



State of Ohio
Environmental Protection Agency

Division of Surface Water

Appendices to

Biological and Water Quality Study of Fourmile Creek, Indian Creek, and Select Tributaries, 2005

Butler and Preble Counties

April 3, 2008

Ted Strickland, Governor
Chris Korleski, Director

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Biological and Water Quality Study of
Fourmile Creek, Indian Creek,
and Select Tributaries
2005

Preble and Butler Counties, Ohio

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Appendix A-1

Summary tables of the inorganic water chemistry sampling results
in the Fourmile Creek and Indian Creek study areas, 2005.

Appendix Table A-1. Fourmile Creek and Indian Creek Watersheds Inorganic Water Chemistry Sampling Results (2005)

Site Location: # 1 FOURMILE CREEK @ GRAVEL LANE UPSTREAM WEIST RD

Fourmile Creek Watershed (WAU:05080002-070)

River Mile: 41.10

Storet: H10K01

Latitude / Longitude: 39.7609 / 84.7887

County: Preble

USGS Quad: New Paris

07/19/2005

08/02/2005

09/19/2005

Time	1440	1320	1340
Temp(C)	23.4	24.4	18.27
D.O. (mg/l)	8.09	9.5	8.56
D.O. Sat (%)	104.2	113.9	91.1
pH (fld) (SU)	7.93	8.12	8.12
pH (lab) (SU)			
Sp Cond (fld) (µmhos/cm)		589	625
Sp Cond (lab) (µmhos/cm)	599	576	621
BOD5 (mg/l)	2 K	2 K	2 K
COD (mg/l)	10 K	10 K	10 K
Alkalinity (mg/l)	256	262	274
Acidity (mg/l)	5 K	5 K	5 K
Ammonia-N (mg/l)	0.05 K	0.065	0.05 K
Nitrate-Nitrite-N (mg/l)	7.96	7.03	6.18
Nitrite-N (mg/l)	0.02 K	0.02 K	0.023
TKN (mg/l)	0.32	0.26	0.39
Phosphorus-T (mg/l)	0.046	0.015	0.081
Phosphorus-Dis (mg/l)			
TDS (mg/l)	364	342	390
TSS (mg/l)	5 K	5	5 K
Chloride (mg/l)	22.7	15.7	27.2
Sulfate (mg/l)	20.8	19.4	24.3
Aluminum-T (µg/l)	200 K	200 K	200 K
Arsenic-T (µg/l)	2 K	2 K	2 K
Barium-T (µg/l)	73	64	66
Cadmium-T (µg/l)	0.2 K	0.2 K	0.2 K
Calcium-T (mg/l)	79	82	80
Chromium-T (µg/l)	30 K	30 K	30 K
Copper-T (µg/l)	10 K	10 K	10 K
Iron-T (µg/l)	104	235	107
Lead-T (µg/l)	2 K	2 K	2 K
Magnesium-T (mg/l)	29	30	29
Manganese-T (µg/l)	13	24	10
Mercury-T (µg/l)	0.2 K	0.2 K	0.2 K
Nickel-T (µg/l)	40 K	40 K	40 K
Potassium-T (mg/l)	3	2 K	4
Selenium-T (µg/l)	2 K	2 K	2 K
Sodium-T (mg/l)	7	5 K	8
Strontium-T (µg/l)	186	142	165
Zinc-T (µg/l)	10 K	10 K	10 K
Hardness (mg/l CaCO3)	317	328	319

K = less than

Appendix Table A-1. Fourmile Creek and Indian Creek Watersheds Inorganic Water Chemistry Sampling Results (2005)

Site Location: # 2 FOURMILE CREEK @ CONCORD-FAIRHAVEN RD

Fourmile Creek Watershed (WAU:05080002-070)

River Mile: 38.95

Storet: H10K02

Latitude / Longitude: 39.7365 / 84.7742

County: Preble

USGS Quad:Fairhaven

	07/19/2005	08/02/2005	08/16/2005	08/30/2005	09/19/2005
Time	1400	1300	1430	1145	1310
Temp(C)	25.9	26.23	22.2	21.26	18.81
D.O. (mg/l)	9.89	9.66	9.08	7.06	9.91
D.O. Sat (%)	122.2	119.8	94.2	79.7	106.6
pH (fld) (SU)	8.14	8.11		8	8.14
pH (lab) (SU)			8.24		
Sp Cond (fld) (µmhos/cm)		597		553	620
Sp Cond (lab) (µmhos/cm)	569	580	631	552	617
BOD5 (mg/l)	2 K	2 K	2 K	2	2 K
COD (mg/l)	17	12	10 K	10 K	10 K
Alkalinity (mg/l)	237	248	294	249	274
Acidity (mg/l)	5 K	5 K	5 K	5 K	5 K
Ammonia-N (mg/l)	0.072	0.09	0.108	0.101	0.061
Nitrate-Nitrite-N (mg/l)	6.76	8.02	1.24	0.6	3
Nitrite-N (mg/l)	0.067	0.023	0.02 K	0.02 K	0.044
TKN (mg/l)	0.53	0.5	0.31	0.44	0.48
Phosphorus-T (mg/l)	0.06	0.031	0.041	0.034	0.029
Phosphorus-Dis (mg/l)					
TDS (mg/l)	348	354	388	330	444
TSS (mg/l)	9	5 K	6	5 K	5 K
Chloride (mg/l)	24.8	27.3	21.5	18.5	27.3
Sulfate (mg/l)	23.8	37.9	41.7	37.9	35.7
Aluminum-T (µg/l)	240	200 K	200 K	200 K	200 K
Arsenic-T (µg/l)	2.1	3.9	2.8	2.5	2.9
Barium-T (µg/l)	86	94	109	96	99
Cadmium-T (µg/l)	0.2 K	0.2 K	0.2 K	0.2 K	0.2 K
Calcium-T (mg/l)	73	65	76	68	77
Chromium-T (µg/l)	30 K	30 K	30 K	30 K	30 K
Copper-T (µg/l)	10 K	10 K	10 K	10 K	10 K
Iron-T (µg/l)	420	237	142	135	170
Lead-T (µg/l)	2 K	2 K	2 K	2 K	2 K
Magnesium-T (mg/l)	29	34	35	32	33
Manganese-T (µg/l)	24	44	22	30	10
Mercury-T (µg/l)	0.2 K	0.2 K	0.2 K	0.2 K	0.2 K
Nickel-T (µg/l)	40 K	40 K	40 K	40 K	40 K
Potassium-T (mg/l)	3	3	3	3	4
Selenium-T (µg/l)	2 K	2 K	2 K	2 K	2 K
Sodium-T (mg/l)	9	9	7	6	10
Strontium-T (µg/l)	516	1260	1870	1770	966
Zinc-T (µg/l)	10 K	10 K	10 K	10 K	10 K
Hardness (mg/l CaCO3)	302	302	334	302	328

K = less than

Appendix Table A-1. Fourmile Creek and Indian Creek Watersheds Inorganic Water Chemistry Sampling Results (2005)

Site Location: # 3 FOURMILE CREEK @ CONCORD-FAIRHAVEN RD

Fourmile Creek Watershed (WAU:05080002-070)

River Mile: 35.62

Storet: H10K03

Latitude / Longitude: 39.6999 / 84.7696

County: Preble

USGS Quad:Fairhaven

	07/19/2005	08/02/2005	08/16/2005	08/30/2005	09/19/2005
Time	1300	1215	1350	1115	1230
Temp(C)	25.6	26.61	23.4	22.06	18.54
D.O. (mg/l)	8.46	10.75	9.94	4.65	8.57
D.O. Sat (%)	104.4	134.2	117	53.3	91.7
pH (fld) (SU)	8.19	8.22		7.85	8.02
pH (lab) (SU)			8.24		
Sp Cond (fld) (µmhos/cm)		558		476	466
Sp Cond (lab) (µmhos/cm)	515	545	543	496	468
BOD5 (mg/l)	2 K	2 K	2 K	3.8	2 K
COD (mg/l)	11	11	14	16	17
Alkalinity (mg/l)	214	236	250	232	198
Acidity (mg/l)	5 K	5 K	5 K	5 K	5 K
Ammonia-N (mg/l)	0.081	0.103	0.168	0.096	0.078
Nitrate-Nitrite-N (mg/l)	6.35	2	1.07	0.1	4.58
Nitrite-N (mg/l)	0.036	0.024	0.039	0.528	0.03
TKN (mg/l)	0.4	0.6	0.5	0.61	0.68
Phosphorus-T (mg/l)	0.089	0.036	0.296	0.1	0.096
Phosphorus-Dis (mg/l)					
TDS (mg/l)	314	324	314	278	328
TSS (mg/l)	14	6	15	18	11
Chloride (mg/l)	21.3	25.6	23.8	21.3	18.4
Sulfate (mg/l)	21.8	29	26.5	19.9	22.6
Aluminum-T (µg/l)	383	200 K	281	394	200 K
Arsenic-T (µg/l)	2.6	2.5	4.9	5.7	3
Barium-T (µg/l)	81	73	78	68	73
Cadmium-T (µg/l)	0.2 K	0.2 K	0.2 K	0.2 K	0.2 K
Calcium-T (mg/l)	67	59	58	49	56
Chromium-T (µg/l)	30 K	30 K	30 K	30 K	30 K
Copper-T (µg/l)	10 K	10 K	10 K	10 K	10 K
Iron-T (µg/l)	1800	242	418	642	415
Lead-T (µg/l)	2 K	2 K	2 K	2 K	2 K
Magnesium-T (mg/l)	27	31	33	33	22
Manganese-T (µg/l)	48	54	65	199	37
Mercury-T (µg/l)	0.2 K	0.2 K	0.2 K	0.2 K	0.2 K
Nickel-T (µg/l)	40 K	40 K	40 K	40 K	40 K
Potassium-T (mg/l)	4	3	4	4	7
Selenium-T (µg/l)	2 K	2 K	2 K	2 K	2 K
Sodium-T (mg/l)	9	9	9	9	6
Strontium-T (µg/l)	572	613	655	526	495
Zinc-T (µg/l)	10 K	10 K	10 K	10 K	10 K
Hardness (mg/l CaCO3)	278	275	281	258	230

K = less than

Appendix Table A-1. Fourmile Creek and Indian Creek Watersheds Inorganic Water Chemistry Sampling Results (2005)

Site Location: # 4 FOURMILE CREEK @ PAINT CREEK FOURMILE RD

Fourmile Creek Watershed (WAU:05080002-070)

River Mile: 30.71

Storet: H10K13

Latitude / Longitude: 39.6558 / 84.7694

County: Preble

USGS Quad: Fairhaven

	07/19/2005	08/02/2005	08/16/2005	08/30/2005	09/19/2005
Time	1125	1100	1245	1015	1115
Temp(C)	24.7	24.02	22.4	21.52	17.88
D.O. (mg/l)	8.14	8.34	8.49	6.82	7.98
D.O. Sat (%)	98.2	99.3	97.9	77.4	84.2
pH (fld) (SU)	8.26	8.18		7.97	8.02
pH (lab) (SU)			8.22		
Sp Cond (fld) (µmhos/cm)		536		466	451
Sp Cond (lab) (µmhos/cm)	500	529	496	485	452
BOD5 (mg/l)	2 K	2 K	2 K	2 K	2 K
COD (mg/l)	10 K	11	10 K	10 K	14
Alkalinity (mg/l)	217	238	235	230	188
Acidity (mg/l)	5 K	5 K	5 K	5 K	5 K
Ammonia-N (mg/l)	0.059	0.067	0.085	0.066	0.053
Nitrate-Nitrite-N (mg/l)	4.65	1.12	0.36	0.1 K	3.46
Nitrite-N (mg/l)	0.02	0.02 K	0.02 K	0.02 K	0.028
TKN (mg/l)	0.41	0.33	0.33	0.25	0.38
Phosphorus-T (mg/l)	0.032	0.023	0.057	0.026	0.105
Phosphorus-Dis (mg/l)					
TDS (mg/l)	310	314	284	266	298
TSS (mg/l)	5	7	5	7	7
Chloride (mg/l)	18.6	21.8	18.4	16.9	17.6
Sulfate (mg/l)	21.4	27.3	25.4	20	21.9
Aluminum-T (µg/l)	200 K	200 K	200 K	200 K	200 K
Arsenic-T (µg/l)	2	2 K	2.3	2.4	3.1
Barium-T (µg/l)	75	73	71	67	72
Cadmium-T (µg/l)	0.2 K	0.2 K	0.2 K	0.2 K	0.2 K
Calcium-T (mg/l)	64	58	54	53	52
Chromium-T (µg/l)	30 K	30 K	30 K	30 K	30 K
Copper-T (µg/l)	10 K	10 K	10 K	10 K	10 K
Iron-T (µg/l)	199	210	168	189	362
Lead-T (µg/l)	2 K	2 K	2 K	2 K	2 K
Magnesium-T (mg/l)	26	30	29	28	22
Manganese-T (µg/l)	18	37	41	46	27
Mercury-T (µg/l)	0.2 K	0.2 K	0.2 K	0.2 K	0.2 K
Nickel-T (µg/l)	40 K	40 K	40 K	40 K	40 K
Potassium-T (mg/l)	4	3	3	3	8
Selenium-T (µg/l)	2 K	2 K	2 K	2 K	2 K
Sodium-T (mg/l)	7	8	8	7	7
Strontium-T (µg/l)	678	684	610	531	661
Zinc-T (µg/l)	10 K	10 K	10 K	10 K	10 K
Hardness (mg/l CaCO3)	267	268	254	248	220

K = less than

Appendix Table A-1. Fourmile Creek and Indian Creek Watersheds Inorganic Water Chemistry Sampling Results (2005)

Site Location: # 5 FOURMILE CREEK ADJACENT CREEK RD

Fourmile Creek Watershed (WAU:05080002-070)

River Mile: 28.90

Storet: H10K16

Latitude / Longitude: 39.6342 / 84.7746

County: Preble

USGS Quad: Fairhaven

	07/19/2005	08/02/2005	08/16/2005	08/30/2005	09/19/2005
Time	1015	1010	1120	0945	1020
Temp(C)	24	22.54	21.9	21.53	18.02
D.O. (mg/l)	7.41	6.74	6.58	6.15	7
D.O. Sat (%)	87.5	78.1	75.2	69.8	74
pH (fld) (SU)	8.22	8.16		7.96	7.93
pH (lab) (SU)			8.13		
Sp Cond (fld) (µmhos/cm)		545		487	463
Sp Cond (lab) (µmhos/cm)	498	538	500	500	465
BOD5 (mg/l)	2 K	2 K	2 K	2 K	2 K
COD (mg/l)	14	10 K	10 K	10 K	17
Alkalinity (mg/l)	209	236	232	230	192
Acidity (mg/l)	5 K	5 K	5 K	5 K	5 K
Ammonia-N (mg/l)	0.053	0.067	0.082	0.066	0.06
Nitrate-Nitrite-N (mg/l)	4.04	1.19	0.2	0.1 K	2.48
Nitrite-N (mg/l)	0.02 K	0.02 K	0.02 K	0.02 K	0.023
TKN (mg/l)	0.43	0.34	0.26	0.35	0.51
Phosphorus-T (mg/l)	0.03	0.017	0.026	0.01 K	0.065
Phosphorus-Dis (mg/l)					
TDS (mg/l)	296	312	296	274	296
TSS (mg/l)	6	7	7	7	6
Chloride (mg/l)	18.1	24	20.1	21.6	20.7
Sulfate (mg/l)	23.8	28.9	25.1	23.1	23.2
Aluminum-T (µg/l)	200 K	200 K	200 K	397	200 K
Arsenic-T (µg/l)	2	2	2.1	2.3	2.3
Barium-T (µg/l)	74	72	69	73	72
Cadmium-T (µg/l)	0.2 K	0.2 K	0.2 K	0.2 K	0.2 K
Calcium-T (mg/l)	64	60	55	54	54
Chromium-T (µg/l)	30 K	30 K	30 K	30 K	30 K
Copper-T (µg/l)	10 K	10 K	10 K	10 K	10 K
Iron-T (µg/l)	220	165	205	454	383
Lead-T (µg/l)	2 K	2 K	2 K	2 K	2 K
Magnesium-T (mg/l)	27	31	28	29	23
Manganese-T (µg/l)	15	25	43	76	31
Mercury-T (µg/l)	0.2 K	0.2 K	0.2 K	0.2 K	0.2 K
Nickel-T (µg/l)	40 K	40 K	40 K	40 K	40 K
Potassium-T (mg/l)	4	3	3	3	8
Selenium-T (µg/l)	2 K	2 K	2 K	2 K	2 K
Sodium-T (mg/l)	7	9	9	10	9
Strontium-T (µg/l)	625	638	553	536	699
Zinc-T (µg/l)	10 K	10 K	10 K	19	10 K
Hardness (mg/l CaCO3)	271	277	253	254	230

K = less than

Appendix Table A-1. Fourmile Creek and Indian Creek Watersheds Inorganic Water Chemistry Sampling Results (2005)

Site Location: # 6 FOURMILE CREEK @ JUNCTION RD

Fourmile Creek Watershed (WAU:05080002-070)

River Mile: 26.73

Storet: H10K04

Latitude / Longitude: 39.6115 / 84.7852

County: Preble

USGS Quad: College Corner

	07/19/2005	08/02/2005	08/16/2005	09/19/2005
Time	1400	1420	1045	1200
Temp(C)	25.19	27.3	20.9	18.1
D.O. (mg/l)	9.09	9.69	6.6	8.05
D.O. Sat (%)	110.5	121.9		84.5
pH (fld) (SU)	8.27	8.58	7.9	
pH (lab) (SU)				8.19
Sp Cond (fld) (µmhos/cm)	553			
Sp Cond (lab) (µmhos/cm)	539	543	491	547
BOD5 (mg/l)	2 K	2 K	2 K	2 K
COD (mg/l)	10 K	12	10 K	11
Alkalinity (mg/l)	221	243	215	237
Acidity (mg/l)	5 K	5 K	5 K	5 K
Ammonia-N (mg/l)	0.059	0.065	0.071	0.053
Nitrate-Nitrite-N (mg/l)	3.78	1.23	0.44	1.76
Nitrite-N (mg/l)	0.02 K	0.02 K	0.02 K	0.02 K
TKN (mg/l)	0.36	0.29	0.29	0.54
Phosphorus-T (mg/l)	0.027	0.01 K	0.033	0.06
Phosphorus-Dis (mg/l)				
TDS (mg/l)	316	342	280	334
TSS (mg/l)	5 K	5 K	5 K	5 K
Chloride (mg/l)	30.7	24.1	26.5	33.5
Sulfate (mg/l)	25.4	28.2	24.2	23.6
Aluminum-T (µg/l)	200 K	200 K	200 K	200 K
Arsenic-T (µg/l)	2 K	2 K	2 K	2 K
Barium-T (µg/l)	65	69	58	68
Cadmium-T (µg/l)	0.2 K	0.2 K	0.2 K	0.2 K
Calcium-T (mg/l)	66	63	58	66
Chromium-T (µg/l)	30 K	30 K	30 K	30 K
Copper-T (µg/l)	10 K	10 K	10 K	10 K
Iron-T (µg/l)	136	120	87	274
Lead-T (µg/l)	2 K	2 K	2 K	2 K
Magnesium-T (mg/l)	28	30	24	26
Manganese-T (µg/l)	11	24	37	27
Mercury-T (µg/l)	0.2 K	0.2 K	0.2 K	0.2 K
Nickel-T (µg/l)	40 K	40 K	40 K	40 K
Potassium-T (mg/l)	3	3	4	5
Selenium-T (µg/l)	2 K	2 K	2 K	2 K
Sodium-T (mg/l)	11	9	10	14
Strontium-T (µg/l)	436	576	392	412
Zinc-T (µg/l)	10 K	10 K	10 K	10 K
Hardness (mg/l CaCO3)	280	281	244	272

K = less than

Appendix Table A-1. Fourmile Creek and Indian Creek Watersheds Inorganic Water Chemistry Sampling Results (2005)

Site Location: # 7 FOURMILE CREEK @ CAMDEN-COLLEGE CORNER RD

Fourmile Creek Watershed (WAU:05080002-070)

River Mile: 24.77

Storet: H10S09

Latitude / Longitude: 39.5919 / 84.7705

County: Preble

USGS Quad: College Corner

	07/19/2005	08/02/2005	08/16/2005	08/30/2005	09/19/2005
Time	1340	1225	1135	1115	1130
Temp(C)	26.57	25.3	22	21.92	18.3
D.O. (mg/l)	9.65	8.97	4.2	6.89	8.84
D.O. Sat (%)	120.4	109.3		78.9	94
pH (fld) (SU)	8.45	6.71	7.37	7.72	
pH (lab) (SU)					8.29
Sp Cond (fld) (µmhos/cm)	500				
Sp Cond (lab) (µmhos/cm)	488	529	483	434	496
BOD5 (mg/l)	2 K	2 K	2 K	2 K	2 K
COD (mg/l)	11	10 K	10 K	10 K	10 K
Alkalinity (mg/l)	209	230	220	190	219
Acidity (mg/l)	5 K	5 K	5 K	5 K	5 K
Ammonia-N (mg/l)	0.054	0.07	0.059	0.051	0.059
Nitrate-Nitrite-N (mg/l)	2.72	1.12	0.27	0.1 K	0.95
Nitrite-N (mg/l)	0.02 K	0.02 K	0.02 K	0.02 K	0.02 K
TKN (mg/l)	0.39	0.24	0.2 K	0.21	0.45
Phosphorus-T (mg/l)	0.014	0.017	0.023	0.033	0.022
Phosphorus-Dis (mg/l)					
TDS (mg/l)	288	310	280	240	308
TSS (mg/l)	5	5 K	5 K	14	5 K
Chloride (mg/l)	20.6	25.1	20.2	18	24.2
Sulfate (mg/l)	24.8	28.6	26.4	20.8	23.7
Aluminum-T (µg/l)	200 K	200 K	200 K	200 K	200 K
Arsenic-T (µg/l)	2 K	2 K	2 K	2 K	2 K
Barium-T (µg/l)	67	63	59	53	63
Cadmium-T (µg/l)	0.2 K	0.2 K	0.2 K	0.2 K	0.2 K
Calcium-T (mg/l)	61	61	57	48	57
Chromium-T (µg/l)	30 K	30 K	30 K	30 K	30 K
Copper-T (µg/l)	10 K	10 K	10 K	10 K	10 K
Iron-T (µg/l)	166	80	50 K	85	137
Lead-T (µg/l)	2 K	2 K	2 K	2 K	2 K
Magnesium-T (mg/l)	27	29	26	24	25
Manganese-T (µg/l)	10	10 K	10 K	14	10 K
Mercury-T (µg/l)	0.2 K	0.2 K	0.2 K	0.2 K	0.2 K
Nickel-T (µg/l)	40 K	40 K	40 K	40 K	40 K
Potassium-T (mg/l)	3	3	3	3	5
Selenium-T (µg/l)	2 K	2 K	2 K	2 K	2 K
Sodium-T (mg/l)	8	9	8	8	10
Strontium-T (µg/l)	616	543	458	415	575
Zinc-T (µg/l)	10 K	10 K	10 K	16	10 K
Hardness (mg/l CaCO3)	264	272	249	219	245

K = less than

Appendix Table A-1. Fourmile Creek and Indian Creek Watersheds Inorganic Water Chemistry Sampling Results (2005)

Site Location: # **8 FOURMILE CREEK @ BUCKLEY RD UPSTREAM OXFORD, DOWNSTREAM ACTON LAKE** Fourmile Creek Watershed (WAU:05080002-070)
 River Mile: 20.25 Storet: H10S07 Latitude / Longitude: 39.5424 / 84.7371 County: Butler USGS Quad:Oxford

	07/19/2005	08/02/2005	08/16/2005	08/30/2005	09/19/2005
Time	1100	1045	0000	1005	1055
Temp(C)	25.75	23.9	21	21.73	20
D.O. (mg/l)	5.94	5.45	3.4	3.65	2.32
D.O. Sat (%)	73			41.6	25.5
pH (fld) (SU)	8.12	7.62		7.45	
pH (lab) (SU)					7.65
Sp Cond (fld) (µmhos/cm)	365				
Sp Cond (lab) (µmhos/cm)	357	503	507	516	470
BOD5 (mg/l)	3.3	4.6	5.3	11	6.2
COD (mg/l)	11	17	11	16	14
Alkalinity (mg/l)	134	230	253	259	237
Acidity (mg/l)	5 K	5 K	5 K	5 K	5 K
Ammonia-N (mg/l)	0.191	2	3.78	4.46	3.71
Nitrate-Nitrite-N (mg/l)	3.69	0.5	0.24	0.68	0.16
Nitrite-N (mg/l)	0.088	0.106	0.105	0.164	0.041
TKN (mg/l)	0.58	2.54	4.18	4.94	4.9
Phosphorus-T (mg/l)	0.044	0.051	0.08	0.133	0.181
Phosphorus-Dis (mg/l)					
TDS (mg/l)	212	292	278	270	268
TSS (mg/l)	14	13	7	9	9
Chloride (mg/l)	18.2	23.6	20.4	20	19.1
Sulfate (mg/l)	20.6	12.9	8.9	5.4	7.7
Aluminum-T (µg/l)	200 K	200 K	200 K	200 K	200 K
Arsenic-T (µg/l)	2 K	3.6	4.8	4.8	2 K
Barium-T (µg/l)	51	69	73	85	74
Cadmium-T (µg/l)	0.2 K	0.2 K	0.2 K	0.2 K	0.2 K
Calcium-T (mg/l)	38	56	58	62	73
Chromium-T (µg/l)	30 K	30 K	30 K	30 K	30 K
Copper-T (µg/l)	10 K	10 K	10 K	10 K	10 K
Iron-T (µg/l)	582	542	531	547	182
Lead-T (µg/l)	2 K	2 K	2 K	2 K	2 K
Magnesium-T (mg/l)	22	26	26	26	28
Manganese-T (µg/l)	105	696	786	1080	16
Mercury-T (µg/l)	0.2 K	0.2 K	0.2 K	0.2 K	0.2 K
Nickel-T (µg/l)	40 K	40 K	40 K	40 K	40 K
Potassium-T (mg/l)	4	4	4	4	5
Selenium-T (µg/l)	2 K	2 K	2 K	2 K	2 K
Sodium-T (mg/l)	6	7	7	7	16
Strontium-T (µg/l)	238	366	380	391	462
Zinc-T (µg/l)	10 K	90	10 K	10 K	10 K
Hardness (mg/l CaCO3)	185	247	252	262	298

K = less than

Appendix Table A-1. Fourmile Creek and Indian Creek Watersheds Inorganic Water Chemistry Sampling Results (2005)

Site Location: # 9 FOURMILE CREEK @ SR 732 UPSTREAM OXFORD, DOWNSTREAM ELAMS RUN

Fourmile Creek Watershed (WAU:05080002-070)

River Mile: 18.70

Storet: H10S34

Latitude / Longitude: 39.5231 / 84.7339

County: Butler

USGS Quad:Oxford

	07/19/2005	08/02/2005	08/16/2005	08/30/2005	09/19/2005
Time	1020	1020	1310	0950	1030
Temp(C)	25.3	24.6	22.1	22.58	19.5
D.O. (mg/l)	7.25	6.91	5.3	4.46	4.6
D.O. Sat (%)	88.3			51.6	49.9
pH (fld) (SU)	8.07	7.86		7.58	
pH (lab) (SU)					7.82
Sp Cond (fld) (µmhos/cm)	376				
Sp Cond (lab) (µmhos/cm)	371	476	485	500	493
BOD5 (mg/l)	3	3.5	3.9	6.4	7.7
COD (mg/l)	11	12	10 K	11	11
Alkalinity (mg/l)	137	215	225	235	238
Acidity (mg/l)	5 K	5 K	5 K	5 K	5 K
Ammonia-N (mg/l)	0.117	0.099	0.788	0.549	2.66
Nitrate-Nitrite-N (mg/l)	3.63	1.53	1.34	2.6	1.69
Nitrite-N (mg/l)	0.077	0.104	0.387	0.457	0.264
TKN (mg/l)	0.65	0.36	0.94	0.97	3.13
Phosphorus-T (mg/l)	0.049	0.03	0.059	0.032	0.056
Phosphorus-Dis (mg/l)					
TDS (mg/l)	212	286	278	274	302
TSS (mg/l)	18	16	11	10	9
Chloride (mg/l)	18.5	23.4	21.1	18.8	19.9
Sulfate (mg/l)	20.7	16.2	13.7	7.3	7.7
Aluminum-T (µg/l)	200 K	200 K	200 K	200 K	200 K
Arsenic-T (µg/l)	2 K	2.1	2.3	2.7	4.4
Barium-T (µg/l)	49	63	60	71	91
Cadmium-T (µg/l)	0.2 K	0.2 K	0.2 K	0.2 K	0.2 K
Calcium-T (mg/l)	39	54	54	61	56
Chromium-T (µg/l)	30 K	30 K	30 K	30 K	30 K
Copper-T (µg/l)	10 K	10 K	10 K	10 K	10 K
Iron-T (µg/l)	571	530	341	244	456
Lead-T (µg/l)	2 K	2 K	2 K	2 K	2 K
Magnesium-T (mg/l)	22	26	23	26	25
Manganese-T (µg/l)	74	103	88	153	814
Mercury-T (µg/l)	0.2 K	0.2 K	0.2 K	0.2 K	0.2 K
Nickel-T (µg/l)	40 K	40 K	40 K	40 K	40 K
Potassium-T (mg/l)	4	4	4	4	4
Selenium-T (µg/l)	2 K	2 K	2 K	2 K	2 K
Sodium-T (mg/l)	6	8	8	8	8
Strontium-T (µg/l)	240	363	350	407	384
Zinc-T (µg/l)	10 K	10 K	10 K	10 K	10 K
Hardness (mg/l CaCO3)	188	242	230	259	243

K = less than

Appendix Table A-1. Fourmile Creek and Indian Creek Watersheds Inorganic Water Chemistry Sampling Results (2005)

Site Location: #10 FOURMILE CREEK UPSTREAM OXFORD WWTP, DOWNSTREAM COLLINS CREEK

Fourmile Creek Watershed (WAU:05080002-070)

River Mile: 16.40

Storet: H10W04

Latitude / Longitude: 39.4972 / 84.7158

County: Butler

USGS Quad: Millville

	07/19/2005	08/02/2005	08/16/2005	08/30/2005	09/19/2005
Time	1330	1310	1415	1225	1225
Temp(C)	26.1	25.3	22.44	22.1	19.4
D.O. (mg/l)	8.4	8.1	6.56	7.55	6.69
D.O. Sat (%)			75.7		72.8
pH (fld) (SU)	8.26	8.13	7.8	8.31	7.72
pH (lab) (SU)	8.42				
Sp Cond (fld) (µmhos/cm)			462		
Sp Cond (lab) (µmhos/cm)	397	504	461	339	527
BOD5 (mg/l)	3.1	2 K	2 K	10	3
COD (mg/l)	31	17	10 K	22	10 K
Alkalinity (mg/l)	150	210	172	94.2	240
Acidity (mg/l)	5 K	5 K	5 K	5 K	5 K
Ammonia-N (mg/l)	0.05 K	0.05 K	0.107	0.131	0.531
Nitrate-Nitrite-N (mg/l)	3.5	0.96	0.88	0.37	2.39
Nitrite-N (mg/l)	0.057	0.02 K	0.05	0.02 K	0.273
TKN (mg/l)	0.42	0.27	0.29	0.52	0.87
Phosphorus-T (mg/l)	0.043	0.016	0.039	0.767	0.018
Phosphorus-Dis (mg/l)					
TDS (mg/l)	242	296	262	238	316
TSS (mg/l)	31	18	24	1520	12
Chloride (mg/l)	24.2	29.6	35.7	45.3	26
Sulfate (mg/l)	21.3	24.4	20.7	18.7	15.4
Aluminum-T (µg/l)	352	202	550	28100	200 K
Arsenic-T (µg/l)	2.3	2 K	2 K	8.7	3
Barium-T (µg/l)	56	68	62	220	77
Cadmium-T (µg/l)	0.2 K	0.2 K	0.2 K	0.49	0.2 K
Calcium-T (mg/l)	45	56	51	139	61
Chromium-T (µg/l)	30 K	30 K	30 K	35	30 K
Copper-T (µg/l)	10 K	10 K	10 K	64	10 K
Iron-T (µg/l)	764	570	883	44100	494
Lead-T (µg/l)	2 K	2 K	2 K	38.5	2 K
Magnesium-T (mg/l)	23	25	19	45	25
Manganese-T (µg/l)	64	62	51	1120	125
Mercury-T (µg/l)	0.2 K	0.2 K	0.2 K	0.2 K	0.2 K
Nickel-T (µg/l)	40 K	40 K	40 K	43	40 K
Potassium-T (mg/l)	4	3	4	8	4
Selenium-T (µg/l)	2 K	2 K	2 K	2 K	2 K
Sodium-T (mg/l)	9	10	18	24	12
Strontium-T (µg/l)	249	316	292	296	378
Zinc-T (µg/l)	10 K	10 K	10 K	191	10 K
Hardness (mg/l CaCO3)	207	243	206	532	255

K = less than

Appendix Table A-1. Fourmile Creek and Indian Creek Watersheds Inorganic Water Chemistry Sampling Results (2005)

Site Location: #11 FOURMILE CREEK DOWNSTREAM OXFORD WWTP (OUTSIDE MIXING ZONE)

Fourmile Creek Watershed (WAU:05080002-070)

River Mile: 16.20

Storet: H10S04

Latitude / Longitude: 39.4966 / 84.7125

County: Butler

USGS Quad: Millville

	07/19/2005	08/02/2005	08/16/2005	08/30/2005	09/19/2005
Time	1310	1245	1345	1205	1215
Temp(C)	26	25.7	22.67	22.3	20.72
D.O. (mg/l)	8.3	9.8	6.91	6.95	7.65
D.O. Sat (%)			80.2		85.5
pH (fld) (SU)	8.25	8.16	7.89	8.02	7.71
pH (lab) (SU)	8.38				
Sp Cond (fld) (µmhos/cm)			771		
Sp Cond (lab) (µmhos/cm)	476	974	776	831	959
BOD5 (mg/l)	2.6	2 K	2 K	2.7	2 K
COD (mg/l)	14	14	10 K	10 K	10 K
Alkalinity (mg/l)	156	232	213	237	263
Acidity (mg/l)	5 K	5 K	5 K	5 K	5 K
Ammonia-N (mg/l)	0.05 K	0.051	0.098	0.11	0.286
Nitrate-Nitrite-N (mg/l)	4.25	6.04	3.94	4.39	6.13
Nitrite-N (mg/l)	0.057	0.02 K	0.044	0.049	0.156
TKN (mg/l)	0.4	0.96	0.73	0.71	1.28
Phosphorus-T (mg/l)	0.208	0.883	0.677	0.73	1.19
Phosphorus-Dis (mg/l)					
TDS (mg/l)	292	566	442	466	562
TSS (mg/l)	26	19	29	67	15
Chloride (mg/l)	40.7	128	92.8	104	124
Sulfate (mg/l)	24.6	56.6	38.9	35	42.5
Aluminum-T (µg/l)	300	200 K	471	1060	200 K
Arsenic-T (µg/l)	2 K	2 K	2	2 K	2.8
Barium-T (µg/l)	58	78	74	84	83
Cadmium-T (µg/l)	0.2 K	0.2 K	0.2 K	0.2 K	0.2 K
Calcium-T (mg/l)	49	78	70	77	81
Chromium-T (µg/l)	30 K	30 K	30 K	30 K	30 K
Copper-T (µg/l)	10 K	10 K	10 K	10 K	10 K
Iron-T (µg/l)	675	446	785	1530	432
Lead-T (µg/l)	2 K	2 K	2 K	2.1	2 K
Magnesium-T (mg/l)	24	29	24	28	29
Manganese-T (µg/l)	58	37	49	103	67
Mercury-T (µg/l)	0.2 K	0.2 K	0.2 K	0.2 K	0.2 K
Nickel-T (µg/l)	40 K	40 K	40 K	40 K	40 K
Potassium-T (mg/l)	4	7	6	7	8
Selenium-T (µg/l)	2 K	2 K	2 K	2 K	2 K
Sodium-T (mg/l)	20	76	57	63	81
Strontium-T (µg/l)	269	393	352	410	461
Zinc-T (µg/l)	10 K	17	12	19	12
Hardness (mg/l CaCO3)	221	314	274	308	322

K = less than

Appendix Table A-1. Fourmile Creek and Indian Creek Watersheds Inorganic Water Chemistry Sampling Results (2005)

Site Location: #12 FOURMILE CREEK @ LANES MILL RD DOWNSTREAM OXFORD WWTP

Fourmile Creek Watershed (WAU:05080002-070)

River Mile: 13.65

Storet: H10S03

Latitude / Longitude: 39.4818 / 84.6862

County: Butler

USGS Quad: Millville

Duplicate A	07/19/2005	Duplicate A	08/02/2005	Duplicate A	08/16/2005	Duplicate A	08/30/2005	Duplicate A	09/19/2005
Time	1220		1205		1315		1130		1140
Temp(C)	26.7		26.6		22.77		22.7		19.71
D.O. (mg/l)	8.8		9.4		7.69		6.89		8.73
D.O. Sat (%)					89.4				95.8
pH (fld) (SU)	8.33		8.46		8.1		8.28		8.09
pH (lab) (SU)	8.54								
Sp Cond (fld) (µmhos/cm)					583				
Sp Cond (lab) (µmhos/cm)	439		882		585		967		889
BOD5 (mg/l)	2.9		2 K		2 K		2 K		2 K
COD (mg/l)	10 K		11		10 K		10 K		10 K
Alkalinity (mg/l)	151		232		196		251		255
Acidity (mg/l)	5 K		5 K		5 K		5 K		5 K
Ammonia-N (mg/l)	0.05 K		0.063		0.093		0.109		0.083
Nitrate-Nitrite-N (mg/l)	4		4.09		2.16		4.89		6.32
Nitrite-N (mg/l)	0.039		0.02		0.02 K		0.029		0.065
TKN (mg/l)	0.38		1.05		0.49		0.96		0.89
Phosphorus-T (mg/l)	0.121		0.577		0.339		0.769		0.965
Phosphorus-Dis (mg/l)									
TDS (mg/l)	262		516		338		548		518
TSS (mg/l)	34		10		30		23		12
Chloride (mg/l)	31.3		111		57.9		134		108
Sulfate (mg/l)	21.5		51.8		25.1		46.6		37.9
Aluminum-T (µg/l)	448		200 K		620		573		200 K
Arsenic-T (µg/l)	2.5		2 K		2.4		2 K		2.9
Barium-T (µg/l)	59		75		67		83		76
Cadmium-T (µg/l)	0.2 K		0.2 K		0.2 K		0.2 K		0.2 K
Calcium-T (mg/l)	48		74		60		80		76
Chromium-T (µg/l)	30 K		30 K		30 K		30 K		30 K
Copper-T (µg/l)	10 K		10 K		10 K		10 K		10 K
Iron-T (µg/l)	874		297		974		732		443
Lead-T (µg/l)	2 K		2 K		2 K		2 K		2 K
Magnesium-T (mg/l)	23		28		22		28		27
Manganese-T (µg/l)	67		26		46		37		25
Mercury-T (µg/l)	0.2 K		0.2 K		0.2 K		0.2 K		0.2 K
Nickel-T (µg/l)	40 K		40 K		40 K		40 K		40 K
Potassium-T (mg/l)	4		6		5		8		7
Selenium-T (µg/l)	2 K		2 K		2 K		2 K		2 K
Sodium-T (mg/l)	14		66		33		84		67
Strontium-T (µg/l)	263		375		319		434		423
Zinc-T (µg/l)	10 K		10		10 K		12		10 K
Hardness (mg/l CaCO3)	214		300		240		315		301

K = less than

Appendix Table A-1. Fourmile Creek and Indian Creek Watersheds Inorganic Water Chemistry Sampling Results (2005)

Site Location: #12 FOURMILE CREEK @ LANES MILL RD DOWNSTREAM OXFORD WWTP

Fourmile Creek Watershed (WAU:05080002-070)

River Mile: 13.65

Storet: H10S03

Latitude / Longitude: 39.4818 / 84.6862

County: Butler

USGS Quad: Millville

Duplicate B	07/19/2005	Duplicate B	08/02/2005	Duplicate B	08/16/2005	Duplicate B	08/30/2005	Duplicate B	09/19/2005
Time	1220		1205		1315		1130		1140
Temp(C)									
D.O. (mg/l)									
D.O. Sat (%)									
pH (fld) (SU)									
pH (lab) (SU)	8.5								
Sp Cond (fld) (µmhos/cm)									
Sp Cond (lab) (µmhos/cm)	441		883		584		973		891
BOD5 (mg/l)	2.7		2 K		2 K		2 K		2 K
COD (mg/l)	14		11		11		11		10 K
Alkalinity (mg/l)	160		235		197		255		257
Acidity (mg/l)	5 K		5 K		5 K		5 K		5 K
Ammonia-N (mg/l)	0.05 K		0.058		0.106		0.119		0.082
Nitrate-Nitrite-N (mg/l)	4.43		4.19		1.96		4.84		6.41
Nitrite-N (mg/l)	0.039		0.02		0.02 K		0.029		0.065
TKN (mg/l)	0.46		0.82		0.4		0.9		0.99
Phosphorus-T (mg/l)	0.116		0.597		0.33		0.791		1.02
Phosphorus-Dis (mg/l)									
TDS (mg/l)	266		514		332		544		520
TSS (mg/l)	33		10		30		24		13
Chloride (mg/l)	31.1		111		57.5		135		109
Sulfate (mg/l)	21.7		51.4		25.4		46.9		38
Aluminum-T (µg/l)	430		200 K		616		594		200 K
Arsenic-T (µg/l)	2.2		2 K		2 K		2.4		3
Barium-T (µg/l)	58		76		66		83		77
Cadmium-T (µg/l)	0.2 K		0.2 K		0.2 K		0.2 K		0.2 K
Calcium-T (mg/l)	48		74		58		81		77
Chromium-T (µg/l)	30 K		30 K		30 K		30 K		30 K
Copper-T (µg/l)	10 K		10 K		10 K		10 K		10 K
Iron-T (µg/l)	868		341		993		752		462
Lead-T (µg/l)	2 K		2 K		2 K		2 K		2 K
Magnesium-T (mg/l)	23		29		22		29		28
Manganese-T (µg/l)	66		28		46		37		25
Mercury-T (µg/l)	0.2 K		0.2 K		0.2 K		0.2 K		0.2 K
Nickel-T (µg/l)	40 K		40 K		40 K		40 K		40 K
Potassium-T (mg/l)	4		6		5		8		7
Selenium-T (µg/l)	2 K		2 K		2 K		2 K		2 K
Sodium-T (mg/l)	14		66		32		86		68
Strontium-T (µg/l)	262		375		312		441		426
Zinc-T (µg/l)	10 K		10 K		10 K		12		10
Hardness (mg/l CaCO3)	214		304		235		322		308

K = less than

Appendix Table A-1. Fourmile Creek and Indian Creek Watersheds Inorganic Water Chemistry Sampling Results (2005)

Site Location: #13 FOURMILE CREEK @ SR 177 NEAR DARRTOWN

Fourmile Creek Watershed (WAU:05080002-070)

River Mile: 11.00

Storet: H10S02

Latitude / Longitude: 39.4874 / 84.6531

County: Butler

USGS Quad: Millville

	07/19/2005	08/02/2005	08/16/2005	08/30/2005	09/19/2005
Time	1130	1115	1215	1050	1055
Temp(C)	26.7	25.7	23.07	22.7	19.64
D.O. (mg/l)	9.2	9.6	7.5	7.01	8.69
D.O. Sat (%)			87.7		95.2
pH (fld) (SU)	8.43	8.42	8.23	8.16	8.25
pH (lab) (SU)	8.55				
Sp Cond (fld) (µmhos/cm)			850		
Sp Cond (lab) (µmhos/cm)	443	782	859	819	886
BOD5 (mg/l)	2.9	2 K	2 K	2 K	2 K
COD (mg/l)	11	10 K	10 K	10 K	10 K
Alkalinity (mg/l)	158	227	253	248	250
Acidity (mg/l)	5 K	5 K	5 K	5 K	5 K
Ammonia-N (mg/l)	0.05 K	0.056	0.104	0.076	0.051
Nitrate-Nitrite-N (mg/l)	3.59	2.84	4.01	3.09	5.73
Nitrite-N (mg/l)	0.02 K	0.023	0.02 K	0.02 K	0.02 K
TKN (mg/l)	0.45	0.6	0.59	0.57	0.76
Phosphorus-T (mg/l)	0.134	0.324	0.688	0.619	0.986
Phosphorus-Dis (mg/l)		0.116	0.568	0.578	
TDS (mg/l)	272	452	500	464	528
TSS (mg/l)	57	13	51	41	19
Chloride (mg/l)	33.7	89	96.7	98.7	112
Sulfate (mg/l)	23.1	43.8	45.3	38.8	42.4
Aluminum-T (µg/l)	511	200 K	1010	1050	295
Arsenic-T (µg/l)	2 K	2.4	2.5	2.8	2.5
Barium-T (µg/l)	57	75	88	81	75
Cadmium-T (µg/l)	0.2 K	0.2 K	0.2 K	0.2 K	0.2 K
Calcium-T (mg/l)	47	69	79	76	77
Chromium-T (µg/l)	30 K	30 K	30 K	30 K	30 K
Copper-T (µg/l)	10 K	10 K	10 K	10 K	10 K
Iron-T (µg/l)	909	472	1570	1430	697
Lead-T (µg/l)	2 K	2 K	2 K	2 K	2 K
Magnesium-T (mg/l)	22	27	29	27	27
Manganese-T (µg/l)	68	33	62	58	31
Mercury-T (µg/l)	0.2 K	0.2 K	0.2 K	0.2 K	0.2 K
Nickel-T (µg/l)	40 K	40 K	40 K	40 K	40 K
Potassium-T (mg/l)	4	5	7	7	7
Selenium-T (µg/l)	2 K	2 K	2 K	2 K	2 K
Sodium-T (mg/l)	15	50	60	60	69
Strontium-T (µg/l)	262	360	412	417	415
Zinc-T (µg/l)	15	10 K	10 K	12	10 K
Hardness (mg/l CaCO3)	208	283	317	301	303

K = less than

Appendix Table A-1. Fourmile Creek and Indian Creek Watersheds Inorganic Water Chemistry Sampling Results (2005)

Site Location: #14 FOURMILE CREEK @ EATON RD

Fourmile Creek Watershed (WAU:05080002-070)

River Mile: 5.40

Storet: H10S01

Latitude / Longitude: 39.4631 / 84.5828

County: Butler

USGS Quad: Hamilton

	07/19/2005	08/02/2005	08/16/2005	08/30/2005	09/19/2005
Time	1040	1030	1110	1005	1005
Temp(C)	26.3	25.9	23.62	22.9	19.9
D.O. (mg/l)	8.5	9.2	7.16	6.58	8.77
D.O. Sat (%)			84.6		96.5
pH (fld) (SU)	8.39	8.31	8.23	8.15	8.2
pH (lab) (SU)	8.57				
Sp Cond (fld) (µmhos/cm)			789		
Sp Cond (lab) (µmhos/cm)	469	685	787	852	753
BOD5 (mg/l)	3	2 K	2 K	2 K	2 K
COD (mg/l)	10 K	11	10 K	10 K	10 K
Alkalinity (mg/l)	167	212	249	255	239
Acidity (mg/l)	5 K	5 K	5 K	5 K	5 K
Ammonia-N (mg/l)	0.05 K	0.064	0.131	0.09	0.053
Nitrate-Nitrite-N (mg/l)	3.19	0.93	2.5	3.32	3.37
Nitrite-N (mg/l)	0.02 K	0.02 K	0.024	0.025	0.02 K
TKN (mg/l)	0.44	0.4	0.55	0.5	0.58
Phosphorus-T (mg/l)	0.108	0.077	0.259	0.489	0.585
Phosphorus-Dis (mg/l)					
TDS (mg/l)	292	392	456	478	446
TSS (mg/l)	50	16	60	52	64
Chloride (mg/l)	36.9	76.6	83	102	83.1
Sulfate (mg/l)	25.6	40.3	43.9	43.2	34.8
Aluminum-T (µg/l)	1300	203	898	1880	1050
Arsenic-T (µg/l)	2 K	2 K	3.4	3.7	2.6
Barium-T (µg/l)	66	73	89	91	77
Cadmium-T (µg/l)	0.2 K	0.2 K	0.2 K	0.2 K	0.2 K
Calcium-T (mg/l)	57	63	76	84	78
Chromium-T (µg/l)	30 K	30 K	30 K	30 K	30 K
Copper-T (µg/l)	10 K	10 K	10 K	10 K	10 K
Iron-T (µg/l)	2230	582	1420	2730	1840
Lead-T (µg/l)	2 K	2 K	2 K	2.1	2 K
Magnesium-T (mg/l)	25	27	28	29	28
Manganese-T (µg/l)	122	43	66	133	82
Mercury-T (µg/l)	0.2 K	0.2 K	0.2 K	0.2 K	0.2 K
Nickel-T (µg/l)	40 K	40 K	40 K	40 K	40 K
Potassium-T (mg/l)	5	5	6	6	6
Selenium-T (µg/l)	2 K	2 K	2 K	2 K	2 K
Sodium-T (mg/l)	18	40	48	59	49
Strontium-T (µg/l)	290	339	390	413	401
Zinc-T (µg/l)	27	15	11	19	18
Hardness (mg/l CaCO3)	245	268	305	329	310

K = less than

Appendix Table A-1. Fourmile Creek and Indian Creek Watersheds Inorganic Water Chemistry Sampling Results (2005)

Site Location: #15 FOURMILE CREEK @ SEVENMILE RD AT NEW MIAMI

Fourmile Creek Watershed (WAU:05080002-070)

River Mile: 0.30

Storet: 600260

Latitude / Longitude: 39.4307 / 84.5443

County: Butler

USGS Quad: Hamilton

	07/19/2005	08/02/2005	08/16/2005	08/30/2005	09/19/2005
Time	0945	0945	1015	0925	0930
Temp(C)	24.5	22	20.36	19.8	19.27
D.O. (mg/l)	7	7.6	6.42	6.18	6.43
D.O. Sat (%)			71.2		69.9
pH (fld) (SU)	7.93	7.83	7.69	7.85	7.68
pH (lab) (SU)	8.16				
Sp Cond (fld) (µmhos/cm)			614		
Sp Cond (lab) (µmhos/cm)	517	594	616	649	634
BOD5 (mg/l)	2 K	2 K	2 K	2 K	2 K
COD (mg/l)	10 K	10 K	10 K	10 K	10 K
Alkalinity (mg/l)	193	223	242	248	234
Acidity (mg/l)	5 K	5 K	5 K	5 K	5 K
Ammonia-N (mg/l)	0.05 K	0.05 K	0.079	0.054	0.057
Nitrate-Nitrite-N (mg/l)	2.59	2	1.76	2.28	2.6
Nitrite-N (mg/l)	0.02 K	0.02 K	0.02 K	0.02 K	0.02 K
TKN (mg/l)	0.31	0.2 K	0.2 K	0.2 K	0.38
Phosphorus-T (mg/l)	0.049	0.017	0.037	0.026	0.106
Phosphorus-Dis (mg/l)					
TDS (mg/l)	312	346	354	372	386
TSS (mg/l)	20	8	24	16	26
Chloride (mg/l)	33.6	43.8	41.7	49	52.2
Sulfate (mg/l)	28.9	36.7	36.1	36.2	35
Aluminum-T (µg/l)	256	200 K	267	483	338
Arsenic-T (µg/l)	2 K	2 K	2 K	2 K	2 K
Barium-T (µg/l)	70	76	86	89	82
Cadmium-T (µg/l)	0.2 K	0.2 K	0.2	0.2 K	0.2 K
Calcium-T (mg/l)	60	66	72	78	70
Chromium-T (µg/l)	30 K	30 K	30 K	30 K	30 K
Copper-T (µg/l)	10 K	10 K	10 K	10 K	10 K
Iron-T (µg/l)	513	323	435	646	744
Lead-T (µg/l)	2 K	2 K	2 K	2 K	2 K
Magnesium-T (mg/l)	24	25	26	28	25
Manganese-T (µg/l)	41	28	31	39	38
Mercury-T (µg/l)	0.2 K	0.2 K	0.2 K	0.2 K	0.2 K
Nickel-T (µg/l)	40 K	40 K	40 K	40 K	40 K
Potassium-T (mg/l)	4	3	3	4	5
Selenium-T (µg/l)	2 K	2 K	2 K	2 K	2 K
Sodium-T (mg/l)	17	20	21	25	28
Strontium-T (µg/l)	437	389	384	397	468
Zinc-T (µg/l)	10 K	11	10 K	17	23
Hardness (mg/l CaCO ₃)	249	268	287	310	278

K = less than

Appendix Table A-1. Fourmile Creek and Indian Creek Watersheds Inorganic Water Chemistry Sampling Results (2005)

Site Location: #16 DIXON BRANCH @ CALIFORNIA SCHOOL RD

Fourmile Creek Watershed (WAU:05080002-070)

River Mile: 0.30

Storet: H10S17

Latitude / Longitude: 39.6998 / 84.7538

County: Preble

USGS Quad: Fairhaven

	07/19/2005	08/02/2005	08/16/2005	08/30/2005	09/19/2005
Time	1330	1230	1405	1130	1250
Temp(C)	24.3	22.26	21	20.76	17.37
D.O. (mg/l)	8.5	8.4	8.24	6.06	7.6
D.O. Sat (%)	115.1	96.7	92.5	67.7	79.3
pH (fld) (SU)	8.13	7.98		7.84	7.85
pH (lab) (SU)			8.08		
Sp Cond (fld) (µmhos/cm)		623		550	600
Sp Cond (lab) (µmhos/cm)	585	609	615	547	596
BOD5 (mg/l)	2 K	2 K	2 K	2.2	2 K
COD (mg/l)	10 K	10 K	10 K	10 K	10 K
Alkalinity (mg/l)	265	286	298	267	288
Acidity (mg/l)	5 K	5 K	5 K	5 K	5 K
Ammonia-N (mg/l)	0.053	0.067	0.078	0.095	0.07
Nitrate-Nitrite-N (mg/l)	4.11	2.58	2.11	2.7	1.45
Nitrite-N (mg/l)	0.02 K	0.02	0.02 K	0.02 K	0.02 K
TKN (mg/l)	0.23	0.2 K	0.2 K	0.32	0.2 K
Phosphorus-T (mg/l)	0.01	0.01 K	0.2 K	0.032	0.024
Phosphorus-Dis (mg/l)					
TDS (mg/l)	348	362	362	318	368
TSS (mg/l)	5 K	5 K	5 K	10	5 K
Chloride (mg/l)	18.8	16.8	15.3	13.4	17.5
Sulfate (mg/l)	29.6	34.5	35	29.2	31.4
Aluminum-T (µg/l)	200 K	200 K	200 K	200 K	200 K
Arsenic-T (µg/l)	2 K	2 K	2 K	2 K	2 K
Barium-T (µg/l)	112	109	113	99	107
Cadmium-T (µg/l)	0.2 K	0.2 K	0.2 K	0.2 K	0.2 K
Calcium-T (mg/l)	76	74	77	66	75
Chromium-T (µg/l)	30 K	30 K	30 K	30 K	30 K
Copper-T (µg/l)	10 K	10 K	10 K	10 K	10 K
Iron-T (µg/l)	97	94	52	120	118
Lead-T (µg/l)	2 K	2 K	2 K	2 K	2 K
Magnesium-T (mg/l)	33	33	34	31	31
Manganese-T (µg/l)	11	22	28	48	35
Mercury-T (µg/l)	0.2 K	0.2 K	0.2 K	0.2 K	0.2 K
Nickel-T (µg/l)	40 K	40 K	40 K	40 K	40 K
Potassium-T (mg/l)	2	2	2	3	4
Selenium-T (µg/l)	2 K	2 K	2 K	2 K	2 K
Sodium-T (mg/l)	8	8	8	6	9
Strontium-T (µg/l)	2440	2540	2420	1890	2550
Zinc-T (µg/l)	10 K	10 K	10 K	10 K	10 K
Hardness (mg/l CaCO3)	326	321	332	292	315

K = less than

Appendix Table A-1. Fourmile Creek and Indian Creek Watersheds Inorganic Water Chemistry Sampling Results (2005)

Site Location: #17 EAST FORK FOURMILE CREEK @ SR 732

Fourmile Creek Watershed (WAU:05080002-070)

River Mile: 5.22

Storet: H10K05

Latitude / Longitude: 39.6505 / 84.7415

County: Preble

USGS Quad:Eaton South

	07/19/2005	08/02/2005	08/16/2005	08/30/2005	09/19/2005
Time	1055	1040	1215	1000	1055
Temp(C)	22.3	21.03	21.3	20.38	16.95
D.O. (mg/l)	6.97	7.06	8.48	5.72	7.1
D.O. Sat (%)	79.6	79.4	95.3	63.5	73.5
pH (fld) (SU)	7.98	7.91		7.77	7.81
pH (lab) (SU)			8.05		
Sp Cond (fld) (µmhos/cm)		652		604	619
Sp Cond (lab) (µmhos/cm)	637	636	623	628	616
BOD5 (mg/l)	2 K	2 K	2 K	2 K	2 K
COD (mg/l)	11	10 K	10 K	10 K	10 K
Alkalinity (mg/l)	271	281	289	290	275
Acidity (mg/l)	5 K	5 K	5 K	5 K	5 K
Ammonia-N (mg/l)	0.118	0.066	0.074	0.079	0.064
Nitrate-Nitrite-N (mg/l)	4.59	2.38	1.47	1.36	2.48
Nitrite-N (mg/l)	0.183	0.02 K	0.02 K	0.02 K	0.02 K
TKN (mg/l)	0.49	0.26	0.2 K	0.24	0.37
Phosphorus-T (mg/l)	0.059	0.01	0.026	0.011	0.041
Phosphorus-Dis (mg/l)					
TDS (mg/l)	392	376	362	362	466
TSS (mg/l)	5 K	5 K	5 K	6	5 K
Chloride (mg/l)	30.9	23.3	20.1	18	31.3
Sulfate (mg/l)	29.4	42	39.9	43.6	28.2
Aluminum-T (µg/l)	200 K	200 K	200 K	200 K	200 K
Arsenic-T (µg/l)	2 K	2 K	2 K	2 K	2.3
Barium-T (µg/l)	102	99	99	103	90
Cadmium-T (µg/l)	0.2 K	0.2 K	0.2 K	0.2 K	0.2 K
Calcium-T (mg/l)	85	79	79	82	76
Chromium-T (µg/l)	30 K	30 K	30 K	30 K	30 K
Copper-T (µg/l)	10 K	10 K	10 K	10 K	10 K
Iron-T (µg/l)	150	102	64	101	230
Lead-T (µg/l)	2 K	2 K	2 K	2 K	2 K
Magnesium-T (mg/l)	33	33	32	34	29
Manganese-T (µg/l)	16	11	33	37	23
Mercury-T (µg/l)	0.2 K	0.2 K	0.2 K	0.2 K	0.2 K
Nickel-T (µg/l)	40 K	40 K	40 K	40 K	40 K
Potassium-T (mg/l)	3	3	3	3	4
Selenium-T (µg/l)	2 K	2 K	2 K	2 K	2 K
Sodium-T (mg/l)	10	7	7	6	11
Strontium-T (µg/l)	703	805	883	975	642
Zinc-T (µg/l)	10	10 K	10 K	16	10 K
Hardness (mg/l CaCO3)	348	333	329	345	309

K = less than

Appendix Table A-1. Fourmile Creek and Indian Creek Watersheds Inorganic Water Chemistry Sampling Results (2005)

Site Location: #18 EAST FORK FOURMILE CREEK @ SR 177

Fourmile Creek Watershed (WAU:05080002-070)

River Mile: 2.42

Storet: H10K06

Latitude / Longitude: 39.6197 / 84.7583

County: Preble

USGS Quad: College Corner

	07/19/2005	08/02/2005	08/16/2005	08/30/2005	09/19/2005
Time	1425	1440	1015	0000	1300
Temp(C)	25.9	24.7	21.3	21.29	18.1
D.O. (mg/l)	9.29	5.4		7	8.92
D.O. Sat (%)	114.5	65.6		79	99
pH (fld) (SU)	8.33	8.59	7.59	7.9	
pH (lab) (SU)					8.26
Sp Cond (fld) (µmhos/cm)	623				
Sp Cond (lab) (µmhos/cm)	610	583	531	421	602
BOD5 (mg/l)	2 K	2 K	2 K	2 K	2 K
COD (mg/l)	10 K	12	10 K	10 K	10 K
Alkalinity (mg/l)	252	234	231	173	261
Acidity (mg/l)	5 K	5 K	5 K	5 K	5 K
Ammonia-N (mg/l)	0.062	0.057	0.063	0.068	0.05 K
Nitrate-Nitrite-N (mg/l)	3.76	0.32	0.13	0.1 K	2.14
Nitrite-N (mg/l)	0.02 K	0.02 K	0.02 K	0.02 K	0.02 K
TKN (mg/l)	0.33	0.24	0.24	0.23	0.43
Phosphorus-T (mg/l)	0.035	0.03	0.025	0.083	0.044
Phosphorus-Dis (mg/l)					
TDS (mg/l)	354	352	304	242	374
TSS (mg/l)	5 K	5 K	5 K	25	5 K
Chloride (mg/l)	34.4	39.9	31.6	25.1	37
Sulfate (mg/l)	28	32.3	26	20.8	23
Aluminum-T (µg/l)	200 K	200 K	200 K	1460	200 K
Arsenic-T (µg/l)	2 K	2 K	2 K	2 K	7.3
Barium-T (µg/l)	75	65	68	64	112
Cadmium-T (µg/l)	0.2 K	0.2 K	0.2 K	0.2 K	0.2 K
Calcium-T (mg/l)	76	66	64	59	49
Chromium-T (µg/l)	30 K	30 K	30 K	30 K	30 K
Copper-T (µg/l)	10 K	10 K	10 K	10 K	10 K
Iron-T (µg/l)	82	92	202	2010	1110
Lead-T (µg/l)	2 K	2 K	2 K	4.5	2 K
Magnesium-T (mg/l)	30	30	27	23	23
Manganese-T (µg/l)	10 K	13	31	200	1480
Mercury-T (µg/l)	0.2 K	0.2 K	0.2 K	0.2 K	0.2 K
Nickel-T (µg/l)	40 K	40 K	40 K	40 K	40 K
Potassium-T (mg/l)	3	3	3	3	4
Selenium-T (µg/l)	2 K	2 K	2 K	2 K	2 K
Sodium-T (mg/l)	13	15	14	15	6
Strontium-T (µg/l)	498	469	430	334	337
Zinc-T (µg/l)	10 K	10 K	10 K	52	10 K
Hardness (mg/l CaCO ₃)	313	288	271	242	217

K = less than

Appendix Table A-1. Fourmile Creek and Indian Creek Watersheds Inorganic Water Chemistry Sampling Results (2005)

Site Location: #19 PAXTON BRANCH NE OF COLLEGE CORNER @ CAMDEN COLLEGE CORNER RD

Fourmile Creek Watershed (WAU:05080002-070)

River Mile: 1.00

Storet: H10S13

Latitude / Longitude: 39.5908 / 84.7817

County: Preble

USGS Quad: College Corner

	07/19/2005	08/02/2005	08/16/2005	09/19/2005
Time	1330	1200	1205	1145
Temp(C)	24.92	23.6	21	17.6
D.O. (mg/l)	9	5.48	7	8.44
D.O. Sat (%)	108.9			88.6
pH (fld) (SU)	8.34	6.75		
pH (lab) (SU)				8.17
Sp Cond (fld) (µmhos/cm)	538			
Sp Cond (lab) (µmhos/cm)	528	556	493	573
BOD5 (mg/l)	2 K	2 K	2 K	2 K
COD (mg/l)	11	10 K	10 K	10 K
Alkalinity (mg/l)	223	228	205	255
Acidity (mg/l)	5 K	5 K	5 K	5 K
Ammonia-N (mg/l)	0.068	0.052	0.055	0.054
Nitrate-Nitrite-N (mg/l)	4.99	0.59	0.15	2.37
Nitrite-N (mg/l)	0.024	0.02 K	0.02 K	0.02 K
TKN (mg/l)	0.41	0.2 K	0.2 K	0.38
Phosphorus-T (mg/l)	0.098	0.027	0.034	0.064
Phosphorus-Dis (mg/l)				
TDS (mg/l)	326	334	294	376
TSS (mg/l)	9	5 K	6	5 K
Chloride (mg/l)	22.3	28.2	22.2	21.7
Sulfate (mg/l)	25.6	39.8	41.6	33.5
Aluminum-T (µg/l)	200 K	200 K	200 K	200 K
Arsenic-T (µg/l)	2 K	2 K	2 K	2 K
Barium-T (µg/l)	79	78	67	80
Cadmium-T (µg/l)	0.2 K	0.2 K	0.2 K	0.2 K
Calcium-T (mg/l)	69	70	57	70
Chromium-T (µg/l)	30 K	30 K	30 K	30 K
Copper-T (µg/l)	10 K	10 K	10 K	10 K
Iron-T (µg/l)	331	130	262	98
Lead-T (µg/l)	2 K	2 K	2 K	2 K
Magnesium-T (mg/l)	26	30	26	28
Manganese-T (µg/l)	10	25	21	12
Mercury-T (µg/l)	0.2 K	0.2 K	0.2 K	0.2 K
Nickel-T (µg/l)	40 K	40 K	40 K	40 K
Potassium-T (mg/l)	5	4	3	6
Selenium-T (µg/l)	2 K	2 K	2 K	2 K
Sodium-T (mg/l)	6	7	6	7
Strontium-T (µg/l)	388	417	373	500
Zinc-T (µg/l)	10 K	10 K	10 K	10 K
Hardness (mg/l CaCO3)	279	298	249	290

K = less than

Appendix Table A-1. Fourmile Creek and Indian Creek Watersheds Inorganic Water Chemistry Sampling Results (2005)

Site Location: #20 LITTLE FOURMILE CREEK @ SR 177

Fourmile Creek Watershed (WAU:05080002-070)

River Mile: 13.50

Storet: H10K07

Latitude / Longitude: 39.6762 / 84.8095

County: Preble

USGS Quad: Fairhaven

	07/19/2005	Duplicate A	08/02/2005	Duplicate A	08/16/2005	Duplicate A	08/30/2005	Duplicate A	09/19/2005
Time	1230		1145		1320		1045		1205
Temp(C)	22.1		21.31		22.3		20.84		17.49
D.O. (mg/l)	8.12		6.51		9.62		5.78		7.07
D.O. Sat (%)	92.4		73.5		109.1		64.8		74
pH (fld) (SU)	8.15		8.01				7.8		7.94
pH (lab) (SU)					7.98				
Sp Cond (fld) (µmhos/cm)			533				620		539
Sp Cond (lab) (µmhos/cm)	562		527		638		636		536
BOD5 (mg/l)	2 K		2 K		2 K		2.7		2 K
COD (mg/l)	10 K		11		11		16		11
Alkalinity (mg/l)	235		234		292		275		244
Acidity (mg/l)	5 K		5 K		5 K		5 K		5 K
Ammonia-N (mg/l)	0.058		0.087		0.314		0.326		0.059
Nitrate-Nitrite-N (mg/l)	9.07		2.8		0.11		0.13		3.35
Nitrite-N (mg/l)	0.04		0.02 K		0.02 K		0.02 K		0.021
TKN (mg/l)	0.38		0.47		0.74		0.66		0.62
Phosphorus-T (mg/l)	0.1		0.073		0.206		0.221		0.153
Phosphorus-Dis (mg/l)									
TDS (mg/l)	408		308		388		368		340
TSS (mg/l)	5 K		5		5 K		11		5 K
Chloride (mg/l)	15.4		22.2		30.5		33.9		17.7
Sulfate (mg/l)	20.2		24.4		38.8		37.8		24.2
Aluminum-T (µg/l)	200 K		200 K		200 K		200 K		200 K
Arsenic-T (µg/l)	2 K		2 K		5.2		5		4.5
Barium-T (µg/l)	74		68		113		134		67
Cadmium-T (µg/l)	0.2 K		0.2 K		0.2 K		0.2 K		0.2 K
Calcium-T (mg/l)	77		58		74		75		64
Chromium-T (µg/l)	30 K		30 K		30 K		30 K		30 K
Copper-T (µg/l)	10 K		10 K		10 K		10 K		10 K
Iron-T (µg/l)	291		140		205		329		152
Lead-T (µg/l)	2 K		2 K		2 K		2 K		2 K
Magnesium-T (mg/l)	28		30		34		33		25
Manganese-T (µg/l)	10 K		22		349		448		18
Mercury-T (µg/l)	0.2 K		0.2 K		0.2 K		0.2 K		0.2 K
Nickel-T (µg/l)	40 K		40 K		40 K		40 K		40 K
Potassium-T (mg/l)	3		3		3		3		7
Selenium-T (µg/l)	2 K		2 K		2 K		2 K		2 K
Sodium-T (mg/l)	6		9		12		14		8
Strontium-T (µg/l)	275		354		1400		1800		388
Zinc-T (µg/l)	10 K		10 K		10 K		22		10 K
Hardness (mg/l CaCO3)	308		268		325		323		263

K = less than

Appendix Table A-1. Fourmile Creek and Indian Creek Watersheds Inorganic Water Chemistry Sampling Results (2005)

Site Location: #20 LITTLE FOURMILE CREEK @ SR 177

Fourmile Creek Watershed (WAU:05080002-070)

River Mile: 13.50

Storet: H10K07

Latitude / Longitude: 39.6762 / 84.8095

County: Preble

USGS Quad: Fairhaven

Duplicate B	08/02/2005	Duplicate B	08/16/2005	Duplicate B	08/30/2005	Duplicate B	09/19/2005
Time	1145		1320		1045		1205
Temp(C)							
D.O. (mg/l)							
D.O. Sat (%)							
pH (fld) (SU)							
pH (lab) (SU)			7.91				
Sp Cond (fld) (µmhos/cm)							
Sp Cond (lab) (µmhos/cm)	526		638		638		536
BOD5 (mg/l)	2 K		2 K		2.8		2 K
COD (mg/l)	14		11		14		11
Alkalinity (mg/l)	236		290		279		247
Acidity (mg/l)	5 K		5 K		5 K		5 K
Ammonia-N (mg/l)	0.077		0.293		0.321		0.058
Nitrate-Nitrite-N (mg/l)	2.49		0.1		0.14		3
Nitrite-N (mg/l)	0.02 K		0.02 K		0.02 K		0.021
TKN (mg/l)	0.46		0.54		0.67		0.57
Phosphorus-T (mg/l)	0.075		0.227		0.199		0.186
Phosphorus-Dis (mg/l)							
TDS (mg/l)	306		398		376		344
TSS (mg/l)	5		5 K		12		5 K
Chloride (mg/l)	22.2		30.6		33.6		17.7
Sulfate (mg/l)	24		38.4		37.5		23.9
Aluminum-T (µg/l)	200 K		200 K		358		200 K
Arsenic-T (µg/l)	2 K		5.8		5.4		3.2
Barium-T (µg/l)	67		114		137		69
Cadmium-T (µg/l)	0.2 K		0.2 K		0.2 K		0.2 K
Calcium-T (mg/l)	58		74		75		65
Chromium-T (µg/l)	30 K		30 K		30 K		30 K
Copper-T (µg/l)	10 K		10 K		10 K		10 K
Iron-T (µg/l)	155		207		693		141
Lead-T (µg/l)	2 K		2 K		2 K		2 K
Magnesium-T (mg/l)	30		34		33		26
Manganese-T (µg/l)	25		380		479		18
Mercury-T (µg/l)	0.2 K		0.2 K		0.2 K		0.2 K
Nickel-T (µg/l)	40 K		40 K		40 K		40 K
Potassium-T (mg/l)	3		3		3		7
Selenium-T (µg/l)	2 K		2 K		2 K		2 K
Sodium-T (mg/l)	9		12		14		8
Strontium-T (µg/l)	350		1410		1770		386
Zinc-T (µg/l)	10 K		10 K		16		10 K
Hardness (mg/l CaCO3)	268		325		323		269

K = less than

Appendix Table A-1. Fourmile Creek and Indian Creek Watersheds Inorganic Water Chemistry Sampling Results (2005)

Site Location: #21 LITTLE FOURMILE CREEK @ FAIRHAVEN-COLLEGE CORNER RD

Fourmile Creek Watershed (WAU:05080002-070)

River Mile: 2.80

Storet: H10S12

Latitude / Longitude: 39.5830 / 84.7979

County: Preble

USGS Quad: College Corner

	07/19/2005	08/02/2005	08/16/2005	08/30/2005	09/19/2005
Time	0930	0940	1020	0915	0955
Temp(C)	24	21.13	21	21.32	17.65
D.O. (mg/l)	8.3	6.32	7.68	4.04	7.36
D.O. Sat (%)		71.2	86.1	45.7	77.3
pH (fld) (SU)	8.08	8.05		7.77	7.9
pH (lab) (SU)			8.15		
Sp Cond (fld) (µmhos/cm)		584		497	455
Sp Cond (lab) (µmhos/cm)	512	572	520	507	458
BOD5 (mg/l)	2 K	2 K	2 K	2.2	2 K
COD (mg/l)	10 K	11	10 K	10 K	14
Alkalinity (mg/l)	217	251	251	246	199
Acidity (mg/l)	5 K	5 K	5 K	5 K	5 K
Ammonia-N (mg/l)	0.07	0.055	0.068	0.096	0.05 K
Nitrate-Nitrite-N (mg/l)	3.91	2.89	0.4	0.1	1.24
Nitrite-N (mg/l)	0.02	0.02 K	0.02 K	0.02 K	0.02 K
TKN (mg/l)	0.46	0.29	0.75	0.4	0.42
Phosphorus-T (mg/l)	0.072	0.05	0.124	0.063	0.142
Phosphorus-Dis (mg/l)					
TDS (mg/l)	302	332	304	280	286
TSS (mg/l)	9	5 K	6	6	5 K
Chloride (mg/l)	21.6	25.2	20.1	20.3	19.1
Sulfate (mg/l)	23.1	25.8	22	18.5	22.9
Aluminum-T (µg/l)	228	200 K	200 K	200 K	200 K
Arsenic-T (µg/l)	2 K	2 K	2 K	2.5	2.6
Barium-T (µg/l)	73	71	62	66	64
Cadmium-T (µg/l)	0.2 K	0.2 K	0.2 K	0.2 K	0.2 K
Calcium-T (mg/l)	65	69	62	64	55
Chromium-T (µg/l)	30 K	30 K	30 K	30 K	30 K
Copper-T (µg/l)	10 K	10 K	10 K	10 K	10 K
Iron-T (µg/l)	424	183	162	159	265
Lead-T (µg/l)	2 K	2 K	2 K	2 K	2 K
Magnesium-T (mg/l)	28	30	27	28	22
Manganese-T (µg/l)	21	19	38	91	23
Mercury-T (µg/l)	0.2 K	0.2 K	0.2 K	0.2 K	0.2 K
Nickel-T (µg/l)	40 K	40 K	40 K	40 K	40 K
Potassium-T (mg/l)	3	3	3	3	8
Selenium-T (µg/l)	2 K	2 K	2 K	2 K	2 K
Sodium-T (mg/l)	7	8	7	8	8
Strontium-T (µg/l)	292	268	227	216	240
Zinc-T (µg/l)	10 K	10 K	10 K	12	10 K
Hardness (mg/l CaCO3)	278	296	266	275	228

K = less than

Appendix Table A-1. Fourmile Creek and Indian Creek Watersheds Inorganic Water Chemistry Sampling Results (2005)

Site Location: #22 FLEISCH RUN @ PAINT CREEK FOURMILE RD

Fourmile Creek Watershed (WAU:05080002-070)

River Mile: 0.70

Storet: H10K14

Latitude / Longitude: 39.6558 / 84.8074

County: Preble

USGS Quad: Fairhaven

	07/19/2005	08/02/2005	08/16/2005	09/19/2005
Time	1200	1125	1300	1140
Temp(C)	24.2	22.32	21.7	17.46
D.O. (mg/l)	7.49	3.44	2.17	5.15
D.O. Sat (%)	87.7	39.7	28.4	53.9
pH (fld) (SU)	8.09	7.81		7.74
pH (lab) (SU)			7.75	
Sp Cond (fld) (µmhos/cm)		652		638
Sp Cond (lab) (µmhos/cm)	586	636	688	634
BOD5 (mg/l)	2 K	2 K	9.6	3.4
COD (mg/l)	11	20	51	22
Alkalinity (mg/l)	238	272	306	270
Acidity (mg/l)	5 K	5 K	5 K	5 K
Ammonia-N (mg/l)	0.085	0.738	2.26	1.26
Nitrate-Nitrite-N (mg/l)	7.74	1.89	0.1 K	2.32
Nitrite-N (mg/l)	0.101	0.21	0.02 K	0.162
TKN (mg/l)	0.67	1.92	4.05	2.24
Phosphorus-T (mg/l)	0.083	0.111	0.499	0.197
Phosphorus-Dis (mg/l)				
TDS (mg/l)	360	384	414	400
TSS (mg/l)	24	33	41	13
Chloride (mg/l)	28.4	37.2	50.1	36.6
Sulfate (mg/l)	22	25	9.8	28.3
Aluminum-T (µg/l)	512	929	735	294
Arsenic-T (µg/l)	2.5	2.7	19.1	2.4
Barium-T (µg/l)	85	103	126	90
Cadmium-T (µg/l)	0.2 K	0.2 K	0.2 K	0.2 K
Calcium-T (mg/l)	72	70	69	74
Chromium-T (µg/l)	30 K	30 K	30 K	30 K
Copper-T (µg/l)	10 K	10 K	10 K	10 K
Iron-T (µg/l)	807	1540	1870	714
Lead-T (µg/l)	2 K	2 K	2 K	2 K
Magnesium-T (mg/l)	29	32	35	28
Manganese-T (µg/l)	44	220	1530	125
Mercury-T (µg/l)	0.2 K	0.2 K	0.2 K	0.2 K
Nickel-T (µg/l)	40 K	40 K	40 K	40 K
Potassium-T (mg/l)	4	8	18	12
Selenium-T (µg/l)	2 K	2 K	2 K	2 K
Sodium-T (mg/l)	13	15	20	16
Strontium-T (µg/l)	335	314	318	330
Zinc-T (µg/l)	10 K	13	10 K	10 K
Hardness (mg/l CaCO3)	299	306	316	300

K = less than

Appendix Table A-1. Fourmile Creek and Indian Creek Watersheds Inorganic Water Chemistry Sampling Results (2005)

Site Location: #23 MORNING SUN TRIB-NORTH (23.57) @ MAIN LOOP RD IN HUESTON WOODS STATE PARK **Fourmile Creek Watershed (WAU:05080002-070)**
River Mile: 0.70 **Storet: H10K17** **Latitude / Longitude: 39.5909 / 84.7554** **County: Preble** **USGS Quad:College Corner**

	08/02/2005	08/16/2005	09/19/2005
Time	1315	1225	1240
Temp(C)	22.1	21	17.8
D.O. (mg/l)	5.72	7.5	8.71
D.O. Sat (%)	65.9		91.6
pH (fld) (SU)	6.71		
pH (lab) (SU)			8.29
Sp Cond (fld) (µmhos/cm)			
Sp Cond (lab) (µmhos/cm)	701	498	614
BOD5 (mg/l)	2 K	2 K	2 K
COD (mg/l)	10 K	10 K	10 K
Alkalinity (mg/l)	338	220	280
Acidity (mg/l)	5	5 K	5 K
Ammonia-N (mg/l)	0.063	0.06	0.05 K
Nitrate-Nitrite-N (mg/l)	0.1 K	0.18	1.35
Nitrite-N (mg/l)	0.02 K	0.02 K	0.02 K
TKN (mg/l)	0.2 K	0.39	0.2 K
Phosphorus-T (mg/l)	0.041	0.089	0.022
Phosphorus-Dis (mg/l)			
TDS (mg/l)	410	292	382
TSS (mg/l)	17	14	5
Chloride (mg/l)	31.3	29.4	34.4
Sulfate (mg/l)	28.3	19.9	26.4
Aluminum-T (µg/l)	200 K	299	200 K
Arsenic-T (µg/l)	2 K	2 K	2 K
Barium-T (µg/l)	83	50	67
Cadmium-T (µg/l)	0.2 K	0.2 K	0.2 K
Calcium-T (mg/l)	92	59	76
Chromium-T (µg/l)	30 K	30 K	30 K
Copper-T (µg/l)	10 K	10 K	10 K
Iron-T (µg/l)	522	460	198
Lead-T (µg/l)	2 K	2 K	2 K
Magnesium-T (mg/l)	37	24	31
Manganese-T (µg/l)	152	29	10 K
Mercury-T (µg/l)	0.2 K	0.2 K	0.2 K
Nickel-T (µg/l)	40 K	40 K	40 K
Potassium-T (mg/l)	4	4	3
Selenium-T (µg/l)	2 K	2 K	2 K
Sodium-T (mg/l)	11	12	13
Strontium-T (µg/l)	431	304	214
Zinc-T (µg/l)	11	10 K	10 K
Hardness (mg/l CaCO3)	382	246	317

K = less than

Appendix Table A-1. Fourmile Creek and Indian Creek Watersheds Inorganic Water Chemistry Sampling Results (2005)

Site Location: #24 MORNING SUN TRIB-SOUTH (23.57/0.25) @ LOOP RD IN HUESTON WOODS STATE PARK Fourmile Creek Watershed (WAU:05080002-070)
 River Mile: 0.40 Storet: H10K15 Latitude / Longitude: 39.5895 / 84.7505 County: Preble USGS Quad:College Corner

	07/19/2005	08/02/2005	08/16/2005	09/19/2005
Time	1210	1335	1235	1230
Temp(C)	20.94	22.8	21	18
D.O. (mg/l)	9.52	9.24	7.5	7.95
D.O. Sat (%)	106.9	108.2		83.9
pH (fld) (SU)	8.37	6.71		
pH (lab) (SU)				8.07
Sp Cond (fld) (µmhos/cm)	612			
Sp Cond (lab) (µmhos/cm)	602	606	585	531
BOD5 (mg/l)	2 K	2 K	2 K	2 K
COD (mg/l)	14	10 K	10 K	10 K
Alkalinity (mg/l)	249	240	250	230
Acidity (mg/l)	5 K	5 K	5 K	5 K
Ammonia-N (mg/l)	0.05	0.054	0.056	0.052
Nitrate-Nitrite-N (mg/l)	7.76	4.21	1.85	0.1 K
Nitrite-N (mg/l)	0.02 K	0.02 K	0.02 K	0.02 K
TKN (mg/l)	0.38	0.2	0.2 K	0.43
Phosphorus-T (mg/l)	0.063	0.024	0.046	0.056
Phosphorus-Dis (mg/l)				
TDS (mg/l)	372	346	348	318
TSS (mg/l)	50	5 K	5	5 K
Chloride (mg/l)	27.8	38.8	34.8	37.9
Sulfate (mg/l)	24	30.9	28.4	18.7
Aluminum-T (µg/l)	403	200 K	200 K	200 K
Arsenic-T (µg/l)	2 K	2 K	2 K	2.1
Barium-T (µg/l)	84	66	68	48
Cadmium-T (µg/l)	0.2 K	0.2 K	0.2 K	0.2 K
Calcium-T (mg/l)	86	71	73	58
Chromium-T (µg/l)	30 K	30 K	30 K	30 K
Copper-T (µg/l)	10 K	10 K	10 K	10 K
Iron-T (µg/l)	632	84	129	122
Lead-T (µg/l)	2 K	2 K	2 K	2 K
Magnesium-T (mg/l)	30	30	29	25
Manganese-T (µg/l)	25	10 K	10 K	19
Mercury-T (µg/l)	0.2 K	0.2 K	0.2 K	0.2 K
Nickel-T (µg/l)	40 K	40 K	40 K	40 K
Potassium-T (mg/l)	3	2	3	4
Selenium-T (µg/l)	2 K	2 K	2 K	2 K
Sodium-T (mg/l)	8	11	13	16
Strontium-T (µg/l)	160	180	208	282
Zinc-T (µg/l)	33	11	10 K	10 K
Hardness (mg/l CaCO3)	338	301	302	248

K = less than

Appendix Table A-1. Fourmile Creek and Indian Creek Watersheds Inorganic Water Chemistry Sampling Results (2005)

Site Location: #25 ELAMS RUN AT MOUTH ALONG RT 732 N OF OXFORD, CORSO RD

Fourmile Creek Watershed (WAU:05080002-070)

River Mile: 0.30

Storet: H10W18

Latitude / Longitude: 39.5211 / 84.7375

County: Butler

USGS Quad: Oxford

	07/19/2005	Duplicate A	08/02/2005	Duplicate A	08/16/2005	Duplicate A	08/30/2005	Duplicate A	09/19/2005
Time	0950		0955		1300		0930		1000
Temp(C)	21.92		21.5		21		20.42		16.7
D.O. (mg/l)	8.89		5.64		8		6.37		8.6
D.O. Sat (%)	101.7						70.8		88.4
pH (fld) (SU)	8.02		7.6				7.82		
pH (lab) (SU)									8.14
Sp Cond (fld) (µmhos/cm)	593								
Sp Cond (lab) (µmhos/cm)	583		738		449		718		667
BOD5 (mg/l)	2 K		2 K		2 K		2 K		2 K
COD (mg/l)	11		10 K		14		10 K		10 K
Alkalinity (mg/l)	214		269		170		276		236
Acidity (mg/l)	5 K		5 K		5 K		5 K		5 K
Ammonia-N (mg/l)	0.056		0.054		0.071		0.055		0.05
Nitrate-Nitrite-N (mg/l)	0.29		0.12		0.24		0.17		0.15
Nitrite-N (mg/l)	0.02 K		0.02 K		0.02 K		0.02 K		0.02 K
TKN (mg/l)	0.32		0.26		0.34		0.32		0.31
Phosphorus-T (mg/l)	0.037		0.036		0.034		0.046		0.025
Phosphorus-Dis (mg/l)									
TDS (mg/l)	342		442		274		424		418
TSS (mg/l)	5 K		5 K		42		10		6
Chloride (mg/l)	44.1		63.2		31.4		52.3		60.7
Sulfate (mg/l)	40		50.7		34.7		48.2		50.3
Aluminum-T (µg/l)	200 K		200 K		436		200 K		200 K
Arsenic-T (µg/l)	2 K		2 K		2 K		2 K		2 K
Barium-T (µg/l)	68		80		54		79		69
Cadmium-T (µg/l)	0.2 K		0.2 K		0.2 K		0.2 K		0.2 K
Calcium-T (mg/l)	74		88		55		87		79
Chromium-T (µg/l)	30 K		30 K		30 K		30 K		30 K
Copper-T (µg/l)	10 K		10 K		10 K		10 K		10 K
Iron-T (µg/l)	204		159		678		95		131
Lead-T (µg/l)	2 K		2 K		2 K		2 K		2 K
Magnesium-T (mg/l)	21		27		15		27		22
Manganese-T (µg/l)	16		33		29		38		11
Mercury-T (µg/l)	0.2 K		0.2 K		0.2 K		0.2 K		0.2 K
Nickel-T (µg/l)	40 K		40 K		40 K		40 K		40 K
Potassium-T (mg/l)	5		4		5		5		5
Selenium-T (µg/l)	2 K		2 K		2 K		2 K		2 K
Sodium-T (mg/l)	24		33		17		31		31
Strontium-T (µg/l)	352		656		256		789		592
Zinc-T (µg/l)	10 K		10 K		10 K		10 K		10 K
Hardness (mg/l CaCO3)	271		331		199		328		288

K = less than

Appendix Table A-1. Fourmile Creek and Indian Creek Watersheds Inorganic Water Chemistry Sampling Results (2005)

Site Location: #25 ELAMS RUN AT MOUTH ALONG RT 732 N OF OXFORD, CORSO RD

Fourmile Creek Watershed (WAU:05080002-070)

River Mile: 0.30

Storet: H10W18

Latitude / Longitude: 39.5211 / 84.7375

County: Butler

USGS Quad:Oxford

Duplicate B	08/02/2005	Duplicate B	08/16/2005	Duplicate B	08/30/2005	Duplicate B	09/19/2005
Time	0955		1300		0930		1000
Temp(C)							
D.O. (mg/l)							
D.O. Sat (%)							
pH (fld) (SU)							
pH (lab) (SU)							8.15
Sp Cond (fld) (µmhos/cm)							
Sp Cond (lab) (µmhos/cm)	742		448		721		665
BOD5 (mg/l)	2 K		2 K		2 K		2 K
COD (mg/l)	10 K		11		10 K		10 K
Alkalinity (mg/l)	264		166		272		235
Acidity (mg/l)	5 K		5 K		5 K		5 K
Ammonia-N (mg/l)	0.053		0.063		0.053		0.05 K
Nitrate-Nitrite-N (mg/l)	0.12		0.24		0.15		0.13
Nitrite-N (mg/l)	0.02 K		0.02 K		0.02 K		0.02 K
TKN (mg/l)	0.25		0.44		0.23		0.33
Phosphorus-T (mg/l)	0.03		0.036		0.041		0.025
Phosphorus-Dis (mg/l)							
TDS (mg/l)	446		268		418		422
TSS (mg/l)	5 K		43		10		5
Chloride (mg/l)	63.4		31.2		52.1		58
Sulfate (mg/l)	50.9		34.2		47.7		49.6
Aluminum-T (µg/l)	200 K		432		200 K		200 K
Arsenic-T (µg/l)	2 K		2 K		2 K		2 K
Barium-T (µg/l)	80		52		79		70
Cadmium-T (µg/l)	0.2 K		0.2 K		0.2 K		0.2 K
Calcium-T (mg/l)	89		53		86		80
Chromium-T (µg/l)	30 K		30 K		30 K		30 K
Copper-T (µg/l)	10 K		10 K		10 K		10 K
Iron-T (µg/l)	158		664		170		130
Lead-T (µg/l)	2 K		2 K		2 K		2 K
Magnesium-T (mg/l)	26		15		26		22
Manganese-T (µg/l)	33		29		46		12
Mercury-T (µg/l)	0.2 K		0.2 K		0.2 K		0.2 K
Nickel-T (µg/l)	40 K		40 K		40 K		40 K
Potassium-T (mg/l)	4		4		5		5
Selenium-T (µg/l)	2 K		2 K		2 K		2 K
Sodium-T (mg/l)	33		17		30		31
Strontium-T (µg/l)	653		248		781		596
Zinc-T (µg/l)	10 K		10 K		10 K		15
Hardness (mg/l CaCO3)	329		194		322		290

K = less than

Appendix Table A-1. Fourmile Creek and Indian Creek Watersheds Inorganic Water Chemistry Sampling Results (2005)

Site Location: #26 HARKERS RUN @ SOMERVILLE RD, DOWNSTREAM TRIBUTARY

Fourmile Creek Watershed (WAU:05080002-070)

River Mile: 2.37

Storet: H10K08

Latitude / Longitude: 39.5393 / 84.7089

County: Butler

USGS Quad: Oxford

	07/19/2005	08/02/2005	08/16/2005	08/30/2005	09/19/2005
Time	1110	1115	1410	1020	1105
Temp(C)	22.96	23.2	21	21.34	17.5
D.O. (mg/l)	8.58	7.8	6.4	5.44	7.2
D.O. Sat (%)	100.1			61.5	75.2
pH (fld) (SU)	8.19	7.9		7.75	
pH (lab) (SU)					8.14
Sp Cond (fld) (µmhos/cm)	574				
Sp Cond (lab) (µmhos/cm)	562	688	646	627	692
BOD5 (mg/l)	2 K	2 K	2 K	2 K	2 K
COD (mg/l)	17	10 K	10 K	10 K	10 K
Alkalinity (mg/l)	208	255	254	256	262
Acidity (mg/l)	5 K	5 K	5 K	5 K	5 K
Ammonia-N (mg/l)	0.068	0.073	0.061	0.076	0.05 K
Nitrate-Nitrite-N (mg/l)	4.75	1.69	0.15	0.13	0.16
Nitrite-N (mg/l)	0.02	0.02 K	0.02 K	0.02 K	0.02 K
TKN (mg/l)	0.48	0.32	0.29	0.24	0.38
Phosphorus-T (mg/l)	0.118	0.025	0.058	0.142	0.011
Phosphorus-Dis (mg/l)					
TDS (mg/l)	344	416	376	354	420
TSS (mg/l)	17	5 K	5 K	5 K	5 K
Chloride (mg/l)	42.8	58.2	52	35.1	65.5
Sulfate (mg/l)	23.7	37.1	34.3	42.6	31.2
Aluminum-T (µg/l)	547	200 K	200 K	200 K	200 K
Arsenic-T (µg/l)	2 K	2 K	2 K	2 K	2
Barium-T (µg/l)	81	82	77	83	81
Cadmium-T (µg/l)	0.2 K	0.2 K	0.2 K	0.2 K	0.2 K
Calcium-T (mg/l)	67	78	73	75	76
Chromium-T (µg/l)	30 K	30 K	30 K	30 K	30 K
Copper-T (µg/l)	10 K	10 K	10 K	10 K	10 K
Iron-T (µg/l)	842	131	71	68	116
Lead-T (µg/l)	2 K	2 K	2 K	2 K	2 K
Magnesium-T (mg/l)	22	31	29	31	30
Manganese-T (µg/l)	31	13	18	57	19
Mercury-T (µg/l)	0.2 K	0.2 K	0.2 K	0.2 K	0.2 K
Nickel-T (µg/l)	40 K	40 K	40 K	40 K	40 K
Potassium-T (mg/l)	6	4	5	4	5
Selenium-T (µg/l)	2 K	2 K	2 K	2 K	2 K
Sodium-T (mg/l)	18	24	22	16	29
Strontium-T (µg/l)	123	208	202	261	234
Zinc-T (µg/l)	10 K	10 K	10 K	10 K	10 K
Hardness (mg/l CaCO3)	258	322	302	315	313

K = less than

Appendix Table A-1. Fourmile Creek and Indian Creek Watersheds Inorganic Water Chemistry Sampling Results (2005)

Site Location: #27 COLLINS CREEK @ US RT 27

Fourmile Creek Watershed (WAU:05080002-070)

River Mile: 0.56

Storet: H10K09

Latitude / Longitude: 39.4985 / 84.7293

County: Butler

USGS Quad: Millville

	07/19/2005	08/02/2005	08/16/2005	08/30/2005	09/19/2005
Time	1355	1320	1505	1245	1240
Temp(C)	28.1	26.7	22.26	22.2	18.4
D.O. (mg/l)	9.8	11.6	8.3	7.72	9.99
D.O. Sat (%)			95.6		106.5
pH (fld) (SU)	8.11	8.06	8.23	8.54	7.71
pH (lab) (SU)	8.55				
Sp Cond (fld) (µmhos/cm)			703		
Sp Cond (lab) (µmhos/cm)	659	945	709	177	776
BOD5 (mg/l)	2 K	2 K	2 K	6.5	2 K
COD (mg/l)	17	14	10 K	19	10 K
Alkalinity (mg/l)	172	216	151	66.7	224
Acidity (mg/l)	5 K	5 K	5 K	5 K	5 K
Ammonia-N (mg/l)	0.05 K	0.054	0.061	0.127	0.05 K
Nitrate-Nitrite-N (mg/l)	0.12	0.1 K	0.76	0.25	0.1 K
Nitrite-N (mg/l)	0.02 K	0.02 K	0.02 K	0.02 K	0.02 K
TKN (mg/l)	0.38	0.67	0.47	0.26	0.44
Phosphorus-T (mg/l)	0.017	0.018	0.046	0.881	0.014
Phosphorus-Dis (mg/l)					
TDS (mg/l)	386	542	414	192	456
TSS (mg/l)	5 K	5 K	14	2360	30
Chloride (mg/l)	88.1	136	108	13.8	94
Sulfate (mg/l)	34.8	62	32.2	12.6	50.8
Aluminum-T (µg/l)	200 K	200 K	684	30000	200 K
Arsenic-T (µg/l)	2 K	2 K	2	9.6	2.1
Barium-T (µg/l)	68	96	68	241	87
Cadmium-T (µg/l)	0.2 K	0.2 K	0.2 K	0.59	0.2 K
Calcium-T (mg/l)	61	81	57	158	79
Chromium-T (µg/l)	30 K	30 K	30 K	42	30 K
Copper-T (µg/l)	10 K	10 K	10 K	59	10 K
Iron-T (µg/l)	132	244	1020	52600	582
Lead-T (µg/l)	2 K	2 K	2 K	36.5	2 K
Magnesium-T (mg/l)	18	26	16	55	24
Manganese-T (µg/l)	16	35	27	1310	50
Mercury-T (µg/l)	0.2 K	0.2 K	0.2 K	0.2 K	0.2 K
Nickel-T (µg/l)	40 K	40 K	40 K	55	40 K
Potassium-T (mg/l)	4	5	4	8	5
Selenium-T (µg/l)	2 K	2 K	2 K	2 K	2 K
Sodium-T (mg/l)	50	77	62	9	54
Strontium-T (µg/l)	323	501	302	249	528
Zinc-T (µg/l)	10 K	12	10	217	30
Hardness (mg/l CaCO3)	226	309	208	621	296

K = less than

Appendix Table A-1. Fourmile Creek and Indian Creek Watersheds Inorganic Water Chemistry Sampling Results (2005)

Site Location: #28 DARRS RUN @ SR 73

Fourmile Creek Watershed (WAU:05080002-070)

River Mile: 2.13

Storet: H10K10

Latitude / Longitude: 39.5079 / 84.6623

County: Butler

USGS Quad: Oxford

	07/19/2005	08/02/2005	08/16/2005	08/30/2005	09/19/2005
Time	1150	1145	1235	1110	1110
Temp(C)	25.7	25	21.83	21.2	17.7
D.O. (mg/l)	7.2	4.9	6.63	6.83	7.59
D.O. Sat (%)			75.7		78.8
pH (fld) (SU)	8.03	7.89	7.88	8.14	7.83
pH (lab) (SU)	8.17				
Sp Cond (fld) (µmhos/cm)			632		
Sp Cond (lab) (µmhos/cm)	609	641	637	625	705
BOD5 (mg/l)	2 K	2 K	2 K	2 K	2 K
COD (mg/l)	10 K	11	10 K	40	10 K
Alkalinity (mg/l)	214	212	239	238	272
Acidity (mg/l)	5 K	5 K	5 K	5 K	5 K
Ammonia-N (mg/l)	0.074	0.071	0.088	0.067	0.05 K
Nitrate-Nitrite-N (mg/l)	0.2	0.1 K	0.1	0.1 K	0.1 K
Nitrite-N (mg/l)	0.02 K	0.02 K	0.02 K	0.02 K	0.02 K
TKN (mg/l)	0.21	0.35	0.2 K	0.71	0.26
Phosphorus-T (mg/l)	0.026	0.022	0.034	0.094	0.019
Phosphorus-Dis (mg/l)					
TDS (mg/l)	374	362	370	364	422
TSS (mg/l)	18	9	23	33	11
Chloride (mg/l)	43	58.5	44	43.7	49.3
Sulfate (mg/l)	56.3	44.2	48.6	51.7	56.6
Aluminum-T (µg/l)	747	400	818	1320	200 K
Arsenic-T (µg/l)	2 K	2 K	2 K	2 K	2 K
Barium-T (µg/l)	65	63	69	73	67
Cadmium-T (µg/l)	0.2 K	0.2 K	0.2 K	0.2 K	0.2 K
Calcium-T (mg/l)	84	66	83	88	94
Chromium-T (µg/l)	30 K	30 K	30 K	30 K	30 K
Copper-T (µg/l)	10 K	10 K	10 K	10 K	10 K
Iron-T (µg/l)	1240	918	1340	1950	482
Lead-T (µg/l)	2 K	2 K	2 K	2 K	2 K
Magnesium-T (mg/l)	21	20	20	23	24
Manganese-T (µg/l)	64	101	94	111	57
Mercury-T (µg/l)	0.2 K	0.2 K	0.2 K	0.2 K	0.2 K
Nickel-T (µg/l)	40 K	40 K	40 K	40 K	40 K
Potassium-T (mg/l)	4	4	4	4	4
Selenium-T (µg/l)	2 K	2 K	2 K	2 K	2 K
Sodium-T (mg/l)	23	38	26	26	27
Strontium-T (µg/l)	257	222	240	255	284
Zinc-T (µg/l)	10 K	17	10 K	11	10 K
Hardness (mg/l CaCO3)	296	247	290	314	334

K = less than

Appendix Table A-1. Fourmile Creek and Indian Creek Watersheds Inorganic Water Chemistry Sampling Results (2005)

Site Location: #29 STONY RUN @ SR 177

Fourmile Creek Watershed (WAU:05080002-070)

River Mile: 0.30

Storet: H10K11

Latitude / Longitude: 39.4681 / 84.6319

County: Butler

USGS Quad: Millville

	07/19/2005	08/02/2005	08/16/2005	08/30/2005	09/19/2005
Time	1105	1100	1155	1030	1035
Temp(C)	28.2	22.7	22.44	22	18.13
D.O. (mg/l)	9.1	4.6	3.47	5.8	4.1
D.O. Sat (%)			40.1	8.03	43.5
pH (fld) (SU)	8.21	7.83	7.59		7.59
pH (lab) (SU)	8.1				
Sp Cond (fld) (µmhos/cm)			606		
Sp Cond (lab) (µmhos/cm)	575	633	606	547	678
BOD5 (mg/l)	2 K	2 K	2 K	2 K	2 K
COD (mg/l)	11	11	10 K	11	10 K
Alkalinity (mg/l)	219	253	232	212	240
Acidity (mg/l)	5 K	5 K	5 K	5 K	5 K
Ammonia-N (mg/l)	0.061	0.128	0.165	0.152	0.094
Nitrate-Nitrite-N (mg/l)	0.1 K	0.1 K	0.13	0.1 K	0.1 K
Nitrite-N (mg/l)	0.02 K	0.02 K	0.02 K	0.02 K	0.02 K
TKN (mg/l)	0.26	0.35	0.37	0.46	0.35
Phosphorus-T (mg/l)	0.539	0.083	0.085	0.124	0.073
Phosphorus-Dis (mg/l)					
TDS (mg/l)	354	376	360	320	430
TSS (mg/l)	9	9	15	14	13
Chloride (mg/l)	40.5	39.8	35.4	28.9	44.4
Sulfate (mg/l)	41.1	43.4	55.3	49.2	72.5
Aluminum-T (µg/l)	200 K	200 K	200 K	485	224
Arsenic-T (µg/l)	2 K	2 K	2 K	2.1	2 K
Barium-T (µg/l)	47	51	48	48	54
Cadmium-T (µg/l)	0.2 K	0.2 K	0.2 K	0.2 K	0.2 K
Calcium-T (mg/l)	73	79	76	65	85
Chromium-T (µg/l)	30 K	30 K	30 K	30 K	30 K
Copper-T (µg/l)	10 K	10 K	10 K	10 K	10 K
Iron-T (µg/l)	201	320	310	684	678
Lead-T (µg/l)	2 K	2 K	2 K	2 K	2 K
Magnesium-T (mg/l)	22	23	22	21	25
Manganese-T (µg/l)	43	298	342	457	338
Mercury-T (µg/l)	0.2 K	0.2 K	0.2 K	0.2 K	0.2 K
Nickel-T (µg/l)	40 K	40 K	40 K	40 K	40 K
Potassium-T (mg/l)	5	5	4	4	6
Selenium-T (µg/l)	2 K	2 K	2 K	2 K	2 K
Sodium-T (mg/l)	23	22	20	18	25
Strontium-T (µg/l)	336	357	356	317	412
Zinc-T (µg/l)	10 K	13	10	42	13
Hardness (mg/l CaCO3)	273	292	280	249	315

K = less than

Appendix Table A-1. Fourmile Creek and Indian Creek Watersheds Inorganic Water Chemistry Sampling Results (2005)

Site Location: # 1 INDIAN CREEK @ FAIRFIELD RD

Indian Creek Watershed (WAU:05080002-080)

River Mile: 23.95

Storet: H11K01

Latitude / Longitude: 39.5085 / 84.8148

County: Butler

USGS Quad: College Corner

	06/15/2005	Duplicate A	06/28/2005	07/21/2005	08/04/2005	08/18/2005
Time	1400		1020	1330	1000	1000
Temp(C)	21		20.6	26.4	25.2	22.84
D.O. (mg/l)	9		7.8	7.94	5.29	4.89
D.O. Sat (%)					64.6	57
pH (fld) (SU)	8.28		7.67	8.96	7.64	7.97
pH (lab) (SU)						
Sp Cond (fld) (µmhos/cm)						
Sp Cond (lab) (µmhos/cm)	619		370	521	478	518
BOD5 (mg/l)	2 K		4.2	2 K	3.2	2 K
COD (mg/l)	10 K		19	11	11	13
Alkalinity (mg/l)	207		109	221	199	226
Acidity (mg/l)	5 K		5 K	5 K	5 K	5 K
Ammonia-N (mg/l)	0.05 K		0.093	0.05 K	0.075	0.138
Nitrate-Nitrite-N (mg/l)	14.6		10.9	3.25	0.1 K	0.6
Nitrite-N (mg/l)	0.046		0.065	0.027	0.02 K	0.02 K
TKN (mg/l)	0.45		0.67	0.42	0.51	0.5
Phosphorus-T (mg/l)	0.212		0.377	0.098	0.058	0.12
Phosphorus-Dis (mg/l)						
TDS (mg/l)	350		238	316	286	304
TSS (mg/l)	27		85	8	46	35
Chloride (mg/l)	23.1		9.8	26.7	31.3	30.6
Sulfate (mg/l)	22.5		16.1	24.4	24.7	23
Aluminum-T (µg/l)	391		2100	200 K	1570	535
Arsenic-T (µg/l)	2 K		2 K	2 K	3.9	4.2
Barium-T (µg/l)	68		63	66	107	97
Cadmium-T (µg/l)	0.2 K		0.2 K	0.2 K	0.2 K	0.2 K
Calcium-T (mg/l)	75		46	64	56	53
Chromium-T (µg/l)	30 K		30 K	30 K	30 K	30 K
Copper-T (µg/l)	10 K		10 K	10 K	10 K	10 K
Iron-T (µg/l)	695		2900	209	2800	881
Lead-T (µg/l)	2 K		2.3	2 K	2.5	2 K
Magnesium-T (mg/l)	28		16	27	30	26
Manganese-T (µg/l)	34		85	20	280	73
Mercury-T (µg/l)	0.2 K		0.2 K	0.2 K	0.2 K	0.2 K
Nickel-T (µg/l)	40 K		40 K	40 K	40 K	40 K
Potassium-T (mg/l)	2		5	4	4	5
Selenium-T (µg/l)	2 K		2 K	2 K	2 K	2 K
Sodium-T (mg/l)	6		5 K	10	13	20
Strontium-T (µg/l)	168		93	204	381	366
Zinc-T (µg/l)	10 K		13	10 K	63	10 K
Hardness (mg/l CaCO ₃)	302		181	271	263	239

K = less than

Appendix Table A-1. Fourmile Creek and Indian Creek Watersheds Inorganic Water Chemistry Sampling Results (2005)

Site Location: # 1 INDIAN CREEK @ FAIRFIELD RD

Indian Creek Watershed (WAU:05080002-080)

River Mile: 23.95

Storet: H11K01

Latitude / Longitude: 39.5085 / 84.8148

County: Butler

USGS Quad: College Corner

Duplicate B 06/28/2005

Time	1020
Temp(C)	
D.O. (mg/l)	
D.O. Sat (%)	
pH (fld) (SU)	
pH (lab) (SU)	
Sp Cond (fld) (µmhos/cm)	
Sp Cond (lab) (µmhos/cm)	370
BOD5 (mg/l)	4.4
COD (mg/l)	22
Alkalinity (mg/l)	112
Acidity (mg/l)	5 K
Ammonia-N (mg/l)	0.085
Nitrate-Nitrite-N (mg/l)	9.74
Nitrite-N (mg/l)	0.066
TKN (mg/l)	0.77
Phosphorus-T (mg/l)	0.367
Phosphorus-Dis (mg/l)	
TDS (mg/l)	230
TSS (mg/l)	85
Chloride (mg/l)	9.6
Sulfate (mg/l)	16.3
Aluminum-T (µg/l)	2040
Arsenic-T (µg/l)	2 K
Barium-T (µg/l)	62
Cadmium-T (µg/l)	0.2 K
Calcium-T (mg/l)	46
Chromium-T (µg/l)	30 K
Copper-T (µg/l)	10 K
Iron-T (µg/l)	2880
Lead-T (µg/l)	2.5
Magnesium-T (mg/l)	16
Manganese-T (µg/l)	84
Mercury-T (µg/l)	0.2 K
Nickel-T (µg/l)	40 K
Potassium-T (mg/l)	5
Selenium-T (µg/l)	2 K
Sodium-T (mg/l)	5 K
Strontium-T (µg/l)	91
Zinc-T (µg/l)	13
Hardness (mg/l CaCO3)	181

K = less than

Appendix Table A-1. Fourmile Creek and Indian Creek Watersheds Inorganic Water Chemistry Sampling Results (2005)

Site Location: # 2 INDIAN CREEK @ INDIAN CREEK RD (SOUTHERN CROSSING)

Indian Creek Watershed (WAU:05080002-080)

River Mile: 17.68

Storet: H11K02

Latitude / Longitude: 39.4485 / 84.7761

County: Butler

USGS Quad: Reily

	06/15/2005	06/28/2005	07/21/2005	08/04/2005	08/18/2005
Time	1330	1200	1235	1135	1050
Temp(C)	23	22.2	25	26.7	22.77
D.O. (mg/l)	9.4	7.8	8.7	8.5	7.72
D.O. Sat (%)			104.7	106.5	89.7
pH (fld) (SU)	8.39	7.79	8.58	7.98	8.12
pH (lab) (SU)					
Sp Cond (fld) (µmhos/cm)					
Sp Cond (lab) (µmhos/cm)	607	290	444	522	530
BOD5 (mg/l)	2 K	5.6	2.3	2 K	2 K
COD (mg/l)	10 K	16	17	11	10
Alkalinity (mg/l)	206	87.3	184	216	230
Acidity (mg/l)	5 K	5 K	5 K	5 K	5 K
Ammonia-N (mg/l)	0.05 K	0.107	0.05 K	0.087	0.076
Nitrate-Nitrite-N (mg/l)	14.9	7.24	1.72	0.33	0.39
Nitrite-N (mg/l)	0.052	0.061	0.02 K	0.02 K	0.02 K
TKN (mg/l)	0.35	0.75	0.38	0.34	0.33
Phosphorus-T (mg/l)	0.089	0.421	0.057	0.013	0.019
Phosphorus-Dis (mg/l)					
TDS (mg/l)	340	186	276	308	314
TSS (mg/l)	14	120	39	13	21
Chloride (mg/l)	23.2	7.1	23.7	33.9	30.6
Sulfate (mg/l)	23	14.6	25.3	27.2	23.2
Aluminum-T (µg/l)	238	1290	820	200 K	222
Arsenic-T (µg/l)	2 K	2 K	2 K	2 K	2 K
Barium-T (µg/l)	64	49	64	84	89
Cadmium-T (µg/l)	0.2 K	0.2 K	0.2 K	0.2 K	0.2 K
Calcium-T (mg/l)	71	36	55	56	59
Chromium-T (µg/l)	30 K	30 K	30 K	30 K	30 K
Copper-T (µg/l)	10 K	10 K	10 K	10 K	10 K
Iron-T (µg/l)	439	1960	1300	403	324
Lead-T (µg/l)	2 K	2 K	2 K	2 K	2 K
Magnesium-T (mg/l)	26	12	20	26	26
Manganese-T (µg/l)	17	52	53	49	35
Mercury-T (µg/l)	0.2 K	0.2 K	0.2 K	0.2 K	0.2 K
Nickel-T (µg/l)	40 K	40 K	40 K	40 K	40 K
Potassium-T (mg/l)	2	6	4	4	4
Selenium-T (µg/l)	2 K	2 K	2 K	2 K	2 K
Sodium-T (mg/l)	6	5 K	9	13	13
Strontium-T (µg/l)	176	82	198	301	347
Zinc-T (µg/l)	10 K	10 K	10 K	10 K	20
Hardness (mg/l CaCO3)	284	139	220	247	254

K = less than

Appendix Table A-1. Fourmile Creek and Indian Creek Watersheds Inorganic Water Chemistry Sampling Results (2005)

Site Location: # 9 INDIAN CREEK ADJACENT REILY-MILLVILLE RD, UPSTREAM MILLVILLE

Indian Creek Watershed (WAU:05080002-080)

River Mile: 9.40

Storet: H11S17

Latitude / Longitude: 39.4002 / 84.6808

County: Butler

USGS Quad: Millville

	06/15/2005	06/28/2005	07/21/2005	08/04/2005	08/18/2005
Time	1430	1300	1235	1650	1310
Temp(C)	25.3	23.6	26.01	33.43	27.3
D.O. (mg/l)	9.8	7.1	7.92	9.21	6.75
D.O. Sat (%)			97.7	129.3	
pH (fld) (SU)	8.46	8.13	8.12	8.24	8.01
pH (lab) (SU)					
Sp Cond (fld) (µmhos/cm)			12	778	
Sp Cond (lab) (µmhos/cm)	588	258	351	504	535
BOD5 (mg/l)	2 K	6.8	2.9	2 K	2 K
COD (mg/l)	10 K	11	23	10 K	10 K
Alkalinity (mg/l)	199	78.7	140	199	205
Acidity (mg/l)	5 K	5 K	5 K	5 K	5 K
Ammonia-N (mg/l)	0.05 K	0.134	0.106	0.057	0.079
Nitrate-Nitrite-N (mg/l)	15.6	4.49	1.4	0.1 K	0.14
Nitrite-N (mg/l)	0.056	0.048	0.02 K	0.02 K	0.02 K
TKN (mg/l)	0.56	0.35	0.38	0.3	0.24
Phosphorus-T (mg/l)	0.03	0.501	0.175	0.03	0.018
Phosphorus-Dis (mg/l)					
TDS (mg/l)	322	162	228	296	312
TSS (mg/l)	19	262	96	15	20
Chloride (mg/l)	23.1	6.7	19.8	108	31.8
Sulfate (mg/l)	22.7	14.4	25.5	114	31.7
Aluminum-T (µg/l)	313	6280	3190	243	513
Arsenic-T (µg/l)	2 K	3.2	2	2 K	2 K
Barium-T (µg/l)	64	82	65	81	93
Cadmium-T (µg/l)	0.2 K	0.2 K	0.2 K	0.2 K	0.2 K
Calcium-T (mg/l)	72	36	46	53	62
Chromium-T (µg/l)	30 K	30 K	30 K	30 K	30 K
Copper-T (µg/l)	10 K	10 K	10 K	10 K	10 K
Iron-T (µg/l)	545	8860	4790	537	840
Lead-T (µg/l)	2 K	7.4	2.5	2 K	2 K
Magnesium-T (mg/l)	27	12	15	23	25
Manganese-T (µg/l)	23	216	114	30	45
Mercury-T (µg/l)	0.2 K	0.2 K	0.2 K	0.2 K	0.2 K
Nickel-T (µg/l)	40 K	40 K	40 K	40 K	40 K
Potassium-T (mg/l)	3	7	6	3	3
Selenium-T (µg/l)	2 K	2 K	2 K	2 K	2 K
Sodium-T (mg/l)	7	5 K	8	14	14
Strontium-T (µg/l)	186	91	161	240	287
Zinc-T (µg/l)	10 K	33	10 K	10 K	10 K
Hardness (mg/l CaCO3)	291	139	177	227	258

K = less than

Appendix Table A-1. Fourmile Creek and Indian Creek Watersheds Inorganic Water Chemistry Sampling Results (2005)

Site Location: #10 INDIAN CREEK UPSTREAM QUEEN ACRES WWTP TRIB

Indian Creek Watershed (WAU:05080002-080)

River Mile: 6.80

Storet: H11S16

Latitude / Longitude: 39.3869 / 84.6465

County: Butler

USGS Quad: Millville

	06/15/2005	06/28/2005	Duplicate A	07/21/2005	Duplicate A	08/04/2005	Duplicate A	08/18/2005
Time	1230	1130		1210		1525		1220
Temp(C)	23.5	23.5		24.46		27.92		
D.O. (mg/l)	8.5	8		6.58		11.37		
D.O. Sat (%)				79		145.2		
pH (fld) (SU)	8.38	7.9		7.87		7.98		
pH (lab) (SU)								
Sp Cond (fld) (µmhos/cm)				384		633		
Sp Cond (lab) (µmhos/cm)	599	248		351		521		603
BOD5 (mg/l)	2 K	2.1		2.9		2 K		2 K
COD (mg/l)	10 K	13		23		10 K		10 K
Alkalinity (mg/l)	190	83.4		134		203		235
Acidity (mg/l)	5 K	5 K		5 K		5 K		5 K
Ammonia-N (mg/l)	0.05 K	0.133		0.05 K		0.061		0.065
Nitrate-Nitrite-N (mg/l)	15	4.05		1.36		0.37		0.28
Nitrite-N (mg/l)	0.056	0.041		0.02 K		0.02 K		0.02 K
TKN (mg/l)	0.56	0.67		0.37		0.28		0.2 K
Phosphorus-T (mg/l)	0.045	0.552		0.207		0.027		0.014
Phosphorus-Dis (mg/l)								
TDS (mg/l)	338	164		226		322		346
TSS (mg/l)	33	444		120		15		18
Chloride (mg/l)	23.2	6.5		21.1		34.8		32.7
Sulfate (mg/l)	22.5	15		25.6		36.2		40
Aluminum-T (µg/l)	428	9720		3290		564		372
Arsenic-T (µg/l)	2 K	4.3		2.4		2 K		2 K
Barium-T (µg/l)	67	107		67		73		90
Cadmium-T (µg/l)	0.2 K	0.2 K		0.2 K		0.2 K		0.2 K
Calcium-T (mg/l)	73	40		47		64		78
Chromium-T (µg/l)	30 K	30 K		30 K		30 K		30 K
Copper-T (µg/l)	10 K	12		10 K		10 K		10 K
Iron-T (µg/l)	763	13800		5040		1050		652
Lead-T (µg/l)	2 K	11.5		2.9		2 K		2 K
Magnesium-T (mg/l)	26	13		16		23		25
Manganese-T (µg/l)	34	354		142		140		167
Mercury-T (µg/l)	0.2 K	0.2 K		0.2 K		0.2 K		0.2 K
Nickel-T (µg/l)	40 K	40 K		40 K		40 K		40 K
Potassium-T (mg/l)	3	7		6		3		3
Selenium-T (µg/l)	2 K	2 K		2 K		2 K		2 K
Sodium-T (mg/l)	7	5 K		8		14		16
Strontium-T (µg/l)	193	101		170		265		349
Zinc-T (µg/l)	10 K	50		13		10 K		10 K
Hardness (mg/l CaCO ₃)	289	153		183		254		298

K = less than

Appendix Table A-1. Fourmile Creek and Indian Creek Watersheds Inorganic Water Chemistry Sampling Results (2005)

Site Location: #10 INDIAN CREEK UPSTREAM QUEEN ACRES WWTP TRIB

Indian Creek Watershed (WAU:05080002-080)

River Mile: 6.80

Storet: H11S16

Latitude / Longitude: 39.3869 / 84.6465

County: Butler

USGS Quad: Millville

Duplicate B	07/21/2005	Duplicate B	08/04/2005	Duplicate B	08/18/2005
Time	1210		1525		1220
Temp(C)					24.3
D.O. (mg/l)					6.86
D.O. Sat (%)					
pH (fld) (SU)					7.82
pH (lab) (SU)					
Sp Cond (fld) (µmhos/cm)					
Sp Cond (lab) (µmhos/cm)	353		522		598
BOD5 (mg/l)	2.9		2 K		2 K
COD (mg/l)	17		10 K		10 K
Alkalinity (mg/l)	133		204		230
Acidity (mg/l)	5 K		5 K		5 K
Ammonia-N (mg/l)	0.05 K		0.063		0.066
Nitrate-Nitrite-N (mg/l)	1.31		0.33		0.33
Nitrite-N (mg/l)	0.02 K		0.02 K		0.02 K
TKN (mg/l)	0.32		0.24		0.21
Phosphorus-T (mg/l)	0.19		0.025		0.019
Phosphorus-Dis (mg/l)					
TDS (mg/l)	230		310		344
TSS (mg/l)	118		16		18
Chloride (mg/l)	21		35.6		32.6
Sulfate (mg/l)	24.3		36.5		39.6
Aluminum-T (µg/l)	3230		271		1240
Arsenic-T (µg/l)	2 K		2 K		2 K
Barium-T (µg/l)	65		66		103
Cadmium-T (µg/l)	0.2 K		0.2 K		0.2 K
Calcium-T (mg/l)	47		58		101
Chromium-T (µg/l)	30 K		30 K		30 K
Copper-T (µg/l)	10 K		10 K		10 K
Iron-T (µg/l)	4890		558		2270
Lead-T (µg/l)	2.5		2 K		2.5
Magnesium-T (mg/l)	16		22		29
Manganese-T (µg/l)	133		93		304
Mercury-T (µg/l)	0.2 K		0.2 K		0.2 K
Nickel-T (µg/l)	40 K		40 K		40 K
Potassium-T (mg/l)	6		3		3
Selenium-T (µg/l)	2 K		2 K		2 K
Sodium-T (mg/l)	8		14		17
Strontium-T (µg/l)	167		248		384
Zinc-T (µg/l)	12		10 K		10 K
Hardness (mg/l CaCO3)	183		235		372

K = less than

Appendix Table A-1. Fourmile Creek and Indian Creek Watersheds Inorganic Water Chemistry Sampling Results (2005)

Site Location: #11 INDIAN CREEK DOWNSTREAM QUEEN ACRES WWTP TRIB

Indian Creek Watershed (WAU:05080002-080)

River Mile: 6.50

Storet: H11S14

Latitude / Longitude: 39.3822 / 84.6478

County: Butler

USGS Quad: Millville

	06/15/2005	06/28/2005	07/21/2005	08/04/2005	08/18/2005
Time	1155	1040	1145	1450	1150
Temp(C)	22.7	22.8	24.24	28.87	23.8
D.O. (mg/l)	8	7.5	5.6	10.43	6.79
D.O. Sat (%)			66.9	135.5	
pH (fld) (SU)	8.31	8.03	7.85	8.1	8.03
pH (lab) (SU)					
Sp Cond (fld) (µmhos/cm)			364	579	
Sp Cond (lab) (µmhos/cm)	605	258	379	619	748
BOD5 (mg/l)	2 K	9.1	2.8	2.8	2
COD (mg/l)	10 K	13	23	10 K	10 K
Alkalinity (mg/l)	195	79.8	134	215	226
Acidity (mg/l)	5 K	5 K	5 K	5 K	5 K
Ammonia-N (mg/l)	0.052	0.146	0.05	0.057	0.078
Nitrate-Nitrite-N (mg/l)	15.9	3.97	2.51	3.79	7.3
Nitrite-N (mg/l)	0.071	0.044	0.02 K	0.021	0.041
TKN (mg/l)	0.37	0.58	0.4	0.49	0.49
Phosphorus-T (mg/l)	0.041	0.542	0.336	0.4	1.04
Phosphorus-Dis (mg/l)					
TDS (mg/l)	344	184	252	376	442
TSS (mg/l)	40	482	91	51	23
Chloride (mg/l)	27	8.9	26.9	47	58.4
Sulfate (mg/l)	24.2	15.6	26.8	44.6	53.1
Aluminum-T (µg/l)	375	10000	2970	528	792
Arsenic-T (µg/l)	2 K	4.3	2	2 K	2.4
Barium-T (µg/l)	66	110	61	66	74
Cadmium-T (µg/l)	0.2 K	0.2 K	0.2 K	0.2 K	0.2 K
Calcium-T (mg/l)	73	39	44	61	75
Chromium-T (µg/l)	30 K	30 K	30 K	30 K	30 K
Copper-T (µg/l)	10 K	13	10 K	10 K	10 K
Iron-T (µg/l)	693	14400	4630	1030	1330
Lead-T (µg/l)	2 K	11.6	2.3	2 K	2 K
Magnesium-T (mg/l)	26	13	15	22	23
Manganese-T (µg/l)	33	358	117	137	107
Mercury-T (µg/l)	0.2 K	0.2 K	0.2 K	0.2 K	0.2 K
Nickel-T (µg/l)	40 K	40 K	40 K	40 K	40 K
Potassium-T (mg/l)	3	7	6	4	6
Selenium-T (µg/l)	2 K	2 K	2 K	2 K	2 K
Sodium-T (mg/l)	11	5 K	14	29	52
Strontium-T (µg/l)	195	102	168	254	322
Zinc-T (µg/l)	10 K	55	14	15	13
Hardness (mg/l CaCO ₃)	289	151	172	243	282

K = less than

Appendix Table A-1. Fourmile Creek and Indian Creek Watersheds Inorganic Water Chemistry Sampling Results (2005)

Site Location: #12 INDIAN CREEK @ HAMILTON-NEW LONDON RD DST MILLVILLE

Indian Creek Watershed (WAU:05080002-080)

River Mile: 4.30

Storet: H11S11

Latitude / Longitude: 39.3630 / 84.6433

County: Butler

USGS Quad:Shandon

	06/15/2005	06/28/2005	07/21/2005	08/04/2005	08/18/2005
Time	1110	1015	1110	1410	1115
Temp(C)	23.3	23.9	25.15	28.92	22.8
D.O. (mg/l)	8.8	7.2	6.66	11.87	9.1
D.O. Sat (%)			80.9	154.3	106
pH (fld) (SU)	8.26	7.94	7.84	7.98	7.9
pH (lab) (SU)					
Sp Cond (fld) (µmhos/cm)			346	566	
Sp Cond (lab) (µmhos/cm)	583	300	356	560	614
BOD5 (mg/l)	2 K	10	2.8	2 K	2 K
COD (mg/l)	10 K	11	20	10 K	10 K
Alkalinity (mg/l)	191	101	134	229	242
Acidity (mg/l)	5 K	5 K	5 K	5 K	5 K
Ammonia-N (mg/l)	0.05 K	0.149	0.05 K	0.062	0.077
Nitrate-Nitrite-N (mg/l)	13.4	4.53	1.43	0.6	0.58
Nitrite-N (mg/l)	0.074	0.046	0.02 K	0.02 K	0.02 K
TKN (mg/l)	0.46	0.53	0.31	0.2 K	0.21
Phosphorus-T (mg/l)	0.091	0.584	0.264	0.019	0.024
Phosphorus-Dis (mg/l)					
TDS (mg/l)	318	222	250	340	352
TSS (mg/l)	21	158	140	24	10
Chloride (mg/l)	23.3	10.7	23.1	33.3	30.9
Sulfate (mg/l)	24.3	18.2	29.2	34.2	42.8
Aluminum-T (µg/l)	389	13800	4380	200 K	200 K
Arsenic-T (µg/l)	2 K	6.4	2.9	2 K	2 K
Barium-T (µg/l)	62	145	71	55	64
Cadmium-T (µg/l)	0.2 K	0.25	0.2 K	0.2 K	0.2 K
Calcium-T (mg/l)	70	53	48	69	81
Chromium-T (µg/l)	30 K	30 K	30 K	30 K	30 K
Copper-T (µg/l)	10 K	17	10 K	10 K	10 K
Iron-T (µg/l)	714	20100	6840	303	183
Lead-T (µg/l)	2 K	16.2	3.2	2 K	2 K
Magnesium-T (mg/l)	25	19	16	22	24
Manganese-T (µg/l)	29	518	142	45	41
Mercury-T (µg/l)	0.2 K	0.2 K	0.2 K	0.2 K	0.2 K
Nickel-T (µg/l)	40 K	40 K	40 K	40 K	40 K
Potassium-T (mg/l)	3	7	6	3	3
Selenium-T (µg/l)	2 K	2 K	2 K	2 K	2 K
Sodium-T (mg/l)	8	5 K	9	15	16
Strontium-T (µg/l)	193	137	169	233	270
Zinc-T (µg/l)	10 K	71	14	10 K	10 K
Hardness (mg/l CaCO3)	278	210	186	263	301

K = less than

Appendix Table A-1. Fourmile Creek and Indian Creek Watersheds Inorganic Water Chemistry Sampling Results (2005)

Site Location: #13 INDIAN CREEK @ SR 128 NR ROSS

Indian Creek Watershed (WAU:05080002-080)

River Mile: 1.66

Storet: 600280

Latitude / Longitude: 39.3377 / 84.6269

County: Butler

USGS Quad:Shandon

	06/15/2005	06/28/2005	07/21/2005	08/04/2005	08/18/2005
Time	1015	0955	1050	1345	1100
Temp(C)	21.9	24.7	24.7	28.26	24.1
D.O. (mg/l)	7.8	7.1	6.16	12.02	8.38
D.O. Sat (%)			74.2	154.5	
pH (fld) (SU)	8.12	7.79	7.88	8.17	7.99
pH (lab) (SU)					
Sp Cond (fld) (µmhos/cm)					
Sp Cond (lab) (µmhos/cm)	580	434	343	533	580
BOD5 (mg/l)	2 K	8.6	3.1	4.2	2 K
COD (mg/l)	10 K	11	28	10 K	10 K
Alkalinity (mg/l)	188	154	134	216	238
Acidity (mg/l)	5 K	5 K	5 K	5 K	5 K
Ammonia-N (mg/l)	0.05 K	0.107	0.053	0.05 K	0.094
Nitrate-Nitrite-N (mg/l)	12.9	5.88	1.39	0.32	0.62
Nitrite-N (mg/l)	0.089	0.061	0.02 K	0.02 K	0.02 K
TKN (mg/l)	0.29	0.55	0.34	0.2 K	0.2 K
Phosphorus-T (mg/l)	0.079	0.455	0.332	0.041	0.02
Phosphorus-Dis (mg/l)					
TDS (mg/l)	330	278	236	312	338
TSS (mg/l)	20	156	256	35	12
Chloride (mg/l)	23.8	20	21.6	31.1	27.8
Sulfate (mg/l)	25	24.2	29.1	36.5	35.8
Aluminum-T (µg/l)	287	9230	6790	538	390
Arsenic-T (µg/l)	2 K	4.9	2.9	2 K	2 K
Barium-T (µg/l)	60	127	86	67	67
Cadmium-T (µg/l)	0.2 K	0.2 K	0.2 K	0.2 K	0.2 K
Calcium-T (mg/l)	69	74	51	68	77
Chromium-T (µg/l)	30 K	30 K	30 K	30 K	30 K
Copper-T (µg/l)	10 K	12	10 K	10 K	10 K
Iron-T (µg/l)	551	14200	10800	976	582
Lead-T (µg/l)	2 K	11.9	5	2 K	2 K
Magnesium-T (mg/l)	24	28	17	23	24
Manganese-T (µg/l)	21	397	203	42	24
Mercury-T (µg/l)	0.2 K	0.2 K	0.2 K	0.2 K	0.2 K
Nickel-T (µg/l)	40 K	40 K	40 K	40 K	40 K
Potassium-T (mg/l)	3	6	7	3	3
Selenium-T (µg/l)	2 K	2 K	2 K	2 K	2 K
Sodium-T (mg/l)	8	7	8	14	14
Strontium-T (µg/l)	192	210	173	229	246
Zinc-T (µg/l)	35	49	26	19	10 K
Hardness (mg/l CaCO3)	271	300	197	264	291

K = less than

Appendix Table A-1. Fourmile Creek and Indian Creek Watersheds Inorganic Water Chemistry Sampling Results (2005)

Site Location: # 3 LITTLE INDIAN CREEK @ SAWMILL RD

Indian Creek Watershed (WAU:05080002-080)

River Mile: 0.09

Storet: H11K03

Latitude / Longitude: 39.4292 / 84.7588

County: Butler

USGS Quad: Reily

	06/15/2005	06/28/2005	07/21/2005	08/04/2005	08/18/2005
Time	1220	1250	1200	1150	1120
Temp(C)	21.1	21.1	22.5	22.4	19.76
D.O. (mg/l)	7.2	14.9	7.06	3.5	2.81
D.O. Sat (%)			81.6	39.9	30.9
pH (fld) (SU)	7.85	7.24	8.08	7.14	7.19
pH (lab) (SU)					
Sp Cond (fld) (µmhos/cm)					
Sp Cond (lab) (µmhos/cm)	644	755	426	767	767
BOD5 (mg/l)	2 K	2 K	2 K	2 K	2 K
COD (mg/l)	10 K	10 K	17	10 K	10 K
Alkalinity (mg/l)	232	305	174	359	379
Acidity (mg/l)	5 K	5 K	5 K	5 K	5 K
Ammonia-N (mg/l)	0.119	0.059	0.067	0.076	0.088
Nitrate-Nitrite-N (mg/l)	3.56	0.18	1.33	0.1 K	0.16
Nitrite-N (mg/l)	0.02 K	0.02 K	0.02 K	0.02 K	0.02 K
TKN (mg/l)	0.28	0.32	0.42	0.2 K	0.2 K
Phosphorus-T (mg/l)	0.043	0.041	0.12	0.042	0.01 K
Phosphorus-Dis (mg/l)					
TDS (mg/l)	360	440	276	448	488
TSS (mg/l)	8	5	23	8	7
Chloride (mg/l)	40.6	45.1	25.6	114	32.7
Sulfate (mg/l)	29.5	26	24.5	109	25.4
Aluminum-T (µg/l)	200 K	200 K	722	200 K	200 K
Arsenic-T (µg/l)	2 K	2 K	2 K	2 K	2 K
Barium-T (µg/l)	67	78	60	83	83
Cadmium-T (µg/l)	0.2 K	0.2 K	0.2 K	0.2 K	0.2 K
Calcium-T (mg/l)	76	99	58	104	108
Chromium-T (µg/l)	30 K	30 K	30 K	30 K	30 K
Copper-T (µg/l)	10 K	10 K	10 K	10 K	10 K
Iron-T (µg/l)	68	89	1170	193	201
Lead-T (µg/l)	2 K	2 K	2 K	2 K	2 K
Magnesium-T (mg/l)	24	25	16	26	26
Manganese-T (µg/l)	12	90	54	160	111
Mercury-T (µg/l)	0.2 K	0.2 K	0.2 K	0.2 K	0.2 K
Nickel-T (µg/l)	40 K	40 K	40 K	40 K	40 K
Potassium-T (mg/l)	3	2	5	2	2
Selenium-T (µg/l)	2 K	2 K	2 K	2 K	2 K
Sodium-T (mg/l)	17	27	11	25	20
Strontium-T (µg/l)	237	262	166	262	248
Zinc-T (µg/l)	10 K	10 K	10 K	10 K	10 K
Hardness (mg/l CaCO3)	289	350	211	367	377

K = less than

Appendix Table A-1. Fourmile Creek and Indian Creek Watersheds Inorganic Water Chemistry Sampling Results (2005)

Site Location: # 4 RESERVE RUN ADJACENT REILY-MILLVILLE RD

Indian Creek Watershed (WAU:05080002-080)

River Mile: 0.25

Storet: H11K04

Latitude / Longitude: 39.4294 / 84.7425

County: Butler

USGS Quad: Millville

	06/15/2005	06/28/2005	07/21/2005	08/04/2005
Time	1255	1400	1215	1215
Temp(C)	22	21.8	22.8	22.9
D.O. (mg/l)	9.6	4	7.62	3.37
D.O. Sat (%)			88.6	39.5
pH (fld) (SU)	7.98	7.27	8.27	7.25
pH (lab) (SU)				
Sp Cond (fld) (µmhos/cm)				
Sp Cond (lab) (µmhos/cm)	616	592	507	633
BOD5 (mg/l)	2 K	2 K	2 K	2 K
COD (mg/l)	10 K	10 K	17	10 K
Alkalinity (mg/l)	228	214	201	268
Acidity (mg/l)	5 K	5 K	5 K	5 K
Ammonia-N (mg/l)	0.05 K	0.053	0.067	0.063
Nitrate-Nitrite-N (mg/l)	0.3	0.17	1.7	0.1 K
Nitrite-N (mg/l)	0.02 K	0.02 K	0.02 K	0.02 K
TKN (mg/l)	0.24	0.36	0.45	0.2 K
Phosphorus-T (mg/l)	0.021	0.027	0.105	0.01 K
Phosphorus-Dis (mg/l)				
TDS (mg/l)	352	346	314	374
TSS (mg/l)	5 K	6	9	5 K
Chloride (mg/l)	34.7	31.7	27	36.4
Sulfate (mg/l)	39.9	34.7	36.3	38.6
Aluminum-T (µg/l)	200 K	200 K	271	200 K
Arsenic-T (µg/l)	2 K	2 K	2 K	2 K
Barium-T (µg/l)	66	65	60	69
Cadmium-T (µg/l)	0.2 K	0.2 K	0.2 K	0.2 K
Calcium-T (mg/l)	81	72	71	83
Chromium-T (µg/l)	30 K	30 K	30 K	30 K
Copper-T (µg/l)	10 K	10 K	10 K	10 K
Iron-T (µg/l)	143	373	614	131
Lead-T (µg/l)	2 K	2 K	2 K	2 K
Magnesium-T (mg/l)	23	21	18	23
Manganese-T (µg/l)	26	142	17	219
Mercury-T (µg/l)	0.2 K	0.2 K	0.2 K	0.2 K
Nickel-T (µg/l)	40 K	40 K	40 K	40 K
Potassium-T (mg/l)	4	4	7	4
Selenium-T (µg/l)	2 K	2 K	2 K	2 K
Sodium-T (mg/l)	17	16	15	18
Strontium-T (µg/l)	341	300	300	340
Zinc-T (µg/l)	10 K	11	10 K	10 K
Hardness (mg/l CaCO ₃)	297	266	251	302

K = less than

Appendix Table A-1. Fourmile Creek and Indian Creek Watersheds Inorganic Water Chemistry Sampling Results (2005)

Site Location: # 5 SALMON RUN @ SALMON RD

Indian Creek Watershed (WAU:05080002-080)

River Mile: 1.90

Storet: H11K09

Latitude / Longitude: 39.4291 / 84.6950

County: Butler

USGS Quad: Millville

	06/15/2005	06/28/2005	07/21/2005	08/04/2005
Time	1035	1540	1045	1330
Temp(C)	18.8	21.1	21.4	19.3
D.O. (mg/l)	4.4	1.5	7.51	4
D.O. Sat (%)			85.2	30.5
pH (fld) (SU)	7.56	7.5	8.08	7.3
pH (lab) (SU)				
Sp Cond (fld) (µmhos/cm)				
Sp Cond (lab) (µmhos/cm)	689	602	519	761
BOD5 (mg/l)	2 K	4.6	2 K	2
COD (mg/l)	10 K	11	23	10 K
Alkalinity (mg/l)	258	198	208	305
Acidity (mg/l)	5 K	5 K	5 K	5 K
Ammonia-N (mg/l)	0.06	0.101	0.073	0.082
Nitrate-Nitrite-N (mg/l)	0.2	0.76	0.39	0.1 K
Nitrite-N (mg/l)	0.02 K	0.044	0.02 K	0.02 K
TKN (mg/l)	1.33	0.46	0.64	0.2
Phosphorus-T (mg/l)	0.048	0.124	0.135	0.017
Phosphorus-Dis (mg/l)				
TDS (mg/l)	398	354	306	446
TSS (mg/l)	5 K	30	7	7
Chloride (mg/l)	44.1	39.2	31.5	58.2
Sulfate (mg/l)	36.8	34.1	35.7	39.2
Aluminum-T (µg/l)	200 K	200 K	318	200 K
Arsenic-T (µg/l)	2 K	2 K	2 K	2 K
Barium-T (µg/l)	47	41	41	50
Cadmium-T (µg/l)	0.2 K	0.2 K	0.2 K	0.2 K
Calcium-T (mg/l)	98	77	72	106
Chromium-T (µg/l)	30 K	30 K	30 K	30 K
Copper-T (µg/l)	10 K	10 K	10 K	10 K
Iron-T (µg/l)	170	433	636	166
Lead-T (µg/l)	2 K	2 K	2 K	2 K
Magnesium-T (mg/l)	20	16	16	21
Manganese-T (µg/l)	70	110	21	243
Mercury-T (µg/l)	0.2 K	0.2 K	0.2 K	0.2 K
Nickel-T (µg/l)	40 K	40 K	40 K	40 K
Potassium-T (mg/l)	3	4	6	2
Selenium-T (µg/l)	2 K	2 K	2 K	2 K
Sodium-T (mg/l)	19	19	18	21
Strontium-T (µg/l)	281	236	234	268
Zinc-T (µg/l)	10 K	10 K	10 K	10 K
Hardness (mg/l CaCO ₃)	327	258	246	351

K = less than

Appendix Table A-1. Fourmile Creek and Indian Creek Watersheds Inorganic Water Chemistry Sampling Results (2005)

Site Location: # 6 SALMON RUN ADJACENT REILY-MILLVILLE RD

Indian Creek Watershed (WAU:05080002-080)

River Mile: 0.10

Storet: H11K05

Latitude / Longitude: 39.4072 / 84.6928

County: Butler

USGS Quad: Millville

Duplicate A	06/15/2005	06/28/2005	07/21/2005	08/04/2005	08/18/2005
Time	0950	1600	1000	1240	1240
Temp(C)	19.8	22.9	22.4	21.4	23.52
D.O. (mg/l)	6	5.6	7.5	13	2.81
D.O. Sat (%)			87.2	113.2	30.9
pH (fld) (SU)	7.7	7.03	7.98	8.02	7.19
pH (lab) (SU)					
Sp Cond (fld) (µmhos/cm)					
Sp Cond (lab) (µmhos/cm)	602	499	415	602	547
BOD5 (mg/l)	2 K	2 K	2 K	2 K	2 K
COD (mg/l)	10 K	11	23	10 K	10 K
Alkalinity (mg/l)	236	176	160	253	235
Acidity (mg/l)	5 K	5 K	5 K	5 K	5 K
Ammonia-N (mg/l)	0.05 K	0.053	0.08	0.068	0.094
Nitrate-Nitrite-N (mg/l)	0.77	0.67	0.49	1.02	0.51
Nitrite-N (mg/l)	0.02 K	0.02 K	0.02 K	0.02 K	0.02 K
TKN (mg/l)	0.26	0.52	0.41	0.23	0.23
Phosphorus-T (mg/l)	0.072	0.1	0.15	0.017	0.036
Phosphorus-Dis (mg/l)					
TDS (mg/l)	348	294	262	350	324
TSS (mg/l)	5 K	5 K	15	5 K	5 K
Chloride (mg/l)	28.9	26.4	26.5	35.8	31.3
Sulfate (mg/l)	33.4	31.6	29	32.6	29.9
Aluminum-T (µg/l)	200 K	200 K	497	200 K	200 K
Arsenic-T (µg/l)	2 K	2 K	2 K	2 K	2 K
Barium-T (µg/l)	41	35	35	45	41
Cadmium-T (µg/l)	0.2 K	0.2 K	0.2 K	0.2 K	0.2 K
Calcium-T (mg/l)	78	66	54	79	75
Chromium-T (µg/l)	30 K	30 K	30 K	30 K	30 K
Copper-T (µg/l)	10 K	10 K	10 K	10 K	10 K
Iron-T (µg/l)	121	167	885	145	132
Lead-T (µg/l)	2 K	2 K	2 K	2 K	2 K
Magnesium-T (mg/l)	19	17	12	19	19
Manganese-T (µg/l)	40	17	35	36	54
Mercury-T (µg/l)	0.2 K	0.2 K	0.2 K	0.2 K	0.2 K
Nickel-T (µg/l)	40 K	40 K	40 K	40 K	40 K
Potassium-T (mg/l)	4	4	6	3	3
Selenium-T (µg/l)	2 K	2 K	2 K	2 K	2 K
Sodium-T (mg/l)	16	16	16	18	19
Strontium-T (µg/l)	278	241	178	266	259
Zinc-T (µg/l)	12	10 K	10 K	10 K	10 K
Hardness (mg/l CaCO3)	273	235	184	276	266

K = less than

Appendix Table A-1. Fourmile Creek and Indian Creek Watersheds Inorganic Water Chemistry Sampling Results (2005)

Site Location: # 6 SALMON RUN ADJACENT REILY-MILLVILLE RD

Indian Creek Watershed (WAU:05080002-080)

River Mile: 0.10

Storet: H11K05

Latitude / Longitude: 39.4072 / 84.6928

County: Butler

USGS Quad: Millville

Duplicate B 06/15/2005

Time	0950
Temp(C)	
D.O. (mg/l)	
D.O. Sat (%)	
pH (fld) (SU)	
pH (lab) (SU)	
Sp Cond (fld) (µmhos/cm)	
Sp Cond (lab) (µmhos/cm)	600
BOD5 (mg/l)	2 K
COD (mg/l)	10 K
Alkalinity (mg/l)	237
Acidity (mg/l)	5 K
Ammonia-N (mg/l)	0.05 K
Nitrate-Nitrite-N (mg/l)	0.73
Nitrite-N (mg/l)	0.02 K
TKN (mg/l)	0.29
Phosphorus-T (mg/l)	0.087
Phosphorus-Dis (mg/l)	
TDS (mg/l)	352
TSS (mg/l)	5 K
Chloride (mg/l)	28.7
Sulfate (mg/l)	33.2
Aluminum-T (µg/l)	200 K
Arsenic-T (µg/l)	2 K
Barium-T (µg/l)	41
Cadmium-T (µg/l)	0.2 K
Calcium-T (mg/l)	77
Chromium-T (µg/l)	30 K
Copper-T (µg/l)	10 K
Iron-T (µg/l)	109
Lead-T (µg/l)	2 K
Magnesium-T (mg/l)	19
Manganese-T (µg/l)	38
Mercury-T (µg/l)	0.2 K
Nickel-T (µg/l)	40 K
Potassium-T (mg/l)	3
Selenium-T (µg/l)	2 K
Sodium-T (mg/l)	16
Strontium-T (µg/l)	271
Zinc-T (µg/l)	10 K
Hardness (mg/l CaCO3)	270

K = less than

Appendix Table A-1. Fourmile Creek and Indian Creek Watersheds Inorganic Water Chemistry Sampling Results (2005)

Site Location: # 7 TRIBUTARY TO SALMON RUN (1.81) @ HUSSEY RD.

Indian Creek Watershed (WAU:05080002-080)

River Mile: 1.40

Storet: H11K10

Latitude / Longitude: 39.4460 / 84.6879

County: Butler

USGS Quad: Millville

	06/15/2005	06/28/2005	07/21/2005	08/04/2005	08/18/2005
Time	1145	1430	1130	1415	1430
Temp(C)			27.9		
D.O. (mg/l)			6.49		
D.O. Sat (%)			82.9		
pH (fld) (SU)			8.45		
pH (lab) (SU)					
Sp Cond (fld) (µmhos/cm)					
Sp Cond (lab) (µmhos/cm)	374	346	335	352	369
BOD5 (mg/l)	12	6.2	4.5	2 K	3.9
COD (mg/l)	45	25	28	28	33
Alkalinity (mg/l)	116	98.8	114	121	133
Acidity (mg/l)	5 K	5 K	5 K	5 K	5 K
Ammonia-N (mg/l)	0.142	0.122	0.334	0.091	0.128
Nitrate-Nitrite-N (mg/l)	0.18	0.33	0.21	0.11	0.33
Nitrite-N (mg/l)	0.028	0.034	0.037	0.02 K	0.02 K
TKN (mg/l)	1.7	1.08	1.26	0.9	1
Phosphorus-T (mg/l)	0.256	0.181	0.239	0.122	0.29
Phosphorus-Dis (mg/l)					
TDS (mg/l)	226	206	212	230	250
TSS (mg/l)	81	68	40	46	93
Chloride (mg/l)	25.5	25.2	25.7	27.7	25.6
Sulfate (mg/l)	29	27.8	27.6	26.4	26.8
Aluminum-T (µg/l)	986	1560	918	737	1530
Arsenic-T (µg/l)	8.2	9.1	10.1	11.9	13.5
Barium-T (µg/l)	48	50	38	37	42
Cadmium-T (µg/l)	0.2 K	0.2 K	0.2 K	0.2 K	0.2 K
Calcium-T (mg/l)	22	21	18	19	24
Chromium-T (µg/l)	30 K	30 K	30 K	30 K	30 K
Copper-T (µg/l)	10 K	10 K	10 K	10 K	10 K
Iron-T (µg/l)	1980	2420	1510	1250	2130
Lead-T (µg/l)	2 K	5.1	2 K	2 K	2.1
Magnesium-T (mg/l)	16	14	13	13	15
Manganese-T (µg/l)	276	300	138	112	137
Mercury-T (µg/l)	0.2 K	0.2 K	0.2 K	0.2 K	0.2 K
Nickel-T (µg/l)	40 K	40 K	40 K	40 K	40 K
Potassium-T (mg/l)	4	4	5	4	5
Selenium-T (µg/l)	2 K	2 K	2 K	2 K	2 K
Sodium-T (mg/l)	30	34	32	33	36
Strontium-T (µg/l)	102	93	86	87	103
Zinc-T (µg/l)	43	39	10 K	10	13
Hardness (mg/l CaCO ₃)	121	110	99	101	122

K = less than

Appendix Table A-1. Fourmile Creek and Indian Creek Watersheds Inorganic Water Chemistry Sampling Results (2005)

Site Location: # 8 TRIBUTARY TO SALMON RUN (1.81) @ SALMON RD.

Indian Creek Watershed (WAU:05080002-080)

River Mile: 0.10

Storet: H11K11

Latitude / Longitude: 39.4290 / 84.6934

County: Butler

USGS Quad: Millville

	06/15/2005	06/28/2005	07/21/2005	08/04/2005	Duplicate A	08/18/2005
Time	1100	1500	1100	1345		1345
Temp(C)	19.8	21.4	22			
D.O. (mg/l)	6.1	4.9	8			
D.O. Sat (%)			92			
pH (fld) (SU)	7.86	7.78	8.39			
pH (lab) (SU)						
Sp Cond (fld) (µmhos/cm)						
Sp Cond (lab) (µmhos/cm)	734	567	571	761		773
BOD5 (mg/l)	2 K	2 K	2 K	11		2 K
COD (mg/l)	12	11	17	10 K		10 K
Alkalinity (mg/l)	244	173	213	307		312
Acidity (mg/l)	5 K	5 K	5 K	5 K		5 K
Ammonia-N (mg/l)	0.05 K	0.051	0.078	0.086		0.079
Nitrate-Nitrite-N (mg/l)	9.72	1.73	0.4	5.7		0.1 K
Nitrite-N (mg/l)	0.02 K	0.02 K	0.02 K	0.02 K		0.02 K
TKN (mg/l)	0.48	0.49	0.54	0.2 K		0.2 K
Phosphorus-T (mg/l)	0.101	0.182	0.116	0.018		0.025
Phosphorus-Dis (mg/l)						
TDS (mg/l)	422	340	340	450		452
TSS (mg/l)	5 K	10	5 K	7		5 K
Chloride (mg/l)	59.8	41	47	58.5		57.5
Sulfate (mg/l)	43.1	40.7	35.1	39.2		35.1
Aluminum-T (µg/l)	200 K	200 K	200 K	200 K		200 K
Arsenic-T (µg/l)	2 K	2 K	2 K	2 K		2 K
Barium-T (µg/l)	48	41	38	50		59
Cadmium-T (µg/l)	0.2 K	0.2 K	0.2 K	0.2 K		0.2 K
Calcium-T (mg/l)	88	66	63	104		118
Chromium-T (µg/l)	30 K	30 K	30 K	30 K		30 K
Copper-T (µg/l)	10 K	10 K	10 K	10 K		10 K
Iron-T (µg/l)	134	334	181	245		321
Lead-T (µg/l)	2 K	2 K	2 K	2 K		2 K
Magnesium-T (mg/l)	20	15	16	20		23
Manganese-T (µg/l)	41	25	10 K	242		247
Mercury-T (µg/l)	0.2 K	0.2 K	0.2 K	0.2 K		0.2 K
Nickel-T (µg/l)	40 K	40 K	40 K	40 K		40 K
Potassium-T (mg/l)	4	5	4	2		2
Selenium-T (µg/l)	2 K	2 K	2 K	2 K		2 K
Sodium-T (mg/l)	36	29	39	20		23
Strontium-T (µg/l)	286	231	211	259		284
Zinc-T (µg/l)	10 K	13	10 K	10 K		10 K
Hardness (mg/l CaCO ₃)	302	226	223	342		389

K = less than

Appendix Table A-1. Fourmile Creek and Indian Creek Watersheds Inorganic Water Chemistry Sampling Results (2005)

Site Location: # 8 TRIBUTARY TO SALMON RUN (1.81) @ SALMON RD.

Indian Creek Watershed (WAU:05080002-080)

River Mile: 0.10

Storet: H11K11

Latitude / Longitude: 39.4290 / 84.6934

County: Butler

USGS Quad: Millville

Duplicate B 08/18/2005

Time	1345
Temp(C)	
D.O. (mg/l)	
D.O. Sat (%)	
pH (fld) (SU)	
pH (lab) (SU)	
Sp Cond (fld) (µmhos/cm)	
Sp Cond (lab) (µmhos/cm)	769
BOD5 (mg/l)	2 K
COD (mg/l)	10 K
Alkalinity (mg/l)	317
Acidity (mg/l)	5 K
Ammonia-N (mg/l)	0.078
Nitrate-Nitrite-N (mg/l)	0.1 K
Nitrite-N (mg/l)	0.02 K
TKN (mg/l)	0.2 K
Phosphorus-T (mg/l)	0.018
Phosphorus-Dis (mg/l)	
TDS (mg/l)	452
TSS (mg/l)	5 K
Chloride (mg/l)	58.2
Sulfate (mg/l)	38.2
Aluminum-T (µg/l)	200 K
Arsenic-T (µg/l)	2 K
Barium-T (µg/l)	59
Cadmium-T (µg/l)	0.2 K
Calcium-T (mg/l)	116
Chromium-T (µg/l)	30 K
Copper-T (µg/l)	10 K
Iron-T (µg/l)	350
Lead-T (µg/l)	2 K
Magnesium-T (mg/l)	22
Manganese-T (µg/l)	288
Mercury-T (µg/l)	0.2 K
Nickel-T (µg/l)	40 K
Potassium-T (mg/l)	2
Selenium-T (µg/l)	2 K
Sodium-T (mg/l)	23
Strontium-T (µg/l)	278
Zinc-T (µg/l)	10 K
Hardness (mg/l CaCO3)	380

K = less than

Appendix Table A-1. Fourmile Creek and Indian Creek Watersheds Inorganic Water Chemistry Sampling Results (2005)

Site Location: #15 LICK RUN @ ROSS RD.

Indian Creek Watershed (WAU:05080002-080)

River Mile: 0.90

Storet: H11K06

Latitude / Longitude: 39.3908 / 84.6750

County: Butler

USGS Quad: Millville

	06/15/2005	06/28/2005	07/21/2005	08/04/2005	08/18/2005
Time	1355	1235	1255	1625	1245
Temp(C)	24.3	23.4	25.19	23.65	22.1
D.O. (mg/l)	8.3	3	6.03	6.49	4.9
D.O. Sat (%)			73.3	76.7	
pH (fld) (SU)	8.23	7.85	8	7.77	7.89
pH (lab) (SU)					
Sp Cond (fld) (µmhos/cm)			733		
Sp Cond (lab) (µmhos/cm)	664	614	551	755	788
BOD5 (mg/l)	2 K	2.8	2	2 K	2 K
COD (mg/l)	10 K	13	23	11	13
Alkalinity (mg/l)	237	208	212	318	312
Acidity (mg/l)	5 K	5 K	5 K	5 K	5 K
Ammonia-N (mg/l)	0.05 K	0.083	0.159	0.095	0.128
Nitrate-Nitrite-N (mg/l)	3.5	1.03	1.39	0.28	0.35
Nitrite-N (mg/l)	0.065	0.026	0.031	0.02 K	0.02 K
TKN (mg/l)	0.69	0.77	0.43	0.36	0.63
Phosphorus-T (mg/l)	0.079	0.21	0.494	0.156	0.241
Phosphorus-Dis (mg/l)					
TDS (mg/l)	382	354	340	454	454
TSS (mg/l)	5 K	8	27	25	5 K
Chloride (mg/l)	40.5	42	35.2	47.3	62.1
Sulfate (mg/l)	43.6	28.9	38.9	43.5	22.4
Aluminum-T (µg/l)	200 K	200 K	1040	200 K	272
Arsenic-T (µg/l)	2 K	3	3.2	3.3	4.3
Barium-T (µg/l)	59	67	58	75	84
Cadmium-T (µg/l)	0.2 K	0.2 K	0.2 K	0.2 K	0.2 K
Calcium-T (mg/l)	76	62	62	88	88
Chromium-T (µg/l)	30 K	30 K	30 K	30 K	30 K
Copper-T (µg/l)	10 K	10 K	10 K	10 K	10 K
Iron-T (µg/l)	102	588	1800	526	582
Lead-T (µg/l)	2 K	2 K	2 K	2 K	2 K
Magnesium-T (mg/l)	24	22	18	22	30
Manganese-T (µg/l)	13	100	116	223	216
Mercury-T (µg/l)	0.2 K	0.2 K	0.2 K	0.2 K	0.2 K
Nickel-T (µg/l)	40 K	40 K	40 K	40 K	40 K
Potassium-T (mg/l)	5	8	9	6	9
Selenium-T (µg/l)	2 K	2 K	2 K	2 K	2 K
Sodium-T (mg/l)	23	29	23	43	40
Strontium-T (µg/l)	329	464	277	469	856
Zinc-T (µg/l)	10 K	10 K	10 K	10 K	10 K
Hardness (mg/l CaCO3)	289	245	229	310	343

K = less than

Appendix Table A-1. Fourmile Creek and Indian Creek Watersheds Inorganic Water Chemistry Sampling Results (2005)

Site Location: #16 BEALS RUN NR MOUTH, DST TRIBUTARY

Indian Creek Watershed (WAU:05080002-080)

River Mile: 0.10

Storet: H11K07

Latitude / Longitude: 39.3902 / 84.6501

County: Butler

USGS Quad: Millville

	06/15/2005	06/28/2005	07/21/2005
Time	1320	1210	1235
Temp(C)	22	25.3	22.69
D.O. (mg/l)	3.3	3.1	1.57
D.O. Sat (%)			18.2
pH (fld) (SU)	7.83	7.58	7.38
pH (lab) (SU)			
Sp Cond (fld) (µmhos/cm)			356
Sp Cond (lab) (µmhos/cm)	625	626	732
BOD5 (mg/l)	2 K	7.6	2 K
COD (mg/l)	10 K	10 K	10 K
Alkalinity (mg/l)	234	208	285
Acidity (mg/l)	5 K	5 K	5 K
Ammonia-N (mg/l)	0.083	0.099	0.17
Nitrate-Nitrite-N (mg/l)	0.26	2.94	3.55
Nitrite-N (mg/l)	0.037	0.066	0.049
TKN (mg/l)	0.38	0.67	0.36
Phosphorus-T (mg/l)	0.045	0.083	0.065
Phosphorus-Dis (mg/l)			
TDS (mg/l)	354	382	456
TSS (mg/l)	5 K	22	7
Chloride (mg/l)	36.4	35.1	39.2
Sulfate (mg/l)	40.5	42.2	58.3
Aluminum-T (µg/l)	200 K	203	200 K
Arsenic-T (µg/l)	2.1	2 K	2 K
Barium-T (µg/l)	50	60	69
Cadmium-T (µg/l)	0.2 K	0.2 K	0.2 K
Calcium-T (mg/l)	74	80	96
Chromium-T (µg/l)	30 K	30 K	30 K
Copper-T (µg/l)	10 K	10 K	10 K
Iron-T (µg/l)	316	572	328
Lead-T (µg/l)	2 K	2 K	2 K
Magnesium-T (mg/l)	19	23	23
Manganese-T (µg/l)	234	161	249
Mercury-T (µg/l)	0.2 K	0.2 K	0.2 K
Nickel-T (µg/l)	40 K	40 K	40 K
Potassium-T (mg/l)	3	3	4
Selenium-T (µg/l)	2 K	2 K	2 K
Sodium-T (mg/l)	26	22	27
Strontium-T (µg/l)	322	331	403
Zinc-T (µg/l)	10 K	10 K	10 K
Hardness (mg/l CaCO3)	263	294	334

K = less than

Appendix A-2

Summary table of the bacteriological water sampling results
in the Fourmile Creek and Indian Creek study areas, 2005.

Appendix Table A-2. Fourmile Creek and Indian Creek Watersheds Bacteriological Water Sampling Results (2005)

Fourmile Creek Watershed (WAU 05080002-070)					
Storet ID	Location	Rivermile	Date	Time	Fecal coliform (#/100 ml) E. coli (#/100 ml)
H10K03 # 3	FOURMILE CREEK @ CONCORD-FAIRHAVEN RD	35.62	10/03/2005	1030	720 JL 220
			10/04/2005	1040	480 230
			10/05/2005	1055	330 190JL
			10/06/2005	1030	420 150JL
			10/13/2005	1045	380 70JL
H10K16 # 5	FOURMILE CREEK ADJACENT CREEK RD	28.90	10/03/2005	1000	70 JL 80JL
			10/04/2005	1010	120 JL 70JL
			10/05/2005	1030	310 110JL
			10/06/2005	1010	190 JL 70JL
			10/13/2005	1000	290 90JL
H10K04 # 6	FOURMILE CREEK @ JUNCTION RD	26.73	10/03/2005	0945	60 JL 30JL
			10/04/2005	0955	100 JL 30JL
			10/05/2005	1015	110 JL 80JL
			10/06/2005	1000	70 JL 20JL
			10/13/2005	0945	60 JL 10K
H10S09 # 7	FOURMILE CREEK @ CAMDEN-COLLEGE CORNER RD	24.77	10/03/2005	0955	20 JL 10JL
			10/04/2005	0950	40 JL 10JL
			10/05/2005	1030	110 JL 50JL
			10/06/2005	1025	10 JL 20JL
			10/13/2005	1000	20 JL 10JL
H10S07 # 8	FOURMILE CREEK @ BUCKLEY RD, DOWNSTREAM ACTON LAKE, UPST OXFORD	20.25	10/03/2005	0915	580 330
			10/04/2005	0930	230 140JL
			10/05/2005	1005	380 120JL
			10/06/2005	0950	360 160JL
			10/13/2005	0935	200 40JL
H10S34 # 9	FOURMILE CREEK @ SR 732 UPSTREAM OXFORD, DOWNSTREAM ELAMS RUN	18.70	10/03/2005	0935	140 JL 60JL
			10/04/2005	1020	100 JL 30JL
			10/05/2005	0955	100 JL 90JL
			10/06/2005	0940	90 JL 40JL
			10/13/2005	0900	200 50JL
H10W04 #10	FOURMILE CREEK UPSTREAM OXFORD WWTP, DOWNSTREAM COLLINS CREEK	16.40	10/03/2005	1005	180 JL 110JL
			10/04/2005	1005	240 100JL
			10/05/2005	1012	240 160JL
			10/06/2005	1055	200 180JL
			10/13/2005	1015	270 60JL
H10S04 #11	FOURMILE CREEK DOWNSTREAM OXFORD WWTP (OUTSIDE MIXING ZONE)	16.20	10/03/2005	1000	1600 JL 540
			10/04/2005	1000	200 80JL
			10/05/2005	1000	250 150JL
			10/06/2005	1040	90 JL 70JL
			10/13/2005	1005	150 JL 20JL

Appendix Table A-2. Fourmile Creek and Indian Creek Watersheds Bacteriological Water Sampling Results (2005)

Fourmile Creek Watershed (WAU 05080002-070)						
Storet ID	Location	Rivermile	Date	Time	Fecal coliform (#/100 ml)	E. coli (#/100 ml)
H10S03	#12 FOURMILE CREEK @ LANES MILL RD DOWNSTREAM OXFORD WWTP	13.65	10/03/2005	0935	1700 JL	430
			10/04/2005	0935	150 JL	40 JL
			10/05/2005	0930	170 JL	100 JL
			10/06/2005	1010	140 JL	50 JL
			10/13/2005	0950	60 JL	40 JL
H10S01	#14 FOURMILE CREEK @ EATON RD	5.40	10/03/2005	0900	20 JL	60 JL
			10/04/2005	0900	110 JL	30 JL
			10/05/2005	0900	90 JL	60 JL
			10/06/2005	0930	140 JL	50 JL
			10/13/2005	0920	100 JL	30 JL
H10S12	#21 LITTLE FOURMILE CREEK @ FAIRHAVEN-COLLEGE CORNER RD	2.80	10/03/2005	0930	130 JL	140 JL
			10/04/2005	0940	200	30 JL
			10/05/2005	0940	100 JL	80 JL
			10/06/2005	0930	60 JL	50 JL
			10/13/2005	0930	210	60 JL
H10K14	#22 FLEISCH RUN @ PAINT CREEK FOURMILE RD	0.70	10/03/2005	1010	5700	2900
			10/04/2005	1020	2200	950 JL
			10/05/2005	1040	3000	2000
			10/06/2005	1020	3400	1500 JL
			10/13/2005	1010	4900	1500 JL
H10K17	#23 MORNING SUN TRIB-NORTH (23.57) @ MAIN LOOP RD IN HUESTON WOODS S.P.	0.70	10/03/2005	1005	170 JL	70 JL
			10/04/2005	1000	230	60 JL
			10/05/2005	1035	80 JL	90 JL
			10/06/2005	1050	170 JL	130 JL
			10/13/2005	0955	120 JL	10 JL
H10K15	#24 MORNING SUN TRIB-SOUTH (23.57/0.25) @ LOOP RD IN HUESTON WOODS S.P.	0.40	10/03/2005	1010	1600 JL	470
			10/04/2005	1005	840 JL	140 JL
			10/05/2005	1040	450	450
			10/06/2005	1055	290	250
			10/13/2005	0950	90 JL	30 JL
H10K10	#28 DARRS RUN @ SR 73	2.13	10/03/2005	0910	140 JL	90 JL
			10/04/2005	0920	100 JL	30 JL
			10/05/2005	1035	120 JL	70 JL
			10/06/2005	0955	80 JL	30 JL
			10/13/2005	1030	200	70 JL

Appendix Table A-2. Fourmile Creek and Indian Creek Watersheds Bacteriological Water Sampling Results (2005)

Indian Creek Watershed (WAU 05080002-080)					
Storet ID	Location	Rivermile	Date	Time	Fecal coliform (#/100 ml) E. coli (#/100 ml)
H11K02	# 2 INDIAN CREEK @ INDIAN CREEK RD (SOUTHERN CROSSING)	17.68	10/03/2005	1125	300 210
			10/04/2005	1110	530 150JL
			10/05/2005	1105	1400 JL 1200JL
			10/06/2005	1055	1200 JL 860JL
			10/13/2005	1115	820 JL 200
H11S16	#10 INDIAN CREEK UPSTREAM QUEEN ACRES WWTP TRIB	6.80	10/03/2005	0950	220 180JL
			10/04/2005	1025	470 270
			10/05/2005	1025	200 220
			10/06/2005	1020	320 340
			10/13/2005	1030	210 120JL
H11S14	#11 INDIAN CREEK DOWNSTREAM QUEEN ACRES WWTP TRIB	6.50	10/03/2005	0930	420 370
			10/04/2005	1010	260 210
			10/05/2005	1010	330 300
			10/06/2005	1010	600 440
			10/13/2005	1015	270 40JL
600280	#13 INDIAN CREEK @ SR 128 NR ROSS	1.66	10/03/2005	1030	80 JL 10JL
			10/04/2005	0945	70 JL 20JL
			10/05/2005	0945	90 JL 40JL
			10/06/2005	0945	40 JL 20JL
			10/13/2005	0955	90 JL 10K
H11K05	# 6 SALMON RUN ADJACENT REILY-MILLVILLE RD	0.10	10/03/2005	1055	70 JL 60JL
			10/04/2005	1050	150 JL 110JL
			10/05/2005	1045	490 280
			10/06/2005	1040	470 420
			10/13/2005	1050	30 JL 10K

Appendix A-3

Summary table of the inorganic water chemistry sampling results
in Acton Lake, 2005.

Appendix Table A-3. Acton Lake Inorganic Water Chemistry Sampling Results (2005)

Site Location: ACTON LAKE L-1 (near dam)

Surface	06/08/2005	Bottom (8 meters)	06/08/2005	Surface	10/03/2005	Bottom (8 meters)	10/03/2005
Time	1130		1200		1240		1320
Temp(C)							
D.O. (mg/l)							
D.O. Sat (%)							
pH (fld) (SU)							
pH (lab) (SU)	9.09		7.63		8.75		7.57
Sp Cond (fld) (µmhos/cm)							
Sp Cond (lab) (µmhos/cm)	400		515		330		350
BOD5 (mg/l)	12		4.8		6.1		5
TOC (mg/l)	7.4		4.1		5.6		5.1
Alkalinity (mg/l)	120		202		127		133
Ammonia-N (mg/l)	0.05 K		1.01		0.234		0.856
Nitrate-Nitrite-N (mg/l)	6.44		2.97		0.1 K		0.1 K
Nitrite-N (mg/l)	0.111		0.635		0.041		0.043
TKN (mg/l)	1.07		1.56		0.67		1.54
Phosphorus-T (mg/l)	0.025		0.033		0.028		0.101
Tot Volatile Solids (mg/l)	120		100		104		112
TDS (mg/l)	232		290		184		164
TSS (mg/l)	9		8		10		25
Tot Solids (mg/l)	260		318		264		250
Sulfate (mg/l)	26.2		23.4		17.3		17.5
Aluminum-T (µg/l)	200 K		200 K		200 K		298
Arsenic-T (µg/l)	2 K		2 K		3		4.1
Barium-T (µg/l)	29		56		34		249
Cadmium-T (µg/l)	0.2 K		0.2 K		0.2 K		0.2 K
Calcium-T (mg/l)	33		59		30		32
Chromium-T (µg/l)	30 K		30 K		30 K		30 K
Copper-T (µg/l)	10 K		10 K		10 K		10 K
Iron-T (µg/l)	116		582		164		753
Lead-T (µg/l)	14.5		4.6		6.2		3.3
Magnesium-T (mg/l)	26		26		21		21
Manganese-T (µg/l)	22		612		41		302
Mercury-T (µg/l)	0.2 K		0.2 K		0.2 K		0.2 K
Nickel-T (µg/l)	40 K		40 K		40 K		40 K
Potassium-T (mg/l)	3		3		4		4
Selenium-T (µg/l)	2 K		2 K		2 K		2 K
Sodium-T (mg/l)	7		7		6		6
Strontium-T (µg/l)	244		286		213		222
Zinc-T (µg/l)	10 K		10 K		10 K		10 K
Hardness (mg/l CaCO3)	189		254		161		166
Fecal coliform (#/100 ml)	10 K				190		
E. coli (#/100 ml)	10 K				10 K		

K = less than

Appendix Table A-3. Acton Lake Inorganic Water Chemistry Sampling Results (2005)

Site Location: ACTON LAKE L-2

Surface	06/08/2005	Bottom (2 meters)	06/08/2005	Surface	10/03/2005	Bottom (1.5 meters)	10/03/2005
Time	1345		1415		1050		1115
Temp(C)							
D.O. (mg/l)							
D.O. Sat (%)							
pH (fld) (SU)							
pH (lab) (SU)	9.29		8.47		8.91		8.46
Sp Cond (fld) (µmhos/cm)							
Sp Cond (lab) (µmhos/cm)	386		417		336		347
BOD5 (mg/l)	12		7.4		13		7.7
TOC (mg/l)	6.7		6.3		7.2		7.2
Alkalinity (mg/l)	111		131		132		134
Ammonia-N (mg/l)	0.05 K		0.05 K		0.086		0.147
Nitrate-Nitrite-N (mg/l)	6.48		5.78		0.1 K		0.1 K
Nitrite-N (mg/l)	0.114		0.126		0.02 K		0.021
TKN (mg/l)	1.11		0.66		1.01		0.98
Phosphorus-T (mg/l)	0.015		0.017		0.064		0.066
Tot Volatile Solids (mg/l)	142		124		124		108
TDS (mg/l)	228		246		190		190
TSS (mg/l)	10		29		20		50
Tot Solids (mg/l)	252		254		214		244
Sulfate (mg/l)	27.1		26.9		17.7		17.7
Aluminum-T (µg/l)	200 K		2630		200 K		566
Arsenic-T (µg/l)	2 K		2.1		3.1		3.3
Barium-T (µg/l)	25		59		38		53
Cadmium-T (µg/l)	0.2 K		0.2 K		0.2 K		0.2 K
Calcium-T (mg/l)	30		44		32		34
Chromium-T (µg/l)	30 K		30 K		30 K		30 K
Copper-T (µg/l)	10 K		10 K		10 K		10 K
Iron-T (µg/l)	120		4440		363		1020
Lead-T (µg/l)	9.1		81		9.3		6.3
Magnesium-T (mg/l)	26		30		21		21
Manganese-T (µg/l)	22		168		54		86
Mercury-T (µg/l)	0.2 K		0.2 K		0.2 K		0.2 K
Nickel-T (µg/l)	40 K		40 K		40 K		40 K
Potassium-T (mg/l)	2		3		4		4
Selenium-T (µg/l)	2 K		2 K		2 K		2 K
Sodium-T (mg/l)	7		7		6		7
Strontium-T (µg/l)	233		273		222		234
Zinc-T (µg/l)	10 K		20		10 K		10 K
Hardness (mg/l CaCO3)	182		233		166		171
Fecal coliform (#/100 ml)	10 K				20		
E. coli (#/100 ml)	10 K				10 K		

K = less than

Appendix A-4

Summary table of the organic compounds sampling results
in the Fourmile Creek study area, 2005.

Appendix Table A-4. Concentrations ($\mu\text{g/l}$) of organic compounds detected in stream water samples collected in the Fourmile Creek study area (WAU 05080002-070) during 2005 and 2006.*

Stream River Mile (Location)	-----Date Sample Collected-----			
	6/23/05	8/16/05	1/12/06	6/1/06
<i>Fourmile Creek (mainstem)</i>				
RM 28.90 (Adjacent Creek Road, downstream Fairhaven)				
<u>Parameter</u> **				
Aldrin	--	0.0030	No sample	No sample
α -Hexachlorocyclohexane	--	0.0030		
Dieldrin	0.0043	0.0043		
Heptachlor epoxide	0.0034	0.0040		
Atrazine	0.58	0.30		
Metolachlor	0.28	--		
TICs [†] (number detected)	2	--		
RM 26.73 (Junction Road)				
<u>Parameter</u> **				
α -Hexachlorocyclohexane	0.0037	0.0032	No sample	No sample
δ -Hexachlorocyclohexane	--	0.0029		
Dieldrin	0.0042	0.0032		
Heptachlor epoxide	0.0034	0.0025		
Atrazine	--	0.44		
Metolachlor	--	0.30		
TICs [†] (number detected)	1	2		
RM 24.77 (Camden College Corner Rd)				
<u>Parameter</u>				
bis(2-Ethylhexyl)adipate	No sample	No sample	0.55	0.51
bis(2-Ethylhexyl)phthalate			0.69	0.89
γ -Hexachlorocyclohexane			--	0.0025
Dieldrin			--	0.0047
Metolachlor			0.27	0.66
Simazine			0.51	0.30
Acetochlor			--	0.25
Atrazine			--	1.67

Stream River Mile (Location)	-----Date Sample Collected-----			
	6/23/05	8/16/05	1/12/06	6/1/06
RM 20.25 (Buckley Road, downstream Acton Lake)				
<u>Parameter</u> **				
α-Hexachlorocyclohexane	0.0030	0.0036	--	--
γ-Hexachlorocyclohexane	0.0033	--	--	0.0028
δ-Hexachlorocyclohexane	--	0.0050	--	--
Dieldrin	0.0037	0.0039	0.0045	0.0028
bis(2-Ethylhexyl)phthalate	3.62 ^J	--	0.60	0.62
bis(2-Ethylhexyl)adipate	--	--	0.53	--
Heptachlor epoxide	--	0.0031	--	--
Acetochlor	--	--	--	0.57
Atrazine	--	2.76	0.21	4.84
Metolachlor	0.84 ^J	0.64	0.26	1.76
Simazine	--	0.23	1.27	0.60
TICs [†] (number detected)	4	2		
RM 16.40 (Upstream Oxford WWTP)				
<u>Parameter</u> ****				
Aldrin	--	0.0023	No sample	No sample
α-Hexachlorocyclohexane	0.0047	0.0047		
Atrazine	--	0.80		
Heptachlor epoxide	--	0.0032		
Metolachlor	--	0.29		
Dieldrin	0.0033	--		
TICs [†] (number detected)	2	3		
RM 16.20 (Downstream Oxford WWTP)				
<u>Parameter</u> ****				
α-Hexachlorocyclohexane	0.0031	--	No sample	No sample
δ-Hexachlorocyclohexane	--	0.0054		
γ-Hexachlorocyclohexane	0.0029	0.0068		
Dieldrin	0.0048	--		
Heptachlor epoxide	--	0.0024		
Atrazine	--	0.89		
Metolachlor	--	0.30		
TICs [†] (number detected)	3	3		
RM 13.65 (Lanes Mill Road)				
<u>Parameter</u>				
Acetochlor	No sample	No sample	--	0.44
bis(2-Ethylhexyl)phthalate			0.73	0.61
bis(2-Ethylhexyl)adipate			0.57	--
γ-Hexachlorocyclohexane			--	0.0035
α-Hexachlorocyclohexane			--	0.0023
Atrazine			0.21	4.51
Hexachlorobenzene			--	0.0064
Metolachlor			0.25	1.49
Dieldrin			0.0032	--
Simazine			1.11	0.57

Stream River Mile (Location)	-----Date Sample Collected-----			
	6/23/05	8/16/05	1/12/06	6/1/06
RM 11.00 (SR 177)				
<u>Parameter****</u>				
α-Hexachlorocyclohexane	0.0033	--	No sample	No sample
γ-Hexachlorocyclohexane	0.0030	0.0030		
Dieldrin	0.0035	--		
Heptachlor epoxide	--	0.0026		
Atrazine	--	1.13		
Metolachlor	--	0.30		
TICs [†] (number detected)	2	2		
RM 5.40 (Eaton Road)				
<u>Parameter***</u>				
α-Hexachlorocyclohexane	0.0044	--	--	--
δ-Hexachlorocyclohexane	--	0.0034	--	--
γ-Hexachlorocyclohexane	0.0034	--	--	--
bis(2-Ethylhexyl)phthalate	--	--	0.68	0.57
bis(2-Ethylhexyl)adipate	--	--	0.53	--
Dieldrin	0.0027	0.0040	--	--
Acetochlor	0.25	--	--	0.37
Atrazine	2.54	0.85	--	4.55
Metolachlor	0.61	0.26	0.26	1.29
Simazine	0.26 ^J	--	0.88	0.50
TICs [†] (number detected)	2	--		
RM 0.35 (Seven Mile Avenue)				
<u>Parameter**</u>				
α-Hexachlorocyclohexane	0.0031	--	No sample	No sample
δ-Hexachlorocyclohexane	--	0.0035		
Dieldrin	0.0027	0.0022		
Atrazine	0.80	0.22		
Metolachlor	0.31	--		
bis(2-Ethylhexyl)phthalate	--	0.85		
TICs [†] (number detected)	2	2		
East Fork Fourmile Creek				
RM 5.22 (SR 732)				
<u>Parameter**</u>				
α-Hexachlorocyclohexane	0.0030	0.0035	No sample	No sample
Dieldrin	0.0046	--		
Heptachlor epoxide	0.0025	0.0038		
Atrazine	--	0.27		
Metolachlor	0.40 ^J	0.23		
TICs [†] (number detected)	2	1		

Stream River Mile (Location)	-----Date Sample Collected-----			
	6/23/05	8/16/05	1/12/06	6/1/06
Little Fourmile Creek				
RM 2.80 (Upstream Fairhaven College Corner Road)				
Parameter**				
Aldrin	--	0.0029	--	--
α-Hexachlorocyclohexane	0.0033	0.0032	--	--
bis(2-Ethylhexyl)phthalate	--	--	0.71	0.55
bis(2-Ethylhexyl)adipate	--	--	0.53	--
Dieldrin	0.0055	0.0045	0.0021	0.013
Heptachlor epoxide	0.0031	--	--	--
Acetochlor	--	--	--	0.72
Atrazine	0.44	0.27	--	2.95
Metolachlor	0.25	--	0.24	1.17
Simazine	--	--	0.34	--
TICs [†] (number detected)	1	--		
Darrs Run				
RM 2.13 (SR 73)				
Parameter****				
α-Hexachlorocyclohexane	0.0033	0.0031	No sample	No sample
Heptachlor epoxide	0.0032	0.0029		
Aldrin	--	0.0034		
Atrazine	--	0.29		
Metolachlor	--	0.21		
Dieldrin	--	0.0028		
TICs [†] (number detected)	--	2		
* Samples were analyzed for volatile organics compounds (VOCs) (USEPA Method 624), semivolatile organic compounds (USEPA Method 625), carbamates (USEPA Method 531.1), glyphosate (USEPA Method 547), polychlorinated biphenyls (PCBs) (USEPA Method 608), and pesticides/herbicides (USEPA Methods 608 and 525.2). Only compounds that were detected at least once are listed. Glyphosate, carbamates, VOCs, and PCBs were not detected at any site. ** Samples at these sites were not analyzed for carbamates on June 23. *** Samples at these sites were not analyzed for carbamates on June 23 and were not analyzed for carbamates, glyphosate, or VOCs on August 16. **** Samples at these sites were not analyzed for carbamates or pesticides (USEPA Method 525.2) on June 23. -- Compound not detected or below the method detection limit. † TICs (Tentatively Identified Compounds)--Analysis indicates the presence of an analyte (non-priority pollutant) that has been "tentatively identified". <u>Qualifiers:</u> j The analyte was positively identified; the associated numerical value is estimated.				

Appendix A-5

Summary table of the organic compounds sampling results
in Acton Lake, 2005.

Appendix Table A-5. Concentrations (µg/l) of organic compounds detected in bottom water samples collected at two sites in Acton Lake during 2005.*

Location	-----Date Sample Collected-----	
	6/08/05	10/03/05
Acton Lake L-1 near dam [Bottom sample – depth 8 meters]		
<u>Parameter</u>		
Acetochlor	0.50	--
Atrazine	5.14	1.67
bis(2-Ethylhexyl)phthalate	0.54	0.58
Metolachlor	1.02	0.40
Simazine	0.45	--
Dieldrin	0.0048	0.0020
γ -Hexachlorocyclohexane (Lindane)	--	0.0020
Heptachlor epoxide	--	0.0025
TICs [†] (number detected)	5	10
Acton Lake L-2 [Bottom sample – depth 1.5 to 2 meters]		
<u>Parameter</u>		
Acetochlor	0.42 ^J	0.20 ^J
Atrazine	4.03 ^J	1.55 ^J
bis(2-Ethylhexyl)phthalate	0.53 ^J	0.53 ^J
Metolachlor	0.69 ^J	0.39 ^J
Simazine	0.41 ^J	--
Dieldrin	0.0053	--
α -Hexachlorocyclohexane	0.0052	--
γ -Hexachlorocyclohexane (Lindane)	0.0059	0.0027
TICs [†] (number detected)	8	7
* Samples were analyzed for semivolatile organic compounds (USEPA Method 625), polychlorinated biphenyls (PCBs) (USEPA Method 608), and pesticides/herbicides (USEPA Methods 608 and 525.2). Only compounds that were detected at least once are listed. -- Compound not detected or below the method detection limit. † TICs (Tentatively Identified Compounds)--Analysis indicates the presence of an analyte (non-priority pollutant) that has been "tentatively identified". <u>Qualifiers:</u> ^J The analyte was positively identified; the associated numerical value is estimated.		

Appendix A-6

Summary table of the organic compounds sampling results
in the Indian Creek study area, 2005.

Appendix Table A-6. Concentrations (µg/l) of organic compounds detected in water samples collected in the Indian Creek study area during 2005.

WAU: 05080002080

***Indian Creek* (mainstem)**

RM 23.90 (Fairfield Rd.)

<u>Parameter*</u>	[Duplicate A / B]	
	<u>28JUN05</u>	<u>04AUG05</u>
a-BHC	--/0.0030	--
Acetochlor	1.59 ^J /1.49 ^J	--
Atrazine	1.60 ^J /1.59 ^J	0.32 ^J
bis(2-Ethylhexyl)phthalate	1.84 ^J /0.65 ^J	--
Dieldrin	0.010/0.011	0.0036
Metolachlor	0.90 ^J /0.86 ^J	--
Simazine	0.22 ^J /0.24 ^J	--
TICs [†] (number detected)	2/--	1

RM 9.40 (adj. Reily-Millville Rd.)

<u>Parameter*</u>	<u>28JUN05</u>	<u>04AUG05</u>
a-BHC	0.0032	0.0036
Acetochlor	1.24 ^J	--
Aldrin	0.0028	--
Atrazine	0.21 ^J	0.30
bis(2-Ethylhexyl)phthalate	0.61 ^J	--
Dieldrin	0.0082	--
Heptachlor epoxide	0.0045	--
Metolachlor	0.42 ^J	--
TICs [†] (number detected)	4	1

RM 6.80 (ust Queen Acres WWTP)

<u>Parameter*</u>	<u>28JUN05</u>	<u>04Aug05</u>
a-BHC	0.0035	0.0037
Acetochlor	1.10 ^J	--
Alachlor	0.22 ^J	--
Aldrin	0.0032	--
Atrazine	1.20 ^J	0.28 ^J
Dieldrin	0.0074	0.0021
Heptachlor epoxide	0.0037	--
Hexachlorobenzene	0.0023	--
Metolachlor	0.40 ^J	--
Simazine	0.64 ^J	--
TICs [†] (number detected)	--	3

RM 6.50 (dst Queen Acres WWTP)

<u>Parameter*</u>	<u>28JUN05</u>	<u>04AUG05</u>
a-BHC	0.0034	--
Acetochlor	1.00 ^J	--
Alachlor	0.21 ^J	--
Aldrin	0.0031	--
Atrazine	1.40 ^J	0.24 ^J
bis(2-Ethylhexyl)phthalate	0.84 ^J	--
Dieldrin	0.0077	--
Heptachlor epoxide	0.0042	--
Metolachlor	0.42 ^J	--
Simazine	0.73 ^J	--
γ-BHC	--	0.0031
TICs [†] (number detected)	--	2

Little Indian Creek**RM 0.10 (Sawmill Rd.)**

<u>Parameter*</u>	<u>28JUN05</u>	<u>04AUG05</u>
Atrazine	0.31 ^J	
bis(2-Ethylhexyl)phthalate	0.60 ^J	

Reserve Run**RM 0.30 (Adj. Reily-Millville Rd.)**

<u>Parameter*</u>	<u>28JUN05</u>	<u>04AUG05</u>
a-BHC	0.0041	--
Atrazine	0.46 ^J	--
bis(2-Ethylhexyl)phthalate	0.51 ^J	--
d-BHC	0.0033	--
Heptachlor epoxide	0.0031	--
γ-BHC	0.0028	--
TICs [†] (number detected)	4	2

* Compounds above detection.

** No samples collected at site.

-- Compound below the method detection limit.

[†] TICs (Tentatively Identified Compounds); analysis indicates the presence of an analyte (non-priority pollutant) that has been "tentatively identified."

Qualifiers:

^J The analyte was positively identified; the associated numerical value is estimated.

Appendix A-7

Total catch summaries (species list) for fish sampling locations
in the Fourmile Creek and Indian Creek study areas, 2005.

Species List

Page 1

River Code: 14-400	Stream: Fourmile Creek	Sample Date: 2005
River Mile: 41.10	Location: gravel lane	Date Range: 09/07/2005
Time Fished: 2060 sec	Drainage: 4.4 sq mi	
Dist Fished: 0.15 km	Basin: Great Miami River No of Passes: 1	Sampler Type: E

Species Name / ODNR status	IBI Grp	Feed Guild	Breed Guild	Tol	# of Fish	Relative Number	% by Number	Relative Weight	% by Weight	Ave(gm) Weight
White Sucker	W	O	S	T	47	94.00	6.44	0.23	5.84	2.49
Common Carp	G	O	M	T	43	86.00	5.89	0.54	13.52	6.30
Western Blacknose Dace	N	G	S	T	42	84.00	5.75	0.18	4.49	2.14
Creek Chub	N	G	N	T	52	104.00	7.12	0.72	18.06	6.96
South. Redbelly Dace	N	H	S		78	156.00	10.68	0.31	7.68	1.97
Scarlet Shiner	N	I	S	M	1	2.00	0.14	0.00	0.10	2.00
Spotfin Shiner	N	I	M		23	46.00	3.15	0.11	2.64	2.30
Sand Shiner	N	I	M	M	5	10.00	0.68	0.02	0.45	1.80
Silverjaw Minnow	N	I	M		2	4.00	0.27	0.01	0.20	2.00
Fathead Minnow	N	O	C	T	18	36.00	2.47	0.05	1.35	1.50
Bluntnose Minnow	N	O	C	T	265	530.00	36.30	0.83	20.81	1.57
Central Stoneroller	N	H	N		82	164.00	11.23	0.48	12.08	2.95
Yellow Bullhead		I	C	T	7	14.00	0.96	0.18	4.39	12.57
Rock Bass	S	C	C		7	14.00	0.96	0.12	2.92	8.33
Green Sunfish	S	I	C	T	2	4.00	0.27	0.05	1.35	13.50
Longear Sunfish	S	I	C	M	6	12.00	0.82	0.10	2.59	8.67
Johnny Darter	D	I	C		11	22.00	1.51	0.02	0.50	0.91
Orangethroat Darter	D	I	S		39	78.00	5.34	0.04	1.05	0.54
<i>Mile Total</i>					730	1,460.00		4.01		
<i>Number of Species</i>					18					
<i>Number of Hybrids</i>					0					

River Code: 14-400	Stream: Fourmile Creek	Sample Date: 2005
River Mile: 38.90	Location: Concord-Fairhaven Rd.	Date Range: 09/07/2005
Time Fished: 2580 sec	Drainage: 12.2 sq mi	
Dist Fished: 0.20 km	Basin: Great Miami River No of Passes: 1	Sampler Type: E

Species Name / ODNR status	IBI Grp	Feed Guild	Breed Guild	Tol	# of Fish	Relative Number	% by Number	Relative Weight	% by Weight	Ave(gm) Weight
Quillback	C	O	M		3	4.50	0.10	3.53	2.84	783.33
Golden Redhorse	R	I	S	M	1	1.50	0.03	0.01	0.00	3.00
White Sucker	W	O	S	T	88	132.00	3.00	3.94	3.18	29.83
Common Carp	G	O	M	T	37	55.50	1.26	101.49	81.91	1,828.57
Western Blacknose Dace	N	G	S	T	13	19.50	0.44	0.06	0.05	3.00
Creek Chub	N	G	N	T	58	87.00	1.98	0.55	0.45	6.34
Scarlet Shiner	N	I	S	M	108	162.00	3.68	0.12	0.10	0.76
Striped Shiner	N	I	S		688	1,032.00	23.47	3.32	2.68	3.21
Spotfin Shiner	N	I	M		21	31.50	0.72	0.08	0.06	2.52
Sand Shiner	N	I	M	M	165	247.50	5.63	0.53	0.43	2.14
Silverjaw Minnow	N	I	M		25	37.50	0.85	0.09	0.07	2.40
Bluntnose Minnow	N	O	C	T	675	1,012.50	23.03	1.60	1.29	1.58
Central Stoneroller	N	H	N		609	913.50	20.78	2.45	1.97	2.68
Hybrid X Minnow					1	1.50	0.03	0.01	0.00	4.00
Yellow Bullhead		I	C	T	22	33.00	0.75	1.09	0.88	32.95
Rock Bass	S	C	C		53	79.50	1.81	2.70	2.18	33.96
Green Sunfish	S	I	C	T	13	19.50	0.44	0.35	0.28	18.08
Longear Sunfish	S	I	C	M	69	103.50	2.35	1.28	1.03	12.32
Johnny Darter	D	I	C		82	123.00	2.80	0.07	0.05	0.54
Greenside Darter	D	I	S	M	63	94.50	2.15	0.33	0.27	3.51
Rainbow Darter	D	I	S	M	84	126.00	2.87	0.20	0.16	1.61
Orangethroat Darter	D	I	S		25	37.50	0.85	0.05	0.04	1.32
Fantail Darter	D	I	C		28	42.00	0.96	0.08	0.07	1.93
<i>Mile Total</i>					2,931	4,396.50		123.91		
<i>Number of Species</i>					22					
<i>Number of Hybrids</i>					1					

River Code: 14-400	Stream: Fourmile Creek	Sample Date: 2005
River Mile: 35.90	Location: Concord-Fairhaven Rd.	Date Range: 08/30/2005
Time Fished: 2015 sec	Drainage: 17.3 sq mi	
Dist Fished: 0.20 km	Basin: Great Miami River No of Passes: 1	Sampler Type: E

Species Name / ODNR status	IBI Grp	Feed Guild	Breed Guild Tol	# of Fish	Relative Number	% by Number	Relative Weight	% by Weight	Ave(gm) Weight
Gizzard Shad		O	M	3	4.50	0.09	0.89	1.12	196.67
Quillback	C	O	M	11	16.50	0.33	10.91	13.81	661.27
Black Redhorse	R	I	S I	2	3.00	0.06	0.75	0.95	250.00
Golden Redhorse	R	I	S M	6	9.00	0.18	2.40	3.04	266.83
Northern Hog Sucker	R	I	S M	6	9.00	0.18	1.70	2.15	189.00
White Sucker	W	O	S T	98	147.00	2.90	6.11	7.74	41.58
Common Carp	G	O	M T	10	15.00	0.30	32.55	41.21	2,170.22
Creek Chub	N	G	N T	31	46.50	0.92	0.51	0.65	11.03
Silver Shiner	N	I	S I	49	73.50	1.45	0.28	0.35	3.75
Scarlet Shiner	N	I	S M	66	99.00	1.96	0.16	0.21	1.65
Striped Shiner	N	I	S	142	213.00	4.21	3.56	4.51	16.73
Spotfin Shiner	N	I	M	50	75.00	1.48	0.17	0.22	2.30
Sand Shiner	N	I	M M	795	1,192.50	23.56	1.83	2.32	1.54
Silverjaw Minnow	N	I	M	21	31.50	0.62	0.09	0.11	2.86
Bluntnose Minnow	N	O	C T	1,572	2,358.00	46.59	5.36	6.79	2.27
Central Stoneroller	N	H	N	44	66.00	1.30	0.43	0.54	6.49
Yellow Bullhead		I	C T	25	37.50	0.74	1.05	1.33	28.00
Rock Bass	S	C	C	43	64.50	1.27	1.65	2.09	25.58
Smallmouth Bass	F	C	C M	27	40.50	0.80	4.95	6.27	122.22
Green Sunfish	S	I	C T	11	16.50	0.33	0.32	0.40	19.09
Longear Sunfish	S	I	C M	94	141.00	2.79	2.40	3.04	17.02
Logperch	D	I	S M	10	15.00	0.30	0.14	0.18	9.40
Johnny Darter	D	I	C	39	58.50	1.16	0.05	0.06	0.77
Greenside Darter	D	I	S M	124	186.00	3.68	0.48	0.61	2.58
Rainbow Darter	D	I	S M	79	118.50	2.34	0.22	0.28	1.84
Orangethroat Darter	D	I	S	6	9.00	0.18	0.01	0.01	1.17
Fantail Darter	D	I	C	10	15.00	0.30	0.02	0.02	1.22
<i>Mile Total</i>				3,374	5,061.00		78.99		
<i>Number of Species</i>				27					
<i>Number of Hybrids</i>				0					

River Code: 14-400	Stream: Fourmile Creek	Sample Date: 2005
River Mile: 26.70	Location: Junction Rd.	Date Range: 09/15/2005
Time Fished: 2715 sec	Drainage: 38.0 sq mi	
Dist Fished: 0.20 km	Basin: Great Miami River No of Passes: 1	Sampler Type: E

Species Name / ODNR status	IBI Grp	Feed Guild	Breed Guild Tol	# of Fish	Relative Number	% by Number	Relative Weight	% by Weight	Ave(gm) Weight
Quillback	C	O	M	4	6.00	0.21	0.06	0.36	10.00
Golden Redhorse	R	I	S M	29	43.50	1.51	0.21	1.26	4.76
Northern Hog Sucker	R	I	S M	41	61.50	2.13	1.73	10.46	28.05
White Sucker	W	O	S T	103	154.50	5.35	4.34	26.30	28.07
Western Blacknose Dace	N	G	S T	168	252.00	8.73	0.26	1.60	1.05
Creek Chub	N	G	N T	130	195.00	6.75	1.81	11.00	9.30
Silver Shiner	N	I	S I	1	1.50	0.05	0.01	0.03	3.00
Scarlet Shiner	N	I	S M	9	13.50	0.47	0.02	0.14	1.67
Striped Shiner	N	I	S	190	285.00	9.87	1.54	9.32	5.39
Spotfin Shiner	N	I	M	8	12.00	0.42	0.04	0.23	3.13
Sand Shiner	N	I	M M	95	142.50	4.94	0.39	2.34	2.71
Silverjaw Minnow	N	I	M	95	142.50	4.94	0.25	1.51	1.75
Bluntnose Minnow	N	O	C T	106	159.00	5.51	0.20	1.24	1.28
Central Stoneroller	N	H	N	526	789.00	27.32	3.38	20.52	4.29
Yellow Bullhead		I	C T	5	7.50	0.26	0.21	1.29	28.20
Stonecat Madtom		I	C I	4	6.00	0.21	0.02	0.12	3.25
Rock Bass	S	C	C	10	15.00	0.52	0.87	5.26	57.78
Smallmouth Bass	F	C	C M	6	9.00	0.31	0.29	1.73	31.67
Largemouth Bass	F	C	C	2	3.00	0.10	0.06	0.34	18.50
Longear Sunfish	S	I	C M	7	10.50	0.36	0.08	0.45	7.14
Logperch	D	I	S M	17	25.50	0.88	0.13	0.80	5.18
Johnny Darter	D	I	C	7	10.50	0.36	0.01	0.08	1.29
Greenside Darter	D	I	S M	86	129.00	4.47	0.24	1.45	1.85
Rainbow Darter	D	I	S M	246	369.00	12.78	0.31	1.89	0.85
Orangethroat Darter	D	I	S	1	1.50	0.05	0.00	0.02	2.00
Fantail Darter	D	I	C	29	43.50	1.51	0.05	0.29	1.11
<i>Mile Total</i>				1,925	2,887.50		16.49		
<i>Number of Species</i>				26					
<i>Number of Hybrids</i>				0					

River Code: 14-400	Stream: Fourmile Creek	Sample Date: 2005
River Mile: 24.80	Location: Camden-College Corner Rd.	Date Range: 08/24/2005
Time Fished: 3720 sec	Drainage: 50.0 sq mi	
Dist Fished: 0.20 km	Basin: Great Miami River No of Passes: 1	Sampler Type: D

Species Name / ODNR status	IBI Grp	Feed Guild	Breed Guild	Tol	# of Fish	Relative Number	% by Number	Relative Weight	% by Weight	Ave(gm) Weight
Golden Redhorse	R	I	S	M	1	1.50	0.04	0.01	0.06	5.00
Northern Hog Sucker	R	I	S	M	8	12.00	0.28	0.10	0.72	8.00
White Sucker	W	O	S	T	93	139.50	3.29	0.33	2.49	2.37
Western Blacknose Dace	N	G	S	T	206	309.00	7.29	0.77	5.77	2.47
Creek Chub	N	G	N	T	146	219.00	5.17	0.56	4.22	2.55
Scarlet Shiner	N	I	S	M	5	7.50	0.18	0.05	0.40	7.00
Striped Shiner	N	I	S		3	4.50	0.11	0.03	0.23	6.67
Spotfin Shiner	N	I	M		3	4.50	0.11	0.06	0.45	13.00
Sand Shiner	N	I	M	M	111	166.50	3.93	0.35	2.60	2.07
Silverjaw Minnow	N	I	M		32	48.00	1.13	0.17	1.27	3.50
Bluntnose Minnow	N	O	C	T	103	154.50	3.64	0.41	3.12	2.67
Central Stoneroller	N	H	N		1,279	1,918.50	45.26	7.68	57.99	4.00
Stonecat Madtom		I	C	I	34	51.00	1.20	0.11	0.82	2.12
Smallmouth Bass	F	C	C	M	1	1.50	0.04	0.02	0.11	10.00
Bluegill Sunfish	S	I	C	P	5	7.50	0.18	0.62	4.64	82.00
Logperch	D	I	S	M	13	19.50	0.46	0.19	1.40	9.46
Johnny Darter	D	I	C		5	7.50	0.18	0.01	0.05	0.80
Greenside Darter	D	I	S	M	128	192.00	4.53	0.53	4.02	2.77
Rainbow Darter	D	I	S	M	497	745.50	17.59	0.84	6.36	1.13
Orangethroat Darter	D	I	S		48	72.00	1.70	0.15	1.10	2.02
Fantail Darter	D	I	C		105	157.50	3.72	0.29	2.22	1.87
<i>Mile Total</i>					2,826	4,239.00		13.25		
<i>Number of Species</i>					21					
<i>Number of Hybrids</i>					0					

Species List

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River Code: 14-400	Stream: Fourmile Creek	Sample Date: 2005
River Mile: 18.70	Location: St. Rt. 732	Date Range: 08/23/2005
Time Fished: 2700 sec	Drainage: 106.0 sq mi	
Dist Fished: 0.20 km	Basin: Great Miami River	No of Passes: 1
		Sampler Type: D

Species Name / ODNR status	IBI Grp	Feed Guild	Breed Guild	Tol	# of Fish	Relative Number	% by Number	Relative Weight	% by Weight	Ave(gm) Weight
Black Redhorse	R	I	S	I	32	48.00	2.33	8.78	18.31	182.91
Golden Redhorse	R	I	S	M	2	3.00	0.15	0.84	1.76	281.00
Northern Hog Sucker	R	I	S	M	183	274.50	13.35	11.75	24.51	42.82
White Sucker	W	O	S	T	5	7.50	0.36	0.45	0.93	59.60
Suckermouth Minnow	N	I	S		2	3.00	0.15	0.06	0.13	20.50
Striped Shiner	N	I	S		44	66.00	3.21	1.48	3.09	22.43
Spotfin Shiner	N	I	M		106	159.00	7.73	0.64	1.34	4.03
Sand Shiner	N	I	M	M	103	154.50	7.51	0.41	0.86	2.66
Bluntnose Minnow	N	O	C	T	179	268.50	13.06	0.92	1.91	3.42
Central Stoneroller	N	H	N		232	348.00	16.92	3.21	6.69	9.21
Yellow Bullhead		I	C	T	13	19.50	0.95	1.82	3.80	93.54
Stonecat Madtom		I	C	I	1	1.50	0.07	0.02	0.03	10.00
Rock Bass	S	C	C		28	42.00	2.04	4.21	8.78	100.22
Smallmouth Bass	F	C	C	M	40	60.00	2.92	5.38	11.23	89.72
Largemouth Bass	F	C	C		8	12.00	0.58	0.70	1.46	58.13
Green Sunfish	S	I	C	T	10	15.00	0.73	0.84	1.76	56.10
Bluegill Sunfish	S	I	C	P	1	1.50	0.07	0.01	0.01	3.00
Longear Sunfish	S	I	C	M	148	222.00	10.80	4.74	9.88	21.34
Green Sf X Hybrid					5	7.50	0.36	0.31	0.65	41.80
Logperch	D	I	S	M	23	34.50	1.68	0.49	1.02	14.22
Greenside Darter	D	I	S	M	41	61.50	2.99	0.34	0.72	5.60
Banded Darter	D	I	S	I	135	202.50	9.85	0.35	0.73	1.73
Rainbow Darter	D	I	S	M	24	36.00	1.75	0.15	0.32	4.23
Fantail Darter	D	I	C		6	9.00	0.44	0.05	0.09	5.00
<i>Mile Total</i>					1,371	2,056.50		47.95		
<i>Number of Species</i>					23					
<i>Number of Hybrids</i>					1					

Species List

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River Code: 14-400	Stream: Fourmile Creek	Sample Date: 2005
River Mile: 16.40	Location: upst. Oxford WWTP	Date Range: 08/24/2005
Time Fished: 3120 sec	Drainage: 122.0 sq mi	
Dist Fished: 0.20 km	Basin: Great Miami River No of Passes: 1	Sampler Type: D

Species Name / ODNR status	IBI Grp	Feed Guild	Breed Guild Tol	# of Fish	Relative Number	% by Number	Relative Weight	% by Weight	Ave(gm) Weight
Gizzard Shad		O	M	5	7.50	0.17	0.17	0.45	22.00
Silver Redhorse	R	I	S M	1	1.50	0.03	0.05	0.15	35.00
Black Redhorse	R	I	S I	7	10.50	0.24	0.64	1.75	60.57
Golden Redhorse	R	I	S M	6	9.00	0.20	0.61	1.67	67.33
Northern Hog Sucker	R	I	S M	1,503	2,254.50	51.24	5.44	14.96	2.41
White Sucker	W	O	S T	6	9.00	0.20	0.47	1.30	52.50
Common Carp	G	O	M T	6	9.00	0.20	11.33	31.14	1,258.33
Western Blacknose Dace	N	G	S T	3	4.50	0.10	0.02	0.04	3.33
Creek Chub	N	G	N T	4	6.00	0.14	0.10	0.27	16.25
Suckermouth Minnow	N	I	S	4	6.00	0.14	0.08	0.23	14.00
Silver Shiner	N	I	S I	6	9.00	0.20	0.07	0.18	7.33
Striped Shiner	N	I	S	124	186.00	4.23	1.74	4.77	9.33
Spotfin Shiner	N	I	M	238	357.00	8.11	0.75	2.05	2.09
Sand Shiner	N	I	M M	216	324.00	7.36	0.48	1.31	1.47
Silverjaw Minnow	N	I	M	6	9.00	0.20	0.04	0.12	4.67
Bluntnose Minnow	N	O	C T	91	136.50	3.10	0.25	0.69	1.84
Central Stoneroller	N	H	N	305	457.50	10.40	2.63	7.24	5.75
Channel Catfish	F		C	1	1.50	0.03	0.01	0.02	4.00
Yellow Bullhead		I	C T	6	9.00	0.20	1.15	3.16	127.67
Stonecat Madtom		I	C I	5	7.50	0.17	0.04	0.11	5.40
Rock Bass	S	C	C	5	7.50	0.17	0.43	1.18	57.20
Smallmouth Bass	F	C	C M	23	34.50	0.78	4.94	13.60	143.30
Largemouth Bass	F	C	C	12	18.00	0.41	0.15	0.41	8.33
Green Sunfish	S	I	C T	9	13.50	0.31	0.44	1.22	32.89
Bluegill Sunfish	S	I	C P	23	34.50	0.78	0.62	1.70	17.91
Longear Sunfish	S	I	C M	64	96.00	2.18	2.71	7.46	28.23
Green Sf X Hybrid				1	1.50	0.03	0.06	0.15	37.00
Logperch	D	I	S M	22	33.00	0.75	0.34	0.93	10.23
Greenside Darter	D	I	S M	44	66.00	1.50	0.19	0.53	2.91
Banded Darter	D	I	S I	112	168.00	3.82	0.24	0.65	1.40
Rainbow Darter	D	I	S M	69	103.50	2.35	0.17	0.48	1.67
Orangethroat Darter	D	I	S	3	4.50	0.10	0.01	0.01	1.00
Fantail Darter	D	I	C	3	4.50	0.10	0.03	0.08	6.67
<i>Mile Total</i>				2,933	4,399.50		36.36		
<i>Number of Species</i>				32					
<i>Number of Hybrids</i>				1					

Species List

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River Code: 14-400	Stream: Fourmile Creek	Sample Date: 2005
River Mile: 16.20	Location: dst. Oxford WWTP	Date Range: 08/23/2005
Time Fished: 2700 sec	Drainage: 122.0 sq mi	
Dist Fished: 0.20 km	Basin: Great Miami River No of Passes: 1	Sampler Type: D

Species Name / ODNR status	IBI Grp	Feed Guild	Breed Guild	Tol	# of Fish	Relative Number	% by Number	Relative Weight	% by Weight	Ave(gm) Weight
Silver Redhorse	R	I	S	M	11	16.50	0.63	0.83	1.30	50.18
Black Redhorse	R	I	S	I	24	36.00	1.37	7.16	11.23	199.00
Golden Redhorse	R	I	S	M	16	24.00	0.91	2.62	4.11	109.19
Northern Hog Sucker	R	I	S	M	181	271.50	10.30	7.48	11.72	27.54
White Sucker	W	O	S	T	51	76.50	2.90	1.90	2.97	24.80
Common Carp	G	O	M	T	3	4.50	0.17	9.83	15.40	2,183.33
Creek Chub	N	G	N	T	6	9.00	0.34	0.06	0.09	6.67
Suckermouth Minnow	N	I	S		4	6.00	0.23	0.04	0.07	7.25
Silver Shiner	N	I	S	I	22	33.00	1.25	0.17	0.26	5.06
Striped Shiner	N	I	S		59	88.50	3.36	0.84	1.31	9.46
Spotfin Shiner	N	I	M		89	133.50	5.07	0.37	0.58	2.76
Sand Shiner	N	I	M	M	292	438.00	16.62	0.83	1.30	1.89
Silverjaw Minnow	N	I	M		4	6.00	0.23	0.05	0.08	8.75
Bluntnose Minnow	N	O	C	T	126	189.00	7.17	0.53	0.82	2.78
Central Stoneroller	N	H	N		427	640.50	24.30	4.00	6.27	6.25
Channel Catfish	F		C		3	4.50	0.17	6.23	9.75	1,383.33
Yellow Bullhead		I	C	T	11	16.50	0.63	1.57	2.46	95.18
Stonecat Madtom		I	C	I	4	6.00	0.23	0.30	0.47	50.00
White Crappie	S	I	C		1	1.50	0.06	0.30	0.47	200.00
Rock Bass	S	C	C		15	22.50	0.85	1.67	2.61	74.00
Smallmouth Bass	F	C	C	M	51	76.50	2.90	10.07	15.78	131.62
Largemouth Bass	F	C	C		16	24.00	0.91	0.25	0.39	10.25
Green Sunfish	S	I	C	T	29	43.50	1.65	1.13	1.77	25.97
Bluegill Sunfish	S	I	C	P	25	37.50	1.42	0.58	0.91	15.52
Longear Sunfish	S	I	C	M	143	214.50	8.14	4.02	6.30	18.73
Green Sf X Hybrid					2	3.00	0.11	0.13	0.20	42.50
Logperch	D	I	S	M	29	43.50	1.65	0.44	0.69	10.07
Greenside Darter	D	I	S	M	24	36.00	1.37	0.18	0.27	4.86
Banded Darter	D	I	S	I	45	67.50	2.56	0.13	0.21	1.96
Rainbow Darter	D	I	S	M	41	61.50	2.33	0.14	0.21	2.19
Fantail Darter	D	I	C		3	4.50	0.17	0.01	0.01	1.33
Mile Total					1,757	2,635.50		63.82		
Number of Species					30					
Number of Hybrids					1					

Species List

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River Code: 14-400	Stream: Fourmile Creek	Sample Date: 2005
River Mile: 13.70	Location: Lanes Mill Rd.	Date Range: 08/23/2005
Time Fished: 2301 sec	Drainage: 132.0 sq mi	
Dist Fished: 0.21 km	Basin: Great Miami River No of Passes: 1	Sampler Type: D

Species Name / ODNR status	IBI Grp	Feed Guild	Breed Guild	Tol	# of Fish	Relative Number	% by Number	Relative Weight	% by Weight	Ave(gm) Weight
Silver Redhorse	R	I	S	M	1	1.43	0.08	0.05	0.22	34.00
Black Redhorse	R	I	S	I	6	8.57	0.48	2.07	9.40	241.67
Golden Redhorse	R	I	S	M	1	1.43	0.08	0.14	0.62	95.00
Northern Hog Sucker	R	I	S	M	124	177.14	9.86	6.64	30.17	37.50
White Sucker	W	O	S	T	6	8.57	0.48	0.47	2.12	54.33
Common Carp	G	O	M	T	1	1.43	0.08	1.71	7.78	1,200.00
Creek Chub	N	G	N	T	6	8.57	0.48	0.07	0.34	8.67
Suckermouth Minnow	N	I	S		29	41.43	2.31	0.35	1.60	8.52
Silver Shiner	N	I	S	I	13	18.57	1.03	0.06	0.25	3.00
Rosyface Shiner	N	I	S	I	2	2.86	0.16	0.01	0.03	2.00
Scarlet Shiner	N	I	S	M	3	4.29	0.24	0.01	0.06	3.33
Striped Shiner	N	I	S		43	61.43	3.42	0.58	2.61	9.36
Spotfin Shiner	N	I	M		239	341.43	19.01	0.87	3.96	2.56
Sand Shiner	N	I	M	M	39	55.71	3.10	0.17	0.79	3.11
Silverjaw Minnow	N	I	M		2	2.86	0.16	0.01	0.03	2.00
Bluntnose Minnow	N	O	C	T	55	78.57	4.38	0.18	0.81	2.28
Central Stoneroller	N	H	N		4	5.71	0.32	0.38	1.73	66.93
Yellow Bullhead		I	C	T	2	2.86	0.16	0.11	0.49	37.50
Stonecat Madtom		I	C	I	28	40.00	2.23	0.51	2.33	12.83
Rock Bass	S	C	C		6	8.57	0.48	0.55	2.50	64.17
Smallmouth Bass	F	C	C	M	10	14.29	0.80	2.54	11.55	178.10
Largemouth Bass	F	C	C		8	11.43	0.64	0.32	1.43	27.63
Green Sunfish	S	I	C	T	2	2.86	0.16	0.06	0.26	20.00
Bluegill Sunfish	S	I	C	P	2	2.86	0.16	0.01	0.03	2.00
Longear Sunfish	S	I	C	M	6	8.57	0.48	0.17	0.78	20.00
Green Sf X Longear Sf					1	1.43	0.08	0.08	0.36	55.00
Logperch	D	I	S	M	18	25.71	1.43	0.49	2.23	19.12
Greenside Darter	D	I	S	M	254	362.86	20.21	2.48	11.28	6.85
Banded Darter	D	I	S	I	248	354.29	19.73	0.62	2.83	1.76
Rainbow Darter	D	I	S	M	97	138.57	7.72	0.31	1.39	2.21
Fantail Darter	D	I	C		1	1.43	0.08	0.00	0.01	2.00
<i>Mile Total</i>					1,257	1,795.71		22.02		
<i>Number of Species</i>					30					
<i>Number of Hybrids</i>					1					

Species List

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River Code: 14-400	Stream: Fourmile Creek	Sample Date: 2005
River Mile: 11.00	Location: St. Rt. 177	Date Range: 08/22/2005
Time Fished: 2940 sec	Drainage: 137.0 sq mi	
Dist Fished: 0.20 km	Basin: Great Miami River	No of Passes: 1
		Sampler Type: D

Species Name / ODNR status	IBI Grp	Feed Guild	Breed Guild	Tol	# of Fish	Relative Number	% by Number	Relative Weight	% by Weight	Ave(gm) Weight
Gizzard Shad		O	M		1	1.50	0.09	0.03	0.08	18.00
Black Redhorse	R	I	S	I	13	19.50	1.15	3.29	9.36	168.85
Golden Redhorse	R	I	S	M	6	9.00	0.53	0.91	2.58	100.80
Northern Hog Sucker	R	I	S	M	111	166.50	9.84	9.13	25.95	54.85
White Sucker	W	O	S	T	4	6.00	0.35	0.20	0.57	33.50
Common Carp	G	O	M	T	2	3.00	0.18	3.75	10.66	1,250.00
Suckermouth Minnow	N	I	S		1	1.50	0.09	0.00	0.01	2.00
Silver Shiner	N	I	S	I	29	43.50	2.57	0.13	0.38	3.07
Rosyface Shiner	N	I	S	I	8	12.00	0.71	0.01	0.04	1.13
Scarlet Shiner	N	I	S	M	1	1.50	0.09	0.00	0.01	2.00
Striped Shiner	N	I	S		77	115.50	6.83	1.30	3.70	11.28
Spotfin Shiner	N	I	M		242	363.00	21.45	0.91	2.58	2.50
Sand Shiner	N	I	M	M	32	48.00	2.84	0.13	0.37	2.71
Bluntnose Minnow	N	O	C	T	120	180.00	10.64	0.50	1.42	2.77
Central Stoneroller	N	H	N		187	280.50	16.58	4.40	12.50	15.68
Channel Catfish	F		C		2	3.00	0.18	2.26	6.41	752.00
Stonecat Madtom		I	C	I	8	12.00	0.71	0.15	0.43	12.50
Rock Bass	S	C	C		9	13.50	0.80	1.17	3.32	86.44
Smallmouth Bass	F	C	C	M	36	54.00	3.19	4.33	12.31	80.21
Largemouth Bass	F	C	C		1	1.50	0.09	0.02	0.04	10.00
Green Sunfish	S	I	C	T	2	3.00	0.18	0.08	0.22	25.50
Bluegill Sunfish	S	I	C	P	5	7.50	0.44	0.12	0.34	16.00
Longear Sunfish	S	I	C	M	36	54.00	3.19	1.02	2.89	18.86
Logperch	D	I	S	M	7	10.50	0.62	0.20	0.56	18.71
Greenside Darter	D	I	S	M	129	193.50	11.44	0.99	2.81	5.11
Banded Darter	D	I	S	I	52	78.00	4.61	0.16	0.44	2.00
Rainbow Darter	D	I	S	M	7	10.50	0.62	0.01	0.03	0.86
<i>Mile Total</i>					1,128	1,692.00		35.18		
<i>Number of Species</i>					27					
<i>Number of Hybrids</i>					0					

River Code: 14-400	Stream: Fourmile Creek	Sample Date: 2005
River Mile: 5.40	Location: Eaton Rd.	Date Range: 08/22/2005
Time Fished: 1190 sec	Drainage: 163.0 sq mi	
Dist Fished: 0.20 km	Basin: Great Miami River No of Passes: 1	Sampler Type: D

Species Name / ODNR status	IBI Grp	Feed Guild	Breed Guild	Tol	# of Fish	Relative Number	% by Number	Relative Weight	% by Weight	Ave(gm) Weight
Silver Redhorse	R	I	S	M	6	9.00	0.38	0.32	0.57	35.33
Black Redhorse	R	I	S	I	22	33.00	1.38	7.73	13.85	234.22
Golden Redhorse	R	I	S	M	4	6.00	0.25	0.67	1.20	111.50
Northern Hog Sucker	R	I	S	M	180	270.00	11.29	24.02	43.03	88.96
White Sucker	W	O	S	T	4	6.00	0.25	0.03	0.05	4.25
Creek Chub	N	G	N	T	24	36.00	1.50	0.22	0.39	6.08
Suckermouth Minnow	N	I	S		4	6.00	0.25	0.02	0.04	3.75
Silver Shiner	N	I	S	I	12	18.00	0.75	0.09	0.15	4.80
Rosyface Shiner	N	I	S	I	43	64.50	2.70	0.17	0.31	2.68
Striped Shiner	N	I	S		106	159.00	6.65	1.67	3.00	10.53
Spotfin Shiner	N	I	M		221	331.50	13.86	0.84	1.50	2.52
Sand Shiner	N	I	M	M	68	102.00	4.26	0.24	0.42	2.31
Silverjaw Minnow	N	I	M		3	4.50	0.19	0.03	0.05	6.00
Bluntnose Minnow	N	O	C	T	104	156.00	6.52	0.27	0.48	1.73
Central Stoneroller	N	H	N		281	421.50	17.62	4.74	8.48	11.23
Channel Catfish	F		C		17	25.50	1.07	2.52	4.51	98.71
Yellow Bullhead		I	C	T	6	9.00	0.38	0.26	0.47	29.33
Stonecat Madtom		I	C	I	12	18.00	0.75	0.17	0.30	9.17
Rock Bass	S	C	C		13	19.50	0.82	0.75	1.34	38.31
Smallmouth Bass	F	C	C	M	42	63.00	2.63	8.81	15.78	139.78
Largemouth Bass	F	C	C		1	1.50	0.06	0.01	0.02	8.00
Green Sunfish	S	I	C	T	9	13.50	0.56	0.27	0.48	19.88
Bluegill Sunfish	S	I	C	P	3	4.50	0.19	0.10	0.17	21.33
Longear Sunfish	S	I	C	M	26	39.00	1.63	0.49	0.89	12.65
Slenderhead Darter	D	I	S	R	1	1.50	0.06	0.01	0.01	3.00
Logperch	D	I	S	M	23	34.50	1.44	0.30	0.54	8.70
Greenside Darter	D	I	S	M	97	145.50	6.08	0.66	1.18	4.52
Banded Darter	D	I	S	I	185	277.50	11.60	0.25	0.45	0.91
Rainbow Darter	D	I	S	M	78	117.00	4.89	0.20	0.35	1.68
<i>Mile Total</i>					1,595	2,392.50		55.82		
<i>Number of Species</i>					29					
<i>Number of Hybrids</i>					0					

River Code: 14-400	Stream: Fourmile Creek	Sample Date: 2005
River Mile: 0.30	Location: Sevenmile Rd.	Date Range: 07/08/2005
Time Fished: 2550 sec	Drainage: 315.0 sq mi	
Dist Fished: 0.50 km	Basin: Great Miami River No of Passes: 1	Sampler Type: A

Species Name / ODNR status	IBI Grp	Feed Guild	Breed Guild	Tol	# of Fish	Relative Number	% by Number	Relative Weight	% by Weight	Ave(gm) Weight
Gizzard Shad		O	M		3	6.00	0.62	0.29	0.47	48.67
Black Redhorse	R	I	S	I	19	38.00	3.94	18.60	29.96	489.47
Golden Redhorse	R	I	S	M	22	44.00	4.56	12.29	19.80	279.32
Northern Hog Sucker	R	I	S	M	41	82.00	8.51	7.69	12.39	93.75
White Sucker	W	O	S	T	18	36.00	3.73	0.26	0.42	7.28
Smallmouth Redhorse	R	I	S	M	4	8.00	0.83	2.75	4.43	343.50
Common Carp	G	O	M	T	2	4.00	0.41	9.55	15.39	2,387.50
Creek Chub	N	G	N	T	1	2.00	0.21	0.01	0.01	4.00
Suckermouth Minnow	N	I	S		2	4.00	0.41	0.04	0.06	9.50
Silver Shiner	N	I	S	I	11	22.00	2.28	0.10	0.16	4.64
Rosyface Shiner	N	I	S	I	16	32.00	3.32	0.07	0.12	2.25
Striped Shiner	N	I	S		15	30.00	3.11	0.44	0.71	14.60
Spotfin Shiner	N	I	M		105	210.00	21.78	0.63	1.02	3.01
Sand Shiner	N	I	M	M	81	162.00	16.80	0.32	0.51	1.96
Mimic Shiner	N	I	M	I	1	2.00	0.21	0.00	0.01	2.00
Bluntnose Minnow	N	O	C	T	64	128.00	13.28	0.26	0.42	2.03
Central Stoneroller	N	H	N		5	10.00	1.04	0.10	0.16	10.00
Channel Catfish	F		C		7	14.00	1.45	3.40	5.48	242.86
Flathead Catfish	F	P	C		1	2.00	0.21	3.60	5.80	1,800.00
Rock Bass	S	C	C		3	6.00	0.62	0.05	0.08	8.50
Smallmouth Bass	F	C	C	M	6	12.00	1.24	0.24	0.39	20.33
Largemouth Bass	F	C	C		4	8.00	0.83	0.05	0.08	6.50
Green Sunfish	S	I	C	T	2	4.00	0.41	0.15	0.24	37.00
Bluegill Sunfish	S	I	C	P	2	4.00	0.41	0.12	0.20	31.00
Longear Sunfish	S	I	C	M	29	58.00	6.02	0.88	1.42	15.17
Green Sf X Bluegill Sf					1	2.00	0.21	0.01	0.02	6.00
Logperch	D	I	S	M	6	12.00	1.24	0.11	0.18	9.33
Greenside Darter	D	I	S	M	5	10.00	1.04	0.03	0.05	3.20
Banded Darter	D	I	S	I	5	10.00	1.04	0.01	0.02	1.40
Rainbow Darter	D	I	S	M	1	2.00	0.21	0.00	0.00	1.00
<i>Mile Total</i>					482	964.00		62.07		
<i>Number of Species</i>					29					
<i>Number of Hybrids</i>					1					

River Code: 14-404	Stream: Little Fourmile Creek	Sample Date: 2005
River Mile: 13.50	Location: St. Rt. 177	Date Range: 09/19/2005
Time Fished: 2415 sec	Drainage: 5.0 sq mi	
Dist Fished: 0.15 km	Basin: Great Miami River No of Passes: 1	Sampler Type: E

Species Name / ODNR status	IBI Grp	Feed Guild	Breed Guild	Tol	# of Fish	Relative Number	% by Number	Relative Weight	% by Weight	Ave(gm) Weight
White Sucker	W	O	S	T	166	332.00	6.51	8.24	23.52	24.83
Creek Chub	N	G	N	T	463	926.00	18.17	8.23	23.47	8.88
South. Redbelly Dace	N	H	S		355	710.00	13.93	1.65	4.71	2.32
Scarlet Shiner	N	I	S	M	4	8.00	0.16	0.03	0.09	3.75
Striped Shiner	N	I	S		231	462.00	9.07	3.99	11.37	8.63
Silverjaw Minnow	N	I	M		2	4.00	0.08	0.01	0.03	2.50
Fathead Minnow	N	O	C	T	8	16.00	0.31	0.04	0.13	2.75
Bluntnose Minnow	N	O	C	T	325	650.00	12.76	1.46	4.17	2.25
Central Stoneroller	N	H	N		789	1,578.00	30.97	8.87	25.30	5.62
Cr Chub X S. Redbelly D					11	22.00	0.43	0.10	0.30	4.73
Yellow Bullhead		I	C	T	12	24.00	0.47	0.65	1.85	27.00
Rock Bass	S	C	C		26	52.00	1.02	1.24	3.54	23.85
Green Sunfish	S	I	C	T	3	6.00	0.12	0.06	0.17	10.00
Johnny Darter	D	I	C		38	76.00	1.49	0.08	0.23	1.05
Greenside Darter	D	I	S	M	10	20.00	0.39	0.08	0.23	4.00
Rainbow Darter	D	I	S	M	28	56.00	1.10	0.08	0.22	1.36
Orangethroat Darter	D	I	S		47	94.00	1.84	0.13	0.38	1.43
Rainbow X Orangethroat		I			30	60.00	1.18	0.11	0.31	1.83
<i>Mile Total</i>					2,548	5,096.00		35.06		
<i>Number of Species</i>					16					
<i>Number of Hybrids</i>					2					

River Code: 14-404	Stream: Little Fourmile Creek	Sample Date: 2005
River Mile: 2.80	Location: Fairhaven Rd.	Date Range: 09/20/2005
Time Fished: 2537 sec	Drainage: 27.8 sq mi	
Dist Fished: 0.20 km	Basin: Great Miami River No of Passes: 1	Sampler Type: E

Species Name / ODNR status	IBI Grp	Feed Guild	Breed Guild	Tol	# of Fish	Relative Number	% by Number	Relative Weight	% by Weight	Ave(gm) Weight
White Sucker	W	O	S	T	31	46.50	4.98	9.92	51.88	213.23
Creek Chub	N	G	N	T	26	39.00	4.17	0.39	2.04	10.00
Scarlet Shiner	N	I	S	M	50	75.00	8.03	0.17	0.91	2.30
Striped Shiner	N	I	S		32	48.00	5.14	0.69	3.61	14.35
Sand Shiner	N	I	M	M	11	16.50	1.77	0.05	0.24	2.73
Bluntnose Minnow	N	O	C	T	53	79.50	8.51	0.20	1.02	2.45
Central Stoneroller	N	H	N		156	234.00	25.04	0.78	4.07	3.32
Yellow Bullhead		I	C	T	1	1.50	0.16	0.13	0.67	85.00
Rock Bass	S	C	C		33	49.50	5.30	3.52	18.42	71.14
Smallmouth Bass	F	C	C	M	14	21.00	2.25	1.87	9.77	88.93
Largemouth Bass	F	C	C		8	12.00	1.28	0.10	0.51	8.13
Green Sunfish	S	I	C	T	1	1.50	0.16	0.09	0.47	60.00
Bluegill Sunfish	S	I	C	P	5	7.50	0.80	0.13	0.67	17.00
Longear Sunfish	S	I	C	M	14	21.00	2.25	0.72	3.77	34.29
Johnny Darter	D	I	C		6	9.00	0.96	0.02	0.08	1.67
Greenside Darter	D	I	S	M	38	57.00	6.10	0.18	0.94	3.14
Rainbow Darter	D	I	S	M	115	172.50	18.46	0.12	0.63	0.70
Fantail Darter	D	I	C		29	43.50	4.65	0.06	0.32	1.43
<i>Mile Total</i>					623	934.50		19.11		
<i>Number of Species</i>					18					
<i>Number of Hybrids</i>					0					

River Code: 14-405	Stream: East Fork Fourmile Creek	Sample Date: 2005
River Mile: 5.20	Location: St. Rt. 732	Date Range: 07/07/2005
Time Fished: 1757 sec	Drainage: 4.9 sq mi	
Dist Fished: 0.20 km	Basin: Great Miami River No of Passes: 1	Sampler Type: E

Species Name / ODNR status	IBI Grp	Feed Guild	Breed Guild	Tol	# of Fish	Relative Number	% by Number	Relative Weight	% by Weight	Ave(gm) Weight
White Sucker	W	O	S	T	226	339.00	6.89	1.84	14.50	5.43
Western Blacknose Dace	N	G	S	T	707	1,060.50	21.56	1.73	13.60	1.63
Creek Chub	N	G	N	T	208	312.00	6.34	1.70	13.37	5.44
South. Redbelly Dace	N	H	S		449	673.50	13.69	0.79	6.20	1.17
Silverjaw Minnow	N	I	M		51	76.50	1.56	0.17	1.35	2.24
Bluntnose Minnow	N	O	C	T	374	561.00	11.41	0.39	3.04	0.69
Central Stoneroller	N	H	N		1,167	1,750.50	35.59	5.97	46.98	3.41
Johnny Darter	D	I	C		19	28.50	0.58	0.02	0.14	0.63
Rainbow Darter	D	I	S	M	8	12.00	0.24	0.01	0.09	1.00
Orangethroat Darter	D	I	S		51	76.50	1.56	0.06	0.50	0.82
Fantail Darter	D	I	C		19	28.50	0.58	0.03	0.24	1.05
<i>Mile Total</i>					3,279	4,918.50		12.70		
<i>Number of Species</i>					11					
<i>Number of Hybrids</i>					0					

River Code: 14-405	Stream: East Fork Fourmile Creek	Sample Date: 2005
River Mile: 2.40	Location: St. Rt. 177	Date Range: 09/19/2005
Time Fished: 2724 sec	Drainage: 9.8 sq mi	
Dist Fished: 0.20 km	Basin: Great Miami River No of Passes: 1	Sampler Type: E

Species Name / ODNR status	IBI Grp	Feed Guild	Breed Guild	Tol	# of Fish	Relative Number	% by Number	Relative Weight	% by Weight	Ave(gm) Weight
White Sucker	W	O	S	T	240	360.00	16.24	7.51	47.56	20.85
Western Blacknose Dace	N	G	S	T	123	184.50	8.32	0.54	3.43	2.93
Creek Chub	N	G	N	T	183	274.50	12.38	3.17	20.10	11.56
Silverjaw Minnow	N	I	M		30	45.00	2.03	0.12	0.76	2.67
Bluntnose Minnow	N	O	C	T	66	99.00	4.47	0.11	0.72	1.15
Central Stoneroller	N	H	N		696	1,044.00	47.09	4.07	25.81	3.90
Johnny Darter	D	I	C		13	19.50	0.88	0.03	0.17	1.36
Rainbow Darter	D	I	S	M	8	12.00	0.54	0.02	0.15	1.88
Orangethroat Darter	D	I	S		85	127.50	5.75	0.14	0.87	1.08
Fantail Darter	D	I	C		34	51.00	2.30	0.07	0.43	1.33
<i>Mile Total</i>					1,478	2,217.00		15.78		
<i>Number of Species</i>					10					
<i>Number of Hybrids</i>					0					

River Code: 14-406	Stream: Harris Run (Dixon Branch)	Sample Date: 2005
River Mile: 0.30	Location: California School Rd.	Date Range: 09/07/2005
Time Fished: 2423 sec	Drainage: 5.5 sq mi	
Dist Fished: 0.20 km	Basin: Great Miami River No of Passes: 1	Sampler Type: E

Species Name / ODNR status	IBI Grp	Feed Guild	Breed Guild	Tol	# of Fish	Relative Number	% by Number	Relative Weight	% by Weight	Ave(gm) Weight
Northern Hog Sucker	R	I	S	M	1	1.50	0.07	0.01	0.09	7.00
White Sucker	W	O	S	T	141	211.50	9.91	2.15	16.74	10.17
Western Blacknose Dace	N	G	S	T	87	130.50	6.11	0.29	2.25	2.21
Creek Chub	N	G	N	T	163	244.50	11.45	2.73	21.23	11.15
South. Redbelly Dace	N	H	S		4	6.00	0.28	0.02	0.14	3.00
Scarlet Shiner	N	I	S	M	4	6.00	0.28	0.01	0.06	1.25
Striped Shiner	N	I	S		40	60.00	2.81	1.16	9.05	19.38
Sand Shiner	N	I	M	M	5	7.50	0.35	0.01	0.07	1.20
Silverjaw Minnow	N	I	M		14	21.00	0.98	0.07	0.58	3.50
Bluntnose Minnow	N	O	C	T	243	364.50	17.08	1.10	8.59	3.02
Central Stoneroller	N	H	N		403	604.50	28.32	4.56	35.50	7.55
Stonecat Madtom		I	C	I	3	4.50	0.21	0.00	0.02	0.67
Rock Bass	S	C	C		1	1.50	0.07	0.11	0.82	70.00
Smallmouth Bass	F	C	C	M	1	1.50	0.07	0.01	0.04	3.00
Green Sunfish	S	I	C	T	3	4.50	0.21	0.02	0.12	3.33
Longear Sunfish	S	I	C	M	1	1.50	0.07	0.01	0.04	3.00
Johnny Darter	D	I	C		43	64.50	3.02	0.08	0.58	1.16
Greenside Darter	D	I	S	M	80	120.00	5.62	0.24	1.87	2.00
Rainbow Darter	D	I	S	M	85	127.50	5.97	0.14	1.09	1.09
Orangethroat Darter	D	I	S		63	94.50	4.43	0.07	0.55	0.75
Fantail Darter	D	I	C		38	57.00	2.67	0.08	0.61	1.39
<i>Mile Total</i>					1,423	2,134.50		12.85		
<i>Number of Species</i>					21					
<i>Number of Hybrids</i>					0					

River Code: 14-408	Stream: Harkers Run	Sample Date: 2005
River Mile: 2.40	Location: Somerville Rd.	Date Range: 09/20/2005
Time Fished: 1244 sec	Drainage: 5.0 sq mi	
Dist Fished: 0.13 km	Basin: Great Miami River	No of Passes: 1
		Sampler Type: E

Species Name / ODNR status	IBI Grp	Feed Guild	Breed Guild	Tol	# of Fish	Relative Number	% by Number	Relative Weight	% by Weight	Ave(gm) Weight
Western Blacknose Dace	N	G	S	T	217	500.77	22.26	0.67	14.98	1.34
Creek Chub	N	G	N	T	323	745.39	33.13	2.17	48.49	2.91
South. Redbelly Dace	N	H	S		314	724.62	32.21	1.12	25.14	1.55
Bluntnose Minnow	N	O	C	T	2	4.62	0.21	0.01	0.27	2.50
Central Stoneroller	N	H	N		47	108.46	4.82	0.28	6.20	2.55
Orangethroat Darter	D	I	S		72	166.15	7.38	0.22	4.95	1.33
<i>Mile Total</i>					975	2,250.00		4.47		
<i>Number of Species</i>					6					
<i>Number of Hybrids</i>					0					

River Code: 14-423	Stream: Elams Run	Sample Date: 2005
River Mile: 0.30	Location:	Date Range: 09/06/2005
Time Fished: 2287 sec	Drainage: 1.6 sq mi	
Dist Fished: 0.15 km	Basin: Great Miami River	No of Passes: 1
		Sampler Type: E

Species Name / ODNR status	IBI Grp	Feed Guild	Breed Guild	Tol	# of Fish	Relative Number	% by Number	Relative Weight	% by Weight	Ave(gm) Weight
Northern Hog Sucker	R	I	S	M	1	2.00	0.10	0.01	0.11	4.00
White Sucker	W	O	S	T	104	208.00	10.34	0.39	5.49	1.87
Western Blacknose Dace	N	G	S	T	123	246.00	12.23	0.53	7.49	2.15
Creek Chub	N	G	N	T	204	408.00	20.28	3.78	53.51	9.27
South. Redbelly Dace	N	H	S		6	12.00	0.60	0.01	0.17	1.00
Bluntnose Minnow	N	O	C	T	5	10.00	0.50	0.03	0.42	3.00
Central Stoneroller	N	H	N		513	1,026.00	50.99	2.09	29.61	2.04
Longear Sunfish	S	I	C	M	3	6.00	0.30	0.11	1.56	18.33
Rainbow Darter	D	I	S	M	6	12.00	0.60	0.02	0.25	1.50
Orangethroat Darter	D	I	S		12	24.00	1.19	0.01	0.20	0.58
Fantail Darter	D	I	C		29	58.00	2.88	0.08	1.19	1.45
<i>Mile Total</i>					1,006	2,012.00		7.07		
<i>Number of Species</i>					11					
<i>Number of Hybrids</i>					0					

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River Code: 14-424	Stream: Darrs Run	Sample Date: 2005
River Mile: 2.10	Location: St. Rt. 73	Date Range: 09/06/2005
Time Fished: 2448 sec	Drainage: 5.1 sq mi	
Dist Fished: 0.20 km	Basin: Great Miami River	No of Passes: 1
		Sampler Type: E

Species Name / ODNR status	IBI Grp	Feed Guild	Breed Guild	Tol	# of Fish	Relative Number	% by Number	Relative Weight	% by Weight	Ave(gm) Weight
White Sucker	W	O	S	T	333	499.50	6.55	0.82	3.89	1.63
Western Blacknose Dace	N	G	S	T	163	244.50	3.21	0.28	1.33	1.14
Creek Chub	N	G	N	T	378	567.00	7.44	2.66	12.69	4.69
South. Redbelly Dace	N	H	S		722	1,083.00	14.21	0.59	2.80	0.54
Rosyface Shiner	N	I	S	I	1	1.50	0.02	0.01	0.03	4.00
Scarlet Shiner	N	I	S	M	1	1.50	0.02	0.01	0.02	3.00
Striped Shiner	N	I	S		205	307.50	4.03	0.61	2.89	1.98
Spotfin Shiner	N	I	M		3	4.50	0.06	0.01	0.05	2.33
Silverjaw Minnow	N	I	M		143	214.50	2.81	0.64	3.06	2.99
Bluntnose Minnow	N	O	C	T	1,051	1,576.50	20.68	2.25	10.74	1.43
Central Stoneroller	N	H	N		1,911	2,866.50	37.60	12.78	60.93	4.46
Striped Sh X S Redbelly D					2	3.00	0.04	0.01	0.04	3.00
Green Sunfish	S	I	C	T	1	1.50	0.02	0.03	0.14	20.00
Johnny Darter	D	I	C		31	46.50	0.61	0.06	0.27	1.23
Rainbow Darter	D	I	S	M	17	25.50	0.33	0.03	0.14	1.18
Orangethroat Darter	D	I	S		107	160.50	2.11	0.19	0.89	1.16
Fantail Darter	D	I	C		13	19.50	0.26	0.02	0.08	0.85
<i>Mile Total</i>					5,082	7,623.00		20.98		
<i>Number of Species</i>					16					
<i>Number of Hybrids</i>					1					

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River Code: 14-426	Stream: Fleisch Run	Sample Date: 2005
River Mile: 0.70	Location: Paint Creek Rd.	Date Range: 09/20/2005
Time Fished: 1867 sec	Drainage: 4.6 sq mi	
Dist Fished: 0.15 km	Basin: Great Miami River	No of Passes: 1
		Sampler Type: E

Species Name / ODNR status	IBI Grp	Feed Guild	Breed Guild	Tol	# of Fish	Relative Number	% by Number	Relative Weight	% by Weight	Ave(gm) Weight
White Sucker	W	O	S	T	57	114.00	10.20	0.58	11.41	5.11
Creek Chub	N	G	N	T	244	488.00	43.65	2.04	40.02	4.18
South. Redbelly Dace	N	H	S		5	10.00	0.89	0.02	0.47	2.40
Scarlet Shiner	N	I	S	M	4	8.00	0.72	0.01	0.20	1.25
Striped Shiner	N	I	S		4	8.00	0.72	0.08	1.53	9.75
Sand Shiner	N	I	M	M	2	4.00	0.36	0.00	0.08	1.00
Fathead Minnow	N	O	C	T	11	22.00	1.97	0.05	1.06	2.45
Bluntnose Minnow	N	O	C	T	130	260.00	23.26	0.83	16.35	3.21
Central Stoneroller	N	H	N		49	98.00	8.77	1.15	22.48	11.70
Rock Bass	S	C	C		16	32.00	2.86	0.23	4.51	7.20
Smallmouth Bass	F	C	C	M	3	6.00	0.54	0.01	0.27	2.33
Johnny Darter	D	I	C		14	28.00	2.50	0.03	0.63	1.15
Orangethroat Darter	D	I	S		20	40.00	3.58	0.05	0.98	1.25
<i>Mile Total</i>					559	1,118.00		5.10		
<i>Number of Species</i>					13					
<i>Number of Hybrids</i>					0					

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River Code: 14-427	Stream: Trib. to Fourmile Creek (RM 23.57)	Sample Date: 2005
River Mile: 0.70	Location: Loop Rd.	Date Range: 09/21/2005
Time Fished: 2727 sec	Drainage: 4.4 sq mi	
Dist Fished: 0.20 km	Basin: Great Miami River No of Passes: 1	Sampler Type: E

Species Name / ODNR status	IBI Grp	Feed Guild	Breed Guild	Tol	# of Fish	Relative Number	% by Number	Relative Weight	% by Weight	Ave(gm) Weight
White Sucker	W	O	S	T	44	66.00	6.90	2.10	25.89	31.82
Common Carp	G	O	M	T	4	6.00	0.63	0.07	0.84	11.25
Western Blacknose Dace	N	G	S	T	17	25.50	2.66	0.11	1.29	4.12
Creek Chub	N	G	N	T	54	81.00	8.46	0.83	10.17	10.19
Scarlet Shiner	N	I	S	M	3	4.50	0.47	0.02	0.28	5.00
Striped Shiner	N	I	S		68	102.00	10.66	1.05	12.95	10.29
Spotfin Shiner	N	I	M		4	6.00	0.63	0.01	0.12	1.67
Bluntnose Minnow	N	O	C	T	6	9.00	0.94	0.03	0.37	3.33
Central Stoneroller	N	H	N		173	259.50	27.12	1.06	13.01	4.06
Yellow Bullhead		I	C	T	14	21.00	2.19	0.81	9.99	38.57
White Crappie	S	I	C		1	1.50	0.16	0.41	5.09	275.00
Largemouth Bass	F	C	C		12	18.00	1.88	0.20	2.50	11.25
Green Sunfish	S	I	C	T	50	75.00	7.84	0.67	8.30	8.98
Bluegill Sunfish	S	I	C	P	34	51.00	5.33	0.17	2.13	3.38
Orangespotted Sunfish	S	I	C		15	22.50	2.35	0.06	0.69	2.50
Longear Sunfish	S	I	C	M	16	24.00	2.51	0.21	2.59	8.75
Logperch	D	I	S	M	2	3.00	0.31	0.02	0.28	7.50
Johnny Darter	D	I	C		1	1.50	0.16	0.00	0.02	1.00
Greenside Darter	D	I	S	M	4	6.00	0.63	0.03	0.37	5.00
Rainbow Darter	D	I	S	M	106	159.00	16.61	0.21	2.64	1.35
Orangethroat Darter	D	I	S		7	10.50	1.10	0.03	0.32	2.50
Fantail Darter	D	I	C		3	4.50	0.47	0.02	0.18	3.33
<i>Mile Total</i>					638	957.00		8.11		
<i>Number of Species</i>					22					
<i>Number of Hybrids</i>					0					

River Code: 14-432	Stream: Stony Run	Sample Date: 2005
River Mile: 0.30	Location: St. Rt. 177	Date Range: 09/08/2005
Time Fished: 2046 sec	Drainage: 4.8 sq mi	
Dist Fished: 0.20 km	Basin: Great Miami River No of Passes: 1	Sampler Type: E

Species Name / ODNR status	IBI Grp	Feed Guild	Breed Guild	Tol	# of Fish	Relative Number	% by Number	Relative Weight	% by Weight	Ave(gm) Weight
Golden Redhorse	R	I	S	M	3	4.50	0.16	0.01	0.11	2.00
White Sucker	W	O	S	T	79	118.50	4.28	0.54	6.80	4.51
Western Blacknose Dace	N	G	S	T	34	51.00	1.84	0.07	0.86	1.32
Creek Chub	N	G	N	T	170	255.00	9.21	1.51	19.22	5.93
Scarlet Shiner	N	I	S	M	13	19.50	0.70	0.03	0.34	1.36
Striped Shiner	N	I	S		89	133.50	4.82	1.38	17.54	10.34
Spotfin Shiner	N	I	M		77	115.50	4.17	0.25	3.16	2.16
Sand Shiner	N	I	M	M	1	1.50	0.05	0.00	0.03	1.00
Silverjaw Minnow	N	I	M		44	66.00	2.38	0.21	2.62	3.12
Bluntnose Minnow	N	O	C	T	165	247.50	8.94	0.74	9.37	2.98
Central Stoneroller	N	H	N		1,074	1,611.00	58.21	2.27	28.79	1.41
Yellow Bullhead		I	C	T	17	25.50	0.92	0.11	1.45	4.47
Smallmouth Bass	F	C	C	M	3	4.50	0.16	0.03	0.38	6.67
Largemouth Bass	F	C	C		7	10.50	0.38	0.12	1.51	11.29
Green Sunfish	S	I	C	T	9	13.50	0.49	0.23	2.97	17.33
Bluegill Sunfish	S	I	C	P	4	6.00	0.22	0.05	0.57	7.50
Longear Sunfish	S	I	C	M	8	12.00	0.43	0.26	3.26	21.43
Johnny Darter	D	I	C		8	12.00	0.43	0.01	0.11	0.75
Greenside Darter	D	I	S	M	2	3.00	0.11	0.01	0.11	3.00
Rainbow Darter	D	I	S	M	13	19.50	0.70	0.02	0.30	1.25
Orangethroat Darter	D	I	S		22	33.00	1.19	0.03	0.41	0.95
Fantail Darter	D	I	C		3	4.50	0.16	0.01	0.10	1.67
<i>Mile Total</i>					1,845	2,767.50		7.87		
<i>Number of Species</i>					22					
<i>Number of Hybrids</i>					0					

Species List

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River Code: 14-433	Stream: Collins Creek	Sample Date: 2005
River Mile: 0.60	Location: St. Rt. 22	Date Range: 09/20/2005
Time Fished: 2606 sec	Drainage: 5.4 sq mi	
Dist Fished: 0.20 km	Basin: Great Miami River	No of Passes: 1
		Sampler Type: E

Species Name / ODNR status	IBI Grp	Feed Guild	Breed Guild	Tol	# of Fish	Relative Number	% by Number	Relative Weight	% by Weight	Ave(gm) Weight
Northern Hog Sucker	R	I	S	M	4	6.00	0.17	0.13	0.91	21.00
White Sucker	W	O	S	T	98	147.00	4.26	1.78	12.86	12.14
Western Blacknose Dace	N	G	S	T	143	214.50	6.21	0.51	3.64	2.36
Creek Chub	N	G	N	T	258	387.00	11.20	2.32	16.73	6.00
Scarlet Shiner	N	I	S	M	7	10.50	0.30	0.02	0.11	1.43
Striped Shiner	N	I	S		17	25.50	0.74	0.30	2.16	11.76
Spotfin Shiner	N	I	M		144	216.00	6.25	0.67	4.86	3.12
Silverjaw Minnow	N	I	M		36	54.00	1.56	0.14	1.03	2.66
Fathead Minnow	N	O	C	T	2	3.00	0.09	0.01	0.04	2.00
Bluntnose Minnow	N	O	C	T	129	193.50	5.60	0.58	4.17	2.99
Central Stoneroller	N	H	N		1,316	1,974.00	57.14	6.91	49.77	3.50
Yellow Bullhead		I	C	T	7	10.50	0.30	0.08	0.54	7.14
Largemouth Bass	F	C	C		1	1.50	0.04	0.01	0.08	7.00
Green Sunfish	S	I	C	T	17	25.50	0.74	0.18	1.26	6.88
Bluegill Sunfish	S	I	C	P	2	3.00	0.09	0.03	0.22	10.00
Rainbow Darter	D	I	S	M	59	88.50	2.56	0.12	0.86	1.35
Orangethroat Darter	D	I	S		47	70.50	2.04	0.06	0.43	0.83
Fantail Darter	D	I	C		16	24.00	0.69	0.05	0.35	2.00
<i>Mile Total</i>					2,303	3,454.50		13.88		
<i>Number of Species</i>					18					
<i>Number of Hybrids</i>					0					

Species List

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River Code: 14-434	Stream: Trib. to Fourmile Creek (23.57/0.25)	Sample Date: 2005
River Mile: 0.90	Location: Loop Rd.	Date Range: 09/21/2005
Time Fished: 1829 sec	Drainage: 3.4 sq mi	
Dist Fished: 0.14 km	Basin: Great Miami River No of Passes: 1	Sampler Type: E

Species Name / ODNR status	IBI Grp	Feed Guild	Breed Guild	Tol	# of Fish	Relative Number	% by Number	Relative Weight	% by Weight	Ave(gm) Weight
Western Blacknose Dace	N	G	S	T	265	567.86	85.21	0.69	70.80	1.22
Creek Chub	N	G	N	T	36	77.14	11.58	0.26	26.54	3.36
South. Redbelly Dace	N	H	S		9	19.29	2.89	0.02	2.15	1.11
Central Stoneroller	N	H	N		1	2.14	0.32	0.00	0.41	2.00
<i>Mile Total</i>					311	666.43		0.98		
<i>Number of Species</i>					4					
<i>Number of Hybrids</i>					0					

Species List

Page 1

River Code: 14-010	Stream: Indian Creek	Sample Date: 2005
River Mile: 23.90	Location: Fairfield Rd.	Date Range: 08/24/2005
Time Fished: 3334 sec	Drainage: 39.0 sq mi	
Dist Fished: 0.20 km	Basin: Great Miami River	No of Passes: 1
		Sampler Type: D

Species Name / ODNR status	IBI Grp	Feed Guild	Breed Guild Tol	# of Fish	Relative Number	% by Number	Relative Weight	% by Weight	Ave(gm) Weight
Quillback	C	O	M	1	1.50	0.03	0.01	0.01	5.00
Black Redhorse	R	I	S I	11	16.50	0.29	2.71	4.71	164.44
Golden Redhorse	R	I	S M	28	42.00	0.74	5.30	9.21	126.25
Northern Hog Sucker	R	I	S M	20	30.00	0.53	1.09	1.89	36.32
White Sucker	W	O	S T	24	36.00	0.64	0.80	1.38	22.11
Common Carp	G	O	M T	9	13.50	0.24	24.83	43.14	1,838.89
Creek Chub	N	G	N T	152	228.00	4.02	0.65	1.13	2.85
South. Redbelly Dace	N	H	S	1	1.50	0.03	0.00	0.00	1.00
Silver Shiner	N	I	S I	27	40.50	0.71	0.08	0.14	2.00
Scarlet Shiner	N	I	S M	128	192.00	3.39	0.25	0.43	1.30
Striped Shiner	N	I	S	115	172.50	3.04	0.74	1.29	4.30
Spotfin Shiner	N	I	M	83	124.50	2.20	0.29	0.51	2.35
Sand Shiner	N	I	M M	481	721.50	12.73	0.91	1.58	1.26
Silverjaw Minnow	N	I	M	39	58.50	1.03	0.20	0.34	3.33
Bluntnose Minnow	N	O	C T	1,452	2,178.00	38.43	4.32	7.50	1.98
Central Stoneroller	N	H	N	760	1,140.00	20.12	2.62	4.55	2.30
Channel Catfish	F		C	1	1.50	0.03	0.00	0.01	2.00
Yellow Bullhead		I	C T	21	31.50	0.56	1.40	2.42	44.29
Rock Bass	S	C	C	3	4.50	0.08	0.36	0.63	80.00
Smallmouth Bass	F	C	C M	18	27.00	0.48	8.16	14.18	302.22
Spotted Bass	F	C	C	15	22.50	0.40	0.17	0.29	7.33
Green Sunfish	S	I	C T	3	4.50	0.08	0.12	0.22	27.50
Bluegill Sunfish	S	I	C P	6	9.00	0.16	0.21	0.36	23.33
Longear Sunfish	S	I	C M	87	130.50	2.30	1.42	2.46	10.85
Green Sf X Longear Sf				31	46.50	0.82	0.42	0.72	8.97
Hybrid X Sunfish				44	66.00	1.16	0.23	0.39	3.41
Johnny Darter	D	I	C	79	118.50	2.09	0.08	0.14	0.67
Greenside Darter	D	I	S M	126	189.00	3.34	0.17	0.30	0.92
Rainbow Darter	D	I	S M	1	1.50	0.03	0.00	0.00	1.00
Orangethroat Darter	D	I	S	5	7.50	0.13	0.02	0.03	2.00
Fantail Darter	D	I	C	7	10.50	0.19	0.02	0.03	1.67
Mile Total				3,778	5,667.00		57.55		
Number of Species				29					
Number of Hybrids				2					

Species List

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River Code: 14-010	Stream: Indian Creek	Sample Date: 2005
River Mile: 17.70	Location: Indian Creek Rd. (south crossing)	Date Range: 08/23/2005
Time Fished: 2370 sec	Drainage: 53.0 sq mi	
Dist Fished: 0.15 km	Basin: Great Miami River No of Passes: 1	Sampler Type: E

Species Name / ODNR status	IBI Grp	Feed Guild	Breed Guild Tol	# of Fish	Relative Number	% by Number	Relative Weight	% by Weight	Ave(gm) Weight
Quillback	C	O	M	1	2.00	0.05	0.02	0.05	10.00
Black Redhorse	R	I	S I	15	30.00	0.75	5.46	14.65	182.00
Golden Redhorse	R	I	S M	22	44.00	1.10	4.52	12.13	102.78
Northern Hog Sucker	R	I	S M	28	56.00	1.39	3.16	8.49	56.48
White Sucker	W	O	S T	19	38.00	0.95	1.33	3.57	35.00
Creek Chub	N	G	N T	17	34.00	0.85	0.30	0.80	8.82
Silver Shiner	N	I	S I	26	52.00	1.29	0.07	0.20	1.42
Rosyface Shiner	N	I	S I	34	68.00	1.69	0.10	0.26	1.41
Striped Shiner	N	I	S	193	386.00	9.61	2.11	5.66	5.47
Spotfin Shiner	N	I	M	40	80.00	1.99	0.20	0.54	2.50
Sand Shiner	N	I	M M	147	294.00	7.32	0.46	1.24	1.57
Silverjaw Minnow	N	I	M	8	16.00	0.40	0.06	0.16	3.75
Bluntnose Minnow	N	O	C T	364	728.00	18.12	1.48	3.97	2.03
Central Stoneroller	N	H	N	815	1,630.00	40.57	5.51	14.78	3.38
Yellow Bullhead		I	C T	12	24.00	0.60	1.97	5.28	82.00
Stonecat Madtom		I	C I	9	18.00	0.45	0.35	0.95	19.67
Rock Bass	S	C	C	23	46.00	1.14	4.83	12.96	105.00
Smallmouth Bass	F	C	C M	6	12.00	0.30	2.62	7.03	218.33
Spotted Bass	F	C	C	7	14.00	0.35	0.14	0.38	10.00
Green Sunfish	S	I	C T	3	6.00	0.15	0.09	0.24	15.00
Longear Sunfish	S	I	C M	43	86.00	2.14	1.59	4.27	18.49
Hybrid X Sunfish				34	68.00	1.69	0.44	1.18	6.47
Johnny Darter	D	I	C	2	4.00	0.10	0.00	0.01	1.00
Greenside Darter	D	I	S M	97	194.00	4.83	0.35	0.93	1.79
Banded Darter	D	I	S I	4	8.00	0.20	0.01	0.02	1.00
Rainbow Darter	D	I	S M	13	26.00	0.65	0.04	0.10	1.46
Orangethroat Darter	D	I	S	3	6.00	0.15	0.01	0.02	1.00
Fantail Darter	D	I	C	24	48.00	1.19	0.06	0.15	1.14
<i>Mile Total</i>				2,009	4,018.00		37.27		
<i>Number of Species</i>				27					
<i>Number of Hybrids</i>				1					

Species List

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River Code: 14-010	Stream: Indian Creek	Sample Date: 2005
River Mile: 9.70	Location: adj. Reily-Millville Rd.	Date Range: 08/22/2005
Time Fished: 2287 sec	Drainage: 82.0 sq mi	
Dist Fished: 0.15 km	Basin: Great Miami River No of Passes: 1	Sampler Type: E

Species Name / ODNR status	IBI Grp	Feed Guild	Breed Guild Tol	# of Fish	Relative Number	% by Number	Relative Weight	% by Weight	Ave(gm) Weight
Quillback	C	O	M	8	16.00	0.41	0.11	0.27	7.14
Black Redhorse	R	I	S I	12	24.00	0.61	2.82	6.57	117.50
Golden Redhorse	R	I	S M	24	48.00	1.22	1.24	2.90	25.91
Northern Hog Sucker	R	I	S M	197	394.00	10.02	14.18	33.03	35.98
White Sucker	W	O	S T	2	4.00	0.10	0.01	0.03	3.00
Creek Chub	N	G	N T	8	16.00	0.41	0.09	0.21	5.71
Silver Shiner	N	I	S I	52	104.00	2.64	0.15	0.35	1.44
Rosyface Shiner	N	I	S I	1	2.00	0.05	0.00	0.01	2.00
Scarlet Shiner	N	I	S M	20	40.00	1.02	0.10	0.23	2.44
Striped Shiner	N	I	S	284	568.00	14.44	2.91	6.78	5.12
Spotfin Shiner	N	I	M	34	68.00	1.73	0.13	0.29	1.85
Sand Shiner	N	I	M M	241	482.00	12.25	0.71	1.65	1.47
Silverjaw Minnow	N	I	M	73	146.00	3.71	0.30	0.69	2.03
Bluntnose Minnow	N	O	C T	157	314.00	7.98	0.74	1.72	2.36
Central Stoneroller	N	H	N	635	1,270.00	32.28	3.56	8.29	2.80
Stonecat Madtom		I	C I	22	44.00	1.12	1.26	2.93	28.57
Rock Bass	S	C	C	7	14.00	0.36	1.00	2.34	71.67
Smallmouth Bass	F	C	C M	36	72.00	1.83	11.68	27.21	162.22
Green Sunfish	S	I	C T	1	2.00	0.05	0.05	0.12	25.00
Longear Sunfish	S	I	C M	28	56.00	1.42	1.24	2.90	22.22
Longear X Orangespot				1	2.00	0.05	0.04	0.09	20.00
Hybrid X Sunfish				3	6.00	0.15	0.05	0.10	7.50
Johnny Darter	D	I	C	3	6.00	0.15	0.02	0.05	3.33
Greenside Darter	D	I	S M	78	156.00	3.97	0.40	0.92	2.53
Banded Darter	D	I	S I	14	28.00	0.71	0.04	0.09	1.43
Rainbow Darter	D	I	S M	16	32.00	0.81	0.07	0.16	2.19
Orangethroat Darter	D	I	S	2	4.00	0.10	0.01	0.02	2.00
Fantail Darter	D	I	C	8	16.00	0.41	0.02	0.05	1.25
<i>Mile Total</i>				1,967	3,934.00		42.92		
<i>Number of Species</i>				26					
<i>Number of Hybrids</i>				2					

Species List

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River Code: 14-010	Stream: Indian Creek	Sample Date: 2005
River Mile: 6.80	Location: upst. Queen Acres WWTP	Date Range: 08/23/2005
Time Fished: 4552 sec	Drainage: 95.0 sq mi	
Dist Fished: 0.25 km	Basin: Great Miami River No of Passes: 1	Sampler Type: D

Species Name / ODNR status	IBI Grp	Feed Guild	Breed Guild Tol	# of Fish	Relative Number	% by Number	Relative Weight	% by Weight	Ave(gm) Weight
Longnose Gar		P	M	1	1.20	0.03	0.12	0.10	100.00
Quillback	C	O	M	6	7.20	0.20	2.82	2.28	391.67
River Carpsucker	C	O	M	1	1.20	0.03	0.48	0.39	400.00
Silver Redhorse	R	I	S M	4	4.80	0.13	0.12	0.10	25.00
Black Redhorse	R	I	S I	75	90.00	2.51	16.65	13.44	185.00
Golden Redhorse	R	I	S M	50	60.00	1.67	23.67	19.10	394.44
Northern Hog Sucker	R	I	S M	76	91.20	2.54	17.15	13.84	188.00
White Sucker	W	O	S T	4	4.80	0.13	0.33	0.26	68.33
Smallmouth Redhorse	R	I	S M	1	1.20	0.03	0.24	0.19	200.00
Creek Chub	N	G	N T	1	1.20	0.03	0.00	0.00	1.00
Silver Shiner	N	I	S I	47	56.40	1.57	0.07	0.06	1.30
Rosyface Shiner	N	I	S I	11	13.20	0.37	0.03	0.02	2.00
Scarlet Shiner	N	I	S M	71	85.20	2.38	0.17	0.14	2.00
Striped Shiner	N	I	S	183	219.60	6.12	1.71	1.38	7.79
Spotfin Shiner	N	I	M	36	43.20	1.20	0.08	0.07	1.92
Sand Shiner	N	I	M M	162	194.40	5.42	0.26	0.21	1.32
Silverjaw Minnow	N	I	M	5	6.00	0.17	0.01	0.01	2.00
Bluntnose Minnow	N	O	C T	776	931.20	25.97	1.55	1.25	1.66
Central Stoneroller	N	H	N	991	1,189.20	33.17	3.41	2.75	2.86
Channel Catfish	F		C	11	13.20	0.37	8.51	6.87	644.44
Yellow Bullhead		I	C T	13	15.60	0.44	1.67	1.35	106.92
Stonecat Madtom		I	C I	4	4.80	0.13	0.01	0.01	2.75
Rock Bass	S	C	C	57	68.40	1.91	8.71	7.03	127.27
Smallmouth Bass	F	C	C M	80	96.00	2.68	32.53	26.26	338.89
Green Sunfish	S	I	C T	11	13.20	0.37	0.42	0.34	31.82
Bluegill Sunfish	S	I	C P	2	2.40	0.07	0.03	0.02	12.50
Longear Sunfish	S	I	C M	74	88.80	2.48	1.90	1.54	21.44
Hybrid X Sunfish				22	26.40	0.74	0.16	0.13	5.91
Logperch	D	I	S M	1	1.20	0.03	0.06	0.05	50.00
Greenside Darter	D	I	S M	98	117.60	3.28	0.27	0.22	2.27
Banded Darter	D	I	S I	36	43.20	1.20	0.05	0.04	1.25
Rainbow Darter	D	I	S M	51	61.20	1.71	0.09	0.07	1.51
Fantail Darter	D	I	C	26	31.20	0.87	0.04	0.03	1.15
Freshwater Drum			M P	1	1.20	0.03	0.60	0.48	500.00
<i>Mile Total</i>				2,988	3,585.60		123.90		
<i>Number of Species</i>				33					
<i>Number of Hybrids</i>				1					

Species List

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River Code: 14-010	Stream: Indian Creek	Sample Date: 2005
River Mile: 6.50	Location: dst. Queen Acres WWTP	Date Range: 08/23/2005
Time Fished: 2706 sec	Drainage: 98.0 sq mi	
Dist Fished: 0.20 km	Basin: Great Miami River No of Passes: 1	Sampler Type: D

Species Name / ODNR status	IBI Grp	Feed Guild	Breed Guild	Tol	# of Fish	Relative Number	% by Number	Relative Weight	% by Weight	Ave(gm) Weight
Black Redhorse	R	I	S	I	56	84.00	2.45	15.12	28.79	180.00
Golden Redhorse	R	I	S	M	60	90.00	2.63	8.76	16.67	97.27
Northern Hog Sucker	R	I	S	M	53	79.50	2.32	3.13	5.97	39.41
White Sucker	W	O	S	T	12	18.00	0.53	0.45	0.86	25.00
Creek Chub	N	G	N	T	6	9.00	0.26	0.02	0.04	2.50
Silver Shiner	N	I	S	I	47	70.50	2.06	0.12	0.23	1.68
Scarlet Shiner	N	I	S	M	35	52.50	1.53	0.10	0.18	1.80
Striped Shiner	N	I	S		206	309.00	9.02	1.30	2.47	4.19
Spotfin Shiner	N	I	M		63	94.50	2.76	0.24	0.46	2.55
Sand Shiner	N	I	M	M	116	174.00	5.08	0.25	0.47	1.42
Silverjaw Minnow	N	I	M		35	52.50	1.53	0.07	0.13	1.31
Bluntnose Minnow	N	O	C	T	540	810.00	23.65	1.24	2.37	1.53
Central Stoneroller	N	H	N		596	894.00	26.11	2.85	5.42	3.18
Yellow Bullhead		I	C	T	4	6.00	0.18	0.32	0.62	53.75
Stonecat Madtom		I	C	I	11	16.50	0.48	0.06	0.11	3.50
Rock Bass	S	C	C		17	25.50	0.74	1.95	3.72	76.54
Smallmouth Bass	F	C	C	M	61	91.50	2.67	12.75	24.28	139.38
Green Sunfish	S	I	C	T	8	12.00	0.35	0.89	1.70	74.38
Longear Sunfish	S	I	C	M	50	75.00	2.19	1.57	2.98	20.87
Hybrid X Sunfish					66	99.00	2.89	0.68	1.29	6.83
Logperch	D	I	S	M	1	1.50	0.04	0.02	0.03	10.00
Greenside Darter	D	I	S	M	70	105.00	3.07	0.27	0.52	2.61
Banded Darter	D	I	S	I	43	64.50	1.88	0.09	0.17	1.41
Rainbow Darter	D	I	S	M	105	157.50	4.60	0.21	0.41	1.35
Fantail Darter	D	I	C		22	33.00	0.96	0.07	0.14	2.25
<i>Mile Total</i>					2,283	3,424.50		52.52		
<i>Number of Species</i>					24					
<i>Number of Hybrids</i>					1					

Species List

River Code: 14-010	Stream: Indian Creek	Sample Date: 2005
River Mile: 4.30	Location: upst. Hamilton-New London Rd.	Date Range: 08/22/2005
Time Fished: 3107 sec	Drainage: 102.0 sq mi	
Dist Fished: 0.21 km	Basin: Great Miami River No of Passes: 1	Sampler Type: D

Species Name / ODNR status	IBI Grp	Feed Guild	Breed Guild Tol	# of Fish	Relative Number	% by Number	Relative Weight	% by Weight	Ave(gm) Weight
Quillback	C	O	M	33	47.14	0.52	0.48	0.61	10.17
Black Redhorse	R	I	S I	47	67.14	0.74	19.76	25.16	294.29
Golden Redhorse	R	I	S M	5	7.14	0.08	1.79	2.27	250.00
Northern Hog Sucker	R	I	S M	28	40.00	0.44	8.36	10.64	208.95
White Sucker	W	O	S T	106	151.43	1.67	0.51	0.65	3.37
Suckermouth Minnow	N	I	S	16	22.86	0.25	0.18	0.23	8.00
Silver Shiner	N	I	S I	2	2.86	0.03	0.01	0.01	2.00
Rosyface Shiner	N	I	S I	53	75.71	0.84	0.14	0.18	1.91
Scarlet Shiner	N	I	S M	24	34.29	0.38	0.07	0.09	2.00
Striped Shiner	N	I	S	124	177.14	1.96	0.70	0.89	3.93
Spotfin Shiner	N	I	M	75	107.14	1.18	0.27	0.35	2.54
Sand Shiner	N	I	M M	1,225	1,750.00	19.32	3.14	3.99	1.79
Silverjaw Minnow	N	I	M	482	688.57	7.60	1.61	2.05	2.33
Bluntnose Minnow	N	O	C T	1,472	2,102.86	23.22	5.73	7.29	2.72
Central Stoneroller	N	H	N	2,168	3,097.14	34.20	19.81	25.22	6.40
Channel Catfish	F		C	8	11.43	0.13	2.69	3.42	235.00
Yellow Bullhead		I	C T	1	1.43	0.02	0.36	0.45	250.00
Stonecat Madtom		I	C I	1	1.43	0.02	0.00	0.01	3.00
Rock Bass	S	C	C	20	28.57	0.32	1.84	2.34	64.44
Smallmouth Bass	F	C	C M	17	24.29	0.27	8.50	10.82	350.00
Bluegill Sunfish	S	I	C P	2	2.86	0.03	0.08	0.10	27.50
Longear Sunfish	S	I	C M	67	95.71	1.06	1.75	2.23	18.31
Hybrid X Sunfish				18	25.71	0.28	0.22	0.28	8.57
Greenside Darter	D	I	S M	108	154.29	1.70	0.29	0.37	1.87
Banded Darter	D	I	S I	120	171.43	1.89	0.13	0.17	0.76
Rainbow Darter	D	I	S M	108	154.29	1.70	0.12	0.15	0.79
Orangethroat Darter	D	I	S	3	4.29	0.05	0.00	0.01	1.00
Fantail Darter	D	I	C	6	8.57	0.09	0.02	0.02	2.00
<i>Mile Total</i>				6,339	9,055.71		78.54		
<i>Number of Species</i>				27					
<i>Number of Hybrids</i>				1					

River Code: 14-011	Stream: Salmon Run	Sample Date: 2005
River Mile: 1.90	Location: end of Shank Rd.	Date Range: 09/21/2005
Time Fished: 1717 sec	Drainage: 1.4 sq mi	
Dist Fished: 0.15 km	Basin: Great Miami River No of Passes: 1	Sampler Type: E

Species Name / ODNR status	IBI Grp	Feed Guild	Breed Guild	Tol	# of Fish	Relative Number	% by Number	Relative Weight	% by Weight	Ave(gm) Weight
White Sucker	W	O	S	T	12	24.00	3.46	0.13	4.12	5.42
Western Blacknose Dace	N	G	S	T	155	310.00	44.67	0.66	21.02	2.14
Creek Chub	N	G	N	T	49	98.00	14.12	1.02	32.29	10.41
South. Redbelly Dace	N	H	S		14	28.00	4.03	0.09	2.85	3.21
Striped Shiner	N	I	S		2	4.00	0.58	0.05	1.58	12.50
Bluntnose Minnow	N	O	C	T	1	2.00	0.29	0.00	0.13	2.00
Central Stoneroller	N	H	N		77	154.00	22.19	0.61	19.25	3.95
Largemouth Bass	F	C	C		1	2.00	0.29	0.05	1.58	25.00
Green Sunfish	S	I	C	T	9	18.00	2.59	0.47	14.88	26.11
Orangethroat Darter	D	I	S		27	54.00	7.78	0.07	2.31	1.35
<i>Mile Total</i>					347	694.00		3.16		
<i>Number of Species</i>					10					
<i>Number of Hybrids</i>					0					

River Code: 14-011	Stream: Salmon Run	Sample Date: 2005
River Mile: 0.10	Location: adj. Reilly-Millville Rd.	Date Range: 08/22/2005
Time Fished: 1748 sec	Drainage: 4.8 sq mi	
Dist Fished: 0.15 km	Basin: Great Miami River No of Passes: 1	Sampler Type: E

Species Name / ODNR status	IBI Grp	Feed Guild	Breed Guild	Tol	# of Fish	Relative Number	% by Number	Relative Weight	% by Weight	Ave(gm) Weight
Golden Redhorse	R	I	S	M	2	4.00	0.19	0.02	0.16	5.00
Northern Hog Sucker	R	I	S	M	9	18.00	0.83	0.25	2.00	14.00
White Sucker	W	O	S	T	77	154.00	7.14	2.02	16.06	13.14
Western Blacknose Dace	N	G	S	T	33	66.00	3.06	0.11	0.87	1.67
Creek Chub	N	G	N	T	143	286.00	13.27	2.23	17.73	7.81
South. Redbelly Dace	N	H	S		2	4.00	0.19	0.01	0.08	2.50
Scarlet Shiner	N	I	S	M	9	18.00	0.83	0.05	0.38	2.67
Striped Shiner	N	I	S		121	242.00	11.22	0.73	5.81	3.03
Spotfin Shiner	N	I	M		4	8.00	0.37	0.01	0.08	1.25
Silverjaw Minnow	N	I	M		88	176.00	8.16	0.52	4.16	2.98
Bluntnose Minnow	N	O	C	T	74	148.00	6.86	0.37	2.94	2.50
Central Stoneroller	N	H	N		370	740.00	34.32	2.83	22.43	3.82
Yellow Bullhead		I	C	T	9	18.00	0.83	0.83	6.55	45.89
Stonecat Madtom		I	C	I	4	8.00	0.37	0.02	0.19	3.00
Smallmouth Bass	F	C	C	M	6	12.00	0.56	0.06	0.48	5.00
Green Sunfish	S	I	C	T	22	44.00	2.04	1.78	14.16	40.56
Bluegill Sunfish	S	I	C	P	1	2.00	0.09	0.15	1.19	75.00
Longear Sunfish	S	I	C	M	12	24.00	1.11	0.23	1.82	9.55
Hybrid X Sunfish					10	20.00	0.93	0.14	1.11	7.00
Johnny Darter	D	I	C		1	2.00	0.09	0.00	0.02	1.00
Greenside Darter	D	I	S	M	10	20.00	0.93	0.06	0.48	3.00
Banded Darter	D	I	S	I	2	4.00	0.19	0.00	0.03	1.00
Rainbow Darter	D	I	S	M	16	32.00	1.48	0.04	0.30	1.19
Orangethroat Darter	D	I	S		19	38.00	1.76	0.04	0.35	1.16
Fantail Darter	D	I	C		34	68.00	3.15	0.08	0.63	1.18
<i>Mile Total</i>					1,078	2,156.00		12.60		
<i>Number of Species</i>					24					
<i>Number of Hybrids</i>					1					

Species List

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River Code: 14-195	Stream: Lick Run	Sample Date: 2005
River Mile: 0.90	Location: private lane	Date Range: 09/21/2005
Time Fished: 1686 sec	Drainage: 4.7 sq mi	
Dist Fished: 0.19 km	Basin: Great Miami River	No of Passes: 1
		Sampler Type: E

Species Name / ODNR status	IBI Grp	Feed Guild	Breed Guild	Tol	# of Fish	Relative Number	% by Number	Relative Weight	% by Weight	Ave(gm) Weight
Northern Hog Sucker	R	I	S	M	3	4.74	0.33	0.11	1.42	23.33
White Sucker	W	O	S	T	121	191.05	13.34	2.23	28.49	11.65
Western Blacknose Dace	N	G	S	T	55	86.84	6.06	0.15	1.96	1.76
Creek Chub	N	G	N	T	259	408.95	28.56	3.59	45.94	8.78
Scarlet Shiner	N	I	S	M	13	20.53	1.43	0.05	0.60	2.31
Striped Shiner	N	I	S		48	75.79	5.29	0.34	4.34	4.48
Spotfin Shiner	N	I	M		4	6.32	0.44	0.03	0.41	5.00
Sand Shiner	N	I	M	M	4	6.32	0.44	0.01	0.08	1.00
Silverjaw Minnow	N	I	M		3	4.74	0.33	0.02	0.20	3.33
Bluntnose Minnow	N	O	C	T	46	72.63	5.07	0.19	2.43	2.61
Central Stoneroller	N	H	N		161	254.21	17.75	0.67	8.55	2.63
Yellow Bullhead		I	C	T	1	1.58	0.11	0.01	0.10	5.00
Smallmouth Bass	F	C	C	M	2	3.16	0.22	0.04	0.50	12.50
Green Sunfish	S	I	C	T	3	4.74	0.33	0.06	0.70	11.67
Johnny Darter	D	I	C		33	52.11	3.64	0.06	0.81	1.21
Rainbow Darter	D	I	S	M	17	26.84	1.87	0.04	0.50	1.47
Orangethroat Darter	D	I	S		73	115.26	8.05	0.11	1.43	0.97
Fantail Darter	D	I	C		61	96.32	6.73	0.12	1.51	1.23
<i>Mile Total</i>					907	1,432.11		7.81		
<i>Number of Species</i>					18					
<i>Number of Hybrids</i>					0					

River Code: 14-198	Stream: Little Indian Creek	Sample Date: 2005
River Mile: 0.10	Location: Sawmill Rd.	Date Range: 08/23/2005
Time Fished: 1694 sec	Drainage: 5.6 sq mi	
Dist Fished: 0.15 km	Basin: Great Miami River No of Passes: 1	Sampler Type: E

Species Name / ODNR status	IBI Grp	Feed Guild	Breed Guild	Tol	# of Fish	Relative Number	% by Number	Relative Weight	% by Weight	Ave(gm) Weight
Northern Hog Sucker	R	I	S	M	6	12.00	0.41	0.06	1.35	5.00
White Sucker	W	O	S	T	173	346.00	11.77	0.63	14.11	1.82
Western Blacknose Dace	N	G	S	T	84	168.00	5.71	0.36	8.16	2.16
Creek Chub	N	G	N	T	326	652.00	22.18	1.87	42.04	2.87
Scarlet Shiner	N	I	S	M	1	2.00	0.07	0.01	0.13	3.00
Striped Shiner	N	I	S		29	58.00	1.97	0.11	2.47	1.90
Spotfin Shiner	N	I	M		2	4.00	0.14	0.01	0.22	2.50
Silverjaw Minnow	N	I	M		7	14.00	0.48	0.02	0.45	1.43
Bluntnose Minnow	N	O	C	T	13	26.00	0.88	0.04	0.90	1.54
Central Stoneroller	N	H	N		750	1,500.00	51.02	1.01	22.65	0.67
Stonecat Madtom		I	C	I	1	2.00	0.07	0.01	0.13	3.00
Spotted Bass	F	C	C		4	8.00	0.27	0.16	3.60	20.00
Johnny Darter	D	I	C		4	8.00	0.27	0.01	0.18	1.00
Greenside Darter	D	I	S	M	6	12.00	0.41	0.01	0.22	0.83
Banded Darter	D	I	S	I	3	6.00	0.20	0.01	0.13	1.00
Orangethroat Darter	D	I	S		39	78.00	2.65	0.08	1.80	1.03
Fantail Darter	D	I	C		22	44.00	1.50	0.06	1.42	1.43
<i>Mile Total</i>					1,470	2,940.00		4.45		
<i>Number of Species</i>					17					
<i>Number of Hybrids</i>					0					

Appendix A-8

Aquatic macroinvertebrate species lists for sampling locations
in the Fourmile Creek and Indian Creek study areas, 2005.

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: Fourmile Creek

Collection Date: 07/25/2005 River Code: 14-400 RM: 40.90

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01801	<i>Turbellaria</i>	+	77800	<i>Helopelopia sp</i>	+
03040	<i>Fredericella sp</i>	+	78500	<i>Paramerina fragilis</i>	+
03360	<i>Plumatella sp</i>	+	78655	<i>Procladius (Holotanypus) sp</i>	+
03600	<i>Oligochaeta</i>	+	82820	<i>Cryptochironomus sp</i>	+
04666	<i>Helobdella triserialis</i>	+	83003	<i>Dicrotendipes fumidus</i>	+
04687	<i>Placobdella parasitica</i>	+	83040	<i>Dicrotendipes neomodestus</i>	+
04935	<i>Erpobdella punctata punctata</i>	+	83840	<i>Microtendipes pedellus group</i>	+
05900	<i>Lirceus sp</i>	+	84300	<i>Phaenopsectra obediens group</i>	+
08250	<i>Orconectes (Procericambarus) rusticus</i>	+	84450	<i>Polypedilum (Uresipedilum) flavum</i>	+
08270	<i>Orconectes (Rhoadesius) sloanii</i>	+	84460	<i>Polypedilum (P.) fallax group</i>	+
08601	<i>Hydrachnidia</i>	+	84470	<i>Polypedilum (P.) illinoense</i>	+
11120	<i>Baetis flavistriga</i>	+	85625	<i>Rheotanytarsus sp</i>	+
11130	<i>Baetis intercalaris</i>	+	85800	<i>Tanytarsus sp</i>	+
13400	<i>Stenacron sp</i>	+	95100	<i>Physella sp</i>	+
13521	<i>Stenonema femoratum</i>	+	96264	<i>Planorbella (Pierosoma) pilsbryi</i>	+
17200	<i>Caenis sp</i>	+			
22001	<i>Coenagrionidae</i>	+	No. Quantitative Taxa: 0		Total Taxa: 59
22300	<i>Argia sp</i>	+	No. Qualitative Taxa: 59		ICI:
23600	<i>Aeshna sp</i>	+	Number of Organisms: 0		Qual EPT: 12
23909	<i>Boyeria vinosa</i>	+			
45300	<i>Sigara sp</i>	+			
50315	<i>Chimarra obscura</i>	+			
52200	<i>Cheumatopsyche sp</i>	+			
52530	<i>Hydropsyche depravata group</i>	+			
53800	<i>Hydroptila sp</i>	+			
58505	<i>Helicopsyche borealis</i>	+			
59300	<i>Mystacides sp</i>	+			
59730	<i>Triaenodes melaca</i>	+			
63300	<i>Hydroporus sp</i>	+			
65800	<i>Berosus sp</i>	+			
67300	<i>Hydrochus sp</i>	+			
67700	<i>Paracymus sp</i>	+			
68075	<i>Psephenus herricki</i>	+			
68201	<i>Scirtidae</i>	+			
68707	<i>Dubiraphia quadrinotata</i>	+			
68708	<i>Dubiraphia vittata group</i>	+			
69400	<i>Stenelmis sp</i>	+			
71900	<i>Tipula sp</i>	+			
72340	<i>Dixella sp</i>	+			
72700	<i>Anopheles sp</i>	+			
74100	<i>Simulium sp</i>	+			
74501	<i>Ceratopogonidae</i>	+			
74673	<i>Atrichopogon websteri</i>	+			
77500	<i>Conchapelopia sp</i>	+			

Ohio EPA/DSW Ecological Assessment Section

Macroinvertebrate Collection

Site: Fourmile Creek

Collection Date: 07/25/2005 River Code: 14-400 RM: 38.90

Concord-Fairhaven Rd.

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01801	<i>Turbellaria</i>	+	78140	<i>Labrundinia pilosella</i>	+
03360	<i>Plumatella sp</i>	+	83040	<i>Dicrotendipes neomodestus</i>	+
04685	<i>Placobdella ornata</i>	+	83820	<i>Microtendipes "caelum" (sensu Simpson & Bode, 1980)</i>	+
05900	<i>Lirceus sp</i>	+	83840	<i>Microtendipes pedellus group</i>	+
06201	<i>Hyalella azteca</i>	+	84450	<i>Polypedilum (Uresipedilum) flavum</i>	+
07875	<i>Cambarus (Tubericambarus) sp A</i>	+	84470	<i>Polypedilum (P.) illinoense</i>	+
08250	<i>Orconectes (Procericambarus) rusticus</i>	+	84540	<i>Polypedilum (Tripodura) scalaenum group</i>	+
08601	<i>Hydrachnidia</i>	+	84750	<i>Stictochironomus sp</i>	+
11120	<i>Baetis flavistriga</i>	+	85625	<i>Rheotanytarsus sp</i>	+
11130	<i>Baetis intercalaris</i>	+	87540	<i>Hemerodromia sp</i>	+
13400	<i>Stenacron sp</i>	+	94400	<i>Fossaria sp</i>	+
13521	<i>Stenonema femoratum</i>	+	95100	<i>Physella sp</i>	+
13561	<i>Maccaffertium pulchellum</i>	+	96900	<i>Ferrissia sp</i>	+
17200	<i>Caenis sp</i>	+	98200	<i>Pisidium sp</i>	+
21200	<i>Calopteryx sp</i>	+	98600	<i>Sphaerium sp</i>	+
21300	<i>Hetaerina sp</i>	+	99860	<i>Lampsilis radiata luteola</i>	+
22001	<i>Coenagrionidae</i>	+			
22300	<i>Argia sp</i>	+			
23909	<i>Boyeria vinosa</i>	+	No. Quantitative Taxa: 0		Total Taxa: 60
45100	<i>Palmacorixa sp</i>	+	No. Qualitative Taxa: 60		ICI:
50315	<i>Chimarra obscura</i>	+	Number of Organisms: 0		Qual EPT: 16
52200	<i>Cheumatopsyche sp</i>	+			
52430	<i>Ceratopsyche morosa group</i>	+			
52530	<i>Hydropsyche depravata group</i>	+			
53800	<i>Hydroptila sp</i>	+			
57400	<i>Neophylax sp</i>	+			
58505	<i>Helicopsyche borealis</i>	+			
59310	<i>Mystacides sepulchralis</i>	+			
59500	<i>Oecetis sp</i>	+			
59730	<i>Triaenodes melaca</i>	+			
60900	<i>Peltodytes sp</i>	+			
65800	<i>Berosus sp</i>	+			
68075	<i>Psephenus herricki</i>	+			
68201	<i>Scirtidae</i>	+			
68601	<i>Ancyronyx variegata</i>	+			
68707	<i>Dubiraphia quadrinotata</i>	+			
68708	<i>Dubiraphia vittata group</i>	+			
68901	<i>Macronychus glabratus</i>	+			
69400	<i>Stenelmis sp</i>	+			
71900	<i>Tipula sp</i>	+			
74100	<i>Simulium sp</i>	+			
77120	<i>Ablabesmyia mallochi</i>	+			
77500	<i>Conchapelopia sp</i>	+			
77800	<i>Helopelopia sp</i>	+			

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: Fourmile Creek

Collection Date: 08/15/2005 River Code: 14-400 RM: 35.90

Concord-Fairhaven Rd.

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01320	<i>Hydra sp</i>	4	74501	<i>Ceratopogonidae</i>	4
01801	<i>Turbellaria</i>	254 +	74673	<i>Atrichopogon websteri</i>	8
03360	<i>Plumatella sp</i>	2 +	77120	<i>Ablabesmyia mallochi</i>	+
04935	<i>Erpobdella punctata punctata</i>	+	77500	<i>Conchapelopia sp</i>	16 +
05900	<i>Lirceus sp</i>	+	77740	<i>Hayesomyia senata</i>	97 +
06201	<i>Hyalella azteca</i>	21 +	77800	<i>Helopelopia sp</i>	97 +
08250	<i>Orconectes (Procericambarus) rusticus</i>	+	78401	<i>Natarsia species A (sensu Roback, 1978)</i>	+
08601	<i>Hydrachnidia</i>	+	78655	<i>Procladius (Holotanypus) sp</i>	+
11120	<i>Baetis flavistriga</i>	+	80370	<i>Corynoneura lobata</i>	60 +
11130	<i>Baetis intercalaris</i>	+	80410	<i>Cricotopus (C.) sp</i>	32
12200	<i>Isonychia sp</i>	+	82141	<i>Thienemanniella xena</i>	8
13400	<i>Stenacron sp</i>	119 +	83040	<i>Dicrotendipes neomodestus</i>	327
13521	<i>Stenonema femoratum</i>	14 +	83820	<i>Microtendipes "caelum" (sensu Simpson & Bode, 1980)</i>	+
13561	<i>Maccaffertium pulchellum</i>	+	83840	<i>Microtendipes pedellus group</i>	+
16700	<i>Tricorythodes sp</i>	1 +	84210	<i>Paratendipes albimanus or P. duplicatus</i>	16
17200	<i>Caenis sp</i>	+	84300	<i>Phaenopsectra obediens group</i>	49 +
21200	<i>Calopteryx sp</i>	7 +	84450	<i>Polypedilum (Uresipedilum) flavum</i>	81 +
22300	<i>Argia sp</i>	17	84460	<i>Polypedilum (P.) fallax group</i>	32
45100	<i>Palmacorixa sp</i>	+	84469	<i>Polypedilum (P.) illinoense group</i>	+
45300	<i>Sigara sp</i>	+	84540	<i>Polypedilum (Tripodura) scalaenum group</i>	16 +
45400	<i>Trichocorixa sp</i>	+	84750	<i>Stictochironomus sp</i>	+
47600	<i>Sialis sp</i>	+	85500	<i>Paratanytarsus sp</i>	162
50315	<i>Chimarra obscura</i>	+	85501	<i>Paratanytarsus n.sp 1</i>	49
52200	<i>Cheumatopsyche sp</i>	12 +	85625	<i>Rheotanytarsus sp</i>	307 +
52430	<i>Ceratopsyche morosa group</i>	+	85720	<i>Stempellinella fimbriata</i>	4 +
52530	<i>Hydropsyche depravata group</i>	+	85752	<i>Sublettea coffmani</i>	16 +
53800	<i>Hydroptila sp</i>	44 +	85800	<i>Tanytarsus sp</i>	16
57400	<i>Neophylax sp</i>	+	85802	<i>Tanytarsus curticornis</i>	32
58505	<i>Helicopsyche borealis</i>	5 +	85821	<i>Tanytarsus glabrescens group sp 7</i>	162
59310	<i>Mystacides sepulchralis</i>	+	86100	<i>Chrysops sp</i>	+
59410	<i>Nectopsyche diarina</i>	+	87540	<i>Hemerodromia sp</i>	24 +
59580	<i>Oecetis persimilis</i>	1 +	93900	<i>Elimia sp</i>	7 +
60900	<i>Peltodytes sp</i>	+	95100	<i>Physella sp</i>	3 +
65800	<i>Berosus sp</i>	5 +	96900	<i>Ferrissia sp</i>	13 +
67800	<i>Tropisternus sp</i>	+	98600	<i>Sphaerium sp</i>	+
68075	<i>Psephenus herricki</i>	+	99860	<i>Lampsilis radiata luteola</i>	+
68130	<i>Helichus sp</i>	+			
68601	<i>Ancyronyx variegata</i>	+			
68708	<i>Dubiraphia vittata group</i>	32 +	No. Quantitative Taxa: 43		Total Taxa: 80
68901	<i>Macronychus glabratus</i>	79 +	No. Qualitative Taxa: 66		ICI: 46
69225	<i>Optioservus fastiditus</i>	+	Number of Organisms: 2256		Qual EPT: 18
69400	<i>Stenelmis sp</i>	1 +			
71900	<i>Tipula sp</i>	+			
74100	<i>Simulium sp</i>	+			

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: Fourmile Creek

Collection Date: 08/15/2005 River Code: 14-400 RM: 26.80

Junction Rd.

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01801	<i>Turbellaria</i>	2 +	68901	<i>Macronychus glabratus</i>	+
03360	<i>Plumatella sp</i>	18 +	69400	<i>Stenelmis sp</i>	+
03600	<i>Oligochaeta</i>	4	77120	<i>Ablabesmyia mallochi</i>	8 +
04685	<i>Placobdella ornata</i>	+	77500	<i>Conchapelopia sp</i>	25 +
05900	<i>Lirceus sp</i>	+	77750	<i>Hayesomyia senata</i> or <i>Thienemannimyia norena</i>	25 +
06201	<i>Hyaella azteca</i>	+	77800	<i>Helopelopia sp</i>	8 +
08250	<i>Orconectes (Procericambarus) rusticus</i>	+	78140	<i>Labrundinia pilosella</i>	8
11014	<i>Acentrella turbida</i>	+	78450	<i>Nilotanypus fimbriatus</i>	16 +
11020	<i>Acerpenna pygmaea</i>	22	80370	<i>Corynoneura lobata</i>	120
11130	<i>Baetis intercalaris</i>	+	81231	<i>Nanocladius (N.) crassicornus</i> or <i>N. (N.) "rectinervis"</i>	33 +
11650	<i>Procloeon sp (w/ hindwing pads)</i>	20 +	81270	<i>Nanocladius (N.) spinipenus</i>	8 +
12200	<i>Isonychia sp</i>	1 +	81825	<i>Rheocricotopus (Psilocricotopus) robacki</i>	+
13000	<i>Leucrocuta sp</i>	3	82101	<i>Thienemanniella taurocapita</i>	8
13400	<i>Stenacron sp</i>	54 +	82220	<i>Tvetenia discoloripes group</i>	+
13521	<i>Stenonema femoratum</i>	148 +	82730	<i>Chironomus (C.) decorus group</i>	8
13540	<i>Maccaffertium mediopunctatum</i>	23 +	83040	<i>Dicrotendipes neomodestus</i>	33 +
13561	<i>Maccaffertium pulchellum</i>	85 +	83820	<i>Microtendipes "caelum" (sensu Simpson & Bode, 1980)</i>	16 +
13590	<i>Maccaffertium vicarium</i>	3 +	84210	<i>Paratendipes albimanus</i> or <i>P. duplicatus</i>	16
16700	<i>Tricorythodes sp</i>	92 +	84300	<i>Phaenopsectra obediens group</i>	8
21200	<i>Calopteryx sp</i>	1 +	84450	<i>Polypedilum (Uresipedilum) flavum</i>	16 +
22001	<i>Coenagrionidae</i>	+	84460	<i>Polypedilum (P.) fallax group</i>	16
22300	<i>Argia sp</i>	6 +	84470	<i>Polypedilum (P.) illinoense</i>	+
23909	<i>Boyeria vinosa</i>	1 +	84540	<i>Polypedilum (Tripodura) scalaenum group</i>	8 +
45100	<i>Palmacorixa sp</i>	+	84750	<i>Stictochironomus sp</i>	+
47600	<i>Sialis sp</i>	+	85261	<i>Cladotanytarsus vanderwulpi group Type 1</i>	+
50315	<i>Chimarra obscura</i>	+	85500	<i>Paratanytarsus sp</i>	8
51600	<i>Polycentropus sp</i>	+	85501	<i>Paratanytarsus n.sp 1</i>	8
52200	<i>Cheumatopsyche sp</i>	+	85615	<i>Rheotanytarsus pellucidus</i>	8
52430	<i>Ceratopsyche morosa group</i>	3 +	85625	<i>Rheotanytarsus sp</i>	389 +
52530	<i>Hydropsyche depravata group</i>	+	85720	<i>Stempellinella fimbriata</i>	12 +
53501	<i>Hydroptilidae</i>	1 +	85752	<i>Sublettea coffmani</i>	25
57900	<i>Pycnopsyche sp</i>	+	85800	<i>Tanytarsus sp</i>	8
58505	<i>Helicopsyche borealis</i>	1 +	85821	<i>Tanytarsus glabrescens group sp 7</i>	149 +
59310	<i>Mystacides sepulchralis</i>	+	85840	<i>Tanytarsus sepp</i>	8
59410	<i>Nectopsyche diarina</i>	+	87540	<i>Hemerodromia sp</i>	60 +
59500	<i>Oecetis sp</i>	+	93900	<i>Elimia sp</i>	+
63300	<i>Hydroporus sp</i>	+	95100	<i>Physella sp</i>	2 +
65800	<i>Berosus sp</i>	+	96900	<i>Ferrissia sp</i>	12 +
67500	<i>Laccobius sp</i>	+			
67800	<i>Tropisternus sp</i>	+			
68075	<i>Psephenus herricki</i>	+			
68130	<i>Helichus sp</i>	+			
68601	<i>Ancyronyx variegata</i>	+			
68708	<i>Dubiraphia vittata group</i>	1 +			

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Collection Date: 08/15/2005 River Code: 14-400 RM: 26.80

Site: Fourmile Creek
Junction Rd.

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
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No. Quantitative Taxa: 50 Total Taxa: 82

No. Qualitative Taxa: 66 ICI: 52

Number of Organisms: 1558 Qual EPT: 21

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: Fourmile Creek

Collection Date: 08/15/2005 River Code: 14-400 RM: 24.80

Camden-College Corner Rd.

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01801	<i>Turbellaria</i>	+	93900	<i>Elimia sp</i>	+
03360	<i>Plumatella sp</i>	+	95100	<i>Physella sp</i>	+
04935	<i>Erpobdella punctata punctata</i>	+			
05900	<i>Lirceus sp</i>	+	No. Quantitative Taxa: 0		Total Taxa: 46
08270	<i>Orconectes (Rhoadesius) sloanii</i>	+	No. Qualitative Taxa: 46		ICI:
08601	<i>Hydrachnidia</i>	+	Number of Organisms: 0		Qual EPT: 16
11130	<i>Baetis intercalaris</i>	+			
12200	<i>Isonychia sp</i>	+			
13400	<i>Stenacron sp</i>	+			
13521	<i>Stenonema femoratum</i>	+			
13540	<i>Maccaffertium mediopunctatum</i>	+			
13561	<i>Maccaffertium pulchellum</i>	+			
17200	<i>Caenis sp</i>	+			
21200	<i>Calopteryx sp</i>	+			
22001	<i>Coenagrionidae</i>	+			
23909	<i>Boyeria vinosa</i>	+			
24900	<i>Gomphus sp</i>	+			
45300	<i>Sigara sp</i>	+			
47600	<i>Sialis sp</i>	+			
48410	<i>Corydalus cornutus</i>	+			
50315	<i>Chimarra obscura</i>	+			
51600	<i>Polycentropus sp</i>	+			
52200	<i>Cheumatopsyche sp</i>	+			
52430	<i>Ceratopsyche morosa group</i>	+			
52530	<i>Hydropsyche depravata group</i>	+			
53800	<i>Hydroptila sp</i>	+			
58505	<i>Helicopsyche borealis</i>	+			
59570	<i>Oecetis nocturna</i>	+			
59720	<i>Triaenodes ignitus</i>	+			
65800	<i>Berosus sp</i>	+			
68075	<i>Psephenus herricki</i>	+			
68130	<i>Helichus sp</i>	+			
68601	<i>Ancyronyx variegata</i>	+			
68707	<i>Dubiraphia quadrinotata</i>	+			
68708	<i>Dubiraphia vittata group</i>	+			
68901	<i>Macronychus glabratus</i>	+			
69400	<i>Stenelmis sp</i>	+			
71100	<i>Hexatoma sp</i>	+			
71900	<i>Tipula sp</i>	+			
77120	<i>Ablabesmyia mallochi</i>	+			
77500	<i>Conchapelopia sp</i>	+			
77800	<i>Helopelopia sp</i>	+			
83840	<i>Microtendipes pedellus group</i>	+			
84450	<i>Polypedilum (Uresipedilum) flavum</i>	+			

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: Fourmile Creek

Collection Date: 08/16/2005 River Code: 14-400 RM: 20.30

Buckley Rd.

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
00700	<i>Radiospongilla crateriformis</i>	+	78500	<i>Paramerina fragilis</i>	+
01801	<i>Turbellaria</i>	213 +	78655	<i>Procladius (Holotanypus) sp</i>	+
03360	<i>Plumatella sp</i>	1 +	79100	<i>Thienemannimyia group</i>	21
03600	<i>Oligochaeta</i>	33 +	80351	<i>Corynoneura n.sp 1</i>	+
04666	<i>Helobdella triserialis</i>	+	81231	<i>Nanocladius (N.) crassicornus or N. (N.) "rectinervis"</i>	21
05800	<i>Caecidotea sp</i>	+	81240	<i>Nanocladius (N.) distinctus</i>	42 +
06700	<i>Crangonyx sp</i>	+	82141	<i>Thienemanniella xena</i>	+
08250	<i>Orconectes (Procericambarus) rusticus</i>	+	82730	<i>Chironomus (C.) decorus group</i>	21
11130	<i>Baetis intercalaris</i>	+	82820	<i>Cryptochironomus sp</i>	21
11200	<i>Callibaetis sp</i>	+	83040	<i>Dicrotendipes neomodestus</i>	339 +
11651	<i>Procloeon sp (w/o hindwing pads)</i>	+	83050	<i>Dicrotendipes lucifer</i>	64 +
11670	<i>Procloeon viridoculare</i>	+	83300	<i>Glyptotendipes (G.) sp</i>	678 +
13400	<i>Stenacron sp</i>	+	83590	<i>Kiefferulus sp</i>	+
13521	<i>Stenonema femoratum</i>	+	84020	<i>Parachironomus carinatus</i>	106 +
16700	<i>Tricorythodes sp</i>	+	84450	<i>Polypedilum (Uresipedilum) flavum</i>	530 +
17200	<i>Caenis sp</i>	+	84470	<i>Polypedilum (P.) illinoense</i>	296 +
21200	<i>Calopteryx sp</i>	+	84520	<i>Polypedilum (Tripodura) halterale group</i>	+
22001	<i>Coenagrionidae</i>	+	84540	<i>Polypedilum (Tripodura) scalaenum group</i>	212 +
22300	<i>Argia sp</i>	+	84750	<i>Stictochironomus sp</i>	+
50315	<i>Chimarra obscura</i>	+	85625	<i>Rheotanytarsus sp</i>	+
52200	<i>Cheumatopsyche sp</i>	+	85821	<i>Tanytarsus glabrescens group sp 7</i>	148 +
52430	<i>Ceratopsyche morosa group</i>	+	85840	<i>Tanytarsus sepp</i>	42
52540	<i>Hydropsyche dicantha</i>	+	87540	<i>Hemerodromia sp</i>	+
53501	<i>Hydroptilidae</i>	+	95100	<i>Physella sp</i>	+
58505	<i>Helicopsyche borealis</i>	+	95907	<i>Gyraulus (Torquis) parvus</i>	+
59001	<i>Leptoceridae</i>	1	96930	<i>Laevapex fuscus</i>	8 +
59160	<i>Ceraclea spongillovorax</i>	+	98600	<i>Sphaerium sp</i>	+
59520	<i>Oecetis cinerascens</i>	+	99100	<i>Pyganodon grandis</i>	+
59555	<i>Oecetis inconspicua complex sp F (sensu Floyd, 1995)</i>	+			
59580	<i>Oecetis persimilis</i>	+	No. Quantitative Taxa: 28		Total Taxa: 72
60800	<i>Haliplus sp</i>	+	No. Qualitative Taxa: 64		ICI: 22
65800	<i>Berosus sp</i>	1 +	Number of Organisms: 3113		Qual EPT: 18
66500	<i>Enochrus sp</i>	2			
67800	<i>Tropisternus sp</i>	1 +			
68201	<i>Scirtidae</i>	19 +			
69400	<i>Stenelmis sp</i>	2 +			
74100	<i>Simulium sp</i>	+			
74501	<i>Ceratopogonidae</i>	24 +			
74673	<i>Atrichopogon websteri</i>	169			
77120	<i>Ablabesmyia mallochi</i>	42 +			
77500	<i>Conchapelopia sp</i>	+			
77740	<i>Hayesomyia senata</i>	+			
77800	<i>Helopelopia sp</i>	+			
78450	<i>Nilotanypus fimbriatus</i>	56 +			

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: Fourmile Creek

Collection Date: 08/16/2005 River Code: 14-400 RM: 18.70

St. Rt. 732

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
00401	<i>Spongillidae</i>	+	83300	<i>Glyptotendipes (G.) sp</i>	34 +
03360	<i>Plumatella sp</i>	40 +	83820	<i>Microtendipes "caelum" (sensu Simpson & Bode, 1980)</i>	+
03600	<i>Oligochaeta</i>	80	84450	<i>Polypedilum (Uresipedilum) flavum</i>	1263 +
04683	<i>Placobdella multilineata</i>	1	84470	<i>Polypedilum (P.) illinoense</i>	+
08601	<i>Hydrachnidia</i>	+	84490	<i>Polypedilum (Cerobregma) ontario</i>	+
11014	<i>Acentrella turbida</i>	+	84540	<i>Polypedilum (Tripodura) scalaenum group</i>	+
11130	<i>Baetis intercalaris</i>	35 +	84750	<i>Stictochironomus sp</i>	+
11650	<i>Procloeon sp (w/ hindwing pads)</i>	39 +	85625	<i>Rheotanytarsus sp</i>	102 +
11670	<i>Procloeon viridoculare</i>	+	85821	<i>Tanytarsus glabrescens group sp 7</i>	717 +
12200	<i>Isonychia sp</i>	+	86100	<i>Chrysops sp</i>	+
13100	<i>Nixe sp</i>	+	87540	<i>Hemerodromia sp</i>	49
13400	<i>Stenacron sp</i>	+	95100	<i>Physella sp</i>	+
13521	<i>Stenonema femoratum</i>	29 +	96900	<i>Ferrissia sp</i>	+
13540	<i>Maccaffertium mediopunctatum</i>	+			
13561	<i>Maccaffertium pulchellum</i>	26 +			
13570	<i>Maccaffertium terminatum</i>	+			
16700	<i>Tricorythodes sp</i>	18 +			
17200	<i>Caenis sp</i>	1 +			
22001	<i>Coenagrionidae</i>	+			
22300	<i>Argia sp</i>	+			
43300	<i>Ranatra sp</i>	+			
44501	<i>Corixidae</i>	+			
50315	<i>Chimarra obscura</i>	11 +			
51206	<i>Cyrnellus fraternus</i>	26 +			
52200	<i>Cheumatopsyche sp</i>	224 +			
52430	<i>Ceratopsyche morosa group</i>	27 +			
52540	<i>Hydropsyche dicantha</i>	2 +			
53501	<i>Hydroptilidae</i>	+			
58505	<i>Helicopsyche borealis</i>	+			
59140	<i>Ceraclea maculata</i>	25			
59970	<i>Petrophila sp</i>	8 +			
67500	<i>Laccobius sp</i>	+			
69400	<i>Stenelmis sp</i>	16 +			
77500	<i>Conchapelopia sp</i>	137			
77750	<i>Hayesomyia senata or Thienemannimyia norena</i>	273			
78450	<i>Nilotanypus fimbriatus</i>	34 +			
80310	<i>Cardiocladius obscurus</i>	+			
80410	<i>Cricotopus (C.) sp</i>	34 +			
80430	<i>Cricotopus (C.) tremulus group</i>	34			
81240	<i>Nanocladius (N.) distinctus</i>	171			
82101	<i>Thienemanniella taurocapita</i>	119			
82141	<i>Thienemanniella xena</i>	32			
83040	<i>Dicrotendipes neomodestus</i>	+			
83051	<i>Dicrotendipes simpsoni</i>	68			

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: Fourmile Creek

Collection Date: 08/17/2005 River Code: 14-400 RM: 16.40

upst. Oxford WWTP

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01320	<i>Hydra sp</i>	40	68901	<i>Macronychus glabratus</i>	+
01801	<i>Turbellaria</i>	251 +	69400	<i>Stenelmis sp</i>	16 +
01900	<i>Nemertea</i>	8	72700	<i>Anopheles sp</i>	+
03040	<i>Fredericella sp</i>	+	74100	<i>Simulium sp</i>	+
03360	<i>Plumatella sp</i>	9 +	77120	<i>Ablabesmyia mallochi</i>	+
03600	<i>Oligochaeta</i>	40 +	77500	<i>Conchapelopia sp</i>	130 +
04935	<i>Erpobdella punctata punctata</i>	+	77750	<i>Hayesomyia senata</i> or <i>Thienemannimyia norena</i>	208 +
08601	<i>Hydrachnidia</i>	+	77800	<i>Helopelopia sp</i>	78 +
11020	<i>Acerpenna pygmaea</i>	2	78350	<i>Meropelopia sp</i>	+
11120	<i>Baetis flavistriga</i>	45 +	78450	<i>Nilotanypus fimbriatus</i>	408 +
11130	<i>Baetis intercalaris</i>	240 +	78500	<i>Paramerina fragilis</i>	+
11250	<i>Centroptilum sp (w/o hindwing pads)</i>	+	80351	<i>Corynoneura n.sp 1</i>	8
11650	<i>Procloeon sp (w/ hindwing pads)</i>	+	80360	<i>Corynoneura "celeripes" (sensu Simpson & Bode, 1980)</i>	48 +
11651	<i>Procloeon sp (w/o hindwing pads)</i>	2	80370	<i>Corynoneura lobata</i>	32
12200	<i>Isonychia sp</i>	128 +	80410	<i>Cricotopus (C.) sp</i>	78 +
13400	<i>Stenacron sp</i>	39 +	81231	<i>Nanocladius (N.) crassicornus</i> or <i>N. (N.) "rectinervis"</i>	26
13510	<i>Maccaffertium exiguum</i>	46	82101	<i>Thienemanniella taurocapita</i>	+
13521	<i>Stenonema femoratum</i>	68 +	82820	<i>Cryptochironomus sp</i>	+
13540	<i>Maccaffertium mediopunctatum</i>	22	83040	<i>Dicrotendipes neomodestus</i>	26 +
13550	<i>Maccaffertium mexicanum integrum</i>	+	83300	<i>Glyptotendipes (G.) sp</i>	+
13561	<i>Maccaffertium pulchellum</i>	475 +	84040	<i>Parachironomus frequens</i>	26
13570	<i>Maccaffertium terminatum</i>	+	84450	<i>Polypedilum (Uresipedilum) flavum</i>	1016 +
16700	<i>Tricorythodes sp</i>	26 +	84490	<i>Polypedilum (Cerobregma) ontario</i>	26 +
17200	<i>Caenis sp</i>	112 +	84540	<i>Polypedilum (Tripodura) scalaenum group</i>	26
21200	<i>Calopteryx sp</i>	+	84750	<i>Stictochironomus sp</i>	+
22300	<i>Argia sp</i>	25 +	85625	<i>Rheotanytarsus sp</i>	599 +
23909	<i>Boyeria vinosa</i>	+	85800	<i>Tanytarsus sp</i>	26 +
24900	<i>Gomphus sp</i>	+	85821	<i>Tanytarsus glabrescens group sp 7</i>	156 +
48410	<i>Corydalus cornutus</i>	2 +	85840	<i>Tanytarsus sepp</i>	104
50315	<i>Chimarra obscura</i>	405 +	87540	<i>Hemerodromia sp</i>	32 +
51206	<i>Cyrnellus fraternus</i>	3 +	96900	<i>Ferrissia sp</i>	+
51300	<i>Neureclipsis sp</i>	+	98600	<i>Sphaerium sp</i>	+
51600	<i>Polycentropus sp</i>	+			
52200	<i>Cheumatopsyche sp</i>	582 +			
52430	<i>Ceratopsyche morosa group</i>	46 +			
52530	<i>Hydropsyche depravata group</i>	+			
52540	<i>Hydropsyche dicantha</i>	+			
53800	<i>Hydroptila sp</i>	56 +			
58505	<i>Helicopsyche borealis</i>	+			
59100	<i>Ceraclea sp</i>	1			
59970	<i>Petrophila sp</i>	+			
67800	<i>Tropisternus sp</i>	+			
68075	<i>Psephenus herricki</i>	+			
68130	<i>Helichus sp</i>	+			

No. Quantitative Taxa: 45	Total Taxa: 76
No. Qualitative Taxa: 63	ICI: 52
Number of Organisms: 5742	Qual EPT: 22

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: Fourmile Creek
dst. Oxford WWTP

Collection Date: 08/17/2005 River Code: 14-400 RM: 16.20

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
00401	<i>Spongillidae</i>	1	80360	<i>Corynoneura "celeripes" (sensu Simpson & Bode, 1980)</i>	16 +
01320	<i>Hydra sp</i>	32			
01801	<i>Turbellaria</i>	34 +	80430	<i>Cricotopus (C.) tremulus group</i>	+
03040	<i>Fredericella sp</i>	1 +	81231	<i>Nanocladius (N.) crassicornus or N. (N.) "rectinervis"</i>	+
03360	<i>Plumatella sp</i>	18 +			
05900	<i>Lirceus sp</i>	+	81250	<i>Nanocladius (N.) minimus</i>	+
08250	<i>Orconectes (Procericambarus) rusticus</i>	1 +	82141	<i>Thienemanniella xena</i>	64 +
11020	<i>Acerpenna pygmaea</i>	1	82730	<i>Chironomus (C.) decorus group</i>	+
11120	<i>Baetis flavistriga</i>	1 +	82820	<i>Cryptochironomus sp</i>	+
11130	<i>Baetis intercalaris</i>	818 +	83040	<i>Dicrotendipes neomodestus</i>	+
11650	<i>Procloeon sp (w/ hindwing pads)</i>	+	83050	<i>Dicrotendipes lucifer</i>	+
12200	<i>Isonychia sp</i>	511 +	83051	<i>Dicrotendipes simpsoni</i>	+
13100	<i>Nixe sp</i>	+	83300	<i>Glyptotendipes (G.) sp</i>	+
13400	<i>Stenacron sp</i>	+	84450	<i>Polypedilum (Uresipedilum) flavum</i>	1800 +
13510	<i>Maccaffertium exiguum</i>	+	84470	<i>Polypedilum (P.) illinoense</i>	270 +
13521	<i>Stenonema femoratum</i>	+	84475	<i>Polypedilum (P.) ophioides</i>	+
13550	<i>Maccaffertium mexicanum integrum</i>	2	84750	<i>Stictochironomus sp</i>	+
13561	<i>Maccaffertium pulchellum</i>	451 +	85625	<i>Rheotanytarsus sp</i>	2610 +
16700	<i>Tricorythodes sp</i>	+	85821	<i>Tanytarsus glabrescens group sp 7</i>	135 +
17200	<i>Caenis sp</i>	1 +	87540	<i>Hemerodromia sp</i>	96 +
21200	<i>Calopteryx sp</i>	+	95100	<i>Physella sp</i>	+
22001	<i>Coenagrionidae</i>	+	96900	<i>Ferrissia sp</i>	+
22300	<i>Argia sp</i>	1 +	97601	<i>Corbicula fluminea</i>	+
23909	<i>Boyeria vinosa</i>	+	98200	<i>Pisidium sp</i>	+
47600	<i>Sialis sp</i>	+	98600	<i>Sphaerium sp</i>	+
48410	<i>Corydalis cornutus</i>	1			
50315	<i>Chimarra obscura</i>	1116 +	No. Quantitative Taxa: 33		Total Taxa: 67
51206	<i>Cyrnellus fraternus</i>	3 +	No. Qualitative Taxa: 60		ICI: 48
52200	<i>Cheumatopsyche sp</i>	1591 +	Number of Organisms: 10408		Qual EPT: 17
52430	<i>Ceratopsyche morosa group</i>	378 +			
53800	<i>Hydroptila sp</i>	48 +			
58505	<i>Helicopsyche borealis</i>	+			
59100	<i>Ceraclea sp</i>	8			
59970	<i>Petrophila sp</i>	+			
67800	<i>Tropisternus sp</i>	+			
68075	<i>Psephenus herricki</i>	+			
68130	<i>Helichus sp</i>	+			
69400	<i>Stenelmis sp</i>	45 +			
70501	<i>Tipulidae</i>	1			
77500	<i>Conchapelopia sp</i>	45 +			
77750	<i>Hayesomyia senata or Thienemannimyia norena</i>	180 +			
77800	<i>Helopelopia sp</i>	+			
78450	<i>Nilotanypus fimbriatus</i>	128 +			
78750	<i>Rheopelopia paramaculipennis</i>	+			

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: Fourmile Creek
Lanes Mill Rd.

Collection Date: 08/16/2005 River Code: 14-400 RM: 13.60

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01801	<i>Turbellaria</i>	+	84540	<i>Polypedilum (Tripodura) scalaenum group</i>	+
03040	<i>Fredericella sp</i>	+	85230	<i>Cladotanytarsus mancus group</i>	+
05900	<i>Lirceus sp</i>	+	85625	<i>Rheotanytarsus sp</i>	+
08250	<i>Orconectes (Procericambarus) rusticus</i>	+	85821	<i>Tanytarsus glabrescens group sp 7</i>	+
11130	<i>Baetis intercalaris</i>	+	86100	<i>Chrysops sp</i>	+
11670	<i>Procladius viridoculare</i>	+	96930	<i>Laevapex fuscus</i>	+
12200	<i>Isonychia sp</i>	+	97601	<i>Corbicula fluminea</i>	+
13400	<i>Stenacron sp</i>	+	98600	<i>Sphaerium sp</i>	+
13510	<i>Maccaffertium exiguum</i>	+			
13521	<i>Stenonema femoratum</i>	+	No. Quantitative Taxa: 0		Total Taxa: 52
13561	<i>Maccaffertium pulchellum</i>	+	No. Qualitative Taxa: 52		ICI:
16700	<i>Tricorythodes sp</i>	+	Number of Organisms: 0		Qual EPT: 15
17200	<i>Caenis sp</i>	+			
21200	<i>Calopteryx sp</i>	+			
22001	<i>Coenagrionidae</i>	+			
22300	<i>Argia sp</i>	+			
23600	<i>Aeshna sp</i>	+			
26700	<i>Macromia sp</i>	+			
50315	<i>Chimarra obscura</i>	+			
52200	<i>Cheumatopsyche sp</i>	+			
52430	<i>Ceratopsyche morosa group</i>	+			
52530	<i>Hydropsyche depravata group</i>	+			
53501	<i>Hydroptilidae</i>	+			
58505	<i>Helicopsyche borealis</i>	+			
59970	<i>Petrophila sp</i>	+			
63300	<i>Hydroporus sp</i>	+			
65800	<i>Berosus sp</i>	+			
66500	<i>Enochrus sp</i>	+			
68075	<i>Psephenus herricki</i>	+			
68130	<i>Helichus sp</i>	+			
68901	<i>Macronychus glabratus</i>	+			
69400	<i>Stenelmis sp</i>	+			
71300	<i>Limonia sp</i>	+			
74501	<i>Ceratopogonidae</i>	+			
74673	<i>Atrichopogon websteri</i>	+			
77500	<i>Conchapelopia sp</i>	+			
77750	<i>Hayesomyia senata or Thienemannimyia norena</i>	+			
78450	<i>Nilotanytus fimbriatus</i>	+			
78655	<i>Procladius (Holotanytus) sp</i>	+			
80410	<i>Cricotopus (C.) sp</i>	+			
82730	<i>Chironomus (C.) decorus group</i>	+			
82820	<i>Cryptochironomus sp</i>	+			
83040	<i>Dicrotendipes neomodestus</i>	+			
84450	<i>Polypedilum (Uresipedilum) flavum</i>	+			

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: Fourmile Creek

Collection Date: 08/17/2005 River Code: 14-400 RM: 11.00

St. Rt. 177

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01801	<i>Turbellaria</i>	+	85625	<i>Rheotanytarsus sp</i>	30 +
03040	<i>Fredericella sp</i>	+	85821	<i>Tanytarsus glabrescens group sp 7</i>	+
03600	<i>Oligochaeta</i>	8	85840	<i>Tanytarsus sepp</i>	7
04686	<i>Placobdella papillifera</i>	+	87540	<i>Hemerodromia sp</i>	32
08250	<i>Orconectes (Procericambarus) rusticus</i>	+	96900	<i>Ferrissia sp</i>	+
11120	<i>Baetis flavistriga</i>	+	97601	<i>Corbicula fluminea</i>	+
11130	<i>Baetis intercalaris</i>	263 +			
12200	<i>Isonychia sp</i>	266 +	No. Quantitative Taxa: 24		Total Taxa: 50
13400	<i>Stenacron sp</i>	+	No. Qualitative Taxa: 41		ICI: 40
13510	<i>Maccaffertium exiguum</i>	1	Number of Organisms: 2707		Qual EPT: 16
13521	<i>Stenonema femoratum</i>	+			
13561	<i>Maccaffertium pulchellum</i>	153 +			
16700	<i>Tricorythodes sp</i>	19 +			
17200	<i>Caenis sp</i>	8 +			
22300	<i>Argia sp</i>	+			
48410	<i>Corydalus cornutus</i>	3 +			
50315	<i>Chimarra obscura</i>	238 +			
51206	<i>Cyrnellus fraternus</i>	+			
51600	<i>Polycentropus sp</i>	+			
52200	<i>Cheumatopsyche sp</i>	769 +			
52430	<i>Ceratopsyche morosa group</i>	172 +			
53800	<i>Hydroptila sp</i>	+			
59100	<i>Ceraclea sp</i>	+			
59570	<i>Oecetis nocturna</i>	+			
59970	<i>Petrophila sp</i>	+			
66500	<i>Enochrus sp</i>	+			
67500	<i>Laccobius sp</i>	1			
68075	<i>Psephenus herricki</i>	+			
68130	<i>Helichus sp</i>	1 +			
68201	<i>Scirtidae</i>	+			
68901	<i>Macronychus glabratus</i>	1			
69400	<i>Stenelmis sp</i>	25 +			
74673	<i>Atrichopogon websteri</i>	24			
77500	<i>Conchapelopia sp</i>	22 +			
77750	<i>Hayesomyia senata or Thienemannimyia norena</i>	15 +			
78450	<i>Nilotanypus fimbriatus</i>	28			
80370	<i>Corynoneura lobata</i>	+			
82101	<i>Thienemanniella taurocapita</i>	+			
82600	<i>Axarus sp</i>	+			
83040	<i>Dicrotendipes neomodestus</i>	+			
83310	<i>Glyptotendipes (Heynotendipes) amplus</i>	+			
84450	<i>Polypedilum (Uresipedilum) flavum</i>	614 +			
84469	<i>Polypedilum (P.) illinoense group</i>	7			
84490	<i>Polypedilum (Cerobregma) ontario</i>	+			

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: Fourmile Creek
Eaton Rd.

Collection Date: 08/17/2005 River Code: 14-400 RM: 5.40

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01801	<i>Turbellaria</i>	+			
03360	<i>Plumatella sp</i>	+			
04935	<i>Erpobdella punctata punctata</i>	+			
06201	<i>Hyalella azteca</i>	+			
11130	<i>Baetis intercalaris</i>	+			
12200	<i>Isonychia sp</i>	+			
13000	<i>Leucrocuta sp</i>	+			
13100	<i>Nixe sp</i>	+			
13400	<i>Stenacron sp</i>	+			
13510	<i>Maccaffertium exiguum</i>	+			
13521	<i>Stenonema femoratum</i>	+			
13561	<i>Maccaffertium pulchellum</i>	+			
13570	<i>Maccaffertium terminatum</i>	+			
16700	<i>Tricorythodes sp</i>	+			
17200	<i>Caenis sp</i>	+			
18100	<i>Anthopotamus sp</i>	+			
22300	<i>Argia sp</i>	+			
48410	<i>Corydalus cornutus</i>	+			
50315	<i>Chimarra obscura</i>	+			
51600	<i>Polycentropus sp</i>	+			
52200	<i>Cheumatopsyche sp</i>	+			
52430	<i>Ceratopsyche morosa group</i>	+			
52530	<i>Hydropsyche depravata group</i>	+			
58505	<i>Helicopsyche borealis</i>	+			
59150	<i>Ceraclea resurgens group</i>	+			
59970	<i>Petrophila sp</i>	+			
66500	<i>Enochrus sp</i>	+			
67500	<i>Laccobius sp</i>	+			
67800	<i>Tropisternus sp</i>	+			
68075	<i>Psephenus herricki</i>	+			
69400	<i>Stenelmis sp</i>	+			
77750	<i>Hayesomyia senata or Thienemannimyia norena</i>	+			
77800	<i>Helopelopia sp</i>	+			
80410	<i>Cricotopus (C.) sp</i>	+			
82101	<i>Thienemanniella taurocapita</i>	+			
82730	<i>Chironomus (C.) decorus group</i>	+			
83040	<i>Dicrotendipes neomodestus</i>	+			
84450	<i>Polypedilum (Uresipedilum) flavum</i>	+			
84520	<i>Polypedilum (Tripodura) halterale group</i>	+			
84540	<i>Polypedilum (Tripodura) scalaenum group</i>	+			
85625	<i>Rheotanytarsus sp</i>	+			
95100	<i>Physella sp</i>	+			

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: Fourmile Creek
Sevenmile Rd.

Collection Date: 08/17/2005 River Code: 14-400 RM: 0.30

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01801	<i>Turbellaria</i>	+	83300	<i>Glyptotendipes (G.) sp</i>	107 +
03360	<i>Plumatella sp</i>	6 +	83310	<i>Glyptotendipes (Heynotendipes) amplus</i>	53
03600	<i>Oligochaeta</i>	48 +	83820	<i>Microtendipes "caelum" (sensu Simpson & Bode, 1980)</i>	+
06700	<i>Crangonyx sp</i>	+	84300	<i>Phaenopsectra obediens group</i>	+
08250	<i>Orconectes (Procericambarus) rusticus</i>	+	84450	<i>Polypedilum (Uresipedilum) flavum</i>	640
11650	<i>Procloeon sp (w/ hindwing pads)</i>	8	84540	<i>Polypedilum (Tripodura) scalaenum group</i>	+
11670	<i>Procloeon viridoculare</i>	+	85625	<i>Rheotanytarsus sp</i>	373
12200	<i>Isonychia sp</i>	398	85821	<i>Tanytarsus glabrescens group sp 7</i>	1867 +
13000	<i>Leucrocota sp</i>	37 +	87540	<i>Hemerodromia sp</i>	16
13100	<i>Nixe sp</i>	+	95100	<i>Physella sp</i>	+
13400	<i>Stenacron sp</i>	4 +	96900	<i>Ferrissia sp</i>	+
13510	<i>Maccaffertium exiguum</i>	9			
13521	<i>Stenonema femoratum</i>	45 +			
13540	<i>Maccaffertium mediopunctatum</i>	9			
13550	<i>Maccaffertium mexicanum integrum</i>	34			
13561	<i>Maccaffertium pulchellum</i>	355 +			
13570	<i>Maccaffertium terminatum</i>	75 +			
16700	<i>Tricorythodes sp</i>	155 +			
17200	<i>Caenis sp</i>	33 +			
22300	<i>Argia sp</i>	+			
44501	<i>Corixidae</i>	+			
52200	<i>Cheumatopsyche sp</i>	476 +			
52430	<i>Ceratopsyche morosa group</i>	67			
53800	<i>Hydroptila sp</i>	33			
58505	<i>Helicopsyche borealis</i>	+			
59140	<i>Ceraclea maculata</i>	1			
59407	<i>Nectopsyche candida</i>	+			
63900	<i>Laccophilus sp</i>	+			
67500	<i>Laccobius sp</i>	+			
67800	<i>Tropisternus sp</i>	+			
68075	<i>Psephenus herricki</i>	+			
68201	<i>Scirtidae</i>	+			
68601	<i>Ancyronyx variegata</i>	16 +			
69400	<i>Stenelmis sp</i>	2 +			
77120	<i>Ablabesmyia mallochi</i>	+			
77750	<i>Hayesomyia senata or Thienemannimyia norena</i>	320 +			
78450	<i>Nilotanypus fimbriatus</i>	16			
78750	<i>Rheopelopia paramaculipennis</i>	160			
80410	<i>Cricotopus (C.) sp</i>	53			
80430	<i>Cricotopus (C.) tremulus group</i>	320 +			
82101	<i>Thienemanniella taurocapita</i>	16			
82710	<i>Chironomus (C.) sp</i>	+			
82820	<i>Cryptochironomus sp</i>	+			
83040	<i>Dicrotendipes neomodestus</i>	800 +			

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: Little Fourmile Creek

Collection Date: 07/26/2005 River Code: 14-404 RM: 13.50

St. Rt. 177

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01801	<i>Turbellaria</i>	+	80370	<i>Corynoneura lobata</i>	+
04666	<i>Helobdella triserialis</i>	+	81650	<i>Parametriocnemus sp</i>	+
05900	<i>Lirceus sp</i>	+	83840	<i>Microtendipes pedellus group</i>	+
08250	<i>Orconectes (Procericambarus) rusticus</i>	+	84300	<i>Phaenopsectra obediens group</i>	+
08601	<i>Hydrachnidia</i>	+	84450	<i>Polypedilum (Uresipedilum) flavum</i>	+
11020	<i>Acerpenna pygmaea</i>	+	84540	<i>Polypedilum (Tripodura) scalaenum group</i>	+
11120	<i>Baetis flavistriga</i>	+	84750	<i>Stictochironomus sp</i>	+
11125	<i>Pseudocloeon frondale</i>	+	85625	<i>Rheotanytarsus sp</i>	+
11130	<i>Baetis intercalaris</i>	+	87540	<i>Hemerodromia sp</i>	+
11150	<i>Pseudocloeon propinquum</i>	+	95100	<i>Physella sp</i>	+
11645	<i>Procloeon sp</i>	+	95907	<i>Gyraulus (Torquis) parvus</i>	+
11651	<i>Procloeon sp (w/o hindwing pads)</i>	+	96264	<i>Planorbella (Pierosoma) pilsbryi</i>	+
12200	<i>Isonychia sp</i>	+	98600	<i>Sphaerium sp</i>	+
13000	<i>Leucrocuta sp</i>	+			
13400	<i>Stenacron sp</i>	+	No. Quantitative Taxa: 0		Total Taxa: 57
13521	<i>Stenonema femoratum</i>	+	No. Qualitative Taxa: 57		ICI:
13590	<i>Maccaffertium vicarium</i>	+	Number of Organisms: 0		Qual EPT: 23
17200	<i>Caenis sp</i>	+			
21200	<i>Calopteryx sp</i>	+			
22001	<i>Coenagrionidae</i>	+			
23909	<i>Boyeria vinosa</i>	+			
47600	<i>Sialis sp</i>	+			
50301	<i>Chimarra aterrima</i>	+			
50315	<i>Chimarra obscura</i>	+			
52200	<i>Cheumatopsyche sp</i>	+			
52530	<i>Hydropsyche depravata group</i>	+			
53800	<i>Hydroptila sp</i>	+			
58505	<i>Helicopsyche borealis</i>	+			
59310	<i>Mystacides sepulchralis</i>	+			
59410	<i>Nectopsyche diarina</i>	+			
59570	<i>Oecetis nocturna</i>	+			
59728	<i>Triaenodes marginatus</i>	+			
68075	<i>Psephenus herricki</i>	+			
68130	<i>Helichus sp</i>	+			
68601	<i>Ancyronyx variegata</i>	+			
68707	<i>Dubiraphia quadrinotata</i>	+			
68708	<i>Dubiraphia vittata group</i>	+			
69225	<i>Optioservus fastiditus</i>	+			
69420	<i>Stenelmis sexlineata</i>	+			
74100	<i>Simulium sp</i>	+			
74501	<i>Ceratopogonidae</i>	+			
77500	<i>Conchapelopia sp</i>	+			
77750	<i>Hayesomyia senata or Thienemannimyia norena</i>	+			
77800	<i>Helopelopia sp</i>	+			

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: Little Fourmile Creek
Fairhaven Rd.

Collection Date: 08/15/2005 River Code: 14-404 RM: 2.80

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
00401	<i>Spongillidae</i>	+			
02600	<i>Nematomorpha</i>	+			
03600	<i>Oligochaeta</i>	+			
05800	<i>Caecidotea sp</i>	+			
06201	<i>Hyalella azteca</i>	+			
08250	<i>Orconectes (Procericambarus) rusticus</i>	+			
11020	<i>Acerpenna pygmaea</i>	+			
11130	<i>Baetis intercalaris</i>	+			
11651	<i>Procloeon sp (w/o hindwing pads)</i>	+			
12200	<i>Isonychia sp</i>	+			
13400	<i>Stenacron sp</i>	+			
13521	<i>Stenonema femoratum</i>	+			
13540	<i>Maccaffertium mediopunctatum</i>	+			
17200	<i>Caenis sp</i>	+			
22001	<i>Coenagrionidae</i>	+			
24900	<i>Gomphus sp</i>	+			
50315	<i>Chimarra obscura</i>	+			
52200	<i>Cheumatopsyche sp</i>	+			
52430	<i>Ceratopsyche morosa group</i>	+			
57400	<i>Neophylax sp</i>	+			
58505	<i>Helicopsyche borealis</i>	+			
63300	<i>Hydroporus sp</i>	+			
68075	<i>Psephenus herricki</i>	+			
68601	<i>Ancyronyx variegata</i>	+			
68708	<i>Dubiraphia vittata group</i>	+			
68901	<i>Macronychus glabratus</i>	+			
69400	<i>Stenelmis sp</i>	+			
77500	<i>Conchapelopia sp</i>	+			
77750	<i>Hayesomyia senata or Thienemannimyia norena</i>	+			
77800	<i>Helopelopia sp</i>	+			
78450	<i>Nilotanytus fimbriatus</i>	+			
84450	<i>Polypedilum (Uresipedilum) flavum</i>	+			
84540	<i>Polypedilum (Tripodura) scalaenum group</i>	+			
85625	<i>Rheotanytarsus sp</i>	+			
93900	<i>Elimia sp</i>	+			
95100	<i>Physella sp</i>	+			
96264	<i>Planorbella (Pierosoma) pilsbryi</i>	+			
98600	<i>Sphaerium sp</i>	+			

No. Quantitative Taxa: 0	Total Taxa: 38
No. Qualitative Taxa: 38	ICI:
Number of Organisms: 0	Qual EPT: 13

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: East Fork Fourmile Creek

Collection Date: 07/26/2005 River Code: 14-405 RM: 5.20

St. Rt. 732

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01801	<i>Turbellaria</i>	+	83040	<i>Dicrotendipes neomodestus</i>	+
03360	<i>Plumatella sp</i>	+	83820	<i>Microtendipes "caelum" (sensu Simpson & Bode, 1980)</i>	+
04685	<i>Placobdella ornata</i>	+	83840	<i>Microtendipes pedellus group</i>	+
05900	<i>Lirceus sp</i>	+	84210	<i>Paratendipes albimanus or P. duplicatus</i>	+
08270	<i>Orconectes (Rhoadesius) sloanii</i>	+	84300	<i>Phaenopsectra obediens group</i>	+
11120	<i>Baetis flavistriga</i>	+	84450	<i>Polypedilum (Uresipedilum) flavum</i>	+
11130	<i>Baetis intercalaris</i>	+	84470	<i>Polypedilum (P.) illinoense</i>	+
11250	<i>Centroptilum sp (w/o hindwing pads)</i>	+	84480	<i>Polypedilum (P.) laetum group</i>	+
11650	<i>Procloeon sp (w/ hindwing pads)</i>	+	84750	<i>Stictochironomus sp</i>	+
13000	<i>Leucrocuta sp</i>	+	85261	<i>Cladotanytarsus vanderwulpi group Type 1</i>	+
13400	<i>Stenacron sp</i>	+	85625	<i>Rheotanytarsus sp</i>	+
13521	<i>Stenonema femoratum</i>	+	87540	<i>Hemerodromia sp</i>	+
13590	<i>Maccaffertium vicarium</i>	+	93900	<i>Elimia sp</i>	+
22001	<i>Coenagrionidae</i>	+	95100	<i>Physella sp</i>	+
23600	<i>Aeshna sp</i>	+			
23909	<i>Boyeria vinosa</i>	+			
27500	<i>Somatochlora sp</i>	+	No. Quantitative Taxa: 0		Total Taxa: 58
47600	<i>Sialis sp</i>	+	No. Qualitative Taxa: 58		ICI:
50301	<i>Chimarra aterrima</i>	+	Number of Organisms: 0		Qual EPT: 17
50315	<i>Chimarra obscura</i>	+			
51600	<i>Polycentropus sp</i>	+			
52200	<i>Cheumatopsyche sp</i>	+			
52430	<i>Ceratopsyche morosa group</i>	+			
52530	<i>Hydropsyche depravata group</i>	+			
53800	<i>Hydroptila sp</i>	+			
58505	<i>Helicopsyche borealis</i>	+			
59730	<i>Triaenodes melaca</i>	+			
63300	<i>Hydroporus sp</i>	+			
68075	<i>Psephenus herricki</i>	+			
69225	<i>Optioservus fastiditus</i>	+			
69400	<i>Stenelmis sp</i>	+			
71900	<i>Tipula sp</i>	+			
74100	<i>Simulium sp</i>	+			
74501	<i>Ceratopogonidae</i>	+			
77500	<i>Conchapelopia sp</i>	+			
78350	<i>Meropelopia sp</i>	+			
80400	<i>Cricotopus sp</i>	+			
80420	<i>Cricotopus (C.) bicinctus</i>	+			
80430	<i>Cricotopus (C.) tremulus group</i>	+			
81650	<i>Parametriocnemus sp</i>	+			
81825	<i>Rheocricotopus (Psilocricotopus) robacki</i>	+			
82200	<i>Tvetenia bavarica group</i>	+			
82730	<i>Chironomus (C.) decorus group</i>	+			
82820	<i>Cryptochironomus sp</i>	+			

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: East Fork Fourmile Creek

Collection Date: 07/26/2005 River Code: 14-405 RM: 2.40

St. Rt. 177

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
04685	<i>Placobdella ornata</i>	+	83820	<i>Microtendipes "caelum" (sensu Simpson & Bode, 1980)</i>	+
06201	<i>Hyalella azteca</i>	+	83840	<i>Microtendipes pedellus group</i>	+
08250	<i>Orconectes (Procericambarus) rusticus</i>	+	84210	<i>Paratendipes albimanus or P. duplicatus</i>	+
08270	<i>Orconectes (Rhoadesius) sloanii</i>	+	84450	<i>Polypedilum (Uresipedilum) flavum</i>	+
11120	<i>Baetis flavistriga</i>	+	84750	<i>Stictochironomus sp</i>	+
11130	<i>Baetis intercalaris</i>	+	85625	<i>Rheotanytarsus sp</i>	+
11200	<i>Callibaetis sp</i>	+	85800	<i>Tanytarsus sp</i>	+
11250	<i>Centroptilum sp (w/o hindwing pads)</i>	+	87540	<i>Hemerodromia sp</i>	+
11651	<i>Procloeon sp (w/o hindwing pads)</i>	+	93900	<i>Elimia sp</i>	+
12200	<i>Isonychia sp</i>	+	95100	<i>Physella sp</i>	+
13000	<i>Leucrocuta sp</i>	+	96900	<i>Ferrissia sp</i>	+
13400	<i>Stenacron sp</i>	+			
13521	<i>Stenonema femoratum</i>	+			
13561	<i>Maccaffertium pulchellum</i>	+			
13590	<i>Maccaffertium vicarium</i>	+			
17200	<i>Caenis sp</i>	+			
21200	<i>Calopteryx sp</i>	+			
22001	<i>Coenagrionidae</i>	+			
23600	<i>Aeshna sp</i>	+			
23909	<i>Boyeria vinosa</i>	+			
24900	<i>Gomphus sp</i>	+			
48410	<i>Corydalus cornutus</i>	+			
50315	<i>Chimarra obscura</i>	+			
51600	<i>Polycentropus sp</i>	+			
52200	<i>Cheumatopsyche sp</i>	+			
52430	<i>Ceratopsyche morosa group</i>	+			
52530	<i>Hydropsyche depravata group</i>	+			
53800	<i>Hydroptila sp</i>	+			
57400	<i>Neophylax sp</i>	+			
58505	<i>Helicopsyche borealis</i>	+			
59730	<i>Triaenodes melaca</i>	+			
68075	<i>Psephenus herricki</i>	+			
68130	<i>Helichus sp</i>	+			
68601	<i>Ancyronyx variegata</i>	+			
68707	<i>Dubiraphia quadrinotata</i>	+			
68708	<i>Dubiraphia vittata group</i>	+			
68901	<i>Macronychus glabratus</i>	+			
69400	<i>Stenelmis sp</i>	+			
71100	<i>Hexatoma sp</i>	+			
74100	<i>Simulium sp</i>	+			
77120	<i>Ablabesmyia mallochi</i>	+			
77500	<i>Conchapelopia sp</i>	+			
78350	<i>Meropelopia sp</i>	+			
80351	<i>Corynoneura n.sp 1</i>	+			

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: Harris Run (Dixon Branch)

Collection Date: 07/25/2005 River Code: 14-406 RM: 0.30

California School Rd.

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01801	<i>Turbellaria</i>	+	84750	<i>Stictochironomus sp</i>	+
05900	<i>Lirceus sp</i>	+	85500	<i>Paratanytarsus sp</i>	+
06201	<i>Hyalella azteca</i>	+	85615	<i>Rheotanytarsus pellucidus</i>	+
08270	<i>Orconectes (Rhoadesius) sloanii</i>	+	85625	<i>Rheotanytarsus sp</i>	+
08601	<i>Hydrachnidia</i>	+	85800	<i>Tanytarsus sp</i>	+
11130	<i>Baetis intercalaris</i>	+	87540	<i>Hemerodromia sp</i>	+
13000	<i>Leucrocuta sp</i>	+	93900	<i>Elimia sp</i>	+
13400	<i>Stenacron sp</i>	+	95100	<i>Physella sp</i>	+
13521	<i>Stenonema femoratum</i>	+	96900	<i>Ferrissia sp</i>	+
21200	<i>Calopteryx sp</i>	+			
22001	<i>Coenagrionidae</i>	+	No. Quantitative Taxa: 0		Total Taxa: 53
23600	<i>Aeshna sp</i>	+	No. Qualitative Taxa: 53		ICI:
45300	<i>Sigara sp</i>	+	Number of Organisms: 0		Qual EPT: 15
50315	<i>Chimarra obscura</i>	+			
51600	<i>Polycentropus sp</i>	+			
52200	<i>Cheumatopsyche sp</i>	+			
52430	<i>Ceratopsyche morosa group</i>	+			
52530	<i>Hydropsyche depravata group</i>	+			
53800	<i>Hydroptila sp</i>	+			
57400	<i>Neophylax sp</i>	+			
57900	<i>Pycnopsyche sp</i>	+			
58505	<i>Helicopsyche borealis</i>	+			
59300	<i>Mystacides sp</i>	+			
59730	<i>Trienodes melaca</i>	+			
66500	<i>Enochrus sp</i>	+			
68075	<i>Psephenus herricki</i>	+			
68707	<i>Dubiraphia quadrinotata</i>	+			
68708	<i>Dubiraphia vittata group</i>	+			
69225	<i>Optioservus fastiditus</i>	+			
69400	<i>Stenelmis sp</i>	+			
70600	<i>Antocha sp</i>	+			
72340	<i>Dixella sp</i>	+			
74501	<i>Ceratopogonidae</i>	+			
77500	<i>Conchapelopia sp</i>	+			
77800	<i>Helopelopia sp</i>	+			
78450	<i>Nilotanytus fimbriatus</i>	+			
81270	<i>Nanocladius (N.) spinipennis</i>	+			
81825	<i>Rheocricotopus (Psilocricotopus) robacki</i>	+			
82141	<i>Thienemanniella xena</i>	+			
83820	<i>Microtendipes "caelum" (sensu Simpson & Bode, 1980)</i>	+			
83840	<i>Microtendipes pedellus group</i>	+			
84210	<i>Paratendipes albimanus</i> or <i>P. duplicatus</i>	+			
84450	<i>Polypedilum (Uresipedilum) flavum</i>	+			
84470	<i>Polypedilum (P.) illinoense</i>	+			

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: Harkers Run
Somerville Rd.

Collection Date: 07/27/2005 River Code: 14-408 RM: 2.40

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01801	<i>Turbellaria</i>	+			
03360	<i>Plumatella sp</i>	+			
05900	<i>Lirceus sp</i>	+			
08270	<i>Orconectes (Rhoadesius) sloanii</i>	+			
08601	<i>Hydrachnidia</i>	+			
11120	<i>Baetis flavistriga</i>	+			
13521	<i>Stenonema femoratum</i>	+			
15000	<i>Paraleptophlebia sp</i>	+			
23600	<i>Aeshna sp</i>	+			
53501	<i>Hydroptilidae</i>	+			
57400	<i>Neophylax sp</i>	+			
59310	<i>Mystacides sepulchralis</i>	+			
63300	<i>Hydroporus sp</i>	+			
66500	<i>Enochrus sp</i>	+			
68025	<i>Ectopria sp</i>	+			
68075	<i>Psephenus herricki</i>	+			
69225	<i>Optioservus fastiditus</i>	+			
69400	<i>Stenelmis sp</i>	+			
71800	<i>Pseudolimnophila sp</i>	+			
71900	<i>Tipula sp</i>	+			
71910	<i>Tipula abdominalis</i>	+			
74100	<i>Simulium sp</i>	+			
74501	<i>Ceratopogonidae</i>	+			
77500	<i>Conchapelopia sp</i>	+			
83003	<i>Dicrotendipes fumidus</i>	+			
83040	<i>Dicrotendipes neomodestus</i>	+			
83840	<i>Microtendipes pedellus group</i>	+			
84450	<i>Polypedilum (Uresipedilum) flavum</i>	+			
85625	<i>Rheotanytarsus sp</i>	+			
85800	<i>Tanytarsus sp</i>	+			
94400	<i>Fossaria sp</i>	+			
95100	<i>Physella sp</i>	+			

No. Quantitative Taxa: 0	Total Taxa: 32
No. Qualitative Taxa: 32	ICI:
Number of Organisms: 0	Qual EPT: 6

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: Elams Run

Collection Date: 07/27/2005 River Code: 14-423 RM: 0.20

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01801	<i>Turbellaria</i>	+	85800	<i>Tanytarsus sp</i>	+
05900	<i>Lirceus sp</i>	+	95100	<i>Physella sp</i>	+
06904	<i>Synurella dentata</i>	+	98200	<i>Pisidium sp</i>	+
07875	<i>Cambarus (Tubericambarus) sp A</i>	+			
08270	<i>Orconectes (Rhoadesius) sloanii</i>	+	No. Quantitative Taxa: 0		Total Taxa: 47
11120	<i>Baetis flavistriga</i>	+	No. Qualitative Taxa: 47		ICI:
11130	<i>Baetis intercalaris</i>	+	Number of Organisms: 0		Qual EPT: 12
13400	<i>Stenacron sp</i>	+			
13521	<i>Stenonema femoratum</i>	+			
17200	<i>Caenis sp</i>	+			
21001	<i>Calopterygidae</i>	+			
22001	<i>Coenagrionidae</i>	+			
23600	<i>Aeshna sp</i>	+			
23909	<i>Boyeria vinosa</i>	+			
27500	<i>Somatochlora sp</i>	+			
51600	<i>Polycentropus sp</i>	+			
52200	<i>Cheumatopsyche sp</i>	+			
52315	<i>Diplectrona modesta</i>	+			
52530	<i>Hydropsyche depravata group</i>	+			
53800	<i>Hydroptila sp</i>	+			
58505	<i>Helicopsyche borealis</i>	+			
59310	<i>Mystacides sepulchralis</i>	+			
63300	<i>Hydroporus sp</i>	+			
68075	<i>Psephenus herricki</i>	+			
68130	<i>Helichus sp</i>	+			
68707	<i>Dubiraphia quadrinotata</i>	+			
69225	<i>Optioservus fastiditus</i>	+			
69400	<i>Stenelmis sp</i>	+			
71300	<i>Limonia sp</i>	+			
71800	<i>Pseudolimnophila sp</i>	+			
71900	<i>Tipula sp</i>	+			
74100	<i>Simulium sp</i>	+			
77500	<i>Conchapelopia sp</i>	+			
78350	<i>Meropelopia sp</i>	+			
83840	<i>Microtendipes pedellus group</i>	+			
84210	<i>Paratendipes albimanus</i> or <i>P. duplicatus</i>	+			
84440	<i>Polypedilum (Uresipedilum) aviceps</i>	+			
84450	<i>Polypedilum (Uresipedilum) flavum</i>	+			
84470	<i>Polypedilum (P.) illinoense</i>	+			
84475	<i>Polypedilum (P.) ophioides</i>	+			
84750	<i>Stictochironomus sp</i>	+			
85261	<i>Cladotanytarsus vanderwulpi group Type 1</i>	+			
85500	<i>Paratanytarsus sp</i>	+			
85625	<i>Rheotanytarsus sp</i>	+			

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: Darrs Run
 St. Rt. 73

Collection Date: 09/12/2005 River Code: 14-424 RM: 2.10

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01801	<i>Turbellaria</i>	+			
03360	<i>Plumatella sp</i>	+			
04686	<i>Placobdella papillifera</i>	+			
04935	<i>Erpobdella punctata punctata</i>	+			
05900	<i>Lirceus sp</i>	+			
06201	<i>Hyalella azteca</i>	+			
08250	<i>Orconectes (Procericambarus) rusticus</i>	+			
11130	<i>Baetis intercalaris</i>	+			
12200	<i>Isonychia sp</i>	+			
13400	<i>Stenacron sp</i>	+			
13521	<i>Stenonema femoratum</i>	+			
17200	<i>Caenis sp</i>	+			
22001	<i>Coenagrionidae</i>	+			
22300	<i>Argia sp</i>	+			
34130	<i>Acroneuria frisoni</i>	+			
50315	<i>Chimarra obscura</i>	+			
52200	<i>Cheumatopsyche sp</i>	+			
58505	<i>Helicopsyche borealis</i>	+			
60900	<i>Peltodytes sp</i>	+			
63300	<i>Hydroporus sp</i>	+			
68075	<i>Psephenus herricki</i>	+			
68708	<i>Dubiraphia vittata group</i>	+			
69400	<i>Stenelmis sp</i>	+			
71100	<i>Hexatoma sp</i>	+			
71300	<i>Limonia sp</i>	+			
77500	<i>Conchapelopia sp</i>	+			
78401	<i>Natarsia species A (sensu Roback, 1978)</i>	+			
84210	<i>Paratendipes albimanus</i> or <i>P. duplicatus</i>	+			
84450	<i>Polypedilum (Uresipedilum) flavum</i>	+			
84470	<i>Polypedilum (P.) illinoense</i>	+			
84750	<i>Stictochironomus sp</i>	+			
85821	<i>Tanytarsus glabrescens group sp 7</i>	+			
89501	<i>Ephydridae</i>	+			

No. Quantitative Taxa: 0	Total Taxa: 33
No. Qualitative Taxa: 33	ICI:
Number of Organisms: 0	Qual EPT: 9

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: Fleisch Run

Collection Date: 07/26/2005 River Code: 14-426 RM: 0.70

Paint Creek Rd.

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
03600	<i>Oligochaeta</i>	+	82200	<i>Tvetenia bavarica group</i>	+
04664	<i>Helobdella stagnalis</i>	+	82820	<i>Cryptochironomus sp</i>	+
04666	<i>Helobdella triserialis</i>	+	84118	<i>Paracladopelma undine</i>	+
04935	<i>Erpobdella punctata punctata</i>	+	84315	<i>Phaenopsectra flavipes</i>	+
05900	<i>Lirceus sp</i>	+	84440	<i>Polypedilum (Uresipedilum) aviceps</i>	+
06700	<i>Crangonyx sp</i>	+	84450	<i>Polypedilum (Uresipedilum) flavum</i>	+
07701	<i>Cambaridae</i>	+	84700	<i>Stenochironomus sp</i>	+
07830	<i>Cambarus (Cambarus) ortmanni</i>	+	85615	<i>Rheotanytarsus pellucidus</i>	+
11020	<i>Acerpenna pygmaea</i>	+	85625	<i>Rheotanytarsus sp</i>	+
11120	<i>Baetis flavistriga</i>	+	85800	<i>Tanytarsus sp</i>	+
11130	<i>Baetis intercalaris</i>	+	86200	<i>Tabanus sp</i>	+
13000	<i>Leucrocuta sp</i>	+	95100	<i>Physella sp</i>	+
13400	<i>Stenacron sp</i>	+	96264	<i>Planorbella (Pierosoma) pilsbryi</i>	+
13521	<i>Stenonema femoratum</i>	+	98200	<i>Pisidium sp</i>	+
17200	<i>Caenis sp</i>	+			
18750	<i>Hexagenia limbata</i>	+	No. Quantitative Taxa: 0		Total Taxa: 58
23600	<i>Aeshna sp</i>	+	No. Qualitative Taxa: 58		ICI:
23909	<i>Boyeria vinosa</i>	+	Number of Organisms: 0		Qual EPT: 17
43205	<i>Nepa apiculata</i>	+			
45300	<i>Sigara sp</i>	+			
52200	<i>Cheumatopsyche sp</i>	+			
52430	<i>Ceratopsyche morosa group</i>	+			
52530	<i>Hydropsyche depravata group</i>	+			
53800	<i>Hydroptila sp</i>	+			
57400	<i>Neophylax sp</i>	+			
58505	<i>Helicopsyche borealis</i>	+			
59410	<i>Nectopsyche diarina</i>	+			
59570	<i>Oecetis nocturna</i>	+			
59730	<i>Triaenodes melaca</i>	+			
63300	<i>Hydroporus sp</i>	+			
68130	<i>Helichus sp</i>	+			
68707	<i>Dubiraphia quadrinotata</i>	+			
68708	<i>Dubiraphia vittata group</i>	+			
69210	<i>Optioservus ampliatus</i>	+			
69225	<i>Optioservus fastiditus</i>	+			
69400	<i>Stenelmis sp</i>	+			
71910	<i>Tipula abdominalis</i>	+			
74100	<i>Simulium sp</i>	+			
77500	<i>Conchapelopia sp</i>	+			
77800	<i>Helopelopia sp</i>	+			
78655	<i>Procladius (Holotanypus) sp</i>	+			
80420	<i>Cricotopus (C.) bicinctus</i>	+			
81825	<i>Rheocricotopus (Psilocricotopus) robacki</i>	+			
82141	<i>Thienemanniella xena</i>	+			

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: Trib. to Fourmile Creek (RM 23.57)

Collection Date: 07/27/2005 River Code: 14-427 RM: 0.60

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01320	<i>Hydra sp</i>	+	84450	<i>Polypedilum (Uresipedilum) flavum</i>	+
01801	<i>Turbellaria</i>	+	84750	<i>Stictochironomus sp</i>	+
03600	<i>Oligochaeta</i>	+	84888	<i>Xenochironomus xenolabis</i>	+
04935	<i>Erpobdella punctata punctata</i>	+	85500	<i>Paratanytarsus sp</i>	+
05900	<i>Lirceus sp</i>	+	85625	<i>Rheotanytarsus sp</i>	+
06201	<i>Hyalella azteca</i>	+	85720	<i>Stempellinella fimbriata</i>	+
08250	<i>Orconectes (Procericambarus) rusticus</i>	+	85800	<i>Tanytarsus sp</i>	+
08601	<i>Hydrachnidia</i>	+	85821	<i>Tanytarsus glabrescens group sp 7</i>	+
11120	<i>Baetis flavistriga</i>	+	94400	<i>Fossaria sp</i>	+
11130	<i>Baetis intercalaris</i>	+	95100	<i>Physella sp</i>	+
13000	<i>Leucrocuta sp</i>	+			
13400	<i>Stenacron sp</i>	+	No. Quantitative Taxa: 0		Total Taxa: 54
13521	<i>Stenonema femoratum</i>	+	No. Qualitative Taxa: 54		ICI:
13590	<i>Maccaffertium vicarium</i>	+	Number of Organisms: 0		Qual EPT: 15
17200	<i>Caenis sp</i>	+			
22001	<i>Coenagrionidae</i>	+			
47600	<i>Sialis sp</i>	+			
48620	<i>Nigronia serricornis</i>	+			
50301	<i>Chimarra aterrima</i>	+			
51600	<i>Polycentropus sp</i>	+			
52200	<i>Cheumatopsyche sp</i>	+			
52430	<i>Ceratopsyche morosa group</i>	+			
52530	<i>Hydropsyche depravata group</i>	+			
58505	<i>Helicopsyche borealis</i>	+			
59300	<i>Mystacides sp</i>	+			
59730	<i>Triaenodes melaca</i>	+			
60800	<i>Halipus sp</i>	+			
68075	<i>Psephenus herricki</i>	+			
68130	<i>Helichus sp</i>	+			
68201	<i>Scirtidae</i>	+			
68707	<i>Dubiraphia quadrinotata</i>	+			
68708	<i>Dubiraphia vittata group</i>	+			
69400	<i>Stenelmis sp</i>	+			
73601	<i>Simuliidae</i>	+			
74501	<i>Ceratopogonidae</i>	+			
77120	<i>Ablabesmyia mallochi</i>	+			
77500	<i>Conchapelopia sp</i>	+			
80351	<i>Corynoneura n.sp 1</i>	+			
80370	<i>Corynoneura lobata</i>	+			
81650	<i>Parametriocnemus sp</i>	+			
81825	<i>Rheocricotopus (Psilocricotopus) robacki</i>	+			
82820	<i>Cryptochironomus sp</i>	+			
83840	<i>Microtendipes pedellus group</i>	+			
84210	<i>Paratendipes albimanus or P. duplicatus</i>	+			

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: Stony Run
St. Rt. 177

Collection Date: 09/12/2005 River Code: 14-432 RM: 0.30

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01801	<i>Turbellaria</i>	+			
03360	<i>Plumatella sp</i>	+			
05900	<i>Lirceus sp</i>	+			
08250	<i>Orconectes (Procericambarus) rusticus</i>	+			
13400	<i>Stenacron sp</i>	+			
13521	<i>Stenonema femoratum</i>	+			
57400	<i>Neophylax sp</i>	+			
58505	<i>Helicopsyche borealis</i>	+			
68075	<i>Psephenus herricki</i>	+			
69400	<i>Stenelmis sp</i>	+			
77120	<i>Ablabesmyia mallochi</i>	+			
84210	<i>Paratendipes albimanus</i> or <i>P. duplicatus</i>	+			
84750	<i>Stictochironomus sp</i>	+			

No. Quantitative Taxa: 0	Total Taxa: 13
No. Qualitative Taxa: 13	ICI:
Number of Organisms: 0	Qual EPT: 4

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: Collins Creek
 St. Rt. 22

Collection Date: 09/12/2005 River Code: 14-433 RM: 0.60

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
00401	<i>Spongillidae</i>	+			
01801	<i>Turbellaria</i>	+			
03600	<i>Oligochaeta</i>	+			
04664	<i>Helobdella stagnalis</i>	+			
05900	<i>Lirceus sp</i>	+			
08270	<i>Orconectes (Rhoadesius) sloanii</i>	+			
11120	<i>Baetis flavistriga</i>	+			
11130	<i>Baetis intercalaris</i>	+			
13521	<i>Stenonema femoratum</i>	+			
21200	<i>Calopteryx sp</i>	+			
22300	<i>Argia sp</i>	+			
51600	<i>Polycentropus sp</i>	+			
52200	<i>Cheumatopsyche sp</i>	+			
52530	<i>Hydropsyche depravata group</i>	+			
53800	<i>Hydroptila sp</i>	+			
68075	<i>Psephenus herricki</i>	+			
69400	<i>Stenelmis sp</i>	+			
71300	<i>Limonia sp</i>	+			
74100	<i>Simulium sp</i>	+			
77120	<i>Ablabesmyia mallochi</i>	+			
77500	<i>Conchapelopia sp</i>	+			
82101	<i>Thienemanniella taurocapita</i>	+			
83003	<i>Dicrotendipes fumidus</i>	+			
83040	<i>Dicrotendipes neomodestus</i>	+			
84210	<i>Paratendipes albimanus</i> or <i>P. duplicatus</i>	+			
84450	<i>Polypedilum (Uresipedilum) flavum</i>	+			
84470	<i>Polypedilum (P.) illinoense</i>	+			
85625	<i>Rheotanytarsus sp</i>	+			
87400	<i>Stratiomys sp</i>	+			

No. Quantitative Taxa: 0	Total Taxa: 29
No. Qualitative Taxa: 29	ICI:
Number of Organisms: 0	Qual EPT: 7

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: Trib. to Fourmile Creek (23.57/0.25)
 Loop Rd.

Collection Date: 07/27/2005 River Code: 14-434 RM: 0.90

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
05900	<i>Lirceus sp</i>	+	83840	<i>Microtendipes pedellus group</i>	+
06904	<i>Synurella dentata</i>	+	84210	<i>Paratendipes albimanus</i> or <i>P. duplicatus</i>	+
08270	<i>Orconectes (Rhoadesius) sloanii</i>	+	84450	<i>Polypedilum (Uresipedilum) flavum</i>	+
11120	<i>Baetis flavistriga</i>	+	84470	<i>Polypedilum (P.) illinoense</i>	+
11130	<i>Baetis intercalaris</i>	+	84475	<i>Polypedilum (P.) ophioides</i>	+
11250	<i>Centroptilum sp (w/o hindwing pads)</i>	+	84750	<i>Stictochironomus sp</i>	+
11430	<i>Dipheter hageni</i>	+	85625	<i>Rheotanytarsus sp</i>	+
13521	<i>Stenonema femoratum</i>	+	85720	<i>Stempellinella fimbriata</i>	+
15000	<i>Paraleptophlebia sp</i>	+	95100	<i>Physella sp</i>	+
17200	<i>Caenis sp</i>	+			
23909	<i>Boyeria vinosa</i>	+	No. Quantitative Taxa: 0		Total Taxa: 53
50301	<i>Chimarra aterrima</i>	+	No. Qualitative Taxa: 53		ICI:
51600	<i>Polycentropus sp</i>	+	Number of Organisms: 0		Qual EPT: 16
52200	<i>Cheumatopsyche sp</i>	+			
52315	<i>Diplectrona modesta</i>	+			
52430	<i>Ceratopsyche morosa group</i>	+			
52530	<i>Hydropsyche depravata group</i>	+			
53800	<i>Hydroptila sp</i>	+			
57400	<i>Neophylax sp</i>	+			
58505	<i>Helicopsyche borealis</i>	+			
63300	<i>Hydroporus sp</i>	+			
66200	<i>Cymbiodyta sp</i>	+			
67800	<i>Tropisternus sp</i>	+			
68075	<i>Psephenus herricki</i>	+			
68130	<i>Helichus sp</i>	+			
68708	<i>Dubiraphia vittata group</i>	+			
69225	<i>Optioservus fastiditus</i>	+			
69400	<i>Stenelmis sp</i>	+			
70600	<i>Antocha sp</i>	+			
71300	<i>Limonia sp</i>	+			
71900	<i>Tipula sp</i>	+			
71910	<i>Tipula abdominalis</i>	+			
74100	<i>Simulium sp</i>	+			
74501	<i>Ceratopogonidae</i>	+			
77500	<i>Conchapelopia sp</i>	+			
77750	<i>Hayesomyia senata</i> or <i>Thienemannimyia norena</i>	+			
77800	<i>Helopelopia sp</i>	+			
79720	<i>Diamesa sp</i>	+			
80420	<i>Cricotopus (C.) bicinctus</i>	+			
81690	<i>Paratrichocladius sp</i>	+			
81825	<i>Rheocricotopus (Psilocricotopus) robacki</i>	+			
82141	<i>Thienemanniella xena</i>	+			
82200	<i>Tvetenia bavarica group</i>	+			
82820	<i>Cryptochironomus sp</i>	+			

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: Indian Creek

Collection Date: 08/18/2005 River Code: 14-010 RM: 23.90

Fairfield Rd.

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01801	<i>Turbellaria</i>	+		<i>Bode, 1980)</i>	
03360	<i>Plumatella sp</i>	+	84450	<i>Polypedilum (Uresipedilum) flavum</i>	+
06700	<i>Crangonyx sp</i>	+	84460	<i>Polypedilum (P.) fallax group</i>	+
08601	<i>Hydrachnidia</i>	+	84470	<i>Polypedilum (P.) illinoense</i>	+
11020	<i>Acerpenna pygmaea</i>	+	84540	<i>Polypedilum (Tripodura) scalaenum group</i>	+
11130	<i>Baetis intercalaris</i>	+	84750	<i>Stictochironomus sp</i>	+
11650	<i>Procloeon sp (w/ hindwing pads)</i>	+	84960	<i>Pseudochironomus sp</i>	+
12200	<i>Isonychia sp</i>	+	85625	<i>Rheotanytarsus sp</i>	+
13400	<i>Stenacron sp</i>	+	85821	<i>Tanytarsus glabrescens group sp 7</i>	+
13510	<i>Maccaffertium exiguum</i>	+	87540	<i>Hemerodromia sp</i>	+
13521	<i>Stenonema femoratum</i>	+	95100	<i>Physella sp</i>	+
13540	<i>Maccaffertium mediopunctatum</i>	+			
13561	<i>Maccaffertium pulchellum</i>	+	No. Quantitative Taxa: 0		Total Taxa: 54
13570	<i>Maccaffertium terminatum</i>	+	No. Qualitative Taxa: 54		ICI:
16700	<i>Tricorythodes sp</i>	+	Number of Organisms: 0		Qual EPT: 18
17200	<i>Caenis sp</i>	+			
22001	<i>Coenagrionidae</i>	+			
22300	<i>Argia sp</i>	+			
45100	<i>Palmacorixa sp</i>	+			
47600	<i>Sialis sp</i>	+			
48410	<i>Corydalis cornutus</i>	+			
50315	<i>Chimarra obscura</i>	+			
51400	<i>Nyctiophylax sp</i>	+			
51600	<i>Polycentropus sp</i>	+			
52200	<i>Cheumatopsyche sp</i>	+			
52430	<i>Ceratopsyche morosa group</i>	+			
58505	<i>Helicopsyche borealis</i>	+			
59970	<i>Petrophila sp</i>	+			
67500	<i>Laccobius sp</i>	+			
67800	<i>Tropisternus sp</i>	+			
68075	<i>Psephenus herricki</i>	+			
68130	<i>Helichus sp</i>	+			
68201	<i>Scirtidae</i>	+			
68601	<i>Ancyronyx variegata</i>	+			
68708	<i>Dubiraphia vittata group</i>	+			
68901	<i>Macronychus glabratus</i>	+			
69400	<i>Stenelmis sp</i>	+			
72700	<i>Anopheles sp</i>	+			
77120	<i>Ablabesmyia mallochi</i>	+			
77500	<i>Conchapelopia sp</i>	+			
77750	<i>Hayesomyia senata or Thienemannimyia norena</i>	+			
77800	<i>Helopelopia sp</i>	+			
82141	<i>Thienemanniella xena</i>	+			
83820	<i>Microtendipes "caelum" (sensu Simpson &</i>	+			

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: Indian Creek

Collection Date: 08/18/2005 River Code: 14-010 RM: 17.80

Indian Creek Rd. (south crossing)

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01320	<i>Hydra sp</i>	22	68075	<i>Psephenus herricki</i>	+
01801	<i>Turbellaria</i>	65 +	68130	<i>Helichus sp</i>	+
03360	<i>Plumatella sp</i>	+	68601	<i>Ancyronyx variegata</i>	+
03600	<i>Oligochaeta</i>	24	68708	<i>Dubiraphia vittata group</i>	+
05900	<i>Lirceus sp</i>	+	68901	<i>Macronychus glabratus</i>	2 +
06201	<i>Hyalella azteca</i>	+	69400	<i>Stenelmis sp</i>	+
08601	<i>Hydrachnidia</i>	+	71300	<i>Limonia sp</i>	+
11014	<i>Acentrella turbida</i>	+	71900	<i>Tipula sp</i>	+
11020	<i>Acerpenna pygmaea</i>	10	72700	<i>Anopheles sp</i>	+
11120	<i>Baetis flavistriga</i>	8 +	74501	<i>Ceratopogonidae</i>	8
11130	<i>Baetis intercalaris</i>	+	74650	<i>Atrichopogon sp</i>	8
11200	<i>Callibaetis sp</i>	+	77120	<i>Ablabesmyia mallochii</i>	14 +
11650	<i>Procloeon sp (w/ hindwing pads)</i>	5	77500	<i>Conchapelopia sp</i>	84
11651	<i>Procloeon sp (w/o hindwing pads)</i>	+	77750	<i>Hayesomyia senata or Thienemannimyia norena</i>	42 +
12200	<i>Isonychia sp</i>	23 +	77800	<i>Helopelopia sp</i>	+
13000	<i>Leucrocuta sp</i>	13	78450	<i>Nilotanytus fimbriatus</i>	70
13400	<i>Stenacron sp</i>	13 +	80351	<i>Corynoneura n.sp 1</i>	8
13521	<i>Stenonema femoratum</i>	3 +	80370	<i>Corynoneura lobata</i>	244
13540	<i>Maccaffertium mediopunctatum</i>	7 +	80420	<i>Cricotopus (C.) bicinctus</i>	14
13561	<i>Maccaffertium pulchellum</i>	236 +	81231	<i>Nanocladius (N.) crassicornus or N. (N.) "rectinervis"</i>	28
16700	<i>Tricorythodes sp</i>	6 +	81250	<i>Nanocladius (N.) minimus</i>	+
17200	<i>Caenis sp</i>	+	82141	<i>Thienemanniella xena</i>	14
21200	<i>Calopteryx sp</i>	+	82700	<i>Chironomus sp</i>	+
21300	<i>Hetaerina sp</i>	+	82820	<i>Cryptochironomus sp</i>	+
22001	<i>Coenagrionidae</i>	+	83040	<i>Dicrotendipes neomodestus</i>	14 +
22300	<i>Argia sp</i>	1 +	83820	<i>Microtendipes "caelum" (sensu Simpson & Bode, 1980)</i>	+
23804	<i>Basiaeschna janata</i>	+	84450	<i>Polypedilum (Uresipedilum) flavum</i>	28 +
23909	<i>Boyeria vinosa</i>	+	84470	<i>Polypedilum (P.) illinoense</i>	+
48410	<i>Corydalus cornutus</i>	1 +	84540	<i>Polypedilum (Tripodura) scalaenum group</i>	+
50315	<i>Chimarra obscura</i>	3 +	84612	<i>Saetheria tylus</i>	+
51400	<i>Nyctiophylax sp</i>	+	84750	<i>Stictochironomus sp</i>	+
51600	<i>Polycentropus sp</i>	+	85615	<i>Rheotanytarsus pellucidus</i>	28 +
52200	<i>Cheumatopsyche sp</i>	10 +	85625	<i>Rheotanytarsus sp</i>	710 +
52430	<i>Ceratopsyche morosa group</i>	1 +	85752	<i>Sublettea coffmani</i>	14
52540	<i>Hydropsyche dicantha</i>	+	85821	<i>Tanytarsus glabrescens group sp 7</i>	334 +
53800	<i>Hydroptila sp</i>	34 +	86100	<i>Chrysops sp</i>	+
58505	<i>Helicopsyche borealis</i>	1 +	87540	<i>Hemerodromia sp</i>	159 +
59140	<i>Ceraclea maculata</i>	+	95100	<i>Physella sp</i>	+
59580	<i>Oecetis persimilis</i>	+	96900	<i>Ferrissia sp</i>	+
59970	<i>Petrophila sp</i>	+	98600	<i>Sphaerium sp</i>	+
60900	<i>Peltodytes sp</i>	+			
65800	<i>Berosus sp</i>	+			
67500	<i>Laccobius sp</i>	+			
67800	<i>Tropisternus sp</i>	+			

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Collection Date: 08/18/2005 River Code: 14-010 RM: 17.80

Site: Indian Creek
Indian Creek Rd. (south crossing)

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
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No. Quantitative Taxa: 39	Total Taxa: 84
No. Qualitative Taxa: 69	ICI: 48
Number of Organisms: 2309	Qual EPT: 22

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: Indian Creek

Collection Date: 08/18/2005 River Code: 14-010 RM: 9.70

adj. Reily-Millville Rd.

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
03360	<i>Plumatella sp</i>	+	80420	<i>Cricotopus (C.) bicinctus</i>	+
03600	<i>Oligochaeta</i>	4 +	80427	<i>Cricotopus (C.) politus</i>	+
08250	<i>Orconectes (Procericambarus) rusticus</i>	+	80430	<i>Cricotopus (C.) tremulus group</i>	5
11020	<i>Acerpenna pygmaea</i>	1	81250	<i>Nanocladius (N.) minimus</i>	11
11130	<i>Baetis intercalaris</i>	+	82600	<i>Axarus sp</i>	+
11625	<i>Paracloeodes sp 3</i>	1	82730	<i>Chironomus (C.) decorus group</i>	5
11651	<i>Procloeon sp (w/o hindwing pads)</i>	14	82820	<i>Cryptochironomus sp</i>	5
12200	<i>Isonychia sp</i>	32 +	83040	<i>Dicrotendipes neomodestus</i>	38
13000	<i>Leucrocuta sp</i>	6 +	83820	<i>Microtendipes "caelum" (sensu Simpson & Bode, 1980)</i>	5
13400	<i>Stenacron sp</i>	41 +	84450	<i>Polypedilum (Uresipedilum) flavum</i>	5 +
13521	<i>Stenonema femoratum</i>	122 +	84460	<i>Polypedilum (P.) fallax group</i>	11
13540	<i>Maccaffertium mediopunctatum</i>	+	84470	<i>Polypedilum (P.) illinoense</i>	5
13561	<i>Maccaffertium pulchellum</i>	192 +	84520	<i>Polypedilum (Tripodura) halterale group</i>	5
16700	<i>Tricorythodes sp</i>	108 +	84540	<i>Polypedilum (Tripodura) scalaenum group</i>	38
17200	<i>Caenis sp</i>	114 +	84750	<i>Stictochironomus sp</i>	+
18600	<i>Ephemera sp</i>	1	85625	<i>Rheotanytarsus sp</i>	16 +
22001	<i>Coenagrionidae</i>	+	85720	<i>Stempellinella fimbriata</i>	5
22300	<i>Argia sp</i>	3 +	85821	<i>Tanytarsus glabrescens group sp 7</i>	204 +
23804	<i>Basiaeschna janata</i>	+	85840	<i>Tanytarsus sepp</i>	5
48410	<i>Corydalus cornutus</i>	+	87540	<i>Hemerodromia sp</i>	16 +
50315	<i>Chimarra obscura</i>	+	94400	<i>Fossaria sp</i>	1
51600	<i>Polycentropus sp</i>	+	95100	<i>Physella sp</i>	4 +
52200	<i>Cheumatopsyche sp</i>	24 +	98600	<i>Sphaerium sp</i>	+
52430	<i>Ceratopsyche morosa group</i>	2 +			
53501	<i>Hydroptilidae</i>	+			
58505	<i>Helicopsyche borealis</i>	+	No. Quantitative Taxa: 44		Total Taxa: 67
59970	<i>Petrophila sp</i>	+	No. Qualitative Taxa: 43		ICI: 52
60900	<i>Peltodytes sp</i>	+	Number of Organisms: 1267		Qual EPT: 15
63300	<i>Hydroporus sp</i>	+			
66500	<i>Enochrus sp</i>	6			
68075	<i>Psephenus herricki</i>	+			
68130	<i>Helichus sp</i>	+			
68708	<i>Dubiraphia vittata group</i>	+			
68901	<i>Macronychus glabratus</i>	6 +			
69400	<i>Stenelmis sp</i>	1 +			
71300	<i>Limonia sp</i>	+			
74501	<i>Ceratopogonidae</i>	4			
77120	<i>Ablabesmyia mallochi</i>	5			
77500	<i>Conchapelopia sp</i>	21			
77750	<i>Hayesomyia senata or Thienemannimyia norena</i>	97			
77800	<i>Helopelopia sp</i>	16 +			
78450	<i>Nilotanypus fimbriatus</i>	11 +			
80370	<i>Corynoneura lobata</i>	40			
80410	<i>Cricotopus (C.) sp</i>	11			

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: Indian Creek

Collection Date: 08/19/2005 River Code: 14-010 RM: 6.90

upst. Queen Acres WWTP

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01320	<i>Hydra sp</i>	12	82820	<i>Cryptochironomus sp</i>	4
01801	<i>Turbellaria</i>	1 +	83040	<i>Dicrotendipes neomodestus</i>	7 +
03360	<i>Plumatella sp</i>	15 +	83310	<i>Glyptotendipes (Heynotendipes) amplus</i>	17
03600	<i>Oligochaeta</i>	9	83820	<i>Microtendipes "caelum" (sensu Simpson & Bode, 1980)</i>	2 +
11020	<i>Acerpenna pygmaea</i>	20	84060	<i>Parachironomus pectinatellae</i>	20
11130	<i>Baetis intercalaris</i>	1 +	84450	<i>Polypedilum (Uresipedilum) flavum</i>	87 +
11650	<i>Procloeon sp (w/ hindwing pads)</i>	2	84460	<i>Polypedilum (P.) fallax group</i>	2
12200	<i>Isonychia sp</i>	56 +	84470	<i>Polypedilum (P.) illinoense</i>	37 +
13000	<i>Leucrocuta sp</i>	1	84540	<i>Polypedilum (Tripodura) scalaenum group</i>	24
13400	<i>Stenacron sp</i>	6 +	84750	<i>Stictochironomus sp</i>	+
13521	<i>Stenonema femoratum</i>	7 +	85625	<i>Rheotanytarsus sp</i>	59 +
13540	<i>Maccaffertium mediopunctatum</i>	6 +	85800	<i>Tanytarsus sp</i>	17
13561	<i>Maccaffertium pulchellum</i>	58 +	85821	<i>Tanytarsus glabrescens group sp 7</i>	70
16700	<i>Tricorythodes sp</i>	78 +	86100	<i>Chrysops sp</i>	+
17200	<i>Caenis sp</i>	61 +	87540	<i>Hemerodromia sp</i>	1
21300	<i>Hetaerina sp</i>	+	95100	<i>Physella sp</i>	+
22300	<i>Argia sp</i>	+			
23804	<i>Basiaeschna janata</i>	+			
47600	<i>Sialis sp</i>	+	No. Quantitative Taxa: 47		Total Taxa: 59
48410	<i>Corydalus cornutus</i>	1 +	No. Qualitative Taxa: 38		ICI: 44
50315	<i>Chimarra obscura</i>	1 +	Number of Organisms: 994		Qual EPT: 13
51600	<i>Polycentropus sp</i>	+			
52200	<i>Cheumatopsyche sp</i>	17 +			
52430	<i>Ceratopsyche morosa group</i>	2 +			
53800	<i>Hydroptila sp</i>	4 +			
58505	<i>Helicopsyche borealis</i>	1			
59970	<i>Petrophila sp</i>	+			
66500	<i>Enochrus sp</i>	+			
68075	<i>Psephenus herricki</i>	+			
68130	<i>Helichus sp</i>	+			
68300	<i>Cyphon sp</i>	1 +			
69400	<i>Stenelmis sp</i>	9 +			
71300	<i>Limonia sp</i>	3			
72700	<i>Anopheles sp</i>	3 +			
74501	<i>Ceratopogonidae</i>	4			
74650	<i>Atrichopogon sp</i>	1			
77500	<i>Conchapelopia sp</i>	52 +			
77750	<i>Hayesomyia senata or Thienemannimyia norena</i>	111			
77800	<i>Helopelopia sp</i>	4 +			
78450	<i>Nilotanytus fimbriatus</i>	46 +			
80370	<i>Corynoneura lobata</i>	48			
81231	<i>Nanocladius (N.) crassicornus or N. (N.) "rectinervis"</i>	2			
82101	<i>Thienemanniella taurocapita</i>	4			

Ohio EPA/DSW Ecological Assessment Section

Macroinvertebrate Collection

Site: Indian Creek

Collection Date: 08/19/2005 River Code: 14-010 RM: 6.40

dst. Queen Acres WWTP

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01320	<i>Hydra sp</i>	176		"rectinervis"	
01801	<i>Turbellaria</i>	136 +	81270	<i>Nanocladius (N.) spinipennis</i>	+
03360	<i>Plumatella sp</i>	40 +	82730	<i>Chironomus (C.) decorus group</i>	28 +
03600	<i>Oligochaeta</i>	112	82820	<i>Cryptochironomus sp</i>	+
08250	<i>Orconectes (Procericambarus) rusticus</i>	+	83040	<i>Dicrotendipes neomodestus</i>	1305 +
08601	<i>Hydrachnidia</i>	18	83051	<i>Dicrotendipes simpsoni</i>	56
11020	<i>Acerpenna pygmaea</i>	+	83300	<i>Glyptotendipes (G.) sp</i>	56
11130	<i>Baetis intercalaris</i>	+	83310	<i>Glyptotendipes (Heynotendipes) amplus</i>	83
11651	<i>Procladius sp (w/o hindwing pads)</i>	26 +	84020	<i>Parachironomus carinatus</i>	28
12200	<i>Isonychia sp</i>	+	84060	<i>Parachironomus pectinatellae</i>	111
13400	<i>Stenacron sp</i>	35 +	84450	<i>Polypedilum (Uresipedilum) flavum</i>	250 +
13521	<i>Stenonema femoratum</i>	119 +	84460	<i>Polypedilum (P.) fallax group</i>	28
13540	<i>Maccaffertium mediopunctatum</i>	4	84470	<i>Polypedilum (P.) illinoense</i>	+
13561	<i>Maccaffertium pulchellum</i>	181 +	84540	<i>Polypedilum (Tripodura) scalaenum group</i>	+
16700	<i>Tricorythodes sp</i>	452 +	84750	<i>Stictochironomus sp</i>	+
17200	<i>Caenis sp</i>	642 +	85625	<i>Rheotanytarsus sp</i>	28 +
22001	<i>Coenagrionidae</i>	+	85821	<i>Tanytarsus glabrescens group sp 7</i>	1055
22300	<i>Argia sp</i>	50 +	85840	<i>Tanytarsus sepp</i>	28
45400	<i>Trichocorixa sp</i>	+	87540	<i>Hemerodromia sp</i>	+
48410	<i>Corydalus cornutus</i>	8 +	95100	<i>Physella sp</i>	+
50315	<i>Chimarra obscura</i>	+	96900	<i>Ferrissia sp</i>	+
51600	<i>Polycentropus sp</i>	+			
52200	<i>Cheumatopsyche sp</i>	5 +	No. Quantitative Taxa: 35		Total Taxa: 64
52430	<i>Ceratopsyche morosa group</i>	+	No. Qualitative Taxa: 48		ICI: 40
53800	<i>Hydroptila sp</i>	98 +	Number of Organisms: 5513		Qual EPT: 15
58505	<i>Helicopsyche borealis</i>	+			
59970	<i>Petrophila sp</i>	+			
60900	<i>Peltodytes sp</i>	+			
65800	<i>Berosus sp</i>	+			
66500	<i>Enochrus sp</i>	+			
67800	<i>Tropisternus sp</i>	+			
68075	<i>Psephenus herricki</i>	+			
68130	<i>Helichus sp</i>	+			
68708	<i>Dubiraphia vittata group</i>	16 +			
69400	<i>Stenelmis sp</i>	+			
69713	<i>Lutrochus laticeps</i>	1			
71300	<i>Limonia sp</i>	+			
77120	<i>Ablabesmyia mallochi</i>	28			
77500	<i>Conchapelopia sp</i>	56			
77750	<i>Hayesomyia senata or Thienemannimyia norena</i>	194 +			
78450	<i>Nilotanytus fimbriatus</i>	+			
80370	<i>Corynoneura lobata</i>	32			
80430	<i>Cricotopus (C.) tremulus group</i>	+			
81231	<i>Nanocladius (N.) crassicornus or N. (N.)</i>	28 +			

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: Indian Creek

Collection Date: 08/18/2005 River Code: 14-010 RM: 4.30

upst. Hamilton-New London Rd.

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
03360	<i>Plumatella sp</i>	+	84960	<i>Pseudochironomus sp</i>	+
05900	<i>Lirceus sp</i>	+	85625	<i>Rheotanytarsus sp</i>	+
06700	<i>Crangonyx sp</i>	+	85821	<i>Tanytarsus glabrescens group sp 7</i>	+
08250	<i>Orconectes (Procericambarus) rusticus</i>	+	95100	<i>Physella sp</i>	+
11020	<i>Acerpenna pygmaea</i>	+			
11120	<i>Baetis flavistriga</i>	+	No. Quantitative Taxa: 0		Total Taxa: 48
11130	<i>Baetis intercalaris</i>	+	No. Qualitative Taxa: 48		ICI:
11200	<i>Callibaetis sp</i>	+	Number of Organisms: 0		Qual EPT: 18
11651	<i>Procloeon sp (w/o hindwing pads)</i>	+			
12200	<i>Isonychia sp</i>	+			
13000	<i>Leucrocuta sp</i>	+			
13400	<i>Stenacron sp</i>	+			
13510	<i>Maccaffertium exiguum</i>	+			
13521	<i>Stenonema femoratum</i>	+			
13561	<i>Maccaffertium pulchellum</i>	+			
16700	<i>Tricorythodes sp</i>	+			
17200	<i>Caenis sp</i>	+			
21300	<i>Hetaerina sp</i>	+			
22001	<i>Coenagrionidae</i>	+			
22300	<i>Argia sp</i>	+			
45100	<i>Palmacorixa sp</i>	+			
48410	<i>Corydalus cornutus</i>	+			
50315	<i>Chimarra obscura</i>	+			
51400	<i>Nyctiophylax sp</i>	+			
51600	<i>Polycentropus sp</i>	+			
52200	<i>Cheumatopsyche sp</i>	+			
52430	<i>Ceratopsyche morosa group</i>	+			
66500	<i>Enochrus sp</i>	+			
67500	<i>Laccobius sp</i>	+			
67800	<i>Tropisternus sp</i>	+			
68075	<i>Psephenus herricki</i>	+			
68130	<i>Helichus sp</i>	+			
69400	<i>Stenelmis sp</i>	+			
77120	<i>Ablabesmyia mallochi</i>	+			
77750	<i>Hayesomyia senata or Thienemannimyia norena</i>	+			
80310	<i>Cardiocladius obscurus</i>	+			
80420	<i>Cricotopus (C.) bicinctus</i>	+			
82220	<i>Tvetenia discoloripes group</i>	+			
82730	<i>Chironomus (C.) decorus group</i>	+			
82820	<i>Cryptochironomus sp</i>	+			
83040	<i>Dicrotendipes neomodestus</i>	+			
84450	<i>Polypedilum (Uresipedilum) flavum</i>	+			
84470	<i>Polypedilum (P.) illinoense</i>	+			
84520	<i>Polypedilum (Tripodura) halterale group</i>	+			

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Collection Date: 09/13/2005 River Code: 14-011 RM: 1.90

Site: Salmon Run
end of Shank Rd.

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
05900	<i>Lirceus sp</i>	+			
08270	<i>Orconectes (Rhoadesius) sloanii</i>	+			
13521	<i>Stenonema femoratum</i>	+			
45300	<i>Sigara sp</i>	+			
51600	<i>Polycentropus sp</i>	+			
68025	<i>Ectopria sp</i>	+			
68075	<i>Psephenus herricki</i>	+			
72700	<i>Anopheles sp</i>	+			
79400	<i>Zavrelimyia sp</i>	+			
82730	<i>Chironomus (C.) decorus group</i>	+			
84210	<i>Paratendipes albimanus</i> or <i>P. duplicatus</i>	+			
84750	<i>Stictochironomus sp</i>	+			
95100	<i>Physella sp</i>	+			
96900	<i>Ferrissia sp</i>	+			

No. Quantitative Taxa: 0 Total Taxa: 14

No. Qualitative Taxa: 14 ICI:

Number of Organisms: 0 Qual EPT: 2

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: Salmon Run
adj. Reilly-Millville Rd.

Collection Date: 08/18/2005 River Code: 14-011 RM: 0.10

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01801	<i>Turbellaria</i>	+			
05900	<i>Lirceus sp</i>	+			
06201	<i>Hyalella azteca</i>	+			
08250	<i>Orconectes (Procericambarus) rusticus</i>	+			
08270	<i>Orconectes (Rhoadesius) sloanii</i>	+			
08601	<i>Hydrachnidia</i>	+			
11120	<i>Baetis flavistriga</i>	+			
12200	<i>Isonychia sp</i>	+			
13400	<i>Stenacron sp</i>	+			
13521	<i>Stenonema femoratum</i>	+			
17200	<i>Caenis sp</i>	+			
21200	<i>Calopteryx sp</i>	+			
22300	<i>Argia sp</i>	+			
50301	<i>Chimarra aterrima</i>	+			
50315	<i>Chimarra obscura</i>	+			
51600	<i>Polycentropus sp</i>	+			
52200	<i>Cheumatopsyche sp</i>	+			
52430	<i>Ceratopsyche morosa group</i>	+			
52530	<i>Hydropsyche depravata group</i>	+			
53800	<i>Hydroptila sp</i>	+			
57400	<i>Neophylax sp</i>	+			
58505	<i>Helicopsyche borealis</i>	+			
63300	<i>Hydroporus sp</i>	+			
67700	<i>Paracymus sp</i>	+			
67800	<i>Tropisternus sp</i>	+			
68025	<i>Ectopria sp</i>	+			
68075	<i>Psephenus herricki</i>	+			
68130	<i>Helichus sp</i>	+			
68201	<i>Scirtidae</i>	+			
68708	<i>Dubiraphia vittata group</i>	+			
69400	<i>Stenelmis sp</i>	+			
71800	<i>Pseudolimnophila sp</i>	+			
71900	<i>Tipula sp</i>	+			
74650	<i>Atrichopogon sp</i>	+			
77500	<i>Conchapelopia sp</i>	+			
83840	<i>Microtendipes pedellus group</i>	+			
84450	<i>Polypedilum (Uresipedilum) flavum</i>	+			
84750	<i>Stictochironomus sp</i>	+			
85625	<i>Rheotanytarsus sp</i>	+			
95100	<i>Physella sp</i>	+			

No. Quantitative Taxa: 0	Total Taxa: 40
No. Qualitative Taxa: 40	ICI:
Number of Organisms: 0	Qual EPT: 14

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: Bokengehalas Creek

Collection Date: 08/23/2005 River Code: 14-076 RM: 4.60

Twp. Rd. 209

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01801	<i>Turbellaria</i>	+	85500	<i>Paratanytarsus sp</i>	+
03600	<i>Oligochaeta</i>	+	85625	<i>Rheotanytarsus sp</i>	+
05800	<i>Caecidotea sp</i>	+	85720	<i>Stempellinella fimbriata</i>	+
06201	<i>Hyalella azteca</i>	+	85800	<i>Tanytarsus sp</i>	+
06700	<i>Crangonyx sp</i>	+	86100	<i>Chrysops sp</i>	+
08250	<i>Orconectes (Procericambarus) rusticus</i>	+	87540	<i>Hemerodromia sp</i>	+
11120	<i>Baetis flavistriga</i>	+	95100	<i>Physella sp</i>	+
11130	<i>Baetis intercalaris</i>	+			
11251	<i>Centroptilum sp (w/ hindwing pads)</i>	+	No. Quantitative Taxa: 0		Total Taxa: 51
12200	<i>Isonychia sp</i>	+	No. Qualitative Taxa: 51		ICI:
13000	<i>Leucrocota sp</i>	+	Number of Organisms: 0		Qual EPT: 17
13100	<i>Nixe sp</i>	+			
13400	<i>Stenacron sp</i>	+			
13570	<i>Maccaffertium terminatum</i>	+			
17200	<i>Caenis sp</i>	+			
18600	<i>Ephemera sp</i>	+			
18700	<i>Hexagenia sp</i>	+			
21200	<i>Calopteryx sp</i>	+			
22300	<i>Argia sp</i>	+			
50315	<i>Chimarra obscura</i>	+			
51600	<i>Polycentropus sp</i>	+			
52200	<i>Cheumatopsyche sp</i>	+			
52430	<i>Ceratopsyche morosa group</i>	+			
52450	<i>Ceratopsyche sparna</i>	+			
52530	<i>Hydropsyche depravata group</i>	+			
68075	<i>Psephenus herricki</i>	+			
68601	<i>Ancyronyx variegata</i>	+			
68702	<i>Dubiraphia bivittata</i>	+			
68708	<i>Dubiraphia vittata group</i>	+			
68901	<i>Macronychus glabratus</i>	+			
69400	<i>Stenelmis sp</i>	+			
70600	<i>Antocha sp</i>	+			
74501	<i>Ceratopogonidae</i>	+			
77120	<i>Ablabesmyia mallochi</i>	+			
77500	<i>Conchapelopia sp</i>	+			
77750	<i>Hayesomyia senata or Thienemannimyia norena</i>	+			
78655	<i>Procladius (Holotanypus) sp</i>	+			
79030	<i>Tanypus "punctipennis" (sensu Roback, 1977)</i>	+			
81631	<i>Parakiefferiella n.sp 1</i>	+			
81825	<i>Rheocricotopus (Psilocricotopus) robacki</i>	+			
82220	<i>Tvetenia discoloripes group</i>	+			
82820	<i>Cryptochironomus sp</i>	+			
82885	<i>Cryptotendipes pseudotener</i>	+			
84155	<i>Paralauterborniella nigrohalteralis</i>	+			

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Collection Date: 09/13/2005 River Code: 14-195 RM: 0.90

Site: Lick Run
private lane

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01801	<i>Turbellaria</i>	+			
03360	<i>Plumatella sp</i>	+			
05900	<i>Lirceus sp</i>	+			
08250	<i>Orconectes (Procericambarus) rusticus</i>	+			
08601	<i>Hydrachnidia</i>	+			
11651	<i>Procloeon sp (w/o hindwing pads)</i>	+			
13400	<i>Stenacron sp</i>	+			
13521	<i>Stenonema femoratum</i>	+			
17200	<i>Caenis sp</i>	+			
21200	<i>Calopteryx sp</i>	+			
22001	<i>Coenagrionidae</i>	+			
22300	<i>Argia sp</i>	+			
28500	<i>Libellula sp</i>	+			
47600	<i>Sialis sp</i>	+			
51600	<i>Polycentropus sp</i>	+			
52200	<i>Cheumatopsyche sp</i>	+			
58505	<i>Helicopsyche borealis</i>	+			
68075	<i>Psephenus herricki</i>	+			
68130	<i>Helichus sp</i>	+			
69400	<i>Stenelmis sp</i>	+			
83590	<i>Kiefferulus sp</i>	+			
83840	<i>Microtendipes pedellus group</i>	+			
84450	<i>Polypedilum (Uresipedilum) flavum</i>	+			
84750	<i>Stictochironomus sp</i>	+			
95100	<i>Physella sp</i>	+			

No. Quantitative Taxa: 0	Total Taxa: 25
No. Qualitative Taxa: 25	ICI:
Number of Organisms: 0	Qual EPT: 7

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: Reserve Run

Collection Date: 09/13/2005 River Code: 14-197 RM: 0.30

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
05900	<i>Lirceus sp</i>	+			
08270	<i>Orconectes (Rhoadesius) sloanii</i>	+			
13521	<i>Stenonema femoratum</i>	+			
17200	<i>Caenis sp</i>	+			
42700	<i>Belostoma sp</i>	+			
52001	<i>Hydropsychidae</i>	+			
60900	<i>Peltodytes sp</i>	+			
66500	<i>Enochrus sp</i>	+			
67500	<i>Laccobius sp</i>	+			
69400	<i>Stenelmis sp</i>	+			
71300	<i>Limonia sp</i>	+			
72700	<i>Anopheles sp</i>	+			
74501	<i>Ceratopogonidae</i>	+			
77500	<i>Conchapelopia sp</i>	+			
78401	<i>Natarsia species A (sensu Roback, 1978)</i>	+			
78601	<i>Pentaneura Type 1</i>	+			
82730	<i>Chironomus (C.) decorus group</i>	+			
83040	<i>Dicrotendipes neomodestus</i>	+			
84210	<i>Paratendipes albimanus or P. duplicatus</i>	+			
84520	<i>Polypedilum (Tripodura) halterale group</i>	+			
86900	<i>Myxosargus sp</i>	+			
95100	<i>Physella sp</i>	+			

No. Quantitative Taxa: 0	Total Taxa: 22
No. Qualitative Taxa: 22	ICI:
Number of Organisms: 0	Qual EPT: 3

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: Little Indian Creek
Sawmill Rd.

Collection Date: 09/12/2005 River Code: 14-198 RM: 0.10

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
03360	<i>Plumatella sp</i>	+			
04935	<i>Erpobdella punctata punctata</i>	+			
05900	<i>Lirceus sp</i>	+			
06201	<i>Hyalella azteca</i>	+			
08270	<i>Orconectes (Rhoadesius) sloanii</i>	+			
13400	<i>Stenacron sp</i>	+			
13521	<i>Stenonema femoratum</i>	+			
50301	<i>Chimarra aterrima</i>	+			
52200	<i>Cheumatopsyche sp</i>	+			
58505	<i>Helicopsyche borealis</i>	+			
63300	<i>Hydroporus sp</i>	+			
68075	<i>Psephenus herricki</i>	+			
68130	<i>Helichus sp</i>	+			
68708	<i>Dubiraphia vittata group</i>	+			
71900	<i>Tipula sp</i>	+			
78401	<i>Natarsia species A (sensu Roback, 1978)</i>	+			
78601	<i>Pentaneura Type 1</i>	+			
82730	<i>Chironomus (C.) decorus group</i>	+			
83840	<i>Microtendipes pedellus group</i>	+			
84210	<i>Paratendipes albimanus or P. duplicatus</i>	+			
84450	<i>Polypedilum (Uresipedilum) flavum</i>	+			
84750	<i>Stictochironomus sp</i>	+			
85500	<i>Paratanytarsus sp</i>	+			
95100	<i>Physella sp</i>	+			
96900	<i>Ferrissia sp</i>	+			

No. Quantitative Taxa: 0	Total Taxa: 25
No. Qualitative Taxa: 25	ICI:
Number of Organisms: 0	Qual EPT: 5