemeroptera		
	Baetis	1	1.0
	Ephemerella	4	2.0
	Isonychia	1	1.0
	Stenonema	7	4.0
	Platyhelminthes		
	Tricladida	8	5.0
	Megaloptera		
	Chauliodes	2	1.0
	Tricoptera		
	Cheumatopsyche	6	4.0
	Chimarra	7	4.0
	Glossosoma	4	2.0
	Hydropsyche	68	41.0
	Ochrotrichia	3	2.0
	Polycentropus	2	1.0
	Rhyacophila	2	1.0
		166	100.0

Station 12.--South Branch French Creek at Coventryville

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Spring 1970	Diptera		
	Antocha	1	2.0
	Chironomidae	9	18.0
	Simuliidae	3	6.0
	Ephemeroptera		
	Ephemerella	5	10.0
	Megaloptera		
	Corydalus	1	2.0
	Plecoptera		
	Acroneuria	1	2.0
	Tricoptera		
	Cheumatopsyche	1	2.0
	Hydropsyche	28	57.0
		49	100.0
Fall 1970	Diptera		
	Chironomidae	1	0.8
	Ephemeroptera		
	Baetis	16	14.0
	Ephemerella	3	2.5
	Stenonema	23	19.0
	Tricoptera		
	Chemuatopsyche	25	21.0
	Hydropsyche	21	18.0
	Psychomyia	29	25.0
		118	100.0

Station 12.--South Branch French Creek at Coventryville--Continued

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Spring 1971	Diptera		
	Antocha	7	3.6
	Chironomidae	28	15.0
	Simuliidae	4	2.0
	Ephemeroptera		
	Baetis	2	1.0
	Ephemerella	51	26.0
	Stenonema	5	2.6
	Plecoptera		
	Acroneuria	1	0.5
	Tricoptera		
	Cheumatopsyche	36	19.0
	Glossosoma	1	0.5
	Hydropsyche	55	28.0
	Psychomyia	3	1.5
		193	100.0
Fall 1971	Coleoptera		
	Psephenus	3	8.0
	Ephemeroptera		
	Ephemerella	1	3.0
	Stenonema	10	28.0
	Plecoptera		
	Acroneuria	2	6.0
	Tricoptera		
	Arctopsyche	7	19.0
	Cheumatopsyche	5	14.0
	Hydropsyche	8	22.0
		36	100.0

Station 12.--South Branch French Creek at Coventryville--Continued

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Fall 1972	Coleoptera		
	Optioservus	14	1.3
	Stenelmis	17	2.0
	Diptera		
	Antocha	3	0.3
	Chironomidae	53	5.0
	Empididae	2	0.2
	Simuliidae	15	1.4
	Tipulidae	1	0.1
	Ephemeroptera		
	Ephemerella	98	9.3
	Isonychia	22	2.1
	Stenonema	29	2.8
	Megaloptera		
	Corydalus	1	0.1
	Plecoptera		
	Paragnetina	12	1.0
	Taeniopteryx	1	0.1
	Tricoptera		
	Cheumatopsyche	112	11.0
	Chimarra	278	26.0
	Glossosoma	13	1.2
	Hydropsyche	370	35.0
	Hydroptila	3	0.3
	Macronemum	9	0.9
		1053	100.0
Fall 1973	Coleoptera		
	Optioservus	13	5.0
	Stenelmis	6	2.0
	Chironomidae	3	1.0
	Simuliidae	1	0.3
	Ephemeroptera		
	Baetis	3	1.0
	Isonychia	1	0.3
	Stenonema	5	2.0
	Hydracarina	1	0.3

Station 12.--South Branch French Creek at Coventryville--Continued

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Fall 1973 (continued)	Lepidoptera		
	Paragyractis	8	3.0
	Odonata		
	Gomphidae	1	0.3
	Plecoptera		
	Acroneuria	2	0.7
	Paragnetina	1	0.3
	Tricoptera		
	Cheumatopsyche	45	16.0
	Chimarra	11	4.0
	Glossosoma	1	0.3
	Hydropsyche	178	62.0
	Leucotrichia	1	0.3
	Macronenum	4	1.4
	Molanna	2	0.7
	Polycentropus	1	0.3
		288	100.0
Fall 1974	Coleoptera		
	Optioservus	8	3.0
	Stenelmis	8	3.0
	Diptera		
	Antocha	7	2.0
	Chironomidae	26	9.0
	Ephemeroptera		
	Baetis	5	2.0
	Ephemerella	14	5.0
	Isonychia	1	0.3
	Stenonema	13	5.0
	Platyhelminthes		
	Tricladida	2	0.7
	Lepidoptera		
	Cataclysta	10	3.7
	Chauliodes	1	0.4

Station 12.--South Branch French Creek at Coventryville--Continued

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Fall 1974 (continued)	Plecoptera		
	Acroneuria	4	1.5
	Paragnetina	3	1.1
	Tricoptera		
	Cheumatopsyche	48	18.0
	Chimarra	18	7.0
	Glossosoma	1	0.4
	Hydropsyche	92	34.0
	Macronemum	5	2.0
	Macrasema	4	1.4
	Sortosa	1	0.4
		271	100.0

Station 13.--French Creek near Coventryville

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Spring 1970	Diptera		
	Antocha	9	8.0
	Atherix	1	1.0
	Chironomidae	6	5.0
	Ephemeroptera		
	Baetis	23	20.0
	Epeorus	3	3.0
	Ephemerella	25	22.0
	Isonychia	1	1.0
	Siphlonurus	1	1.0
	Stenonema	8	7.0
	Plecoptera		
	Acroneuria	1	1.0
	Cheumatopsyche	3	3.0
	Hydropsyche	32	28
		113	100.0
Fall 1970	Diptera		
	Chironomidae	1	2.0
	Ephemeroptera		
	Baetis	10	17.0
	Stenonema	14	24.0
	Plecoptera		
	Acroneuria	1	2.0
	Tricoptera		
	Cheumatopsyche	6	10.0
	Hydropsyche	14	24.0
	Molanna	2	3.0
	Psychomyia	10	17.0
		58	100.0

Station 13.--French Creek near Coventryville--Cont

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Spring 1971	Coleoptera		
	Psephenus	3	4.0
	Diptera		
	Antocha	3	4.0
	Chironomidae	30	39.0
	Simuliidae	2	3.0
	Ephemeroptera		
	Baetis	3	4.0
	Ephemerella	28	37.0
	Tricoptera		
	Cheumatopsyche	2	3.0
	Hydropsyche	5	6.0
		76	100.0
Fall 1971	Coleoptera		
	Psephenus	2	9.0
	Ephemeroptera		
	Ephemerella	4	17.0
	Stenonema	3	13.0
	Tricoptera		
	Cheumatopsyche	6	26.0
	Hydropsyche	8	35.0
		23	100.0
Fall 1972	Coleoptera		
	Optioservus	3	1.0
	Stenelmis	1	0.4
	Diptera		
	Antocha	8	3.0
	Chaoborus	1	0.4
	Chironomidae	77	28.0
	Empididae	1	0.4
	Tipulidae	3	1.0

Station 13.--French Creek near Coventryville--Cont

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Fall 1972 (continued)	Ephemeroptera		
	Ephemerella	3	1.0
	Isonychia	3	1.0
	Paraleptophelbia	1	0.4
	Pseudocloeon	3	1.0
	Stenonema	15	6.0
	Plecoptera		
	Acroneuria	6	2.0
	Paragnetina	10	4.0
	Taeniopteryx	3	1.0
	Tricoptera		
	Cheumatopsyche	24	9.0
	Chimarra	6	2.0
	Hydropsyche	87	32.0
	Hydroptila	6	2.0
	Limnephilidae	1	0.4
	Micrasema	6	2.0
	Psychomyia	3	1.0
	Rhyacophila	1	0.4
		272	100.0
Fall 1973	Coleoptera		
	Stenelmis	1	1.0
	Diptera		
	Chironomidae	1	1.0
	Simulidae	2	2.0
	Ephemeroptera		
	Baetis	2	2.0
	Isonychia	1	1.0
	Stenonema	4	4.0
	Gastropoda		
	Ferrissia	1	1.0
	Plecoptera		
	Acroneuria	2	2.0

Station 13.--French Creek near Coventryville--Cont

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Fall 1973 (continued)	Tricoptera		
	Cheumatopsyche	39	39.0
	Chimarra	10	10.0
	Glossosoma	2	2.0
	Hydropsyche	33	33.0
	Molanna	1	1.0
	Polycentropus	2	2.0
		101	100.0
Fall 1974	Diptera		
	Antocha	3	10.0
	Ephemeroptera		
	Isonychia	2	6.0
	Stenonema	4	13.0
	Gastropoda		
	Ferrissia	5	16.0
	Tricoptera		
	Cheumatopsyche	2	6.0
	Chimarra	5	16.0
	Glossosoma	1	3.0
	Hydropsyche	9	29.0
		31	100.0

Station 14.--French Creek near Pughtown

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Spring 1970	Diptera		
	Antocha	3	3.0
	Chironomidae	43	37.0
	Simuliidae	1	1.0
	Ephemeroptera		
	Baetis	9	8.0
	Ephemerella	15	13.0
	Stenonema	7	6.0
	Plecoptera		
	Acroneuria	3	3.0
	Hydropsyche	35	30.0
		116	100.0
Fall 1970	Diptera		
	Chironomidae	3	5.0
	Ephemeroptera		
	Ameletus	1	2.0
	Baetis	1	2.0
	Stenonema	4	7.0
	Plecoptera		
	Acroneuria	9	16.0
	Tricoptera		
	Cheumatopsyche	8	14.0
	Hydropsyche	12	21.0
	Psychomyia	20	34.0
		58	100.0
Spring 1971	Coleoptera		
	Psephenus	6	7.0
	Diptera		
	Antocha	6	7.0
	Chironomidae	14	15.0
	Simuliidae	12	13.0
	Ephemeroptera		
	Ephemerella	11	12.0
	Stenonema	7	8.0
	Tricoptera		
	Cheumatopsyche	12	13.0
	Hydropsyche	24	26.0
		92	100.0

Station 14.--French Creek near Pughtown--Continued

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Fall 1971	Diptera		
	Simuliidae	15	44.0
			6.0
	Ephemeroptera		
	Baetis	3	1.6
	Ephemerella	2	6.0
	Tricoptera		
	Cheumatopsyche	2	6.0
	Hydropsyche	7	21.0
	Psychomyia	5	15.0
		34	100.0
Fall 1972	Coleoptera		
	Optioservus	4	1.0
	Stenelmis	1	0.2
	Diptera		
	Antocha	6	1.0
	Chironomidae	81	13.0
	Empididae	5	1.0
	Simulidae	1	0.2
	Tipulidae	1	0.2
	Ephemeroptera		
	Baetis	2	0.3
	Epeorus	10	2.0
	Ephemerella	47	7.0
	Isonychia	23	4.0
	Stenonema	65	10.0
	Megaloptera		
	Corydalus	1	0.2
	Plecoptera		
	Acroneuria	4	1.0
	Paragnetina	3	0.5

Station 14.--French Creek near Pughtown--Continued

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Fall 1972 (continued)	Tricoptera		
	Cheumatopsyche	69	11.0
	Chimarra	52	8.0
	Glossosoma	27	4.0
	Goera	1	0.2
	Hydropsyche	229	36.0
	Lepidostoma	1	0.2
	Leucotrichia	1	0.2
	Micrasema	1	0.2
	Mystacides	1	0.2
	Neureclipsis	4	0.6
	Nyctiophylas	2	0.3
	Oecetis	1	0.2
		643	100.0
Fall 1973	Coleoptera		
	Optioservus	3	1.0
	Psephenus	1	0.4
	Stenelmis	4	2.0
	Diptera		
	Chironomidae	4	2.0
	Simuliidae	1	0.4
	Ephemeroptera		
	Baetis	2	9.0
	Isonychia	3	1.0
	Stenonema	8	4.0
	Neuroptera		
	Corydalus	1	0.4
	Plecoptera		
	Paragnetina	4	2.0
	Tricoptera		
	Cheumatopsyche	33	13.0
	Chimarra	9	4.0
	Glossosoma	1	0.4
	Hydropsyche	150	61.0
	Molanna	1	0.4
		246	100.0

Station 14.--French Creek near Pughtown--Continued

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Fall 1974	Diptera		
	Antocha	3	2.0
	Atherix	1	0.5
	Chironomidae	39	21.0
	Ephemeroptera		
	Baetis	2	1.0
	Ephemerella	10	5.0
	Stenonema	26	14.0
	Platyhelminthes		
	Tricladida	4	2.0
	Gastropoda		
	Gyraulus	2	1.0
	Plecoptera		
	Phasganophora	2	1.0
	Tricoptera		
	Cheumatopsyche	21	11.0
	Chimarra	16	9.0
	Glossosoma	1	0.5
	Hydropsyche	55	29.0
	Micrasema	5	3.0
	Ochrotrichia	1	0.5
	Polycentropus	1	0.5
		189	100.0

Station 15.--French Creek near Phoenixville, Pa.

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Spring 1970	Diptera		
	Chironomidae	5	9.0
	Simuliidae	23	43.0
	Ephemeroptera		
	Stenonema	6	11.0
	Tricoptera		
	Cheumatopsyche	8	15.0
	Hydropsyche	12	22.0
		54	100.0
Fall 1970	Ephemeroptera		
	Baetis	4	7.0
	Ephemerella	3	7.0
	Stenonema	7	13.0
	Tricoptera		
	Cheumatopsyche	11	24.0
	Hydropsyche	13	23.0
	Molanna	1	1.8 or 2.0
	Psychomyia	17	30.0
		56	100.0
Spring 1971	Diptera		
	Antocha	2	4.0
	Chironomidae	21	47.0
	Simuliidae	1	2.0
	Ephemeroptera		
	Baetis	3	7.0
	Ephemerella	10	22.0
	Tricoptera		
	Cheumatopsyche	4	9.0
	Hydropsyche	4	9.0
		45	100.0

Station 15.--French Creek near Phoenixville, Pa--Continued

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Fall 1971	Coleoptera		
	Psephenus	1	4.0
	Ephemerella	3	13.0
	Stenonema	8	33.0
	Tricoptera		
	Cheumatopsyche	1	4.0
	Hydropsyche	10	42.0
	Psychomyia	1	4.0
		24	100.0
Fall 1972	Diptera		
	Antocha	2	0.6
	Chironomidae	21	6.0
	Empididae	4	1.0
	Ephemeroptera		
	Epeorus	15	5.0
	Ephemerella	39	12.0
	Isonychia	5	2.0
	Stenonema	54	17.0
	Neuroptera		
	Climacia	1	0.3
	Plecoptera		
	Acroneuria	6	2.0
	Paragnetina	3	1.0
	Tricoptera		
	Cheumatopsyche	51	16.0
	Chimarra	5	2.0
	Glossosoma	64	20.0
	Helicopsyche	1	0.3
	Hydropsyche	49	15.0
	Lepidostoma	1	0.3
	Limnephilidae	1	0.3
	Micrasema	1	0.3
	Neureclipsis	1	0.3
		324	100.0

Station 15.--French Creek near Phoenixville, Pa--Continued

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Fall 1973	Coleoptera		
	Optioservus	1	1.0
	Diptera		
	Chironomidae	1	1.0
	Ephemeroptera		
	Baetis	3	3.0
	Isonychia	3	3.0
	Stenonema	2	2.0
	Plecoptera		
	Acroneuria	2	2.0
	Tricoptera		
	Cheumatopsyche	44	46.0
	Chimarra	2	2.0
	Glossosoma	3	30
	Helicopsyche	34	35.0
	Molanna	1	1.0
		96	100.0
Fall 1974	Coleoptera		
	Optioservus	1	0.1
	Diptera		
	Antocha	1	0.1
	Ephemeroptera		
	Ephemerella	2	2.0
	Stenonema	2	2.0
	Platyhelminthes		
	Tricladida	4	5.0
	Gastropoda		
	Ferrissia	19	22.0
	Amnicola	1	1.0
	Pelecypoda		
	Sphaerium	1	1.0
	Tricoptera		
	Cheumatopsyche	24	28.0
	Chimarra	6	7.0
	Glossosoma	2	2.0
	Hydropsyche	18	21.0
	Macronemum	2	2.0
	Micrasema	2	2.0
		85	100.0

Station 16.--French Creek at Phoenixville

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Spring 1970	No organisms found		
Fall 1970	No organisms found		
Spring 1971	Diptera		
	Chironomidae	1	20.0
	Ephemeroptera		
	Stenonema	4	80.0
		5	100.0
Fall 1971	No organisms found		
Fall 1972	No organisms found		
Fall 1973	No organisms found		
Fall 1974	No organisms found		

Station 17.--Darby Creek at Waterloo Mills near Devon

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Spring 1970	Diptera		
	Chironomidae	7	9.0
	Simuliidae	54	68.0
	Ephemeroptera		
	Ameletus	1	1.0
	Baetis	5	6.0
	Ephemerella	1	1.0
	Tricoptera		
	Chimarra	2	3.0
	Hydropsyche	9	11.0
		79	100.0
Fall 1970	Ephemeroptera		
	Baetis	4	9.0
	Stenonema	17	37.0
	Tricoptera		
	Hydropsyche	25	54.0
		46	100.0
Spring 1971	Diptera		
	Chironomidae	18	60.0
	Tricoptera		
	Cheumatopsyche	7	23.0
	Hydropsyche	5	17.0
		30	100.0
Fall 1971	Ephemeroptera		
	Stenonema	1	13.0
	Tricoptera		
	Cheumatopsyche	4	50.0
	Hydropsyche	3	37.0
		8	100.0

Station 17.--Darby Creek at Waterloo Mills near Devon--Continued

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Fall 1972	Coleoptera		
	Psephenus	1	0.6
	Diptera		
	Antocha	7	5.0
	Chironomidae	18	12.0
	Simuliidae	3	2.0
	Ephemeroptera		
	Baetis	2	1.3
	Stenonema	6	4.0
	Tricoptera		
	Cheumatopsyche	70	45.0
	Hydropsyche	46	30.0
	Leucotrichia	1	0.6
	Sortosa	1	0.6
		155	100.0
Fall 1973	No data		
Fall 1974	Diptera		
	Antocha	22	9.0
	Chironomidae	43	18.0
	Hemerodromia	1	0.4
	Simuliidae	5	2.0
	Amphipoda		
	Gammarus	1	0.4
	Tricoptera		
	Cheumatopsyche	112	47.0
	Chimarra	7	3.0
	Glossosoma	2	0.8
	Hydropsyche	42	18.0
	Leucotrichia	3	1.0
	Ochrotrichia	1	0.4
		29	100.0

Station 18.--East Branch Crum Creek near Paoli

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Spring 1970	Diptera		
	Chironomidae	44	49.0
	Simuliidae	4	5.0
	Ephemeroptera		
	Ameletus	12	13.0
	Baetis	5	6.0
	Ephemerella	2	2.0
	Isonychia	1	1.0
	Stenonema	5	6.0
	Plecoptera		
	Acroneuria	4	5.0
	Tricoptera		
	Hydropsyche	12	13.0
		89	100.0
Fall 1970	Diptera		
	Simuliidae	3	2.0
	Ephemeroptera		
	Baetis	9	7.0
	Isonychia	1	0.8
	Stenonema	11	9.0
	Plecoptera		
	Acroneuria	1	0.8
	Tricoptera		
	Cheumatopsyche	39	31.0
	Hydropsyche	48	38.0
	Psychomyia	13	10.0
		125	100.0
Spring 1971	Diptera		
	Simuliidae	8	2.0
	Ephemeroptera		
	Baetis	3	10.0
	Stenonema	2	6.0
	Tricoptera		
	Cheumatopsyche	8	26.0
	Hydropsyche	10	32.0
		31	100.0

Station 18.--East Branch Crum Creek near Paoli--Continued

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Fall 1971	Diptera		
	Simuliidae	10	36.0
	Ephemeroptera		
	Stenonema	2	7.0
	Tricoptera		
	Cheumatopsyche	9	32.0
	Hydropsyche	7	25.0
		28	100.0
Fall 1972	Diptera		
	Antocha	4	3.0
	Chironomidae	51	40.0
	Empididae	5	4.0
	Simuliidae	1	0.8
	Ephemeroptera		
	Stenonema	4	3.0
	Tricorythodes	1	0.8
	Plecoptera		
	Phasganophora	4	3.0
	Tricoptera		
	Cheumatopsyche	19	15.0
	Hydropsyche	37	28.0
	Hydroptila	1	0.8
	Leucotrichia	2	2.0
		129	100.0
Fall 1973	Coleoptera		
	Optioservus	1	0.8
	Psephenus	1	0.8
	Stenelmis	1	0.8
	Diptera		
	Antocha	1	0.8
	Ephemeroptera		
	Baetis	3	2.0
	Isonychia	3	2.0

Station 18.--East Branch Crum Creek near Paoli

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Fall 1973 (continued)	Hemiptera		
	Rhagovelia	1	0.8
	Lepidoptera		
	Arzama	1	0.8
	Plecoptera		
	Paragnetina	8	6.0
	Tricoptera		
	Cheumatopsyche	54	41.0
	Chimarra	9	7.0
	Hydropsyche	49	37.0
		132	100.0
Fall 1974	No data		

Station 19.--West Branch Crum Creek near Paoli

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Spring 1970	Diptera		
	Antocha	2	1.3
	Chironomidae	79	52.0
	Simuliidae	4	3.0
	Ephemeroptera		
	Ameletus	10	7.0
	Ephemerella	9	6.0
	Stenonema	4	3.0
	Plecoptera		
	Acroneuria	4	3.0
	Hydropsyche	40	26.0
		152	100.0
Fall 1970	Diptera		
	Antocha	1	1.0
	Ephemeroptera		
	Baetis	4	5.0
	Centroptilum	2	2.0
	Isonychia	1	1.0
	Stenonema	6	7.0
	Plecoptera		
	Acroneuria	1	1.0
	Tricoptera		
	Cheumatopsyche	29	33.0
	Hydropsyche	40	45.0
	Psychomyia	4	5.0
		88	100.0
Spring 1971	Diptera		
	Chironomidae	2	6.0
	Ephemeroptera		
	Stenonema	1	3.0
	Tricoptera		
	Cheumatopsyche	4	13.0
	Hydropsyche	18	59.0
	Psychomyia	6	19.0
		31	100.0

Station 19.--West Branch Crum Creek near Paoli--Continued

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Fall 1971	Diptera		
	Chironomidae	5	11.0
	Simuliidae	7	16.0
	Ephemeroptera		
	Stenonema	1	2.0
	Tricoptera		
	Cheumatopsyche	14	31.0
	Hydropsyche	16	36.0
	Psychomyia	2	4.0
		45	100.0
Fall 1972	Diptera		
	Antocha	6	3.0
	Chironomidae	111	51.0
	Empididae	1	0.4
	Ephemeroptera		
	Baetis	3	1.0
	Stenonema	7	3.0
	Tricoptera		
	Cheumatopsyche	9	4.0
	Hydropsyche	79	36.0
	Leucotrichia	3	1.0
		219	100.0
Fall 1973	Coleoptera		
	Optioservus	2	2.0
	Psephenus	1	0.8
	Ordobrevia	2	2.0
	Diptera		
	Antocha	2	2.0
	Chironomidae	14	12.0
	Simuliidae	2	2.0
	Ephemeroptera		
	Baetis	1	0.8
	Isonychia	1	0.8
	Stenonema	10	8.0
	Hydracarina	1	0.8

Station 19.--West Branch Crum Creek near Paoli--Continued

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Fall 1973 (continued)	Lepidoptera		
	Paragyractis	3	2.5
	Collembola		
	Entomobryidae	1	0.8
	Tricoptera		
	Cheumatopsyche	19	16.0
	Chimarra	9	8.0
	Glossosoma	1	0.8
	Hydropsyche	47	39.0
	Leucotrichia	4	3.0
		120	100.0
Fall 1974	Coleoptera		
	Optioservus	2	3.0
	Psephenus	1	2.0
	Stenelmis	3	4.0
	Diptera		
	Antocha	7	10.0
	Chironomidae	28	42.0
	Simuliidae	1	2.0
	Hemerodromia	2	2.0
	Ephemeroptera		
	Baetis	1	2.0
	Ephemerella	4	6.0
	Stenonema	6	9.0
	Gastropoda		
	Ferrissia	4	6.0
	Lepidoptera		
	Cataclysta	6	9.0
	Arazama	1	2.0
	Plecoptera		
	Paragnetina	1	2.0
		67	100.0

Station 20.--Ridley Creek near Goshenville

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Spring 1970	Diptera		
	Antocha	2	2.0
	Chironomidae	43	34.0
	Simuliidae	16	13.0
	Ephemeroptera		
	Ameletus	7	6.0
	Baetis	1	0.8
	Tricoptera		
	Cheumatopsyche	13	10.0
	Hydropsyche	44	35.0
		126	100.0
Fall 1970	Diptera		
	Chironomidae	2	1.7
	Simuliidae	6	5.0
	Tricoptera		
	Cheumatopsyche	30	26.0
	Hydropsyche	77	66.0
	Molanna	1	1.0
		116	100.0
Spring 1971	Diptera		
	Simuliidae	10	30.0
	Ephemeroptera		
	Ephemerella	8	24.0
	Stenonema	6	18.0
	Tricoptera		
	Cheumatopsyche	5	15.0
	Hydropsyche	4	12.0
		33	100.0
Fall 1971	Tricoptera		
	Cheumatopsyche	7	47.0
	Hydropsyche	8	53.0
		15	100.0

Station 20.--Ridley Creek near Goshenville--Continued

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Fall 1972	Diptera		
	Chironomidae	22	14.0
	Simuliidae	8	5.0
	Ephemeroptera		
	Baetis	1	1.0
	Ephemerella	1	1.0
	Isonychia	6	4.0
	Pseudocloeon	1	1.0
	Stenonema	28	18.0
	Plecoptera		
	Taeniopteryx	3	2.0
	Tricoptera		
	Cheumatopsyche	7	4.0
	Chimarra	5	3.0
	Glossosoma	4	3.0
	Hydropsyche	64	41.0
	Hydroptila	1	1.0
	Sortosa	7	4.0
		158	100.0
Fall 1973	Diptera		
	Antocha	2	0.8
	Chironomidae	1	0.4
	Simuliidae	3	1.2
	Ephemeroptera		
	Baetis	8	3.3
	Isonychia	7	2.9
	Stenonema	5	2.0
	Hydracarina	1	0.4
	Megaloptera		
	Corydalus	1	0.4
	Tricoptera		
	Cheumatopsyche	33	13.0
	Chimarra	3	1.2
	Hydropsyche	171	70.0
	Leucotrichia	1	0.4
	Macronemum	10	4.0
		246	100.0

Station 21.--Ridley Creek near Dutton Mill

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Spring 1970	Diptera		
	Chironomidae	8	21.0
	Simuliidae	7	19.0
	Ephemeroptera		
	Ephemerella	8	22.0
	Stenonema	1	3.0
	Tricoptera		
	Hydropsyche	13	35.0
		37	100.0
Fall 1970	Ephemeroptera		
	Baetis	3	2.0
	Centroptilum	1	1.0
	Siphlonurus	1	1.0
	Stenonema	16	9.0
	Megaloptera		
	Corydalus	1	1.0
	Odonata		
	Argia	1	1.0
	Tricoptera		
	Cheumatopsyche	65	38.0
	Hydropsyche	61	35.0
	Psychomyia	23	14.0
		172	100.0
Spring 1971	Ephemeroptera		
	Ephemerella	4	31.0
	Stenonema	1	8.0
	Tricoptera		
	Cheumatopsyche	3	23.0
	Hydropsyche	5	38.0
		13	100.0

Station 21.--Ridley Creek near Dutton Mill--Continued

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Fall 1971	Diptera		
	Simuliidae	15	47.0
	Ephemeroptera		
	Ephemerella	2	6.0
	Stenonema	1	3.0
	Tricoptera		
	Cheumatopsyche	4	13.0
	Hydropsyche	10	31.0
		32	100.0
Fall 1972	Coleoptera		
	Stenelmis	1	1.0
	Diptera		
	Chironomidae	53	28.0
	Empididae	2	1.0
	Simuliidae	3	2.0
	Ephemeroptera		
	Ephemerella	2	1.0
	Isonychia	19	10.0
	Stenonema	58	13.0
	Tricoptera		
	Cheumatopsyche	25	13.0
	Chimarra	5	3.0
	Hydropsyche	15	8.0
	Limnephilidae	1	1.0
	Macronemum	5	3.0
		189	100.0
Fall 1973	Diptera		
	Chironomidae	1	2.0
	Tipula	1	2.0
	Simuliidae	8	13.0
	Ephemeroptera		
	Baetis	6	9.0
	Isonychia	7	1.0

Station 21.--Ridley Creek near Dutton Mill--Continued

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Fall 1973 (continued)	Tricoptera		
	Cheumatopsyche	3	5.0
	Glossosoma	2	3.0
	Hydropsyche	35	55.0
		63	100.0
Fall 1974	Diptera		
	Antocha	2	1.0
	Simuliidae	1	1.0
	Gastropoda		
	Lymnaea	1	1.0
	Platyhelminthes		
	Tricladida	1	1.0
	Tricoptera		
	Cheumatopsyche	61	37.0
	Chimarra	3	2.0
	Hydropsyche	89	54.0
	Macronemum	7	4.0
		166	100.0

Station 22.--Chester Creek near West Chester

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Spring 1970	Diptera		
	Antocha	1	0.4
	Chironomidae	222	99.0
	Ephemeroptera		
	Ephemerella	1	0.4
	Stenonema	1	0.4
		225	100.0
Fall 1970	Ephemeroptera		
	Baetis	1	2.0
	Ephemerella	7	12.0
	Stenonema	15	25.0
	Tricoptera		
	Glossosoma	21	36.0
	Hydropsyche	15	25.0
		59	100.0
Spring 1971	Diptera		
	Antocha	1	1.0
	Chironomidae	5	7.0
	Simuliidae	3	4.0
	Ephemeroptera		
	Baetis	1	1.0
	Ephemerella	25	34.0
	Stenonema	14	19.0
	Tricoptera		
	Cheumatopsyche	7	9.0
	Glossosoma	8	11.0
	Hydropsyche	10	14.0
		7	100.0

Station 22.--Chester Creek near West Chester--Continued

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Fall 1971	Diptera		
	Chironomidae	12	27.0
	Simuliidae	1	2.0
	Ephemeroptera		
	Ephemerella	3	7.0
	Stenonema	7	16.0
	Tricoptera		
	Cheumatopsyche	3	7.0
	Hydropsyche	15	33.0
	Psychomyia	2	4.0
		45	100.0
Fall 1972	Coleoptera		
	Ectopria	2	0.4
	Optioservus	6	1.0
	Stenelmis	8	2.0
	Diptera		
	Antocha	89	17.0
	Chironomidae	26	
	Empididae	2	0.4
	Simuliidae	2	0.4
	Ephemeroptera		
	Baetis	10	2.0
	Ephemerella	16	3.0
	Isonychia	1	0.2
	Pseudocloeon	4	0.8
	Stenonema	25	5.0
	Plecoptera		
	Isoperla	1	0.2
	Tricoptera		
	Cheumatopsyche	24	5.0
	Chimarra	11	2.1
	Glossosoma	17	3.0
	Hydropsyche	276	53.1
		520	100.0

Station 22.--Chester Creek near West Chester--Continued

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Fall 1973	Coleoptera		
	Ordobrevia	2	1.4
	Diptera		
	Atherix	13	9.0
	Chironomidae	5	3.0
	Tipula	1	0.6
	Ephemeroptera		
	Baetis	8	5.6
	Ephemerella	1	0.6
	Stenonema	14	9.7
	Tricoptera		
	Cheumatopsyche	6	4.2
	Chimarra	3	2.1
	Glossosoma	28	19.4
	Hydropsyche	63	44.0
		144	100.0
Fall 1974	Diptera		
	Antocha	4	31.0
	Chironomidae	5	38.0
	Isopoda		
	Asellus	3	23.0
	Hydracarina	1	8.0
		13	100.0

Station 23.--Chester Creek near Milltown

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Spring 1970	Diptera		
	Antocha	10	7.0
	Chironomidae	118	80.0
	Ephemeroptera		
	Ephemerella	1	1.0
	Tricoptera		
	Hydropsyche	18	12.0
		147	100.0
Fall 1970	Ephemeroptera		
	Ephemerella	21	25.0
	Stenonema	23	28.0
	Tricoptera		
	Glossosoma	16	19.0
	Hydropsyche	23	28.0
		83	100.0
Spring 1971	Diptera		
	Chironomidae	38	39.0
	Ephemeroptera		
	Baetis	3	3.0
	Ephemerella	12	12.0
	Stenonema	8	8.0
	Tricoptera		
	Cheumatopsyche	4	4.0
	Glossosoma	4	4.0
	Hydropsyche	28	29.0
		97	100.0
Fall 1971	Diptera		
	Chironomidae	2	8.0
	Simuliidae	3	13.0
	Tricoptera		
	Cheumatopsyche	6	25.0
	Hydropsyche	13	54.0
		24	100.0

Station 23.--Chester Creek near Milltown--Continued

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Fall 1972	Coleoptera		
	Stenelmis	4	1.0
	Diptera		
	Antocha	3	1.0
	Chironomidae	15	5.0
	Empididae	1	0.3
	Simuliidae	7	2.0
	Ephemeroptera		
	Baetis	7	2.0
	Stenonema	20	7.0
	Tricoptera		
	Cheumatopsyche	70	23.0
	Hydropsyche	164	55.0
	Hydroptila	8	3.0
		299	100.0
Fall 1973	Diptera		
	Antocha	1	0.4
	Tipula	1	0.4
	Ephemeroptera		
	Stenonema	1	0.4
	Tricoptera		
	Cheumatopsyche	72	31.0
	Hydropsyche	159	68.0
		234	100.0
Fall 1974	Diptera		
	Chironomidae	7	10.0
	Ephemeroptera		
	Stenonema	3	4.0
	Caenis	1	1.0
	Tricoptera		
	Hydropsyche	60	82.0
	Odonata		
	Calopteryx	1	1.0
	Gastropoda		
	Physa	1	1.0
		73	100.0

Station 24.--Chester Creek at Westtown School

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Spring 1970	Diptera		
	Antocha	44	13.0
	Chironomidae	206	56.0
	Simuliidae	103	28.0
	Tricoptera		
	Hydropsyche	12	3.0
		365	100.0
Fall 1970	Tricoptera		
	Hydropsyche	55	100
		55	100.0
Spring 1971	Diptera		
	Chironomidae	22	26.0
	Simuliidae	45	52.0
	Ephemeroptera		
	Ephemerella	2	2.0
	Tricoptera		
	Cheumatopsyche	7	8.0
	Chimarra	1	2.0
	Hydropsyche	9	10.0
		86	100.0
Fall 1971	Diptera		
	Chironomidae	14	9.0
	Simuliidae	5	3.0
	Ephemeroptera		
	Stenonema	7	4.0
	Tricoptera		
	Cheumatopsyche	111	72.0
	Hydropsyche	19	12.0
		156	100.0
Fall 1972	Diptera		
	Antocha	1	0.1
	Ceratopogonidae	1	0.1
	Chironomidae	25	3.0
	Empididae	4	0.4
	Simuliidae	57	6.0

Station 24.--Chester Creek at Westtown School--Continued

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Fall 1972 (continued)	Ephemeroptera		
	Baetis #1	6	0.7
	Pseudocloeon	3	0.3
	Stenonema	21	2.3
	Megaloptera		
	Nigronia	1	0.1
	Tricoptera		
	Cheumatopsyche	494	55.0
	Hydropsyche	288	32.0
		901	100.0
Fall 1973	No data		
Fall 1974	Coleoptera		
	Ancyronyx	1	0.1
	Dubiraphia	1	0.1
	Diptera		
	Chironomidae	462	35.0
	Simuliidae	210	16.0
	Ephemeroptera		
	Baetis	1	0.1
	Stenonema	2	0.2
	Platyhelminthes		
	Tricladida	51	4.0
	Annelida		
	Oligochaeta	12	1.0
	Gastropoda		
	Physa	1	0.1
	Ferrissia	2	0.2
	Plecypoda		
	Sphaerium	2	0.2
	Tricoptera		
	Cheumatopsyche	370	28.0
	Hydropsyche	218	16.0
		1333	100.0

Station 25.--Goose Creek near West Chester

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Spring 1970	Diptera		
	Chironomidae	756	98.0
	Simuliidae	15	2.0
		771	100.0
Fall 1970	No organisms found		
Spring 1971	Diptera		
	Chironomidae	5	100
		5	100.0
Fall 1971	No organisms found		
Fall 1972	No organisms found		
Fall 1973	No organisms found		
Fall 1974	No organisms found		

Station 26.--Red Clay Creek near Five Point

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Spring 1970	Diptera		
	Chironomidae	7	4.0
	Simuliidae	158	81.0
	Ephemeroptera		
	Ameletus	1	1.0
	Baetis	9	5.0
	Ephemerella	4	2.0
	Odonata		
	Argia	2	1.0
	Tricoptera		
	Hydropsyche	15	8.0
		196	100.0
Fall 1970	Ephemeroptera		
	Ephemerella	3	5.0
	Tricoptera		
	Hydropsyche	58	95.0
		61	100.0
Spring 1971	Diptera		
	Antocha	1	0.5
	Chironomidae	72	34.0
	Simuliidae	118	56.0
	Ephemeroptera		
	Ephemerella	6	3.0
	Tricoptera		
	Cheumatopsyche	6	3.0
	Hydropsyche	7	3.0
		210	100.0
Fall 1971	Diptera		
	Simuliidae	1	14.0
	Tricoptera		
	Cheumatopsyche	5	72.0
	Hydropsyche	1	14.0
		7	100.0

Station 26.--Red Clay Creek near Five Point--Continued

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Fall 1972	Diptera		
	Antocha	9	5.0
	Chironomidae	10	5.0
	Tricoptera		
	Cheumatopsyche	74	41.0
	Hydropsyche	85	47.0
	Leucotrichia	3	2.0
		181	100.0
Fall 1973	Coleoptera		
	Optioservus	1	0.2
	Diptera		
	Antocha	6	1.0
	Chironomidae	6	1.0
	Simuliidae	2	0.4
	Ephemeroptera		
	Baetis	3	0.6
	Isonychia	1	0.2
	Stenonema	1	0.2
	Hymenoptera	1	0.2
	Hydracarina	4	0.8
	Tricoptera		
	Cheumatopsyche	269	57.0
	Hydropsyche	178	38.0
	Leucotrichia	1	0.2
		473	100.0
Fall 1974	No data		

Station 27.--Red Clay Creek near Kennett Square

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Spring 1970	Diptera		
	Chironomidae	41	51.0
	Simuliidae	26	32.0
	Ephemeroptera		
	Baetis	8	10.0
	Tricoptera		
	Hydropsyche	6	7.0
		81	100.0
Fall 1970	Diptera		
	Simuliidae	182	100
		182	100.0
Spring 1971	Diptera		
	Chironomidae	68	37.0
	Simuliidae	117	63.0
		185	100.0
Fall 1971	Diptera		
	Simuliidae	9	5.0
	Ephemeroptera		
	Stenonema	1	1.0
	Tricoptera		
	Cheumatopsyche	2	1.0
	Hydropsyche	18	10.0
Fall 1972	Diptera		
	Chironomidae	18	11.0
	Empididae	3	2.0
	Simuliidae	145	81.0
	Tricoptera		
	Cheumatopsyche	9	5.0
	Hydropsyche	2	1.0
		178	100.0

Station 27.--Red Clay Creek near Kennett Square--Continued

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Fall 1973	Diptera		
	Antocha	1	1.0
	Chironomidae	7	6.0
	Simuliidae	3	3.0
	Annelida		
	Oligochaeta	1	1.0
	Tricoptera		
	Cheumatopsyche	78	72.0
	Hydropsyche	18	17.0
		108	100.0
Fall 1974	No data		

Station 28.--White Clay Creek near Avondale

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Spring 1970	No data		
Fall 1970	Ephemeroptera		
	Baetis	4	5.0
	Ephemerella	7	9.0
	Stenonema	3	4.0
	Tricoptera		
	Hydropsyche	62	82.0
		76	100.0
Spring 1971	Diptera		
	Chironomidae	27	19.0
	Simuliidae	97	69.0
	Ephemeroptera		
	Baetis	14	10.0
	Tricoptera	2	1.0
		140	100.0
Fall 1971	Diptera		
	Simuliidae	7	27.0
	Ephemeroptera		
	Baetis	3	12.0
	Ephemerella	4	15.0
	Stenonema	3	12.0
	Tricoptera		
	Cheumatopsyche	7	27.0
	Hydropsyche	2	8.0
		26	100.0
Fall 1972	Diptera		
	Antocha	20	10.0
	Chironomidae	81	40.0
	Empididae	6	3.0
	Simuliidae	2	1.0
	Ephemeroptera		
	Baetis	1	0.4
	Stenonema	5	2.0

Station 28.--White Clay Creek near Avondale--Continued

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Fall 1972 (continued)	Odonata		
	Boyeria	1	0.4
	Tricoptera		
	Cheumatopsyche	44	22.0
	Hydropsyche	40	19.8
	Hydroptila	2	1.0
		202	100.0
Fall 1973	Coleoptera		
	Optioservus	5	1.7
	Diptera		
	Antocha	41	14.0
	Chironomidae	38	13.0
	Simuliidae	16	5.3
	Ephemeroptera		
	Baetis	6	2.0
	Hemiptera		
	Rhagovelia	1	0.3
	Platyhelminthes		
	Turbellaria	3	1.0
	Tricoptera		
	Cheumatopsyche	93	32.0
	Hydropsyche	87	30.0
	Leucotrichia	3	1.0
		293	100.0
Fall 1974	No data		

Station 29.--White Clay Creek near Wickerton

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Spring 1970	Diptera		
	Chironomidae	30	35.0
	Simuliidae	40	47.0
	Ephemeroptera		
	Baetis	8	9.0
	Tricoptera		
	Hydropsyche	8	9.0
		86	100.0
Fall 1970	Diptera		
	Chironomidae	1	1.6
	Ephemeroptera		
	Baetis	4	7.0
	Ephemerella	5	9.0
	Stenonema	1	1.6
	Plecoptera		
	Acroneuria	1	1.6
	Tricoptera		
	Hydropsyche	49	80.0
		61	100.0
Spring 1971	Diptera		
	Chironomidae	56	48.0
	Simuliidae	30	26.0
	Ephemeroptera		
	Baetis	6	5.0
	Ephemerella	3	3.0
	Stenonema	1	1.0
	Tricoptera		
	Cheumatopsyche	7	6.0
	Hydropsyche	13	11.0
		116	100.0
Fall 1971	Diptera		
	Simuliidae	2	15.0
	Tricoptera		
	Cheumatopsyche	8	62.0
	Hydropsyche	3	23.0
		13	100.0

Station 29.--White Clay Creek near Wickerton--Continued

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Fall 1972	Coleoptera		
	Optioservus	1	0.1
	Diptera		
	Antocha	14	2.0
	Chironomidae	186	27.0
	Empididae	1	0.1
	Helius	1	0.1
	Simuliidae	2	0.3
	Ephemeroptera		
	Baetis	6	0.9
	Isonychia	7	1.0
	Pseudocloeon	11	2.0
	Stenonema	30	4.0
	Tricoptera		
	Cheumatopsyche	136	20.0
	Hydropsyche	260	38.0
	Hydropsychidae	17	3.0
	Hydroptila	4	1.0
	Sortosa	1	0.1
		677	100.0
Fall 1973	Coleoptera		
	Optioservus	2	0.7
	Stenelmis	1	0.3
	Helius	1	0.3
	Diptera		
	Atherix	1	0.3
	Chironomidae	60	21.0
	Simuliidae	225	77.0
		291	100.0

Station 29.--White Clay Creek near Wickerton--Continued

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Fall 1974	Coleoptera		
	Optioservus	4	3.0
	Ephemeroptera	2	1.0
	Platyhelminthes		
	Tricladida	5	3.0
	Annelida		
	Oligochaeta	4	3.0
	Trichoptera		
	Cheumatopsyche	58	37.0
	Hydropsyche	83	53.0
		156	100.0

Station 30.--West Branch White Clay Creek near Chesterville

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Spring 1970	Diptera		
	Chironomidae	11	58.0
	Ephemeroptera		
	Baetis	1	5.0
	Ephemerella	1	5.0
	Tricoptera		
	Hydropsyche	6	32.0
		19	100.0
Fall 1970	Ephemeroptera		
	Baetis	2	5.0
	Ephemerella	1	2.0
	Stenonema	8	19.0
	Tricoptera		
	Hydropsyche	31	74.0
		42	100.0
Spring 1971	Diptera		
	Simuliidae	10	53.0
	Ephemeroptera		
	Baetis	5	26.0
	Ephemerella	4	21.0
		19	100.0
Fall 1972	Coleoptera		
	Optioservus	2	0.5
	Diptera		
	Antocha	10	3.0
	Chironomidae	65	18.0
	Empididae	4	1.1
	Simuliidae	2	0.5
	Ephemeroptera		
	Baetis	1	0.3
	Ephemerella	1	0.3
	Isonychia	52	14.0
	Pseudocloeon	6	2.0
	Stenonema	20	5.0

Station 30.--West Branch White Clay Creek near Chesterville--Continued

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Fall 1972 (continued)	Plecoptera		
	Isoperla	1	0.3
	Tricoptera		
	Cheumatopsyche	55	15.0
	Clossosoma	1	0.3
	Hydropsyche	145	40.0
	Sortosa	2	0.5
		367	100.0
Fall 1973	Diptera		
	Antocha	2	1.0
	Ephemeroptera		
	Isonychia	17	7.0
	Stenonema	4	2.0
	Megaloptera		
	Corydalus	1	1.0
	Tricoptera		
	Cheumatopsyche	64	25.0
	Hydropsyche	168	65.0
	Leucotrichia	3	1.0
		259	100.0
Fall 1974	No data		

Station 31.--Elk Creek at Elkview

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Spring 1970	Diptera		
	Chironomidae	88	48.0
	Simuliidae	15	8.0
	Ephemeroptera		
	Ameletus	1	0.5
	Baetis	17	9.0
	Epeorus	1	0.5
	Tricoptera		
	Hydropsyche	62	34.0
		184	100.0
Fall 1970	Tricoptera		
	Hydropsyche	69	100
		69	100.0
Spring 1971	Diptera		
	Simuliidae	54	67.0
	Ephemeroptera		
	Ephemerella	6	8.0
	Tricoptera		
	Hydropsyche	20	25.0
		80	100.0
Fall 1971	Ephemeroptera		
	Stenonema	2	33.0
	Tricoptera		
	Cheumatopsyche	2	33.0
	Hydropsyche	2	33.0
		6	100.0

Station 31.--Elk Creek at Elkview--Continued

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Fall 1972	Coleoptera		
	Optioservus	1	0.3
	Diptera		
	Antocha	15	4.6
	Chironomidae	174	53.5
	Empididae	4	1.0
	Simuliidae	1	0.3
	Ephemeroptera		
	Baetis	1	0.3
	Isonychia	3	0.9
	Pseudocloeon	1	0.3
	Stenonema	22	7.0
	Tricoptera		
	Cheumatopsyche	13	4.0
	Hydropsyche	84	26.0
	Hydroptila	4	1.0
	Polycentropus	1	0.3
	Sortosa	1	0.3
		325	100.0
Fall 1973	Diptera		
	Antocha	4	9.0
	Tanypodinae	1	2.0
	Ephemeroptera		
	Isonychia	1	2.0
	Stenonema	6	14.0
	Tricoptera		
	Cheumatopsyche	12	28.0
	Hydropsyche	19	45.0
		43	100.0

Station 32.--Elk Creek near Oxford

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Spring 1970	No data		
Fall 1970	Diptera		
	Chironomidae	30	29.0
	Ephemeroptera		
	Ephemerella	27	26.0
	Stenonema	13	12.0
	Tricoptera		
	Hydropsyche	34	33.0
		104	100.0
Spring 1971	Diptera		
	Chironomidae	15	37.0
	Ephemeroptera		
	Ephemerella	3	7.0
	Stenonema	5	12.0
	Tricoptera		
	Hydropsyche	18	44.0
		41	100.0
Fall 1971	Ephemeroptera		
	Ephemerella	1	7.0
	Stenonema	2	13.0
	Tricoptera		
	Cheumatopsyche	5	33.0
	Hydropsyche	7	47.0
		15	100.0
Fall 1972	Coleoptera		
	Stenelmis	1	0.1
	Diptera		
	Antocha	46	5.0
	Chironomidae	122	13.0
	Helius	1	0.1

Station 32.--Elk Creek near Oxford--Continued

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Fall 1972 (continued)	Ephemeroptera		
	Baetis	5	0.5
	Ephemerella	1	0.1
	Isonychia	39	4.0
	Pseudoclaeon	3	0.3
	Stenonema	58	6.0
	Megaloptera		
	Corydalus	1	0.1
	Odonata		
	Coenagrionidae	1	0.1
	Tricoptera		
	Cheumatopsyche	104	11.0
	Hydropsyche	517	56.0
	Hydroptila	3	10.0
	Leucotrichia	4	0.3
	Macronemum	14	0.4
	Rhyacophila	1	2.0
		920	0.1
			100.0
Fall 1973	Diptera		
	Antocha	12	3.0
	Chironomidae	9	2.0
	Ephemeroptera		
	Baetis	2	0.4
	Isonychia	1	0.2
	Stenonema	5	1.0
	Megaloptera		
	Corydalus	1	0.2
	Tricoptera		
	Cheumatopsyche	71	16.0
	Hydropsyche	320	73.0
	Leucotrichia	7	2.0
	Macronemum	12	3.0
	Polycentropus	1	0.2
		441	100.0
Fall 1974	No data		

Station 33.--Octoraro Creek near Atglen

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Spring 1970	Diptera		
	Chironomidae	8	17.0
	Simuliidae	4	8.0
	Ephemeroptera		
	Baetis	8	17.0
	Tricoptera		
	Hydropsyche	28	58.0
		48	100.0
Fall 1970	Diptera		
	Chironomidae	9	12.0
	Ephemeroptera		
	Ephemerella	32	42.0
	Stenonema	13	17.0
	Tricoptera		
	Hydropsyche	22	29.0
		76	100.0
Spring 1971	Diptera		
	Chironomidae	18	37.0
	Simuliidae	13	27.0
	Ephemeroptera		
	Baetis	3	6.0
	Ephemerella	7	14.0
	Tricoptera		
	Hydropsyche	8	16.0
		49	100.0
Fall 1971	Ephemeroptera		
	Ephemerella	1	1.5
	Stenonema	33	52.0
	Tricoptera		
	Cheumatopsyche	13	21.0
	Hydropsyche	15	24.0
	Rhyacophila	1	1.5
		63	100.0

Station 33.--Octoraro Creek near Atglen--Continued

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Fall 1972	Coleoptera		
	Stenelmis	2	0.3
	Diptera		
	Antocha	17	2.0
	Chironomidae	122	17.0
	Empididae	1	0.1
	Ephemeroptera		
	Baetis	1	0.1
	Isonychia	1	0.1
	Stenonema	29	4.0
	Tricoptera		
	Cheumatopsyche	193	27.0
	Chimarra	56	8.0
	Glossosoma	1	0.1
	Hydropsyche	278	39.0
	Hydroptila	1	0.1
	Leucotrichia	3	0.4
		705	100.0
Fall 1973	Coleoptera		
	Stenelmis	8	2.0
	Diptera		
	Antocha	2	0.5
	Chironomidae	5	1.0
	Simuliidae	1	0.3
	Ephemeroptera		
	Baetis	2	0.5
	Isonychia	5	1.0
	Stenonema	7	2.0
	Platyhelminthes		
	Turbellaria	6	1.0
	Tricoptera		
	Cheumatopsyche	98	25.0
	Chimarra	9	2.0
	Hydropsyche	231	60.0
	Leucotrichia	11	3.0
		385	100.0

Station 33.--Octoraro Creek near Atglen--Continued

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Fall 1974	Coleoptera		
	Stenelmis	1	0.6
	Diptera		
	Antocha	3	1.7
	Chironomidae	9	5.2
	Simuliidae	1	0.6
	Ephemeroptera		
	Isonychia	8	5.0
	Stenonema	1	0.6
	Gastropoda		
	Ferrissia	4	2.3
	Platyhelminthes		
	Tricladida	6	3.5
	Tricoptera		
	Cheumatopsyche	49	29.0
	Chimarra	43	25.0
	Hydropsyche	47	27.0
		172	100.0

Station 34.--Valley Creek near Atglen

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Spring 1970	No data		
Fall 1970	Diptera		
	Chironomidae	18	23.0
	Ephemeroptera		
	Baetis	10	13.0
	Ephemerella	27	35.0
	Stenonema	6	8.0
	Tricoptera		
	Hydropsyche	16	21.0
		77	100.0
Spring 1971	Diptera		
	Chironomidae	11	22.0
	Simuliidae	15	30.0
	Ephemeroptera		
	Baetis	8	16.0
	Ephemerella	9	18.0
	Tricoptera		
	Hydropsyche	7	14.0
		50	100.0
Fall 1971	Ephemeroptera		
	Stenonema	3	60.0
	Tricoptera		
	Hydropsyche	2	40.0
		5	100.0
Fall 1972	Coleoptera		
	Stenelmis	2	0.6
	Diptera		
	Antocha	1	0.3
	Chironomidae	24	7.0
	Empididae	1	0.3
	Hexatoma	1	0.3
	Simuliidae	7	2.0

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Fall 1972 (continued)	Ephemeroptera		
	Baetis	8	2.0
	Isonychia	30	9.0
	Pseudocloeon	2	0.6
	Stenonema	38	11.0
	Tricoptera		
	Cheumatopsyche	78	23.0
	Glossosoma	4	1.0
	Helichus	1	0.3
	Hydropsyche	137	41.0
		334	100.0
Fall 1973	Diptera		
	Chironomidae	1	1.0
	Simulidae	5	4.0
	Ephemeroptera		
	Baetis	1	1.0
	Isonychia	26	19.0
	Stenonema	1	1.0
	Tricoptera		
	Cheumatopsyche	24	18.0
	Hydropsyche	78	57.0
		136	100.0
Fall 1974	Coleoptera		
	Stenelmis	2	1.0
	Diptera		
	Antocha	2	1.0
	Chironomidae	16	12.0
	Simuliidae	2	2.0
	Isopoda		
	Asellus	1	1.0
	Tricoptera		
	Cheumatopsyche	12	9.0
	Hydropsyche	95	73.0
		130	100.0

Station 35.--Octoraro Creek near Steelville

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Spring 1970	Diptera		
	Chironomidae	2	7.0
	Ephemeroptera		
	Baetis	2	7.0
	Heptagenia	2	7.0
	Stenonema	4	16.0
	Tricoptera		
	Hydropsyche	17	63.0
		27	100.0
Fall 1970	Ephemeroptera		
	Baetis	10	10.0
	Ephemerella	52	51.0
	Stenonema	6	6.0
	Tricoptera		
	Hydropsyche	23	23.0
	Psychomyia	11	11.0
		102	100.0
Spring 1971	Diptera		
	Simuliidae	18	27.0
	Ephemeroptera		
	Ephemeroptera	11	17.0
	Stenonema	21	32.0
	Tricoptera		
	Hydropsyche	16	24.0
		166	100.0
Fall 1971	Ephemeroptera		
	Ephemerella	3	7.0
	Stenonema	12	28.0
	Tricoptera		
	Cheumatopsyche	16	37.0
	Hydropsyche	12	28.0
		43	100.0

Station 35.--Octoraro Creek near Steelville--Continued

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Fall 1972	Diptera		
	Antocha	7	0.8
	Chironomidae	587	68.0
	Empididae	6	0.7
	Simuliidae	9	1.0
	Ephemeroptera		
	Baetis	1	0.1
	Ephemerella	2	0.2
	Isonychia	19	2.0
	Pseudocloeon	1	0.1
	Stenonema	114	13.0
	Megaloptera		
	Corydalus	1	0.1
	Tricoptera		
	Cheumatopsyche	45	5.0
	Hydropsyche	63	7.0
	Leucotrichia	2	0.2
	Microsema	1	0.1
		858	100.0
Fall 1973	Diptera		
	Chironomidae	1	0.7
	Ephemeroptera		
	Isonychia	28	20.0
	Stenonema	8	6.0
	Megaloptera		
	Nigronia	1	0.7
	Tricoptera		
	Cheumatopsyche	21	15.0
	Hydropsyche	79	57.0
		138	100.0

Station 35.--Octoraro Creek near Steelville--Continued

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Fall 1974	Coleoptera		
	Psephenus	1	1.0
	Diptera		
	Antocha	1	1.0
	Chironomidae	6	4.0
	Ephemeroptera		
	Baetis	2	1.0
	Ephemerella	2	1.0
	Isonychia	13	9.0
	Stenonema	8	6.0
	Isopoda		
	Asellus	1	1.0
	Tricoptera		
	Cheumatopsyche	44	31.0
	Chimarra	6	4.0
	Hydropsyche	55	39.0
	Rhyacophila	1	1.0
		140	100.0

Station 36.--East Branch Brandywine Creek near Downingtown

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Spring 1970	No data		
Fall 1970	Diptera		
	Simuliidae	1	1.0
	Ephemeroptera		
	Ephemerella	1	1.0
	Megaloptera		
	Corydalus	1	1.0
	Plecoptera		
	Acroneuria	1	1.0
	Tricoptera		
	Cheumatopsyche	28	32.0
	Hydropsyche	49	56.0
	Psychomyia	5	6.0
		88	100.0
Spring 1971	Diptera		
	Simuliidae	1	3.0
	Ephemeroptera		
	Baetis	8	21.0
	Ephemerella	7	18.0
	Stenonema	2	5.0
	Tricoptera		
	Cheumatopsyche	5	13.0
	Hydropsyche	15	40.0
		38	100.0
Fall 1971	Ephemeroptera		
	Stenonema	2	5.0
	Plecoptera		
	Acroneuria	1	3.0
	Tricoptera		
	Cheumatopsyche	4	11.0
	Hydropsyche	29	76.0
	Macronemum	2	5.0
		38	100.0

Station 36.--East Branch Brandywine Creek near Downingtown--Continued

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Fall 1972	Diptera		
	Chironomidae	37	29.0
	Empididae	1	0.7
	Ephemeroptera		
	Baetis	5	4.0
	Isonychia	6	5.0
	Pseudocloeon	1	0.7
	Stenonema	1	0.7
	Plecoptera		
	Acroneuria	1	0.7
	Tricoptera		
	Cheumatopsyche	16	13.0
	Chimarra	2	2.0
	Hydropsyche	51	40.0
	Leucotrichia	3	2.0
	Macronemum	1	0.7
	Neureclipsis	1	0.7
	Psychomyia	1	0.7
		127	100.0
Fall 1973	Coleoptera		
	Optioservus	2	1.0
	Diptera		
	Antocha	6	3.0
	Chironomidae	4	2.0
	Simuliidae	2	1.0
	Ephemeroptera		
	Baetis	6	3.0
	Isonychia	1	0.5
	Stenonema	9	4.0
	Plecoptera		
	Acroneuria	1	0.5
	Paragnetina	1	0.5

Station 36.--East Branch Brandywine Creek near Downingtown--Continued

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Fall 1973 (continued)	Tricoptera		
	Cheumatopsyche	70	35.0
	Chimarra	3	1.0
	Hydropsyche	94	47.0
	Macronemum	2	1.0
		201	100.0
Fall 1974	Coleoptera		
	Optioservus	1	0.7
	Diptera		
	Antocha	1	0.7
	Chironomidae	12	8.0
	Ephemeroptera		
	Baetis	1	0.7
	Isonychia	4	2.7
	Stenonema	5	3.4
	Hydracarina	1	0.7
	Gastropoda		
	Ferrissia	1	0.7
	Tricoptera		
	Cheumatopsyche	14	9.5
	Chimarra	1	0.7
	Hydropsyche	100	68.0
	Macronemum	1	0.7
	Polycentropus	2	0.7
	Psychomyia	3	2.0
		147	100.0

Station 37.--West Branch Brandywine Creek near Coatesville

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Spring 1970	No data		
Fall 1970	Diptera		
	Chironomidae	1	2.0
	Ephemeroptera		
	Baetis	2	3.0
	Stenonema	28	42.0
	Plecoptera		
	Acroneuria	3	4.0
	Tricoptera		
	Cheumatopsyche	7	11.0
	Hydropsyche	24	36.0
	Molanna	1	2.0
		66	100.0
Spring 1971	Ephemeroptera		
	Baetis	10	17.0
	Ephemerella	11	19.0
	Stenonema	6	11.0
	Plecoptera		
	Acroneuria	4	7.0
	Tricoptera		
	Cheumatopsyche	5	9.0
	Hydropsyche	21	37.0
		57	100.0
Fall 1971	Tricoptera		
	Cheumatopsyche	7	35.0
	Hydropsyche	13	65.0
		20	100.0

Station 37.--West Branch Brandywine Creek near Coatesville--Continued

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Fall 1972	Diptera		
	Chironomidae	4	3.0
	Simuliidae	1	0.8
	Ephemeroptera		
	Baetis	27	21.0
	Ephemerella	1	0.8
	Isonychia	10	8.0
	Stenonema	5	4.0
	Plecoptera		
	Paragnetina	1	0.8
	Tricoptera		
	Cheumatopsyche	14	11.0
	Chimarra	9	7.0
	Glossosoma	1	0.7
	Hydropsyche	47	37.0
	Leucotrichia	6	5.0
	Neureclipsis	1	0.8
	Sortosa	1	0.8
		128	100.0
Fall 1973	Diptera		
	Antocha	4	3.0
	Chironomidae	5	4.0
	Geranomyia	1	0.8
	Ephemeroptera		
	Baetis	1	0.8
	Isonychia	3	3.0
	Hydracarina	1	0.8
	Lepidoptera	2	1.7
	Plecoptera		
	Acroneuria	2	1.7

Station 37.--West Branch Brandywine Creek near Coatesville--Continued

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Fall 1973 (continued)	Gastropoda		
	Ferrissia	5	4.0
	Viviparidae	1	0.8
	Tricoperata		
	Chemuatopsyche	30	26.0
	Chimarra	11	9.0
	Glossosoma	2	1.7
	Hydropsyche	46	39.0
	Leucotrichia	1	1.7
	Polycentropus	2	1.7
		117	100.0
Fall 1974	Diptera		
	Antocha	1	1.0
	Chironomidae	2	2.0
	Platyhelminthes		
	Tricladida	1	1.0
	Plecoptera		
	Paragnetina	1	1.0
	Tricoptera		
	Cheumatopsyche	21	19.0
	Chimarra	14	12.0
	Hydropsyche	73	65.0
		113	100.0

Station 38.--West Branch Brandywine Creek at Wawaset

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Spring 1970	No data		
Fall 1970	Tricoptera		
	Cheumatopsyche	2	3.0
	Hydropsyche	56	97.0
		58	100.0
Spring 1971	Diptera		
	Chironomidae	1	20.0
	Ephemeroptera		
	Ephemerella	1	20.0
	Stenonema	1	20.0
	Tricoptera		
	Hydropsyche	2	40.0
		5	100.0
Fall 1971	Tricoptera		
	Cheumatopsyche	9	35.0
	Hydropsyche	17	65.0
		26	100.0
Fall 1972	Diptera		
	Antocha	1	0.2
	Chironomidae	39	8.0
	Empididae	1	0.2
	Simuliidae	18	4.0
	Ephemeroptera		
	Baetis	1	0.2
	Isonychia	2	0.4
	Pseudocloeon	3	0.6
	Stenonema	3	0.6
	Hymenoptera		
	Mymaridae	1	0.2
	Tricoptera		
	Cheumatopsyche	133	26.0
	Hydropsyche	305	60.0
		507	100.0
Fall 1973	No data		
Fall 1974	No data		

Station 39.--East Branch Brandywine Creek at Wawaset

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Spring 1970	No data		
Fall 1970	No data		
Spring 1971	No data		
Fall 1971	Ephemeroptera		
	Stenonema	10	55.0
	Tricoptera		
	Cheumatopsyche	3	17.0
	Hydropsyche	5	28.0
		18	100.0
Fall 1972	Coleoptera		
	Stenelmis	1	0.5
	Diptera		
	Chironomidae	40	19.0
	Ephemeroptera		
	Baetis	4	1.9
	Pseudocloeon	1	0.5
	Stenonema	12	6.0
	Tricorythodes	1	0.5
	Tricoptera		
	Cheumatopsyche	43	21.0
	Hydropsyche	106	51.0
		208	100.0
Fall 1973	Diptera		
	Chironomidae	11	16.0
	Simuliidae	12	17.0
	Megaloptera		
	Sialis	1	1.0
	Odonata		
	Argia	3	4.0
	Tricoptera		
	Cheumatopsyche	13	19.0
	Hydropsyche	30	43.0
		70	100.0

Station 39.--East Branch Brandywine Creek at Wawaset--Continued

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Fall 1974	Coleoptera		
	Stenelmis	1	2.0
	Dubiraphia	1	2.0
	Diptera		
	Chironomidae	26	50.0
	Annelida		
	Oligochaeta	4	8.0
	Ephemeroptera		
	Stenonema	1	2.0
	Platyhelminthes		
	Tricladida	13	25.0
	Gastropoda		
	Physa	1	2.0
	Ferrissia	2	4.0
	Ostracoda	2	4.0
	Pelscypoda		
	Sphaerium	1	2.0
		52	100.0

Station 40.--Brandywine Creek at Chadds Ford

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Spring 1970	None		
Fall 1970	None		
Spring 1971	Diptera		
	Simuliidae	11	27.0
	Ephemeroptera		
	Ephemerella	7	17.0
	Stenonema	8	19.0
	Tricoptera		
	Hydropsyche	15	37.0
		41	100.0
Fall 1972	Diptera		
	Chironomidae	12	9.0
	Simuliidae	3	2.0
	Ephemeroptera		
	Baetis	1	1.0
	Stenonema	7	5.0
	Lepidoptera		
	Cataclysta	6	5.0
	Tricoptera		
	Cheumatopsyche	27	20.0
	Hydropsyche	76	57.1
	Leucotrichia	1	1.0
		133	100.0
Fall 1973	Ephemeroptera		
	Baetis	3	0.5
	Isonychia	2	0.5
	Stenonema	11	3.0
	Pelecypoda		
	Sphaeriidae	13	3.0
	Gastropoda		
	Ferrissia	4	1.0
	Physa	1	0.1

Station 40.--Brandywine Creek at Chadds Ford--Continued

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Fall 1973 (continued)	Hymenoptera		
	Parargyractis	4	1.0
	Tricoptera		
	Cheumatopsyche	405	62.0
	Hydropsyche	206	32.0
	Leucotrichia	2	0.3
	Polycentropus	2	0.3
		653	100.0
Fall 1974	Coleoptera		
	Dubiraphia	1	0.4
	Chironomidae	5	2.0
	Platyhelminthes		
	Tricladida	32	13.0
	Ephemeroptera		
	Baetis	1	0.4
	Stenonema	1	0.4
	Pelecypoda		
	Sphaerium	7	3.0
	Tricoptera		
	Cheumatopsyche	142	58.0
	Hydropsyche	55	22.0
	Leucotrichia	1	0.4
	Oecetis	1	0.4
		246	100.0

Station 41.--French Creek near Trythall

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Fall 1973	No data		
Fall 1974	No data		

Station 42.--East Branch Brandywine Creek near Glenmore

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Fall 1973	Diptera		
	Chironomidae	1	0.7
	Simuliidae	1	0.7
	Antocha	2	1.5
	Tipula	1	0.7
	Gonomyia	3	2.2
	Ephemeroptera		
	Stenonema	3	2.2
	Neuroptera		
	Corydalus	1	0.7
	Odonata		
	Aeshna	2	1.5
	Platyhelminthes		
	Turbellaria	1	0.7
	Plecoptera		
	Acroneuria	1	0.7
	Paragnetina	17	12.7
	Tricoptera		
	Chimarra	16	11.9
	Cheumatopsyche	28	20.9
	Hydropsyche	57	42.5
		134	100.0
Fall 1974	Coleoptera		
	Stenelmis	1	0.9
	Diptera		
	Chironomidae	5	4.4
	Simuliidae	4	3.5
	Antocha	11	9.7
	Atherix	1	0.9
	Ephemeroptera		
	Baetis	1	0.9
	Stenonema	2	1.8
	Ephemerella	1	0.9

Station 42.--East Branch Brandywine Creek near Glenmore--Continued

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Fall 1974	Hydracarina	4	3.5
	Neuroptera		
	Chauliodes	1	0.9
	Plecoptera		
	Paragnetina	3	2.6
	Tricoptera		
	Macronemum	1	0.9
	Hydropsyche	63	55.7
	Polycentropus	1	0.9
	Micrasema	1	0.9
	Glossosoma	1	0.9
	Cheumatopsyche	12	10.6
		113	100.0

Station 43.--East Branch Brandywine Creek near Struble Dam

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Fall 1973	Coleoptera		
	Stenelmis	1	0.5
	Diptera		
	Chironomidae	5	2.6
	Tipula	1	0.5
	Simuliidae	2	1.0
	Limnophora	1	0.5
	Platyhelminthes		
	Turbellaria	13	6.8
	Tricoptera		
	Hydropsyche	126	65.9
	Cheumatopsyche	42	21.9
		191	100.0
Fall 1974	No data		

Station 44.--Valley Creek at Mullsteins Meadows

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Fall 1973	Coleoptera		
	Stenelmis	5	0.6
	Optioservus	8	1.0
	Diptera		
	Chironomidae	18	2.3
	Simuliidae	19	2.5
	Antocha	1	0.1
	Ephemeroptera		
	Stenonema	25	3.2
	Baetis	9	1.2
	Isonychia	3	0.4
	Tricorythodes	1	0.1
	Ephemerella	8	1.0
	Neuroptera		
	Nigronia	1	0.1
	Corydalus	1	0.1
	Tricoptera		
	Hydropsyche	487	63.2
	Cheumatopsyche	182	23.6
	Clossosoma	1	0.1
	Chimarra	1	0.1
		770	100.0
Fall 1974	Coleoptera		
	Stenelmis	19	2.0
	Optioservus	3	0.3
	Diptera		
	Chironomidae	15	1.6
	Simuliidae	22	2.3
	Antocha	6	0.6
	Ephemeroptera		
	Isonychia	4	0.4
	Baetis	6	0.6
	Ephemerella	5	0.5
	Stenonema	19	2.0

Station 44.--Valley Creek at Mullsteins Meadows--Continued

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Fall 1974 (continued)	Gastropoda		
	Physa	1	0.1
	Neuroptera		
	Corydalus	1	0.1
	Platyhelminthes		
	Tricladida	5	0.5
	Plecoptera		
	Phasganophora	1	0.1
	Tricoptera		
	Hydropsyche	547	57.6
	Cheumatopsyche	294	30.9
	Rhyacophila	1	0.5
		949	100.0

Station 45.--Doe Run near Springdale

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Fall 1973	Coleoptera		
	Optioservus	1	6.7
	Diptera		
	Chironomidae	9	60.0
	Antocha	1	6.7
	Ephemeroptera		
	Stenonema	1	6.7
	Platyhelminthes		
	Turbellaria	1	6.7
	Tricoptera		
	Hydropsyche	1	6.7
	Cheumatopsyche	1	6.7
		15	100.0
Fall 1974	Diptera		
	Chironomidae	3	2.0
	Ephemeroptera		
	Isonychia	2	1.3
	Baetis	1	0.7
	Stenonema	1	0.7
	Gastropoda		
	Ferrissia	2	1.3
	Tricoptera		
	Hydropsyche	106	72.1
	Cheumatopsyche	32	21.8
		147	100.0

Station 46.--Buck Run Creek near Doe Run

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Fall 1973	Diptera		
	Simuliidae	4	1.2
	Ephemeroptera		
	Isonychia	1	0.3
	Baetis	2	0.6
	Gastropoda		
	Physa	1	0.3
	Platyhelminthes		
	Turbellaria	1	0.3
	Tricoptera		
	Hydropsyche	276	79.8
	Cheumatopsyche	49	14.2
	Leucotrichia	12	3.5
		346	100.0
Fall 1974	Diptera		
	Chironomidae	8	14.8
	Hemerodromia	4	7.4
	Platyhelminthes		
	Tricladida	1	1.7
	Tricoptera		
	Hydropsyche	30	55.6
	Cheumatopsyche	11	20.4
		54	100.0

Station 47.--Indian Creek near Springton

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Fall 1973	No data		
Fall 1974	Coleoptera		
	Optioservus	3	1.6
	Diptera		
	Chironomidae	6	3.2
	Antocha	3	1.6
	Simuliidae	2	1.1
	Ephemeroptera		
	Stenonema	12	6.4
	Ephemerella	3	1.6
	Baetis	2	1.1
	Gastropoda		
	Ferrissia	9	4.7
	Plceoptera		
	Acroneuria	2	1.1
	Paragnetina	1	0.5
	Tricoptera		
	Goera	1	0.5
	Sortosa	3	1.6
	Glossosoma	18	9.6
	Hydropsyche	63	33.5
	Psychomyiid (A)	1	0.5
	Psychomyia	7	3.7
	Cheumatopsyche	44	23.4
	Rhyacophila	4	2.1
	Leucotrichia	1	0.5
	Chimarra	2	1.1
	Polycentropus	1	0.5
		188	100.0

Station 48.--East Branch Brandywine Creek near Cupola

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Fall 1973	Coleoptera		
	Optioservus	8	3.7
	Diptera		
	Chironomidae	7	3.2
	Simuliidae	10	4.6
	Antocha	1	0.5
	Ephemeroptera		
	Stenonema	14	6.4
	Isonychia	2	0.9
	Baetis	1	0.5
	Neuroptera		
	Corydalus	2	0.9
	Platyhelminthes		
	Turbellaria	4	1.8
	Plecoptera		
	Paragnetina	7	3.2
	Tricoptera		
	Chimarra	54	24.8
	Hydropsyche	75	34.4
	Cheumatopsyche	31	14.2
	Leucotrichia	2	0.9
		218	100.0
Fall 1974	Coleoptera		
	Optioservus	1	0.5
	Stenelmis	6	3.2
	Diptera		
	Chironomidae	12	6.4
	Antocha	3	1.6
	Hemerodromia	1	0.5
	Simuliidae	2	1.1

Station 48.--East Branch Brandywine Creek near Cupola--Continued

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Fall 1974 (continued)	Ephemeroptera		
	Ephemerella	4	2.1
	Stenonema	10	5.3
	Baetis	1	0.5
	Platyhelminthes		
	Tricladida	15	7.9
	Plecoptera		
	Phasganophora	1	0.5
	Paragnetina	2	1.1
	Tricoptera		
	Glossosoma	3	1.6
	Hydropsyche	62	33.0
	Chimarra	59	31.4
	Cheumatopsyche	5	2.7
	Leucotrichia	1	0.5
		188	100.0

Station 49.--Little Valley Creek near Valley Forge

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Fall 1973	Amphipoda		
	Gammarus	1	3.4
	Tricoptera		
	Hydropsyche	28	96.6
		29	100.0
Fall 1974	No organisms found		

Station 50.--Valley Creek near Valley Forge

DATE	ORGANISMS	TOTAL ORGANISM COUNT	PERCENT COMPOSITION
Fall 1973	Isopoda		
	Asellus	1	4.0
	Tricoptera		
	Hydropsyche	24	96.0
		25	100.0
Fall 1974	Amphipoda		
	Gammarus	3	2.0
	Diptera		
	Chironomidae	1	0.7
	Antocha	3	2.0
	Gastropoda		
	Ferrissia	10	6.5
	Isopoda		
	Asellus	3	2.0
	Neuroptera		
	Sialis	1	0.7
	Tricoptera		
	Hydropsyche	103	67.3
	Cheumatopsyche	29	19.0
		153	100.0

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