

APPENDICES

SCIOTO BRUSH CREEK WATERSHED

2006

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Appendix Table 1. Scioto Brush Creek chemical/physical and bacteriological water sampling results, 2006. NA = not analyzed. B or J = result is an estimate. RC = result is rejected due to poor correlation with its co-analyte.

Parameter	Units
Acidity	mg/L
Alkalinity	mg/L
Aluminum	ug/L
Ammonia	mg/L
Arsenic	ug/L
BOD5	mg/L
Barium	ug/L
COD	mg/L
Cadmium	ug/L
Calcium	mg/L
Chloride	mg/L
Chromium	ug/L
Conductivity	umhos/cm
Copper	ug/L
Hardness, Total	mg/L
Iron	ug/L
Lead	ug/L
Magnesium	mg/L
Manganese	ug/L
Mercury	ug/L
Nickel	ug/L
Nitrate+nitrite	mg/L
Nitrite	mg/L
Potassium	mg/L
Selenium	ug/L
Sodium	mg/L
Strontium	ug/L
Sulfate	mg/L
TKN	mg/L
Total Dissolved Solids	mg/L
Total Phosphorus	mg/L
Total Suspended Solids	mg/L
Zinc	ug/L
Field Measurements	
Temperature	°C
Conductivity	µmhos/cm
D.O. Saturation	%
Dissolved Oxygen	mg/L
pH	S.U.

Site Location: SCIOTO BRUSH CK @ TRAIL FROM HACKELSHIN RD				
River Mile: 38.2 Storet: 300095				
	8/1/2006	8/14/2006	09/12/2006	10/24/2006
	9:00 AM	9:29 AM	9:40 AM	9:10 AM
Acidity	13.5	12.0 RC,B	<5.0	9.3
Alkalinity	5.8	5.2 RC	<5.0	<5.0
Aluminum	325	408	10100	486
Ammonia	<0.050	<0.050	0.070	<0.050
Arsenic	<2.0	<2.0	8.5	<2.0
BOD5	<2.0	<2.0	<2.0	<2.0
Barium	54	55	67	39
COD	<10	<10	13	<10
Cadmium	1.57	1.75	2.34	1.50
Calcium	27	28	21	14
Chloride	50.2	52.7	23.8	11.4
Chromium	<30	<30	<30	<30
Conductivity	424	442	323	208
Copper	<10	<10	26	<10
Hardness, Total	129	132	106	68
Iron	316	250	16800	124
Lead	<2.0	<2.0	9.4	<2.0
Magnesium	15	15	13	8
Manganese	485	492	648	306
Mercury	<0.20	<0.20	<0.20	<0.20
Nickel	75	82	109	40
Nitrate+nitrite	0.18	0.11	0.27	0.45
Nitrite	<0.020	<0.020	<0.020	<0.020
Potassium	4	4	5	2
Selenium	<2.0	<2.0	<2.0	<2.0
Sodium	28	29	20	9
Strontium	116	119	89	64
Sulfate	124	127	107	66.0
TKN	<0.20	0.20	<0.20	0.25
Total Dissolved Solids	292	320	226	136
Total Phosphorus	0.177	0.123 J	0.062	<0.010
Total Suspended Solids	5	<5	436	<5
Zinc	108	113	240	83
Field Measurements				
Temperature	23.46	22.11	19.34	8.66
Conductivity	441	432.3	317.4	180.2
D.O. Saturation	54	72.2	98.7	122.9
Dissolved Oxygen	4.55	6.29	9.08	14.32
pH	5.94	7.1	5.93	7.88

Site Location: SCIOTO BRUSH CREEK @ POPLAR GROVE RD					
River Mile: 36.0 Storet: 200282					
	07/20/2006	08/01/2006	08/14/2006	09/12/2006	10/24/2006
	9:25 AM	9:20 AM	9:52 AM	10:08 AM	9:33 AM
Acidity	<5.0	<5.0	<5.0	<5.0	<5.0
Alkalinity	13.1	18.8	19.8	16.9	6.1
Aluminum	<200	<200	<200	5200	253
Ammonia	<0.050	<0.050	<0.050	0.068	<0.050
Arsenic	<2.0	<2.0	<2.0	3.7	<2.0
BOD5	<2.0	<2.0	<2.0	3.3	<2.0
Barium	50	49	45	61	41
COD	<10	<10	<10	16	<10
Cadmium	0.32	0.21	<0.20	1.13	1.19
Calcium	20	20	21	20	15
Chloride	30.7	31.3	33.8	28.0	11.4
Chromium	<30	<30	<30	<30	<30
Conductivity	294	297	313	309	206
Copper	<10	<10	<10	13	<10
Hardness, Total	95	95	102	95	70
Iron	137	225	206	8370	122
Lead	<2.0	<2.0	<2.0	4.9	<2.0
Magnesium	11	11	12	11	8
Manganese	155	162	107	435	266
Mercury	<0.20	<0.20	<0.20	<0.20	<0.20
Nickel	<40	<40	<40	58	<40
Nitrate+nitrite	0.20	0.16	0.17	0.31	0.53
Nitrite	<0.020	<0.020	<0.020	<0.020	<0.020
Potassium	4	4	4	5	3
Selenium	<2.0	<2.0	<2.0	<2.0	<2.0
Sodium	17	17	17	22	9
Strontium	79	78	75	66	60
Sulfate	74.6	76.2	78.7	88.4	61.0
TKN	0.57	<0.20	<0.20	<0.20	0.25
Total Dissolved Solids	194	178	236	224	140
Total Phosphorus	<0.010	0.339	0.025	0.085	<0.010
Total Suspended Solids	<5	<5	<5	238	<5
Zinc	25	14	29	117	78
Field Measurements					
Temperature	22.97	22.96	21.54	19.15	8.52
Conductivity	320	316	307.4	297.3	175.4
D.O. Saturation	60.7	70.3	74.6	87.7	98.8
Dissolved Oxygen	5.18	5.96	6.57	8.11	11.55
pH	6.55	6.39	7.15	6.44	7.21

Appendix Table 1. Continued.

Parameter	Units
Acidity	mg/L
Alkalinity	mg/L
Aluminum	ug/L
Ammonia	mg/L
Arsenic	ug/L
BOD5	mg/L
Barium	ug/L
COD	mg/L
Cadmium	ug/L
Calcium	mg/L
Chloride	mg/L
Chromium	ug/L
Conductivity	umhos/cm
Copper	ug/L
Hardness, Total	mg/L
Iron	ug/L
Lead	ug/L
Magnesium	mg/L
Manganese	ug/L
Mercury	ug/L
Nickel	ug/L
Nitrate+nitrite	mg/L
Nitrite	mg/L
Potassium	mg/L
Selenium	ug/L
Sodium	mg/L
Strontium	ug/L
Sulfate	mg/L
TKN	mg/L
Total Dissolved Solids	mg/L
Total Phosphorus	mg/L
Total Suspended Solids	mg/L
Zinc	ug/L
Field Measurements	
Temperature	°C
Conductivity	µmhos/cm
D.O. Saturation	%
Dissolved Oxygen	mg/L
pH	S.U.

Site Location: SCIOTO BRUSH CK @ SR 32					
River Mile: 33.55 Storet: V14Q20					
Dup A/B					
07/20/2006	08/01/2006	8/14/2006	09/12/2006	10/24/2006	
9:36 AM	9:35 AM	10:05 AM	10:15 AM	9:45 AM	
<5.0	<5.0	<5.0/<5.0	<5.0	<5.0	
115	141	135/135	97.9	56.0	
<200	<200	<200/<200	2670	<200	
<0.050	<0.050	<0.050/<0.05	<0.050	<0.050	
<2.0	<2.0	<2.0/<2.0	2.4	<2.0	
<2.0	<2.0	<2.0/<2.0	3.2	<2.0	
69	73	69/69	84	52	
13	<10	12/<10	10	<10	
<0.20	<0.20	<0.20/<0.20	0.88	0.45	
36	42	39/39	30	26	
22.9	24.4	25.4/25.4	21.5	9.0	
<30	<30	<30/<30	<30	<30	
400	436	429/422	341	280	
<10	<10	<10/<10	<10	<10	
176	204	188/192	145	131	
72	69	<50/<50	4230	74	
<2.0	<2.0	<2.0/<2.0	5.1	<2.0	
21	24	22/23	17	16	
57	73	56/56	482	98	
<0.20	<0.20	<0.20/<0.20	<0.20	<0.20	
<40	<40	<40/<40	<40	<40	
0.19	0.18	0.18/0.18	0.31	0.72	
<0.020	<0.020	<0.020/<0.02	<0.020	<0.020	
4	4	4/4.0	4	3	
<2.0	<2.0	<2.0/<2.0	<2.0	<2.0	
13	13	12/12.0	13	6	
67	70	65/65	47	55	
55.4	46.9	44.9/44.0	55.1	45.7	
0.25	<0.20	<0.20/<0.20	<0.20	0.31	
246	270	252/250	240	182	
0.012	0.011	<0.010/<0.01	<0.050 UJ	0.011	
<5	<5	<5/<5	14	<5	
15	<10	<10/<10	70	28	
Field Measurements					
23.15	23.06	20.84	18.97	7.55	
425	454	410.4	328.5	237.6	
74.4	69.7	71.6	83	100.1	
6.27	5.94	6.39	7.7	11.97	
7.46	7.17	7.77	7.12	7.59	

Site Location: SCIOTO BRUSH CK @ SR 73, DST COFFEE HOLLOW					
River Mile: 27.87 Storet: V14Q21					
07/20/2006	08/01/2006	08/14/2006	09/12/2006	10/24/2006	
	10:35 AM	11:32 AM	11:05 AM	10:40 AM	
<5.0	<5.0	<5.0	<5.0	<5.0	
148	134	142	128	77.9	
<200	<200	<200	678	<200	
<0.050	<0.050	<0.050	0.059	<0.050	
<2.0	<2.0	<2.0	<2.0	<2.0	
<2.0	<2.0	<2.0	<2.0	<2.0	
82	101	115	78	54	
<10	10	<10	<10	<10	
<0.20	<0.20	<0.20	<0.20	<0.20	
72	104	110	82	43	
23.6	30.9	37.4	26.8	11.1	
<30	<30	<30	<30	<30	
747	1000	1130	880	453	
<10	<10	<10	<10	<10	
402	593	637	464	227	
81	85	105	1060	103	
<2.0	<2.0	<2.0	<2.0	<2.0	
54	81	88	63	29	
53	61	57	106	30	
<0.20	<0.20	<0.20	<0.20	<0.20	
<40	<40	<40	<40	<40	
0.14	0.21	0.16	0.27	0.50	
<0.020	<0.020	<0.020	<0.020	<0.020	
4	5	5	6	3	
<2.0	<2.0	<4.0	<2.0	<2.0	
12	13	14	11	6	
175	271	290	225	91	
236	401	436	333	107	
0.25	0.30	<0.20	<0.20	0.38	
524	798	866	670	292	
<0.010	<0.010	<0.010	0.046	0.466	
<5	<5	<5	148	<5	
<10	<10	<10	16	11	
Field Measurements					
24.36	24.8	23.03	19.46	7.87	
795	1063	1112.7	841.1	383.1	
64.2	78.9	73.3	79.6	101.8	
5.38	6.44	6.26	7.3	12.08	
7.34	6.89	7.76	7.41	7.13	

Appendix Table 1. Continued.

Parameter	Units
Acidity	mg/L
Alkalinity	mg/L
Aluminum	ug/L
Ammonia	mg/L
Arsenic	ug/L
BOD5	mg/L
Barium	ug/L
COD	mg/L
Cadmium	ug/L
Calcium	mg/L
Chloride	mg/L
Chromium	ug/L
Conductivity	umhos/cm
Copper	ug/L
Hardness, Total	mg/L
Iron	ug/L
Lead	ug/L
Magnesium	mg/L
Manganese	ug/L
Mercury	ug/L
Nickel	ug/L
Nitrate+nitrite	mg/L
Nitrite	mg/L
Potassium	mg/L
Selenium	ug/L
Sodium	mg/L
Strontium	ug/L
Sulfate	mg/L
TKN	mg/L
Total Dissolved Solids	mg/L
Total Phosphorus	mg/L
Total Suspended Solids	mg/L
Zinc	ug/L
Field Measurements	
Temperature	°C
Conductivity	µmhos/cm
D.O. Saturation	%
Dissolved Oxygen	mg/L
pH	S.U.

Site Location: SCIOTO BRUSH CK @ FORD 0.2 MI UPST RARDEN CK					
River Mile: 24.25 Storet: V14Q22					
Dup A/B					
07/20/2006	08/01/2006	08/14/2006	09/12/2006	10/24/2006	
10:55 AM	10:55 AM	11:50 AM	11:15 AM	10:50 AM	
<5.0	<5.0/<5.0	5.0	<5.0	<5.0	
133	133/131	137	122	68.5	
<200	<200/<200	<200	459	<200	
<0.050	<0.050/<0.05	<0.050	0.050	<0.050	
<2.0	<2.0/<2.0	<2.0	<2.0	<2.0	
<2.0	<2.0/<2.0	<2.0	<2.0	<2.0	
102	123/124	110	85	57	
<10	<10/<10	<10	<10	32	
<0.20	<0.20/<0.20	<0.20	<0.20	0.20	
62	82/83	71	62	38	
23.9	26.6/26.8	28.2	19.6	10.6	
<30	<30/<30	<30	<30	<30	
686	817/810	760	680	404	
<10	<10/<10	<10	<10	<10	
340	456/458	387	340	198	
274	176/170	206	836	214	
<2.0	<2.0/<2.0	<2.0	<2.0	<2.0	
45	61/61	51	45	25	
164	106/108	113	143	60	
<0.20	<0.20/<0.20	<0.20	<0.20	<0.20	
<40	<40/<40	<40	<40	<40	
0.66	0.17/0.17	0.18	0.18	0.47	
<0.020	<0.020/<0.02	<0.020	<0.020	<0.020	
4	5/5.0	4	4	3	
<2.0	<2.0/<2.0	<2.0	<2.0	<2.0	
11	12/12.0	12	10	6	
182	224/223	208	170	88	
205	300/302	226	228	91.6	
0.21	<0.20/<0.20	<0.20	0.29	0.20	
480	624/640	524	486	262	
0.058 J	<0.010/<0.01	<0.010	<0.010	<0.010	
<5	<5.0/<5.0	<5	16	<5	
<10	<10/<10	<10	<10	11	
Field Measurements					
25.38	24.74	23.61	19.57	8.04	
722	881	752.1	656.1	343.1	
62.8	77.7	68.6	76.5	95.3	
5.12	6.39	5.8	7	11.27	
7.43	7.42	7.85	7.58	7.37	

Site Location: SCIOTO BRUSH CK @ DIEHLMAN RD					
River Mile: 12.15 Storet: V14Q23					
07/20/2006	08/01/2006	08/14/2006	09/12/2006	10/24/2006	
11:20 AM	1:15 PM	1:27 PM	12:58 PM	12:24 PM	
<5.0	<5.0	<5.0	<5.0	<5.0	
82.7	62.4	67.9	107	38.7	
<200	<200	<200	<200	<200	
<0.050	<0.050	<0.050	<0.050	<0.050	
<2.0	<2.0	<2.0	<2.0	<2.0	
<2.0	9.3 J	<2.0	<2.0	<2.0	
74	67	62	87	50	
<10	<10	<10	<10	<10	
<0.20	<0.20	<0.20	<0.20	<0.20	
29	26	22	38	20	
11.4	9.5	9.6	16.2	5.9	
<30	<30	<30	<30	<30	
326	293	275	441	243	
<10	<10	<10	<10	<10	
155	139	117	210	103	
190	234	349	287	234	
<2.0	<2.0	<2.0	<2.0	<2.0	
20	18	15	28	13	
198	107	180	150	42	
<0.20	<0.20	<0.20	<0.20	<0.20	
<40	<40	<40	<40	<40	
0.16	0.35	0.27	<0.10	0.72	
<0.020	<0.020	<0.020	<0.020	<0.020	
3	4	3	4	2	
<2.0	<2.0	<2.0	<2.0	<2.0	
8	7	7	9	5	
92	85	76	123	63	
70.0	67.5	53.0	106	52.3	
0.28	<0.20	<0.20	<0.20	0.49	
216	188	178	292	148	
0.011	0.096	<0.010	0.010	0.019 B	
<5	<5	8	<5	<5	
<10	<10	<10	<10	<10	
Field Measurements					
28.15	28.94	25.82	21.68	9.04	
362	318	271.2	429.1	224.6	
67.8	74.4	72.3	80.4	92	
5.21	5.65	5.89	7.06	10.62	
7.52	7.47	7.34	7.43	7.55	

Appendix Table 1. Continued.

		Site Location: SCIOTO BRUSH CREEK 1 MI. SW OF OTWAY - S.R. 345									
		River Mile: 17.1 Storet: V14P04									
Parameter	Units	02/02/2006	03/29/2006	04/10/2006	05/25/2006	06/19/2006	07/18/2006	07/20/2006	08/01/2006	08/14/2006	08/28/2006
		10:18 AM	9:40 AM	2:30 PM	10:45 AM	10:10 AM	10:15 AM	9:35 AM	10:40 AM	11:21 AM	9:50 AM
Acidity	mg/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Alkalinity	mg/L	62.0	50.1	50.6	80.5	95.3	112	112	104	111	131
Aluminum	ug/L	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200
Ammonia	mg/L	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Arsenic	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
BOD5	mg/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Barium	ug/L	54	48	48	59	82	89	91	97	74	104
COD	mg/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Cadmium	ug/L	<0.20	0.25	0.29	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Calcium	mg/L	33	25	24	32	43	49	49	53	40	54
Chloride	mg/L	13.6	15.0	8.5	11.8	17.0	21.2	20.3	21.0	18.4	21.4
Chromium	ug/L	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30
Conductivity	umhos/cm	356	296	281	380	473	530	524	562	471	598
Copper	ug/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Hardness, Total	mg/L	169	128	130	170	231	262	271	289	219	300
Iron	ug/L	282	246	175	338	245	172	145	102	54	198
Lead	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Magnesium	mg/L	21	16	17	22	30	34	36	38	29	40
Manganese	ug/L	76	62	53	78	130	119	113	88	67	237
Mercury	ug/L	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Nickel	ug/L	<40	<40	<40	<40	<40	<40	<40	<40	<40	<40
Nitrate+nitrite	mg/L	0.79	0.42	0.44	0.15	0.26	0.17	0.22	0.13	0.18	0.13
Nitrite	mg/L	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Potassium	mg/L	3	2	2	3	4	4	4	4	4	4
Selenium	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Sodium	mg/L	8	9	6	8	10	11	11	10	9	11
Strontium	ug/L	87	75	72	89	122	148	150	154	119	167
Sulfate	mg/L	87.2	74.4	72.0	86.0	121	127	136	158	105	183
TKN	mg/L	<0.20	<0.20	<0.20	0.20	<0.20	0.38	0.24	<0.20	<0.20	0.86
Total Dissolved Solids	mg/L	228	214	190	256	296	360	352	360	322	432
Total Phosphorus	mg/L	<0.010	<0.010	<0.010	<0.010	<0.010	0.014	0.011	<0.010	<0.010	0.010
Total Suspended Solids	mg/L	<5	<5	<5	5	<5	<5	<5	<5	<5	14
Zinc	ug/L	16	16	12	<10	<10	<10	<10	<10	<10	<10
Field Measurements											
Temperature	°C	6.4	8.18	10.47	NA	NA	NA	25.2	27.06	24.71	24.26
Conductivity	umhos/cm	390	322	296	NA	NA	NA	431	614	452.7	579
D.O. Saturation	%	75.6	82.5	89.9	NA	NA	NA	67.1	76.4	83.2	64.3
Dissolved Oxygen	mg/L	9.21	9.59	9.96	NA	NA	NA	5.44	5.99	6.9	5.38
pH	S.U.	7.19	7.23	7.63	NA	NA	NA	8.1	7.66	7.69	7.37

Appendix Table 1. Continued.

		Site Location: SCIOTO BRUSH CREEK 1 MI. SW OF OTWAY - S.R. 345									
		River Mile: 17.1					Storet: V14P04				
Parameter	Units	Dup A			Dup B						
		09/12/2006 11:12 AM	09/25/2006 10:00 AM	10/12/2006 10:03 AM	10/12/2006 10:03 AM	10/24/2006 10:56 AM	11/15/2006 11:01 AM				
Acidity	mg/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0				
Alkalinity	mg/L	132	42.7	58.9	58.4	45.8	67.2				
Aluminum	ug/L	<200	326	<200	<200	<200	<200				
Ammonia	mg/L	0.051	<0.050	<0.050	<0.050	<0.050	<0.050				
Arsenic	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0				
BOD5	mg/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0				
Barium	ug/L	116	53	71	71	51	55				
COD	mg/L	<10	<10	<10	<10	<10	<10				
Cadmium	ug/L	<0.20	<0.20	0.21	<0.20	0.23	<0.20				
Calcium	mg/L	75	25	43	43	26	32				
Chloride	mg/L	27.2	7.6	12.2	12.2	7.8	9.4				
Chromium	ug/L	<30	<30	<30	<30	<30	<30				
Conductivity	umhos/cm	791	271	450	452	303	333				
Copper	ug/L	<10	<10	<10	<10	<10	<10				
Hardness, Total	mg/L	422	128	231	231	135	166				
Iron	ug/L	194	508	459	321	228	285				
Lead	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0				
Magnesium	mg/L	57	16	30	30	17	21				
Manganese	ug/L	164	59	107	75	63	67				
Mercury	ug/L	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20				
Nickel	ug/L	<40	<40	<40	<40	<40	<40				
Nitrate+nitrite	mg/L	<0.10	1.55	0.58	0.63	0.45	0.39				
Nitrite	mg/L	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020				
Potassium	mg/L	5	3	3	3	3	3				
Selenium	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0				
Sodium	mg/L	12	5	7	7	6	6				
Strontium	ug/L	221	67	119	120	74	86				
Sulfate	mg/L	272	65.6	130	118	71.7	86.8				
TKN	mg/L	<0.20	0.20	<0.20	<0.20	0.24	<0.20				
Total Dissolved Solids	mg/L	556	184	340	338	184	168				
Total Phosphorus	mg/L	0.020	0.015	<0.010	0.011	0.141 B	<0.010				
Total Suspended Solids	mg/L	6	10	16	7	<5	<5				
Zinc	ug/L	<10	13	10	<10	<10	12				
Field Measurements											
Temperature	°C	20.8	18.76	16.04	16.04	9.26	8.59				
Conductivity	umhos/cm	765.1	286.1	435	435	284.1	350.2				
D.O. Saturation	%	83.8	85.3	87.3	87.3	94.3	95.1				
Dissolved Oxygen	mg/L	7.49	7.94	8.6	8.6	10.82	11.1				
pH	S.U.	7.53	7.86	7.7	7.7	8.23	7.4				

Appendix Table 1. Continued.

		Site Location: SCIOTO BRUSH CK @ TATMAN-COE RD									
		River Mile: 5.81 Storet: 300054									
Parameter	Units	02/02/2006	03/29/2006	04/10/2006	05/25/2006	06/19/2006	07/18/2006	07/20/2006	08/01/2006	08/14/2006	08/28/2006
		9:45 AM	9:15 AM	3:25 PM	1:15 PM	9:35 AM	9:45 AM	12:20 PM	2:55 PM	2:36 PM	9:24 AM
Acidity	mg/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Alkalinity	mg/L	44.3	49.4	38.6	67.6	79.1	71.6	71.4	57.0	66.4	87.2
Aluminum	ug/L	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200
Ammonia	mg/L	<0.050	<0.050	<0.050	0.053 J	<0.050	<0.050	<0.050	0.051	<0.050	0.050
Arsenic	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
BOD5	mg/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Barium	ug/L	52	48	42	66	72	67	67	64	60	62
COD	mg/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	12
Cadmium	ug/L	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Calcium	mg/L	23	21	16	27	29	25	25	22	22	23
Chloride	mg/L	8.4	10.2	5.7	8.1	10.4	10.3	9.6	7.9	9.8	10.7
Chromium	ug/L	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30
Conductivity	umhos/cm	268	262	202	323	329	287	286	257	286	278
Copper	ug/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Hardness, Total	mg/L	119	110	85	146	155	132	132	117	121	127
Iron	ug/L	287	287	226	342	354	474	359	453	279	321
Lead	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Magnesium	mg/L	15	14	11	19	20	17	17	15	16	17
Manganese	ug/L	39	38	33	79	135	157	194	192	153	141
Mercury	ug/L	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Nickel	ug/L	<40	<40	<40	<40	<40	<40	<40	<40	<40	<40
Nitrate+nitrite	mg/L	1.10	0.58	0.43	0.23 J	0.17	0.24	0.11	0.35	0.22	0.13
Nitrite	mg/L	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Potassium	mg/L	2	2	2	3	3	3	4	4	3	4
Selenium	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Sodium	mg/L	6	7	6	7	8	9	9	6	7	8
Strontium	ug/L	75	70	61	91	93	94	92	78	81	88
Sulfate	mg/L	62.2	64.9	48.2	73.2	70.1	57.3	59.6	58.1	56.9	49.6
TKN	mg/L	<0.20	<0.20	<0.20	0.71	0.74	0.32	0.29	<0.20	<0.20	<0.20
Total Dissolved Solids	mg/L	170	184	132	218	202	190	194	150	176	186
Total Phosphorus	mg/L	0.056	<0.010	<0.010	<0.010	<0.010	0.158	<0.010	<0.010	<0.010	0.013
Total Suspended Solids	mg/L	<5	<5	<5	7	5	8	<5	6	5	10
Zinc	ug/L	<10	11	12	<10	<10	<10	<10	<10	<10	<10
Field Measurements											
Temperature	°C	6.98	8.37	14.43	21.26	24.73	NA	29.42	30.52	27.63	25.76
Conductivity	umhos/cm	300	300	221	311	351	NA	337	284	283.8	269.7
D.O. Saturation	%	73.8	91.8	91.3	69.9	82.1	NA	64	63.1	80.8	66.2
Dissolved Oxygen	mg/L	8.78	10.53	9.25	6.13	6.71	NA	4.82	4.66	6.36	5.39
pH	S.U.	7.75	7.69	7.44	7.14	7.35	NA	7.46	7.31	7.44	7.42

Appendix Table 1. Continued.

		Site Location: SCIOTO BRUSH CK @ TATMAN-COE RD									
		River Mile: 5.81 Storet: 300054									
		Dup A					Dup B				
Parameter	Units	09/12/2006	09/25/2006	10/12/2006	10/24/2006	11/15/2006	11/15/2006				
		3:00 PM	9:31 AM	9:35 AM	1:44 PM	10:34 AM	10:34 AM				
Acidity	mg/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0				
Alkalinity	mg/L	94.4	36.8	45.9	36.2	56.5	56.1				
Aluminum	ug/L	<200	748	<200	<200	<200	<200				
Ammonia	mg/L	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050				
Arsenic	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0				
BOD5	mg/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0				
Barium	ug/L	77	52	65	48	54	56				
COD	mg/L	<10	<10	<10	<10	<10	<10				
Cadmium	ug/L	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20				
Calcium	mg/L	30	18	28	19	24	25				
Chloride	mg/L	13.8	5.2	8.5	5.5	6.4	6.5				
Chromium	ug/L	<30	<30	<30	<30	<30	<30				
Conductivity	umhos/cm	350	208	301	235	263	263				
Copper	ug/L	<10	<10	<10	<10	<10	<10				
Hardness, Total	mg/L	166	94	144	101	122	128				
Iron	ug/L	461	1170	307	236	286	266				
Lead	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0				
Magnesium	mg/L	22	12	18	13	15	16				
Manganese	ug/L	124	63	50	35	33	34				
Mercury	ug/L	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20				
Nickel	ug/L	<40	<40	<40	<40	<40	<40				
Nitrate+nitrite	mg/L	<0.10	0.68	0.94	0.65	0.56	0.56				
Nitrite	mg/L	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020				
Potassium	mg/L	4	3	3	3	3	3				
Selenium	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0				
Sodium	mg/L	9	5	6	5	6	6				
Strontium	ug/L	110	54	85	65	73	73				
Sulfate	mg/L	75.8	45.8	72.5	51.0	59.7	61.8				
TKN	mg/L	<0.20	<0.20	<0.20	0.26	0.29	<0.20				
Total Dissolved Solids	mg/L	222	156	230	152	160	162				
Total Phosphorus	mg/L	<0.010	0.028	<0.010	0.018 B	<0.010	<0.010				
Total Suspended Solids	mg/L	7	17	<5	<5	<5	<5				
Zinc	ug/L	17	20	<10	<10	<10	<10				
Field Measurements											
Temperature	°C	22.06	17.93	14.89	9.65	9.06	9.06				
Conductivity	umhos/cm	345	225	335.5	216.1	277.9	277.9				
D.O. Saturation	%	82.3	88.3	85.6	94.5	88.9	88.9				
Dissolved Oxygen	mg/L	7.19	8.37	8.65	10.75	10.25	10.25				
pH	S.U.	7.4	8.66	8.13	7.53	7.36	7.36				

Appendix Table 1. Continued.

Parameter	Units
Acidity	mg/L
Alkalinity	mg/L
Aluminum	ug/L
Ammonia	mg/L
Arsenic	ug/L
BOD5	mg/L
Barium	ug/L
COD	mg/L
Cadmium	ug/L
Calcium	mg/L
Chloride	mg/L
Chromium	ug/L
Conductivity	umhos/cm
Copper	ug/L
Hardness, Total	mg/L
Iron	ug/L
Lead	ug/L
Magnesium	mg/L
Manganese	ug/L
Mercury	ug/L
Nickel	ug/L
Nitrate+nitrite	mg/L
Nitrite	mg/L
Potassium	mg/L
Selenium	ug/L
Sodium	mg/L
Strontium	ug/L
Sulfate	mg/L
TKN	mg/L
Total Dissolved Solids	mg/L
Total Phosphorus	mg/L
Total Suspended Solids	mg/L
Zinc	ug/L
Field Measurements	
Temperature	°C
Conductivity	umhos/cm
D.O. Saturation	%
Dissolved Oxygen	mg/L
pH	S.U.

Site Location: SCIOTO BRUSH CK @ COLLEY RD					
River Mile: 3.35 Storet: V14Q24					
Dup A/B					
07/20/2006	08/01/2006	08/14/2006	09/12/2006	10/24/2006	
12:40 PM	3:05 PM	2:52 PM	3:13 PM	1:59 PM	
<5.0/<5.0	<5.0	<5.0	<5.0	<5.0	
74.3/73.8	55.9	63.1	90.4	36.7	
<200/<200	<200	<200	<200	<200	
<0.050/<0.05	<0.050	NA	<0.050	<0.050	
<2.0/<2.0	<2.0	<2.0	<2.0	<2.0	
<2.0/<2.0	<2.0	<2.0	<2.0	<2.0	
66/66	59	61	65	50	
10/<10	<10	NA	<10	<10	
<0.20/<0.20	<0.20	<0.20	0.73	<0.20	
24/25	21	23	25	20	
10.1/10.0	7.4	9.6	12.0	5.5	
<30/<30	<30	<30	<30	<30	
285/286	248	281	303	236	
<10/<10	<10	<10	<10	<10	
130/132	114	123	136	103	
242/240	307	221	353	252	
<2.0/<2.0	<2.0	<2.0	<2.0	<2.0	
17/17	15	16	18	13	
272/248	104	149	89	33	
<0.20/<0.20	<0.20	<0.20	<0.20	<0.20	
<40/<40	<40	<40	<40	<40	
0.18/0.23	0.35	NA	0.18	0.66	
<0.020/<0.02	<0.020	0.061	<0.020	<0.020	
3/3.0	4	3	4	3	
<2.0/<2.0	<2.0	<2.0	<2.0	<2.0	
8/8.0	6	7	9	6	
92/92	75	83	96	68	
56.8/55.6	52.9	57.0	54.9	50.5	
<0.20/0.28	<0.20	NA	<0.20	0.34	
184/180	152	182	186	150	
0.010/<0.01	0.762	NA	<0.010	0.016 B	
<5.0/<5.0	<5	<5	5	<5	
13/10	<10	<10	<10	<10	
Field Measurements					
29.55	31.32	21.81	9.82	27.72	
313	269	296.8	212.8	277	
78.8	68.9	88.9	95.3	72.5	
5.83	5.03	7.79	10.79	5.7	
7.6	7.36	7.4	7.5	7.44	

Site Location: SCIOTO BRUSH CK @ SR 104					
River Mile: 0.27 Storet: V14P06					
07/20/2006	08/01/2006	08/14/2006	09/12/2006	10/24/2006	
1:00 PM	9:00 AM	9:45 AM	9:42 AM	9:35 AM	
<5.0	<5.0	<5.0	<5.0	<5.0	
80.6	53.8	62.6	92.6	35.5	
<200	233	<200	<200	<200	
<0.050	<0.050	<0.050	<0.050	<0.050	
<2.0	<2.0	<2.0	<2.0	<2.0	
<2.0	<2.0	<2.0	<2.0	<2.0	
59	54	58	58	45	
<10	10	12	<10	<10	
<0.20	<0.20	<0.20	<0.20	<0.20	
25	19	22	23	18	
10.0	6.9	8.9	11.4	5.5	
<30	<30	<30	<30	<30	
284	227	268	283	227	
<10	<10	<10	<10	<10	
132	101	117	123	94	
226	462	237	221	266	
<2.0	<2.0	<2.0	<2.0	<2.0	
17	13	15	16	12	
89	71	71	63	32	
<0.20	<0.20	<0.20	<0.20	<0.20	
<40	<40	<40	<40	<40	
0.14	0.38	0.24	0.66	0.62	
<0.020	<0.020	<0.020	<0.020	<0.020	
3	4	4	4	2	
<2.0	<2.0	<2.0	<2.0	<2.0	
9	6	7	9	6	
96	72	85	93	65	
52.9	46.6	53.3	46.0	47.7	
0.31	<0.20	<0.20	<0.20	0.45	
186	142	166	174	146	
<0.010	0.015	<0.010	0.015	0.024 B	
<5	5	5	<5	<5	
<10	<10	<10	<10	<10	
Field Measurements					
29.25	26.3	24.94	21.51	9.72	
315	247	264.8	279.8	212.5	
80	64.6	83.1	82	99.1	
5.98	5.14	6.87	7.23	11.26	
7.78	7.96	7.72	8.18	7.72	

Appendix Table 1. Continued.

Parameter	Units
Acidity	mg/L
Alkalinity	mg/L
Aluminum	ug/L
Ammonia	mg/L
Arsenic	ug/L
BOD5	mg/L
Barium	ug/L
COD	mg/L
Cadmium	ug/L
Calcium	mg/L
Chloride	mg/L
Chromium	ug/L
Conductivity	umhos/cm
Copper	ug/L
Hardness, Total	mg/L
Iron	ug/L
Lead	ug/L
Magnesium	mg/L
Manganese	ug/L
Mercury	ug/L
Nickel	ug/L
Nitrate+nitrite	mg/L
Nitrite	mg/L
Potassium	mg/L
Selenium	ug/L
Sodium	mg/L
Strontium	ug/L
Sulfate	mg/L
TKN	mg/L
Total Dissolved Solids	mg/L
Total Phosphorus	mg/L
Total Suspended Solids	mg/L
Zinc	ug/L
Field Measurements	
Temperature	°C
Conductivity	umhos/cm
D.O. Saturation	%
Dissolved Oxygen	mg/L
pH	S.U.

Site Location: JAYBIRD BR @ BEAVER POND RD River Mile: 0.99 Storet: V14Q25				
07/20/2006 9:50 AM	08/01/2006 10:25 AM	08/14/2006 10:56 AM	09/12/2006 10:55 AM	10/24/2006 10:26 AM
<5.0	<5.0	<5.0	<5.0/<5.0	<5.0
26.6	16.4	19.5 B	26.5/22.3	19.1
538	503	954	9490/9060	707
<0.050	<0.050	<0.050	<0.050/<0.05	<0.050
<2.0	<2.0	<2.0	4.2/3.8	<2.0
<2.0	<2.0	<2.0	2.0/2.1	<2.0
35	37	36	82/79	40
<10	<10	<10	13/<10	<10
1.30	1.23	1.32	0.91/0.90	1.31
12	12	12	20/19	12
<5.0	<5.0	<5.0	10.8/10.5	<5.0
<30	<30	<30	<30/<30	<30
166	161	172	237RC/226RC	161
<10	<10	<10	14/13	<10
59	59	59	108/101	59
147	217	1210	14100/13400	99
<2.0	<2.0	<2.0	7.4/7.4	<2.0
7	7	7	14/13	7
234	241	352	283/274	217
<0.20	<0.20	<0.20	<0.20/<0.20	<0.20
<40	44	45	52/52	44
0.13	0.13	0.15	0.32/0.32	0.52
<0.020	<0.020	<0.020	<0.020/<0.02	<0.020
3	3	4	5/5.0	3
<2.0	<2.0	<2.0	<2.0/<4.0UJ	<2.0
<5	<5	<5	6/6.0	<5
51	49	50	65/62	51
61.6	57.0	64.2	75.9/77.4	55.6
0.25	<0.20	<0.20	<0.20/<0.20	<0.20
126	122	132	242RC/236RC	122
0.434	<0.010	<0.010	0.027/0.029	0.100
<5	<5	17	290/280	<5
87	90	85	144/142	87
Field Measurements				
19.65	21.23	20.15	18.73	9.43
185	170	171.5	226.9	136.8
44.7	55	48.4	90.2	94.2
4	4.82	4.39	8.41	10.78
4.6	4.14	5.51	7.32	6.05

Site Location: BETTYS CREEK ADJ. POPLAR GROVE RD. River Mile: 1.5 Storet: 200287			
08/01/2006 9:10 AM	08/14/2006 9:41 AM	09/12/2006 10:00 AM	10/24/2006 9:22 AM
<5.0	<5.0	<5.0	<5.0
38.3	40.4	51.3	8.7
<200	<200	260	216
<0.050	<0.050	<0.050	<0.050
<2.0	<2.0	<2.0	<2.0
<2.0	<2.0	<2.0	<2.0
54	55	47	47
<10	<10	<10	<10
0.20	0.44	0.28	1.17
18	19	16	11
5.0	<5.0	<5.0	<5.0
<30	<30	<30	<30
197	210	189	141
<10	<10	<10	<10
86	93	81	52
<50	<50	356	55
<2.0	<2.0	<2.0	<2.0
10	11	10	6
13	<10	42	95
<0.20	<0.20	<0.20	<0.20
<40	<40	<40	<40
0.13	0.13	0.17	0.22
<0.020	<0.020	<0.020	<0.020
3	3	2	2
<2.0	<2.0	<2.0	<2.0
<5	<5	<5	<5
51	51	43	40
47.4	49.2	39.0	42.9
<0.20	<0.20	<0.20	0.35
120	146	124	94
<0.010	0.012	<0.010	<0.010
40	<5	13	<5
<10	<10	<10	57
Field Measurements			
21.3	20.38	18.38	9.29
210	210.4	182.2	119.3
53.4	47.3	81.8	97.3
4.67	4.26	7.68	11.17
6.21	6.95	6.43	7.54

Appendix Table 1. Continued.

Parameter	Units
Acidity	mg/L
Alkalinity	mg/L
Aluminum	ug/L
Ammonia	mg/L
Arsenic	ug/L
BOD5	mg/L
Barium	ug/L
COD	mg/L
Cadmium	ug/L
Calcium	mg/L
Chloride	mg/L
Chromium	ug/L
Conductivity	umhos/cm
Copper	ug/L
Hardness, Total	mg/L
Iron	ug/L
Lead	ug/L
Magnesium	mg/L
Manganese	ug/L
Mercury	ug/L
Nickel	ug/L
Nitrate+nitrite	mg/L
Nitrite	mg/L
Potassium	mg/L
Selenium	ug/L
Sodium	mg/L
Strontium	ug/L
Sulfate	mg/L
TKN	mg/L
Total Dissolved Solids	mg/L
Total Phosphorus	mg/L
Total Suspended Solids	mg/L
Zinc	ug/L
Field Measurements	
Temperature	°C
Conductivity	umhos/cm
D.O. Saturation	%
Dissolved Oxygen	mg/L
pH	S.U.

Site Location: DUCK RUN @ LANE UPST REEDS RUN				
River Mile: 1.56 Storet: 300096				
8/1/2006 9:25 AM	8/14/2006 10:08 AM	09/12/2006 10:06 AM	10/24/2006 9:57 AM	
<5.0	<5.0	<5.0	<5.0	
93.6	87.7	108	38.8	
<200	<200	<200	<200	
<0.050	<0.050	<0.050	<0.050	
<2.0	<2.0	<2.0	<2.0	
<2.0	<2.0	<2.0	<2.0	
49	46	42	23	
<10	24	<10	<10	
<0.20	<0.20	<0.20	<0.20	
34	34	32	16	
25.4	25.0	24.0	7.5	
<30	<30	<30	<30	
477	531	483	261	
<10	<10	<10	<10	
192	192	183	98	
<50	58	110	98	
<2.0	<2.0	<2.0	<2.0	
26	26	25	14	
32	12	12	<10	
<0.20	<0.20	<0.20	<0.20	
<40	<40	<40	<40	
0.36	0.23	<0.10	0.33	
<0.020	<0.020	<0.020	<0.020	
5	5	5	3	
<2.0	<2.0	<2.0	<2.0	
30	31	30	12	
262	269	250	129	
112	144	116	60.1	
<0.20	<0.20	<0.20	<0.20	
302	338	302	162	
<0.010	<0.010	0.065	0.016 B	
<5	<5	<5	<5	
<10	<10	<10	<10	
Field Measurements				
23.33	22.22	19.39	6.85	
525	515.4	467	242.4	
46.2	74	85.4	103.3	
3.88	6.44	7.85	12.57	
7.4	7.43	7.74	8.13	

Site Location: REEDS RUN @ DUCK RUN-OTWAY RD				
River Mile: 0.07 Storet: 300111				
8/1/2006 9:15 AM	8/14/2006 10:00 AM	09/12/2006 9:56 AM	10/24/2006 9:48 AM	
<5.0	<5.0	<5.0	<5.0	
122	133	154	47.3	
<200	<200	<200	<200	
<0.050	<0.050	<0.050	<0.050	
<2.0	<2.0	<2.0	<2.0	
<2.0	<2.0	<2.0	<2.0	
56	50	50	28	
<10	<10	<10	<10	
<0.20	<0.20	<0.20	<0.20	
42	42	42	20	
28.6	29.9	30.6	11.9	
<30	<30	<30	<30	
582	613	590	321	
<10	<10	<10	<10	
232	224	228	116	
282	147	129	54	
<2.0	<2.0	<2.0	<2.0	
31	29	30	16	
151	123	118	33	
<0.20	<0.20	<0.20	<0.20	
<40	<40	<40	<40	
<0.10	0.18	0.16	0.68	
<0.020	<0.020	<0.020	<0.020	
6	5	5	3	
<2.0	<2.0	<2.0	<2.0	
41	38	38	16	
287	267	262	116	
138	141	131	74.0	
<0.20	<0.20	<0.20	0.56	
366	390	364	194	
0.013	0.032	0.023	0.011 B	
16	<5	<5	<5	
<10	<10	<10	<10	
Field Measurements				
23.33	22.22	19.39	6.85	
525	515.4	467	242.4	
46.2	74	85.4	103.3	
3.88	6.44	7.85	12.57	
7.4	7.43	7.74	8.13	

Appendix Table 1. Continued.

Parameter	Units
Acidity	mg/L
Alkalinity	mg/L
Aluminum	ug/L
Ammonia	mg/L
Arsenic	ug/L
BOD5	mg/L
Barium	ug/L
COD	mg/L
Cadmium	ug/L
Calcium	mg/L
Chloride	mg/L
Chromium	ug/L
Conductivity	umhos/cm
Copper	ug/L
Hardness, Total	mg/L
Iron	ug/L
Lead	ug/L
Magnesium	mg/L
Manganese	ug/L
Mercury	ug/L
Nickel	ug/L
Nitrate+nitrite	mg/L
Nitrite	mg/L
Potassium	mg/L
Selenium	ug/L
Sodium	mg/L
Strontium	ug/L
Sulfate	mg/L
TKN	mg/L
Total Dissolved Solids	mg/L
Total Phosphorus	mg/L
Total Suspended Solids	mg/L
Zinc	ug/L
Field Measurements	
Temperature	°C
Conductivity	umhos/cm
D.O. Saturation	%
Dissolved Oxygen	mg/L
pH	S.U.

Site Location: MCCULLOUGH CK @ LANE OFF HENLY DEEMER RD					
River Mile: 1.33 Storet: V14Q26					
	07/20/2006	08/01/2006	08/14/2006	09/12/2006	10/24/2006
	11:30 AM	2:20 PM	1:44 PM	2:20 PM	1:04 PM
<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
27.5	33.9	36.4	31.9	12.9	
<200	<200	<200	<200	<200	<200
0.064	0.116	0.133	<0.050	<0.050	
<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
68	78	65	65	40	
<10	<10	<10	<10	<10	<10
<0.20	0.29	<0.20	<0.20	<0.20	<0.20
20	21	19	21	11	
12.8	15.2	15.3	14.2	5.0	
<30	<30	<30	<30	<30	<30
315	329	328	347	203	
<10	<10	<10	<10	<10	<10
124	131	122	135	73	
318	109	693	159	<50	
<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
18	19	18	20	11	
228	70	324	34	<10	
<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
<40	<40	<40	<40	<40	<40
0.36	0.59	0.82	<0.10	0.22	
0.043	0.118	<0.020	<0.020	<0.020	
4	6	6	4	2	
<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
14	14	13	15	8	
146	151	140	155	77	
99.6	97.0	93.9	119	62.9	
0.26	0.27	0.31	<0.20	<0.20	
206	206	206	222	130	
0.022	0.014	0.068	0.079	<0.010	
38	<5	<5	<5	<5	
11	<10	<10	12	<10	
Field Measurements					
25.18	27.4	24.96	20.58	7.76	
334	362	171.1	336.6	186.8	
59.8	42.8	90.1	84.2	102.6	
4.85	3.34	7.45	7.56	12.21	
7.25	6.92	7.14	6.92	7.68	

Site Location: MCCULLOUGH CK @ DIEHLMAN RD					
River Mile: 0.61 Storet: V14Q27					
Dup A/B					
	07/20/2006	08/01/2006	08/14/2006	09/12/2006	10/24/2006
	11:45 AM	2:00 PM	1:58 PM	2:32 PM	1:14 PM
<5.0	<5.0	<5.0/<5.0	<5.0	<5.0	<5.0
40.0	41.2	44.3/42.8	53.3	21.9	
<200	<200	<200/<200	<200	<200	<200
<0.050	<0.050	<0.050/<0.05	<0.050	<0.050	<0.050
<2.0	<2.0	<2.0/<2.0	<2.0	<2.0	<2.0
<2.0	<2.0	<2.0/<2.0	<2.0	<2.0	<2.0
59	60	52/53	53	36	
<10	<10	<10/<10	<10	<10	<10
<0.20	<0.20	<0.20/<0.20	<0.20	<0.20	<0.20
21	22	20/20	21	13	
15.4	17.4	18.4/18.4	16.7	6.3	
<30	<30	<30/<30	<30	<30	<30
340	348	350/347	358	232	
<10	<10	<10/<10	<10	<10	<10
131	137	124/124	131	82	
78	74	144/101	178	191	
<2.0	<2.0	<2.0/<2.0	<2.0	<2.0	<2.0
19	20	18/18	19	12	
85	87	75/73	85	12	
<0.20	<0.20	<0.20/<0.20	<0.20	<0.20	<0.20
<40	<40	<40/<40	<40	<40	<40
0.23	0.19	0.15/0.16	0.15	0.28	
<0.020	<0.020	<0.020/<0.02	<0.020	<0.020	<0.020
4	4	3/3.0	3	2	
<2.0	<2.0	<2.0/<2.0	<2.0	<2.0	<2.0
18	18	17/17	18	9	
157	160	144/144	150	92	
95.8	104	106/106	105	64.7	
0.63	<0.20	<0.20/<0.20	<0.20	0.23	
222	220	212/214	220	142	
0.084	<0.010	<0.010/<0.01	0.160	0.018 B	
<5	<5	5/5.0	6	<5	
<10	<10	<10/<10	<10	<10	<10
Field Measurements					
27.68	31.08	26.71	20.82	7.9	
376	382	342.6	347.1	213.3	
90.4	82.6	96.5	92	101.6	
6.91	6.04	7.72	8.22	12.06	
7.32	7.33	7.4	7.18	7.58	

Appendix Table 1. Continued.

Parameter	Units
Acidity	mg/L
Alkalinity	mg/L
Aluminum	ug/L
Ammonia	mg/L
Arsenic	ug/L
BOD5	mg/L
Barium	ug/L
COD	mg/L
Cadmium	ug/L
Calcium	mg/L
Chloride	mg/L
Chromium	ug/L
Conductivity	umhos/cm
Copper	ug/L
Hardness, Total	mg/L
Iron	ug/L
Lead	ug/L
Magnesium	mg/L
Manganese	ug/L
Mercury	ug/L
Nickel	ug/L
Nitrate+nitrite	mg/L
Nitrite	mg/L
Potassium	mg/L
Selenium	ug/L
Sodium	mg/L
Strontium	ug/L
Sulfate	mg/L
TKN	mg/L
Total Dissolved Solids	mg/L
Total Phosphorus	mg/L
Total Suspended Solids	mg/L
Zinc	ug/L
Field Measurements	
Temperature	°C
Conductivity	umhos/cm
D.O. Saturation	%
Dissolved Oxygen	mg/L
pH	S.U.

Site Location: E BR MCCULLOUGH CK ADJ SR 348 DST West. Trib				
River Mile: 3.42 Storet: 300097				
8/1/2006 9:43 AM	8/14/2006 10:24 AM	09/12/2006 10:26 AM	10/24/2006 10:10 AM	
<5.0	<5.0	<5.0	<5.0	
89.9	89.5	102	40.2	
<200	<200	<200	<200	
<0.050	<0.050	0.060	<0.050	
<2.0	<2.0	<2.0	<2.0	
<2.0	<2.0	<2.0	<2.0	
55	46	51	33	
<10	<10	40	<10	
<0.20	<0.20	<0.20	<0.20	
37	32	33	19	
42.2	43.6	36.0	12.8	
<30	<30	<30	<30	
547	521	530	316	
<10	<10	<10	<10	
212	183	198	117	
130	280	93	101	
<2.0	<2.0	<2.0	<2.0	
29	25	28	17	
85	113	31	12	
<0.20	<0.20	<0.20	<0.20	
<40	<40	<40	<40	
0.11	1.26	<0.10	0.47	
<0.020	<0.020	<0.020	<0.020	
4	4	4	3	
<2.0	<2.0	<2.0	<2.0	
36	32	32	16	
241	211	235	132	
128	104	132	77.6	
<0.20	<0.20	<0.20	0.47	
342	308	324	194	
<0.010	<0.010	<0.010	0.231 B	
<5	<5	<5	<5	
<10	<10	<10	<10	
Field Measurements				
25.03	23.66	19.75	7.7	
601	506.3	510.5	245.6	
76.3	94.5	95.6	104.3	
6.21	7.99	8.72	12.44	
7.51	7.65	7.7	7.62	

Site Location: E BR MCCULLOUGH CK UPST CONLEY RD				
River Mile: 1.0 Storet: V14Q28				
07/20/2006 12:00 PM	08/01/2006 2:40 PM	08/14/2006 2:18 PM	09/12/2006 2:43 PM	10/24/2006 1:28 PM
<5.0	<5.0	<5.0	<5.0	<5.0
65.7	67.5	68.5	79.6	29.5
<200	<200	2460	<200	<200
<0.050	<0.050	0.054	<0.050	<0.050
<2.0	<2.0	2.6	<2.0	<2.0
<2.0	<2.0	<2.0	<2.0	<2.0
59	55	77	50	31
<10	10	<10	<10	<10
<0.20	<0.20	0.35	<0.20	<0.20
29	28	27	27	16
21.0	20.7	24.1	23.5	8.4
<30	<30	<30	<30	<30
457	443	459	456	268
<10	<10	<10	<10	<10
175	173	166	170	98
486	<50	6440	<50	<50
<2.0	<2.0	4.2	<2.0	<2.0
25	25	24	25	14
41	11	227	<10	<10
<0.20	<0.20	<0.20	<0.20	<0.20
<40	<40	<40	<40	<40
0.23	1.31	0.25	0.15	0.30
<0.020	<0.020	<0.020	<0.020	<0.020
4	4	5	4	2
<2.0	<2.0	<2.0	<2.0	<2.0
25	25	24	25	12
205	200	194	188	106
118	123	124	116	70.9
0.37	<0.20	<0.20	<0.20	0.53
292	270	316	280	170
<0.010	<0.010	<0.010	0.066	<0.010
8	<5	106	<5	<5
<10	<10	21	<10	<10
Field Measurements				
26.9	28.17	26.88	20.16	6.87
490	477	445.5	435	296.3
95.5	88.6	101.2	105.5	102.4
7.51	6.83	8.07	9.55	12.46
7.77	7.68	7.89	7.89	8.35

Appendix Table 1. Continued.

Parameter	Units
Acidity	mg/L
Alkalinity	mg/L
Aluminum	ug/L
Ammonia	mg/L
Arsenic	ug/L
BOD5	mg/L
Barium	ug/L
COD	mg/L
Cadmium	ug/L
Calcium	mg/L
Chloride	mg/L
Chromium	ug/L
Conductivity	umhos/cm
Copper	ug/L
Hardness, Total	mg/L
Iron	ug/L
Lead	ug/L
Magnesium	mg/L
Manganese	ug/L
Mercury	ug/L
Nickel	ug/L
Nitrate+nitrite	mg/L
Nitrite	mg/L
Potassium	mg/L
Selenium	ug/L
Sodium	mg/L
Strontium	ug/L
Sulfate	mg/L
TKN	mg/L
Total Dissolved Solids	mg/L
Total Phosphorus	mg/L
Total Suspended Solids	mg/L
Zinc	ug/L
Field Measurements	
Temperature	°C
Conductivity	umhos/cm
D.O. Saturation	%
Dissolved Oxygen	mg/L
pH	S.U.

Site Location: BEAR CREEK @ Spruce RD Dst Left & Right Forks				
River Mile: 5.1 Storet: 300098				
8/1/2006 12:05 PM	8/14/2006 12:22 PM	09/12/2006 12:25 PM	10/24/2006 11:48 AM	
<5.0	<5.0	<5.0	<5.0	
21.3	20.6	21.9	9.9	
<200	<200	<200	<200	
<0.050	<0.050	0.161	<0.050	
<2.0	<2.0	<2.0	<2.0	
<2.0	<2.0	2.6	<2.0	
40	35	46	28	
<10	<10	<10	<10	
<0.20	<0.20	<0.20	<0.20	
9	8	9	6	
<5.0	<5.0	<5.0	<5.0	
<30	<30	<30	<30	
153	154	167	114	
<10	<10	<10	<10	
60	53	64	40	
146	68	127	72	
<2.0	<2.0	<2.0	<2.0	
9	8	10	6	
28	32	268	<10	
<0.20	<0.20	<0.20	<0.20	
<40	<40	<40	<40	
0.23	0.34	<0.10	0.30	
<0.020	<0.020	<0.020	<0.020	
3	3	4	2	
<2.0	<2.0	<2.0	<2.0	
5	5	5	<5	
66	62	72	45	
43.1	43.8	51.6	29.2	
<0.20	<0.20	0.32	0.49	
98	102	108	68	
0.016	<0.010	0.036	0.015 B	
6	9	<5	<5	
<10	<10	<10	<10	
Field Measurements				
24.36	24.18	20.66	7.32	
166	147.6	159.3	106.2	
73.3	110	89.1	98.2	
6.05	9.23	7.99	11.82	
7.25	7.21	6.8	7.75	

Site Location: BEAR CK @ BIG SPRUCE RD NR ALUM ROCK				
River Mile: 3.45 Storet: V14Q29				
07/20/2006 10:30 AM	08/01/2006 12:23 PM	08/14/2006 12:39 PM	09/12/2006 12:37 PM	10/24/2006 12:00 PM
<5.0	<5.0	<5.0	<5.0	<5.0
19.1	39.7	42.6	60.7	14.5
<200	<200	<200	<200	<200
<0.050	<0.050	<0.050	<0.050	<0.050
<2.0	<2.0	<2.0	<2.0	<2.0
<2.0	<2.0	<2.0	<2.0	<2.0
39	52	51	57	30
<10	<10	<10	<10	<10
<0.20	<0.20	<0.20	<0.20	<0.20
8	13	13	15	7
<5.0	<5.0	5.0	6.8	<5.0
<30	<30	<30	<30	<30
152	195	209	228	134
<10	<10	<10	<10	<10
57	82	82	95	46
100	<50	<50	<50	<50
<2.0	<2.0	<2.0	<2.0	<2.0
9	12	12	14	7
34	<10	<10	25	<10
<0.20	<0.20	<0.20	<0.20	<0.20
<40	<40	<40	<40	<40
0.31	0.68	0.29	0.17	0.25
<0.020	<0.020	<0.020	<0.020	<0.020
3	3	3	3	2
<2.0	<2.0	<2.0	<2.0	<2.0
5	7	7	8	5
66	85	85	99	50
41.3	45.6	47.3	47.8	33.5
<0.20	<0.20	<0.20	<0.20	0.45
102	118	128	140	90
0.012	0.069	<0.010	<0.010	<0.010
<5	<5	<5	<5	<5
<10	<10	<10	<10	<10
Field Measurements				
24.18	23.71	22.38	19.18	7.19
165	207	199.6	216.8	123.2
93.2	81.5	95	81.8	100.3
7.82	6.81	8.24	7.56	12.11
7.39	7.48	7.34	7.12	7.72

Appendix Table 1. Continued.

Parameter	Units
Acidity	mg/L
Alkalinity	mg/L
Aluminum	ug/L
Ammonia	mg/L
Arsenic	ug/L
BOD5	mg/L
Barium	ug/L
COD	mg/L
Cadmium	ug/L
Calcium	mg/L
Chloride	mg/L
Chromium	ug/L
Conductivity	umhos/cm
Copper	ug/L
Hardness, Total	mg/L
Iron	ug/L
Lead	ug/L
Magnesium	mg/L
Manganese	ug/L
Mercury	ug/L
Nickel	ug/L
Nitrate+nitrite	mg/L
Nitrite	mg/L
Potassium	mg/L
Selenium	ug/L
Sodium	mg/L
Strontium	ug/L
Sulfate	mg/L
TKN	mg/L
Total Dissolved Solids	mg/L
Total Phosphorus	mg/L
Total Suspended Solids	mg/L
Zinc	ug/L
Field Measurements	
Temperature	°C
Conductivity	umhos/cm
D.O. Saturation	%
Dissolved Oxygen	mg/L
pH	S.U.

Site Location: BEAR CREEK Adj SR 73, DST Mouth of Saw Pit Run					
River Mile: 1.4 Storet: 200296					
Dup A/B					
07/20/2006	08/01/2006	08/14/2006	09/12/2006	10/24/2006	
10:50 AM	11:45 AM	12:50 PM	1:15 PM	12:53 PM	
<5.0	<5.0	<5.0	<5.0/<5.0	<5.0	
46.4	47.5	46.3	52.8/51.7	20.1	
<200	<200	<200	<200/<200	<200	
<0.050	<0.050	<0.050	<0.050/<0.05	<0.050	
<2.0	<2.0	<2.0	<2.0/<2.0	<2.0	
<2.0	<2.0	<2.0	<2.0/<2.0	<2.0	
61	58	54	56/56	35	
<10	<10	<10	<10/<10	<10	
<0.20	<0.20	<0.20	<0.20/<0.20	<0.20	
17	16	16	16/16	10	
14.0	14.1	13.8	15.8/15.4	5.5	
<30	<30	<30	<30/<30	<30	
261	262	263	259/255	174	
<10	<10	<10	<10/<10	<10	
100	98	94	98/98	62	
87	105	97	159/144	84	
<2.0	<2.0	<2.0	<2.0/<2.0	<2.0	
14	14	13	14/14	9	
226	202	66	28/25	15	
<0.20	<0.20	<0.20	<0.20/<0.20	<0.20	
<40	<40	<40	<40/<40	<40	
0.24	0.23	0.41	0.14/0.15	0.41	
<0.020	<0.020	<0.020	<0.020/<0.02	<0.020	
3	3	3	3/3.0	2	
<2.0	<2.0	<2.0	<2.0/<2.0	<2.0	
13	14	12	13/13	7	
118	119	110	117/115	69	
62.0	60.5	60.7	57.2/58.1	40.6	
0.22	<0.20	<0.20	<0.20/<0.20	0.47	
176	162	158	156/154	114	
<0.010	<0.010	<0.010	<0.010/<0.01	<0.010	
<5	<5	<5	7/8.0	14	
<10	<10	<10	<10/<10	<10	
Field Measurements					
23.21	26.25	24.57	20.09	8.08	
288	267	262.9	301	159.2	
81.8	73.6	109.7	116.7	101.2	
6.83	5.86	9.13	10.58	11.96	
7.21	7.11	6.83	6.51	7.63	

Site Location: SAW PIT RUN W OF LOMBARDSVILLE @ MOUTH				
River Mile: 0.10 Storet: 200299				
08/01/2006	08/14/2006	09/12/2006	10/24/2006	
11:45 AM	1:00 PM	1:31 PM	12:38 PM	
<5.0	<5.0	<5.0	<5.0	
56.7	59.8	74.8	28.7	
<200	<200	<200	<200	
<0.050	<0.050	<0.050	<0.050	
<2.0	<2.0	<2.0	<2.0	
<2.0	<2.0	<2.0	<2.0	
62	60	83	36	
<10	<10	<10	<10	
<0.20	<0.20	<0.20	<0.20	
22	22	25	14	
29.3	34.2	40.0	10.1	
<30	<30	<30	<30	
342	364	386	241	
<10	<10	<10	<10	
125	125	132	89	
<50	<50	166	<50	
<2.0	<2.0	<2.0	<2.0	
17	17	17	13	
<10	<10	21	<10	
<0.20	<0.20	<0.20	<0.20	
<40	<40	<40	<40	
0.49	0.83	1.28	0.42	
<0.020	<0.020	<0.020	<0.020	
4	4	4	3	
<2.0	<2.0	<2.0	<2.0	
21	22	24	12	
136	130	140	86	
71.4	71.3	65.2	55.1	
0.37	<0.20	<0.20	0.42	
214	224	240	150	
<0.010	0.244	<0.010	<0.010	
<5	<5	23	<5	
<10	<10	<10	<10	
Field Measurements				
22.36	21.37	19.83	8.01	
382	359.1	377.2	220.2	
77.6	72.7	79.8	98.3	
6.64	6.43	7.27	11.63	
7.14	6.87	6.44	7.58	

Appendix Table 1. Continued.

Parameter	Units
Acidity	mg/L
Alkalinity	mg/L
Aluminum	ug/L
Ammonia	mg/L
Arsenic	ug/L
BOD5	mg/L
Barium	ug/L
COD	mg/L
Cadmium	ug/L
Calcium	mg/L
Chloride	mg/L
Chromium	ug/L
Conductivity	umhos/cm
Copper	ug/L
Hardness, Total	mg/L
Iron	ug/L
Lead	ug/L
Magnesium	mg/L
Manganese	ug/L
Mercury	ug/L
Nickel	ug/L
Nitrate+nitrite	mg/L
Nitrite	mg/L
Potassium	mg/L
Selenium	ug/L
Sodium	mg/L
Strontium	ug/L
Sulfate	mg/L
TKN	mg/L
Total Dissolved Solids	mg/L
Total Phosphorus	mg/L
Total Suspended Solids	mg/L
Zinc	ug/L
Field Measurements	
Temperature	°C
Conductivity	umhos/cm
D.O. Saturation	%
Dissolved Oxygen	mg/L
pH	S.U.

Site Location: S FK SCIOTO BRUSH CK @ LANE TO HALL HOLLOW					
River Mile: 12.36 Storet: V14Q30					
07/20/2006	08/01/2006	08/14/2006	09/12/2006	10/24/2006	
12:55 PM	11:34 AM	12:16 PM	12:28 PM	12:53 PM	
<5.0	<5.0	<5.0	<5.0	<5.0	
103	105	86.2	118	61.3	
<200	<200	<200	<200	<200	
<0.050	<0.050	0.052	0.052	<0.050	
<2.0	<2.0	<2.0	<2.0	<2.0	
<2.0	<2.0	<2.0	<2.0	<2.0	
81	81	80	87	56	
<10	21	<10	<10	<10	
<0.20	<0.20	<0.20	<0.20	<0.20	
31	31	27	32	26	
8.4	8.2	9.0	10.4	<5.0	
<30	<30	<30	<30	<30	
307	309	287	328	256	
<10	<10	<10	<10	<10	
152	152	133	158	131	
183	244	319	220	85	
<2.0	<2.0	<2.0	<2.0	<2.0	
18	18	16	19	16	
84	77	139	93	21	
<0.20	<0.20	<0.20	<0.20	0.41	
<40	<40	<40	<40	<40	
0.30	0.30	0.30	0.18	0.97	
<0.020	<0.020	<0.020	<0.020	<0.020	
4	3	4	4	2	
<2.0	<2.0	<2.0	<2.0	<2.0	
6	6	7	7	<5	
75	68	73	79	56	
45.3	41.0	42.9	46.5	36.2	
0.26	<0.20	<0.20	<0.20	<0.20	
182	198	172	202	166	
<0.010	0.011	<0.010	0.086	0.128	
6	9	<5	<5	<5	
<10	<10	<10	<10	<10	
Field Measurements					
27.87	26.68	24.7	21.26	8.49	
337	326.5	276.9	337.8	239.3	
58.7	76.7	69.4	63	100.1	
4.54	6.14	5.76	5.59	11.7	
7.36	7.55	7.13	7.36	7.5	

Site Location: S FK SCIOTO BRUSH CK @ SR 348 NR WAMSLEY					
River Mile: 7.02 Storet: V14P02					
Dup A/B					
07/20/2006	08/01/2006	08/14/2006	09/12/2006	10/24/2006	
12:35 PM	10:40 AM	11:35 AM	11:22 AM	1:55 PM	
<5.0	<5.0/<5.0	<5.0	<5.0	<5.0	
93.6	71.3/70.3	73.4	82.0	46.2	
<200	<200/<200	<200	<200	<200	
0.061	<0.050/<0.05	0.057	<0.050	<0.050	
<2.0	<2.0/<2.0	<2.0	<2.0	<2.0	
<2.0	<2.0/<2.0	<2.0	<2.0	<2.0	
79	71/71	72	69	57	
<10	<10/<10	<10	<10	12	
<0.20	<0.20/<0.20	<0.20	<0.20	0.26	
28	24/24	23	23	22	
8.0	8.3/8.4	9.3	9.1	5.0	
<30	<30/<30	<30	<30	<30	
292	251/252	259	251	228	
<10	<10/<10	<10	<10	<10	
140	118/118	115	115	108	
311	432/462	556	630	261	
<2.0	<2.0/<2.0	<2.0	<2.0	<2.0	
17	14/14	14	14	13	
157	156/160	246	208	62	
<0.20	<0.20/<0.20	<0.20	<0.20	<0.20	
<40	<40/<40	<40	<40	<40	
0.29	0.43/0.41	0.44	0.23	1.22	
<0.020	<0.020/<0.02	<0.020	<0.020	<0.020	
3	3/3.0	4	4	3	
<2.0	<2.0/<2.0	<2.0	<2.0	<2.0	
6	6/6.0	6	6	5	
75	69/68	69	67	60	
42.5	38.7/38.4	40.9	36.3	38.1	
<0.20	<0.20/<0.20	<0.20	<0.20	0.33	
184	170/178	156	156	160	
<0.010	<0.010/<0.01	0.012	0.012	0.036	
<5	<5.0/<5.0	<5	<5	<5	
<10	<10/<10	<10	<10	16	
Field Measurements					
28	26.31	24.37	20.82	8.52	
315	259.5	257.6	257.1	212.6	
65	78.1	82.2	74.8	96.5	
4.93	6.3	6.87	6.69	11.28	
7.34	7.35	7.18	7.25	7.26	

Appendix Table 1. Continued.

		Site Location: S. FK. SCIOTO BRUSH CREEK AT ROCKY FORK RD.									
		River Mile: 1.14 Storet: V14P03									
Parameter	Units	02/02/2006	03/29/2006	04/10/2006	05/25/2006	06/19/2006	07/18/2006	07/20/2006	08/01/2006	08/14/2006	08/28/2006
		10:30 AM	9:50 AM	1:25 PM	11:40 AM	10:25 AM	10:20 AM	9:45 AM	11:00 AM	11:37 AM	10:03 AM
Acidity	mg/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Alkalinity	mg/L	49.7	53.8	42.6	78.1	89.6	89.6	85.9	61.3	64.9	84.5
Aluminum	ug/L	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200
Ammonia	mg/L	<0.050	<0.050	<0.050	0.054	0.062	<0.050	<0.050	0.055	0.084	<0.050
Arsenic	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	2.0
BOD5	mg/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Barium	ug/L	60	56	48	69	74	77	75	67	66	68
COD	mg/L	13	<10	<10	<10	<10	<10	<10	<10	<10	<10
Cadmium	ug/L	0.22	0.23	0.30	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Calcium	mg/L	23	21	17	26	27	27	25	22	20	21
Chloride	mg/L	6.6	5.9	<5.0	6.2	6.9	8.7	8.1	7.8	7.3	8.3
Chromium	ug/L	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30
Conductivity	umhos/cm	245	237	200	286	279	274	267	233	237	236
Copper	ug/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Hardness, Total	mg/L	111	106	88	135	133	133	128	108	99	106
Iron	ug/L	327	274	197	490	387	366	276	321	389	358
Lead	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Magnesium	mg/L	13	13	11	17	16	16	16	13	12	13
Manganese	ug/L	74	54	46	98	126	165	181	149	287	262
Mercury	ug/L	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Nickel	ug/L	<40	<40	<40	<40	<40	<40	<40	<40	<40	<40
Nitrate+nitrite	mg/L	1.34	0.69	0.67	0.32	0.30	0.31	0.13	0.58	0.82	0.20
Nitrite	mg/L	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Potassium	mg/L	2	2	2	3	3	3	3	3	4	5
Selenium	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Sodium	mg/L	5	5	5	6	6	7	6	6	6	7
Strontium	ug/L	61	62	51	70	69	74	71	64	64	68
Sulfate	mg/L	46.6	52.5	44.6	48.7	43.4	38.0	40.9	40.8	36.9	34.0
TKN	mg/L	<0.20	<0.20	<0.20	<0.20	0.34	0.36	0.40	<0.20	<0.20	<0.20
Total Dissolved Solids	mg/L	158	164	138	178	170	176	172	140	144	150
Total Phosphorus	mg/L	<0.010	<0.010	<0.010	<0.010	<0.010	0.011	<0.010	<0.010	<0.010	<0.010
Total Suspended Solids	mg/L	<5	<5	5	<5	<5	<5	<5	<5	<5	<5
Zinc	ug/L	13	15	15	<10	<10	<10	<10	<10	<10	<10
Field Measurements											
Temperature	°C	6.2	8.7	11.84	NA	NA	NA	25.85	26.93	24.63	24.3
Conductivity	umhos/cm	268	256	209	NA	NA	NA	293	259	234.9	228
D.O. Saturation	%	74.8	85.4	68.5	NA	NA	NA	80.3	59.7	46.4	60.8
Dissolved Oxygen	mg/L	9.1	9.81	7.35	NA	NA	NA	6.44	4.69	3.86	5.09
pH	S.U.	7.44	7.1	7.99	NA	NA	NA	7.5	7.36	7.12	7.16

Appendix Table 1. Continued.

		Site Location: S. FK. SCIOTO BRUSH CREEK AT ROCKY FORK RD.										
		River Mile: 1.14 Storet: V14P03										
		09/12/2006	09/25/2006	10/12/2006	10/24/2006	11/15/2006						
		11:35 AM	10:08 AM	10:16 AM	11:06 AM	11:14 AM						
Parameter	Units											
Acidity	mg/L	<5.0	<5.0	<5.0	<5.0	<5.0						
Alkalinity	mg/L	93.5	46.6	50.7	40.8	66.4						
Aluminum	ug/L	<200	347	<200	<200	<200						
Ammonia	mg/L	0.066	<0.050	<0.050	<0.050	<0.050						
Arsenic	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0						
BOD5	mg/L	<2.0	<2.0	<2.0	<2.0	<2.0						
Barium	ug/L	68	63	76	58	65						
COD	mg/L	<10	<10	13	<10	<10						
Cadmium	ug/L	<0.20	<0.20	<0.20	0.24	<0.20						
Calcium	mg/L	22	21	24	19	23						
Chloride	mg/L	8.7	5.1	6.6	<5.0	5.1						
Chromium	ug/L	<30	<30	<30	<30	<30						
Conductivity	umhos/cm	250	220	243	224	244						
Copper	ug/L	<10	<10	<10	<10	<10						
Hardness, Total	mg/L	112	102	118	97	115						
Iron	ug/L	316	721	541	326	454						
Lead	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0						
Magnesium	mg/L	14	12	14	12	14						
Manganese	ug/L	166	70	114	76	83						
Mercury	ug/L	<0.20	<0.20	<0.20	<0.20	<0.20						
Nickel	ug/L	<40	<40	<40	<40	<40						
Nitrate+nitrite	mg/L	0.95	0.90	1.40	1.02	0.80						
Nitrite	mg/L	<0.020	<0.020	<0.020	<0.020	<0.020						
Potassium	mg/L	4	3	3	3	3						
Selenium	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0						
Sodium	mg/L	7	5	6	5	5						
Strontium	ug/L	70	51	67	56	60						
Sulfate	mg/L	34.9	39.7	42.0	40.1	45.3						
TKN	mg/L	<0.20	<0.20	1.69	0.44	<0.20						
Total Dissolved Solids	mg/L	150	148	186	140	148						
Total Phosphorus	mg/L	0.033	0.015	<0.010	0.011 B	<0.010						
Total Suspended Solids	mg/L	<5	12	6	<5	<5						
Zinc	ug/L	<10	12	<10	11	14						
Field Measurements												
Temperature	°C	20.64	18.08	15.65	9.31	8.56						
Conductivity	umhos/cm	245.7	212.8	237.8	206.6	247.7						
D.O. Saturation	%	69.7	91.4	83.8	92.3	92.5						
Dissolved Oxygen	mg/L	6.26	8.64	8.33	10.59	10.8						
pH	S.U.	7.27	7.72	7.36	8.21	7.31						

Appendix Table 1. Continued.

Parameter	Units
Acidity	mg/L
Alkalinity	mg/L
Aluminum	ug/L
Ammonia	mg/L
Arsenic	ug/L
BOD5	mg/L
Barium	ug/L
COD	mg/L
Cadmium	ug/L
Calcium	mg/L
Chloride	mg/L
Chromium	ug/L
Conductivity	umhos/cm
Copper	ug/L
Hardness, Total	mg/L
Iron	ug/L
Lead	ug/L
Magnesium	mg/L
Manganese	ug/L
Mercury	ug/L
Nickel	ug/L
Nitrate+nitrite	mg/L
Nitrite	mg/L
Potassium	mg/L
Selenium	ug/L
Sodium	mg/L
Strontium	ug/L
Sulfate	mg/L
TKN	mg/L
Total Dissolved Solids	mg/L
Total Phosphorus	mg/L
Total Suspended Solids	mg/L
Zinc	ug/L
Field Measurements	
Temperature	°C
Conductivity	umhos/cm
D.O. Saturation	%
Dissolved Oxygen	mg/L
pH	S.U.

Site Location: ROCKY FORK CREEK @ SR 125					
River Mile: 8.78 Storet: 300099					
	Dup A		Dup B	Dup A/B	
	8/1/2006	8/14/2006	09/12/2006	09/12/2006	10/24/2006
	2:55 PM	2:43 PM	2:59 PM	2:59 PM	9:56 AM
<5.0	<5.0	<5.0	<5.0	<5.0	<5.0/<5.0
38.0	41.7	62.6	61.0	10.2/10.1	
<200	<200	<200	<200	<200/<200	
<0.050	<0.050	<0.050	<0.050	<0.050/<0.05	
<2.0	<2.0	<2.0	<2.0	<2.0/<2.0	
<2.0	<2.0	<2.0	<2.0	<2.0/<2.0	
35	35	44	43	26/25	
<10	<10	<10	<10	12/<10	
<0.20	<0.20	<0.20	<0.20	<0.20/<0.20	
10	10	13	13	5/5.0	
11.5	12.4	18.1	18.2	<5.0/<5.0	
<30	<30	<30	<30	<30/<30	
153	165	212	212	81/80	
<10	<10	<10	<10	<10/<10	
54	54	70	70	29/29	
<50	128	<50	58	79/55	
<2.0	<2.0	<2.0	<2.0	<2.0/<2.0	
7	7	9	9	4/4.0	
<10	<10	<10	<10	<10/<10	
<0.20	<0.20	<0.20	<0.20	<0.20/<0.20	
<40	<40	<40	<40	<40/<40	
0.17	0.19	0.22	0.20	0.19/0.21	
<0.020	<0.020	<0.020	<0.020	<0.020/<0.02	
2	2	2	2	<2	
<2.0	<2.0	<2.0	<2.0	<2.0/<2.0	
9	9	13	14	<5.0/<5.0	
54	56	72	71	33/32	
20.1	20.7	21.5	21.8	15.7/15.8	
<0.20	<0.20	<0.20	<0.20	<0.20/<0.20	
88	90	132	126	58/62	
0.011	<0.010	0.234	0.185	0.015/<0.05	
<5	<5	<5	<5	<5.0/<5.0	
<10	<10	<10	<10	<10/<10	
Field Measurements					
29.78	27.49	20.64	20.64	7.63	
145.4	157.8	214.9	214.9	73.3	
101.1	112	84.7	84.7	98.7	
7.67	8.84	7.6	7.6	11.8	
7.97	8.11	7.59	7.59	7.85	

Site Location: ROCKY FORK CREEK @ FOOTBRIDGE DST BIG RUN					
River Mile: 7.15 Storet: V14Q31					
	07/20/2006	08/01/2006	08/14/2006	09/12/2006	10/24/2006
	10:05 AM	3:15 PM	2:55 PM	3:16 PM	9:35 AM
<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
54.6	49.8	56.9	73.0	13.0	
<200	<200	NA	<200	<200	
<0.050	<0.050	NA	<0.050	<0.050	
<2.0	<2.0	NA	<2.0	<2.0	
<2.0	<2.0	<2.0	<2.0	<2.0	
54	45	NA	57	26	
<10	10	NA	<10	<10	
<0.20	<0.20	NA	<0.20	<0.20	
15	13	NA	18	6	
12.7	10.4	12.0	15.3	<5.0	
<30	<30	NA	<30	<30	
212	192	211	248	96	
<10	<10	NA	<10	<10	
83	74	NA	99	36	
69	<50	NA	92	55	
<2.0	<2.0	NA	<2.0	<2.0	
11	10	NA	13	5	
<10	10	NA	11	<10	
<0.20	<0.20	NA	<0.20	<0.20	
<40	<40	NA	<40	<40	
0.26	0.15	NA	0.21	0.27	
<0.020	<0.020	<0.020	<0.020	<0.020	
3	3	NA	3	2	
<2.0	<2.0	NA	<2.0	<2.0	
11	9	NA	11	<5	
86	71	NA	87	38	
30.1	26.4	28.4	34.1	19.5	
0.26	<0.20	NA	<0.20	<0.20	
128	120	120	152	62	
<0.010	<0.010	NA	0.011	<0.010	
<5	<5	<5	6	<5	
<10	<10	NA	<10	<10	
Field Measurements					
23.21	29.19	26.62	20.2	6.54	
237	194.8	108.4	250	87.1	
55.1	93.4	93.2	75.1	103.2	
4.64	7.16	7.48	6.8	12.67	
7.35	7.61	7.41	7.38	8.83	

Appendix Table 1. Continued.

Parameter	Units
Acidity	mg/L
Alkalinity	mg/L
Aluminum	ug/L
Ammonia	mg/L
Arsenic	ug/L
BOD5	mg/L
Barium	ug/L
COD	mg/L
Cadmium	ug/L
Calcium	mg/L
Chloride	mg/L
Chromium	ug/L
Conductivity	umhos/cm
Copper	ug/L
Hardness, Total	mg/L
Iron	ug/L
Lead	ug/L
Magnesium	mg/L
Manganese	ug/L
Mercury	ug/L
Nickel	ug/L
Nitrate+nitrite	mg/L
Nitrite	mg/L
Potassium	mg/L
Selenium	ug/L
Sodium	mg/L
Strontium	ug/L
Sulfate	mg/L
TKN	mg/L
Total Dissolved Solids	mg/L
Total Phosphorus	mg/L
Total Suspended Solids	mg/L
Zinc	ug/L
Field Measurements	
Temperature	°C
Conductivity	umhos/cm
D.O. Saturation	%
Dissolved Oxygen	mg/L
pH	S.U.

Site Location: ROCKY FORK CK @ Gravel Lane Off ROCKY FK RD				
River Mile: 3.52 Storet: V14Q32				
Dup A	Dup B			Dup A/B
8/1/2006	8/1/2006	8/14/2006	09/12/2006	10/24/2006
11:20 AM	11:20 AM	11:52 AM	11:50 AM	11:21 AM
<5.0	<5.0	<5.0	<5.0	<5.0/<5.0
37.5	37.3	34.3	41.1	16.1/16.1
<200	<200	<200	<200	<200/<200
<0.050	<0.050	0.067	<0.050	<0.050/<0.05
<2.0	<2.0	<2.0	<2.0	<2.0/<2.0
<2.0	<2.0	<2.0	<2.0	<2.0/<2.0
39	42	40	46	25/27
<10	<10	<10	13	<10/<10
<0.20	<0.20	<0.20	<0.20	<0.20/<0.20
13	13	13	15	8/8.0
6.5	6.4	7.3	9.4	<5.0/<5.0
<30	<30	<30	<30	<30/<30
192	192	203	231	123/123
<10	<10	<10	<10	<10/<10
74	78	74	91	45/49
<50	<50	91	<50	<50/66
<2.0	<2.0	<2.0	<2.0	<2.0/<2.0
10	11	10	13	6/7.0
<10	<10	<10	<10	<10/<10
<0.20	<0.20	<0.20	<0.20	<0.20/<0.20
<40	<40	<40	<40	<40/<40
0.17	0.17	0.19 PT	<0.10	0.31/0.27
<0.020	<0.020	<0.020	<0.020	<0.020/<0.02
3	3	3	3	2/2.0
<2.0	<2.0	<2.0	<2.0	<2.0/<2.0
8	8	8	9	<5.0/<5.0
77	81	77	94	44/47
44.0	43.2	48.8	58.2	26.4/26.3
<0.20	<0.20	<0.20	<0.20	0.43/0.35
118	120	124	146	84/84
<0.010	<0.010	<0.010	0.010	0.056J/<0.01
<5	5	<5	<5	<5.0/<5.0
<10	<10	<10	<10	<10/<10
Field Measurements				
26.51	26.51	24.91	20.72	7.54
207	207	196.3	221.4	113.7
83.5	83.5	102.3	85.7	94.8
6.62	6.62	8.47	7.68	11.35
7.29	7.29	7.14	7.4	7.72

Site Location: SPRUCE RUN SE OF WAMSLEY @ ROCKY FORK RD.				
River Mile: 0.1 Storet: 200306				
08/01/2006	08/14/2006	09/12/2006	10/24/2006	
11:40 AM	12:05 PM	12:06 PM	11:31 AM	
<5.0	<5.0	<5.0	<5.0	
66.6	74.2	95.0	22.6	
<200	<200	<200	<200	
<0.050	<0.050	<0.050	<0.050	
<2.0	<2.0	<2.0	<2.0	
<2.0	<2.0	<2.0	<2.0	
48	47	52	28	
<10	<10	<10	<10	
<0.20	<0.20	<0.20	<0.20	
18	19	22	10	
<5.0	<5.0	<5.0	<5.0	
<30	<30	<30	<30	
236	256	270	152	
<10	<10	<10	<10	
111	113	129	62	
<50	<50	83	<50	
<2.0	<2.0	<2.0	<2.0	
16	16	18	9	
<10	<10	<10	<10	
<0.20	<0.20	<0.20	<0.20	
<40	<40	<40	<40	
0.80	0.18	<0.10	0.21	
<0.020	<0.020	<0.020	<0.020	
3	3	3	2	
<2.0	<2.0	<2.0	<2.0	
6	6	7	<5	
102	101	119	54	
47.4	49.3	53.3	34.0	
<0.20	<0.20	<0.20	0.43	
150	160	164	86	
0.011	<0.010	<0.010	0.014 B	
<5	<5	<5	<5	
<10	<10	<10	<10	
Field Measurements				
24.84	23.56	20.66	6.85	
260	251.5	265.9	138.3	
83.1	119	105.9	99.3	
6.79	10.09	9.49	12.1	
7.67	8.35	7.91	7.71	

Appendix Table 1. Continued.

Parameter	Units
Acidity	mg/L
Alkalinity	mg/L
Aluminum	ug/L
Ammonia	mg/L
Arsenic	ug/L
BOD5	mg/L
Barium	ug/L
COD	mg/L
Cadmium	ug/L
Calcium	mg/L
Chloride	mg/L
Chromium	ug/L
Conductivity	umhos/cm
Copper	ug/L
Hardness, Total	mg/L
Iron	ug/L
Lead	ug/L
Magnesium	mg/L
Manganese	ug/L
Mercury	ug/L
Nickel	ug/L
Nitrate+nitrite	mg/L
Nitrite	mg/L
Potassium	mg/L
Selenium	ug/L
Sodium	mg/L
Strontium	ug/L
Sulfate	mg/L
TKN	mg/L
Total Dissolved Solids	mg/L
Total Phosphorus	mg/L
Total Suspended Solids	mg/L
Zinc	ug/L
Field Measurements	
Temperature	°C
Conductivity	umhos/cm
D.O. Saturation	%
Dissolved Oxygen	mg/L
pH	S.U.

Site Location: BEECH FORK @ BEECH FORK RD				
River Mile: 1.85 Storet: 300100				
	Dup A		Dup B	
	8/1/2006	8/14/2006	09/12/2006	10/24/2006
	10:08 AM	11:10 AM	10:59 AM	1:11 PM
Acidity	<5.0	<5.0	<5.0	<5.0
Alkalinity	26.9	41.0	35.8	12.0
Aluminum	<200	<200	<200	<200
Ammonia	<0.050	<0.050	<0.050	<0.050
Arsenic	<2.0	<2.0	<2.0	<2.0
BOD5	<2.0	<2.0	<2.0	<2.0
Barium	52	57	50	41
COD	<10	<10	<10	<10
Cadmium	0.37	0.38	0.37	0.45
Calcium	14	18	16	10
Chloride	<5.0	<5.0	<5.0	<5.0
Chromium	<30	<30	<30	<30
Conductivity	184	232	206	145
Copper	<10	<10	<10	<10
Hardness, Total	76	99	85	54
Iron	<50	<50	<50	<50
Lead	<2.0	<2.0	<2.0	<2.0
Magnesium	10	13	11	7
Manganese	<10	<10	<10	<10
Mercury	<0.20	<0.20	<0.20	<0.20
Nickel	<40	<40	<40	<40
Nitrate+nitrite	0.15	0.22	0.15	0.27
Nitrite	<0.020	<0.020	<0.020	<0.020
Potassium	2	2	2	2
Selenium	<2.0	<2.0	<2.0	<2.0
Sodium	5	6	5	<5
Strontium	72	86	76	53
Sulfate	54.3	66.2	61.8	43.7
TKN	<0.20	<0.20	<0.20	0.48
Total Dissolved Solids	124	144	142	84
Total Phosphorus	<0.010	<0.010	0.539	<0.010
Total Suspended Solids	<5	6	<5	<5
Zinc	13	<10	<10	20
Field Measurements				
Temperature	21.97	22.51	19.15	9.53
Conductivity	187.6	145.8	206.1	123
D.O. Saturation	93.9	100.2	93.2	99.2
Dissolved Oxygen	8.21	8.67	8.62	11.32
pH	7.35	7.56	7.4	7.13

Site Location: TURKEY CK @ JONES RD				
River Mile: 6.0 Storet: 300101				
	Dup A		Dup B	
	08/01/2006	08/14/2006	09/12/2006	10/24/2006
	9:10 AM	10:04 AM	10:01 AM	2:03 PM
Acidity	<5.0	<5.0	<5.0	<5.0
Alkalinity	203	206	148	129
Aluminum	<200	<200	3420	<200
Ammonia	0.053	<0.050	<0.050	<0.050
Arsenic	<2.0	<2.0	2.2	<2.0
BOD5	<2.0	<2.0	3.8	<2.0
Barium	204	192	184	130
COD	<10	<10	13	<10
Cadmium	<0.20	<0.20	0.47	<0.20
Calcium	54	51	35	43
Chloride	11.6	11.7	6.4	<5.0
Chromium	<30	<30	<30	<30
Conductivity	492	485	317	410
Copper	<10	<10	<10	<10
Hardness, Total	262	255	170	210
Iron	172	170	3720	114
Lead	<2.0	<2.0	5.2	<2.0
Magnesium	31	31	20	25
Manganese	33	27	135	20
Mercury	<0.20	<0.20	<0.20	<0.20
Nickel	<40	<40	<40	<40
Nitrate+nitrite	0.70	0.51	0.25	0.20
Nitrite	0.049	<0.020	<0.020	<0.020
Potassium	4	5	4	2
Selenium	<2.0	<2.0	<2.0	<2.0
Sodium	8	8	5	<5
Strontium	56	56	35	44
Sulfate	38.4	38.5	29.1	37.3
TKN	<0.20	<0.20	<0.20	0.36
Total Dissolved Solids	284	280	226	238
Total Phosphorus	0.011	<0.010	0.065	<0.010
Total Suspended Solids	<5	8	51	<5
Zinc	<10	<10	68	<10
Field Measurements				
Temperature	22.74	21.82	18.75	8.43
Conductivity	498.4	456.6	331.5	347.3
D.O. Saturation	86.9	99.4	88.9	93.6
Dissolved Oxygen	7.48	8.71	8.29	10.96
pH	8.16	8.17	7.62	7.97

Appendix Table 1. Continued.

Parameter	Units
Acidity	mg/L
Alkalinity	mg/L
Aluminum	ug/L
Ammonia	mg/L
Arsenic	ug/L
BOD5	mg/L
Barium	ug/L
COD	mg/L
Cadmium	ug/L
Calcium	mg/L
Chloride	mg/L
Chromium	ug/L
Conductivity	umhos/cm
Copper	ug/L
Hardness, Total	mg/L
Iron	ug/L
Lead	ug/L
Magnesium	mg/L
Manganese	ug/L
Mercury	ug/L
Nickel	ug/L
Nitrate+nitrite	mg/L
Nitrite	mg/L
Potassium	mg/L
Selenium	ug/L
Sodium	mg/L
Strontium	ug/L
Sulfate	mg/L
TKN	mg/L
Total Dissolved Solids	mg/L
Total Phosphorus	mg/L
Total Suspended Solids	mg/L
Zinc	ug/L
Field Measurements	
Temperature	°C
Conductivity	umhos/cm
D.O. Saturation	%
Dissolved Oxygen	mg/L
pH	S.U.

Site Location: TURKEY CK @ GRAVEL LANE UPST DRY FK					
River Mile: 4.24 Storet: V14Q33					
07/20/2006	08/01/2006	08/14/2006	09/12/2006	10/24/2006	
12:10 PM	9:42 AM	10:24 AM	10:14 AM	1:45 PM	
<5.0	<5.0	<5.0	<5.0	<5.0	
218	181	169	156	114	
<200	<200	<200	1930	<200	
0.252	<0.050	<0.050	<0.050	<0.050	
<2.0	<2.0	<2.0	<2.0	<2.0	
2.2	<2.0	<2.0	3.2	<2.0	
213	168	168	151	122	
10	<10	<10	<10	<10	
<0.20	<0.20	<0.20	0.29	<0.20	
52	47	43	35	40	
14.0	11.3	11.3	9.4	5.0	
<30	<30	<30	<30	<30	
500	443	431	352	375	
<10	<10	<10	<10	<10	
258	233	214	174	199	
231	262	478	2660	107	
<2.0	<2.0	<2.0	3.3	<2.0	
31	28	26	21	24	
39	62	147	106	25	
<0.20	<0.20	<0.20	<0.20	<0.20	
<40	<40	<40	<40	<40	
0.94	0.15	0.32	0.30	0.22	
0.218	<0.020	<0.020	<0.020	<0.020	
8	3	3	5	2	
<2.0	<2.0	<2.0	<2.0	<2.0	
9	8	7	6	<5	
59	55	54	39	48	
35.8	38.7	39.9	29.1	36.3	
0.72	<0.20	<0.20	<0.20	0.31	
300	264	252	230	230	
0.020	<0.010	<0.010	0.048	<0.050 UJ	
14	9	11	80	<5	
<10	<10	<10	28	<10	
Field Measurements					
27.62	24	23.37	19.33	8.29	
524	453.5	424.4	358.5	316.9	
95	78	65.4	77.2	104.2	
7.37	6.55	5.57	7.11	12.25	
8.09	7.89	7.55	7.82	7.6	

Site Location: TURKEY CREEK NEAR MOUTH, UPST. ST. RT. 78					
River Mile: 0.6 Storet: 200309					
07/20/2006	08/01/2006	08/14/2006	09/12/2006	10/24/2006	
12:30 PM	10:26 AM	10:53 AM	10:43 AM	1:26 PM	
<5.0	<5.0	<5.0	<5.0	<5.0	
96.6	84.7	79.1	84.4	54.4	
<200	<200	<200	464	<200	
<0.050	<0.050	<0.050	<0.050	<0.050	
<2.0	<2.0	<2.0	<2.0	<2.0	
<2.0	<2.0	<2.0	<2.0	<2.0	
88	88	83	73	78	
<10	<10	<10	<10	<10	
<0.20	<0.20	<0.20	<0.20	0.38	
29	29	26	25	24	
11.1	10.4	11.8	8.0	<5.0	
<30	<30	<30	<30	<30	
303	294	288	271	255	
<10	<10	<10	<10	<10	
142	142	131	120	118	
367	205	397	834	104	
<2.0	<2.0	<2.0	<2.0	<2.0	
17	17	16	14	14	
128	94	159	79	44	
<0.20	<0.20	<0.20	<0.20	<0.20	
<40	<40	<40	<40	<40	
0.17	0.28	0.30	0.22	0.56	
<0.020	<0.020	<0.020	<0.020	<0.020	
4	4	3	3	2	
<2.0	<2.0	<2.0	<2.0	<2.0	
8	8	8	6	5	
69	66	65	61	52	
45.0	45.6	45.7	48.9	43.1	
<0.20	<0.20	<0.20	<0.20	0.30	
194	190	168	182	170	
<0.010	<0.010	0.023	0.474	<0.010	
6	<5	6	11	<5	
<10	<10	<10	<10	21	
Field Measurements					
28.87	26.05	24.24	20.91	8.77	
328	311.6	283.9	277.7	220.1	
82.6	7.54	94.6	92.1	101.9	
6.27	7.8	7.92	8.22	11.84	
7.71	NA	7.53	7.58	7.28	

Appendix Table 1. Continued.

Parameter	Units
Acidity	mg/L
Alkalinity	mg/L
Aluminum	ug/L
Ammonia	mg/L
Arsenic	ug/L
BOD5	mg/L
Barium	ug/L
COD	mg/L
Cadmium	ug/L
Calcium	mg/L
Chloride	mg/L
Chromium	ug/L
Conductivity	umhos/cm
Copper	ug/L
Hardness, Total	mg/L
Iron	ug/L
Lead	ug/L
Magnesium	mg/L
Manganese	ug/L
Mercury	ug/L
Nickel	ug/L
Nitrate+nitrite	mg/L
Nitrite	mg/L
Potassium	mg/L
Selenium	ug/L
Sodium	mg/L
Strontium	ug/L
Sulfate	mg/L
TKN	mg/L
Total Dissolved Solids	mg/L
Total Phosphorus	mg/L
Total Suspended Solids	mg/L
Zinc	ug/L
Field Measurements	
Temperature	°C
Conductivity	umhos/cm
D.O. Saturation	%
Dissolved Oxygen	mg/L
pH	S.U.

Site Location: DRY FORK (TURKEY CK) @ SR 781				
River Mile: 0.18 Storet: 300102				
8/1/2006 9:25 AM	8/14/2006 10:38 AM	09/12/2006 10:24 AM	10/24/2006 1:38 PM	
<5.0	<5.0	<5.0	8.9 RC	
7.0	14.1	8.6	7.6 RC	
<200	<200	<200	<200	
<0.050	<0.050	<0.050	<0.050	
<2.0	<2.0	<2.0	<2.0	
<2.0	<2.0	<2.0	<2.0	
43	40	39	41	
<10	<10	<10	26	
0.70	0.51	0.65	0.80	
11	11	10	10	
<5.0	5.2	<5.0	<5.0	
<30	<30	<30	<30	
149	159	144	145	
<10	<10	<10	<10	
56	56	50	50	
<50	51	127	<50	
<2.0	<2.0	<2.0	<2.0	
7	7	6	6	
17	15	40	46	
<0.20	<0.20	<0.20	<0.20	
<40	<40	<40	<40	
0.50	0.55	0.53	0.59	
<0.020	<0.020	<0.020	<0.020	
3	3	3	3	
<2.0	<2.0	<2.0	<2.0	
5	5	<5	<5	
53	51	47	48	
48.8	51.0	43.6	44.4	
<0.20	2.82	<0.20	<0.20	
112	106	112	96	
0.014	0.013	0.038	<0.010	
<5	<5	<5	<5	
43	19	32	46	
Field Measurements				
23.09	22.1	19.14	9.46	
152.1	149.5	147	123	
83.6	91.1	84.6	97.9	
7.16	7.95	7.82	11.2	
6.78	6.64	7.04	7.15	

Site Location: TURKEY RUN @ NEWMAN RD N OF BLUE CREEK				
River Mile: 0.26 Storet: V14P05				
7/18/2006 10:40 AM	08/01/2006 10:50 AM	08/14/2006 11:50 AM	09/12/2006 11:39 AM	10/24/2006 1:39 PM
<5.0	<5.0	<5.0	<5.0	<5.0
18.3	17.2	17.4	24.1	7.2
<200	<200	<200	<200	<200
<0.050	<0.050	<0.050	<0.050	<0.050
<2.0	<2.0	<2.0	<2.0	<2.0
<2.0	<2.0	<2.0	<2.0	<2.0
54	50	46	45	57
<10	21	<10	<10	<10
0.22	<0.20	<0.20	<0.20	0.92
14	13	12	13	12
12.7	12.1	11.3	12.6	<5.0
<30	<30	<30	<30	<30
199	193	187	197	168
<10	<10	<10	<10	<10
72	65	63	65	63
91	78	122	216	102
<2.0	<2.0	<2.0	<2.0	<2.0
9	8	8	8	8
50	44	39	45	218
<0.20	<0.20	<0.20	<0.20	<0.20
<40	<40	<40	<40	<40
1.15	0.54	0.27	0.20	0.67
<0.020	<0.020	<0.020	<0.020	<0.020
5	6	5	5	3
<2.0	<2.0	<2.0	<2.0	<2.0
9	8	8	8	5
60	54	51	53	55
51.7	48.6	49.8	48.9	50.1
<0.20	<0.20	<0.20	<0.20	0.24
138	132	124	134	130
<0.010	<0.010	<0.010	0.011	<0.010
<5	<5	<5	<5	<5
10	10	<10	<10	60
Field Measurements				
NA	25	23.79	19.84	8.55
NA	198.6	181.6	201.9	156.3
NA	89.2	95.7	89.6	98.1
NA	7.37	8.08	8.17	11.46
NA	6.99	6.91	7.24	6.99

Appendix Table 1. Continued.

Parameter	Units
Acidity	mg/L
Alkalinity	mg/L
Aluminum	ug/L
Ammonia	mg/L
Arsenic	ug/L
BOD5	mg/L
Barium	ug/L
COD	mg/L
Cadmium	ug/L
Calcium	mg/L
Chloride	mg/L
Chromium	ug/L
Conductivity	umhos/cm
Copper	ug/L
Hardness, Total	mg/L
Iron	ug/L
Lead	ug/L
Magnesium	mg/L
Manganese	ug/L
Mercury	ug/L
Nickel	ug/L
Nitrate+nitrite	mg/L
Nitrite	mg/L
Potassium	mg/L
Selenium	ug/L
Sodium	mg/L
Strontium	ug/L
Sulfate	mg/L
TKN	mg/L
Total Dissolved Solids	mg/L
Total Phosphorus	mg/L
Total Suspended Solids	mg/L
Zinc	ug/L
Field Measurements	
Temperature	°C
Conductivity	umhos/cm
D.O. Saturation	%
Dissolved Oxygen	mg/L
pH	S.U.

Site Location: WINTERSTEIN RUN @ MOORS MEM. CHAPEL				
River Mile: 0.4 Storet: V14Q09				
	8/1/2006 11:13 AM	8/14/2006 12:07 PM	09/12/2006 11:57 AM	10/24/2006 1:19 PM
<5.0	<5.0	<5.0	<5.0	<5.0
57.2	77.7	96.8	14.5	
<200	<200	<200	<200	
<0.050	<0.050	<0.050	<0.050	
<2.0	<2.0	<2.0	<2.0	
<2.0	<2.0	<2.0	<2.0	
50	61	74	35	
15	<10	<10	<10	
0.21	0.20	0.32	<0.20	
24	28	36	12	
9.2	9.8	12.5	6.3	
<30	<30	<30	<30	
281	330	415	172	
<10	<10	<10	<10	
126	148	185	67	
62	83	250	<50	
<2.0	<2.0	<2.0	<2.0	
16	19	23	9	
22	<10	15	<10	
<0.20	<0.20	<0.20	<0.20	
<40	<40	<40	<40	
0.23	0.24	0.21	1.11	
<0.020	<0.020	<0.020	<0.020	
3	3	3	2	
<2.0	<2.0	<2.0	<2.0	
9	10	11	6	
97	113	140	59	
63.5	74.6	110	41.3	
<0.20	<0.20	<0.20	0.38	
182	206	266	122	
<0.010	0.200	0.014	<0.010	
<5	<5	8	<5	
<10	<10	<10	<10	
Field Measurements				
28.32	23.38	20.69	8.83	
290.6	328.3	415.6	158.7	
103.3	26.3	50.9	100.4	
8.04	2.24	4.56	11.64	
8.27	6.75	7.17	7.43	

Site Location: MILL CREEK, JUST UPST. MIDDLE BRANCH				
River Mile: 2.2 Storet: 200313				
	08/01/2006 12:25 PM	08/14/2006 12:52 PM	09/12/2006 1:08 PM	10/24/2006 10:46 AM
<5.0	<5.0	<5.0	<5.0	
201	186	226	174	
<200	<200	<200	<200	
<0.050	<0.050	<0.050	<0.050	
<2.0	<2.0	<2.0	<2.0	
<2.0	<2.0	<2.0	<2.0	
109	107	102	86	
<10	24	<10	<10	
<0.20	<0.20	<0.20	<0.20	
59	57	55	59	
17.2	18.2	19.4	11.2	
<30	<30	<30	<30	
523	532	533	527	
<10	<10	<10	<10	
283	282	273	291	
148	<50	65	75	
<2.0	<2.0	<2.0	<2.0	
33	34	33	35	
30	23	28	11	
<0.20	<0.20	<0.20	<0.20	
<40	<40	<40	<40	
0.18	0.18	0.14	0.15	
<0.020	<0.020	<0.020	<0.020	
3	3	3	2	
<2.0	<2.0	<2.0	<2.0	
11	10	11	8	
59	59	56	55	
54.8	65.2	59.9	47.0	
<0.20	<0.20	<0.20	0.20	
314	314	330	330	
0.029	<0.010	0.031 J	<0.010	
7	<5	<5	<5	
<10	<10	<10	<10	
Field Measurements				
23.33	21.8	19.25	7.08	
273.4	537.4	540.9	497.3	
83.9	85.9	72.7	97.8	
7.15	7.53	6.7	11.83	
8.01	7.84	7.79	8.09	

Appendix Table 1. Continued.

Parameter	Units
Acidity	mg/L
Alkalinity	mg/L
Aluminum	ug/L
Ammonia	mg/L
Arsenic	ug/L
BOD5	mg/L
Barium	ug/L
COD	mg/L
Cadmium	ug/L
Calcium	mg/L
Chloride	mg/L
Chromium	ug/L
Conductivity	umhos/cm
Copper	ug/L
Hardness, Total	mg/L
Iron	ug/L
Lead	ug/L
Magnesium	mg/L
Manganese	ug/L
Mercury	ug/L
Nickel	ug/L
Nitrate+nitrite	mg/L
Nitrite	mg/L
Potassium	mg/L
Selenium	ug/L
Sodium	mg/L
Strontium	ug/L
Sulfate	mg/L
TKN	mg/L
Total Dissolved Solids	mg/L
Total Phosphorus	mg/L
Total Suspended Solids	mg/L
Zinc	ug/L
Field Measurements	
Temperature	°C
Conductivity	umhos/cm
D.O. Saturation	%
Dissolved Oxygen	mg/L
pH	S.U.

Site Location: MILL CREEK @ GRAVEL ROAD OFF SR 125					
River Mile: 0.8 Storet: V14Q10					
07/20/2006	08/01/2006	08/14/2006	09/12/2006	10/24/2006	
2:00 PM	12:08 PM	12:42 PM	12:57 PM	10:32 AM	
<5.0	<5.0	<5.0	<5.0	<5.0	
193	169	192	214	120	
<200	<200	<200	<200	<200	
0.571	<0.050	0.671	0.571	<0.050	
<2.0	<2.0	<2.0	2.3	<2.0	
<2.0	<2.0	2.2	<2.0	<2.0	
127	105	128	130	72	
<10	10	<10	<10	<10	
<0.20	<0.20	<0.20	<0.20	<0.20	
49	47	48	49	43	
8.1	9.2	10.3	10.1	5.6	
<30	<30	<30	<30	<30	
465	425	470	467	387	
<10	<10	<10	<10	<10	
242	228	235	242	214	
348	243	308	254	104	
<2.0	<2.0	<2.0	<2.0	<2.0	
29	27	28	29	26	
268	114	252	279	22	
<0.20	<0.20	<0.20	<0.20	<0.20	
<40	<40	<40	<40	<40	
0.34	0.51	0.62	0.67	0.50	
0.144	<0.020	0.240	0.085	<0.020	
6	4	6	6	2	
<2.0	<2.0	<2.0	<2.0	<2.0	
5	6	6	6	<5	
63	57	61	61	53	
44.2	38.5	39.5	41.9	41.6	
1.86	<0.20	0.67	0.68	<0.20	
282	258	272	278	248	
0.068 J	0.054	0.012	0.023	<0.010	
7	<5	<5	<5	<5	
11	<10	<10	<10	<10	
Field Measurements					
25.49	25.88	23.4	19.92	7.38	
494	434.3	458.9	471.6	371.8	
41.8	78.9	60	47	96.4	
3.31	6.41	5.1	4.27	11.57	
7.46	7.84	7.35	7.44	7.86	

Site Location: MIDDLE BRANCH MILL CK UPST HICKMAN RUN				
River Mile: 1.95 Storet: 300103				
Dup A/B				
08/01/2006	08/14/2006	09/12/2006	10/24/2006	
12:45 PM	1:24 PM	1:28 PM	11:11 AM	
<5.0	<5.0/<5.0	<5.0	<5.0	
204	198/205	218	174	
<200	276/NA	<200	<200	
<0.050	<0.050/NA	<0.050	<0.050	
<2.0	<2.0/NA	<2.0	<2.0	
<2.0	<2.0/<2.0	<2.0	<2.0	
75	80/NA	78	67	
13	<10/NA	<10	<10	
<0.20	<0.20/NA	<0.20	<0.20	
51	45/NA	51	57	
6.3	9.3/9.2	6.6	<5.0	
<30	<30/NA	<30	<30	
459	481/483	463	491	
<10	<10/NA	<10	<10	
267	265/NA	259	286	
<50	520/NA	125	56	
<2.0	<2.0/NA	<2.0	<2.0	
34	37/NA	32	35	
<10	41/NA	12	<10	
<0.20	<0.20/NA	<0.20	<0.20	
<40	<40/NA	<40	<40	
0.12	2.51/NA	0.12	0.13	
<0.020	<0.020/<0.02	<0.020	<0.020	
3	3/NA	3	2	
<2.0	<2.0/NA	<2.0	<2.0	
5	8/NA	5	<5	
57	68/NA	59	53	
43.8	44.6/44.0	46.6	38.7	
<0.20	0.26/NA	<0.20	0.49	
278	286/278	284	304	
<0.010	<0.010/NA	<0.010	<0.010	
<5	9/9.0	<5	<5	
<10	<10/NA	<10	<10	
Field Measurements				
29.77	27.61	21.94	7.92	
244.4	245.8	472.7	454.6	
126.5	123.2	102.8	111.7	
9.6	9.71	8.99	13.24	
8.44	8.48	8.28	8.23	

Appendix Table 1. Continued.

Parameter	Units
Acidity	mg/L
Alkalinity	mg/L
Aluminum	ug/L
Ammonia	mg/L
Arsenic	ug/L
BOD5	mg/L
Barium	ug/L
COD	mg/L
Cadmium	ug/L
Calcium	mg/L
Chloride	mg/L
Chromium	ug/L
Conductivity	umhos/cm
Copper	ug/L
Hardness, Total	mg/L
Iron	ug/L
Lead	ug/L
Magnesium	mg/L
Manganese	ug/L
Mercury	ug/L
Nickel	ug/L
Nitrate+nitrite	mg/L
Nitrite	mg/L
Potassium	mg/L
Selenium	ug/L
Sodium	mg/L
Strontium	ug/L
Sulfate	mg/L
TKN	mg/L
Total Dissolved Solids	mg/L
Total Phosphorus	mg/L
Total Suspended Solids	mg/L
Zinc	ug/L
Field Measurements	
Temperature	°C
Conductivity	umhos/cm
D.O. Saturation	%
Dissolved Oxygen	mg/L
pH	S.U.

Site Location: M BR MILL CK JUST DST MOUTH OF HICKMAN RUN					
River Mile: 1.8 Storet: 200318					
07/20/2006	08/01/2006	08/14/2006	09/12/2006	10/24/2006	
1:45 PM	12:55 PM	1:11 PM	1:36 PM	11:19 AM	
<5.0	<5.0	<5.0	<5.0	<5.0	
203	168	152	195	73.9	
<200	<200	221	<200	<200	
<0.050	<0.050	<0.050	<0.050	<0.050	
<2.0	<2.0	<2.0	<2.0	<2.0	
<2.0	<2.0	<2.0	<2.0	<2.0	
74	77	78	79	61	
<10	<10	<10	<10	<10	
<0.20	<0.20	0.24	<0.20	0.36	
48	46	42	46	30	
6.0	5.8	5.8	5.8	<5.0	
<30	<30	<30	<30	<30	
467	414	395	415	280	
<10	<10	<10	<10	<10	
264	230	208	230	149	
<50	132	347	70	137	
<2.0	<2.0	<2.0	<2.0	<2.0	
35	28	25	28	18	
<10	21	53	12	24	
<0.20	<0.20	<0.20	<0.20	<0.20	
<40	<40	<40	<40	<40	
<0.10	0.36	0.10	<0.10	0.43	
<0.020	<0.020	<0.020	<0.020	<0.020	
2	3	3	3	2	
<2.0	<2.0	<2.0	<2.0	<2.0	
5	5	<5	<5	<5	
60	61	64	64	53	
46.1	45.0	45.3	45.9	43.8	
<0.20	0.32	<0.20	<0.20	<0.20	
286	248	234	272	190	
<0.010	<0.010	<0.010	<0.010	<0.050 UJ	
<5	<5	11	<5	<5	
<10	<10	<10	<10	15	
Field Measurements					
30.35	26.21	25.11	19.34	7.87	
498	419.3	388.4	419.1	266.8	
96.5	113	120.4	85.8	100.4	
6.89	9.12	9.92	7.9	11.92	
8.27	8.33	8.27	7.82	7.76	

Site Location: HICKMAN RUN SE OF LYNX @ BURR RD				
River Mile: 0.1 Storet: 200320				
08/01/2006	08/14/2006	09/12/2006	10/24/2006	
12:50 PM	1:20 PM	1:37 PM	11:15 AM	
<5.0	<5.0	<5.0	<5.0	
152	153	193	73.5	
<200	<200	<200	<200	
<0.050	<0.050	<0.050	<0.050	
<2.0	<2.0	<2.0	<2.0	
<2.0	<2.0	<2.0	<2.0	
86	81	82	59	
<10	<10	<10	<10	
0.25	0.26	<0.20	0.32	
45	42	45	29	
5.8	5.3	5.7	<5.0	
<30	<30	<30	<30	
390	395	406	282	
<10	<10	<10	<10	
215	208	219	146	
106	311	<50	67	
<2.0	<2.0	<2.0	<2.0	
25	25	26	18	
57	46	18	14	
<0.20	<0.20	<0.20	<0.20	
<40	<40	<40	<40	
0.15	0.14	0.11	0.46	
<0.020	<0.020	<0.020	<0.020	
3	3	3	2	
<2.0	<2.0	<2.0	<2.0	
5	<5	<5	<5	
67	65	67	52	
45.4	45.3	46.3	42.1	
<0.20	0.27	<0.20	0.23	
240	234	242	196	
<0.010	<0.010	0.022	<0.010	
6	16	19	<5	
13	<10	<10	12	
Field Measurements				
19.57	19.95	17.9	7.94	
350.4	255.5	424.2	269.1	
81.5	88.1	84.2	99.1	
7.47	8.01	7.98	11.75	
7.56	7.51	7.57	7.85	

Appendix Table 1. Continued.

Parameter	Units
Acidity	mg/L
Alkalinity	mg/L
Aluminum	ug/L
Ammonia	mg/L
Arsenic	ug/L
BOD5	mg/L
Barium	ug/L
COD	mg/L
Cadmium	ug/L
Calcium	mg/L
Chloride	mg/L
Chromium	ug/L
Conductivity	umhos/cm
Copper	ug/L
Hardness, Total	mg/L
Iron	ug/L
Lead	ug/L
Magnesium	mg/L
Manganese	ug/L
Mercury	ug/L
Nickel	ug/L
Nitrate+nitrite	mg/L
Nitrite	mg/L
Potassium	mg/L
Selenium	ug/L
Sodium	mg/L
Strontium	ug/L
Sulfate	mg/L
TKN	mg/L
Total Dissolved Solids	mg/L
Total Phosphorus	mg/L
Total Suspended Solids	mg/L
Zinc	ug/L
Field Measurements	
Temperature	°C
Conductivity	umhos/cm
D.O. Saturation	%
Dissolved Oxygen	mg/L
pH	S.U.

Site Location: CHURN CR.UPST. Slate Fork, Adj. Churn Creek Rd.				
River Mile: 3.9 Storet: 200328				
8/1/2006	8/14/2006	09/12/2006	10/24/2006	
2:02 PM	1:58 PM	2:16 PM	12:05 PM	
<5.0	<5.0	<5.0	<5.0	
52.0	58.7	72.8	13.5	
<200	<200	<200	<200	
<0.050	<0.050	<0.050	<0.050	
<2.0	<2.0	<2.0	<2.0	
<2.0	<2.0	<2.0	<2.0	
42	42	46	23	
<10	<10	<10	<10	
<0.20	<0.20	<0.20	<0.20	
14	15	17	6	
5.4	5.9	7.2	<5.0	
<30	<30	<30	<30	
184	201	217	99	
<10	<10	<10	<10	
76	83	92	36	
52	130	54	<50	
<2.0	<2.0	<2.0	<2.0	
10	11	12	5	
<10	<10	<10	<10	
<0.20	<0.20	<0.20	<0.20	
<40	<40	<40	<40	
0.18	0.22	0.18	0.24	
<0.020	<0.020	<0.020	<0.020	
3	3	3	2	
<2.0	<2.0	<2.0	<2.0	
6	6	7	<5	
74	78	84	39	
28.6	29.6	32.3	20.3	
<0.20	<0.20	<0.20	<0.20	
112	122	138	70	
0.027	<0.010	0.539	<0.010	
<5	18	<5	<5	
<10	<10	<10	<10	
Field Measurements				
24.85	23.12	19.6	8.48	
170.8	193.9	221	89.4	
88.3	97.5	83.6	100.9	
7.32	8.34	7.66	11.81	
7.67	7.73	7.57	7.35	

Site Location: CHURN CREEK UPST. JOHNSON RUN				
River Mile: 3.0 Storet: 200327				
07/20/2006	08/01/2006	08/14/2006	09/12/2006	10/24/2006
1:10 PM	2:20 PM	1:49 PM	2:06 PM	11:53 AM
<5.0	<5.0	<5.0	<5.0	<5.0
54.7	49.1	53.8	66.6	14.5
<200	<200	<200	<200	<200
<0.050	<0.050	<0.050	<0.050	<0.050
<2.0	<2.0	<2.0	<2.0	<2.0
<2.0	<2.0	<2.0	<2.0	<2.0
46	39	40	44	26
<10	10	<10	<10	<10
<0.20	<0.20	<0.20	<0.20	<0.20
16	15	16	19	8
8.1	7.4	8.4	9.5	<5.0
<30	<30	<30	<30	<30
205	195	213	238	111
<10	<10	<10	<10	<10
85	79	85	101	45
419	<50	65	<50	<50
<2.0	<2.0	<2.0	<2.0	<2.0
11	10	11	13	6
25	<10	<10	<10	<10
<0.20	<0.20	<0.20	<0.20	<0.20
<40	<40	<40	<40	<40
0.18	0.16	0.73	0.26	0.31
<0.020	<0.020	<0.020	<0.020	<0.020
3	3	3	3	2
<2.0	<2.0	<2.0	<2.0	<2.0
8	7	7	8	<5
84	77	78	92	45
33.3	33.7	35.8	41.2	23.2
<0.20	<0.20	<0.20	<0.20	<0.20
126	128	122	152	76
<0.010	<0.010	<0.010	<0.010	<0.010
<5	<5	<5	<5	<5
10	<10	<10	<10	<10
Field Measurements				
28.47	28.77	25.18	21.32	8.04
219	198.3	208.9	244.5	101.2
74	97	95.6	73.2	100.5
5.66	7.49	7.87	6.48	11.89
7.8	7.66	7.44	7.48	7.7

Appendix Table 1. Continued.

		Site Location: CHURN CK @ SR 125 W OF BLUE CREEK							
		River Mile: 0.15 Storet: V14P01							
Parameter	Units	Dup A		Dup B		09/12/2006 12:41 PM	10/24/2006 11:39 AM		
		07/18/2006 11:00 AM	07/20/2006 1:25 PM	07/20/2006 1:25 PM	08/01/2006 11:52 AM				
Acidity	mg/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0		
Alkalinity	mg/L	46.3	48.5	49.4	42.5	40.7	52.2	15.6	
Aluminum	ug/L	<200	<200	<200	<200	<200	<200	<200	
Ammonia	mg/L	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	
Arsenic	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	
BOD5	mg/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	
Barium	ug/L	61	56	58	52	48	55	40	
COD	mg/L	<10	<10	<10	<10	<10	<10	<10	
Cadmium	ug/L	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	
Calcium	mg/L	19	19	20	18	17	19	11	
Chloride	mg/L	7.3	7.3	7.2	6.8	6.7	7.2	<5.0	
Chromium	ug/L	<30	<30	<30	<30	<30	<30	<30	
Conductivity	umhos/cm	218	222	223	203	202	226	144	
Copper	ug/L	<10	<10	<10	<10	<10	<10	<10	
Hardness, Total	mg/L	93	97	99	86	84	93	56	
Iron	ug/L	167	93	103	51	89	159	66	
Lead	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	
Magnesium	mg/L	11	12	12	10	10	11	7	
Manganese	ug/L	36	27	27	22	37	42	<10	
Mercury	ug/L	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	
Nickel	ug/L	<40	<40	<40	<40	<40	<40	<40	
Nitrate+nitrite	mg/L	0.60	0.40	0.43	0.40	0.81	0.31	1.43	
Nitrite	mg/L	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	
Potassium	mg/L	3	3	3	3	3	3	2	
Selenium	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	
Sodium	mg/L	6	6	6	6	6	6	<5	
Strontium	ug/L	88	88	88	77	73	82	56	
Sulfate	mg/L	45.9	46.5	46.2	41.0	45.2	50.2	31.3	
TKN	mg/L	0.34	<0.20	<0.20	<0.20	0.41	<0.20	0.33	
Total Dissolved Solids	mg/L	150	142	144	132	126	152	100	
Total Phosphorus	mg/L	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	
Total Suspended Solids	mg/L	<5	<5	<5	<5	<5	<5	<5	
Zinc	ug/L	<10	19	20	<10	<10	<10	12	
Field Measurements									
Temperature	°C	NA	29.16	29.16	27.69	27.05	22.44	8.36	
Conductivity	umhos/cm	NA	240	240	210.9	203.4	232.3	136.3	
D.O. Saturation	%	NA	73.9	73.9	102.9	105.7	99.8	101.4	
Dissolved Oxygen	mg/L	NA	5.5	5.5	8.09	8.41	8.65	11.9	
pH	S.U.	NA	7.3	7.3	7.41	7.24	7.31	7.53	

Appendix Table 1. Continued.

Parameter	Units
Acidity	mg/L
Alkalinity	mg/L
Aluminum	ug/L
Ammonia	mg/L
Arsenic	ug/L
BOD5	mg/L
Barium	ug/L
COD	mg/L
Cadmium	ug/L
Calcium	mg/L
Chloride	mg/L
Chromium	ug/L
Conductivity	umhos/cm
Copper	ug/L
Hardness, Total	mg/L
Iron	ug/L
Lead	ug/L
Magnesium	mg/L
Manganese	ug/L
Mercury	ug/L
Nickel	ug/L
Nitrate+nitrite	mg/L
Nitrite	mg/L
Potassium	mg/L
Selenium	ug/L
Sodium	mg/L
Strontium	ug/L
Sulfate	mg/L
TKN	mg/L
Total Dissolved Solids	mg/L
Total Phosphorus	mg/L
Total Suspended Solids	mg/L
Zinc	ug/L
Field Measurements	
Temperature	°C
Conductivity	umhos/cm
D.O. Saturation	%
Dissolved Oxygen	mg/L
pH	S.U.

Site Location: BLUE CREEK @ GRAVEL LANE DST. GLEN RUN				
River Mile: 2.2 Storet: 200333				
8/1/2006	8/14/2006	09/12/2006	10/24/2006	
2:37 PM	2:22 PM	2:39 PM	12:27 PM	
<5.0	<5.0	<5.0	<5.0	
36.3	46.2	45.2	13.0	
<200	<200	<200	<200	
<0.050	<0.050	<0.050	<0.050	
<2.0	<2.0	<2.0	<2.0	
<2.0	<2.0	<2.0	<2.0	
52	56	55	40	
<10	<10	<10	<10	
0.20	<0.20	0.22	0.29	
17	18	18	12	
7.2	7.2	8.2	<5.0	
<30	<30	<30	<30	
197	220	218	148	
<10	<10	<10	<10	
84	90	90	59	
97	357	299	<50	
<2.0	<2.0	<2.0	<2.0	
10	11	11	7	
87	210	250	<10	
<0.20	<0.20	<0.20	<0.20	
<40	<40	<40	<40	
0.13	0.13	0.10	1.05	
<0.020	<0.020	<0.020	<0.020	
3	3	3	2	
<2.0	<2.0	<2.0	<2.0	
6	6	6	<5	
68	75	73	53	
46.4	45.2	49.9	37.2	
<0.20	0.56	<0.20	<0.20	
126	136	148	108	
<0.010	<0.010	0.014	<0.010	
9	6	<5	<5	
10	<10	<10	18	
Field Measurements				
23.26	22.73	19.93	9.95	
201.9	209.5	223.6	135.5	
65.6	40.3	42.2	97.3	
5.6	3.48	3.84	10.99	
6.67	6.46	6.65	7.35	

Site Location: BLOODY RUN @ SR 348 UPST OTWAY				
River Mile: 0.3 Storet: 300109				
08/01/2006	08/14/2006	09/12/2006	10/24/2006	
10:00 AM	10:44 AM	10:41 AM	10:28 AM	
<5.0	<5.0	<5.0	<5.0	
88.3	96.4	83.2	29.9	
<200	<200	<200	<200	
<0.050	<0.050	0.067	<0.050	
<2.0	<2.0	<2.0	<2.0	
<2.0	<2.0	<2.0	<2.0	
79	74	57	42	
<10	<10	<10	<10	
0.22	0.26	0.74	<0.20	
43	41	32	20	
72.7	75.3	53.3	23.0	
<30	<30	<30	<30	
656	691	506	328	
<10	<10	<10	<10	
227	222	170	116	
86	324	196	121	
<2.0	<2.0	<2.0	<2.0	
29	29	22	16	
48	89	29	14	
<0.20	<0.20	<0.20	<0.20	
<40	<40	<40	<40	
0.22	0.25	0.35	0.21	
<0.020	<0.020	<0.020	<0.020	
5	5	5	3	
<2.0	<2.0	<2.0	<2.0	
52	51	39	19	
238	231	169	109	
136	135	102	83.0	
0.36	0.38	0.21	0.57	
376	424	312	208	
<0.010	<0.010	0.014	<0.010	
<5	<5	<5	<5	
<10	<10	13	13	
Field Measurements				
22.34	20.71	18.73	5.43	
719	673.5	493.1	311.5	
61	70.6	97.8	102.3	
5.21	6.32	9.11	12.91	
7.88	7.63	7.96	8.38	

Appendix Table 1. Continued.

		Site Location: BLOODY RUN @ RR BRIDGE DST OTWAY River Mile: 0.08 Storet: 300110					Site Location: DRY RUN N OF YOUNGS, ADJ. DRY RUN RD. River Mile: 0.6 Storet: 200336				
		8/1/2006	8/14/2006	09/12/2006	10/24/2006	08/01/2006	08/14/2006	09/12/2006	10/24/2006		
Parameter	Units	10:15 AM	11:02 AM	10:53 AM	10:40 AM	1:25 PM	2:08 PM	12:45 PM	12:39 PM		
Acidity	mg/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0		
Alkalinity	mg/L	120	120	105	35.2	36.1	37.5	22.8	11.5		
Aluminum	ug/L	<200	<200	<200	<200	<200	<200	<200	<200		
Ammonia	mg/L	0.073	0.069	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050		
Arsenic	ug/L	<2.0	<2.0	2.0	<2.0	<2.0	<2.0	<2.0	<2.0		
BOD5	mg/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0		
Barium	ug/L	66	58	49	37	52	51	48	38		
COD	mg/L	<10	<10	<10	<10	<10	<10	<10	<10		
Cadmium	ug/L	0.58	0.55	0.22	<0.20	<0.20	0.28	<0.20	<0.20		
Calcium	mg/L	42	37	36	21	18	18	17	11		
Chloride	mg/L	61.3	56.4	48.3	22.6	<5.0	<5.0	<5.0	<5.0		
Chromium	ug/L	<30	<30	<30	<30	<30	<30	<30	<30		
Conductivity	umhos/cm	592	565	510	331	248	252	245	186		
Copper	ug/L	<10	<10	<10	<10	<10	15	<10	<10		
Hardness, Total	mg/L	212	183	180	118	107	107	100	69		
Iron	ug/L	<50	94	141	<50	<50	318	113	<50		
Lead	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0		
Magnesium	mg/L	26	22	22	16	15	15	14	10		
Manganese	ug/L	112	278	26	<10	<10	20	13	<10		
Mercury	ug/L	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20		
Nickel	ug/L	<40	<40	<40	<40	<40	<40	<40	<40		
Nitrate+nitrite	mg/L	<0.10	<0.10	1.65	0.40	0.23	0.20	0.15	0.32		
Nitrite	mg/L	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020		
Potassium	mg/L	6	5	5	3	3	3	3	2		
Selenium	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0		
Sodium	mg/L	43	39	36	19	7	7	8	6		
Strontium	ug/L	204	178	170	108	108	105	103	73		
Sulfate	mg/L	90.2	80.8	92.9	77.5	75.6	73.4	98.9	60.5		
TKN	mg/L	0.23	0.35	0.26	0.59	<0.20	<0.20	<0.20	0.23		
Total Dissolved Solids	mg/L	338	340	308	194	162	160	158	130		
Total Phosphorus	mg/L	0.061	0.036	0.046	0.014 B	0.014	0.033	<0.010	<0.010		
Total Suspended Solids	mg/L	<5	6	8	5	<5	21	47	<5		
Zinc	ug/L	11	<10	<10	<10	<10	17	<10	<10		
Field Measurements											
Temperature	°C	25.98	23.98	21.48	6.13	24.14	22.56	20.71	9.13		
Conductivity	umhos/cm	645	551	491.6	312.5	258	252	235.7	158.7		
D.O. Saturation	%	11.7	14.9	100.5	99.2	47.4	50	97.7	98.1		
Dissolved Oxygen	mg/L	0.93	1.26	8.86	12.29	4.02	4.32	8.76	11.3		
pH	S.U.	7.35	7.29	7.68	8.37	6.74	6.92	7.26	7.06		

Appendix Table 1. Continued.

Parameter	Units
Acidity	mg/L
Alkalinity	mg/L
Aluminum	ug/L
Ammonia	mg/L
Arsenic	ug/L
BOD5	mg/L
Barium	ug/L
COD	mg/L
Cadmium	ug/L
Calcium	mg/L
Chloride	mg/L
Chromium	ug/L
Conductivity	umhos/cm
Copper	ug/L
Hardness, Total	mg/L
Iron	ug/L
Lead	ug/L
Magnesium	mg/L
Manganese	ug/L
Mercury	ug/L
Nickel	ug/L
Nitrate+nitrite	mg/L
Nitrite	mg/L
Potassium	mg/L
Selenium	ug/L
Sodium	mg/L
Strontium	ug/L
Sulfate	mg/L
TKN	mg/L
Total Dissolved Solids	mg/L
Total Phosphorus	mg/L
Total Suspended Solids	mg/L
Zinc	ug/L
Field Measurements	
Temperature	°C
Conductivity	umhos/cm
D.O. Saturation	%
Dissolved Oxygen	mg/L
pH	S.U.

Site Location: DRY RUN NR MOUTH River Mile: 0.06 Storet: V14Q34				
07/20/2006 2:30 PM	08/01/2006 1:35 PM	08/14/2006 2:15 PM	09/12/2006 12:50 PM	10/24/2006 12:47 PM
<5.0	<5.0	<5.0	<5.0	<5.0
63.3	59.6	64.2	35.4	14.8
<200	<200	<200	<200	<200
<0.050	<0.050	<0.050	<0.050	<0.050
<2.0	<2.0	<2.0	<2.0	<2.0
<2.0	<2.0	<2.0	<2.0	<2.0
66	61	61	48	40
<10	<10	<10	<10	<10
<0.20	<0.20	<0.20	<0.20	<0.20
24	23	24	19	12
6.5	5.7	6.2	<5.0	<5.0
<30	<30	<30	<30	<30
293	285	299	259	190
<10	<10	<10	<10	<10
138	132	138	109	75
192	137	464	<50	<50
<2.0	<2.0	<2.0	<2.0	<2.0
19	18	19	15	11
74	44	68	10	<10
<0.20	<0.20	<0.20	<0.20	<0.20
<40	<40	<40	<40	<40
0.43	0.16	0.19	0.14	0.39
<0.020	<0.020	<0.020	<0.020	<0.020
4	3	3	3	2
<2.0	<2.0	<2.0	<2.0	<2.0
8	8	8	8	6
135	125	130	104	78
72.9	74.2	72.4	80.9	58.7
<0.20	<0.20	<0.20	<0.20	0.30
192	184	184	174	126
<0.010	<0.010	<0.010	0.037	0.254
<5	<5	7	<5	<5
<10	<10	<10	<10	<10
Field Measurements				
30.36	29.05	27.73	20.26	8.97
318	303	303	251.5	161
56.1	69.8	76.4	86.5	98.8
4.15	5.29	6	7.82	11.43
7.29	6.86	7.35	7.16	6.8

Site Location: JESSIE RUN @ LANE JUST UPST. TOWN OF RARDEN River Mile: 0.6 Storet: 200338				
08/01/2006 12:38 PM	08/14/2006 1:53 PM	09/12/2006 12:10 PM	10/24/2006 11:58 AM	10/24/2006 11:58 AM
<5.0	<5.0	<5.0	<5.0	<5.0
42.0	49.4	40.8	16.4	16.4
<200	<200	955	<200	<200
<0.050	<0.050	<0.050	<0.050	<0.050
<2.0	<2.0	<2.0	<2.0	<2.0
<2.0	<2.0	<2.0	<2.0	<2.0
60	53	47	39	37
<10	14	13	<10	<10
0.46	0.60	1.05	0.76	0.81
33	31	23	19	19
32.8	28.7	18.6	8.9	9.0
<30	<30	<30	<30	<30
501	466	373	293	295
<10	<10	<10	<10	<10
189	176	136	117	113
<50	<50	1310	<50	<50
<2.0	<2.0	<2.0	<2.0	<2.0
26	24	19	17	16
23	50	57	12	11
<0.20	<0.20	<0.20	<0.20	<0.20
<40	<40	<40	<40	<40
0.26	0.16	0.51	0.44	0.44
<0.020	<0.020	<0.020	<0.020	<0.020
4	4	4	2	2
<2.0	<2.0	<2.0	<2.0	<2.0
28	23	20	11	11
174	157	123	106	102
153	132	122	100	101
0.22	<0.20	<0.20	0.55	0.52
332	304	252	198	202
<0.010	<0.010	<0.010	<0.010	<0.010
<5	<5	16	<5	<5
13	16	46	35	35
Field Measurements				
24.38	22.69	19.04	7.6	
529	451.1	359.2	255.1	
59.8	35.4	89.8	100.1	
5.07	3.05	8.32	11.97	
6.75	7	6.77	6.89	

Appendix Table 1. Continued.

Parameter	Units
Acidity	mg/L
Alkalinity	mg/L
Aluminum	ug/L
Ammonia	mg/L
Arsenic	ug/L
BOD5	mg/L
Barium	ug/L
COD	mg/L
Cadmium	ug/L
Calcium	mg/L
Chloride	mg/L
Chromium	ug/L
Conductivity	umhos/cm
Copper	ug/L
Hardness, Total	mg/L
Iron	ug/L
Lead	ug/L
Magnesium	mg/L
Manganese	ug/L
Mercury	ug/L
Nickel	ug/L
Nitrate+nitrite	mg/L
Nitrite	mg/L
Potassium	mg/L
Selenium	ug/L
Sodium	mg/L
Strontium	ug/L
Sulfate	mg/L
TKN	mg/L
Total Dissolved Solids	mg/L
Total Phosphorus	mg/L
Total Suspended Solids	mg/L
Zinc	ug/L
Field Measurements	
Temperature	°C
Conductivity	umhos/cm
D.O. Saturation	%
Dissolved Oxygen	mg/L
pH	S.U.

Site Location: JESSIE RUN @ HILL RD DST RARDEN				
River Mile: 0.25 Storet: 300105				
	8/1/2006 12:50 PM	8/14/2006 2:28 PM	09/12/2006 12:15 PM	10/24/2006 12:06 PM
<5.0	<5.0	<5.0	<5.0	<5.0
140	175	60.5	21.0	
<200	<200	688	<200	
<0.050	0.050	0.140	<0.050	
<2.0	<2.0	<2.0	<2.0	
<2.0	<2.0	2.1	<2.0	
69	75	45	34	
<10	20	<10	<10	
0.34	<0.20	0.39	0.27	
48	55	26	20	
53.9	60.2	24.3	12.0	
<30	<30	<30	<30	
603	675	408	306	
<10	<10	<10	<10	
235	269	143	116	
144	259	1190	<50	
<2.0	<2.0	<2.0	<2.0	
28	32	19	16	
169	357	39	10	
<0.20	<0.20	<0.20	<0.20	
<40	<40	<40	<40	
0.13	0.10	0.96	0.63	
<0.020	<0.020	<0.020	<0.020	
5	5	4	2	
<2.0	<2.0	<2.0	<2.0	
34	34	23	12	
200	227	125	102	
93.4	88.9	101	95.4	
<0.20	0.42	<0.20	0.33	
360	418	264	200	
<0.010	<0.010	0.036	<0.010	
<5	6	24	<5	
<10	<10	28	19	
Field Measurements				
30.53	31.22	19.79	7.74	
641	678.3	388.1	267.7	
77.1	116.5	83.8	100.5	
5.69	8.61	7.65	11.97	
7.04	7.53	7.04	6.96	

Site Location: Dunlap Ck Adj Private Rd Upst 1st Adams Co Trib				
River Mile: 1.93 Storet: 300106				
	08/01/2006 1:00 PM	08/14/2006 2:52 PM	09/12/2006 12:30 PM	10/24/2006 12:16 PM
<5.0	5.0 B	<5.0	<5.0	
31.0	29.1	29.8	18.1	
<200	<200	<200	<200	
<0.050	0.142	<0.050	<0.050	
<2.0	<2.0	<2.0	<2.0	
<2.0	2.8	<2.0	<2.0	
41	41	54	47	
<10	<10	<10	<10	
<0.20	<0.20	0.20	0.39	
13	12	12	12	
11.0	11.4	10.4	6.7	
<30	<30	<30	<30	
182	186	182	170	
<10	<10	<10	<10	
65	63	63	63	
492	782	432	350	
<2.0	<2.0	<2.0	<2.0	
8	8	8	8	
189	359	160	188	
<0.20	<0.20	<0.20	<0.20	
<40	<40	<40	<40	
0.16	0.53	0.16	0.17	
<0.020	<0.020	<0.020	<0.020	
3	3	3	2	
<2.0	<2.0	<2.0	<2.0	
7	7	7	6	
63	58	60	53	
38.4	38.3	40.7	40.2	
<0.20	0.26	<0.20	0.25	
126	124	126	110	
0.025	0.010	0.012	<0.010	
10	6	7	<5	
<10	55	11	24	
Field Measurements				
27.28	25.01	19.69	9.17	
189	184.5	255.8	144.2	
66.6	69.2	83.7	95.9	
5.21	5.71	7.66	11.04	
7.15	7.03	6.85	7.08	

Appendix Table 1. Continued.

Parameter	Units
Acidity	mg/L
Alkalinity	mg/L
Aluminum	ug/L
Ammonia	mg/L
Arsenic	ug/L
BOD5	mg/L
Barium	ug/L
COD	mg/L
Cadmium	ug/L
Calcium	mg/L
Chloride	mg/L
Chromium	ug/L
Conductivity	umhos/cm
Copper	ug/L
Hardness, Total	mg/L
Iron	ug/L
Lead	ug/L
Magnesium	mg/L
Manganese	ug/L
Mercury	ug/L
Nickel	ug/L
Nitrate+nitrite	mg/L
Nitrite	mg/L
Potassium	mg/L
Selenium	ug/L
Sodium	mg/L
Strontium	ug/L
Sulfate	mg/L
TKN	mg/L
Total Dissolved Solids	mg/L
Total Phosphorus	mg/L
Total Suspended Solids	mg/L
Zinc	ug/L
Field Measurements	
Temperature	°C
Conductivity	umhos/cm
D.O. Saturation	%
Dissolved Oxygen	mg/L
pH	S.U.

Site Location: DUNLAP CK @ GRAVEL RD UPST MOUTH					
River Mile: 0.65 Storet: V14Q35					
07/20/2006	08/01/2006	08/14/2006	09/12/2006	10/24/2006	
11:10 AM	1:10 PM	2:40 PM	12:25 PM	12:26 PM	
<5.0	<5.0	<5.0	<5.0	<5.0	
31.0	28.3	28.7	54.7	17.2	
<200	<200	<200	447	<200	
0.096	0.169	0.156	<0.050	<0.050	
<2.0	<2.0	<2.0	<2.0	<2.0	
<2.0	<2.0	<2.0	<2.0	<2.0	
49	59	46	50	46	
<10	<10	<10	<10	<10	
<0.20	<0.20	<0.20	0.22	0.22	
12	13	12	20	12	
8.1	9.1	8.9	18.7	5.1	
<30	<30	<30	<30	<30	
172	174	172	261	167	
<10	<10	<10	<10	<10	
63	65	63	103	63	
463	764	500	1480	153	
<2.0	<2.0	<2.0	<2.0	<2.0	
8	8	8	13	8	
141	197	120	479	55	
<0.20	<0.20	<0.20	<0.20	<0.20	
<40	<40	<40	<40	<40	
0.37	0.29	0.45	0.36	0.25	
0.027	0.022	0.023	<0.020	<0.020	
4	5	4	4	2	
<2.0	<2.0	<2.0	<2.0	<2.0	
6	7	7	11	6	
61	64	60	73	57	
35.6	38.3	33.3	46.9	39.6	
<0.20	0.53	0.40	<0.20	0.28	
104	108	104	174	106	
0.324	<0.010	<0.010	<0.010	0.025	
8	8	<5	20	<5	
10	<10	<10	11	16	
Field Measurements					
25.25	25.96	26.2	19.52	9.34	
179	182	172	175.3	138.8	
72.7	68.1	75.6	82	96	
5.9	5.4	6.11	7.53	11.01	
6.8	6.53	7.2	7.1	7.06	

Site Location: Rarden Ck @ Gravel Lane Upst Adams/Scioto Co					
River Mile: 3.86 Storet: V14Q36					
07/20/2006	08/01/2006	08/14/2006	09/12/2006	10/24/2006	
10:30 AM	12:15 PM	1:14 PM	11:55 AM	11:38 AM	
<5.0	<5.0	<5.0	<5.0	<5.0	
16.5	18.3	18.3	7.7	5.9	
<200	<200	<200	3640	<200	
<0.050	<0.050	<0.050	<0.050	<0.050	
<2.0	<2.0	<2.0	2.9	<2.0	
<2.0	<2.0	<2.0	3.0	<2.0	
53	46	38	72	39	
<10	<10	<10	<10	<10	
0.51	0.30	0.20	1.27	0.47	
13	13	12	9	8	
<5.0	<5.0	<5.0	<5.0	<5.0	
<30	<30	<30	<30	<30	
178	164	161	129 RC	127	
<10	<10	<10	<10	<10	
70	65	63	47	45	
236	74	162	6210	<50	
<2.0	<2.0	<2.0	4.0	<2.0	
9	8	8	6	6	
63	20	50	310	19	
<0.20	<0.20	<0.20	<0.20	<0.20	
<40	<40	<40	<40	<40	
0.25	0.28	0.26	0.38	0.48	
<0.020	<0.020	<0.020	<0.020	<0.020	
4	3	3	4	2	
<2.0	<2.0	<2.0	<2.0	<2.0	
<5	<5	<5	<5	<5	
68	62	61	45	48	
60.9	51.4	51.3	45.4	38.2	
<0.20	<0.20	<0.20	<0.20	0.94	
124	110	102	122 RC	92	
0.013	<0.010	<0.010	0.117	0.162	
7	24	14	200	<5	
23	15	<10	74	27	
Field Measurements					
26.47	26.72	27.08	19.06	9.29	
184	173	163	122.8	108.1	
92	66.5	79.1	84.2	95.3	
7.3	5.21	6.29	7.8	10.93	
7.3	6.28	6.99	6.51	6.66	

Appendix Table 1. Continued.

Parameter	Units
Acidity	mg/L
Alkalinity	mg/L
Aluminum	ug/L
Ammonia	mg/L
Arsenic	ug/L
BOD5	mg/L
Barium	ug/L
COD	mg/L
Cadmium	ug/L
Calcium	mg/L
Chloride	mg/L
Chromium	ug/L
Conductivity	umhos/cm
Copper	ug/L
Hardness, Total	mg/L
Iron	ug/L
Lead	ug/L
Magnesium	mg/L
Manganese	ug/L
Mercury	ug/L
Nickel	ug/L
Nitrate+nitrite	mg/L
Nitrite	mg/L
Potassium	mg/L
Selenium	ug/L
Sodium	mg/L
Strontium	ug/L
Sulfate	mg/L
TKN	mg/L
Total Dissolved Solids	mg/L
Total Phosphorus	mg/L
Total Suspended Solids	mg/L
Zinc	ug/L
Field Measurements	
Temperature	°C
Conductivity	umhos/cm
D.O. Saturation	%
Dissolved Oxygen	mg/L
pH	S.U.

Site Location: RARDEN CREEK AT RARDEN @ ST. RT. 73 River Mile: 0.3 Storet: 200340				
07/20/2006 10:15 AM	08/01/2006 11:05 AM	08/14/2006 12:31 PM	09/12/2006 11:25 AM	10/24/2006 10:59 AM
<5.0	<5.0	<5.0	<5.0	<5.0
14.7	17.4	14.6	13.6	9.0
<200	<200	<200	<200	<200
<0.050	<0.050	<0.050	0.058	<0.050
<2.0	<2.0	<2.0	<2.0	<2.0
<2.0	<2.0	<2.0	<2.0	<2.0
48	49	54	39	42
<10	<10	<10	<10	<10
0.30	0.24	<0.20	0.24	0.48
11	11	11	10	10
<5.0	<5.0	5.0	<5.0	<5.0
<30	<30	<30	<30	<30
159	161	158	152	154
<10	<10	<10	<10	<10
56	56	56	54	54
1440	1970	2130	1060	268
<2.0	<2.0	<2.0	<2.0	<2.0
7	7	7	7	7
757	838	816	477	215
<0.20	<0.20	<0.20	<0.20	<0.20
<40	<40	<40	<40	<40
0.10	0.11	0.17	0.19	0.58
<0.020	<0.020	<0.020	<0.020	<0.020
3	3	3	3	2
<2.0	<2.0	<2.0	<2.0	<2.0
5	5	6	5	<5
68	68	65	61	57
47.4	48.8	46.5	48.6	45.8
<0.20	<0.20	<0.20	<0.20	0.44
106	112 PT	112	104	100
<0.010	<0.010	<0.010	<0.010	<0.010
5	24	9	9	<5
20	14	<10	10	25
Field Measurements				
26.72	27.74	25.58	19.74	8.58
168	164	162.5	154.2	130.9
71.6	90.3	74.4	83.4	97.3
5.65	7	6.08	7.62	11.35
6.95	7.47	7.02	7.33	7.36

Site Location: STRAIGHT FK RARDEN CK ADJ STRAIGHT FORK RD River Mile: 0.31 Storet: 300107				
08/01/2006 11:40 AM	08/14/2006 12:59 PM	09/12/2006 11:45 AM	10/24/2006 11:23 AM	
<5.0	<5.0	<5.0	<5.0	
10.4	12.2	8.4	6.0	
<200	<200	2280	<200	
<0.050	<0.050	<0.050	<0.050	
<2.0	<2.0	<2.0	<2.0	
<2.0	<2.0	2.3	<2.0	
39	38	54	37	
<10	<10	16	<10	
0.50	0.52	1.00	0.70	
9	9	7	7	
<5.0	<5.0	<5.0	<5.0	
<30	<30	<30	<30	
129	136	113	114	
<10	<10	<10	<10	
47	47	42	38	
72	153	2860	<50	
<2.0	<2.0	<2.0	<2.0	
6	6	6	5	
32	58	122	17	
<0.20	<0.20	<0.20	<0.20	
<40	<40	<40	<40	
0.11	0.16	0.80	0.20	
<0.020	<0.020	<0.020	<0.020	
2	2	3	2	
<2.0	<2.0	<2.0	<2.0	
<5	<5	<5	<5	
49	48	40	41	
43.7	45.0	38.7	36.0	
<0.20	<0.20	<0.20	<0.20	
92	104	130 RC	76	
<0.010	0.059	0.011	<0.010	
<5	<5	70	<5	
26	24	56	38	
Field Measurements				
25.4	22.54	18.76	9.68	
129	132.8	107	96	
90.6	52.4	81.9	96.2	
7.11	4.53	7.64	10.94	
6.82	6.23	6.55	6.76	

Appendix Table 1. Continued.

Parameter	Units
Acidity	mg/L
Alkalinity	mg/L
Aluminum	ug/L
Ammonia	mg/L
Arsenic	ug/L
BOD5	mg/L
Barium	ug/L
COD	mg/L
Cadmium	ug/L
Calcium	mg/L
Chloride	mg/L
Chromium	ug/L
Conductivity	umhos/cm
Copper	ug/L
Hardness, Total	mg/L
Iron	ug/L
Lead	ug/L
Magnesium	mg/L
Manganese	ug/L
Mercury	ug/L
Nickel	ug/L
Nitrate+nitrite	mg/L
Nitrite	mg/L
Potassium	mg/L
Selenium	ug/L
Sodium	mg/L
Strontium	ug/L
Sulfate	mg/L
TKN	mg/L
Total Dissolved Solids	mg/L
Total Phosphorus	mg/L
Total Suspended Solids	mg/L
Zinc	ug/L
Field Measurements	
Temperature	°C
Conductivity	umhos/cm
D.O. Saturation	%
Dissolved Oxygen	mg/L
pH	S.U.

Site Location: BULL RUN NW OF RARDEN, ADJ. BULL RUN RD.				
River Mile: 0.4 Storet: 200344				
	8/1/2006 12:05 PM	8/14/2006 1:08 PM	09/12/2006 11:50 AM	10/24/2006 11:31 AM
<5.0	<5.0	<5.0	<5.0	<5.0
30.1	30.7	16.1	7.3	
<200	<200	1280	<200	
<0.050	<0.050	<0.050	<0.050	
<2.0	<2.0	<2.0	<2.0	
<2.0	<2.0	<2.0	<2.0	
54	58	45	39	
<10	11	<10	<10	
0.40	0.40	0.38	0.45	
17	17	12	9	
<5.0	<5.0	<5.0	<5.0	
<30	<30	<30	<30	
212	217	164	139	
<10	<10	<10	<10	
88	88	63	51	
<50	52	2200	<50	
<2.0	<2.0	<2.0	<2.0	
11	11	8	7	
10	15	53	11	
<0.20	<0.20	<0.20	<0.20	
<40	<40	<40	<40	
0.55	0.18	0.36	0.54	
<0.020	<0.020	<0.020	<0.020	
4	4	4	2	
<2.0	<2.0	<2.0	<2.0	
5	5	<5	<5	
83	82	55	51	
60.8	61.5	54.2	42.8	
<0.20	<0.20	<0.20	0.46	
142	144	132	98	
<0.010	<0.020 UJ	0.132	0.192	
<5	<5	38	<5	
15	13	17	25	
Field Measurements				
24.77	23.56	19.28	8.6	
217	213.5	155.9	117.4	
67	43.2	86.1	99.7	
5.84	3.67	7.94	11.63	
6.67	6.52	6.33	6.81	

Site Location: Dry Fork Rarden CK @ Gravel Land Dst Kizzie Run				
River Mile: 0.96 Storet: 300108				
	08/01/2006 11:25 AM	08/14/2006 12:43 PM	09/12/2006 11:35 AM	10/24/2006 11:10 AM
<5.0	<5.0	<5.0	<5.0	
33.2	38.9	29.0	13.9	
<200	<200	936	<200	
<0.050	<0.050	0.129	<0.050	
<2.0	<2.0	<2.0	<2.0	
<2.0	<2.0	<2.0	<2.0	
56	58	52	44	
<10	<10	<10	15	
0.34	0.37	0.52	0.32	
19	19	14	13	
5.0	<5.0	<5.0	<5.0	
<30	<30	<30	<30	
247	246	209	189	
<10	<10	<10	<10	
105	101	80	78	
61	<50	1960	<50	
<2.0	<2.0	<2.0	<2.0	
14	13	11	11	
26	30	60	<10	
<0.20	<0.20	<0.20	<0.20	
<40	<40	<40	<40	
0.64	1.30	0.47	0.66	
<0.020	<0.020	<0.020	<0.020	
4	4	3	2	
<2.0	<2.0	<2.0	<2.0	
7	7	6	6	
102	100	78	76	
72.9	66.3	63.4	55.4	
<0.20	<0.20	<0.20	<0.20	
166	158	150	126	
<0.010	<0.010	0.039	<0.010	
<5	<5	24	<5	
14	13	21	16	
Field Measurements				
23.42	22.49	19.27	9.09	
259	243.2	201.2	161.5	
80.1	62.8	91.9	98.6	
6.72	5.44	8.48	11.37	
6.82	6.64	7.16	7.09	

Appendix Table 1. Continued.

Parameter	Units
Acidity	mg/L
Alkalinity	mg/L
Aluminum	ug/L
Ammonia	mg/L
Arsenic	ug/L
BOD5	mg/L
Barium	ug/L
COD	mg/L
Cadmium	ug/L
Calcium	mg/L
Chloride	mg/L
Chromium	ug/L
Conductivity	umhos/cm
Copper	ug/L
Hardness, Total	mg/L
Iron	ug/L
Lead	ug/L
Magnesium	mg/L
Manganese	ug/L
Mercury	ug/L
Nickel	ug/L
Nitrate+nitrite	mg/L
Nitrite	mg/L
Potassium	mg/L
Selenium	ug/L
Sodium	mg/L
Strontium	ug/L
Sulfate	mg/L
TKN	mg/L
Total Dissolved Solids	mg/L
Total Phosphorus	mg/L
Total Suspended Solids	mg/L
Zinc	ug/L
Field Measurements	
Temperature	°C
Conductivity	umhos/cm
D.O. Saturation	%
Dissolved Oxygen	mg/L
pH	S.U.

Site Location: CEDAR FORK SE of Peebles @ Davis Memorial Rd.				
River Mile: 2.3 Storet: 200345				
	8/1/2006 10:10 AM	8/14/2006 10:40 AM	09/12/2006 10:45 AM	10/24/2006 10:14 AM
<5.0	<5.0	<5.0	<5.0	<5.0
128	128	106	62.4	
<200	<200	577	<200	
<0.050	<0.050	0.062	<0.050	
<2.0	<2.0	<2.0	<2.0	
<2.0	<2.0	2.1	<2.0	
86	86	64	63	
<10	<10	13	<10	
<0.20	<0.20	0.25	<0.20	
39	41	28	25	
5.8	7.1	<5.0	<5.0	
<30	<30	<30	<30	
386	417	281	264	
<10	<10	<10	<10	
204	218	144	128	
218	199	830	62	
<2.0	<2.0	<2.0	<2.0	
26	28	18	16	
352	312	183	42	
<0.20	<0.20	<0.20	<0.20	
<40	<40	<40	<40	
0.58	0.10	0.21	0.26	
<0.020	<0.020	<0.020	<0.020	
3	2	3	2	
<2.0	<2.0	<2.0	<2.0	
<5	<5	<5	<5	
59	60	40	41	
65.1	72.7	46.8	43.0	
<0.20	0.65	0.57	0.61	
248	266	186	170	
0.016	<0.010	0.018	<0.010	
<5	<5	22	<5	
<10	<10	23	10	
Field Measurements				
24.12	22.34	19.13	8.5	
417	449.4	276.2	231.9	
70.5	91.7	82.7	98.5	
5.84	7.95	7.65	11.52	
7.34	7.82	7.59	7.89	

Site Location: PLUM RUN @ MOUTH 3 MI E OF PEBBLES				
River Mile: 0.01 Storet: V14P08				
	08/01/2006 9:50 AM	08/14/2006 10:18 AM	09/12/2006 10:30 AM	10/24/2006 9:57 AM
<5.0	<5.0	<5.0	<5.0	
131	123	115	142	
<200	<200	656	<200	
<0.050	<0.050	0.087	<0.050	
<2.0	<2.0	3.6	<2.0	
<2.0	<2.0	2.9	<2.0	
43	35	52	61	
<10	<10	10	12	
<0.20	<0.20	<0.20	<0.20	
166	176	76	94	
64.5	74.2	17.0	31.5	
<30	<30	<30	<30	
1530	1660	518	922	
<10	<10	<10	<10	
970	1030	383	527	
108	55	2460	146	
<2.0	<2.0	10.3	<2.0	
135	144	47	71	
36	23	124	20	
<0.20	<0.20	<0.20	<0.20	
<40	<40	<40	<40	
0.32	0.30	0.32	0.53	
<0.020	<0.020	<0.020	<0.020	
6	7	3	4	
<2.0	<2.0	<2.0	<2.0	
22	23	8	12	
578	633	109	235	
736	801	146	280	
<0.20	1.80	<0.20	0.38	
1360	1460	358	670	
<0.010	<0.010	0.019	<0.050 UJ	
<5	<5	158	<5	
23	22	65	<10	
Field Measurements				
18.1	17.88	19.09	9.85	
1690	1654.9	492.6	795	
82	82.8	84.9	93.4	
7.6	7.82	7.85	10.55	
7.42	7.7	7.39	7.88	

Appendix Table 1. Continued.

Scioto Brush Creek Study Area 2006 Bacteria: Fecal Coliform													
Date Sampled	River Mile	5/25	6/19	7/18	7/25	8/2	8/3	8/15	8/28	8/29	9/13	9/25	10/12
Scioto Brush Cr.	38.20	NA	NA	NA	NA	<10	<10	NA	NA	<10	180 JL	NA	NA
Scioto Brush Cr.	36.00	NA	NA	NA	380	650 JL	370	2100	NA	590	430	NA	NA
Scioto Brush Cr.	33.55	NA	NA	NA	100 JL	130JL/90JL	180 J,JL	22000	NA	90JL/70JL	3100	NA	NA
Scioto Brush Cr.	27.87	NA	NA	NA	470	140 JL	320	8000 J,JL	NA	400	10000 J,JL	NA	NA
Scioto Brush Cr.	24.25	NA	NA	NA	4600	130 J,JL	280/ 250	3300	NA	260	5300 J	NA	NA
Scioto Brush Cr.	17.10	80 JL	270	190 JL	20 JL	160 JL	60 JL	120 JL	40 JL	40 JL	14000 JL	960 JL	160JL/130JL
Scioto Brush Cr.	12.15	NA	NA	NA	150 JL	170 J,JL	180 JL	30 JL	NA	50 JL	9000 JL	NA	NA
Scioto Brush Cr.	5.81	50 JL	260	70 JL	220	190 JL	70 JL	90 JL	40 JL	30 JL	710 JL	2500	60 JL
Scioto Brush Cr.	3.35	NA	NA	NA	240/ 300	110JL/100JL	120 JL	2500	NA	3300	1100 JL	NA	NA
Scioto Brush Cr.	0.27	NA	NA	NA	80 JL	210	50 JL	110 JL/90JL	NA	170 JL	3400 J	NA	NA
Jaybird Branch	0.99	NA	NA	NA	NA	140 JL	NA	70 JL/120JL	NA	NA	200	NA	NA
Bettys Creek	1.50	NA	NA	NA	NA	10 JL	NA	400	NA	NA	690 JL	NA	NA
Duck Run	1.56	NA	NA	NA	NA	180 JL	130 JL	2500	NA	130 JL	7300 JL	NA	NA
Reeds Run	0.07	NA	NA	NA	NA	490	460	47000	NA	1500 JL	60000 E	NA	NA
McCullough Creek	1.33	NA	NA	NA	2500	1300 JL	370	2200	NA	1300 JL	3200 J	NA	NA
McCullough Creek	0.61	NA	NA	NA	40 JL	100 JL	150JL/90JL	2900	NA	520	3700 J	NA	NA
East Branch McCullough Cr.	3.42	NA	NA	NA	NA	900 JL	550	22000	NA	300J/230J	4900	NA	NA
East Branch McCullough Cr.	1.00	NA	NA	NA	210	<10	30 JL	10000 J,JL	NA	80 JL	4700 J	NA	NA
Bear Creek	5.10	NA	NA	NA	NA	450/ 600	75500 JL	60000 E	NA	NA	60000 E	NA	NA
Bear Creek	3.45	NA	NA	NA	150 JL	20 JL	80 JL	60 JL	NA	40 JL	1400JL/800	NA	NA
Bear Creek	1.40	NA	NA	NA	170 JL	60 JL	210	2000	NA	60 JL	6000 J,JL	NA	NA
Saw Pit Run	0.10	NA	NA	NA	NA	90 JL	40 JL	2300 J	NA	NA	16000 JL	NA	NA
S.F. Scioto Brush Creek	12.36	NA	NA	NA	800 JL	1400 JL	850 JL	150 JL/ 210	NA	640 JL	NA	NA	NA
S.F. Scioto Brush Creek	7.02	NA	NA	NA	560	460 J	520	1500 JL	NA	300	35000	NA	NA
S.F. Scioto Brush Creek	1.14	40 JL	160 JL	10 JL	NA	40 JL	180 JL	140 JL	170 JL	100 JL	680 JL	790 JL	240
Rocky Fork	8.78	NA	NA	NA	NA	160 JL	NA	770 JL	NA	NA	15000 JL	NA	NA
Rocky Fork	7.15	NA	NA	NA	NA	20 JL/ 20 JL	NA	10 JL	NA	NA	2300J/2500J	NA	NA
Rocky Fork	3.52	NA	NA	NA	120 JL	20 JL	130 JL	170 JL	NA	290/ 170JL	270	NA	NA
Spruce Run	0.1	NA	NA	NA	NA	20 JL	NA	730 JL	NA	NA	600	NA	NA
Beech Fork	1.85	NA	NA	NA	NA	400/ 470	NA	400 J,JL	NA	NA	680 JL	NA	NA

Appendix Table 1. Continued.

Scioto Brush Creek Study Area 2006 Bacteria: Fecal Coliform													
Date Sampled		5/25	6/19	7/18	7/25	8/2	8/3	8/15	8/28	8/29	9/13	9/25	10/12
Stream	River Mile												
Turkey Creek	6.00	NA	NA	NA	NA	250	NA	6400JL/8100	NA	NA	2200	NA	NA
Turkey Creek	4.24	NA	NA	NA	NA	400	NA	4700	NA	NA	1700 JL	NA	NA
Turkey Creek	0.60	NA	NA	NA	800 J,JL	340	290	2000	NA	530	1300 J,JL	NA	NA
Dry Fork	0.18	NA	NA	NA	NA	110 JL	NA	730 JL	NA	NA	2600	NA	NA
Turkey Run	0.26	NA	NA	140 JL	NA	180 JL	380	830 JL	NA	450	21000	NA	NA
Winterstein Run	0.40	NA	NA	NA	NA	20 JL	10 JL	210	NA	590	2800	NA	NA
Mill Creek	2.20	NA	NA	NA	NA	350	NA	3400	NA	NA	6000 JL	NA	NA
Mill Creek	0.80	NA	NA	NA	2000	2900	1200 JL	2300	NA	2400/1500JL	13000 JL	NA	NA
Middle Branch Mill Creek	1.95	NA	NA	NA	NA	120 JL	NA	2500	NA	NA	5100	NA	NA
Middle Branch Mill Creek	1.80	NA	NA	NA	NA	50 JL	NA	780 JL	NA	NA	6700 JL	NA	NA
Hickman Run	0.10	NA	NA	NA	NA	80 JL	NA	280	NA	NA	9500 JL	NA	NA
Churn Creek	3.90	NA	NA	NA	NA	70 JL	NA	60 JL	NA	NA	12000 JL	NA	NA
Churn Creek	3.00	NA	NA	NA	NA	170 JL	NA	880 JL	NA	NA	6600 JL	NA	NA
Churn Creek	0.15	NA	NA	170 JL	280/ 190JL	410	290	1400 JL	NA	180 J,JL	2800J/3600J	NA	NA
Blue Creek	2.20	NA	NA	NA	NA	450	NA	8100 JL	NA	NA	2500	NA	NA
Bloody Run	0.30	NA	NA	NA	NA	470	420	<10 J	NA	210	12000 J,JL	NA	NA
Bloody Run	0.08	NA	NA	NA	NA	110 JL	360	7300 JL	NA	150 JL	9000 J,JL	NA	NA
Dry Run	0.60	NA	NA	NA	NA	50 JL	30 JL	420	NA	90 JL	NA	NA	NA
Dry Run	0.06	NA	NA	NA	420	120JL/140JL	90JL/ 60JL	4900	NA	770 JL	1900 JL	NA	NA
Jessie Run	0.60	NA	NA	NA	NA	70 JL	20 JL	4700	NA	80 JL	1600 J,JL	NA	NA
Jessie Run	0.25	NA	NA	NA	NA	30 JL	20 JL	6200 JL	NA	40 JL	600 J,JL	NA	NA
Dunlap Creek	1.93	NA	NA	NA	NA	580	NA	4200/3500	NA	NA	2500	NA	NA
Dunlap Creek	0.65	NA	NA	NA	NA	530	NA	17000 JL	NA	NA	2000/ 2000	NA	NA
Rarden Creek	3.86	NA	NA	NA	NA	200	NA	1300 JL	NA	NA	750 JL	NA	NA
Rarden Creek	0.30	NA	NA	NA	90 JL	50 JL	20 JL	2300	NA	100 JL	920 JL	NA	NA
Straight Fork Rarden Creek	0.31	NA	NA	NA	NA	180 JL	NA	890 JL	NA	NA	520	NA	NA
Bull Run	0.40	NA	NA	NA	NA	60 JL	NA	2200	NA	NA	760 JL	NA	NA
Dry Fork Rarden Creek	0.96	NA	NA	NA	NA	210	NA	1300 J,JL	NA	NA	560	NA	NA
Cedar Fork	2.30	NA	NA	NA	NA	70 JL	NA	4600	NA	NA	870 JL	NA	NA
Plum Run	0.01	NA	NA	NA	NA	20 JL	NA	13000 JL	NA	NA	3000JL/8000	NA	NA

Appendix Table 1. Continued.

Scioto Brush Creek Study Area 2006 Bacteria: E. Coli													
Date Sampled		5/25	6/19	7/18	7/25	8/2	8/3	8/15	8/28	8/29	9/13	9/25	10/12
Stream	River Mile												
Scioto Brush Cr.	38.20	NA	NA	NA	NA	<10	<10	NA	NA	<10	20 JL	NA	NA
Scioto Brush Cr.	36.00	NA	NA	NA	160 JL	180 JL	350	600	NA	210	60 JL	NA	NA
Scioto Brush Cr.	33.55	NA	NA	NA	40 JL	30 JL/ 10JL	60 JL	18000 JL	NA	60 JL/ 60JL	1900 JL	NA	NA
Scioto Brush Cr.	27.87	NA	NA	NA	170 JL	100 JL	320	4700	NA	160 JL	3900	NA	NA
Scioto Brush Cr.	24.25	NA	NA	NA	1300 JL	10 JL	190JL/220	3900	NA	170 JL	4200	NA	NA
Scioto Brush Cr.	17.10	<10	240	50 JL	60 JL	60 JL	20 JL	50 JL	20 JL	50 JL	5200	560	80 JL/ 80JL
Scioto Brush Cr.	12.15	NA	NA	NA	100 JL	30 JL	70 JL	60 JL	NA	60 JL	4600	NA	NA
Scioto Brush Cr.	5.81	10 JL	220	10 JL	60 JL	<10	40 JL	60 JL	20 JL	<10	590	1700 JL	40 JL
Scioto Brush Cr.	3.35	NA	NA	NA	210/150JL	80 JL/50JL	<10	490	NA	740	630	NA	NA
Scioto Brush Cr.	0.27	NA	NA	NA	30 JL	<10	20 JL	20 JL/40JL	NA	30 JL	600	NA	NA
Jaybird Branch	0.99	NA	NA	NA	NA	90 JL	NA	130 JL/80JL	NA	NA	40 JL	NA	NA
Bettys Creek	1.50	NA	NA	NA	NA	<10	NA	200	NA	NA	220	NA	NA
Duck Run	1.56	NA	NA	NA	NA	100 JL	150 JL	1200 JL	NA	160 JL	5200	NA	NA
Reeds Run	0.07	NA	NA	NA	NA	350	390	46000	NA	1200 JL	7700/ 7400	NA	NA
McCullough Creek	1.33	NA	NA	NA	370	310	240	630	NA	1100 JL	3300	NA	NA
McCullough Creek	0.61	NA	NA	NA	10 JL	10 JL	60 JL/ 90JL	1300 JL	NA	290	2000	NA	NA
East Branch McCullough Cr.	3.42	NA	NA	NA	NA	240	370	20000	NA	300/ 270	3200	NA	NA
East Branch McCullough Cr.	1.00	NA	NA	NA	10 JL	<10	70 JL	6100	NA	40 JL	2400	NA	NA
Bear Creek	5.10	NA	NA	NA	NA	360/ 270	60500	80000 E	NA	NA	45000	NA	NA
Bear Creek	3.45	NA	NA	NA	40 JL	40 JL	60 JL	70 JL	NA	10 JL	470/ 460	NA	NA
Bear Creek	1.40	NA	NA	NA	20 JL	60 JL	200	2600	NA	30 JL	6600	NA	NA
Saw Pit Run	0.10	NA	NA	NA	NA	<10	10 JL	1700 J,JL	NA	NA	6100	NA	NA
S.F. Scioto Brush Creek	12.36	NA	NA	NA	590	460	510	120JL/150JL	NA	380	NA	NA	NA
S.F. Scioto Brush Creek	7.02	NA	NA	NA	170 JL	160 JL	320	540	NA	180 JL	30000	NA	NA
S.F. Scioto Brush Creek	1.14	10 JL	60 JL	10 JL	NA	40 JL	40 JL	140 JL	70 JL	20 JL	460	570	190 JL
Rocky Fork	8.78	NA	NA	NA	NA	140 JL	NA	670	NA	NA	6800	NA	NA
Rocky Fork	7.15	NA	NA	NA	NA	30JL/10JL	NA	10 JL	NA	NA	1600JL/1500	NA	NA
Rocky Fork	3.52	NA	NA	NA	20 JL	10 JL	40 JL	250	NA	110JL/50JL	200	NA	NA
Spruce Run	0.1	NA	NA	NA	NA	10 JL	NA	840 JL	NA	NA	330	NA	NA
Beech Fork	1.85	NA	NA	NA	NA	20JL/60JL	NA	90 JL	NA	NA	530	NA	NA

Appendix Table 1. Continued.

Scioto Brush Creek Study Area 2006 Bacteria: E. Coli													
Date Sampled	River Mile	5/25	6/19	7/18	7/25	8/2	8/3	8/15	8/28	8/29	9/13	9/25	10/12
Turkey Creek	6.00	NA	NA	NA	NA	40 JL	NA	3100/2800	NA	NA	1500 JL	NA	NA
Turkey Creek	4.24	NA	NA	NA	NA	140 JL	NA	2100	NA	NA	2100	NA	NA
Turkey Creek	0.60	NA	NA	NA	500 J,JL	170 JL	200	4000 JL	NA	240	1100 JL	NA	NA
Dry Fork	0.18	NA	NA	NA	NA	20 JL	NA	380	NA	NA	1100 JL	NA	NA
Turkey Run	0.26	NA	NA	60 JL	NA	90 JL	40 JL	390	NA	200	8000 JL	NA	NA
Winterstein Run	0.40	NA	NA	NA	NA	10 JL	<10	120 JL	NA	100 JL	630	NA	NA
Mill Creek	2.20	NA	NA	NA	NA	120 JL	NA	2200	NA	NA	2300	NA	NA
Mill Creek	0.80	NA	NA	NA	860 JL	790 JL	570	1300 JL	NA	1400JL/1400	5600	NA	NA
Middle Branch Mill Creek	1.95	NA	NA	NA	NA	70 JL	NA	1000 JL	NA	NA	2200	NA	NA
Middle Branch Mill Creek	1.80	NA	NA	NA	NA	30 JL	NA	420	NA	NA	3900	NA	NA
Hickman Run	0.10	NA	NA	NA	NA	30 JL	NA	130 JL	NA	NA	5300	NA	NA
Churn Creek	3.90	NA	NA	NA	NA	40 JL	NA	70 JL	NA	NA	9000 JL	NA	NA
Churn Creek	3.00	NA	NA	NA	NA	40 JL	NA	790	NA	NA	3100	NA	NA
Churn Creek	0.15	NA	NA	10 JL	80JL/70JL	170 JL	70 JL	1100 JL	NA	100 JL	4500/ 2800	NA	NA
Blue Creek	2.20	NA	NA	NA	NA	400	NA	6700	NA	NA	2300	NA	NA
Bloody Run	0.30	NA	NA	NA	NA	490	210	5600	NA	170 JL	4300 J	NA	NA
Bloody Run	0.08	NA	NA	NA	NA	80 JL	240	4800	NA	40 JL	5800	NA	NA
Dry Run	0.60	NA	NA	NA	NA	<10	<10	220	NA	30 JL	NA	NA	NA
Dry Run	0.06	NA	NA	NA	30 JL	40JL/30JL	10JL/40JL	4700	NA	400	1800 JL	NA	NA
Jessie Run	0.60	NA	NA	NA	NA	80 JL	<10	2600	NA	40 JL	490 J	NA	NA
Jessie Run	0.25	NA	NA	NA	NA	40 JL	<10	3500	NA	10 JL	1100 JL	NA	NA
Dunlap Creek	1.93	NA	NA	NA	NA	290	NA	2800/ 2800	NA	NA	2100	NA	NA
Dunlap Creek	0.65	NA	NA	NA	NA	220	NA	9500 JL	NA	NA	840JL/ 770	NA	NA
Rarden Creek	3.86	NA	NA	NA	NA	50 JL	NA	590	NA	NA	330	NA	NA
Rarden Creek	0.30	NA	NA	NA	10 JL	20 JL	30 JL	2300	NA	30 JL	440	NA	NA
Straight Fork Rarden Creek	0.31	NA	NA	NA	NA	170 JL	NA	860 JL	NA	NA	320	NA	NA
Bull Run	0.40	NA	NA	NA	NA	20 JL	NA	620	NA	NA	310	NA	NA
Dry Fork Rarden Creek	0.96	NA	NA	NA	NA	140 JL	NA	1100 JL	NA	NA	220	NA	NA
Cedar Fork	2.30	NA	NA	NA	NA	10 JL	NA	2300	NA	NA	520	NA	NA
Plum Run	0.01	NA	NA	NA	NA	<10	NA	6500	NA	NA	3000/ 3600	NA	NA

J - The analyte was positively identified, the associated numerical value is estimated.

JL - The reported result is estimated because it has been computed using a colony count that is not within the acceptable count range

E - Analyte was quantified but the concentration exceeds the instruments callibration range for that specific analysis.

< - Less than detection limit; NA - Not analyzed

Appendix Table 2. Surface water results for semivolatile and volatile organic compounds, herbicides, pesticides, and PCBs from the Scioto Brush Creek study area, 2006.

Stream	Scioto Brush Creek	Scioto Brush Creek	Scioto Brush Creek	Scioto Brush Creek	SF Scioto Brush Cr.
River Mile	27.87	24.25	17.10	5.81	12.4
STORET Number	V14Q21	V14Q22	V14P04	300054	V14Q30
Date Sampled	8/3/2006	8/3/2006	8/3/2006	8/3/2006	8/3/2006
Semivolatile Organic Compounds (ug/l)					
Acenaphthene	<5.5	<5.0	<5.4	<5.0	<5.2
Acenaphthylene	<5.5	<5.0	<5.4	<5.0	<5.2
Anthracene	<2.2	<2.0	<2.1	<2.0	<2.1
Benzo[a]anthracene	<2.2	<2.0	<2.1	<2.0	<2.1
Benzo[a]pyrene	<2.2	<2.0	<2.1	<2.0	<2.1
Benzo[b]fluoranthene	<2.2	<2.0	<2.1	<2.0	<2.1
Benzo[g,h,i]perylene	<2.2	<2.0	<2.1	<2.0	<2.1
Benzo[k]fluoranthene	<2.2	<2.0	<2.1	<2.0	<2.1
bis(2-Chloroethoxy)methane	<5.5	<5.0	<5.4	<5.0	<5.2
bis(2-Chloroethyl)ether	<2.2	<2.0	<2.1	<2.0	<2.1
bis(2-Chloroisopropyl)ether	<2.2	<2.0	<2.1	<2.0	<2.1
bis(2-Ethylhexyl)phthalate	<10.9	<10.0	<10.7	<10.0	<10.3
4-Bromophenyl-phenylether	<5.5	<5.0	<5.4	<5.0	<5.2
Butylbenzylphthalate	<2.2	<2.0	<2.1	<2.0	<2.1
4-Chloro-3-methylphenol	<10.9	<10.0	<10.7	<10.0	<10.3
2-Chloronaphthalene	<5.5	<5.0	<5.4	<5.0	<5.2
2-Chlorophenol	<2.2	<2.0	<2.1	<2.0	<2.1
4-Chlorophenyl-phenylether	<2.2	<2.0	<2.1	<2.0	<2.1
Chrysene	<2.2	<2.0	<2.1	<2.0	<2.1
Di-n-butylphthalate	<5.5	<5.0	<5.4	<5.0	<5.2
Di-n-octylphthalate	<2.2	<2.0	<2.1	<2.0	<2.1
Dibenz[a,h]anthracene	<2.2	<2.0	<2.1	<2.0	<2.1
1,3-Dichlorobenzene	<2.2	<2.0	<2.1	<2.0	<2.1
1,4-Dichlorobenzene	<2.2	<2.0	<2.1	<2.0	<2.1
1,2-Dichlorobenzene	<2.2	<2.0	<2.1	<2.0	<2.1
2,4-Dichlorophenol	<2.2	<2.0	<2.1	<2.0	<2.1
Diethylphthalate	<5.5	<5.0	<5.4	<5.0	<5.2
2,4-Dimethylphenol	<10.9	<10.0	<10.7	<10.0	<10.3
Dimethylphthalate	<5.5	<5.0	<5.4	<5.0	<5.2
4,6-Dinitro-2-methylphenol	<5.5	<5.0	<5.4	<5.0	<5.2
2,4-Dinitrophenol	<21.8	<20.1	<21.4	<20.1	<20.6
2,6-Dinitrotoluene	<2.2	<2.0	<2.1	<2.0	<2.1
2,4-Dinitrotoluene	<2.2	<2.0	<2.1	<2.0	<2.1
Fluoranthene	<2.2	<2.0	<2.1	<2.0	<2.1
Fluorene	<2.2	<2.0	<2.1	<2.0	<2.1
Hexachlorobenzene	<2.2	<2.0	<2.1	<2.0	<2.1
Hexachlorobutadiene	<2.2	<2.0	<2.1	<2.0	<2.1
Hexachlorocyclopentadiene	<2.2	<2.0	<2.1	<2.0	<2.1
Hexachloroethane	<5.5	<5.0	<5.4	<5.0	<5.2
Indeno[1,2,3-cd]pyrene	<2.2	<2.0	<2.1	<2.0	<2.1
Isophorone	<2.2	<2.0	<2.1	<2.0	<2.1
N-Nitroso-di-n-propylamine	<2.2	<2.0	<2.1	<2.0	<2.1
N-Nitrosodiphenylamine	<5.5	<5.0	<5.4	<5.0	<5.2
Naphthalene	<2.2	<2.0	<2.1	<2.0	<2.1
Nitrobenzene	<2.2	<2.0	<2.1	<2.0	<2.1
2-Nitrophenol	<2.2	<2.0	<2.1	<2.0	<2.1

Appendix Table 2. Continued.

Stream	Scioto Brush Creek	Scioto Brush Creek	Scioto Brush Creek	Scioto Brush Creek	SF Scioto Brush Cr.
River Mile	27.87	24.25	17.10	5.81	12.4
Date Sampled	V14Q21	V14Q22	V14P04	300054	V14Q30
Time Sampled	8/3/2006	8/3/2006	8/3/2006	8/3/2006	8/3/2006
Semivolatile Organic Compounds (ug/l)					
4-Nitrophenol	<21.8	<20.1	<21.4	<20.1	<20.6
Pentachlorophenol	<10.9	<10.0	<10.7	<10.0	<10.3
Phenanthrene	<2.2	<2.0	<2.1	<2.0	<2.1
Phenol	<2.2	<2.0	<2.1	<2.0	<2.1
Pyrene	<2.2	<2.0	<2.1	<2.0	<2.1
1,2,4-Trichlorobenzene	<2.2	<2.0	<2.1	<2.0	<2.1
2,4,6-Trichlorophenol	<5.5	<5.0	<5.4	<5.0	<5.2
Pesticides (ug/l)					
Aldrin	<0.0023 UJ	<0.0022	<0.0021	<0.0020 UJ	<0.0022
a-BHC	0.0085	0.0067	0.0078	0.0079	0.0082
b-BHC	<0.0023	<0.0022	<0.0021	<0.0020	<0.0022
d-BHC	<0.0023	0.0065	<0.0021	<0.0020	<0.0022
γ-BHC	<0.0023	<0.0022	<0.0021	<0.0020	<0.0022
4,4'-DDD	<0.0069	<0.0066	<0.0063	<0.0061	<0.0066
4,4'-DDE	<0.0023	<0.0022	<0.0021	<0.0020	<0.0022
4,4'-DDT	<0.0069	<0.0066	<0.0063	<0.0061	<0.0066
Dieldrin	<0.0023	<0.0022	<0.0021	<0.0020	<0.0022
Endosulfan I	<0.0023	<0.0022	<0.0021	<0.0020	<0.0022
Endosulfan II	<0.0023	<0.0022	<0.0021	<0.0020	<0.0022
Endosulfan sulfate	<0.023	<0.022	<0.021	<0.020	<0.022
Endrin	<0.0023	<0.0022	<0.0021	<0.0020	<0.0022
Endrin aldehyde	<0.0069	<0.0066	<0.0063	<0.0061	<0.0066
Heptachlor	<0.0023 UJ	<0.0022	<0.0021	<0.0020 UJ	<0.0022
Heptachlor epoxide	<0.0023	<0.0022	<0.0021	<0.0020	<0.0022
Methoxychlor	<0.012	<0.011	<0.010	<0.010	<0.011
Mirex	<0.012	<0.011	<0.010	<0.010	<0.011
Hexachlorobenzene	<0.0023	<0.0022	<0.0021	<0.0020	<0.0022
PCBs (ug/l)					
PCB-1016	<0.12	<0.11	<0.11	<0.10	<0.11
PCB-1221	<0.12	<0.11	<0.11	<0.10	<0.11
PCB-1232	<0.12	<0.11	<0.11	<0.10	<0.11
PCB-1242	<0.12	<0.11	<0.11	<0.10	<0.11
PCB-1248	<0.12	<0.11	<0.11	<0.10	<0.11
PCB-1254	<0.12	<0.11	<0.11	<0.10	<0.11
PCB-1260	<0.12	<0.11	<0.11	<0.10	<0.11
Volatile Organic Compounds (ug/l)					
Benzene	<0.50	<0.50	<0.50	<0.50	<0.50
Bromobenzene	<0.50	<0.50	<0.50	<0.50	<0.50
Bromochloromethane	<0.50	<0.50	<0.50	<0.50	<0.50
Bromodichloromethane	<0.50	<0.50	<0.50	<0.50	<0.50
Bromoform	<0.50	<0.50	<0.50	<0.50	<0.50
Bromomethane	<0.50	<0.50	<0.50	<0.50	<0.50
n-Butylbenzene	<0.50	<0.50	<0.50	<0.50	<0.50
sec-Butylbenzene	<0.50	<0.50	<0.50	<0.50	<0.50
tert-Butylbenzene	<0.50	<0.50	<0.50	<0.50	<0.50
Carbon tetrachloride	<0.50	<0.50	<0.50	<0.50	<0.50
Chlorobenzene	<0.50	<0.50	<0.50	<0.50	<0.50

Appendix Table 2. Continued.

Stream	Scioto Brush Creek	Scioto Brush Creek	Scioto Brush Creek	Scioto Brush Creek	SF Scioto Brush Cr.
River Mile	27.87	24.25	17.10	5.81	12.4
Date Sampled	V14Q21	V14Q22	V14P04	300054	V14Q30
Time Sampled	8/3/2006	8/3/2006	8/3/2006	8/3/2006	8/3/2006
Volatile Organic Compounds (ug/l)					
Chloroethane	<0.50	<0.50	<0.50	<0.50	<0.50
Chloroform	<0.50	<0.50	<0.50	<0.50	<0.50
Chloromethane	<0.50	<0.50	<0.50	<0.50	<0.50
2-Chlorotoluene	<0.50	<0.50	<0.50	<0.50	<0.50
4-Chlorotoluene	<0.50	<0.50	<0.50	<0.50	<0.50
Dibromochloromethane	<0.50	<0.50	<0.50	<0.50	<0.50
1,2-Dibromo-3-chloropropane	<0.50	<0.50	<0.50	<0.50	<0.50
1,2-Dibromoethane	<0.50	<0.50	<0.50	<0.50	<0.50
Dibromomethane	<0.50	<0.50	<0.50	<0.50	<0.50
1,2-Dichlorobenzene	<0.50	<0.50	<0.50	<0.50	<0.50
1,3-Dichlorobenzene	<0.50	<0.50	<0.50	<0.50	<0.50
1,4-Dichlorobenzene	<0.50	<0.50	<0.50	<0.50	<0.50
Dichlorodifluoromethane	<0.50	<0.50	<0.50	<0.50	<0.50
1,1-Dichloroethane	<0.50	<0.50	<0.50	<0.50	<0.50
1,2-Dichloroethane	<0.50	<0.50	<0.50	<0.50	<0.50
1,1-Dichloroethene	<0.50	<0.50	<0.50	<0.50	<0.50
cis-1,2-Dichloroethene	<0.50	<0.50	<0.50	<0.50	<0.50
trans-1,2-Dichloroethene	<0.50	<0.50	<0.50	<0.50	<0.50
1,2-Dichloropropane	<0.50	<0.50	<0.50	<0.50	<0.50
1,3-Dichloropropane	<0.50	<0.50	<0.50	<0.50	<0.50
2,2-Dichloropropane	<0.50	<0.50	<0.50	<0.50	<0.50
1,1-Dichloropropene	<0.50	<0.50	<0.50	<0.50	<0.50
cis-1,3-Dichloropropene	<0.50	<0.50	<0.50	<0.50	<0.50
trans-1,3-Dichloropropene	<0.50	<0.50	<0.50	<0.50	<0.50
Ethylbenzene	<0.50	<0.50	<0.50	<0.50	<0.50
Hexachlorobutadiene	<0.50	<0.50	<0.50	<0.50	<0.50
Isopropylbenzene	<0.50	<0.50	<0.50	<0.50	<0.50
4-Isopropyltoluene	<0.50	<0.50	<0.50	<0.50	<0.50
Methylene chloride	<0.50	<0.50	<0.50	<0.50	<0.50
Naphthalene	<0.50	<0.50	<0.50	<0.50	<0.50
n-Propylbenzene	<0.50	<0.50	<0.50	<0.50	<0.50
Styrene	<0.50	<0.50	<0.50	<0.50	<0.50
1,1,1,2-Tetrachloroethane	<0.50	<0.50	<0.50	<0.50	<0.50
1,1,2,2-Tetrachloroethane	<0.50	<0.50	<0.50	<0.50	<0.50
Tetrachloroethene	<0.50	<0.50	<0.50	<0.50	<0.50
Toluene	<0.50	<0.50	<0.50	<0.50	<0.50
1,2,3-Trichlorobenzene	<0.50	<0.50	<0.50	<0.50	<0.50
1,2,4-Trichlorobenzene	<0.50	<0.50	<0.50	<0.50	<0.50
1,1,1-Trichloroethane	<0.50	<0.50	<0.50	<0.50	<0.50
1,1,2-Trichloroethane	<0.50	<0.50	<0.50	<0.50	<0.50
Trichloroethene	<0.50	<0.50	<0.50	<0.50	<0.50
Trichlorofluoromethane	<0.50	<0.50	<0.50	<0.50	<0.50
1,2,3-Trichloropropane	<0.50	<0.50	<0.50	<0.50	<0.50
1,2,4-Trimethylbenzene	<0.50	<0.50	<0.50	<0.50	<0.50
1,3,5-Trimethylbenzene	<0.50	<0.50	<0.50	<0.50	<0.50
Vinyl chloride	<0.50	<0.50	<0.50	<0.50	<0.50
o-Xylene	<0.50	<0.50	<0.50	<0.50	<0.50
Total m&p-xylenes	<0.50	<0.50	<0.50	<0.50	<0.50

Appendix Table 2. Continued.

Stream	SF Scioto Brush Cr.	SF Scioto Brush Cr.	Mill Creek	Jaybird Branch	Dunlap Creek
River Mile	7.02	1.13	0.80	1.0	1.93
STORET Number	V14P02	V14P03	V14Q10	V14Q25	300106
Date Sampled	8/3/2006	8/3/2006	8/3/2006	8/3/2006	8/3/2006
Semivolatile Organic Compounds (ug/l)					
Acenaphthene	<5.0	<5.3	<5.1	<5.1	<5.3
Acenaphthylene	<5.0	<5.3	<5.1	<5.1	<5.3
Anthracene	<2.0	<2.1	<2.0	<2.1	<2.1
Benzo[a]anthracene	<2.0	<2.1	<2.0	<2.1	<2.1
Benzo[a]pyrene	<2.0	<2.1	<2.0	<2.1	<2.1
Benzo[b]fluoranthene	<2.0	<2.1	<2.0	<2.1	<2.1
Benzo[g,h,i]perylene	<2.0	<2.1	<2.0	<2.1	<2.1
Benzo[k]fluoranthene	<2.0	<2.1	<2.0	<2.1	<2.1
bis(2-Chloroethoxy)methane	<5.0	<5.3	<5.1	<5.1	<5.3
bis(2-Chloroethyl)ether	<2.0	<2.1	<2.0	<2.1	<2.1
bis(2-Chloroisopropyl)ether	<2.0	<2.1	<2.0	<2.1	<2.1
bis(2-Ethylhexyl)phthalate	<10.0	<10.5	<10.2	<10.2	<10.5
4-Bromophenyl-phenylether	<5.0	<5.3	<5.1	<5.1	<5.3
Butylbenzylphthalate	<2.0	<2.1	<2.0	<2.1	<2.1
4-Chloro-3-methylphenol	<10.0	<10.5	<10.2	<10.2	<10.5
2-Chloronaphthalene	<5.0	<5.3	<5.1	<5.1	<5.3
2-Chlorophenol	<2.0	<2.1	<2.0	<2.1	<2.1
4-Chlorophenyl-phenylether	<2.0	<2.1	<2.0	<2.1	<2.1
Chrysene	<2.0	<2.1	<2.0	<2.1	<2.1
Di-n-butylphthalate	<5.0	<5.3	<5.1	<5.1	<5.3
Di-n-octylphthalate	<2.0	<2.1	<2.0	<2.1	<2.1
Dibenz[a,h]anthracene	<2.0	<2.1	<2.0	<2.1	<2.1
1,3-Dichlorobenzene	<2.0	<2.1	<2.0	<2.1	<2.1
1,4-Dichlorobenzene	<2.0	<2.1	<2.0	<2.1	<2.1
1,2-Dichlorobenzene	<2.0	<2.1	<2.0	<2.1	<2.1
2,4-Dichlorophenol	<2.0	<2.1	<2.0	<2.1	<2.1
Diethylphthalate	<5.0	<5.3	<5.1	<5.1	<5.3
2,4-Dimethylphenol	<10.0	<10.5	<10.2	<10.2	<10.5
Dimethylphthalate	<5.0	<5.3	<5.1	<5.1	<5.3
4,6-Dinitro-2-methylphenol	<5.0	<5.3	<5.1	<5.1	<5.3
2,4-Dinitrophenol	<20.1	<21.0	<20.4	<20.5	<21.0
2,6-Dinitrotoluene	<2.0	<2.1	<2.0	<2.1	<2.1
2,4-Dinitrotoluene	<2.0	<2.1	<2.0	<2.1	<2.1
Fluoranthene	<2.0	<2.1	<2.0	<2.1	<2.1
Fluorene	<2.0	<2.1	<2.0	<2.1	<2.1
Hexachlorobenzene	<2.0	<2.1	<2.0	<2.1	<2.1
Hexachlorobutadiene	<2.0	<2.1	<2.0	<2.1	<2.1
Hexachlorocyclopentadiene	<2.0	<2.1	<2.0	<2.1	<2.1
Hexachloroethane	<5.0	<5.3	<5.1	<5.1	<5.3
Indeno[1,2,3-cd]pyrene	<2.0	<2.1	<2.0	<2.1	<2.1
Isophorone	<2.0	<2.1	<2.0	<2.1	<2.1
N-Nitroso-di-n-propylamine	<2.0	<2.1	<2.0	<2.1	<2.1
N-Nitrosodiphenylamine	<5.0	<5.3	<5.1	<5.1	<5.3
Naphthalene	<2.0	<2.1	<2.0	<2.1	<2.1
Nitrobenzene	<2.0	<2.1	<2.0	<2.1	<2.1
2-Nitrophenol	<2.0	<2.1	<2.0	<2.1	<2.1

Appendix Table 2. Continued.

Stream	SF Scioto Brush Cr.	SF Scioto Brush Cr.	Mill Creek	Jaybird Branch	Dunlap Creek
River Mile	7.02	1.13	0.80	1.0	1.93
Date Sampled	V14P02	V14P03	V14Q10	V14Q25	300106
Time Sampled	8/3/2006	8/3/2006	8/3/2006	8/3/2006	8/3/2006
Semivolatile Organic Compounds (ug/l)					
4-Nitrophenol	<20.1	<21.0	<20.4	<20.5	<21.0
Pentachlorophenol	<10.0	<10.5	<10.2	<10.2	<10.5
Phenanthrene	<2.0	<2.1	<2.0	<2.1	<2.1
Phenol	<2.0	<2.1	<2.0	<2.1	<2.1
Pyrene	<2.0	<2.1	<2.0	<2.1	<2.1
1,2,4-Trichlorobenzene	<2.0	<2.1	<2.0	<2.1	<2.1
2,4,6-Trichlorophenol	<5.0	<5.3	<5.1	<5.1	<5.3
Pesticides (ug/l)					
Aldrin	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021
a-BHC	0.0080	0.0092	0.0085	<0.0021	0.0080
b-BHC	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021
d-BHC	<0.0021	<0.0021	<0.0021	0.0062	<0.0021
γ-BHC	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021
4,4'-DDD	<0.0064	<0.0062	<0.0062	<0.0063	<0.0064
4,4'-DDE	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021
4,4'-DDT	<0.0064	<0.0062	<0.0062	<0.0063	<0.0064
Dieldrin	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021
Endosulfan I	0.0024	0.019	0.015	<0.0021	<0.0021
Endosulfan II	0.0034	0.013	0.011	<0.0021	<0.0021
Endosulfan sulfate	<0.021	<0.021	<0.021	<0.021	<0.021
Endrin	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021
Endrin aldehyde	<0.0064	<0.0062	<0.0062	<0.0063	<0.0064
Heptachlor	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021
Heptachlor epoxide	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021
Methoxychlor	<0.011	<0.010	<0.010	<0.010	<0.011
Mirex	<0.011	<0.010	<0.010	<0.010	<0.011
Hexachlorobenzene	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021
PCBs (ug/l)					
PCB-1016	<0.11	<0.10	<0.10	<0.11	<0.11
PCB-1221	<0.11	<0.10	<0.10	<0.11	<0.11
PCB-1232	<0.11	<0.10	<0.10	<0.11	<0.11
PCB-1242	<0.11	<0.10	<0.10	<0.11	<0.11
PCB-1248	<0.11	<0.10	<0.10	<0.11	<0.11
PCB-1254	<0.11	<0.10	<0.10	<0.11	<0.11
PCB-1260	<0.11	<0.10	<0.10	<0.11	<0.11
Volatile Organic Compounds (ug/l)					
Benzene	<0.50	<0.50	<0.50	<0.50	<0.50
Bromobenzene	<0.50	<0.50	<0.50	<0.50	<0.50
Bromochloromethane	<0.50	<0.50	<0.50	<0.50	<0.50
Bromodichloromethane	<0.50	<0.50	<0.50	<0.50	<0.50
Bromoform	<0.50	<0.50	<0.50	<0.50	<0.50
Bromomethane	<0.50	<0.50	<0.50	<0.50	<0.50
n-Butylbenzene	<0.50	<0.50	<0.50	<0.50	<0.50
sec-Butylbenzene	<0.50	<0.50	<0.50	<0.50	<0.50
tert-Butylbenzene	<0.50	<0.50	<0.50	<0.50	<0.50
Carbon tetrachloride	<0.50	<0.50	<0.50	<0.50	<0.50
Chlorobenzene	<0.50	<0.50	<0.50	<0.50	<0.50

Appendix Table 2. Continued.

Stream	SF Scioto Brush Cr.	SF Scioto Brush Cr.	Mill Creek	Jaybird Branch	Dunlap Creek
River Mile	7.02	1.13	0.80	1.0	1.93
Date Sampled	V14P02	V14P03	V14Q10	V14Q25	300106
Time Sampled	8/3/2006	8/3/2006	8/3/2006	8/3/2006	8/3/2006
Volatile Organic Compounds (ug/l)					
Chloroethane	<0.50	<0.50	<0.50	<0.50	<0.50
Chloroform	<0.50	<0.50	<0.50	<0.50	<0.50
Chloromethane	<0.50	<0.50	<0.50	<0.50	<0.50
2-Chlorotoluene	<0.50	<0.50	<0.50	<0.50	<0.50
4-Chlorotoluene	<0.50	<0.50	<0.50	<0.50	<0.50
Dibromochloromethane	<0.50	<0.50	<0.50	<0.50	<0.50
1,2-Dibromo-3-chloropropane	<0.50	<0.50	<0.50	<0.50	<0.50
1,2-Dibromoethane	<0.50	<0.50	<0.50	<0.50	<0.50
Dibromomethane	<0.50	<0.50	<0.50	<0.50	<0.50
1,2-Dichlorobenzene	<0.50	<0.50	<0.50	<0.50	<0.50
1,3-Dichlorobenzene	<0.50	<0.50	<0.50	<0.50	<0.50
1,4-Dichlorobenzene	<0.50	<0.50	<0.50	<0.50	<0.50
Dichlorodifluoromethane	<0.50	<0.50	<0.50	<0.50	<0.50
1,1-Dichloroethane	<0.50	<0.50	<0.50	<0.50	<0.50
1,2-Dichloroethane	<0.50	<0.50	<0.50	<0.50	<0.50
1,1-Dichloroethene	<0.50	<0.50	<0.50	<0.50	<0.50
cis-1,2-Dichloroethene	<0.50	<0.50	<0.50	<0.50	<0.50
trans-1,2-Dichloroethene	<0.50	<0.50	<0.50	<0.50	<0.50
1,2-Dichloropropane	<0.50	<0.50	<0.50	<0.50	<0.50
1,3-Dichloropropane	<0.50	<0.50	<0.50	<0.50	<0.50
2,2-Dichloropropane	<0.50	<0.50	<0.50	<0.50	<0.50
1,1-Dichloropropene	<0.50	<0.50	<0.50	<0.50	<0.50
cis-1,3-Dichloropropene	<0.50	<0.50	<0.50	<0.50	<0.50
trans-1,3-Dichloropropene	<0.50	<0.50	<0.50	<0.50	<0.50
Ethylbenzene	<0.50	<0.50	<0.50	<0.50	<0.50
Hexachlorobutadiene	<0.50	<0.50	<0.50	<0.50	<0.50
Isopropylbenzene	<0.50	<0.50	<0.50	<0.50	<0.50
4-Isopropyltoluene	<0.50	<0.50	<0.50	<0.50	<0.50
Methylene chloride	<0.50	<0.50	<0.50	<0.50	<0.50
Naphthalene	<0.50	<0.50	<0.50	<0.50	<0.50
n-Propylbenzene	<0.50	<0.50	<0.50	<0.50	<0.50
Styrene	<0.50	<0.50	<0.50	<0.50	<0.50
1,1,1,2-Tetrachloroethane	<0.50	<0.50	<0.50	<0.50	<0.50
1,1,2,2-Tetrachloroethane	<0.50	<0.50	<0.50	<0.50	<0.50
Tetrachloroethene	<0.50	<0.50	<0.50	<0.50	<0.50
Toluene	<0.50	<0.50	<0.50	<0.50	<0.50
1,2,3-Trichlorobenzene	<0.50	<0.50	<0.50	<0.50	<0.50
1,2,4-Trichlorobenzene	<0.50	<0.50	<0.50	<0.50	<0.50
1,1,1-Trichloroethane	<0.50	<0.50	<0.50	<0.50	<0.50
1,1,2-Trichloroethane	<0.50	<0.50	<0.50	<0.50	<0.50
Trichloroethene	<0.50	<0.50	<0.50	<0.50	<0.50
Trichlorofluoromethane	<0.50	<0.50	<0.50	<0.50	<0.50
1,2,3-Trichloropropane	<0.50	<0.50	<0.50	<0.50	<0.50
1,2,4-Trimethylbenzene	<0.50	<0.50	<0.50	<0.50	<0.50
1,3,5-Trimethylbenzene	<0.50	<0.50	<0.50	<0.50	<0.50
Vinyl chloride	<0.50	<0.50	<0.50	<0.50	<0.50
o-Xylene	<0.50	<0.50	<0.50	<0.50	<0.50
Total m&p-xylenes	<0.50	<0.50	<0.50	<0.50	<0.50

Appendix Table 2. Continued.

Stream	Scioto Brush Creek	Scioto Brush Creek	SF Scioto Brush Cr.
River Mile	17.10	5.81	1.13
STORET Number	V14P04	300054	V14P03
Date Sampled	5/25/2006	5/25/2006	5/25/2006
Semivolatile Organic Compounds (ug/l)			
Acenaphthene	<5.1	<5.2	<5.1
Acenaphthylene	<5.1	<5.2	<5.1
Anthracene	<2.1	<2.1	<2.0
Benzo[a]anthracene	<2.1	<2.1	<2.0
Benzo[a]pyrene	<2.1	<2.1	<2.0
Benzo[b]fluoranthene	<2.1	<2.1	<2.0
Benzo[g,h,i]perylene	<2.1	<2.1	<2.0
Benzo[k]fluoranthene	<2.1	<2.1	<2.0
bis(2-Chloroethoxy)methane	<5.1	<5.2	<5.1
bis(2-Chloroethyl)ether	<2.1	<2.1	<2.0
bis(2-Chloroisopropyl)ether	<2.1	<2.1	<2.0
bis(2-Ethylhexyl)phthalate	<10.2	<10.3	<10.2
4-Bromophenyl-phenylether	<5.1	<5.2	<5.1
Butylbenzylphthalate	<2.1	<2.1	<2.0
4-Chloro-3-methylphenol	<10.2	<10.3	<10.2
2-Chloronaphthalene	<5.1	<5.2	<5.1
2-Chlorophenol	<2.1	<2.1	<2.0
4-Chlorophenyl-phenylether	<2.1	<2.1	<2.0
Chrysene	<2.1	<2.1	<2.0
Di-n-butylphthalate	<5.1	<5.2	<5.1
Di-n-octylphthalate	<2.1	<2.1	<2.0
Dibenz[a,h]anthracene	<2.1	<2.1	<2.0
1,3-Dichlorobenzene	<2.1	<2.1	<2.0
1,4-Dichlorobenzene	<2.1	<2.1	<2.0
1,2-Dichlorobenzene	<2.1	<2.1	<2.0
2,4-Dichlorophenol	<2.1	<2.1	<2.0
Diethylphthalate	<5.1	<5.2	<5.1
2,4-Dimethylphenol	<10.2	<10.3	<10.2
Dimethylphthalate	<5.1	<5.2	<5.1
4,6-Dinitro-2-methylphenol	<5.1	<5.2	<5.1
2,4-Dinitrophenol	<20.5	<20.6	<20.3
2,6-Dinitrotoluene	<2.1	<2.1	<2.0
2,4-Dinitrotoluene	<2.1	<2.1	<2.0
Fluoranthene	<2.1	<2.1	<2.0
Fluorene	<2.1	<2.1	<2.0
Hexachlorobenzene	<2.1	<2.1	<2.0
Hexachlorobutadiene	<2.1	<2.1	<2.0
Hexachlorocyclopentadiene	<2.1	<2.1	<2.0
Hexachloroethane	<5.1	<5.2	<5.1
Indeno[1,2,3-cd]pyrene	<2.1	<2.1	<2.0
Isophorone	<2.1	<2.1	<2.0
N-Nitroso-di-n-propylamine	<2.1	<2.1	<2.0
N-Nitrosodiphenylamine	<5.1	<5.2	<5.1
Naphthalene	<2.1	<2.1	<2.0
Nitrobenzene	<2.1	<2.1	<2.0
2-Nitrophenol	<2.1	<2.1	<2.0

Appendix Table 2. Continued.

Stream	Scioto Brush Creek	Scioto Brush Creek	SF Scioto Brush Cr.
River Mile	17.10	5.81	1.13
Date Sampled	V14P04	300054	V14P03
Time Sampled	5/25/2006	5/25/2006	5/25/2006
Semivolatile Organic Compounds (ug/l)			
4-Nitrophenol	<20.5	<20.6	<20.3
Pentachlorophenol	<10.2	<10.3	<10.2
Phenanthrene	<2.1	<2.1	<2.0
Phenol	<2.1	<2.1	<2.0
Pyrene	<2.1	<2.1	<2.0
1,2,4-Trichlorobenzene	<2.1	<2.1	<2.0
2,4,6-Trichlorophenol	<5.1	<5.2	<5.1
Pesticides (ug/l)			
Aldrin	<0.0020	<0.0020	<0.0022
a-BHC	<0.0020	<0.0020	<0.0022
b-BHC	<0.0020	<0.0020	<0.0022
d-BHC	<0.0020	<0.0020	<0.0022
γ-BHC	<0.0020	<0.0020	<0.0022
4,4'-DDD	<0.0060	<0.0062	<0.0065
4,4'-DDE	<0.0020	<0.0020	<0.0022
4,4'-DDT	<0.0060	<0.0062	<0.0065
Dieldrin	<0.0020	<0.0020	<0.0022
Endosulfan I	<0.0020	<0.0020	<0.0022
Endosulfan II	<0.0020	<0.0020	<0.0022
Endosulfan sulfate	<0.020	<0.020	<0.022
Endrin	<0.0020	<0.0020	<0.0022
Endrin aldehyde	<0.0060	<0.0062	<0.0065
Heptachlor	<0.0020	<0.0020	<0.0022
Heptachlor epoxide	<0.0020	<0.0020	<0.0022
Methoxychlor	<0.010	<0.010	<0.011
Mirex	<0.010	<0.010	<0.011
Hexachlorobenzene	<0.0020	<0.0020	<0.0022
PCBs (ug/l)			
PCB-1016	<0.10	<0.10	<0.11
PCB-1221	<0.10	<0.10	<0.11
PCB-1232	<0.10	<0.10	<0.11
PCB-1242	<0.10	<0.10	<0.11
PCB-1248	<0.10	<0.10	<0.11
PCB-1254	<0.10	<0.10	<0.11
PCB-1260	<0.10	<0.10	<0.11
Herbicides (ug/l)			
Acetochlor	<0.21 UJ	<0.21 UJ	<0.21 UJ
Alachlor	<0.21 UJ	<0.21 UJ	<0.21 UJ
Atrazine	<0.21 UJ	<0.21 UJ	<0.21 UJ
Benzo[a]pyrene	<0.54 UJ	<0.52 UJ	<0.52 UJ
bis(2-Ethylhexyl)adipate	<0.54 UJ	<0.52 UJ	<0.52 UJ
bis(2-Ethylhexyl)phthalate	0.56 J	1.06 J	0.82 J
Butachlor	<0.21 UJ	<0.21 UJ	<0.21 UJ
Cyanazine	<0.21 UJ	<0.21 UJ	<0.21 UJ

Appendix Table 2. Continued.

Stream	Scioto Brush Creek	Scioto Brush Creek	SF Scioto Brush Cr.
River Mile	17.10	5.81	1.13
Date Sampled	V14P04	300054	V14P03
Time Sampled	5/25/2006	5/25/2006	5/25/2006
Herbicides (ug/l)			
Metolachlor	<0.21 UJ	<0.21 UJ	<0.21 UJ
Metribuzin	<0.21 UJ	<0.21 UJ	<0.21 UJ
Pentachlorophenol	<5.4 UJ	<5.2 UJ	<5.2 UJ
Propachlor	<0.21 UJ	<0.21 UJ	<0.21 UJ
Simazine	<0.21 UJ	<0.21 UJ	<0.21 UJ

< - Not detected at or above the method detection limit (MDL value reported with the less than symbol).

J - The analyte was positively identified, the associated value is estimated.

UJ - The analyte was not detected above the sample quantitation limit (QL). The reported QL is estimated.

Appendix Table 3. Sediment results (metals, nutrients) from twelve locations sampled in the Scioto Brush Creek study area, 2006.

Stream	Scioto Brush Creek	Scioto Brush Creek	Scioto Brush Creek	Scioto Brush Creek	Scioto Brush Creek	SF Scioto Brush Creek
River Mile	33.5	27.9	24.2	17.1	5.8	12.4
STORET Number	V14Q20	V14Q21	V14Q22	V14P04	300054	V14Q30
Date Sampled	8/24/2006	8/24/2006	8/14/2006	8/24/2006	8/24/2006	8/24/2006
Time Sampled	9:15 AM	9:40 AM	12:00 PM	10:40 AM	11:20 AM	12:15 PM
Metals (mg/kg)						
Aluminum	13500 J	8600 J	9190 J	9460 J	9660 J	11400 J
Barium	116	72.8	103	121	94.8	134
Calcium	14800	52300	7080	4510	2910	5020
Chromium	40	20	<21	<26	<24	<30
Copper	34.3	20.2	30.5	24.3	18.4	28.7
Iron	81500	37400	27800	29800	25400	31600
Lead	60	24	<28	47	<32	<40
Magnesium	8520	30700	4330	2800	1940	3640
Manganese	1070	746	561	1350	666	588
Nickel	182	89	103	83	70	89
Potassium	1080	<1190	<1420	<1710	<1600	<2020
Sodium	<2610	<2980	<3540	<4280	<4000	<5040
Strontium	<16	29	<21	<26	<24	<30
Zinc	614	308	277	241	191	308
Mercury	0.040	<0.037	0.036	0.166	<0.043	<0.048
Arsenic	58.4	26.8	22.7	24.0	14.7	17.7
Cadmium	5.16	2.74	2.90	3.77	2.60	4.23 J
Selenium	1.67	<1.19	<1.42	2.29	<1.60	<2.02
Other						
Ammonia (mg/kg)	76	140	54	90	270	370
Phosphorus - Total (mg/kg)	907	442	436	512	427	551
Total Organic Carbon (%)	NA	NA	2.2	NA	NA	NA
Percent Solids	56.4	56.9	54.3	45.8	48.1	38.9
Stream	SF Scioto Brush Creek	SF Scioto Brush Creek	Mill Creek	Jaybird Branch	Dunlap Creek	Rarden Creek
River Mile	7.0	1.1	0.8	1.0	1.9	3.9
STORET Number	V14P02	V14P03	V14Q10	V14Q25	300106	V14Q36
Date Sampled	8/24/2006	8/24/2006	8/24/2006	8/14/2006	8/14/2006	8/14/2006
Time Sampled	11:40 AM	10:45 AM	1:00 PM	11:30 AM	2:55 PM	1:30 PM
Metals (mg/kg)						
Aluminum	7370 J	7340 J	9270 J	12700 J	7030 J	7060 J
Barium	82.2	86.6	134	73.4	56.1	77.2
Calcium	4380	1470	16500	<920	<1320	1220
Chromium	<21	<16	<23	14	<20	<18
Copper	22.6	16.4	24.4	37.5	23.3	27.8
Iron	25200	21200	29700	51600	37700	32400
Lead	38	<22	<30	27	32	<25
Magnesium	2840	1340	9130	801	775	1250
Manganese	486	566	752	133	358	759
Nickel	74	60	86	27	43	62
Potassium	<1380	<1080	<1520	1270	<1320	<1220
Sodium	<3440	<2700	<3790	<2300	<3290	<3060
Strontium	<21	<16	<23	<14	<20	<18
Zinc	236	168	340	101	154	183
Mercury	<0.042	<0.034	<0.043	0.041	0.066	0.051
Arsenic	15.5	11.9	18.1	40.3	29.3	28.5
Cadmium	2.96	2.16	3.07	0.496	1.57	2.36
Selenium	<1.38	<1.08	<1.52	1.85	<1.32	<1.22
Other						
Ammonia (mg/kg)	64	51	87	37	44	44
Phosphorus - Total (mg/kg)	445	330	631	474	353	355
Total Organic Carbon (%)	NA	NA	NA	2.3	1.8	1.7
Percent Solids	52.8	57.0	46.3	63.9	58.4	50.2

J - Estimated due to high matrix spike recoveries.

Appendix Table 4. Sediment sampling results for semivolatile organic compounds, pesticides, PCBs, and particle size from the Scioto Brush Creek study area, 2006.

Stream	Scioto Brush Creek	Scioto Brush Creek	Scioto Brush Creek	Scioto Brush Creek	Scioto Brush Creek	SF Scioto Brush Cr.
River Mile	33.5	27.9	24.2	17.1	5.8	12.4
STORET Number	V14Q20	V14Q21	V14Q22	V14P04	300054	V14Q30
Date Sampled	8/24/2006	8/24/2006	8/14/2006	8/24/2006	8/24/2006	8/24/2006
Time Sampled	9:15 AM	9:40 AM	12:00 PM	10:40 AM	11:20 AM	12:15 PM
Semivolatile Organic Compounds (mg/kg)						
Acenaphthene	<0.70	<0.70	<0.73	<0.88	<0.80	<1.01
Acenaphthylene	<0.70	<0.70	<0.73	<0.88	<0.80	<1.01
Acetophenone	<0.70	<0.70	<0.73	<0.88	<0.80	<1.01
2-Acetylaminofluorene	<0.70	<0.70	<0.73	<0.88	<0.80	<1.01
Aniline	<3.5	<3.5	<3.7	<4.4	<4.0	<5.1
Anthracene	<0.70	<0.70	<0.73	<0.88	<0.80	<1.01
Benz[a]anthracene	<0.70	<0.70	<0.73	<0.88	<0.80	<1.01
Benzo[a]pyrene	<0.70	<0.70	<0.73	<0.88	<0.80	<1.01
Benzo[b]fluoranthene	<0.70	<0.70	<0.73	<0.88	<0.80	<1.01
Benzo[g,h,i]perylene	<0.70	<0.70	<0.73	<0.88	<0.80	<1.01
Benzo[k]fluoranthene	<0.70	<0.70	<0.73	<0.88	<0.80	<1.01
Benzyl alcohol	<0.70	<0.70	<0.73	<0.88	<0.80	<1.01
bis(2-Chloroethoxy)methane	<0.70	<0.70	<0.73	<0.88	<0.80	<1.01
bis(2-Chloroethyl)ether	<0.70	<0.70	<0.73	<0.88	<0.80	<1.01
bis(2-Chloroisopropyl)ether	<0.70	<0.70	<0.73	<0.88	<0.80	<1.01
bis(2-Ethylhexyl)phthalate	<0.70	<0.70	<0.73	<0.88	<0.80	<1.01
4-Bromophenyl-phenylether	<0.70	<0.70	<0.73	<0.88	<0.80	<1.01
Butylbenzylphthalate	<0.70	<0.70	<0.73	<0.88	<0.80	<1.01
4-Chloro-3-methylphenol	<0.70	<0.70	<0.73	<0.88	<0.80	<1.01
2-Chloronaphthalene	<0.70	<0.70	<0.73	<0.88	<0.80	<1.01
2-Chlorophenol	<0.70	<0.70	<0.73	<0.88	<0.80	<1.01
4-Chlorophenyl-phenylether	<0.70	<0.70	<0.73	<0.88	<0.80	<1.01
Chrysene	<0.70	<0.70	<0.73	<0.88	<0.80	<1.01
Di-n-butylphthalate	<0.70	<0.70	<0.73	<0.88	<0.80	<1.01
Di-n-octylphthalate	<0.70	<0.70	<0.73	<0.88	<0.80	<1.01
Dibenz[a,h]anthracene	<0.70	<0.70	<0.73	<0.88	<0.80	<1.01
Dibenzofuran	<0.70	<0.70	<0.73	<0.88	<0.80	<1.01
1,3-Dichlorobenzene	<0.70	<0.70	<0.73	<0.88	<0.80	<1.01
1,4-Dichlorobenzene	<0.70	<0.70	<0.73	<0.88	<0.80	<1.01
1,2-Dichlorobenzene	<0.70	<0.70	<0.73	<0.88	<0.80	<1.01
3,3'-Dichlorobenzidine	<3.5	<3.5	<3.7	<4.4	<4.0	<5.1
2,6-Dichlorophenol	<0.70	<0.70	<0.73	<0.88	<0.80	<1.01
2,4-Dichlorophenol	<0.70	<0.70	<0.73	<0.88	<0.80	<1.01
Diethylphthalate	<0.70	<0.70	<0.73	<0.88	<0.80	<1.01
p-Dimethylaminoazobenzene	<0.70	<0.70	<0.73	<0.88	<0.80	<1.01
7,12-Dimethylbenz[a]anthracene	<3.5	<3.5	<3.7	<4.4	<4.0	<5.1
2,4-Dimethylphenol	<0.70	<0.70	<0.73	<0.88	<0.80	<1.01
Dimethylphthalate	<0.70	<0.70	<0.73	<0.88	<0.80	<1.01
4,6-Dinitro-2-methylphenol	<0.70	<0.70	<0.73	<0.88	<0.80	<1.01
1,3-Dinitrobenzene	<0.70	<0.70	<0.73	<0.88	<0.80	<1.01
2,4-Dinitrophenol	<3.5	<3.5	<3.7	<4.4	<4.0	<5.1
2,6-Dinitrotoluene	<0.70	<0.70	<0.73	<0.88	<0.80	<1.01
2,4-Dinitrotoluene	<0.70	<0.70	<0.73	<0.88	<0.80	<1.01
Dinoseb	<0.70	<0.70	<0.73	<0.88	<0.80	<1.01
Diphenylamine	<0.70	<0.70	<0.73	<0.88	<0.80	<1.01
Ethyl methanesulfonate	<0.70	<0.70	<0.73	<0.88	<0.80	<1.01

Appendix Table 4. Continued.

Stream	Scioto Brush Creek 33.5	Scioto Brush Creek 27.9	Scioto Brush Creek 24.2	Scioto Brush Creek 17.1	Scioto Brush Creek 5.8	SF Scioto Brush Cr. 12.4
River Mile						
STORET Number	V14Q20	V14Q21	V14Q22	V14P04	300054	V14Q30
Date Sampled	8/24/2006	8/24/2006	8/14/2006	8/24/2006	8/24/2006	8/24/2006
Time Sampled	9:15 AM	9:40 AM	12:00 PM	10:40 AM	11:20 AM	12:15 PM
Semivolatile Organic Compounds (mg/kg)						
Fluoranthene	<0.70	<0.70	<0.73	<0.88	<0.80	<1.01
Fluorene	<0.70	<0.70	<0.73	<0.88	<0.80	<1.01
Hexachlorobenzene	<0.70	<0.70	<0.73	<0.88	<0.80	<1.01
Hexachlorobutadiene	<0.70	<0.70	<0.73	<0.88	<0.80	<1.01
Hexachlorocyclopentadiene	<0.70	<0.70	<0.73	<0.88	<0.80	<1.01
Hexachloroethane	<0.70	<0.70	<0.73	<0.88	<0.80	<1.01
Hexachloropropene	<0.70	<0.70	<0.73	<0.88	<0.80	<1.01
Indeno[1,2,3-cd]pyrene	<0.70	<0.70	<0.73	<0.88	<0.80	<1.01
Isophorone	<0.70	<0.70	<0.73	<0.88	<0.80	<1.01
Methyl methanesulfonate	<0.70	<0.70	<0.73	<0.88	<0.80	<1.01
3-Methylcholanthrene	<0.70	<0.70	<0.73	<0.88	<0.80	<1.01
2-Methylnaphthalene	<0.70	<0.70	<0.73	<0.88	<0.80	<1.01
3&4-Methylphenol	<0.70	<0.70	<0.73	<0.88	<0.80	<1.01
2-Methylphenol	<0.70	<0.70	<0.73	<0.88	<0.80	<1.01
N-Nitroso-di-n-butylamine	<0.70	<0.70	<0.73	<0.88	<0.80	<1.01
N-Nitroso-di-n-propylamine	<0.70	<0.70	<0.73	<0.88	<0.80	<1.01
N-Nitrosomorpholine	<0.70	<0.70	<0.73	<0.88	<0.80	<1.01
N-Nitrosopiperidine	<0.70	<0.70	<0.73	<0.88	<0.80	<1.01
N-Nitrosopyrrolidine	<0.70	<0.70	<0.73	<0.88	<0.80	<1.01
Naphthalene	<0.70	<0.70	<0.73	<0.88	<0.80	<1.01
1,4-Naphthoquinone	<0.70	<0.70	<0.73	<0.88	<0.80	<1.01
2-Nitroaniline	<0.70	<0.70	<0.73	<0.88	<0.80	<1.01
4-Nitroaniline	<0.70	<0.70	<0.73	<0.88	<0.80	<1.01
Nitrobenzene	<0.70	<0.70	<0.73	<0.88	<0.80	<1.01
4-Nitrophenol	<3.5	<3.5	<3.7	<4.4	<4.0	<5.1
2-Nitrophenol	<0.70	<0.70	<0.73	<0.88	<0.80	<1.01
Pentachlorobenzene	<0.70	<0.70	<0.73	<0.88	<0.80	<1.01
Pentachlorophenol	<0.70	<0.70	<0.73	<0.88	<0.80	3.35
Phenacetin	<0.70	<0.70	<0.73	<0.88	<0.80	<1.01
Phenanthrene	<0.70	<0.70	<0.73	<0.88	<0.80	<1.01
Phenol	<0.70	<0.70	<0.73	<0.88	<0.80	<1.01
2-Picoline	<0.70	<0.70	<0.73	<0.88	<0.80	<1.01
Pronamide	<0.70	<0.70	<0.73	<0.88	<0.80	<1.01
Pyrene	<0.70	<0.70	<0.73	<0.88	<0.80	<1.01
Safrole	<0.70	<0.70	<0.73	<0.88	<0.80	<1.01
1,2,4,5-Tetrachlorobenzene	<0.70	<0.70	<0.73	<0.88	<0.80	<1.01
2,3,4,6-Tetrachlorophenol	<0.70	<0.70	<0.73	<0.88	<0.80	<1.01
1,2,4-Trichlorobenzene	<0.70	<0.70	<0.73	<0.88	<0.80	<1.01
2,4,6-Trichlorophenol	<0.70	<0.70	<0.73	<0.88	<0.80	<1.01
2,4,5-Trichlorophenol	<0.70	<0.70	<0.73	<0.88	<0.80	<1.01
Volatile Organic Compounds (mg/kg)						
Acetone	<0.094	<0.076	<0.091	<0.103	<0.086	0.149
Benzene	<0.075	<0.060	<0.073	<0.083	<0.069	<0.097
Bromobenzene	<0.075	<0.060	<0.073	<0.083	<0.069	<0.097
Bromochloromethane	<0.075	<0.060	<0.073	<0.083	<0.069	<0.097
Bromodichloromethane	<0.075	<0.060	<0.073	<0.083	<0.069	<0.097
Bromoform	<0.075	<0.060	<0.073	<0.083	<0.069	<0.097

Appendix Table 4. Continued.

Stream	Scioto Brush Creek 33.5	Scioto Brush Creek 27.9	Scioto Brush Creek 24.2	Scioto Brush Creek 17.1	Scioto Brush Creek 5.8	SF Scioto Brush Cr. 12.4
River Mile						
STORET Number	V14Q20	V14Q21	V14Q22	V14P04	300054	V14Q30
Date Sampled	8/24/2006	8/24/2006	8/14/2006	8/24/2006	8/24/2006	8/24/2006
Time Sampled	9:15 AM	9:40 AM	12:00 PM	10:40 AM	11:20 AM	12:15 PM
Volatile Organic Compounds (mg/kg)						
Bromomethane	<0.075	<0.060	<0.073	<0.083	<0.069	<0.097
2-Butanone	<0.075	<0.060	<0.073	<0.083	<0.069	<0.097
n-Butylbenzene	<0.075	<0.060	<0.073	<0.083	<0.069	<0.097
sec-Butylbenzene	<0.075	<0.060	<0.073	<0.083	<0.069	<0.097
tert-Butylbenzene	<0.075	<0.060	<0.073	<0.083	<0.069	<0.097
Carbon disulfide	<0.075	<0.060	<0.073	<0.083	<0.069	<0.097
Carbon tetrachloride	<0.075	<0.060	<0.073	<0.083	<0.069	<0.097
Chlorobenzene	<0.075	<0.060	<0.073	<0.083	<0.069	<0.097
Chloroethane	<0.075	<0.060	<0.073	<0.083	<0.069	<0.097
Chloroform	<0.075	<0.060	<0.073	<0.083	<0.069	<0.097
Chloromethane	<0.075	<0.060	<0.073	<0.083	<0.069	<0.097
2-Chlorotoluene	<0.075	<0.060	<0.073	<0.083	<0.069	<0.097
4-Chlorotoluene	<0.075	<0.060	<0.073	<0.083	<0.069	<0.097
Dibromochloromethane	<0.075	<0.060	<0.073	<0.083	<0.069	<0.097
1,2-Dibromo-3-chloropropane	<0.075	<0.060	<0.073	<0.083	<0.069	<0.097
1,2-Dibromoethane	<0.075	<0.060	<0.073	<0.083	<0.069	<0.097
Dibromomethane	<0.075	<0.060	<0.073	<0.083	<0.069	<0.097
1,2-Dichlorobenzene	<0.075	<0.060	<0.073	<0.083	<0.069	<0.097
1,3-Dichlorobenzene	<0.075	<0.060	<0.073	<0.083	<0.069	<0.097
1,4-Dichlorobenzene	<0.075	<0.060	<0.073	<0.083	<0.069	<0.097
Dichlorodifluoromethane	<0.075	<0.060	<0.073	<0.083	<0.069	<0.097
1,1-Dichloroethane	<0.075	<0.060	<0.073	<0.083	<0.069	<0.097
1,2-Dichloroethane	<0.075	<0.060	<0.073	<0.083	<0.069	<0.097
1,1-Dichloroethene	<0.075	<0.060	<0.073	<0.083	<0.069	<0.097
cis-1,2-Dichloroethene	<0.075	<0.060	<0.073	<0.083	<0.069	<0.097
trans-1,2-Dichloroethene	<0.075	<0.060	<0.073	<0.083	<0.069	<0.097
1,2-Dichloropropane	<0.075	<0.060	<0.073	<0.083	<0.069	<0.097
1,3-Dichloropropane	<0.075	<0.060	<0.073	<0.083	<0.069	<0.097
2,2-Dichloropropane	<0.075	<0.060	<0.073	<0.083	<0.069	<0.097
1,1-Dichloropropene	<0.075	<0.060	<0.073	<0.083	<0.069	<0.097
cis-1,3-Dichloropropene	<0.075	<0.060	<0.073	<0.083	<0.069	<0.097
trans-1,3-Dichloropropene	<0.075	<0.060	<0.073	<0.083	<0.069	<0.097
Ethylbenzene	<0.075	<0.060	<0.073	<0.083	<0.069	<0.097
Hexachlorobutadiene	<0.075	<0.060	<0.073	<0.083	<0.069	<0.097
2-Hexanone	<0.075	<0.060	<0.073	<0.083	<0.069	<0.097
Isopropylbenzene	<0.075	<0.060	<0.073	<0.083	<0.069	<0.097
4-Isopropyltoluene	<0.075	<0.060	<0.073	<0.083	<0.069	<0.097
Methylene chloride	<0.075	<0.060	<0.073	<0.083	<0.069	<0.097
4-Methyl-2-pentanone	<0.075	<0.060	<0.073	<0.083	<0.069	<0.097
Naphthalene	<0.075	<0.060	<0.073	<0.083	<0.069	<0.097
n-Propylbenzene	<0.075	<0.060	<0.073	<0.083	<0.069	<0.097
Styrene	<0.075	<0.060	<0.073	<0.083	<0.069	<0.097
1,1,1,2-Tetrachloroethane	<0.075	<0.060	<0.073	<0.083	<0.069	<0.097
1,1,2,2-Tetrachloroethane	<0.075	<0.060	<0.073	<0.083	<0.069	<0.097
Tetrachloroethene	<0.075	<0.060	<0.073	<0.083	<0.069	<0.097
Toluene	<0.075	<0.060	<0.073	<0.083	<0.069	<0.097
1,2,3-Trichlorobenzene	<0.075	<0.060	<0.073	<0.083	<0.069	<0.097

Appendix Table 4. Continued.

Stream	Scioto Brush Creek 33.5	Scioto Brush Creek 27.9	Scioto Brush Creek 24.2	Scioto Brush Creek 17.1	Scioto Brush Creek 5.8	SF Scioto Brush Cr. 12.4
River Mile						
STORET Number	V14Q20	V14Q21	V14Q22	V14P04	300054	V14Q30
Date Sampled	8/24/2006	8/24/2006	8/14/2006	8/24/2006	8/24/2006	8/24/2006
Time Sampled	9:15 AM	9:40 AM	12:00 PM	10:40 AM	11:20 AM	12:15 PM
Volatile Organic Compounds (mg/kg)						
1,2,4-Trichlorobenzene	<0.075	<0.060	<0.073	<0.083	<0.069	<0.097
1,1,1-Trichloroethane	<0.075	<0.060	<0.073	<0.083	<0.069	<0.097
1,1,2-Trichloroethane	<0.075	<0.060	<0.073	<0.083	<0.069	<0.097
Trichloroethene	<0.075	<0.060	<0.073	<0.083	<0.069	<0.097
Trichlorofluoromethane	<0.075	<0.060	<0.073	<0.083	<0.069	<0.097
1,2,3-Trichloropropane	<0.075	<0.060	<0.073	<0.083	<0.069	<0.097
1,2,4-Trimethylbenzene	<0.075	<0.060	<0.073	<0.083	<0.069	<0.097
1,3,5-Trimethylbenzene	<0.075	<0.060	<0.073	<0.083	<0.069	<0.097
Vinyl chloride	<0.075	<0.060	<0.073	<0.083	<0.069	<0.097
o-Xylene	<0.075	<0.060	<0.073	<0.083	<0.069	<0.097
Total m&p-xylenes	<0.075	<0.060	<0.073	<0.083	<0.069	<0.097
Pesticides (ug/kg)						
Aldrin	<7.0	<7.0	<7.4	<8.8	<8.0	<10.1
a-BHC	<7.0	<7.0	<7.4	<8.8	<8.0	<10.1
b-BHC	<7.0	<7.0	<7.4	<8.8	<8.0	<10.1
d-BHC	<7.0	<7.0	<7.4	<8.8	<8.0	<10.1
γ-BHC	<7.0	<7.0	<7.4	<8.8	<8.0	<10.1
4,4'-DDD	<7.0	<7.0	<7.4	<8.8	<8.0	<10.1
4,4'-DDE	<7.0	<7.0	<7.4	<8.8	<8.0	<10.1
4,4'-DDT	<7.0	<7.0	<7.4	<8.8	<8.0	<10.1
Dieldrin	<7.0	<7.0	<7.4	<8.8	<8.0	<10.1
Endosulfan I	<7.0	<7.0	<7.4	<8.8	<8.0	<10.1
Endosulfan II	<7.0	<7.0	<7.4	<8.8	<8.0	<10.1
Endosulfan sulfate	<7.0	<7.0	<7.4	<8.8	<8.0	<10.1
Endrin	<7.0	<7.0	<7.4	<8.8	<8.0	<10.1
Endrin aldehyde	<7.0	<7.0	<7.4	<8.8	<8.0	<10.1
Heptachlor	<7.0	<7.0	<7.4	<8.8	<8.0	<10.1
Heptachlor epoxide	<7.0	<7.0	<7.4	<8.8	<8.0	<10.1
Methoxychlor	<7.0	<7.0	<7.4	<8.8	<8.0	<10.1
Mirex	<7.0	<7.0	<7.4	<8.8	<8.0	<10.1
Hexachlorobenzene	<7.0	<7.0	<7.4	<8.8	<8.0	<10.1
PCBs (ug/kg)						
PCB-1016	<34.9	<35.1	<36.8	<44.0	<40.0	<50.7
PCB-1221	<34.9	<35.1	<36.8	<44.0	<40.0	<50.7
PCB-1232	<34.9	<35.1	<36.8	<44.0	<40.0	<50.7
PCB-1242	<34.9	<35.1	<36.8	<44.0	<40.0	<50.7
PCB-1248	<34.9	<35.1	<36.8	<44.0	<40.0	<50.7
PCB-1254	<34.9	<35.1	<36.8	<44.0	<40.0	<50.7
PCB-1260	<34.9	<35.1	<36.8	<44.0	<40.0	<50.7
Particle Size (%)						
Sand +	60.6	42.1	36.8	42.0	36.9	29.5
Silt	32.2	47.6	53.2	52.1	52.3	61.5
Clay	7.2	10.3	10.0	5.9	10.8	9.0

Appendix Table 4. Continued.

Stream	SF Scioto Brush Cr.	SF Scioto Brush Cr.	Mill Creek	Jaybird Branch	Dunlap Creek	Rarden Creek
River Mile	7.0	1.1	0.8	1.0	1.9	3.9
STORET Number	V14P02	V14P03	V14Q10	V14Q25	300106	V14Q36
Date Sampled	8/24/2006	8/24/2006	8/24/2006	8/14/2006	8/14/2006	8/14/2006
Time Sampled	11:40 AM	10:45 AM	1:00 PM	11:30 AM	2:55 PM	1:30 PM
Semivolatile Organic Compounds (mg/kg)						
Acenaphthene	<0.75	<0.66	<0.88	<0.65	<0.70	<0.78
Acenaphthylene	<0.75	<0.66	<0.88	<0.65	<0.70	<0.78
Acetophenone	<0.75	<0.66	<0.88	<0.65	<0.70	<0.78
2-Acetylaminofluorene	<0.75	<0.66	<0.88	<0.65	<0.70	<0.78
Aniline	<3.7	<3.3	<4.4	<3.2	<3.5	<3.9
Anthracene	<0.75	<0.66	<0.88	<0.65	<0.70	<0.78
Benz[a]anthracene	<0.75	<0.66	<0.88	<0.65	<0.70	<0.78
Benzo[a]pyrene	<0.75	<0.66	<0.88	<0.65	<0.70	<0.78
Benzo[b]fluoranthene	<0.75	<0.66	<0.88	<0.65	<0.70	<0.78
Benzo[g,h,i]perylene	<0.75	<0.66	<0.88	<0.65	<0.70	<0.78
Benzo[k]fluoranthene	<0.75	<0.66	<0.88	<0.65	<0.70	<0.78
Benzyl alcohol	<0.75	<0.66	<0.88	<0.65	<0.70	<0.78
bis(2-Chloroethoxy)methane	<0.75	<0.66	<0.88	<0.65	<0.70	<0.78
bis(2-Chloroethyl)ether	<0.75	<0.66	<0.88	<0.65	<0.70	<0.78
bis(2-Chloroisopropyl)ether	<0.75	<0.66	<0.88	<0.65	<0.70	<0.78
bis(2-Ethylhexyl)phthalate	<0.75	<0.66	<0.88	<0.65	<0.70	<0.78
4-Bromophenyl-phenylether	<0.75	<0.66	<0.88	<0.65	<0.70	<0.78
Butylbenzylphthalate	<0.75	<0.66	<0.88	<0.65	<0.70	<0.78
4-Chloro-3-methylphenol	<0.75	<0.66	<0.88	<0.65	<0.70	<0.78
2-Chloronaphthalene	<0.75	<0.66	<0.88	<0.65	<0.70	<0.78
2-Chlorophenol	<0.75	<0.66	<0.88	<0.65	<0.70	<0.78
4-Chlorophenyl-phenylether	<0.75	<0.66	<0.88	<0.65	<0.70	<0.78
Chrysene	<0.75	<0.66	<0.88	<0.65	<0.70	<0.78
Di-n-butylphthalate	<0.75	<0.66	<0.88	<0.65	<0.70	<0.78
Di-n-octylphthalate	<0.75	<0.66	<0.88	<0.65	<0.70	<0.78
Dibenz[a,h]anthracene	<0.75	<0.66	<0.88	<0.65	<0.70	<0.78
Dibenzofuran	<0.75	<0.66	<0.88	<0.65	<0.70	<0.78
1,3-Dichlorobenzene	<0.75	<0.66	<0.88	<0.65	<0.70	<0.78
1,4-Dichlorobenzene	<0.75	<0.66	<0.88	<0.65	<0.70	<0.78
1,2-Dichlorobenzene	<0.75	<0.66	<0.88	<0.65	<0.70	<0.78
3,3'-Dichlorobenzidine	<3.7	<3.3	<4.4	<3.2	<3.5	<3.9
2,6-Dichlorophenol	<0.75	<0.66	<0.88	<0.65	<0.70	<0.78
2,4-Dichlorophenol	<0.75	<0.66	<0.88	<0.65	<0.70	<0.78
Diethylphthalate	<0.75	<0.66	<0.88	<0.65	<0.70	<0.78
p-Dimethylaminoazobenzene	<0.75	<0.66	<0.88	<0.65	<0.70	<0.78
7,12-Dimethylbenz[a]anthracene	<3.7	<3.3	<4.4	<3.2	<3.5	<3.9
2,4-Dimethylphenol	<0.75	<0.66	<0.88	<0.65	<0.70	<0.78
Dimethylphthalate	<0.75	<0.66	<0.88	<0.65	<0.70	<0.78
4,6-Dinitro-2-methylphenol	<0.75	<0.66	<0.88	<0.65	<0.70	<0.78
1,3-Dinitrobenzene	<0.75	<0.66	<0.88	<0.65	<0.70	<0.78
2,4-Dinitrophenol	<3.7	<3.3	<4.4	<3.2	<3.5	<3.9
2,6-Dinitrotoluene	<0.75	<0.66	<0.88	<0.65	<0.70	<0.78
2,4-Dinitrotoluene	<0.75	<0.66	<0.88	<0.65	<0.70	<0.78
Dinoseb	<0.75	<0.66	<0.88	<0.65	<0.70	<0.78
Diphenylamine	<0.75	<0.66	<0.88	<0.65	<0.70	<0.78
Ethyl methanesulfonate	<0.75	<0.66	<0.88	<0.65	<0.70	<0.78

Appendix Table 4. Continued.

Stream	SF Scioto Brush Cr. 7.0	SF Scioto Brush Cr. 1.1	Mill Creek 0.8	Jaybird Branch 1.0	Dunlap Creek 1.9	Rarden Creek 3.9
River Mile						
STORET Number	V14P02	V14P03	V14Q10	V14Q25	300106	V14Q36
Date Sampled	8/24/2006	8/24/2006	8/24/2006	8/14/2006	8/14/2006	8/14/2006
Time Sampled	11:40 AM	10:45 AM	1:00 PM	11:30 AM	2:55 PM	1:30 PM
Semivolatile Organic Compounds (mg/kg)						
Fluoranthene	<0.75	<0.66	<0.88	<0.65	<0.70	<0.78
Fluorene	<0.75	<0.66	<0.88	<0.65	<0.70	<0.78
Hexachlorobenzene	<0.75	<0.66	<0.88	<0.65	<0.70	<0.78
Hexachlorobutadiene	<0.75	<0.66	<0.88	<0.65	<0.70	<0.78
Hexachlorocyclopentadiene	<0.75	<0.66 UJ	<0.88	<0.65	<0.70	<0.78
Hexachloroethane	<0.75	<0.66	<0.88	<0.65	<0.70	<0.78
Hexachloropropene	<0.75	<0.66 UJ	<0.88	<0.65	<0.70	<0.78
Indeno[1,2,3-cd]pyrene	<0.75	<0.66	<0.88	<0.65	<0.70	<0.78
Isophorone	<0.75	<0.66	<0.88	<0.65	<0.70	<0.78
Methyl methanesulfonate	<0.75	<0.66	<0.88	<0.65	<0.70	<0.78
3-Methylcholanthrene	<0.75	<0.66	<0.88	<0.65	<0.70	<0.78
2-Methylnaphthalene	<0.75	<0.66	<0.88	<0.65	<0.70	<0.78
3&4-Methylphenol	<0.75	<0.66	<0.88	<0.65	<0.70	<0.78
2-Methylphenol	<0.75	<0.66	<0.88	<0.65	<0.70	<0.78
N-Nitroso-di-n-butylamine	<0.75	<0.66	<0.88	<0.65	<0.70	<0.78
N-Nitroso-di-n-propylamine	<0.75	<0.66	<0.88	<0.65	<0.70	<0.78
N-Nitrosomorpholine	<0.75	<0.66	<0.88	<0.65	<0.70	<0.78
N-Nitrosopiperidine	<0.75	<0.66	<0.88	<0.65	<0.70	<0.78
N-Nitrosopyrrolidine	<0.75	<0.66	<0.88	<0.65	<0.70	<0.78
Naphthalene	<0.75	<0.66	<0.88	<0.65	<0.70	<0.78
1,4-Naphthoquinone	<0.75	<0.66	<0.88	<0.65	<0.70	<0.78
2-Nitroaniline	<0.75	<0.66	<0.88	<0.65	<0.70	<0.78
4-Nitroaniline	<0.75	<0.66 UJ	<0.88	<0.65	<0.70	<0.78
Nitrobenzene	<0.75	<0.66	<0.88	<0.65	<0.70	<0.78
4-Nitrophenol	<3.7	<3.3	<4.4	<3.2	<3.5	<3.9
2-Nitrophenol	<0.75	<0.66	<0.88	<0.65	<0.70	<0.78
Pentachlorobenzene	<0.75	<0.66	<0.88	<0.65	<0.70	<0.78
Pentachlorophenol	<0.75	<0.66	<0.88	<0.65	<0.70	<0.78
Phenacetin	<0.75	<0.66	<0.88	<0.65	<0.70	<0.78
Phenanthrene	<0.75	<0.66	<0.88	<0.65	<0.70	<0.78
Phenol	<0.75	<0.66	<0.88	<0.65	<0.70	<0.78
2-Picoline	<0.75	<0.66	<0.88	<0.65	<0.70	<0.78
Pronamide	<0.75	<0.66	<0.88	<0.65	<0.70	<0.78
Pyrene	<0.75	<0.66	<0.88	<0.65	<0.70	<0.78
Safrole	<0.75	<0.66	<0.88	<0.65	<0.70	<0.78
1,2,4,5-Tetrachlorobenzene	<0.75	<0.66	<0.88	<0.65	<0.70	<0.78
2,3,4,6-Tetrachlorophenol	<0.75	<0.66	<0.88	<0.65	<0.70	<0.78
1,2,4-Trichlorobenzene	<0.75	<0.66	<0.88	<0.65	<0.70	<0.78
2,4,6-Trichlorophenol	<0.75	<0.66	<0.88	<0.65	<0.70	<0.78
2,4,5-Trichlorophenol	<0.75	<0.66	<0.88	<0.65	<0.70	<0.78
Volatile Organic Compounds (mg/kg)						
Acetone	<0.095	<0.071	0.167	<0.071	<0.073	<0.081
Benzene	<0.076	<0.057	<0.092	<0.057	<0.059	<0.065
Bromobenzene	<0.076	<0.057	<0.092	<0.057	<0.059	<0.065
Bromochloromethane	<0.076	<0.057	<0.092	<0.057	<0.059	<0.065
Bromodichloromethane	<0.076	<0.057	<0.092	<0.057	<0.059	<0.065
Bromoform	<0.076	<0.057	<0.092	<0.057	<0.059	<0.065

Appendix Table 4. Continued.

Stream	SF Scioto Brush Cr. 7.0	SF Scioto Brush Cr. 1.1	Mill Creek 0.8	Jaybird Branch 1.0	Dunlap Creek 1.9	Rarden Creek 3.9
River Mile						
STORET Number	V14P02	V14P03	V14Q10	V14Q25	300106	V14Q36
Date Sampled	8/24/2006	8/24/2006	8/24/2006	8/14/2006	8/14/2006	8/14/2006
Time Sampled	11:40 AM	10:45 AM	1:00 PM	11:30 AM	2:55 PM	1:30 PM
Volatile Organic Compounds (mg/kg)						
Bromomethane	<0.076	<0.057	<0.092	<0.057	<0.059	<0.065
2-Butanone	<0.076	<0.057	<0.092	<0.057	<0.059	<0.065
n-Butylbenzene	<0.076	<0.057	<0.092	<0.057	<0.059	<0.065 UJ
sec-Butylbenzene	<0.076	<0.057	<0.092	<0.057	<0.059	<0.065
tert-Butylbenzene	<0.076	<0.057	<0.092	<0.057	<0.059	<0.065
Carbon disulfide	<0.076	<0.057	<0.092	<0.057	<0.059	<0.065
Carbon tetrachloride	<0.076	<0.057	<0.092	<0.057	<0.059	<0.065
Chlorobenzene	<0.076	<0.057	<0.092	<0.057	<0.059	<0.065
Chloroethane	<0.076	<0.057	<0.092	<0.057	<0.059	<0.065
Chloroform	<0.076	<0.057	<0.092	<0.057	<0.059	<0.065
Chloromethane	<0.076	<0.057	<0.092	<0.057	<0.059	<0.065
2-Chlorotoluene	<0.076	<0.057	<0.092	<0.057	<0.059	<0.065
4-Chlorotoluene	<0.076	<0.057	<0.092	<0.057	<0.059	<0.065
Dibromochloromethane	<0.076	<0.057	<0.092	<0.057	<0.059	<0.065
1,2-Dibromo-3-chloropropane	<0.076	<0.057	<0.092	<0.057	<0.059	<0.065 UJ
1,2-Dibromoethane	<0.076	<0.057	<0.092	<0.057	<0.059	<0.065
Dibromomethane	<0.076	<0.057	<0.092	<0.057	<0.059	<0.065
1,2-Dichlorobenzene	<0.076	<0.057	<0.092	<0.057	<0.059	<0.065 UJ
1,3-Dichlorobenzene	<0.076	<0.057	<0.092	<0.057	<0.059	<0.065
1,4-Dichlorobenzene	<0.076	<0.057	<0.092	<0.057	<0.059	<0.065
Dichlorodifluoromethane	<0.076	<0.057	<0.092	<0.057	<0.059	<0.065
1,1-Dichloroethane	<0.076	<0.057	<0.092	<0.057	<0.059	<0.065
1,2-Dichloroethane	<0.076	<0.057	<0.092	<0.057	<0.059	<0.065
1,1-Dichloroethene	<0.076	<0.057	<0.092	<0.057	<0.059	<0.065
cis-1,2-Dichloroethene	<0.076	<0.057	<0.092	<0.057	<0.059	<0.065
trans-1,2-Dichloroethene	<0.076	<0.057	<0.092	<0.057	<0.059	<0.065
1,2-Dichloropropane	<0.076	<0.057	<0.092	<0.057	<0.059	<0.065
1,3-Dichloropropane	<0.076	<0.057	<0.092	<0.057	<0.059	<0.065
2,2-Dichloropropane	<0.076	<0.057	<0.092	<0.057	<0.059	<0.065
1,1-Dichloropropene	<0.076	<0.057	<0.092	<0.057	<0.059	<0.065
cis-1,3-Dichloropropene	<0.076	<0.057	<0.092	<0.057	<0.059	<0.065
trans-1,3-Dichloropropene	<0.076	<0.057	<0.092	<0.057	<0.059	<0.065
Ethylbenzene	<0.076	<0.057	<0.092	<0.057	<0.059	<0.065
Hexachlorobutadiene	<0.076	<0.057	<0.092	<0.057	<0.059	<0.065 UJ
2-Hexanone	<0.076	<0.057	<0.092	<0.057	<0.059	<0.065
Isopropylbenzene	<0.076	<0.057	<0.092	<0.057	<0.059	<0.065
4-Isopropyltoluene	<0.076	<0.057	<0.092	<0.057	<0.059	<0.065
Methylene chloride	<0.076	<0.057	<0.092	<0.057	<0.059	<0.065
4-Methyl-2-pentanone	<0.076	<0.057	<0.092	<0.057	<0.059	<0.065
Naphthalene	<0.076	<0.057	<0.092	<0.057	<0.059	<0.065 UJ
n-Propylbenzene	<0.076	<0.057	<0.092	<0.057	<0.059	<0.065
Styrene	<0.076	<0.057	<0.092	<0.057	<0.059	<0.065
1,1,1,2-Tetrachloroethane	<0.076	<0.057	<0.092	<0.057	<0.059	<0.065
1,1,2,2-Tetrachloroethane	<0.076	<0.057	<0.092	<0.057	<0.059	<0.065
Tetrachloroethene	<0.076	<0.057	<0.092	<0.057	<0.059	<0.065
Toluene	<0.076	<0.057	<0.092	<0.057	<0.059	<0.065
1,2,3-Trichlorobenzene	<0.076	<0.057	<0.092	<0.057	<0.059	<0.065 UJ

Appendix Table 4. Continued.

Stream	SF Scioto Brush Cr. 7.0	SF Scioto Brush Cr. 1.1	Mill Creek 0.8	Jaybird Branch 1.0	Dunlap Creek 1.9	Rarden Creek 3.9
River Mile						
STORET Number	V14P02	V14P03	V14Q10	V14Q25	300106	V14Q36
Date Sampled	8/24/2006	8/24/2006	8/24/2006	8/14/2006	8/14/2006	8/14/2006
Time Sampled	11:40 AM	10:45 AM	1:00 PM	11:30 AM	2:55 PM	1:30 PM
Volatile Organic Compounds (mg/kg)						
1,2,4-Trichlorobenzene	<0.076	<0.057	<0.092	<0.057	<0.059	<0.065 UJ
1,1,1-Trichloroethane	<0.076	<0.057	<0.092	<0.057	<0.059	<0.065
1,1,2-Trichloroethane	<0.076	<0.057	<0.092	<0.057	<0.059	<0.065
Trichloroethene	<0.076	<0.057	<0.092	<0.057	<0.059	<0.065
Trichlorofluoromethane	<0.076	<0.057	<0.092	<0.057	<0.059	<0.065
1,2,3-Trichloropropane	<0.076	<0.057	<0.092	<0.057	<0.059	<0.065
1,2,4-Trimethylbenzene	<0.076	<0.057	<0.092	<0.057	<0.059	<0.065
1,3,5-Trimethylbenzene	<0.076	<0.057	<0.092	<0.057	<0.059	<0.065
Vinyl chloride	<0.076	<0.057	<0.092	<0.057	<0.059	<0.065
o-Xylene	<0.076	<0.057	<0.092	<0.057	<0.059	<0.065
Total m&p-xylenes	<0.076	<0.057	<0.092	<0.057	<0.059	<0.065
Pesticides (ug/kg)						
Aldrin	<7.5	<6.7	<8.8	<6.5	<7.0	<7.8
a-BHC	<7.5	<6.7	<8.8	<6.5	<7.0	<7.8
b-BHC	<7.5	<6.7	<8.8	<6.5	<7.0	<7.8
d-BHC	<7.5	<6.7	<8.8	<6.5	<7.0	<7.8
γ-BHC	<7.5	<6.7	<8.8	<6.5	<7.0	<7.8
4,4'-DDD	<7.5	<6.7	<8.8	<6.5	<7.0	<7.8
4,4'-DDE	<7.5	<6.7	<8.8	<6.5	<7.0	<7.8
4,4'-DDT	<7.5	<6.7	<8.8	<6.5	<7.0	<7.8
Dieldrin	<7.5	<6.7	<8.8	<6.5	<7.0	<7.8
Endosulfan I	<7.5	<6.7	<8.8	<6.5	<7.0	<7.8
Endosulfan II	<7.5	<6.7	<8.8	<6.5	<7.0	<7.8
Endosulfan sulfate	<7.5	<6.7	<8.8	<6.5	<7.0	<7.8
Endrin	<7.5	<6.7	<8.8	<6.5	<7.0	<7.8
Endrin aldehyde	<7.5	<6.7	<8.8	<6.5	<7.0	<7.8
Heptachlor	<7.5	<6.7	<8.8	<6.5	<7.0	<7.8
Heptachlor epoxide	<7.5	<6.7	<8.8	<6.5	<7.0	<7.8
Methoxychlor	<7.5	<6.7	<8.8	<6.5	<7.0	<7.8
Mirex	<7.5	<6.7	<8.8	<6.5	<7.0	<7.8
Hexachlorobenzene	<7.5	<6.7	<8.8	<6.5	<7.0	<7.8
PCBs (ug/kg)						
PCB-1016	<37.4	<33.2	<43.8	<32.4	<34.9	<39.1
PCB-1221	<37.4	<33.2	<43.8	<32.4	<34.9	<39.1
PCB-1232	<37.4	<33.2	<43.8	<32.4	<34.9	<39.1
PCB-1242	<37.4	<33.2	<43.8	<32.4	<34.9	<39.1
PCB-1248	<37.4	<33.2	<43.8	<32.4	<34.9	<39.1
PCB-1254	<37.4	<33.2	<43.8	<32.4	<34.9	<39.1
PCB-1260	<37.4	<33.2	<43.8	<32.4	<34.9	<39.1
Particle Size (%)						
Sand +	29.9	27.4	39.4	56.8	53.8	21.6
Silt	61.1	65.5	50.3	35.0	40.2	69.2
Clay	9.0	7.1	10.3	8.2	6.0	9.2

< - Not detected at or above the method detection limit (MDL value reported with the less than symbol).

UJ - Estimated due to failure of the reporting limit standard, or due to low spike recovery.

Appendix Table 5. Qualitative Habitat Evaluation Index (QHEI) attribute scores for the Scioto Brush Creek study area, 2006.

River Mile	QHEI	Gradient (ft/mile)	WWH Attributes							MWH Attributes										Total MLL MWH Attributes	(MWH+1)/(WWH+1) Ratio	(MWH+1)/(MWH+1) Ratio			
			No Crannellization or Recovered Boulder/Cobble/Gravel Substrates	Silt Free Substrates	Good/Excellent Substrates	Moderate/High Sinuosity	Extensive/Moderate Cover	Fast Current/Eddies	Low-Normal Overall Embeddedness	Max Depth > 40 cm	Low-Normal Riffle Embeddedness	Total WWH Attributes	High Influence			Moderate Influence									
													Channelized or No Recovery Silt/Muck Substrates	No Sinuosity	Sparse/No Cover	Max Depth < 40 cm (WD, HW)	Total HLL MWH Attributes	Recovering Channel	Heavy/Moderate Silt Cover				Sand Substrates (Boat)	Hardpan Substrate Origin	Fair/Poor Development
(02-700) Scioto Brush Creek																									
Year: 2006																									
38.2	66.0	30.77	# # # # # #	# #	# #	# #	# #	# #	6		◆		1		●		●	●	3	0.29	0.71				
36.0	69.5	9.43	# # # # # #	# #	# #	# #	# #	# #	8		◆		1				●		1	0.22	0.33				
32.2	60.0	9.30	# # # # # #	# #	# #	# #	# #	# #	3		◆	◆	2		●	●	●	●	5	0.75	2.00				
27.9	83.0	10.31	# # # # # #	# #	# #	# #	# #	# #	8				0				●		1	0.11	0.22				
24.3	58.5	3.67	# # # # # #	# #	# #	# #	# #	# #	5		◆		1		●	●	●	●	6	0.33	1.33				
16.7	83.0	4.26	# # # # # #	# #	# #	# #	# #	# #	7				0		●		●		2	0.13	0.38				
12.2	82.0	4.02	# # # # # #	# #	# #	# #	# #	# #	7				0		●	●	●		3	0.13	0.50				
5.8	82.0	3.60	# # # # # #	# #	# #	# #	# #	# #	7				0		●		●		2	0.13	0.38				
2.6	79.0	3.04	# # # # # #	# #	# #	# #	# #	# #	7				0		●		●		2	0.13	0.38				
0.6	79.5	3.04	# # # # # #	# #	# #	# #	# #	# #	7				0		●		●		2	0.13	0.38				
(02-701) Duck Run																									
Year: 2006																									
1.6	51.0	40.82	# # # # # #	# #	# #	# #	# #	# #	4		◆		1		●	●	●	●	5	0.40	1.40				
(02-703) McCullough Creek																									
Year: 2006																									
2.2	45.5	68.97	# # # # # #	# #	# #	# #	# #	# #	4	◆	◆	◆	4		●	●	●	●	5	1.00	2.00				
0.6	59.0	17.39	# # # # # #	# #	# #	# #	# #	# #	4		◆		1		●	●	●	●	5	0.40	1.40				
(02-704) East Branch McCullough Creek																									
Year: 2006																									
3.8	49.5	30.77	# # # # # #	# #	# #	# #	# #	# #	2		◆	◆	3		●	●	●	●	5	1.33	3.00				
1.2	60.0	80.00	# # # # # #	# #	# #	# #	# #	# #	5		◆		1		●		●		3	0.33	0.83				
(02-705) Bear Creek																									
Year: 2006																									
5.1	58.5	42.55	# # # # # #	# #	# #	# #	# #	# #	6		◆	◆	2		●		●	●	3	0.43	0.86				
1.4	71.5	17.86	# # # # # #	# #	# #	# #	# #	# #	7		◆		1		●		●		2	0.25	0.50				
(02-706) Saw Pit Run																									
Year: 2006																									
0.2	49.0	39.22	# # # # # #	# #	# #	# #	# #	# #	5		◆	◆	2		●	●	●	●	5	0.50	1.33				
(02-710) South Fork Scioto Brush Creek																									
Year: 2006																									
12.4	67.0	10.10	# # # # # #	# #	# #	# #	# #	# #	5				0		●	●	●	●	5	0.17	1.00				

Key
QHEI
Components

Appendix Table 5. Qualitative Habitat Evaluation Index (QHEI) attribute scores for the Scioto Brush Creek study area, 2006.

River Mile	QHEI	Gradient (ft/mile)	WWH Attributes									MWH Attributes									Total MLL MWH Attributes	(MWH+1)/(WWH+1) Ratio	(MWH+1)/(MWH+1) Ratio									
			Key QHEI Components									High Influence				Moderate Influence																
			No Channelization or Recovered Boulder/Cobble/Gravel Substrates	Silt Free Substrates	Good/Excellent Substrates	Moderate/High Sinuosity	Extensive/Moderate Cover	Fast Current/Eddies	Low-Normal Overall Embeddedness	Max Depth > 40 cm	Low-Normal Riffle Embeddedness	Total WWH Attributes	Channelized or No Recovery Silt/Muck Substrates	No Sinuosity	Sparse/No Cover	Max Depth < 40 cm (WD, HW)	Total HLL MWH Attributes	Recovering Channel	Heavy/Moderate Silt Cover	Sand Substrates (Boat)				Hardpan Substrate Origin	Fair/Poor Development	Low Sinuosity	Only 1-2 Cover Types	Intermittent and Poor Pools	No Fast Current	High/Mod. Overall Embeddedness	High/Mod. Riffle Embeddedness	No Riffle
(02-710) South Fork Scioto Brush Creek																																
Year: 2006																																
7.0	76.0	5.01	#	#	#	#	#	#	#	#	8					0													2	0.11	0.33	
5.0	64.0	5.01	#			#	#	#	#		5	◆				1	●			●	●		●							4	0.33	1.00
1.1	74.5	3.96	#	#		#	#	#	#	#	7			◆		1				●			●							2	0.25	0.50
(02-711) Rocky Fork Scioto Brush Creek																																
Year: 2006																																
8.7	56.5	38.46	#	#	#				#	#	5		◆	◆	◆	3	●			●			●							3	0.67	1.17
7.0	62.0	66.67	#	#	#	#			#	#	6			◆		1				●			●			●				3	0.29	0.71
3.5	62.5	32.79	#	#		#			#	#	6	◆		◆	◆	3				●			●			●				2	0.57	0.86
(02-713) Spruce Run																																
Year: 2006																																
0.2	51.0	68.97	#	#	#	#			#		5			◆	◆	2				●		●		●		●				4	0.50	1.17
(02-717) Beech Fork																																
Year: 2006																																
1.9	38.0	52.63	#	#					#		3	◆		◆	◆	4				●		●		●		●				4	1.25	2.25
(02-719) Turkey Creek																																
Year: 2006																																
6.0	51.5	24.10	#			#			#		3			◆	◆	3				●			●		●		●			4	1.00	2.00
4.2	73.0	19.23	#	#	#	#	#	#	#	#	7					0				●			●		●		●			4	0.13	0.63
0.4	51.0	11.30	#						#		2	◆		◆	◆	3	●			●			●		●		●			5	1.33	3.00
(02-720) Dry Fork																																
Year: 2006																																
0.1	56.0	52.63	#	#	#	#	#	#	#	#	7			◆		1				●			●			●				3	0.25	0.63
(02-722) Turkey Run																																
Year: 2006																																
0.3	69.0	22.73	#	#	#	#	#	#	#	#	8			◆		1							●			●				2	0.22	0.44
(02-727) Winterstein Run																																
Year: 2006																																
0.2	50.5	45.45	#	#	#	#	#	#	#		6			◆	◆	2				●			●			●				3	0.43	0.86
(02-728) Mill Creek																																
Year: 2006																																
2.2	84.0	25.32	#	#	#	#	#	#	#	#	9					0							●							1	0.10	0.20
0.5	73.5	9.38	#	#	#	#	#	#	#	#	9			◆		1				●			●							2	0.20	0.40

Appendix Table 5. Qualitative Habitat Evaluation Index (QHEI) attribute scores for the Scioto Brush Creek study area, 2006.

River Mile	QHEI	Gradient (ft/mile)	WWH Attributes							MWH Attributes										Total MLL MWH Attributes	(MWH+1)/(WWH+1) Ratio	(MWH+1)/(MWH+1) Ratio		
			No Channelization or Recovered Boulder/Cobble/Gravel Substrates	Silt Free Substrates	Good/Excellent Substrates	Moderate/High Sinuosity	Extensive/Moderate Cover	Fast Current/Eddies	Low-Normal Overall Embeddedness	Max Depth > 40 cm	Low-Normal Riffle Embeddedness	High Influence					Moderate Influence							
												Total WWH Attributes	Channelized or No Recovery Silt/Muck Substrates	No Sinuosity	Sparse/No Cover	Max Depth < 40 cm (WD, HW)	Total HLL MWH Attributes	Recovering Channel	Heavy/Moderate Silt Cover				Sand Substrates (Boat)	Hardpan Substrate Origin
(02-730) Middle Branch Mill Creek																								
Year: 2006																								
1.9	53.5	15.27	#	#	#				3						2				3	0.75	1.50			
1.8	67.0	15.27	#	#	#	#	#	#	5						2				2	0.50	0.83			
(02-732) Hickman Run																								
Year: 2006																								
0.1	63.0	14.81	#	#	#	#	#	#	6						1				5	0.29	1.00			
(02-736) Churn Creek																								
Year: 2006																								
3.9	72.5	41.67	#	#	#	#	#	#	8						1				2	0.22	0.44			
3.0	57.5	41.67	#	#	#	#	#	#	5						3				2	0.67	1.00			
0.3	70.0	15.04	#	#	#	#	#	#	8						1				3	0.22	0.56			
(02-737) Blue Creek																								
Year: 2006																								
2.2	44.5	45.45	#	#	#	#	#	#	6						2				4	0.43	1.00			
(02-759) Dry Run																								
Year: 2006																								
2.2	66.0	60.61	#	#	#	#	#	#	7						0				3	0.13	0.50			
0.2	58.0	32.73	#	#	#	#	#	#	4						2				4	0.60	1.40			
(02-768) Dunlap Creek																								
Year: 2006																								
1.9	70.5	25.97	#	#	#	#	#	#	7						2				3	0.38	0.75			
0.7	75.5	28.57	#	#	#	#	#	#	8						1				2	0.22	0.44			
(02-769) Rarden Creek																								
Year: 2006																								
3.8	46.0	30.30	#					#	2						4				5	1.67	3.33			
0.4	71.0	15.04	#	#	#	#	#	#	7						2				5	0.38	1.00			
(02-770) Dry Fork																								
Year: 2006																								
1.0	44.5	50.00	#	#	#	#	#	#	4						3				5	0.80	1.80			
(02-771) Cedar Fork																								
Year: 2006																								
2.3	82.0	16.95	#	#	#	#	#	#	8						0				2	0.11	0.33			

Appendix Table 5. Qualitative Habitat Evaluation Index (QHEI) attribute scores for the Scioto Brush Creek study area, 2006.

River Mile	QHEI	Gradient (ft/mile)	WWH Attributes							MWH Attributes										Total MLL MWH Attributes	(MWH+1)/(WWH+1) Ratio	(MWH+1)/(MWH+1) Ratio				
			No Channelization or Recovered Boulder/Cobble/Gravel Substrates	Silt Free Substrates	Good/Excellent Substrates	Moderate/High Sinuosity	Extensive/Moderate Cover	Fast Current/Eddies	Low-Normal Overall Embeddedness	Max Depth > 40 cm	Low-Normal Riffle Embeddedness	Total WWH Attributes	High Influence					Moderate Influence								
													Channelized or No Recovery Silt/Muck Substrates	No Sinuosity	Sparse/No Cover	Max Depth < 40 cm (WD, HW)	Total HLL MWH Attributes	Recovering Channel	Heavy/Moderate Silt Cover				Sand Substrates (Boat)	Hardpan Substrate Origin	Fair/Poor Development	Low Sinuosity
(02-772) Plum Run																										
Year: 2006																										
0.2	73.0	23.81	#	#	#	#	#	#	#	7			◆			1		●			●			3	0.25	0.63
(02-773) Betty's Fork																										
Year: 2006																										
1.4	78.5	23.26	#	#	#	#	#	#	#	8			◆			1					●			1	0.22	0.33
(02-774) Jaybird Branch																										
Year: 2006																										
2.2	57.5	46.51	#	#	#	#	#	#	#	5			◆			1		●			●		●	3	0.33	0.83
1.0	67.0	23.81	#	#	#	#	#	#	#	6			◆			1		●			●			2	0.29	0.57
0.8	69.0	23.81	#	#	#	#	#	#	#	5			◆	◆		2		●			●		●	3	0.50	1.00
0.6	66.0	23.81	#	#	#	#	#	#	#	5			◆			1		●			●		●	3	0.33	0.83
(02-787) Bull Run																										
Year: 2006																										
0.1	52.0	35.71	#	#	#	#	#	#	#	4			◆	◆		2		●			●		●	3	0.60	1.20
(02-788) Straight Fork Rarden Creek																										
Year: 2006																										
0.4	53.0	55.56	#	#	#	#	#	#	#	4			◆	◆		2	●		●		●		●	4	0.60	1.40
(02-790) Trib. to Jaybird Branch (RM 2.11)																										
Year: 2006																										
0.1	54.0	25.32	#	#	#	#	#	#	#	3			◆	◆	◆	3		●		●		●	●	5	1.00	2.25

Key
QHEI
Components

Appendix Table 6. The Index of Biotic Integrity (IBI) and Modified Index of Well Being (MIwb)metrics and scores for fish sampling sites in the Scioto Brush Creek study area, 2006.

River Mile	Type	Date	Drainage area (sq mi)	Number of						Percent of Individuals					Rel.No. minus tolerants /(0.3km)	IBI	
				Total species	Minnow species	Headwater species	Sensitive species	Darter & Sculpin species	Simple Lithophils	Tolerant fishes	Omni-vores	Pioneering fishes	Insect-ivores	DELT anomalies			
Scioto Brush Creek - (02-700)																	
Year: 2006																	
38.20	E	07/11/2006	4.1	3(1)	2(1)	0(1)	1(1)	0(1)	0(1)	99(1)	0(5)	100(1)	1(1)	0.0(5)	5(1)	20	
36.00	E	07/11/2006	7.6	17(5)	9(5)	3(3)	5(5)	3(3)	9(5)	57(1)	5(5)	62(1)	29(3)	0.2(5)	472(3)	44	
32.20	D	08/30/2006	18.9	27(5)	7(5)	3(3)	* (5)	7(5)	12(5)	18(5)	16(5)	28(5)	63(5)	0.1(5)	879(5)	58	
Duck Run - (02-701)																	
Year: 2006																	
1.60	E	08/01/2006	4.0	10(3)	6(5)	3(3)	0(1)	2(3)	4(3)	39(3)	8(5)	33(3)	12(1)	0.0(5)	1468(5)	40	
McCullough Creek - (02-703)																	
Year: 2006																	
2.20	E	07/26/2006	7.6	12(3)	4(3)	4(5)	3(3)	5(5)	7(5)	37(3)	0(5)	29(5)	5(1)	0.1(5)	1212(5)	48	
0.60	E	08/01/2006	19.6	22(5)	10(5)	3(3)	9(5)	5(5)	10(5)	25(5)	12(5)	26(5)	60(5)	0.0(5)	936(5)	58	
E. Br. McCullough Cr - (02-704)																	
Year: 2006																	
3.80	E	08/01/2006	4.4	11(3)	7(5)	3(3)	0(1)	3(5)	5(5)	33(5)	6(5)	25(5)	12(1)	0.0(5)	2570(5)	48	
1.20	E	08/01/2006	8.9	18(5)	7(5)	4(5)	4(3)	6(5)	9(5)	29(5)	6(5)	26(5)	20(1)	0.0(5)	1472(5)	54	
Bear Creek - (02-705)																	
Year: 2006																	
5.10	E	07/25/2006	4.2	9(3)	5(3)	5(5)	1(1)	3(5)	5(5)	66(1)	1(5)	60(1)	15(1)	0.0(5)	168(3)	38	
1.40	E	07/31/2006	17.8	20(5)	8(5)	3(3)	9(5)	5(5)	10(5)	7(5)	4(5)	7(5)	49(3)	0.1(5)	1998(5)	56	
Saw Pit Run - (02-706)																	
Year: 2006																	
0.20	E	07/31/2006	4.9	8(3)	5(3)	2(3)	1(1)	1(1)	3(3)	79(1)	5(5)	74(1)	10(1)	0.0(5)	23(1) *	28	
Rocky Fork - (02-711)																	
Year: 2006																	
8.70	E	07/06/2006	4.7	9(3)	6(5)	4(5)	0(1)	3(3)	4(3)	27(5)	3(5)	20(5)	16(1)	0.0(5)	2235(5)	46	
7.00	E	07/25/2006	8.4	14(5)	7(5)	3(3)	4(3)	4(5)	7(5)	31(5)	3(5)	29(5)	35(3)	0.0(5)	574(3)	52	
3.50	E	07/31/2006	18.0	14(3)	7(5)	3(3)	5(3)	3(3)	5(3)	3(5)	1(5)	4(5)	33(3)	0.0(5)	1108(5)	48	

♦ - IBI is low end adjusted.

* - < 200 Total individuals in sample

** - < 50 Total individuals in sample

● - One or more species excluded from IBI calculation.

Appendix Table 6. The Index of Biotic Integrity (IBI) and Modified Index of Well Being (MIwb)metrics and scores for fish sampling sites in the Scioto Brush Creek study area, 2006.

River Mile	Type	Date	Drainage area (sq mi)	Number of						Percent of Individuals					Rel.No. minus tolerants /(0.3km)	IBI	
				Total species	Minnow species	Headwater species	Sensitive species	Darter & Sculpin species	Simple Lithophils	Tolerant fishes	Omni-vores	Pioneering fishes	Insect-ivores	DELT anomalies			
<i>Spruce Run - (02-713)</i>																	
Year: 2006																	
0.20	E	07/25/2006	3.4	10(3)	4(3)	3(3)	2(3)	4(5)	5(5)	28(5)	1(5)	20(5)	9(1)	0.0(5)	804(5)	48	
<i>Beech Fork - (02-717)</i>																	
Year: 2006																	
1.90	E	07/26/2006	4.1	8(3)	5(3)	4(5)	2(3)	3(5)	5(5)	70(1)	0(5)	58(1)	10(1)	0.0(5)	185(3)	40	
<i>Turkey Creek - (02-719)</i>																	
Year: 2006																	
6.00	E	07/27/2006	4.2	14(5)	7(5)	3(3)	3(3)	4(5)	7(5)	54(3)	23(3)	57(1)	27(3)	0.0(5)	650(5)	46	
4.20	E	07/27/2006	7.4	18(5)	6(5)	1(1)	8(5)	4(5)	8(5)	33(5)	22(3)	31(3)	54(5)	0.0(5)	1056(5)	52	
0.40	E	07/26/2006	16.6	25(5)	7(5)	2(3)	* (5)	7(5)	12(5)	14(5)	11(5)	20(5)	66(5)	0.0(5)	1420(5)	58	
<i>Dry Fork Turkey Cr. - (02-720)</i>																	
Year: 2006																	
0.10	E	07/19/2006	4.2	15(5)	8(5)	3(3)	5(5)	4(5)	7(5)	35(3)	0(5)	40(3)	18(3)	0.0(5)	938(5)	52	
<i>Turkey Run - (02-722)</i>																	
Year: 2006																	
0.30	E	07/17/2006	4.8	13(5)	6(5)	2(3)	3(3)	3(3)	6(5)	57(3)	0(5)	60(1)	15(1)	0.1(5)	748(5)	44	
<i>Winterstein Run - (02-727)</i>																	
Year: 2006																	
0.20	E	07/19/2006	3.1	14(5)	8(5)	3(3)	4(5)	4(5)	7(5)	31(5)	3(5)	30(5)	29(3)	0.0(5)	1503(5)	56	
<i>Mill Creek - (02-728)</i>																	
Year: 2006																	
2.20	E	07/18/2006	3.0	21(5)	8(5)	3(3)	8(5)	6(5)	11(5)	32(5)	8(5)	36(3)	43(5)	0.0(5)	1248(5)	56	
0.50	E	07/18/2006	17.1	26(5)	7(5)	2(3)	* (5)	7(5)	11(5)	27(5)	14(5)	29(5)	51(5)	0.0(5)	1584(5)	58	
<i>M. Br. Mill Creek - (02-730)</i>																	
Year: 2006																	
1.90	E	07/17/2006	7.5	16(5)	8(5)	4(5)	3(3)	5(5)	8(5)	65(1)	5(5)	60(1)	19(1)	0.0(5)	170(1)	42	
1.80	E	07/17/2006	11.6	18(5)	8(5)	5(5)	4(3)	5(5)	9(5)	41(3)	5(5)	47(3)	39(3)	0.0(5)	1012(5)	52	
<i>Hickman Run - (02-732)</i>																	

◆ - IBI is low end adjusted.

* - < 200 Total individuals in sample

** - < 50 Total individuals in sample

● - One or more species excluded from IBI calculation.

Appendix Table 6. The Index of Biotic Integrity (IBI) and Modified Index of Well Being (MIwb)metrics and scores for fish sampling sites in the Scioto Brush Creek study area, 2006.

River Mile	Type	Date	Drainage area (sq mi)	Number of						Percent of Individuals					Rel.No. minus tolerants /(0.3km)	IBI	
				Total species	Minnow species	Headwater species	Sensitive species	Darter & Sculpin species	Simple Lithophils	Tolerant fishes	Omni-vores	Pioneering fishes	Insect-ivores	DELT anomalies			
Year: 2006																	
0.10	E	07/17/2006	4.1	11(3)	6(5)	4(5)	2(3)	4(5)	6(5)	59(1)	1(5)	55(1)	22(3)	0.0(5)	588(5)	46	
<i>Churn Creek - (02-736)</i>																	
Year: 2006																	
3.90	E	07/18/2006	5.1	7(3)	2(1)	1(1)	3(3)	3(3)	3(3)	36(3)	0(5)	41(3)	21(3)	0.0(5)	153(3)	36	
3.00	E	07/18/2006	7.3	6(1)	2(1)	1(1)	3(3)	2(3)	2(1)	8(5)	0(5)	8(5)	34(3)	0.0(5)	424(3)	36	
0.30	E	07/19/2006	13.1	16(5)	6(3)	1(1)	6(5)	3(3)	5(3)	20(5)	11(5)	24(5)	64(5)	0.0(5)	1452(5)	50	
<i>Blue Creek - (02-737)</i>																	
Year: 2006																	
2.20	E	07/18/2006	3.9	6(3)	3(3)	2(3)	2(3)	1(1)	3(3)	93(1)	6(5)	88(1)	4(1)	0.0(5)	23(1)	30	
<i>Dry Run - (02-759)</i>																	
Year: 2006																	
2.20	E	07/05/2006	3.7	10(3)	6(5)	5(5)	2(3)	4(5)	6(5)	31(5)	0(5)	32(3)	53(5)	0.0(5)	723(5)	54	
0.20	E	07/12/2006	7.1	19(5)	7(5)	4(5)	6(5)	5(5)	8(5)	43(3)	4(5)	42(3)	27(3)	0.0(5)	532(3)	52	
<i>Dunlap Creek - (02-768)</i>																	
Year: 2006																	
1.90	E	07/12/2006	4.3	15(5)	5(3)	1(1)	3(3)	4(5)	5(5)	67(1)	6(5)	67(1)	33(3)	0.0(5)	363(3)	40	
0.70	E	07/12/2006	8.2	21(5)	8(5)	5(5)	5(5)	6(5)	9(5)	38(3)	5(5)	39(3)	47(5)	0.0(5)	976(5)	56	
<i>Rarden Creek - (02-769)</i>																	
Year: 2006																	
3.80	E	07/11/2006	8.0	7(3)	5(3)	3(3)	1(1)	2(3)	3(3)	69(1)	0(5)	75(1)	12(1)	0.0(5)	242(3)	32	
0.40	E	07/12/2006	18.7	21(5)	8(5)	5(5)	4(3)	6(5)	8(5)	44(3)	1(5)	48(3)	42(3)	0.0(5)	351(3)	50	
<i>Dry Fork Rarden Cr. - (02-770)</i>																	
Year: 2006																	
1.00	E	07/26/2006	4.2	7(3)	4(3)	3(3)	2(3)	3(5)	4(3)	38(3)	0(5)	39(3)	18(3)	0.0(5)	725(5)	44	
<i>Cedar Fork - (02-771)</i>																	
Year: 2006																	
2.30	E	07/10/2006	4.9	15(5)	4(3)	3(3)	3(3)	4(5)	4(3)	16(5)	8(5)	19(5)	73(5)	0.0(5)	578(5)	52	

◆ - IBI is low end adjusted.

* - < 200 Total individuals in sample

** - < 50 Total individuals in sample

● - One or more species excluded from IBI calculation.

Appendix Table 6. The Index of Biotic Integrity (IBI) and Modified Index of Well Being (MIwb)metrics and scores for fish sampling sites in the Scioto Brush Creek study area, 2006.

River Mile	Type	Date	Drainage area (sq mi)	Number of						Percent of Individuals					Rel.No. minus tolerants /(0.3km)	IBI	
				Total species	Minnow species	Headwater species	Sensitive species	Darter & Sculpin species	Simple Lithophils	Tolerant fishes	Omni-vores	Pioneering fishes	Insect-ivores	DELT anomalies			
<i>Plum Run - (02-772)</i>																	
Year: 2006																	
0.20	E	07/11/2006	4.0	14(5)	5(3)	1(1)	3(3)	5(5)	6(5)	40(3)	2(5)	44(3)	23(3)	0.1(5)	1285(5)	46	
<i>Bettys Creek - (02-773)</i>																	
Year: 2006																	
1.40	E	07/11/2006	4.5	7(3)	3(3)	3(3)	2(3)	4(5)	4(3)	68(1)	0(5)	78(1)	18(3)	0.0(5)	173(3)	38	
<i>Jaybird Branch - (02-774)</i>																	
Year: 2006																	
2.20	E	09/06/2006	1.2	1(1)	1(1)	0(1)	0(1)	0(1)	0(1)	100(1)	0(1)	100(1)	0(1)	0.0(1)	0(1) * *	12	
1.00	E	07/12/2006	3.9	0(1)	0(1)	0(1)	0(1)	0(1)	0(1)	0(1)	0(1)	0(1)	0(1)	0.0(1)	0(1) * *	12	
1.00	E	09/06/2006	3.9	1(1)	1(1)	0(1)	0(1)	0(1)	0(1)	100(1)	0(1)	100(1)	0(1)	0.0(1)	0(1) * *	12	
0.80	E	07/12/2006	4.7	4(1)	2(1)	1(1)	0(1)	1(1)	2(1)	95(1)	0(5)	96(1)	1(1)	0.0(5)	18(1)	20	
0.60	E	09/06/2006	4.8	10(3)	6(5)	3(3)	0(1)	3(3)	5(5)	81(1)	0(5)	85(1)	7(1)	0.0(5)	198(3)	36	
<i>Bull Run - (02-787)</i>																	
Year: 2006																	
0.10	E	07/11/2006	3.6	7(3)	5(3)	3(3)	1(1)	2(3)	3(3)	41(3)	0(5)	50(3)	39(5)	0.0(5)	483(5)	42	
<i>Straight Fk Rarden C - (02-788)</i>																	
Year: 2006																	
0.40	E	07/11/2006	1.4	4(3)	3(3)	2(3)	1(3)	1(3)	3(5)	23(5)	0(5)	28(5)	59(5)	0.0(5)	513(5)	50	
<i>Jaybird Br trib 2.11 - (02-790)</i>																	
Year: 2006																	
0.10	E	09/06/2006	1.5	1(1)	1(1)	0(1)	0(1)	0(1)	0(1)	100(1)	0(1)	100(1)	0(1)	0.0(1)	0(1) * *	12	

◆ - IBI is low end adjusted.

* - < 200 Total individuals in sample

** - < 50 Total individuals in sample

● - One or more species excluded from IBI calculation.

Appendix Table 6. The Index of Biotic Integrity (IBI) and Modified Index of Well-being (MIwb) metrics and scores for fish sampling sites in the Scioto Brush Creek basin, 2006.

River Mile	Type	Date	Drainage area (sq mi)	Number of					Percent of Individuals					Rel.No. minus tolerants /(0.3km)	IBI	Modified Iwb	
				Total species	Sunfish species	Sucker species	Intolerant species	Darter species	Simple Lithophils	Tolerant fishes	Omni- vores	Top carnivores	Insect- ivores				DELT anomalies
Scioto Brush Creek - (02700)																	
Year: 2006																	
27.90	D	08/30/2006	35	25(5)	4(5)	4(5)	3(3)	7(5)	69(5)	6(5)	2(5)	4.8(3)	85(5)	0.0(5)	1302(5)	56	10.1
24.30	D	08/30/2006	46	24(5)	3(3)	2(3)	3(3)	7(5)	74(5)	10(5)	5(5)	2.5(3)	85(5)	0.0(5)	1226(5)	52	8.7
S Fk Scioto Brush Cr - (02710)																	
Year: 2006																	
12.40	D	08/29/2006	36	27(5)	4(5)	7(5)	3(3)	4(3)	46(5)	28(3)	27(3)	3.4(3)	65(5)	0.0(5)	845(5)	50	9.4
7.00	D	08/28/2006	56	29(5)	3(3)	4(5)	5(5)	7(5)	68(5)	12(5)	10(5)	5.2(5)	80(5)	0.0(5)	1886(5)	58	9.7
5.00	D	08/29/2006	76	31(5)	4(5)	4(5)	5(3)	7(5)	55(5)	17(5)	15(5)	4.2(3)	73(5)	0.0(5)	2208(5)	56	10.2

na - Qualitative data, Modified Iwb not applicable.

◆ - IBI is low end adjusted.

* - < 200 Total individuals in sample

** - < 50 Total individuals in sample

● - One or more species excluded from IBI calculation.

Appendix Table 6. The Index of Biotic Integrity (IBI) and Modified Index of Well-being (MIwb) metrics and scores for fish sampling sites in the Scioto Brush Creek basin, 2006.

River Mile	Type	Date	Drainage area (sq mi)	Number of				Percent of Individuals						DELTA anomalies	Rel.No. minus tolerants /(1.0 km)	Modified IBI	lwb
				Total species	Sunfish species	Sucker species	Intolerant species	Rnd-bodied suckers	Simple Lithophils	Tolerant fishes	Omnivores	Top carnivores	Insectivores				
Scioto Brush Creek - (02-700)																	
Year: 2006																	
17.80	A	09/05/2006	93	22(5)	4(5)	4(3)	2(3)	44(5)	49(3)	14(5)	23(3)	6(3)	68(5)	0.0(5)	344(3)	48	9.0
16.70	A	08/23/2006	207	30(5)	4(5)	7(5)	6(5)	38(3)	52(5)	17(3)	16(5)	6(3)	77(5)	0.0(5)	792(5)	54	10.1
12.20	A	08/23/2006	233	31(5)	3(3)	7(5)	5(5)	29(3)	42(3)	11(5)	21(3)	8(3)	69(5)	0.0(5)	746(5)	50	9.9
12.20	A	10/11/2006	233	22(5)	4(5)	6(5)	3(3)	34(3)	48(3)	13(5)	13(5)	12(5)	72(5)	0.0(5)	336(3)	52	9.3
5.80	A	08/22/2006	261	26(5)	3(3)	6(5)	3(3)	28(3)	38(3)	9(5)	16(3)	9(3)	70(5)	0.0(5)	892(5)	48	10.1
5.80	A	10/10/2006	261	27(5)	4(5)	7(5)	3(3)	18(1)	28(3)	11(5)	12(5)	15(5)	69(5)	0.0(5)	624(5)	52	9.6
2.60	A	08/22/2006	265	30(5)	4(5)	8(5)	2(3)	22(3)	35(3)	12(5)	24(3)	10(3)	64(5)	1.1(3)	478(5)	48	10.1
2.60	A	10/10/2006	265	29(5)	4(5)	7(5)	4(5)	14(1)	22(1)	18(3)	18(3)	7(3)	73(5)	0.3(5)	480(5)	46	9.9
0.60	A	08/21/2006	273	27(5)	5(5)	4(3)	0(1)	3(1)	6(1)	10(5)	15(5)	20(5)	58(5)	0.0(5)	308(3)	44	9.8
0.60	A	10/11/2006	273	20(3)	3(3)	5(3)	1(1)	15(1)	25(3)	3(5)	4(5)	19(5)	76(5)	0.0(5)	192(1) *	40	9.1
S Fk Scioto Brush Cr - (02-710)																	
Year: 2006																	
1.10	A	09/07/2006	89	15(3)	3(3)	4(3)	2(3)	21(3)	75(5)	6(5)	6(5)	4(1)	90(5)	0.0(5)	682(5)	46	8.2

♦ - IBI is low end adjusted.

* - < 200 Total individuals in sample

** - < 50 Total individuals in sample

Appendix Table 7. Ohio EPA fish community results from the Scioto Brush Creek watershed, 2006.

Species List

River Code: 02-700	Stream: Scioto Brush Creek	Sample Date: 2006
River Mile: 38.20	Location:	Date Range: 07/11/2006
Time Fished: 1200 sec	Drainage: 4.1 sq mi	
Dist Fished: 0.12 km	Basin: Scioto 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
Creek Chub	N	G	N	T	236	590.00	99.16			
Silverjaw Minnow	N	I	M		1	2.50	0.42			
Longear Sunfish	S	I	C	M	1	2.50	0.42			
<i>Mile Total</i>					238	595.00				
<i>Number of Species</i>					3					
<i>Number of Hybrids</i>					0					

Species List

River Code: 02-700	Stream: Scioto Brush Creek	Sample Date: 2006
River Mile: 36.00	Location: Bettys Creek Rd.	Date Range: 07/11/2006
Time Fished: 1800 sec	Drainage: 7.6 sq mi	
Dist Fished: 0.15 km	Basin: Scioto 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	8.00	0.72			
White Sucker	W	O	S	T	7	14.00	1.27			
Western Blacknose Dace	N	G	S	T	2	4.00	0.36			
Creek Chub	N	G	N	T	290	580.00	52.44			
South. Redbelly Dace	N	H	S		7	14.00	1.27			
Rosyside Dace [T]	N	I	S	S	3	6.00	0.54			
Scarlet Shiner	N	I	S	M	21	42.00	3.80			
Striped Shiner	N	I	S		83	166.00	15.01			
Silverjaw Minnow	N	I	M		12	24.00	2.17			
Bluntnose Minnow	N	O	C	T	18	36.00	3.25			
Central Stoneroller	N	H	N		58	116.00	10.49			
Rock Bass	S	C	C		9	18.00	1.63			
Bluegill Sunfish	S	I	C	P	1	2.00	0.18			
Longear Sunfish	S	I	C	M	12	24.00	2.17			
Johnny Darter	D	I	C		17	34.00	3.07			
Rainbow Darter	D	I	S	M	3	6.00	0.54			
Orangethroat Darter	D	I	S		6	12.00	1.08			
<i>Mile Total</i>					553	1,106.00				
<i>Number of Species</i>					17					
<i>Number of Hybrids</i>					0					

Species List

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River Code: 02-700	Stream: Scioto Brush Creek	Sample Date: 2006
River Mile: 32.20	Location:	Date Range: 08/30/2006
Time Fished: 1800 sec	Drainage: 18.9 sq mi	
Dist Fished: 0.20 km	Basin: Scioto 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
Least Brook Lamprey		F	N	10	15.00	1.40	0.10	0.74	6.50
Black Redhorse	R	I	S I	30	45.00	4.21	1.52	11.51	33.87
Golden Redhorse	R	I	S M	12	18.00	1.68	0.29	2.20	16.18
Northern Hog Sucker	R	I	S M	82	123.00	11.50	3.06	23.10	24.86
White Sucker	W	O	S T	14	21.00	1.96	0.82	6.18	38.93
Bigeye Chub	N	I	S I	5	7.50	0.70	0.02	0.11	2.00
Creek Chub	N	G	N T	4	6.00	0.56	0.02	0.17	3.75
Silver Shiner	N	I	S I	5	7.50	0.70	0.03	0.23	4.00
Scarlet Shiner	N	I	S M	6	9.00	0.84	0.02	0.17	2.40
Striped Shiner	N	I	S	101	151.50	14.17	1.39	10.47	9.15
Bluntnose Minnow	N	O	C T	100	150.00	14.03	0.12	0.88	0.78
Central Stoneroller	N	H	N	109	163.50	15.29	0.52	3.94	3.19
Yellow Bullhead		I	C T	1	1.50	0.14	0.26	1.99	175.00
Rock Bass	S	C	C	21	31.50	2.95	2.23	16.83	70.71
Smallmouth Bass	F	C	C M	4	6.00	0.56	0.44	3.31	73.00
Spotted Bass	F	C	C	1	1.50	0.14	0.15	1.13	100.00
Largemouth Bass	F	C	C	1	1.50	0.14	0.23	1.70	150.00
Green Sunfish	S	I	C T	8	12.00	1.12	0.36	2.72	30.00
Bluegill Sunfish	S	I	C P	3	4.50	0.42	0.05	0.40	11.67
Longear Sunfish	S	I	C M	35	52.50	4.91	1.02	7.68	19.37
Green Sf X Bluegill Sf				3	4.50	0.42	0.22	1.65	48.33
Blackside Darter	D	I	S	3	4.50	0.42	0.02	0.14	4.00
Logperch	D	I	S M	10	15.00	1.40	0.13	0.97	8.50
Johnny Darter	D	I	C	89	133.50	12.48	0.10	0.78	0.77
Greenside Darter	D	I	S M	8	12.00	1.12	0.05	0.34	3.75
Rainbow Darter	D	I	S M	28	42.00	3.93	0.05	0.36	1.15
Fantail Darter	D	I	C	11	16.50	1.54	0.02	0.17	1.36
Mottled Sculpin		I	C	9	13.50	1.26	0.02	0.17	1.67
<i>Mile Total</i>				713	1,069.50		13.24		
<i>Number of Species</i>				27					
<i>Number of Hybrids</i>				1					

Species List

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River Code: 02-700	Stream: Scioto Brush Creek	Sample Date: 2006
River Mile: 27.90	Location:	Date Range: 08/30/2006
Time Fished: 2400 sec	Drainage: 35.0 sq mi	
Dist Fished: 0.20 km	Basin: Scioto 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	27	40.50	2.93	2.49	11.67	61.46
Golden Redhorse	R	I	S	M	18	27.00	1.95	3.90	18.28	144.44
Northern Hog Sucker	R	I	S	M	82	123.00	8.88	3.34	15.66	27.16
White Sucker	W	O	S	T	4	6.00	0.43	0.14	0.63	22.50
Creek Chub	N	G	N	T	30	45.00	3.25	0.95	4.45	21.11
Silver Shiner	N	I	S	I	49	73.50	5.31	0.11	0.52	1.50
Scarlet Shiner	N	I	S	M	37	55.50	4.01	0.09	0.40	1.53
Striped Shiner	N	I	S		301	451.50	32.61	1.71	8.00	3.78
Bluntnose Minnow	N	O	C	T	15	22.50	1.63	0.06	0.28	2.67
Central Stoneroller	N	H	N		43	64.50	4.66	0.41	1.92	6.34
Yellow Bullhead		I	C	T	1	1.50	0.11	0.03	0.14	20.00
Rock Bass	S	C	C		28	42.00	3.03	2.55	11.95	60.71
Smallmouth Bass	F	C	C	M	13	19.50	1.41	2.66	12.48	136.54
Largemouth Bass	F	C	C		3	4.50	0.33	0.31	1.46	69.33
Green Sunfish	S	I	C	T	5	7.50	0.54	0.24	1.13	32.00
Bluegill Sunfish	S	I	C	P	3	4.50	0.33	0.09	0.42	20.00
Longear Sunfish	S	I	C	M	52	78.00	5.63	1.50	7.03	19.23
Blackside Darter	D	I	S		11	16.50	1.19	0.06	0.28	3.64
Logperch	D	I	S	M	16	24.00	1.73	0.22	1.05	9.33
Johnny Darter	D	I	C		30	45.00	3.25	0.03	0.15	0.69
Greenside Darter	D	I	S	M	27	40.50	2.93	0.03	0.14	0.74
Banded Darter	D	I	S	I	12	18.00	1.30	0.02	0.11	1.25
Rainbow Darter	D	I	S	M	49	73.50	5.31	0.11	0.53	1.53
Fantail Darter	D	I	C		28	42.00	3.03	0.06	0.27	1.36
Mottled Sculpin		I	C		39	58.50	4.23	0.23	1.05	3.85
<i>Mile Total</i>					923	1,384.50		21.33		
<i>Number of Species</i>					25					
<i>Number of Hybrids</i>					0					

Species List

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River Code: 02-700	Stream: Scioto Brush Creek	Sample Date: 2006
River Mile: 24.30	Location:	Date Range: 08/30/2006
Time Fished: 2400 sec	Drainage: 46.8 sq mi	
Dist Fished: 0.22 km	Basin: Scioto 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
Least Brook Lamprey		F	N		1	1.36	0.10	0.01	0.14	6.00
Redfin Pickerel		P	M	P	12	16.36	1.20	0.42	7.06	25.42
Golden Redhorse	R	I	S	M	21	28.64	2.11	0.44	7.42	15.26
Northern Hog Sucker	R	I	S	M	29	39.55	2.91	0.28	4.75	7.07
Bigeye Chub	N	I	S	I	3	4.09	0.30	0.01	0.14	2.00
Creek Chub	N	G	N	T	42	57.27	4.22	0.48	8.06	8.29
Scarlet Shiner	N	I	S	M	62	84.55	6.22	0.14	2.33	1.62
Striped Shiner	N	I	S		555	756.82	55.72	1.57	26.63	2.07
Silverjaw Minnow	N	I	M		3	4.09	0.30	0.03	0.46	6.67
Bluntnose Minnow	N	O	C	T	49	66.82	4.92	0.20	3.36	2.96
Central Stoneroller	N	H	N		33	45.00	3.31	0.18	2.99	3.91
Brindled Madtom		I	C	I	3	4.09	0.30	0.03	0.46	6.67
Rock Bass	S	C	C		11	15.00	1.10	0.78	13.19	51.82
Spotted Bass	F	C	C		2	2.73	0.20	0.11	1.85	40.00
Green Sunfish	S	I	C	T	6	8.18	0.60	0.23	3.87	27.83
Longear Sunfish	S	I	C	M	56	76.36	5.62	0.68	11.48	8.85
Blackside Darter	D	I	S		7	9.55	0.70	0.03	0.46	2.86
Logperch	D	I	S	M	2	2.73	0.20	0.01	0.24	5.00
Johnny Darter	D	I	C		21	28.64	2.11	0.04	0.70	1.43
Greenside Darter	D	I	S	M	26	35.46	2.61	0.10	1.73	2.88
Banded Darter	D	I	S	I	14	19.09	1.41	0.04	0.59	1.82
Rainbow Darter	D	I	S	M	17	23.18	1.71	0.03	0.46	1.18
Fantail Darter	D	I	C		8	10.91	0.80	0.02	0.27	1.50
Mottled Sculpin		I	C		13	17.73	1.31	0.08	1.37	4.58
<i>Mile Total</i>					996	1,358.18		5.89		
<i>Number of Species</i>					24					
<i>Number of Hybrids</i>					0					

Species List

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River Code: 02-700	Stream: Scioto Brush Creek	Sample Date: 2006
River Mile: 17.80	Location: upst. South Fork	Date Range: 09/05/2006
Time Fished: 4227 sec	Drainage: 93.0 sq mi	
Dist Fished: 0.50 km	Basin: Scioto 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	23	46.00	11.50	4.40	6.53	95.65
Redfin Pickerel		P	M P	1	2.00	0.50	0.04	0.05	18.00
Muskellunge [S]	F	P	M	1	2.00	0.50	1.40	2.08	700.00
Black Redhorse	R	I	S I	15	30.00	7.50	2.95	4.38	98.27
Golden Redhorse	R	I	S M	66	132.00	33.00	31.48	46.72	238.49
Northern Hog Sucker	R	I	S M	2	4.00	1.00	0.38	0.57	96.00
Spotted Sucker	R	I	S	4	8.00	2.00	2.00	2.97	250.00
Silver Shiner	N	I	S I	3	6.00	1.50	0.02	0.04	4.00
Scarlet Shiner	N	I	S M	1	2.00	0.50	0.01	0.01	3.00
Striped Shiner	N	I	S	6	12.00	3.00	0.04	0.06	3.33
Bluntnose Minnow	N	O	C T	23	46.00	11.50	0.10	0.15	2.26
Central Stoneroller	N	H	N	1	2.00	0.50	0.01	0.01	3.00
Yellow Bullhead		I	C T	1	2.00	0.50	0.09	0.13	44.00
Brook Silverside		I	M M	8	16.00	4.00	0.03	0.05	2.00
Rock Bass	S	C	C	1	2.00	0.50	0.25	0.37	125.00
Spotted Bass	F	C	C	4	8.00	2.00	0.96	1.42	119.33
Largemouth Bass	F	C	C	5	10.00	2.50	2.17	3.21	216.60
Green Sunfish	S	I	C T	4	8.00	2.00	0.30	0.45	37.75
Bluegill Sunfish	S	I	C P	5	10.00	2.50	0.62	0.93	62.40
Longear Sunfish	S	I	C M	19	38.00	9.50	0.69	1.02	18.13
Redear Sunfish	E	I	C	1	2.00	0.50	0.52	0.77	260.00
Green Sf X Bluegill Sf				1	2.00	0.50	0.12	0.18	60.00
Blackside Darter	D	I	S	1	2.00	0.50	0.01	0.01	4.00
Freshwater Drum			M P	4	8.00	2.00	18.80	27.90	2,350.00
<i>Mile Total</i>				200	400.00		67.38		
<i>Number of Species</i>				23					
<i>Number of Hybrids</i>				1					

Species List

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River Code: 02-700	Stream: Scioto Brush Creek	Sample Date: 2006
River Mile: 16.70	Location:	Date Range: 08/23/2006
Time Fished: 4746 sec	Drainage: 207.0 sq mi	
Dist Fished: 0.50 km	Basin: Scioto 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
Longnose Gar		P	M	2	4.00	0.42	3.00	3.65	750.00
Gizzard Shad		O	M	17	34.00	3.55	5.31	6.46	156.25
Silver Redhorse	R	I	S M	5	10.00	1.04	11.00	13.38	1,100.00
Black Redhorse	R	I	S I	24	48.00	5.01	4.17	5.08	86.96
Golden Redhorse	R	I	S M	125	250.00	26.10	28.72	34.92	114.88
River Redhorse [S]	R	I	S I	3	6.00	0.63	0.52	0.63	86.67
Northern Hog Sucker	R	I	S M	15	30.00	3.13	3.43	4.16	114.17
Spotted Sucker	R	I	S	2	4.00	0.42	0.19	0.23	47.50
Smallmouth Redhorse	R	I	S M	8	16.00	1.67	0.64	0.78	40.00
Silver Shiner	N	I	S I	7	14.00	1.46	0.05	0.06	3.67
Scarlet Shiner	N	I	S M	3	6.00	0.63	0.01	0.01	2.00
Striped Shiner	N	I	S	54	108.00	11.27	0.29	0.36	2.71
Steelcolor Shiner	N	I	M P	1	2.00	0.21	0.01	0.01	3.00
Spotfin Shiner	N	I	M	1	2.00	0.21	0.00	0.00	2.00
Mimic Shiner	N	I	M I	2	4.00	0.42	0.01	0.01	2.00
Bluntnose Minnow	N	O	C T	59	118.00	12.32	0.33	0.40	2.81
Popeye Shiner [E]	N	I	S S	1	2.00	0.21	0.01	0.01	3.00
Channel Catfish	F		C	2	4.00	0.42	3.44	4.18	860.00
Brindled Madtom		I	C I	1	2.00	0.21	0.00	0.00	1.00
Brook Silverside		I	M M	4	8.00	0.84	0.02	0.02	2.00
Rock Bass	S	C	C	9	18.00	1.88	1.39	1.69	77.00
Smallmouth Bass	F	C	C M	4	8.00	0.84	0.64	0.78	80.00
Spotted Bass	F	C	C	12	24.00	2.51	2.01	2.44	83.58
Largemouth Bass	F	C	C	1	2.00	0.21	0.12	0.15	60.00
Green Sunfish	S	I	C T	24	48.00	5.01	0.24	0.29	5.00
Bluegill Sunfish	S	I	C P	1	2.00	0.21	0.04	0.05	20.00
Longear Sunfish	S	I	C M	84	168.00	17.54	3.60	4.38	21.43
Logperch	D	I	S M	2	4.00	0.42	0.04	0.05	10.00
Johnny Darter	D	I	C	2	4.00	0.42	0.01	0.01	3.00
Freshwater Drum			M P	4	8.00	0.84	13.00	15.81	1,625.00
<i>Mile Total</i>				479	958.00		82.23		
<i>Number of Species</i>				30					
<i>Number of Hybrids</i>				0					

Species List

River Code: 02-700	Stream: Scioto Brush Creek	Sample Date: 2006
River Mile: 12.20	Location:	Date Range: 08/23/2006
Time Fished: 8909 sec	Drainage: 233.0 sq mi	Thru: 10/11/2006
Dist Fished: 1.00 km	Basin: Scioto River	No of Passes: 2
		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
Least Brook Lamprey		F	N	2	2.00	0.33	0.01	0.01	5.00
Longnose Gar		P	M	3	3.00	0.49	1.75	2.07	583.33
Gizzard Shad		O	M	44	44.00	7.20	3.25	3.84	73.93
Muskellunge [S]	F	P	M	1	1.00	0.16	18.16	21.44	18,160.00
Silver Redhorse	R	I	S M	4	4.00	0.65	5.02	5.92	1,254.00
Black Redhorse	R	I	S I	12	12.00	1.96	0.92	1.09	77.00
Golden Redhorse	R	I	S M	149	149.00	24.39	21.49	25.37	144.25
River Redhorse [S]	R	I	S I	1	1.00	0.16	0.08	0.09	80.00
Northern Hog Sucker	R	I	S M	4	4.00	0.65	0.55	0.65	138.00
Spotted Sucker	R	I	S	11	11.00	1.80	0.60	0.71	54.55
Smallmouth Redhorse	R	I	S M	4	4.00	0.65	0.23	0.27	58.00
Common Carp	G	O	M T	1	1.00	0.16	8.38	9.89	8,375.00
Silver Shiner	N	I	S I	18	18.00	2.95	0.14	0.16	7.67
Scarlet Shiner	N	I	S M	1	1.00	0.16	0.07	0.09	72.00
Striped Shiner	N	I	S	43	43.00	7.04	0.28	0.33	6.56
Spotfin Shiner	N	I	M	8	8.00	1.31	0.10	0.11	11.92
Mimic Shiner	N	I	M I	3	3.00	0.49	0.01	0.01	2.67
Bluntnose Minnow	N	O	C T	67	67.00	10.97	0.25	0.30	3.78
Central Stoneroller	N	H	N	1	1.00	0.16	0.01	0.01	5.00
Popeye Shiner [E]	N	I	S S	13	13.00	2.13	0.02	0.02	1.38
Flathead Catfish	F	P	C	2	2.00	0.33	1.10	1.30	550.00
Brook Silverside		I	M M	11	11.00	1.80	0.02	0.03	2.00
Rock Bass	S	C	C	13	13.00	2.13	1.24	1.47	95.54
Smallmouth Bass	F	C	C M	6	6.00	0.98	1.09	1.28	180.83
Spotted Bass	F	C	C	30	30.00	4.91	2.32	2.73	77.17
Green Sunfish	S	I	C T	2	2.00	0.33	0.15	0.18	76.00
Bluegill Sunfish	S	I	C P	13	13.00	2.13	0.51	0.60	39.23
Longear Sunfish	S	I	C M	127	127.00	20.79	1.63	1.92	12.80
Sauger	F	P	S	1	1.00	0.16	0.91	1.07	910.00
Walleye	F	P	S	1	1.00	0.16	0.27	0.32	270.00
Blackside Darter	D	I	S	1	1.00	0.16	0.00	0.00	3.00
Logperch	D	I	S M	2	2.00	0.33	0.02	0.02	8.00
Johnny Darter	D	I	C	1	1.00	0.16	0.00	0.00	2.00
Greenside Darter	D	I	S M	1	1.00	0.16	0.00	0.00	4.00
Freshwater Drum			M P	10	10.00	1.64	14.13	16.68	1,413.00
<i>Mile Total</i>				611	611.00		84.70		
<i>Number of Species</i>				35					
<i>Number of Hybrids</i>				0					

Species List

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River Code: 02-700	Stream: Scioto Brush Creek	Sample Date: 2006
River Mile: 5.80	Location: Tatman Rd.	Date Range: 08/22/2006
Time Fished: 5236 sec	Drainage: 261.0 sq mi	Thru: 10/10/2006
Dist Fished: 1.00 km	Basin: Scioto River	No of Passes: 2
		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	44	44.00	5.24	6.30	7.16	143.18
Smallmouth Buffalo	C	I	M	1	1.00	0.12	2.70	3.07	2,700.00
Silver Redhorse	R	I	S M	2	2.00	0.24	1.13	1.28	562.50
Black Redhorse	R	I	S I	25	25.00	2.98	1.99	2.26	79.61
Golden Redhorse	R	I	S M	133	133.00	15.85	17.51	19.89	131.64
River Redhorse [S]	R	I	S I	2	2.00	0.24	0.08	0.09	40.00
Northern Hog Sucker	R	I	S M	12	12.00	1.43	0.75	0.85	62.17
Spotted Sucker	R	I	S	1	1.00	0.12	0.03	0.03	28.00
Smallmouth Redhorse	R	I	S M	22	22.00	2.62	1.66	1.89	75.55
Emerald Shiner	N	I	M	2	2.00	0.24	0.01	0.01	2.50
Silver Shiner	N	I	S I	22	22.00	2.62	0.09	0.10	4.09
Scarlet Shiner	N	I	S M	1	1.00	0.12	0.00	0.00	3.00
Striped Shiner	N	I	S	47	47.00	5.60	0.22	0.25	4.68
Spotfin Shiner	N	I	M	22	22.00	2.62	0.07	0.07	3.00
Bluntnose Minnow	N	O	C T	78	78.00	9.30	0.21	0.24	2.67
Popeye Shiner [E]	N	I	S S	1	1.00	0.12	0.00	0.00	3.00
Flathead Catfish	F	P	C	3	3.00	0.36	1.34	1.52	446.67
Brook Silverside		I	M M	40	40.00	4.77	0.06	0.06	1.40
White Bass	F	P	M	1	1.00	0.12	0.15	0.17	152.00
Rock Bass	S	C	C	35	35.00	4.17	2.04	2.32	58.30
Smallmouth Bass	F	C	C M	25	25.00	2.98	3.40	3.86	135.88
Spotted Bass	F	C	C	31	31.00	3.69	1.63	1.85	52.53
Largemouth Bass	F	C	C	2	2.00	0.24	1.85	2.10	925.00
Green Sunfish	S	I	C T	3	3.00	0.36	0.08	0.09	25.67
Bluegill Sunfish	S	I	C P	6	6.00	0.72	0.27	0.30	44.67
Longear Sunfish	S	I	C M	227	227.00	27.06	2.67	3.03	11.76
Sauger	F	P	S	2	2.00	0.24	0.48	0.55	241.00
Walleye	F	P	S	1	1.00	0.12	0.38	0.43	375.00
Blackside Darter	D	I	S	3	3.00	0.36	0.06	0.07	21.00
Logperch	D	I	S M	10	10.00	1.19	0.09	0.10	9.00
Johnny Darter	D	I	C	1	1.00	0.12	0.01	0.01	7.00
Greenside Darter	D	I	S M	2	2.00	0.24	0.01	0.01	4.50
Freshwater Drum			M P	32	32.00	3.81	40.78	46.33	1,274.22
<i>Mile Total</i>				839	839.00		88.01		
<i>Number of Species</i>				33					
<i>Number of Hybrids</i>				0					

Species List

River Code: 02-700	Stream: Scioto Brush Creek	Sample Date: 2006
River Mile: 2.60	Location: dst. McDermott-Pond Creek Rd.	Date Range: 08/22/2006
Time Fished: 9730 sec	Drainage: 265.0 sq mi	Thru: 10/10/2006
Dist Fished: 1.00 km	Basin: Scioto River	No of Passes: 2
		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
Longnose Gar		P	M	3	3.00	0.53	2.73	4.65	908.33
Gizzard Shad		O	M	33	33.00	5.86	4.67	7.97	141.52
Muskellunge [S]	F	P	M	1	1.00	0.18	2.35	4.01	2,350.00
Smallmouth Buffalo	C	I	M	1	1.00	0.18	1.55	2.65	1,550.00
Quillback	C	O	M	1	1.00	0.18	1.40	2.39	1,400.00
Highfin Carpsucker	C	O	M	1	1.00	0.18	0.70	1.19	700.00
Silver Redhorse	R	I	S M	9	9.00	1.60	3.49	5.95	387.22
Black Redhorse	R	I	S I	9	9.00	1.60	0.70	1.19	77.33
Golden Redhorse	R	I	S M	62	62.00	11.01	6.55	11.18	105.65
Northern Hog Sucker	R	I	S M	4	4.00	0.71	0.41	0.70	102.50
Spotted Sucker	R	I	S	5	5.00	0.89	0.65	1.10	129.00
Smallmouth Redhorse	R	I	S M	12	12.00	2.13	0.64	1.09	53.00
Emerald Shiner	N	I	M	13	13.00	2.31	0.03	0.04	1.91
Silver Shiner	N	I	S I	4	4.00	0.71	0.02	0.04	5.50
Scarlet Shiner	N	I	S M	1	1.00	0.18	0.00	0.00	2.00
Striped Shiner	N	I	S	41	41.00	7.28	0.17	0.28	4.02
Steelcolor Shiner	N	I	M P	1	1.00	0.18	0.01	0.02	12.00
Spotfin Shiner	N	I	M	12	12.00	2.13	0.02	0.04	1.83
Mimic Shiner	N	I	M I	1	1.00	0.18	0.00	0.00	2.00
Bluntnose Minnow	N	O	C T	80	80.00	14.21	0.17	0.28	2.07
Central Stoneroller	N	H	N	3	3.00	0.53	0.01	0.02	4.00
Popeye Shiner [E]	N	I	S S	6	6.00	1.07	0.02	0.04	3.67
Channel Catfish	F		C	2	2.00	0.36	1.48	2.52	737.50
Flathead Catfish	F	P	C	1	1.00	0.18	2.70	4.61	2,700.00
Blackstripe Topminnow		I	M	2	2.00	0.36	0.01	0.01	2.50
Brook Silverside		I	M M	32	32.00	5.68	0.06	0.10	1.76
Rock Bass	S	C	C	6	6.00	1.07	0.21	0.36	35.00
Smallmouth Bass	F	C	C M	4	4.00	0.71	2.85	4.86	712.50
Spotted Bass	F	C	C	27	27.00	4.80	1.92	3.28	71.15
Largemouth Bass	F	C	C	6	6.00	1.07	1.52	2.59	252.50
Green Sunfish	S	I	C T	4	4.00	0.71	0.27	0.46	67.50
Bluegill Sunfish	S	I	C P	18	18.00	3.20	0.67	1.14	37.24
Longear Sunfish	S	I	C M	141	141.00	25.04	2.07	3.54	14.70
Green Sf X Bluegill Sf				1	1.00	0.18	0.01	0.01	8.00
Logperch	D	I	S M	5	5.00	0.89	0.04	0.06	7.60
Johnny Darter	D	I	C	1	1.00	0.18	0.00	0.00	2.00
Greenside Darter	D	I	S M	1	1.00	0.18	0.00	0.00	2.00
Freshwater Drum			M P	9	9.00	1.60	18.53	31.62	2,058.33
<i>Mile Total</i>				563	563.00		58.59		
<i>Number of Species</i>				37					
<i>Number of Hybrids</i>				1					

Species List

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River Code: 02-700	Stream: Scioto Brush Creek	Sample Date: 2006
River Mile: 0.60	Location:	Date Range: 08/21/2006
Time Fished: 8763 sec	Drainage: 273.0 sq mi	Thru: 10/11/2006
Dist Fished: 1.00 km	Basin: Scioto River	No of Passes: 2
		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
Longnose Gar		P	M	4	4.00	1.48	2.95	2.88	737.50
Gizzard Shad		O	M	14	14.00	5.17	2.18	2.12	155.36
Muskellunge [S]	F	P	M	4	4.00	1.48	41.15	40.13	10,287.00
Bigmouth Buffalo	C	I	M	3	3.00	1.11	9.05	8.83	3,016.67
Smallmouth Buffalo	C	I	M	5	5.00	1.85	13.54	13.20	2,707.80
Silver Redhorse	R	I	S M	2	2.00	0.74	0.04	0.04	20.00
Golden Redhorse	R	I	S M	8	8.00	2.95	0.95	0.93	118.75
Spotted Sucker	R	I	S	5	5.00	1.85	0.16	0.16	32.40
Smallmouth Redhorse	R	I	S M	6	6.00	2.21	0.70	0.68	115.83
Common Carp	G	O	M T	1	1.00	0.37	2.75	2.68	2,750.00
Emerald Shiner	N	I	M	15	15.00	5.54	0.03	0.02	1.67
Silver Shiner	N	I	S I	8	8.00	2.95	0.02	0.02	2.00
Scarlet Shiner	N	I	S M	1	1.00	0.37	0.00	0.00	2.00
Striped Shiner	N	I	S	1	1.00	0.37	0.00	0.00	3.00
Bluntnose Minnow	N	O	C T	15	15.00	5.54	0.02	0.02	1.33
Central Stoneroller	N	H	N	2	2.00	0.74	0.01	0.00	2.50
Channel Catfish	F		C	1	1.00	0.37	0.88	0.85	875.00
Flathead Catfish	F	P	C	1	1.00	0.37	3.40	3.32	3,400.00
Brook Silverside		I	M M	8	8.00	2.95	0.01	0.01	1.25
White Bass	F	P	M	1	1.00	0.37	0.11	0.10	105.00
White Crappie	S	I	C	2	2.00	0.74	0.58	0.57	290.00
Rock Bass	S	C	C	2	2.00	0.74	0.05	0.05	25.00
Spotted Bass	F	C	C	17	17.00	6.27	1.02	1.00	60.18
Largemouth Bass	F	C	C	22	22.00	8.12	4.89	4.77	222.09
Green Sunfish	S	I	C T	5	5.00	1.85	0.09	0.09	17.60
Bluegill Sunfish	S	I	C P	35	35.00	12.92	0.55	0.54	15.77
Longear Sunfish	S	I	C M	65	65.00	23.99	0.68	0.67	10.51
Sauger	F	P	S	2	2.00	0.74	0.60	0.58	297.50
Logperch	D	I	S M	2	2.00	0.74	0.01	0.01	6.50
Johnny Darter	D	I	C	1	1.00	0.37	0.00	0.00	2.00
Greenside Darter	D	I	S M	1	1.00	0.37	0.00	0.00	3.00
Fantail Darter	D	I	C	1	1.00	0.37	0.00	0.00	2.00
Freshwater Drum			M P	11	11.00	4.06	16.14	15.74	1,467.36
<i>Mile Total</i>				271	271.00		102.54		
<i>Number of Species</i>				33					
<i>Number of Hybrids</i>				0					

Species List

River Code: 02-701 River Mile: 1.60 Time Fished: 1500 sec Dist Fished: 0.12 km	Stream: Duck Run Location: Drainage: 4.0 sq mi Basin: Scioto River	Sample Date: 2006 Date Range: 08/01/2006 No of Passes: 1 Sampler Type: E
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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	25	62.50	2.59			
Western Blacknose Dace	N	G	S	T	56	140.00	5.79			
Creek Chub	N	G	N	T	240	600.00	24.82			
South. Redbelly Dace	N	H	S		108	270.00	11.17			
Silverjaw Minnow	N	I	M		18	45.00	1.86			
Bluntnose Minnow	N	O	C	T	50	125.00	5.17			
Central Stoneroller	N	H	N		377	942.50	38.99			
Green Sunfish	S	I	C	T	9	22.50	0.93			
Orangethroat Darter	D	I	S		6	15.00	0.62			
Fantail Darter	D	I	C		78	195.00	8.07			
<i>Mile Total</i>					967	2,417.50				
<i>Number of Species</i>					10					
<i>Number of Hybrids</i>					0					

Species List

River Code: 02-703	Stream: McCullough Creek	Sample Date: 2006
River Mile: 2.20	Location:	Date Range: 07/26/2006
Time Fished: 1200 sec	Drainage: 7.6 sq mi	
Dist Fished: 0.15 km	Basin: Scioto 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	0.62			
White Sucker	W	O	S	T	3	6.00	0.31			
Western Blacknose Dace	N	G	S	T	86	172.00	8.88			
Creek Chub	N	G	N	T	273	546.00	28.17			
Rosyside Dace [T]	N	I	S	S	4	8.00	0.41			
Central Stoneroller	N	H	N		556	1,112.00	57.38			
Green Sunfish	S	I	C	T	1	2.00	0.10			
Blackside Darter	D	I	S		1	2.00	0.10			
Rainbow Darter	D	I	S	M	32	64.00	3.30			
Orangethroat Darter	D	I	S		2	4.00	0.21			
Fantail Darter	D	I	C		1	2.00	0.10			
Mottled Sculpin		I	C		4	8.00	0.41			
<i>Mile Total</i>					969	1,938.00				
<i>Number of Species</i>					12					
<i>Number of Hybrids</i>					0					

Species List

River Code: 02-703	Stream: McCullough Creek	Sample Date: 2006
River Mile: 0.60	Location:	Date Range: 08/01/2006
Time Fished: 2100 sec	Drainage: 19.6 sq mi	
Dist Fished: 0.20 km	Basin: Scioto 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	34	51.00	4.10			
White Sucker	W	O	S	T	5	7.50	0.60			
Bigeye Chub	N	I	S	I	1	1.50	0.12			
Western Blacknose Dace	N	G	S	T	11	16.50	1.33			
Creek Chub	N	G	N	T	84	126.00	10.12			
Silver Shiner	N	I	S	I	4	6.00	0.48			
Rosyface Shiner	N	I	S	I	1	1.50	0.12			
Scarlet Shiner	N	I	S	M	43	64.50	5.18			
Striped Shiner	N	I	S		245	367.50	29.52			
Silverjaw Minnow	N	I	M		4	6.00	0.48			
Bluntnose Minnow	N	O	C	T	97	145.50	11.69			
Central Stoneroller	N	H	N		127	190.50	15.30			
Rock Bass	S	C	C		4	6.00	0.48			
Smallmouth Bass	F	C	C	M	1	1.50	0.12			
Green Sunfish	S	I	C	T	9	13.50	1.08			
Bluegill Sunfish	S	I	C	P	15	22.50	1.81			
Longear Sunfish	S	I	C	M	38	57.00	4.58			
Logperch	D	I	S	M	7	10.50	0.84			
Johnny Darter	D	I	C		24	36.00	2.89			
Rainbow Darter	D	I	S	M	25	37.50	3.01			
Fantail Darter	D	I	C		39	58.50	4.70			
Mottled Sculpin		I	C		12	18.00	1.45			
<i>Mile Total</i>					830	1,245.00				
<i>Number of Species</i>					22					
<i>Number of Hybrids</i>					0					

Species List

River Code: 02-704 River Mile: 3.80 Time Fished: 1500 sec Dist Fished: 0.12 km	Stream: East Branch McCullough Creek Location: Drainage: 4.4 sq mi Basin: Scioto River	Sample Date: 2006 Date Range: 08/01/2006 No of Passes: 1 Sampler Type: E
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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	77.50	2.04			
Western Blacknose Dace	N	G	S	T	149	372.50	9.78			
Creek Chub	N	G	N	T	253	632.50	16.61			
South. Redbelly Dace	N	H	S		127	317.50	8.34			
Striped Shiner	N	I	S		16	40.00	1.05			
Silverjaw Minnow	N	I	M		6	15.00	0.39			
Bluntnose Minnow	N	O	C	T	62	155.00	4.07			
Central Stoneroller	N	H	N		712	1,780.00	46.75			
Johnny Darter	D	I	C		3	7.50	0.20			
Orangethroat Darter	D	I	S		50	125.00	3.28			
Fantail Darter	D	I	C		114	285.00	7.49			
<i>Mile Total</i>					1,523	3,807.50				
<i>Number of Species</i>					11					
<i>Number of Hybrids</i>					0					

Species List

River Code: 02-704	Stream: East Branch McCullough Creek	Sample Date: 2006
River Mile: 1.20	Location:	Date Range: 08/01/2006
Time Fished: 1800 sec	Drainage: 8.9 sq mi	
Dist Fished: 0.14 km	Basin: Scioto 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	1	2.14	0.10			
Northern Hog Sucker	R	I	S	M	10	21.43	1.04			
White Sucker	W	O	S	T	7	15.00	0.73			
Western Blacknose Dace	N	G	S	T	47	100.71	4.87			
Creek Chub	N	G	N	T	169	362.14	17.51			
South. Redbelly Dace	N	H	S		6	12.86	0.62			
Striped Shiner	N	I	S		28	60.00	2.90			
Silverjaw Minnow	N	I	M		12	25.71	1.24			
Bluntnose Minnow	N	O	C	T	55	117.86	5.70			
Central Stoneroller	N	H	N		487	1,043.57	50.47			
Smallmouth Bass	F	C	C	M	1	2.14	0.10			
Bluegill Sunfish	S	I	C	P	19	40.71	1.97			
Blackside Darter	D	I	S		1	2.14	0.10			
Johnny Darter	D	I	C		11	23.57	1.14			
Rainbow Darter	D	I	S	M	26	55.71	2.69			
Orangethroat Darter	D	I	S		2	4.29	0.21			
Fantail Darter	D	I	C		21	45.00	2.18			
Mottled Sculpin		I	C		62	132.86	6.42			
<i>Mile Total</i>					965	2,067.86				
<i>Number of Species</i>					18					
<i>Number of Hybrids</i>					0					

Species List

River Code: 02-705 River Mile: 5.10 Time Fished: 1500 sec Dist Fished: 0.12 km	Stream: Bear Creek Location: Drainage: 4.2 sq mi Basin: Scioto River	Sample Date: 2006 Date Range: 07/25/2006 No of Passes: 1 Sampler Type: E
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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	1	2.50	0.51			
Western Blacknose Dace	N	G	S	T	15	37.50	7.65			
Creek Chub	N	G	N	T	113	282.50	57.65			
South. Redbelly Dace	N	H	S		36	90.00	18.37			
Rosyside Dace [T]	N	I	S	S	2	5.00	1.02			
Central Stoneroller	N	H	N		1	2.50	0.51			
Orangethroat Darter	D	I	S		5	12.50	2.55			
Fantail Darter	D	I	C		6	15.00	3.06			
Mottled Sculpin		I	C		17	42.50	8.67			
<i>Mile Total</i>					196	490.00				
<i>Number of Species</i>					9					
<i>Number of Hybrids</i>					0					

Species List

River Code: 02-705	Stream: Bear Creek	Sample Date: 2006
River Mile: 1.40	Location:	Date Range: 07/31/2006
Time Fished: 1800 sec	Drainage: 17.8 sq mi	
Dist Fished: 0.15 km	Basin: Scioto 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			
Northern Hog Sucker	R	I	S	M	63	126.00	5.86			
White Sucker	W	O	S	T	2	4.00	0.19			
Western Blacknose Dace	N	G	S	T	5	10.00	0.46			
Creek Chub	N	G	N	T	29	58.00	2.70			
Silver Shiner	N	I	S	I	1	2.00	0.09			
Scarlet Shiner	N	I	S	M	81	162.00	7.53			
Striped Shiner	N	I	S		141	282.00	13.10			
Silverjaw Minnow	N	I	M		4	8.00	0.37			
Bluntnose Minnow	N	O	C	T	41	82.00	3.81			
Central Stoneroller	N	H	N		450	900.00	41.82			
Rock Bass	S	C	C		12	24.00	1.12			
Smallmouth Bass	F	C	C	M	12	24.00	1.12			
Bluegill Sunfish	S	I	C	P	1	2.00	0.09			
Longear Sunfish	S	I	C	M	32	64.00	2.97			
Logperch	D	I	S	M	2	4.00	0.19			
Greenside Darter	D	I	S	M	14	28.00	1.30			
Rainbow Darter	D	I	S	M	88	176.00	8.18			
Fantail Darter	D	I	C		47	94.00	4.37			
Mottled Sculpin		I	C		49	98.00	4.55			
<i>Mile Total</i>					1,076	2,152.00				
<i>Number of Species</i>					20					
<i>Number of Hybrids</i>					0					

Species List

River Code: 02-706	Stream: Saw Pit Run	Sample Date: 2006
River Mile: 0.20	Location:	Date Range: 07/31/2006
Time Fished: 900 sec	Drainage: 4.9 sq mi	
Dist Fished: 0.12 km	Basin: Scioto 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	1	2.50	2.38			
Western Blacknose Dace	N	G	S	T	1	2.50	2.38			
Creek Chub	N	G	N	T	30	75.00	71.43			
Striped Shiner	N	I	S		2	5.00	4.76			
Bluntnose Minnow	N	O	C	T	1	2.50	2.38			
Central Stoneroller	N	H	N		5	12.50	11.90			
Longear Sunfish	S	I	C	M	1	2.50	2.38			
Mottled Sculpin		I	C		1	2.50	2.38			
<i>Mile Total</i>					42	105.00				
<i>Number of Species</i>					8					
<i>Number of Hybrids</i>					0					

Species List

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River Code: 02-710	Stream: South Fork Scioto Brush Creek	Sample Date: 2006
River Mile: 12.40	Location:	Date Range: 08/29/2006
Time Fished: 2100 sec	Drainage: 36.4 sq mi	
Dist Fished: 0.20 km	Basin: Scioto 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	
Redfin Pickerel		P	M	P	1	1.50	0.13	0.01	0.04	8.00
Silver Redhorse	R	I	S	M	2	3.00	0.25	0.05	0.14	15.00
Black Redhorse	R	I	S	I	12	18.00	1.52	1.32	4.02	73.33
Golden Redhorse	R	I	S	M	75	112.50	9.53	6.69	20.37	59.47
Northern Hog Sucker	R	I	S	M	12	18.00	1.52	1.45	4.40	80.25
White Sucker	W	O	S	T	6	9.00	0.76	0.84	2.55	93.00
Spotted Sucker	R	I	S		9	13.50	1.14	1.14	3.47	84.44
Smallmouth Redhorse	R	I	S	M	1	1.50	0.13	0.12	0.37	80.00
Common Carp	G	O	M	T	2	3.00	0.25	11.51	35.05	3,837.50
Creek Chub	N	G	N	T	1	1.50	0.13	0.00	0.01	2.00
Silver Shiner	N	I	S	I	26	39.00	3.30	0.12	0.36	3.00
Scarlet Shiner	N	I	S	M	70	105.00	8.89	0.09	0.26	0.81
Striped Shiner	N	I	S		143	214.50	18.17	0.80	2.44	3.74
Silverjaw Minnow	N	I	M		10	15.00	1.27	0.02	0.05	1.00
Bluntnose Minnow	N	O	C	T	204	306.00	25.92	0.59	1.80	1.93
Central Stoneroller	N	H	N		37	55.50	4.70	0.37	1.13	6.67
Yellow Bullhead		I	C	T	1	1.50	0.13	0.56	1.69	370.00
Brindled Madtom		I	C	I	2	3.00	0.25	0.04	0.12	12.50
Rock Bass	S	C	C		12	18.00	1.52	0.81	2.46	44.83
Smallmouth Bass	F	C	C	M	7	10.50	0.89	2.01	6.12	191.43
Spotted Bass	F	C	C		7	10.50	0.89	1.34	4.06	127.14
Green Sunfish	S	I	C	T	10	15.00	1.27	1.01	3.07	67.30
Bluegill Sunfish	S	I	C	P	2	3.00	0.25	0.05	0.14	15.00
Longear Sunfish	S	I	C	M	100	150.00	12.71	1.83	5.56	12.17
Logperch	D	I	S	M	5	7.50	0.64	0.07	0.21	9.00
Johnny Darter	D	I	C		26	39.00	3.30	0.04	0.13	1.12
Greenside Darter	D	I	S	M	1	1.50	0.13	0.00	0.01	2.00
Rainbow Darter	D	I	S	M	3	4.50	0.38	0.01	0.02	1.33
<i>Mile Total</i>				787	1,180.50			32.85		
<i>Number of Species</i>				28						
<i>Number of Hybrids</i>				0						

Species List

River Code: 02-710	Stream: South Fork Scioto Brush Creek	Sample Date: 2006
River Mile: 7.00	Location:	Date Range: 08/28/2006
Time Fished: 2100 sec	Drainage: 56.0 sq mi	
Dist Fished: 0.20 km	Basin: Scioto 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	
Redfin Pickerel		P	M	P	3	4.50	0.21	0.04	0.17	8.33
Black Redhorse	R	I	S	I	29	43.50	2.03	1.72	7.89	39.45
Golden Redhorse	R	I	S	M	46	69.00	3.22	3.20	14.71	46.39
Northern Hog Sucker	R	I	S	M	18	27.00	1.26	1.74	8.00	64.44
Smallmouth Redhorse	R	I	S	M	1	1.50	0.07	0.08	0.38	55.00
River Chub	N	I	N	I	5	7.50	0.35	0.23	1.07	31.00
Creek Chub	N	G	N	T	23	34.50	1.61	0.12	0.55	3.48
Silver Shiner	N	I	S	I	16	24.00	1.12	0.04	0.20	1.83
Scarlet Shiner	N	I	S	M	63	94.50	4.41	0.13	0.61	1.40
Striped Shiner	N	I	S		741	1,111.50	51.93	1.99	9.16	1.79
Spotfin Shiner	N	I	M		3	4.50	0.21	0.01	0.05	2.50
Silverjaw Minnow	N	I	M		2	3.00	0.14	0.01	0.04	2.50
Bluntnose Minnow	N	O	C	T	138	207.00	9.67	0.38	1.74	1.83
Central Stoneroller	N	H	N		54	81.00	3.78	0.14	0.63	1.70
Yellow Bullhead		I	C	T	5	7.50	0.35	1.11	5.10	148.00
Brindled Madtom		I	C	I	2	3.00	0.14	0.03	0.14	10.00
Brook Silverside		I	M	M	8	12.00	0.56	0.02	0.11	1.88
Rock Bass	S	C	C		43	64.50	3.01	2.60	11.92	40.24
Smallmouth Bass	F	C	C	M	6	9.00	0.42	1.07	4.89	118.33
Spotted Bass	F	C	C		22	33.00	1.54	3.33	15.31	100.95
Green Sunfish	S	I	C	T	4	6.00	0.28	0.20	0.92	33.33
Longear Sunfish	S	I	C	M	113	169.50	7.92	3.25	14.95	19.20
Green Sf X Bluegill Sf					1	1.50	0.07	0.03	0.14	20.00
Blackside Darter	D	I	S		4	6.00	0.28	0.02	0.08	3.00
Logperch	D	I	S	M	10	15.00	0.70	0.14	0.62	9.00
Johnny Darter	D	I	C		19	28.50	1.33	0.03	0.14	1.05
Greenside Darter	D	I	S	M	11	16.50	0.77	0.03	0.14	1.82
Banded Darter	D	I	S	I	9	13.50	0.63	0.02	0.08	1.33
Rainbow Darter	D	I	S	M	16	24.00	1.12	0.03	0.14	1.25
Fantail Darter	D	I	C		12	18.00	0.84	0.03	0.14	1.67
<i>Mile Total</i>				1,427	2,140.50			21.76		
<i>Number of Species</i>				29						
<i>Number of Hybrids</i>				1						

Species List

River Code: 02-710	Stream: South Fork Scioto Brush Creek	Sample Date: 2006
River Mile: 5.00	Location:	Date Range: 08/29/2006
Time Fished: 1800 sec	Drainage: 76.0 sq mi	
Dist Fished: 0.15 km	Basin: Scioto 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
Least Brook Lamprey		F	N	1	2.00	0.08	0.01	0.05	6.00
Longnose Gar		P	M	1	2.00	0.08	0.05	0.20	25.00
Black Redhorse	R	I	S I	12	24.00	0.90	1.02	4.03	42.33
Golden Redhorse	R	I	S M	77	154.00	5.79	7.76	30.79	50.37
Northern Hog Sucker	R	I	S M	37	74.00	2.78	1.56	6.18	21.06
Smallmouth Redhorse	R	I	S M	2	4.00	0.15	0.34	1.35	85.00
River Chub	N	I	N I	10	20.00	0.75	0.30	1.19	15.00
Creek Chub	N	G	N T	16	32.00	1.20	0.11	0.44	3.44
Silver Shiner	N	I	S I	3	6.00	0.23	0.02	0.10	4.00
Scarlet Shiner	N	I	S M	8	16.00	0.60	0.02	0.10	1.50
Striped Shiner	N	I	S	478	956.00	35.94	2.09	8.30	2.19
Steelcolor Shiner	N	I	M P	1	2.00	0.08	0.04	0.16	20.00
Bluntnose Minnow	N	O	C T	197	394.00	14.81	0.66	2.63	1.68
Central Stoneroller	N	H	N	92	184.00	6.92	0.60	2.37	3.24
Yellow Bullhead		I	C T	9	18.00	0.68	1.59	6.31	88.33
Brindled Madtom		I	C I	2	4.00	0.15	0.03	0.12	7.50
Brook Silverside		I	M M	3	6.00	0.23	0.01	0.04	1.67
Rock Bass	S	C	C	27	54.00	2.03	1.14	4.53	21.15
Smallmouth Bass	F	C	C M	8	16.00	0.60	1.56	6.18	97.25
Spotted Bass	F	C	C	17	34.00	1.28	1.64	6.51	48.24
Largemouth Bass	F	C	C	3	6.00	0.23	2.03	8.07	338.67
Green Sunfish	S	I	C T	4	8.00	0.30	0.06	0.23	7.33
Bluegill Sunfish	S	I	C P	10	20.00	0.75	0.14	0.57	7.22
Longear Sunfish	S	I	C M	122	244.00	9.17	1.60	6.35	6.56
Green Sf X Bluegill Sf				1	2.00	0.08	0.17	0.67	85.00
Blackside Darter	D	I	S	5	10.00	0.38	0.04	0.16	4.00
Logperch	D	I	S M	8	16.00	0.60	0.10	0.40	6.25
Johnny Darter	D	I	C	8	16.00	0.60	0.05	0.18	2.86
Greenside Darter	D	I	S M	28	56.00	2.11	0.21	0.83	3.75
Banded Darter	D	I	S I	27	54.00	2.03	0.07	0.27	1.25
Rainbow Darter	D	I	S M	46	92.00	3.46	0.05	0.21	0.58
Fantail Darter	D	I	C	67	134.00	5.04	0.12	0.47	0.89
<i>Mile Total</i>				1,330	2,660.00		25.19		
<i>Number of Species</i>				31					
<i>Number of Hybrids</i>				1					

Species List

River Code: 02-710 River Mile: 1.10 Time Fished: 1900 sec Dist Fished: 0.28 km	Stream: South Fork Scioto Brush Creek Location: Tick Ridge Rd. Drainage: 89.0 sq mi Basin: Scioto River	Sample Date: 2006 Date Range: 09/07/2006 No of Passes: 1 Sampler Type: A
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Species Name / ODNR status	IBI Grp	Feed Guild	Breed Guild Tol	# of Fish	Relative Number	% by Number	Relative Weight	% by Weight	Ave(gm) Weight	
Redfin Pickerel		P	M	P	1	3.57	0.49	0.14	1.20	40.00
Black Redhorse	R	I	S	I	4	14.29	1.97	0.91	7.67	63.75
Golden Redhorse	R	I	S	M	33	117.86	16.26	4.11	34.57	34.85
Northern Hog Sucker	R	I	S	M	4	14.29	1.97	0.20	1.65	13.75
Spotted Sucker	R	I	S		1	3.57	0.49	0.18	1.51	50.00
Silver Shiner	N	I	S	I	13	46.43	6.40	0.20	1.65	4.23
Scarlet Shiner	N	I	S	M	2	7.14	0.99	0.02	0.18	3.00
Striped Shiner	N	I	S		95	339.29	46.80	1.84	15.48	5.42
Bluntnose Minnow	N	O	C	T	12	42.86	5.91	0.16	1.31	3.64
Rock Bass	S	C	C		3	10.71	1.48	0.93	7.82	86.67
Smallmouth Bass	F	C	C	M	3	10.71	1.48	1.52	12.78	141.67
Spotted Bass	F	C	C		1	3.57	0.49	0.14	1.20	40.00
Bluegill Sunfish	S	I	C	P	1	3.57	0.49	0.04	0.30	10.00
Longear Sunfish	S	I	C	M	29	103.57	14.29	1.50	12.59	14.44
Fantail Darter	D	I	C		1	3.57	0.49	0.01	0.09	3.00
<i>Mile Total</i>				203	725.00		11.88			
<i>Number of Species</i>				15						
<i>Number of Hybrids</i>				0						

Species List

River Code: 02-711	Stream: Rocky Fork Scioto Brush Creek	Sample Date: 2006
River Mile: 8.70	Location:	Date Range: 07/06/2006
Time Fished: 1500 sec	Drainage: 4.7 sq mi	
Dist Fished: 0.12 km	Basin: Scioto 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	120	300.00	9.74			
Creek Chub	N	G	N	T	182	455.00	14.77			
South. Redbelly Dace	N	H	S		87	217.50	7.06			
Striped Shiner	N	I	S		1	2.50	0.08			
Bluntnose Minnow	N	O	C	T	36	90.00	2.92			
Central Stoneroller	N	H	N		613	1,532.50	49.76			
Orangethroat Darter	D	I	S		32	80.00	2.60			
Fantail Darter	D	I	C		110	275.00	8.93			
Mottled Sculpin		I	C		51	127.50	4.14			
<i>Mile Total</i>					1,232	3,080.00				
<i>Number of Species</i>					9					
<i>Number of Hybrids</i>					0					

Species List

River Code: 02-711	Stream: Rocky Fork Scioto Brush Creek	Sample Date: 2006
River Mile: 7.00	Location:	Date Range: 07/25/2006
Time Fished: 1800 sec	Drainage: 8.4 sq mi	
Dist Fished: 0.15 km	Basin: Scioto 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	16	32.00	3.87			
White Sucker	W	O	S	T	7	14.00	1.69			
Western Blacknose Dace	N	G	S	T	2	4.00	0.48			
Creek Chub	N	G	N	T	112	224.00	27.12			
Scarlet Shiner	N	I	S	M	2	4.00	0.48			
Striped Shiner	N	I	S		20	40.00	4.84			
Silverjaw Minnow	N	I	M		1	2.00	0.24			
Bluntnose Minnow	N	O	C	T	5	10.00	1.21			
Central Stoneroller	N	H	N		141	282.00	34.14			
Smallmouth Bass	F	C	C	M	3	6.00	0.73			
Rainbow Darter	D	I	S	M	10	20.00	2.42			
Orangethroat Darter	D	I	S		2	4.00	0.48			
Fantail Darter	D	I	C		30	60.00	7.26			
Mottled Sculpin		I	C		62	124.00	15.01			
<i>Mile Total</i>					413	826.00				
<i>Number of Species</i>					14					
<i>Number of Hybrids</i>					0					

Species List

River Code: 02-711	Stream: Rocky Fork Scioto Brush Creek	Sample Date: 2006
River Mile: 3.50	Location:	Date Range: 07/31/2006
Time Fished: 1500 sec	Drainage: 18.0 sq mi	
Dist Fished: 0.15 km	Basin: Scioto 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	30	60.00	5.23			
Western Blacknose Dace	N	G	S	T	1	2.00	0.17			
Creek Chub	N	G	N	T	13	26.00	2.26			
Scarlet Shiner	N	I	S	M	29	58.00	5.05			
Striped Shiner	N	I	S		27	54.00	4.70			
Silverjaw Minnow	N	I	M		3	6.00	0.52			
Bluntnose Minnow	N	O	C	T	6	12.00	1.05			
Central Stoneroller	N	H	N		336	672.00	58.54			
Rock Bass	S	C	C		6	12.00	1.05			
Smallmouth Bass	F	C	C	M	24	48.00	4.18			
Longear Sunfish	S	I	C	M	1	2.00	0.17			
Rainbow Darter	D	I	S	M	50	100.00	8.71			
Fantail Darter	D	I	C		29	58.00	5.05			
Mottled Sculpin		I	C		19	38.00	3.31			
<i>Mile Total</i>					574	1,148.00				
<i>Number of Species</i>					14					
<i>Number of Hybrids</i>					0					

Species List

River Code: 02-713	Stream: Spruce Run	Sample Date: 2006
River Mile: 0.20	Location:	Date Range: 07/25/2006
Time Fished: 1500 sec	Drainage: 3.4 sq mi	
Dist Fished: 0.10 km	Basin: Scioto 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	3	9.00	0.80			
Western Blacknose Dace	N	G	S	T	29	87.00	7.77			
Creek Chub	N	G	N	T	73	219.00	19.57			
Striped Shiner	N	I	S		5	15.00	1.34			
Central Stoneroller	N	H	N		235	705.00	63.00			
Smallmouth Bass	F	C	C	M	1	3.00	0.27			
Rainbow Darter	D	I	S	M	14	42.00	3.75			
Orangethroat Darter	D	I	S		3	9.00	0.80			
Fantail Darter	D	I	C		4	12.00	1.07			
Mottled Sculpin		I	C		6	18.00	1.61			
<i>Mile Total</i>					373	1,119.00				
<i>Number of Species</i>					10					
<i>Number of Hybrids</i>					0					

Species List

River Code: 02-717	Stream: Beech Fork	Sample Date: 2006
River Mile: 1.90	Location:	Date Range: 07/26/2006
Time Fished: 1200 sec	Drainage: 4.1 sq mi	
Dist Fished: 0.12 km	Basin: Scioto 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	31	77.50	12.65			
Creek Chub	N	G	N	T	140	350.00	57.14			
South. Redbelly Dace	N	H	S		7	17.50	2.86			
Rosyside Dace [T]	N	I	S	S	1	2.50	0.41			
Central Stoneroller	N	H	N		43	107.50	17.55			
Rainbow Darter	D	I	S	M	8	20.00	3.27			
Orangethroat Darter	D	I	S		3	7.50	1.22			
Fantail Darter	D	I	C		12	30.00	4.90			
<i>Mile Total</i>					245	612.50				
<i>Number of Species</i>					8					
<i>Number of Hybrids</i>					0					

Species List

River Code: 02-719	Stream: Turkey Creek	Sample Date: 2006
River Mile: 6.00	Location:	Date Range: 07/27/2006
Time Fished: 1500 sec	Drainage: 4.2 sq mi	
Dist Fished: 0.12 km	Basin: Scioto 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	2	5.00	0.35			
White Sucker	W	O	S	T	35	87.50	6.19			
Western Blacknose Dace	N	G	S	T	2	5.00	0.35			
Creek Chub	N	G	N	T	174	435.00	30.80			
South. Redbelly Dace	N	H	S		3	7.50	0.53			
Striped Shiner	N	I	S		6	15.00	1.06			
Silverjaw Minnow	N	I	M		32	80.00	5.66			
Bluntnose Minnow	N	O	C	T	94	235.00	16.64			
Central Stoneroller	N	H	N		102	255.00	18.05			
Bluegill Sunfish	S	I	C	P	1	2.50	0.18			
Johnny Darter	D	I	C		24	60.00	4.25			
Greenside Darter	D	I	S	M	5	12.50	0.88			
Rainbow Darter	D	I	S	M	30	75.00	5.31			
Fantail Darter	D	I	C		55	137.50	9.73			
<i>Mile Total</i>					565	1,412.50				
<i>Number of Species</i>					14					
<i>Number of Hybrids</i>					0					

Species List

River Code: 02-719	Stream: Turkey Creek	Sample Date: 2006
River Mile: 4.20	Location:	Date Range: 07/27/2006
Time Fished: 1800 sec	Drainage: 7.4 sq mi	
Dist Fished: 0.15 km	Basin: Scioto 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
Black Redhorse	R	I	S	I	3	6.00	0.38			
Golden Redhorse	R	I	S	M	10	20.00	1.28			
Northern Hog Sucker	R	I	S	M	19	38.00	2.42			
White Sucker	W	O	S	T	28	56.00	3.57			
Creek Chub	N	G	N	T	84	168.00	10.71			
Scarlet Shiner	N	I	S	M	43	86.00	5.48			
Striped Shiner	N	I	S		180	360.00	22.96			
Silverjaw Minnow	N	I	M		7	14.00	0.89			
Bluntnose Minnow	N	O	C	T	144	288.00	18.37			
Central Stoneroller	N	H	N		86	172.00	10.97			
Rock Bass	S	C	C		9	18.00	1.15			
Smallmouth Bass	F	C	C	M	7	14.00	0.89			
Bluegill Sunfish	S	I	C	P	13	26.00	1.66			
Longear Sunfish	S	I	C	M	33	66.00	4.21			
Johnny Darter	D	I	C		10	20.00	1.28			
Greenside Darter	D	I	S	M	3	6.00	0.38			
Rainbow Darter	D	I	S	M	68	136.00	8.67			
Fantail Darter	D	I	C		37	74.00	4.72			
<i>Mile Total</i>					784	1,568.00				
<i>Number of Species</i>					18					
<i>Number of Hybrids</i>					0					

Species List

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River Code: 02-719	Stream: Turkey Creek	Sample Date: 2006
River Mile: 0.40	Location:	Date Range: 07/26/2006
Time Fished: 1800 sec	Drainage: 16.6 sq mi	
Dist Fished: 0.15 km	Basin: Scioto 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
Least Brook Lamprey		F	N	3	6.00	0.36			
Black Redhorse	R	I	S I	10	20.00	1.21			
Golden Redhorse	R	I	S M	6	12.00	0.73			
Northern Hog Sucker	R	I	S M	33	66.00	4.00			
White Sucker	W	O	S T	19	38.00	2.30			
Creek Chub	N	G	N T	20	40.00	2.42			
Silver Shiner	N	I	S I	4	8.00	0.48			
Scarlet Shiner	N	I	S M	87	174.00	10.53			
Striped Shiner	N	I	S	217	434.00	26.27			
Silverjaw Minnow	N	I	M	49	98.00	5.93			
Bluntnose Minnow	N	O	C T	71	142.00	8.60			
Central Stoneroller	N	H	N	148	296.00	17.92			
Yellow Bullhead		I	C T	3	6.00	0.36			
Rock Bass	S	C	C	19	38.00	2.30			
Smallmouth Bass	F	C	C M	5	10.00	0.61			
Green Sunfish	S	I	C T	3	6.00	0.36			
Bluegill Sunfish	S	I	C P	1	2.00	0.12			
Longear Sunfish	S	I	C M	56	112.00	6.78			
Blackside Darter	D	I	S	2	4.00	0.24			
Logperch	D	I	S M	2	4.00	0.24			
Johnny Darter	D	I	C	18	36.00	2.18			
Greenside Darter	D	I	S M	1	2.00	0.12			
Banded Darter	D	I	S I	2	4.00	0.24			
Rainbow Darter	D	I	S M	33	66.00	4.00			
Fantail Darter	D	I	C	14	28.00	1.69			
<i>Mile Total</i>				826	1,652.00				
<i>Number of Species</i>				25					
<i>Number of Hybrids</i>				0					

Species List

River Code: 02-720	Stream: Dry Fork	Sample Date: 2006
River Mile: 0.10	Location:	Date Range: 07/19/2006
Time Fished: 1800 sec	Drainage: 4.2 sq mi	
Dist Fished: 0.12 km	Basin: Scioto 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	5	12.50	0.87			
Western Blacknose Dace	N	G	S	T	3	7.50	0.52			
Creek Chub	N	G	N	T	196	490.00	34.09			
South. Redbelly Dace	N	H	S		163	407.50	28.35			
Scarlet Shiner	N	I	S	M	3	7.50	0.52			
Striped Shiner	N	I	S		40	100.00	6.96			
Silverjaw Minnow	N	I	M		9	22.50	1.57			
Bluntnose Minnow	N	O	C	T	1	2.50	0.17			
Central Stoneroller	N	H	N		106	265.00	18.43			
Smallmouth Bass	F	C	C	M	1	2.50	0.17			
Longear Sunfish	S	I	C	M	1	2.50	0.17			
Johnny Darter	D	I	C		6	15.00	1.04			
Rainbow Darter	D	I	S	M	5	12.50	0.87			
Orangethroat Darter	D	I	S		15	37.50	2.61			
Fantail Darter	D	I	C		21	52.50	3.65			
<i>Mile Total</i>					575	1,437.50				
<i>Number of Species</i>					15					
<i>Number of Hybrids</i>					0					

Species List

River Code: 02-722	Stream: Turkey Run	Sample Date: 2006
River Mile: 0.30	Location: Newman Rd.	Date Range: 07/17/2006
Time Fished: 1800 sec	Drainage: 4.8 sq mi	
Dist Fished: 0.12 km	Basin: Scioto 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	7.50	0.44			
White Sucker	W	O	S	T	1	2.50	0.15			
Western Blacknose Dace	N	G	S	T	5	12.50	0.73			
Creek Chub	N	G	N	T	384	960.00	55.73			
Scarlet Shiner	N	I	S	M	13	32.50	1.89			
Striped Shiner	N	I	S		19	47.50	2.76			
Silverjaw Minnow	N	I	M		4	10.00	0.58			
Central Stoneroller	N	H	N		193	482.50	28.01			
Rock Bass	S	C	C		2	5.00	0.29			
Longear Sunfish	S	I	C	M	11	27.50	1.60			
Blackside Darter	D	I	S		1	2.50	0.15			
Johnny Darter	D	I	C		26	65.00	3.77			
Fantail Darter	D	I	C		27	67.50	3.92			
<i>Mile Total</i>					689	1,722.50				
<i>Number of Species</i>					13					
<i>Number of Hybrids</i>					0					

Species List

River Code: 02-727	Stream: Winterstein Run	Sample Date: 2006
River Mile: 0.20	Location:	Date Range: 07/19/2006
Time Fished: 1800 sec	Drainage: 3.1 sq mi	
Dist Fished: 0.12 km	Basin: Scioto 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	5	12.50	0.58			
Western Blacknose Dace	N	G	S	T	29	72.50	3.35			
Creek Chub	N	G	N	T	212	530.00	24.48			
South. Redbelly Dace	N	H	S		2	5.00	0.23			
Scarlet Shiner	N	I	S	M	5	12.50	0.58			
Striped Shiner	N	I	S		74	185.00	8.55			
Silverjaw Minnow	N	I	M		13	32.50	1.50			
Bluntnose Minnow	N	O	C	T	24	60.00	2.77			
Central Stoneroller	N	H	N		345	862.50	39.84			
Bluegill Sunfish	S	I	C	P	1	2.50	0.12			
Johnny Darter	D	I	C		6	15.00	0.69			
Greenside Darter	D	I	S	M	2	5.00	0.23			
Rainbow Darter	D	I	S	M	35	87.50	4.04			
Fantail Darter	D	I	C		113	282.50	13.05			
<i>Mile Total</i>					866	2,165.00				
<i>Number of Species</i>					14					
<i>Number of Hybrids</i>					0					

Species List

River Code: 02-728	Stream: Mill Creek	Sample Date: 2006
River Mile: 2.20	Location:	Date Range: 07/18/2006
Time Fished: 1500 sec	Drainage: 3.0 sq mi	
Dist Fished: 0.12 km	Basin: Scioto 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
Least Brook Lamprey		F	N	14	35.00	1.89			
Black Redhorse	R	I	S I	2	5.00	0.27			
Northern Hog Sucker	R	I	S M	5	12.50	0.68			
White Sucker	W	O	S T	17	42.50	2.30			
Creek Chub	N	G	N T	180	450.00	24.36			
Rosyside Dace [T]	N	I	S S	2	5.00	0.27			
Scarlet Shiner	N	I	S M	18	45.00	2.44			
Striped Shiner	N	I	S	179	447.50	24.22			
Silverjaw Minnow	N	I	M	26	65.00	3.52			
Bluntnose Minnow	N	O	C T	43	107.50	5.82			
Central Stoneroller	N	H	N	161	402.50	21.79			
Popeye Shiner [E]	N	I	S S	2	5.00	0.27	0.01	100.00	2.50
Rock Bass	S	C	C	7	17.50	0.95			
Bluegill Sunfish	S	I	C P	3	7.50	0.41			
Longear Sunfish	S	I	C M	2	5.00	0.27			
Blackside Darter	D	I	S	5	12.50	0.68			
Johnny Darter	D	I	C	18	45.00	2.44			
Greenside Darter	D	I	S M	6	15.00	0.81			
Rainbow Darter	D	I	S M	37	92.50	5.01			
Orangethroat Darter	D	I	S	2	5.00	0.27			
Fantail Darter	D	I	C	10	25.00	1.35			
<i>Mile Total</i>				739	1,847.50		0.01		
<i>Number of Species</i>				21					
<i>Number of Hybrids</i>				0					

Species List

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River Code: 02-728	Stream: Mill Creek	Sample Date: 2006
River Mile: 0.50	Location:	Date Range: 07/18/2006
Time Fished: 2100 sec	Drainage: 17.1 sq mi	
Dist Fished: 0.15 km	Basin: Scioto 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
Least Brook Lamprey		F	N		2	4.00	0.19			
Black Redhorse	R	I	S	I	4	8.00	0.37			
Golden Redhorse	R	I	S	M	3	6.00	0.28			
Northern Hog Sucker	R	I	S	M	31	62.00	2.87			
Creek Chub	N	G	N	T	118	236.00	10.94			
Silver Shiner	N	I	S	I	13	26.00	1.20			
Scarlet Shiner	N	I	S	M	6	12.00	0.56			
Striped Shiner	N	I	S		292	584.00	27.06			
Silverjaw Minnow	N	I	M		2	4.00	0.19			
Bluntnose Minnow	N	O	C	T	154	308.00	14.27			
Central Stoneroller	N	H	N		233	466.00	21.59			
Yellow Bullhead		I	C	T	1	2.00	0.09			
Brook Silverside		I	M	M	1	2.00	0.09			
Rock Bass	S	C	C		14	28.00	1.30			
Smallmouth Bass	F	C	C	M	5	10.00	0.46			
Largemouth Bass	F	C	C		1	2.00	0.09			
Green Sunfish	S	I	C	T	14	28.00	1.30			
Bluegill Sunfish	S	I	C	P	6	12.00	0.56			
Longear Sunfish	S	I	C	M	47	94.00	4.36			
Logperch	D	I	S	M	1	2.00	0.09			
Johnny Darter	D	I	C		26	52.00	2.41			
Greenside Darter	D	I	S	M	15	30.00	1.39			
Banded Darter	D	I	S	I	6	12.00	0.56			
Rainbow Darter	D	I	S	M	35	70.00	3.24			
Orangethroat Darter	D	I	S		1	2.00	0.09			
Fantail Darter	D	I	C		48	96.00	4.45			
<i>Mile Total</i>					1,079	2,158.00				
<i>Number of Species</i>					26					
<i>Number of Hybrids</i>					0					

Species List

River Code: 02-730	Stream: Middle Branch Mill Creek	Sample Date: 2006
River Mile: 1.90	Location:	Date Range: 07/17/2006
Time Fished: 1500 sec	Drainage: 7.5 sq mi	
Dist Fished: 0.12 km	Basin: Scioto 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	1	2.50	0.51			
Western Blacknose Dace	N	G	S	T	16	40.00	8.12			
Creek Chub	N	G	N	T	101	252.50	51.27			
South. Redbelly Dace	N	H	S		9	22.50	4.57			
Rosyside Dace [T]	N	I	S	S	3	7.50	1.52			
Striped Shiner	N	I	S		3	7.50	1.52			
Silverjaw Minnow	N	I	M		2	5.00	1.02			
Bluntnose Minnow	N	O	C	T	9	22.50	4.57			
Central Stoneroller	N	H	N		22	55.00	11.17			
Largemouth Bass	F	C	C		2	5.00	1.02			
Green Sunfish	S	I	C	T	2	5.00	1.02			
Johnny Darter	D	I	C		3	7.50	1.52			
Greenside Darter	D	I	S	M	2	5.00	1.02			
Rainbow Darter	D	I	S	M	11	27.50	5.58			
Orangethroat Darter	D	I	S		2	5.00	1.02			
Fantail Darter	D	I	C		9	22.50	4.57			
<i>Mile Total</i>					197	492.50				
<i>Number of Species</i>					16					
<i>Number of Hybrids</i>					0					

Species List

River Code: 02-730	Stream: Middle Branch Mill Creek	Sample Date: 2006
River Mile: 1.80	Location:	Date Range: 07/17/2006
Time Fished: 1800 sec	Drainage: 11.6 sq mi	
Dist Fished: 0.15 km	Basin: Scioto 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
Least Brook Lamprey		F	N		2	4.00	0.23			
Northern Hog Sucker	R	I	S	M	9	18.00	1.05			
White Sucker	W	O	S	T	3	6.00	0.35			
Western Blacknose Dace	N	G	S	T	54	108.00	6.32			
Creek Chub	N	G	N	T	248	496.00	29.01			
South. Redbelly Dace	N	H	S		34	68.00	3.98			
Rosyside Dace [T]	N	I	S	S	64	128.00	7.49			
Striped Shiner	N	I	S		42	84.00	4.91			
Silverjaw Minnow	N	I	M		33	66.00	3.86			
Bluntnose Minnow	N	O	C	T	42	84.00	4.91			
Central Stoneroller	N	H	N		140	280.00	16.37			
Largemouth Bass	F	C	C		2	4.00	0.23			
Green Sunfish	S	I	C	T	2	4.00	0.23			
Johnny Darter	D	I	C		57	114.00	6.67			
Greenside Darter	D	I	S	M	1	2.00	0.12			
Rainbow Darter	D	I	S	M	51	102.00	5.96			
Orangethroat Darter	D	I	S		19	38.00	2.22			
Fantail Darter	D	I	C		52	104.00	6.08			
<i>Mile Total</i>					855	1,710.00				
<i>Number of Species</i>					18					
<i>Number of Hybrids</i>					0					

Species List

River Code: 02-732	Stream: Hickman Run	Sample Date: 2006
River Mile: 0.10	Location:	Date Range: 07/17/2006
Time Fished: 1500 sec	Drainage: 4.1 sq mi	
Dist Fished: 0.12 km	Basin: Scioto 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	5	12.50	0.88			
Western Blacknose Dace	N	G	S	T	64	160.00	11.23			
Creek Chub	N	G	N	T	266	665.00	46.67			
South. Redbelly Dace	N	H	S		69	172.50	12.11			
Rosyside Dace [T]	N	I	S	S	71	177.50	12.46			
Silverjaw Minnow	N	I	M		3	7.50	0.53			
Central Stoneroller	N	H	N		40	100.00	7.02			
Johnny Darter	D	I	C		3	7.50	0.53			
Rainbow Darter	D	I	S	M	1	2.50	0.18			
Orangethroat Darter	D	I	S		43	107.50	7.54			
Fantail Darter	D	I	C		5	12.50	0.88			
<i>Mile Total</i>					570	1,425.00				
<i>Number of Species</i>					11					
<i>Number of Hybrids</i>					0					

Species List

River Code: 02-736	Stream: Churn Creek	Sample Date: 2006
River Mile: 3.90	Location:	Date Range: 07/18/2006
Time Fished: 1500 sec	Drainage: 5.1 sq mi	
Dist Fished: 0.12 km	Basin: Scioto 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	2.50	1.05			
Creek Chub	N	G	N	T	34	85.00	35.79			
Central Stoneroller	N	H	N		34	85.00	35.79			
Smallmouth Bass	F	C	C	M	7	17.50	7.37			
Rainbow Darter	D	I	S	M	4	10.00	4.21			
Orangethroat Darter	D	I	S		5	12.50	5.26			
Fantail Darter	D	I	C		10	25.00	10.53			
<i>Mile Total</i>					95	237.50				
<i>Number of Species</i>					7					
<i>Number of Hybrids</i>					0					

Species List

River Code: 02-736 River Mile: 3.00 Time Fished: 1500 sec Dist Fished: 0.15 km	Stream: Churn Creek Location: Drainage: 7.3 sq mi Basin: Scioto River	Sample Date: 2006 Date Range: 07/18/2006 No of Passes: 1 Sampler Type: E
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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	12	24.00	5.19			
Creek Chub	N	G	N	T	19	38.00	8.23			
Central Stoneroller	N	H	N		126	252.00	54.55			
Smallmouth Bass	F	C	C	M	7	14.00	3.03			
Rainbow Darter	D	I	S	M	11	22.00	4.76			
Fantail Darter	D	I	C		56	112.00	24.24			
<i>Mile Total</i>					231	462.00				
<i>Number of Species</i>					6					
<i>Number of Hybrids</i>					0					

Species List

River Code: 02-736	Stream: Churn Creek	Sample Date: 2006
River Mile: 0.30	Location:	Date Range: 07/19/2006
Time Fished: 2100 sec	Drainage: 13.1 sq mi	
Dist Fished: 0.15 km	Basin: Scioto 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
Black Redhorse	R	I	S	I	5	10.00	0.55			
Northern Hog Sucker	R	I	S	M	77	154.00	8.50			
Creek Chub	N	G	N	T	79	158.00	8.72			
Scarlet Shiner	N	I	S	M	129	258.00	14.24			
Striped Shiner	N	I	S		227	454.00	25.06			
Silverjaw Minnow	N	I	M		24	48.00	2.65			
Bluntnose Minnow	N	O	C	T	100	200.00	11.04			
Central Stoneroller	N	H	N		124	248.00	13.69			
Rock Bass	S	C	C		9	18.00	0.99			
Smallmouth Bass	F	C	C	M	16	32.00	1.77			
Green Sunfish	S	I	C	T	1	2.00	0.11			
Bluegill Sunfish	S	I	C	P	2	4.00	0.22			
Longear Sunfish	S	I	C	M	40	80.00	4.42			
Johnny Darter	D	I	C		16	32.00	1.77			
Rainbow Darter	D	I	S	M	31	62.00	3.42			
Fantail Darter	D	I	C		26	52.00	2.87			
<i>Mile Total</i>					906	1,812.00				
<i>Number of Species</i>					16					
<i>Number of Hybrids</i>					0					

Species List

River Code: 02-737	Stream: Blue Creek	Sample Date: 2006
River Mile: 2.20	Location:	Date Range: 07/18/2006
Time Fished: 1500 sec	Drainage: 3.9 sq mi	
Dist Fished: 0.12 km	Basin: Scioto 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	2.50	0.74			
White Sucker	W	O	S	T	8	20.00	5.88			
Creek Chub	N	G	N	T	119	297.50	87.50			
Rosyside Dace [T]	N	I	S	S	1	2.50	0.74			
Central Stoneroller	N	H	N		3	7.50	2.21			
Fantail Darter	D	I	C		4	10.00	2.94			
<i>Mile Total</i>					136	340.00				
<i>Number of Species</i>					6					
<i>Number of Hybrids</i>					0					

Species List

River Code: 02-759	Stream: Dry Run	Sample Date: 2006
River Mile: 2.20	Location:	Date Range: 07/05/2006
Time Fished: 900 sec	Drainage: 3.7 sq mi	
Dist Fished: 0.12 km	Basin: Scioto 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	15	37.50	3.56			
Creek Chub	N	G	N	T	117	292.50	27.79			
South. Redbelly Dace	N	H	S		26	65.00	6.18			
Rosyside Dace [T]	N	I	S	S	1	2.50	0.24			
Striped Shiner	N	I	S		199	497.50	47.27			
Central Stoneroller	N	H	N		39	97.50	9.26			
Rainbow Darter	D	I	S	M	3	7.50	0.71			
Orangethroat Darter	D	I	S		18	45.00	4.28			
Fantail Darter	D	I	C		1	2.50	0.24			
Mottled Sculpin		I	C		2	5.00	0.48			
<i>Mile Total</i>					421	1,052.50				
<i>Number of Species</i>					10					
<i>Number of Hybrids</i>					0					

Species List

River Code: 02-759	Stream: Dry Run	Sample Date: 2006
River Mile: 0.20	Location:	Date Range: 07/12/2006
Time Fished: 1500 sec	Drainage: 7.1 sq mi	
Dist Fished: 0.15 km	Basin: Scioto 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
Least Brook Lamprey		F	N		1	2.00	0.21			
Northern Hog Sucker	R	I	S	M	7	14.00	1.50			
White Sucker	W	O	S	T	10	20.00	2.14			
Common Carp	G	O	M	T	1	2.00	0.21			
Western Blacknose Dace	N	G	S	T	2	4.00	0.43			
Creek Chub	N	G	N	T	178	356.00	38.03			
Silver Shiner	N	I	S	I	1	2.00	0.21			
Scarlet Shiner	N	I	S	M	2	4.00	0.43			
Striped Shiner	N	I	S		38	76.00	8.12			
Bluntnose Minnow	N	O	C	T	9	18.00	1.92			
Central Stoneroller	N	H	N		136	272.00	29.06			
Yellow Bullhead		I	C	T	2	4.00	0.43			
Rock Bass	S	C	C		3	6.00	0.64			
Smallmouth Bass	F	C	C	M	2	4.00	0.43			
Longear Sunfish	S	I	C	M	20	40.00	4.27			
Logperch	D	I	S	M	1	2.00	0.21			
Johnny Darter	D	I	C		5	10.00	1.07			
Orangethroat Darter	D	I	S		5	10.00	1.07			
Fantail Darter	D	I	C		36	72.00	7.69			
Mottled Sculpin		I	C		9	18.00	1.92			
<i>Mile Total</i>					468	936.00				
<i>Number of Species</i>					20					
<i>Number of Hybrids</i>					0					

Species List

River Code: 02-768	Stream: Dunlap Creek	Sample Date: 2006
River Mile: 1.90	Location:	Date Range: 07/12/2006
Time Fished: 2100 sec	Drainage: 4.3 sq mi	
Dist Fished: 0.12 km	Basin: Scioto 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
Redfin Pickerel		P	M	P	2	5.00	0.46			
White Sucker	W	O	S	T	7	17.50	1.61			
Creek Chubsucker	R	I	M		4	10.00	0.92			
Creek Chub	N	G	N	T	224	560.00	51.38			
Scarlet Shiner	N	I	S	M	3	7.50	0.69			
Striped Shiner	N	I	S		39	97.50	8.94			
Bluntnose Minnow	N	O	C	T	21	52.50	4.82			
Central Stoneroller	N	H	N		40	100.00	9.17			
Yellow Bullhead		I	C	T	1	2.50	0.23			
Green Sunfish	S	I	C	T	38	95.00	8.72			
Longear Sunfish	S	I	C	M	10	25.00	2.29			
Blackside Darter	D	I	S		2	5.00	0.46			
Johnny Darter	D	I	C		5	12.50	1.15			
Rainbow Darter	D	I	S	M	14	35.00	3.21			
Fantail Darter	D	I	C		26	65.00	5.96			
<i>Mile Total</i>					436	1,090.00				
<i>Number of Species</i>					15					
<i>Number of Hybrids</i>					0					

Species List

River Code: 02-768	Stream: Dunlap Creek	Sample Date: 2006
River Mile: 0.70	Location:	Date Range: 07/12/2006
Time Fished: 2100 sec	Drainage: 8.2 sq mi	
Dist Fished: 0.15 km	Basin: Scioto 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
Least Brook Lamprey		F	N		5	10.00	0.63			
Redfin Pickerel		P	M	P	7	14.00	0.88			
Northern Hog Sucker	R	I	S	M	13	26.00	1.64			
White Sucker	W	O	S	T	9	18.00	1.14			
Creek Chub	N	G	N	T	247	494.00	31.19			
South. Redbelly Dace	N	H	S		2	4.00	0.25			
Rosyside Dace [T]	N	I	S	S	6	12.00	0.76			
Scarlet Shiner	N	I	S	M	20	40.00	2.53			
Striped Shiner	N	I	S		152	304.00	19.19			
Silverjaw Minnow	N	I	M		2	4.00	0.25			
Bluntnose Minnow	N	O	C	T	32	64.00	4.04			
Central Stoneroller	N	H	N		117	234.00	14.77			
Rock Bass	S	C	C		1	2.00	0.13			
Green Sunfish	S	I	C	T	16	32.00	2.02			
Longear Sunfish	S	I	C	M	6	12.00	0.76			
Blackside Darter	D	I	S		4	8.00	0.51			
Johnny Darter	D	I	C		7	14.00	0.88			
Rainbow Darter	D	I	S	M	12	24.00	1.52			
Orangethroat Darter	D	I	S		6	12.00	0.76			
Fantail Darter	D	I	C		65	130.00	8.21			
Mottled Sculpin		I	C		63	126.00	7.95			
<i>Mile Total</i>					792	1,584.00				
<i>Number of Species</i>					21					
<i>Number of Hybrids</i>					0					

Species List

River Code: 02-769	Stream: Rarden Creek	Sample Date: 2006
River Mile: 3.80	Location:	Date Range: 07/11/2006
Time Fished: 1800 sec	Drainage: 8.0 sq mi	
Dist Fished: 0.15 km	Basin: Scioto 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
Creek Chub	N	G	N	T	273	546.00	69.29			
South. Redbelly Dace	N	H	S		41	82.00	10.41			
Rosyside Dace [T]	N	I	S	S	21	42.00	5.33			
Silverjaw Minnow	N	I	M		5	10.00	1.27			
Central Stoneroller	N	H	N		34	68.00	8.63			
Orangethroat Darter	D	I	S		19	38.00	4.82			
Fantail Darter	D	I	C		1	2.00	0.25			
<i>Mile Total</i>					394	788.00				
<i>Number of Species</i>					7					
<i>Number of Hybrids</i>					0					

Species List

River Code: 02-769	Stream: Rarden Creek	Sample Date: 2006
River Mile: 0.40	Location:	Date Range: 07/12/2006
Time Fished: 1800 sec	Drainage: 18.7 sq mi	
Dist Fished: 0.20 km	Basin: Scioto 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
Least Brook Lamprey		F	N		4	6.00	0.96			
White Sucker	W	O	S	T	1	1.50	0.24			
Creek Chubsucker	R	I	M		1	1.50	0.24			
Creek Chub	N	G	N	T	180	270.00	43.17			
South. Redbelly Dace	N	H	S		39	58.50	9.35			
Rosyside Dace [T]	N	I	S	S	55	82.50	13.19			
Scarlet Shiner	N	I	S	M	34	51.00	8.15			
Striped Shiner	N	I	S		33	49.50	7.91			
Silverjaw Minnow	N	I	M		2	3.00	0.48			
Bluntnose Minnow	N	O	C	T	1	1.50	0.24			
Central Stoneroller	N	H	N		18	27.00	4.32			
Yellow Bullhead		I	C	T	1	1.50	0.24			
Rock Bass	S	C	C		1	1.50	0.24			
Bluegill Sunfish	S	I	C	P	1	1.50	0.24			
Longear Sunfish	S	I	C	M	11	16.50	2.64			
Blackside Darter	D	I	S		6	9.00	1.44			
Johnny Darter	D	I	C		16	24.00	3.84			
Rainbow Darter	D	I	S	M	2	3.00	0.48			
Orangethroat Darter	D	I	S		2	3.00	0.48			
Fantail Darter	D	I	C		7	10.50	1.68			
Mottled Sculpin		I	C		2	3.00	0.48			
<i>Mile Total</i>					417	625.50				
<i>Number of Species</i>					21					
<i>Number of Hybrids</i>					0					

Species List

River Code: 02-770	Stream: Dry Fork	Sample Date: 2006
River Mile: 1.00	Location:	Date Range: 07/26/2006
Time Fished: 1200 sec	Drainage: 4.2 sq mi	
Dist Fished: 0.12 km	Basin: Scioto 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
Creek Chub	N	G	N	T	180	450.00	38.30			
South. Redbelly Dace	N	H	S		193	482.50	41.06			
Rosyside Dace [T]	N	I	S	S	49	122.50	10.43			
Central Stoneroller	N	H	N		14	35.00	2.98			
Hybrid X Minnow					1	2.50	0.21			
Rainbow Darter	D	I	S	M	2	5.00	0.43			
Orangethroat Darter	D	I	S		2	5.00	0.43			
Fantail Darter	D	I	C		29	72.50	6.17			
<i>Mile Total</i>					470	1,175.00				
<i>Number of Species</i>					7					
<i>Number of Hybrids</i>					1					

Species List

River Code: 02-771	Stream: Cedar Fork	Sample Date: 2006
River Mile: 2.30	Location:	Date Range: 07/10/2006
Time Fished: 1500 sec	Drainage: 4.9 sq mi	
Dist Fished: 0.12 km	Basin: Scioto 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
Least Brook Lamprey		F	N		4	10.00	1.45			
Northern Hog Sucker	R	I	S	M	5	12.50	1.81			
White Sucker	W	O	S	T	5	12.50	1.81			
Creek Chub	N	G	N	T	23	57.50	8.33			
Striped Shiner	N	I	S		99	247.50	35.87			
Bluntnose Minnow	N	O	C	T	17	42.50	6.16			
Central Stoneroller	N	H	N		20	50.00	7.25			
Rock Bass	S	C	C		4	10.00	1.45			
Largemouth Bass	F	C	C		1	2.50	0.36			
Bluegill Sunfish	S	I	C	P	4	10.00	1.45			
Longear Sunfish	S	I	C	M	17	42.50	6.16			
Johnny Darter	D	I	C		12	30.00	4.35			
Rainbow Darter	D	I	S	M	56	140.00	20.29			
Fantail Darter	D	I	C		6	15.00	2.17			
Mottled Sculpin		I	C		3	7.50	1.09			
<i>Mile Total</i>					276	690.00				
<i>Number of Species</i>					15					
<i>Number of Hybrids</i>					0					

Species List

River Code: 02-772	Stream: Plum Run	Sample Date: 2006
River Mile: 0.20	Location:	Date Range: 07/11/2006
Time Fished: 1500 sec	Drainage: 4.0 sq mi	
Dist Fished: 0.12 km	Basin: Scioto 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	17	42.50	1.97			
White Sucker	W	O	S	T	15	37.50	1.74			
Creek Chub	N	G	N	T	324	810.00	37.63			
Striped Shiner	N	I	S		72	180.00	8.36			
Silverjaw Minnow	N	I	M		23	57.50	2.67			
Bluntnose Minnow	N	O	C	T	6	15.00	0.70			
Central Stoneroller	N	H	N		319	797.50	37.05			
Largemouth Bass	F	C	C		1	2.50	0.12			
Green Sunfish	S	I	C	T	2	5.00	0.23			
Johnny Darter	D	I	C		23	57.50	2.67			
Greenside Darter	D	I	S	M	5	12.50	0.58			
Rainbow Darter	D	I	S	M	44	110.00	5.11			
Orangethroat Darter	D	I	S		4	10.00	0.46			
Mottled Sculpin		I	C		6	15.00	0.70			
<i>Mile Total</i>					861	2,152.50				
<i>Number of Species</i>					14					
<i>Number of Hybrids</i>					0					

Species List

River Code: 02-773 River Mile: 1.40 Time Fished: 1200 sec Dist Fished: 0.12 km	Stream: Betty's Fork Location: Drainage: 4.5 sq mi Basin: Scioto River	Sample Date: 2006 Date Range: 07/11/2006 No of Passes: 1 Sampler Type: E
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Species Name / ODNR status	IBI Grp	Feed Guild	Breed Guild	Tol	# of Fish	Relative Number	% by Number	Relative Weight	% by Weight	Ave(gm) Weight
Creek Chub	N	G	N	T	150	375.00	68.49			
South. Redbelly Dace	N	H	S		30	75.00	13.70			
Rosyside Dace [T]	N	I	S	S	15	37.50	6.85			
Johnny Darter	D	I	C		6	15.00	2.74			
Rainbow Darter	D	I	S	M	1	2.50	0.46			
Orangethroat Darter	D	I	S		14	35.00	6.39			
Fantail Darter	D	I	C		3	7.50	1.37			
<i>Mile Total</i>					219	547.50				
<i>Number of Species</i>					7					
<i>Number of Hybrids</i>					0					

Species List

River Code: 02-774	Stream: Jaybird Branch	Sample Date: 2006
River Mile: 2.20	Location:	Date Range: 09/06/2006
Time Fished: 1500 sec	Drainage: 1.2 sq mi	
Dist Fished: 0.10 km	Basin: Scioto 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
Creek Chub	N	G	N	T	3	9.00	100.00			
	<i>Mile Total</i>				3	9.00				
					<i>Number of Species</i>	1				
					<i>Number of Hybrids</i>	0				

Species List

River Code: 02-774	Stream: Jaybird Branch	Sample Date: 2006
River Mile: 1.00	Location:	Date Range: 07/12/2006
Time Fished: 2700 sec	Drainage: 3.9 sq mi	Thru: 09/06/2006
Dist Fished: 0.24 km	Basin: Scioto River	Sampler Type: E
	No of Passes: 2	

Species Name / ODNR status	IBI Grp	Feed Guild	Breed Guild	Tol	# of Fish	Relative Number	% by Number	Relative Weight	% by Weight	Ave(gm) Weight
Creek Chub	N	G	N	T	1	1.25	100.00			
No Fish					0	0.00	0.00			
					<i>Mile Total</i>	1	1.25			
					<i>Number of Species</i>	1				
					<i>Number of Hybrids</i>	0				

Species List

River Code: 02-774	Stream: Jaybird Branch	Sample Date: 2006
River Mile: 0.80	Location:	Date Range: 07/12/2006
Time Fished: 1200 sec	Drainage: 4.7 sq mi	
Dist Fished: 0.12 km	Basin: Scioto 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
Creek Chub	N	G	N	T	139	347.50	94.56			
South. Redbelly Dace	N	H	S		6	15.00	4.08			
Green Sunfish	S	I	C	T	1	2.50	0.68			
Orangethroat Darter	D	I	S		1	2.50	0.68			
<i>Mile Total</i>					147	367.50				
<i>Number of Species</i>					4					
<i>Number of Hybrids</i>					0					

Species List

River Code: 02-774	Stream: Jaybird Branch	Sample Date: 2006
River Mile: 0.60	Location:	Date Range: 09/06/2006
Time Fished: 1800 sec	Drainage: 4.8 sq mi	
Dist Fished: 0.15 km	Basin: Scioto 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	2	4.00	0.39			
Western Blacknose Dace	N	G	S	T	3	6.00	0.58			
Creek Chub	N	G	N	T	410	820.00	79.77			
South. Redbelly Dace	N	H	S		43	86.00	8.37			
Striped Shiner	N	I	S		2	4.00	0.39			
Silverjaw Minnow	N	I	M		7	14.00	1.36			
Central Stoneroller	N	H	N		19	38.00	3.70			
Johnny Darter	D	I	C		8	16.00	1.56			
Orangethroat Darter	D	I	S		14	28.00	2.72			
Mottled Sculpin		I	C		6	12.00	1.17			
<i>Mile Total</i>					514	1,028.00				
<i>Number of Species</i>					10					
<i>Number of Hybrids</i>					0					

Species List

River Code: 02-788 Mile Range: 0.40	Stream: Straight Fork Rarden Creek	River Segment Totals Date Range: 07/11/2006
Dist Fished: 0.12 km	Basin: Scioto 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
Creek Chub	N	G	N	T	61	152.50	22.93			
South. Redbelly Dace	N	H	S		48	120.00	18.05			
Rosyside Dace [T]	N	I	S	S	143	357.50	53.76			
Orangethroat Darter	D	I	S		14	35.00	5.26			
<i>Stream Total</i>					266	665.00				
<i>Number of Species</i>					4					
<i>Number of Hybrids</i>					0					

Species List

River Code: 02-787	Stream: Bull Run	Sample Date: 2006
River Mile: 0.10	Location:	Date Range: 07/11/2006
Time Fished: 1200 sec	Drainage: 3.6 sq mi	
Dist Fished: 0.12 km	Basin: Scioto 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
Creek Chub	N	G	N	T	136	340.00	41.34			
South. Redbelly Dace	N	H	S		50	125.00	15.20			
Rosyside Dace [T]	N	I	S	S	93	232.50	28.27			
Silverjaw Minnow	N	I	M		3	7.50	0.91			
Central Stoneroller	N	H	N		15	37.50	4.56			
Orangethroat Darter	D	I	S		25	62.50	7.60			
Fantail Darter	D	I	C		7	17.50	2.13			
<i>Mile Total</i>					329	822.50				
<i>Number of Species</i>					7					
<i>Number of Hybrids</i>					0					

Species List

River Code: 02-790	Stream: Trib. to Jaybird Branch (RM 2.11)	Sample Date: 2006
River Mile: 0.10	Location:	Date Range: 09/06/2006
Time Fished: 1500 sec	Drainage: 1.5 sq mi	
Dist Fished: 0.10 km	Basin: Scioto 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
Creek Chub	N	G	N	T	4	12.00	100.00			
	<i>Mile Total</i>				4	12.00				
	<i>Number of Species</i>				1					
	<i>Number of Hybrids</i>				0					

River Mile	Drainage Area (sq mi)	Number of				Percent:					Qual. EPT	Eco-region	ICI
		Total Taxa	Mayfly Taxa	Caddisfly Taxa	Dipteran Taxa	Mayflies	Caddisflies	Tanytarsini	Other Dipt/NI	Tolerant Organisms			
Scioto Brush Creek (02-700)													
Year: 2006													
28.10	35.0	34(4)	6(4)	2(4)	18(4)	16.5(4)	0.4(2)	56.0(6)	26.4(6)	2.9(6)	14(6)	4	46
24.30	46.8	40(6)	6(4)	3(4)	16(4)	5.1(2)	0.9(2)	13.0(2)	75.9(0)	7.2(4)	13(6)	4	34
17.20	94.4	43(6)	6(4)	5(6)	21(6)	4.3(2)	8.3(4)	26.0(4)	53.3(2)	4.8(6)	17(6)	4	46
5.70	262.0	43(6)	7(4)	6(6)	18(6)	33.3(6)	8.8(2)	35.2(6)	19.0(6)	5.0(4)	15(4)	4	50
0.30	273.0	28(4)	6(4)	9(6)	4(0)	38.3(6)	27.2(6)	18.7(4)	15.1(6)	0.2(6)	22(6)	4	48
South Fork Scioto Brush Creek (02-710)													
Year: 2006													
12.30	36.4	46(6)	8(6)	3(4)	21(6)	20.7(4)	8.0(4)	5.8(2)	60.3(2)	7.3(4)	18(6)	4	44
7.00	56.0	48(6)	8(6)	3(4)	18(4)	21.9(4)	6.2(2)	3.2(2)	59.4(2)	6.0(6)	15(6)	4	42
1.10	89.5	40(6)	7(4)	4(6)	16(4)	23.2(4)	0.7(2)	9.6(2)	59.8(2)	7.6(4)	11(4)	4	38

Appendix Table 9. Ohio EPA macroinvertebrate community results from the Scioto Brush Creek watershed, 2006.

**Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection**

Site: Scioto Brush Creek

Collection Date: 08/16/2006 River Code: 02-700 RM: 38.20

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
03600	<i>Oligochaeta</i>	+			
07880	<i>Cambarus (Tubericambarus) thomai</i>	+			
21200	<i>Calopteryx sp</i>	+			
22300	<i>Argia sp</i>	+			
24900	<i>Gomphus sp</i>	+			
25510	<i>Stylogomphus albistylus</i>	+			
27340	<i>Helocordulia uhleri</i>	+			
28955	<i>Plathemis lydia</i>	+			
33100	<i>Leuctra sp</i>	+			
47600	<i>Sialis sp</i>	+			
48620	<i>Nigronia serricornis</i>	+			
51400	<i>Nyctiophylax sp</i>	+			
52315	<i>Diplectrone modesta</i>	+			
52530	<i>Hydropsyche depravata group</i>	+			
68130	<i>Helichus sp</i>	+			
71700	<i>Pilaria sp</i>	+			
71900	<i>Tipula sp</i>	+			
74501	<i>Ceratopogonidae</i>	+			
77120	<i>Ablabesmyia mallochi</i>	+			
78655	<i>Procladius (Holotanypus) sp</i>	+			
83040	<i>Dicrotendipes neomodestus</i>	+			
84470	<i>Polypedilum (P.) illinoense</i>	+			
84800	<i>Tribelos jucundum</i>	+			
85801	<i>Tanytarsus Type 1</i>	+			

No. Quantitative Taxa: 0	Total Taxa: 24
No. Qualitative Taxa: 24	ICI:
Number of Organisms: 0	Qual EPT: 4

**Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection**

Site: Scioto Brush Creek
Bettys Creek Rd.

Collection Date: 08/11/2006 River Code: 02-700 RM: 36.00

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01900	<i>Nemertea</i>	+			
06700	<i>Crangonyx sp</i>	+			
08260	<i>Orconectes (Crockerinus) sanbornii sanbornii</i>	+			
08601	<i>Hydrachnidia</i>	+			
11018	<i>Acerpenna macdunnoughi</i>	+			
11250	<i>Centroptilum sp (w/o hindwing pads)</i>	+			
11651	<i>Procloeon sp (w/o hindwing pads)</i>	+			
13400	<i>Stenacron sp</i>	+			
13590	<i>Maccaffertium vicarium</i>	+			
17200	<i>Caenis sp</i>	+			
18600	<i>Ephemera sp</i>	+			
21200	<i>Calopteryx sp</i>	+			
22300	<i>Argia sp</i>	+			
23909	<i>Boyeria vinosa</i>	+			
27340	<i>Helocordulia uhleri</i>	+			
27500	<i>Somatochlora sp</i>	+			
33100	<i>Leuctra sp</i>	+			
47600	<i>Sialis sp</i>	+			
48620	<i>Nigronia serratocornis</i>	+			
50301	<i>Chimarra aterrima</i>	+			
52200	<i>Cheumatopsyche sp</i>	+			
52530	<i>Hydropsyche depravata group</i>	+			
57900	<i>Pycnopsyche sp</i>	+			
63300	<i>Hydroporus sp</i>	+			
68075	<i>Psephenus herricki</i>	+			
71100	<i>Hexatoma sp</i>	+			
71900	<i>Tipula sp</i>	+			
72700	<i>Anopheles sp</i>	+			
74501	<i>Ceratopogonidae</i>	+			
77120	<i>Ablabesmyia mallochi</i>	+			
77800	<i>Helopelopia sp</i>	+			
78655	<i>Procladius (Holotanypus) sp</i>	+			
81650	<i>Parametriocnemus sp</i>	+			
84210	<i>Paratendipes albimanus or P. duplicatus</i>	+			
84800	<i>Tribelos jucundum</i>	+			
85801	<i>Tanytarsus Type 1</i>	+			
85815	<i>Tanytarsus glabrescens group sp 1</i>	+			
93900	<i>Elimia sp</i>	+			

No. Quantitative Taxa: 0 Total Taxa: 38
 No. Qualitative Taxa: 38 ICI:
 Number of Organisms: 0 Qual EPT: 12

Ohio EPA/DSW Ecological Assessment Section
 Macroinvertebrate Collection

Site: Scioto Brush Creek

Collection Date: 08/16/2006 River Code: 02-700 RM: 33.60

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
03360	<i>Plumatella sp</i>	+	84210	<i>Paratendipes albimanus or P. duplicatus</i>	+
03600	<i>Oligochaeta</i>	+	84750	<i>Stictochironomus sp</i>	+
08260	<i>Orconectes (Crockerinus) sanbornii sanbornii</i>	+	85201	<i>Cladotanytarsus species group A</i>	+
11120	<i>Baetis flavistriga</i>	+	85230	<i>Cladotanytarsus mancus group</i>	+
11250	<i>Centroptilum sp (w/o hindwing pads)</i>	+	85625	<i>Rheotanytarsus sp</i>	+
13400	<i>Stenacron sp</i>	+	93900	<i>Elimia sp</i>	+
13521	<i>Stenonema femoratum</i>	+	95100	<i>Physella sp</i>	+
13590	<i>Maccaffertium vicarium</i>	+	96002	<i>Helisoma anceps anceps</i>	+
15000	<i>Paraleptophlebia sp</i>	+	96900	<i>Ferrissia sp</i>	+
17200	<i>Caenis sp</i>	+	98600	<i>Sphaerium sp</i>	+
22001	<i>Coenagrionidae</i>	+			
23909	<i>Boyeria vinosa</i>	+	No. Quantitative Taxa: 0		Total Taxa: 54
24900	<i>Gomphus sp</i>	+	No. Qualitative Taxa: 54		ICI:
25510	<i>Stylogomphus albistylus</i>	+	Number of Organisms: 0		Qual EPT: 16
26120	<i>Cordulegaster maculata</i>	+			
26700	<i>Macromia sp</i>	+			
28500	<i>Libellula sp</i>	+			
44501	<i>Corixidae</i>	+			
47600	<i>Sialis sp</i>	+			
48410	<i>Corydalus cornutus</i>	+			
48620	<i>Nigronia serricornis</i>	+			
50301	<i>Chimarra aterrima</i>	+			
50315	<i>Chimarra obscura</i>	+			
51400	<i>Nyctiophylax sp</i>	+			
52200	<i>Cheumatopsyche sp</i>	+			
52430	<i>Ceratopsyche morosa group</i>	+			
52530	<i>Hydropsyche depravata group</i>	+			
57400	<i>Neophylax sp</i>	+			
57900	<i>Pycnopsyche sp</i>	+			
59720	<i>Triaenodes ignitus</i>	+			
59970	<i>Petrophila sp</i>	+			
60300	<i>Dineutus sp</i>	+			
60900	<i>Peltodytes sp</i>	+			
68075	<i>Psephenus herricki</i>	+			
68130	<i>Helichus sp</i>	+			
68601	<i>Ancyronyx variegata</i>	+			
69225	<i>Optioservus fastiditus</i>	+			
69275	<i>Optioservus trivittatus</i>	+			
69400	<i>Stenelmis sp</i>	+			
77120	<i>Ablabesmyia mallochi</i>	+			
77800	<i>Helopelopia sp</i>	+			
78401	<i>Natarsia species A (sensu Roback, 1978)</i>	+			
83840	<i>Microtendipes pedellus group</i>	+			
84155	<i>Paralauterborniella nigrohalteralis</i>	+			

Ohio EPA/DSW Ecological Assessment Section
 Macroinvertebrate Collection

Site: Scioto Brush Creek

Collection Date: 09/05/2006 River Code: 02-700 RM: 28.10

St. Rt. 73 dst. Coffee Hollow

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
00556	<i>Ephydatia fluviatilis</i>	+	81825	<i>Rheocricotopus (Psilocricotopus) robacki</i>	10
03360	<i>Plumatella sp</i>	+	82121	<i>Thienemanniella lobapodema</i>	8
03600	<i>Oligochaeta</i>	18 +	82141	<i>Thienemanniella xena</i>	40
08260	<i>Orconectes (Crockerinus) sanbornii sanbornii</i>	+	83840	<i>Microtendipes pedellus group</i>	+
08601	<i>Hydrachnidia</i>	1	84210	<i>Paratendipes albimanus or P. duplicatus</i>	10
11130	<i>Baetis intercalaris</i>	8 +	84450	<i>Polypedilum (Uresipedilum) flavum</i>	10
11250	<i>Centroptilum sp (w/o hindwing pads)</i>	+	84460	<i>Polypedilum (P.) fallax group</i>	10 +
12200	<i>Isonychia sp</i>	1 +	85625	<i>Rheotanytarsus sp</i>	311 +
13400	<i>Stenacron sp</i>	+	85720	<i>Stempellinella fimbriata</i>	10
13521	<i>Stenonema femoratum</i>	2 +	85800	<i>Tanytarsus sp</i>	70 +
13590	<i>Maccaffertium vicarium</i>	93 +	85802	<i>Tanytarsus curticornis</i>	211
16200	<i>Eurylophella sp</i>	5	85821	<i>Tanytarsus glabrescens group sp 7</i>	121
17200	<i>Caenis sp</i>	104 +	87540	<i>Hemerodromia sp</i>	24 +
18600	<i>Ephemera sp</i>	+	93900	<i>Elimia sp</i>	3 +
21200	<i>Calopteryx sp</i>	+	96900	<i>Ferrissia sp</i>	9
22001	<i>Coenagrionidae</i>	+	97601	<i>Corbicula fluminea</i>	+
22300	<i>Argia sp</i>	2 +	98600	<i>Sphaerium sp</i>	2 +
24900	<i>Gomphus sp</i>	+			
25510	<i>Stylogomphus albistylus</i>	+	No. Quantitative Taxa: 34		Total Taxa: 61
27340	<i>Helocordulia uhleri</i>	+	No. Qualitative Taxa: 44		ICI: 46
45400	<i>Trichocorixa sp</i>	+	Number of Organisms: 1291		Qual EPT: 14
47600	<i>Sialis sp</i>	+			
48410	<i>Corydalus cornutus</i>	4 +			
48620	<i>Nigronia serricornis</i>	+			
50301	<i>Chimarra aterrima</i>	+			
50315	<i>Chimarra obscura</i>	+			
52200	<i>Cheumatopsyche sp</i>	4 +			
52430	<i>Ceratopsyche morosa group</i>	+			
57900	<i>Pycnopsyche sp</i>	+			
59110	<i>Ceraclea ancylus</i>	+			
59500	<i>Oecetis sp</i>	1			
59970	<i>Petrophila sp</i>	+			
60900	<i>Peltodytes sp</i>	+			
68075	<i>Psephenus herricki</i>	+			
68708	<i>Dubiraphia vittata group</i>	+			
68901	<i>Macronychus glabratus</i>	3 +			
74100	<i>Simulium sp</i>	+			
77500	<i>Conchapelopia sp</i>	40			
77750	<i>Hayesomyia senata or Thienemannimyia norena</i>	10			
77800	<i>Helopelopia sp</i>	30 +			
78401	<i>Natarsia species A (sensu Roback, 1978)</i>	+			
78450	<i>Nilotanypus fimbriatus</i>	10			
80370	<i>Corynoneura lobata</i>	96			
81650	<i>Parametriocnemus sp</i>	10			

Ohio EPA/DSW Ecological Assessment Section
 Macroinvertebrate Collection

Site: Scioto Brush Creek

Collection Date: 09/05/2006 River Code: 02-700 RM: 24.30

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01801	<i>Turbellaria</i>	2	77500	<i>Conchapelopia sp</i>	6 +
01900	<i>Nemertea</i>	6	77800	<i>Helopelopia sp</i>	3 +
03600	<i>Oligochaeta</i>	1 +	78140	<i>Labrundinia pilosella</i>	9
08260	<i>Orconectes (Crockerinus) sanbornii sanbornii</i>	+	80370	<i>Corynoneura lobata</i>	11
08601	<i>Hydrachnidia</i>	4 +	81825	<i>Rheocricotopus (Psilocricotopus) robacki</i>	3
11250	<i>Centroptilum sp (w/o hindwing pads)</i>	+	82121	<i>Thienemanniella lobapodema</i>	2
11651	<i>Procloeon sp (w/o hindwing pads)</i>	1	82141	<i>Thienemanniella xena</i>	2
13400	<i>Stenacron sp</i>	4 +	82600	<i>Axarus sp</i>	+
13500	<i>Maccaffertium sp</i>	1	83300	<i>Glyptotendipes (G.) sp</i>	1
13521	<i>Stenonema femoratum</i>	+	84450	<i>Polypedilum (Uresipedilum) flavum</i>	1
14950	<i>Leptophlebia sp or Paraleptophlebia sp</i>	1 +	84460	<i>Polypedilum (P.) fallax group</i>	3
16200	<i>Eurylophella sp</i>	3 +	84750	<i>Stictochironomus sp</i>	+
17200	<i>Caenis sp</i>	7 +	85615	<i>Rheotanytarsus pellucidus</i>	1
21200	<i>Calopteryx sp</i>	2 +	85625	<i>Rheotanytarsus sp</i>	11
22001	<i>Coenagrionidae</i>	+	85802	<i>Tanytarsus curticornis</i>	26
22300	<i>Argia sp</i>	3 +	85821	<i>Tanytarsus glabrescens group sp 7</i>	5
23804	<i>Basiaeschna janata</i>	+	87540	<i>Hemerodromia sp</i>	8
23909	<i>Boyeria vinosa</i>	+	93900	<i>Elimia sp</i>	169 +
24900	<i>Gomphus sp</i>	+	95100	<i>Physella sp</i>	7 +
25510	<i>Stylogomphus albistylus</i>	+	96900	<i>Ferrissia sp</i>	13
27340	<i>Helocordulia uhleri</i>	+	97601	<i>Corbicula fluminea</i>	+
34130	<i>Acroneuria frisoni</i>	2	99440	<i>Fusconaia flava</i>	+
47600	<i>Sialis sp</i>	+	99860	<i>Lampsilis radiata luteola</i>	+
48410	<i>Corydalus cornutus</i>	1 +			
48620	<i>Nigronia serricornis</i>	1 +	No. Quantitative Taxa: 40		Total Taxa: 67
50301	<i>Chimarra aterrima</i>	+	No. Qualitative Taxa: 45		ICI: 34
50315	<i>Chimarra obscura</i>	+	Number of Organisms: 332		Qual EPT: 13
50804	<i>Lype diversa</i>	1			
50906	<i>Psychomyia flavida</i>	+			
51400	<i>Nyctiophylax sp</i>	1 +			
51600	<i>Polycentropus sp</i>	1			
52200	<i>Cheumatopsyche sp</i>	+			
59500	<i>Oecetis sp</i>	+			
59700	<i>Triaenodes sp</i>	+			
59970	<i>Petrophila sp</i>	+			
60300	<i>Dineutus sp</i>	+			
68075	<i>Psephenus herricki</i>	+			
68130	<i>Helichus sp</i>	1 +			
68601	<i>Ancyronyx variegata</i>	+			
68708	<i>Dubiraphia vittata group</i>	1 +			
68901	<i>Macronychus glabratus</i>	6 +			
74100	<i>Simulium sp</i>	+			
74501	<i>Ceratopogonidae</i>	1			
77120	<i>Ablabesmyia mallochi</i>	+			

Ohio EPA/DSW Ecological Assessment Section
 Macroinvertebrate Collection

Site: Scioto Brush Creek
 upst. St. Rt. 348

Collection Date: 09/07/2006 River Code: 02-700 RM: 17.20

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01320	<i>Hydra sp</i>	115	81650	<i>Parametrioctenus sp</i>	5
01801	<i>Turbellaria</i>	+	81825	<i>Rheocricotopus (Psilocricotopus) robacki</i>	15 +
03600	<i>Oligochaeta</i>	48 +	82101	<i>Thienemanniella taurocapita</i>	9
08260	<i>Orconectes (Crockerinus) sanbornii sanbornii</i>	+	82141	<i>Thienemanniella xena</i>	16
08601	<i>Hydrachnidia</i>	+	82730	<i>Chironomus (C.) decorus group</i>	+
11120	<i>Baetis flavistriga</i>	2 +	83003	<i>Dicrotendipes fumidus</i>	+
12200	<i>Isonychia sp</i>	1 +	84210	<i>Paratendipes albimanus or P. duplicatus</i>	+
13400	<i>Stenacron sp</i>	5 +	84450	<i>Polypedilum (Uresipedilum) flavum</i>	152
13590	<i>Maccaffertium vicarium</i>	33 +	84460	<i>Polypedilum (P.) fallax group</i>	5
16200	<i>Eurylophella sp</i>	+	84470	<i>Polypedilum (P.) illinoense</i>	5
16700	<i>Tricorythodes sp</i>	1 +	84750	<i>Stictochironomus sp</i>	+
17200	<i>Caenis sp</i>	10 +	84800	<i>Tribelos jucundum</i>	+
22300	<i>Argia sp</i>	1 +	84960	<i>Pseudochironomus sp</i>	+
25510	<i>Stylogomphus albistylus</i>	+	85400	<i>Micropsectra sp</i>	+
27340	<i>Helocordulia uhleri</i>	+	85615	<i>Rheotanytarsus pellucidus</i>	137
34130	<i>Acroneuria frisoni</i>	7 +	85625	<i>Rheotanytarsus sp</i>	103
45300	<i>Sigara sp</i>	+	85800	<i>Tanytarsus sp</i>	29 +
47600	<i>Sialis sp</i>	+	85821	<i>Tanytarsus glabrescens group sp 7</i>	24
48410	<i>Corydalus cornutus</i>	34 +	85840	<i>Tanytarsus sepp</i>	20
50315	<i>Chimarra obscura</i>	35 +	87540	<i>Hemerodromia sp</i>	40
51400	<i>Nyctiophylax sp</i>	+	93900	<i>Elimia sp</i>	133 +
51600	<i>Polycentropus sp</i>	+	95100	<i>Physella sp</i>	+
52200	<i>Cheumatopsyche sp</i>	5 +	96002	<i>Helisoma anceps anceps</i>	+
52530	<i>Hydropsyche depravata group</i>	+	96120	<i>Menetus (Micromenetus) dilatatus</i>	2
52540	<i>Hydropsyche dicantha</i>	27 +	96930	<i>Laevapex fuscus</i>	1
52620	<i>Macrostemum zebratum</i>	3 +	97601	<i>Corbicula fluminea</i>	1 +
57400	<i>Neophylax sp</i>	+			
59110	<i>Ceraclea ancylus</i>	+	No. Quantitative Taxa: 43		Total Taxa: 69
59500	<i>Oecetis sp</i>	30	No. Qualitative Taxa: 48		ICI: 46
60300	<i>Dineutus sp</i>	+	Number of Organisms: 1204		Qual EPT: 17
68075	<i>Psephenus herricki</i>	8			
68130	<i>Helichus sp</i>	+			
68901	<i>Macronychus glabratus</i>	47 +			
69400	<i>Stenelmis sp</i>	+			
71900	<i>Tipula sp</i>	2			
74100	<i>Simulium sp</i>	5 +			
77500	<i>Conchapelopia sp</i>	15 +			
77750	<i>Hayesomyia senata or Thienemannimyia norena</i>	10			
77800	<i>Helopelopia sp</i>	5 +			
78402	<i>Natarsia baltimoreus</i>	+			
78450	<i>Nilotanypus fimbriatus</i>	13			
80360	<i>Corynoneura "celeripes" (sensu Simpson & Bode, 1980)</i>	24			
80370	<i>Corynoneura lobata</i>	21			

Ohio EPA/DSW Ecological Assessment Section
 Macroinvertebrate Collection

Site: Scioto Brush Creek

Collection Date: 09/12/2006 River Code: 02-700 RM: 12.10

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01801	<i>Turbellaria</i>	+	72700	<i>Anopheles sp</i>	+
03040	<i>Fredericella sp</i>	+	74501	<i>Ceratopogonidae</i>	+
03360	<i>Plumatella sp</i>	+	77120	<i>Ablabesmyia mallochi</i>	+
03600	<i>Oligochaeta</i>	+	77355	<i>Clinotanypus pinguis</i>	+
08260	<i>Orconectes (Crockerinus) sanbornii sanbornii</i>	+	78140	<i>Labrundinia pilosella</i>	+
08601	<i>Hydrachnidia</i>	+	78655	<i>Procladius (Holotanypus) sp</i>	+
11130	<i>Baetis intercalaris</i>	+	82885	<i>Cryptotendipes pseudotener</i>	+
11250	<i>Centroptilum sp (w/o hindwing pads)</i>	+	84060	<i>Parachironomus pectinatellae</i>	+
12200	<i>Isonychia sp</i>	+	84470	<i>Polypedilum (P.) illinoense</i>	+
13400	<i>Stenacron sp</i>	+	84750	<i>Stictochironomus sp</i>	+
13510	<i>Maccaffertium exiguum</i>	+	85500	<i>Paratanytarsus sp</i>	+
13561	<i>Maccaffertium pulchellum</i>	+	85625	<i>Rheotanytarsus sp</i>	+
13590	<i>Maccaffertium vicarium</i>	+	85800	<i>Tanytarsus sp</i>	+
16200	<i>Eurylophella sp</i>	+	85801	<i>Tanytarsus Type 1</i>	+
16700	<i>Tricorythodes sp</i>	+	85815	<i>Tanytarsus glabrescens group sp 1</i>	+
17200	<i>Caenis sp</i>	+	93200	<i>Hydrobiidae</i>	+
18600	<i>Ephemera sp</i>	+	93900	<i>Elimia sp</i>	+
22001	<i>Coenagrionidae</i>	+	95100	<i>Physella sp</i>	+
22300	<i>Argia sp</i>	+	96002	<i>Helisoma anceps anceps</i>	+
24900	<i>Gomphus sp</i>	+	97601	<i>Corbicula fluminea</i>	+
25010	<i>Hagenius brevistylus</i>	+			
25510	<i>Stylogomphus albistylus</i>	+	No. Quantitative Taxa: 0		Total Taxa: 64
26700	<i>Macromia sp</i>	+	No. Qualitative Taxa: 64		ICI:
27400	<i>Neurocordulia sp</i>	+	Number of Organisms: 0		Qual EPT: 19
34130	<i>Acroneuria frisoni</i>	+			
43300	<i>Ranatra sp</i>	+			
47600	<i>Sialis sp</i>	+			
48410	<i>Corydalus cornutus</i>	+			
48620	<i>Nigronia serricornis</i>	+			
50315	<i>Chimarra obscura</i>	+			
52200	<i>Cheumatopsyche sp</i>	+			
52540	<i>Hydropsyche dicantha</i>	+			
52620	<i>Macrostemum zebratum</i>	+			
57400	<i>Neophylax sp</i>	+			
57900	<i>Pycnopsyche sp</i>	+			
59110	<i>Ceraclea anelylus</i>	+			
59970	<i>Petrophila sp</i>	+			
60300	<i>Dineutus sp</i>	+			
68025	<i>Ectopria 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>	+			

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: Scioto Brush Creek

Collection Date: 09/08/2006 River Code: 02-700 RM: 5.70

dst. Tatum Coe Rd.

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
03040	<i>Fredericella sp</i>	1	74501	<i>Ceratopogonidae</i>	+
03451	<i>Urnatella gracilis</i>	8	77120	<i>Ablabesmyia mallochi</i>	12 +
03600	<i>Oligochaeta</i>	128 +	77750	<i>Hayesomyia senata or Thienemannimyia norena</i>	36
05800	<i>Caecidotea sp</i>	+	77800	<i>Helopelopia sp</i>	47 +
06201	<i>Hyaella azteca</i>	+	78450	<i>Nilotanypus fimbriatus</i>	24
06830	<i>Gammarus minus</i>	+	80370	<i>Corynoneura lobata</i>	32
08260	<i>Orconectes (Crockerinus) sanbornii sanbornii</i>	+	80410	<i>Cricotopus (C.) sp</i>	71
08451	<i>Palaemonetes kadiakensis</i>	+	81650	<i>Parametriocnemus sp</i>	12
08601	<i>Hydrachnidia</i>	1	81825	<i>Rheocricotopus (Psilocricotopus) robacki</i>	36
11670	<i>Procloeon viridoculare</i>	+	82885	<i>Cryptotendipes pseudotener</i>	+
12200	<i>Isonychia sp</i>	37 +	83840	<i>Microtendipes pedellus group</i>	+
13400	<i>Stenacron sp</i>	27 +	83900	<i>Nilothauma sp</i>	12
13561	<i>Maccaffertium pulchellum</i>	446 +	84450	<i>Polypedilum (Uresipedilum) flavum</i>	83
13590	<i>Maccaffertium vicarium</i>	7 +	84540	<i>Polypedilum (Tripodura) scalaenum group</i>	12 +
16200	<i>Eurylophella sp</i>	8 +	85263	<i>Cladotanytarsus vanderwulpi group Type 3</i>	12
16700	<i>Tricorythodes sp</i>	62 +	85615	<i>Rheotanytarsus pellucidus</i>	12
17200	<i>Caenis sp</i>	411 +	85625	<i>Rheotanytarsus sp</i>	439
18600	<i>Ephemera sp</i>	+	85800	<i>Tanytarsus sp</i>	71
18750	<i>Hexagenia limbata</i>	+	85802	<i>Tanytarsus curticornis</i>	47
22001	<i>Coenagrionidae</i>	+	85821	<i>Tanytarsus glabrescens group sp 7</i>	415
22300	<i>Argia sp</i>	16 +	85840	<i>Tanytarsus sepp</i>	59
23804	<i>Basiaeschna janata</i>	+	93200	<i>Hydrobiidae</i>	+
24900	<i>Gomphus sp</i>	+	93900	<i>Elimia sp</i>	29 +
25510	<i>Stylogomphus albistylus</i>	+	96002	<i>Helisoma anceps anceps</i>	+
27406	<i>Neurocordulia obsoleta</i>	+	96120	<i>Menetus (Micromenetus) dilatatus</i>	2
43300	<i>Ranatra sp</i>	+	96900	<i>Ferrissia sp</i>	22
45400	<i>Trichocorixa sp</i>	+	97601	<i>Corbicula fluminea</i>	+
47600	<i>Sialis sp</i>	+			
48410	<i>Corydalus cornutus</i>	12 +	No. Quantitative Taxa: 43		Total Taxa: 71
48620	<i>Nigronia serricornis</i>	+	No. Qualitative Taxa: 49		ICI: 50
50315	<i>Chimarra obscura</i>	2 +	Number of Organisms: 2997		Qual EPT: 15
51300	<i>Neureclipsis sp</i>	157 +			
52200	<i>Cheumatopsyche sp</i>	1			
52620	<i>Macrostemum zebratum</i>	4 +			
53800	<i>Hydroptila sp</i>	17 +			
57400	<i>Neophylax sp</i>	+			
59500	<i>Oecetis sp</i>	83			
59970	<i>Petrophila sp</i>	+			
68025	<i>Ectopria sp</i>	+			
68075	<i>Psephenus herricki</i>	+			
68130	<i>Helichus sp</i>	3 +			
68708	<i>Dubiraphia vittata group</i>	+			
68901	<i>Macronychus glabratus</i>	80 +			
69400	<i>Stenelmis sp</i>	1 +			

**Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection**

Site: Scioto Brush Creek
St. Rt. 104

Collection Date: 09/08/2006 River Code: 02-700 RM: 0.30

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
00401	<i>Spongillidae</i>	+	59970	<i>Petrophila sp</i>	1 +
01320	<i>Hydra sp</i>	19	66500	<i>Enochrus sp</i>	+
03600	<i>Oligochaeta</i>	8 +	68025	<i>Ectopria sp</i>	+
06201	<i>Hyalella azteca</i>	+	68075	<i>Psephenus herricki</i>	+
08260	<i>Orconectes (Crockerinus) sanbornii sanbornii</i>	+	68130	<i>Helichus sp</i>	+
08451	<i>Palaemonetes kadiakensis</i>	+	68601	<i>Ancyronyx variegata</i>	1
08601	<i>Hydrachnidia</i>	25 +	78655	<i>Procladius (Holotanypus) sp</i>	+
11130	<i>Baetis intercalaris</i>	352 +	83840	<i>Microtendipes pedellus group</i>	+
11200	<i>Callibaetis sp</i>	+	84300	<i>Phaenopsectra obediens group</i>	+
11250	<i>Centroptilum sp (w/o hindwing pads)</i>	+	84450	<i>Polypedilum (Uresipedilum) flavum</i>	717 +
11670	<i>Proclaeon viridoculare</i>	+	84540	<i>Polypedilum (Tripodura) scalaenum group</i>	+
12200	<i>Isonychia sp</i>	95 +	84700	<i>Stenochironomus sp</i>	+
13400	<i>Stenacron sp</i>	+	84960	<i>Pseudochironomus sp</i>	+
13510	<i>Maccaffertium exiguum</i>	487 +	85625	<i>Rheotanytarsus sp</i>	927
13521	<i>Stenonema femoratum</i>	+	85800	<i>Tanytarsus sp</i>	+
13561	<i>Maccaffertium pulchellum</i>	568 +	85814	<i>Tanytarsus glabrescens group</i>	52
13590	<i>Maccaffertium vicarium</i>	81	85840	<i>Tanytarsus sepp</i>	+
16200	<i>Eurylophella sp</i>	+	87540	<i>Hemerodromia sp</i>	8
16700	<i>Tricorythodes sp</i>	424 +	93900	<i>Elimia sp</i>	11 +
17200	<i>Caenis sp</i>	+	94400	<i>Fossaria sp</i>	+
21300	<i>Hetaerina sp</i>	16 +	95100	<i>Physella sp</i>	+
22001	<i>Coenagrionidae</i>	+	96002	<i>Helisoma anceps anceps</i>	+
22300	<i>Argia sp</i>	+	98600	<i>Sphaerium sp</i>	+
23804	<i>Basiaeschna janata</i>	+			
24900	<i>Gomphus sp</i>	+	No. Quantitative Taxa: 28		Total Taxa: 67
26700	<i>Macromia sp</i>	+	No. Qualitative Taxa: 57		ICI: 48
27500	<i>Somatochlora sp</i>	+	Number of Organisms: 5234		Qual EPT: 22
34130	<i>Acroneuria frisoni</i>	1 +			
45400	<i>Trichocorixa sp</i>	+			
47600	<i>Sialis sp</i>	+			
48410	<i>Corydalis cornutus</i>	16 +			
50315	<i>Chimarra obscura</i>	217 +			
51206	<i>Cyrnellus fraternus</i>	2			
51300	<i>Neureclipsis sp</i>	51 +			
52200	<i>Cheumatopsyche sp</i>	517 +			
52430	<i>Ceratopsyche morosa group</i>	115 +			
52510	<i>Hydropsyche aerata</i>	14			
52540	<i>Hydropsyche dicantha</i>	488			
52620	<i>Macrostemum zebratum</i>	+			
53800	<i>Hydroptila sp</i>	5			
57900	<i>Pycnopsyche sp</i>	+			
59110	<i>Ceraclea ancylus</i>	+			
59500	<i>Oecetis sp</i>	16 +			
59724	<i>Triaenodes injustus</i>	+			

**Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection**

Site: Duck Run

Collection Date: 06/26/2006 River Code: 02-701 RM: 1.60

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
03360	<i>Plumatella sp</i>	+			
03600	<i>Oligochaeta</i>	+			
08260	<i>Orconectes (Crockerinus) sanbornii sanbornii</i>	+			
11120	<i>Baetis flavistriga</i>	+			
13521	<i>Stenonema femoratum</i>	+			
17200	<i>Caenis sp</i>	+			
22001	<i>Coenagrionidae</i>	+			
32200	<i>Amphinemura sp</i>	+			
34300	<i>Neoperla clymene complex</i>	+			
47600	<i>Sialis sp</i>	+			
48620	<i>Nigronia serratocornis</i>	+			
51400	<i>Nyctiophylax sp</i>	+			
51600	<i>Polycentropus sp</i>	+			
52200	<i>Cheumatopsyche sp</i>	+			
53800	<i>Hydroptila sp</i>	+			
68075	<i>Psephenus herricki</i>	+			
69400	<i>Stenelmis sp</i>	+			
71300	<i>Limonia sp</i>	+			
71900	<i>Tipula sp</i>	+			
77500	<i>Conchapelopia sp</i>	+			
77800	<i>Helopelopia sp</i>	+			
82141	<i>Thienemanniella xena</i>	+			
82200	<i>Tvetenia bavarica group</i>	+			
82820	<i>Cryptochironomus sp</i>	+			
83820	<i>Microtendipes "caelum" (sensu Simpson & Bode, 1980)</i>	+			
84440	<i>Polypedilum (Uresipedilum) aviceps</i>	+			
84450	<i>Polypedilum (Uresipedilum) flavum</i>	+			
84750	<i>Stictochironomus sp</i>	+			
85625	<i>Rheotanytarsus sp</i>	+			

No. Quantitative Taxa: 0	Total Taxa: 29
No. Qualitative Taxa: 29	ICI:
Number of Organisms: 0	Qual EPT: 9

**Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection**

Site: McCullough Creek

Collection Date: 07/10/2006 River Code: 02-703 RM: 1.30

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
07820	<i>Cambarus (Cambarus) sp A</i>	+			
11012	<i>Acentrella n.sp 1</i>	+			
13400	<i>Stenacron sp</i>	+			
13521	<i>Stenonema femoratum</i>	+			
13590	<i>Maccaffertium vicarium</i>	+			
17200	<i>Caenis sp</i>	+			
33100	<i>Leuctra sp</i>	+			
34130	<i>Acroneuria frisoni</i>	+			
47600	<i>Sialis sp</i>	+			
50301	<i>Chimarra aterrima</i>	+			
52200	<i>Cheumatopsyche sp</i>	+			
68075	<i>Psephenus herricki</i>	+			
77500	<i>Conchapelopia sp</i>	+			
77800	<i>Helopelopia sp</i>	+			
83003	<i>Dicrotendipes fumidus</i>	+			
83840	<i>Microtendipes pedellus group</i>	+			
84210	<i>Paratendipes albimanus or P. duplicatus</i>	+			
84440	<i>Polypedilum (Uresipedilum) aviceps</i>	+			
85625	<i>Rheotanytarsus sp</i>	+			
85802	<i>Tanytarsus curticornis</i>	+			
85821	<i>Tanytarsus glabrescens group sp 7</i>	+			
87540	<i>Hemerodromia sp</i>	+			

No. Quantitative Taxa: 0	Total Taxa: 22
No. Qualitative Taxa: 22	ICI:
Number of Organisms: 0	Qual EPT: 9

**Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection**

Site: McCullough Creek

Collection Date: 07/10/2006 River Code: 02-703 RM: 0.70

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
03600	<i>Oligochaeta</i>	+			
06700	<i>Crangonyx sp</i>	+			
08260	<i>Orconectes (Crockerinus) sanbornii sanbornii</i>	+			
08601	<i>Hydrachnidia</i>	+			
11250	<i>Centroptilum sp (w/o hindwing pads)</i>	+			
11650	<i>Procloeon sp (w/ hindwing pads)</i>	+			
11651	<i>Procloeon sp (w/o hindwing pads)</i>	+			
13400	<i>Stenacron sp</i>	+			
13521	<i>Stenonema femoratum</i>	+			
13590	<i>Maccaffertium vicarium</i>	+			
14600	<i>Choroterpes sp</i>	+			
17200	<i>Caenis sp</i>	+			
25510	<i>Stylogomphus albistylus</i>	+			
26700	<i>Macromia sp</i>	+			
34130	<i>Acroneuria frisoni</i>	+			
34300	<i>Neoperla clymene complex</i>	+			
47600	<i>Sialis sp</i>	+			
48620	<i>Nigronia serricornis</i>	+			
51400	<i>Nyctiophylax sp</i>	+			
51600	<i>Polycentropus sp</i>	+			
52200	<i>Cheumatopsyche sp</i>	+			
53501	<i>Hydroptilidae</i>	+			
63300	<i>Hydroporus sp</i>	+			
68025	<i>Ectopria sp</i>	+			
68075	<i>Psephenus herricki</i>	+			
71100	<i>Hexatoma sp</i>	+			
71900	<i>Tipula sp</i>	+			
77800	<i>Helopelopia sp</i>	+			
83840	<i>Microtendipes pedellus group</i>	+			
84210	<i>Paratendipes albimanus or P. duplicatus</i>	+			
84300	<i>Phaenopsectra obediens group</i>	+			
84460	<i>Polypedilum (P.) fallax group</i>	+			
84540	<i>Polypedilum (Tripodura) scalaenum group</i>	+			
84750	<i>Stictochironomus sp</i>	+			
85625	<i>Rheotanytarsus sp</i>	+			
87540	<i>Hemerodromia sp</i>	+			

No. Quantitative Taxa: 0 Total Taxa: 36
 No. Qualitative Taxa: 36 ICI:
 Number of Organisms: 0 Qual EPT: 14

Ohio EPA/DW Ecological Assessment Section
 Macroinvertebrate Collection

Site: East Branch McCullough Creek

Collection Date: 06/26/2006 River Code: 02-704 RM: 3.40

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
03360	<i>Plumatella sp</i>	+	95100	<i>Physella sp</i>	+
03600	<i>Oligochaeta</i>	+			
08260	<i>Orconectes (Crockerinus) sanbornii sanbornii</i>	+	No. Quantitative Taxa: 0		Total Taxa: 44
11120	<i>Baetis flavistriga</i>	+	No. Qualitative Taxa: 44		ICI:
11130	<i>Baetis intercalaris</i>	+	Number of Organisms: 0		Qual EPT: 9
13521	<i>Stenonema femoratum</i>	+			
14700	<i>Habrophlebiodes sp</i>	+			
17200	<i>Caenis sp</i>	+			
22300	<i>Argia sp</i>	+			
25510	<i>Stylogomphus albistylus</i>	+			
44501	<i>Corixidae</i>	+			
50301	<i>Chimarra aterrima</i>	+			
52200	<i>Cheumatopsyche sp</i>	+			
52530	<i>Hydropsyche depravata group</i>	+			
53800	<i>Hydroptila sp</i>	+			
60900	<i>Peltodytes sp</i>	+			
68075	<i>Psephenus herricki</i>	+			
68130	<i>Helichus sp</i>	+			
69400	<i>Stenelmis sp</i>	+			
70600	<i>Antocha sp</i>	+			
71100	<i>Hexatoma sp</i>	+			
71900	<i>Tipula sp</i>	+			
74100	<i>Simulium 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>	+			
80351	<i>Corynoneura n.sp 1</i>	+			
81825	<i>Rheocricotopus (Psilocricotopus) robacki</i>	+			
82141	<i>Thienemanniella xena</i>	+			
83003	<i>Dicrotendipes fumidus</i>	+			
83040	<i>Dicrotendipes neomodestus</i>	+			
83820	<i>Microtendipes "caelum" (sensu Simpson & Bode, 1980)</i>	+			
83840	<i>Microtendipes pedellus group</i>	+			
84210	<i>Paratendipes albimanus or P. duplicatus</i>	+			
84300	<i>Phaenopsectra obediens group</i>	+			
84440	<i>Polypedilum (Uresipedilum) aviceps</i>	+			
84450	<i>Polypedilum (Uresipedilum) flavum</i>	+			
84470	<i>Polypedilum (P.) illinoense</i>	+			
84750	<i>Stictochironomus sp</i>	+			
85625	<i>Rheotanytarsus sp</i>	+			
85818	<i>Tanytarsus glabrescens group sp 4</i>	+			
85821	<i>Tanytarsus glabrescens group sp 7</i>	+			

**Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection**

Site: East Branch McCullough Creek

Collection Date: 06/26/2006 River Code: 02-704 RM: 1.80

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
03600	<i>Oligochaeta</i>	+			
06700	<i>Crangonyx sp</i>	+			
07801	<i>Cambarus (C.) sp</i>	+			
08260	<i>Orconectes (Crockerinus) sanbornii sanbornii</i>	+			
13521	<i>Stenonema femoratum</i>	+			
14600	<i>Choroterpes sp</i>	+			
22300	<i>Argia sp</i>	+			
25510	<i>Stylogomphus albistylus</i>	+			
48410	<i>Corydalis cornutus</i>	+			
48620	<i>Nigronia serricornis</i>	+			
52200	<i>Cheumatopsyche sp</i>	+			
68075	<i>Psephenus herricki</i>	+			
71100	<i>Hexatoma sp</i>	+			
78655	<i>Procladius (Holotanypus) sp</i>	+			
80410	<i>Cricotopus (C.) sp</i>	+			
83820	<i>Microtendipes "caelum" (sensu Simpson & Bode, 1980)</i>	+			
83840	<i>Microtendipes pedellus group</i>	+			
84750	<i>Stictochironomus sp</i>	+			
85625	<i>Rheotanytarsus sp</i>	+			
95100	<i>Physella sp</i>	+			

No. Quantitative Taxa: 0	Total Taxa: 20
No. Qualitative Taxa: 20	ICI:
Number of Organisms: 0	Qual EPT: 3

Ohio EPA/DSW Ecological Assessment Section
 Macroinvertebrate Collection

Site: Bear Creek

Collection Date: 06/29/2006 River Code: 02-705 RM: 5.10

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01801	<i>Turbellaria</i>	+			
03600	<i>Oligochaeta</i>	+	No. Quantitative Taxa: 0		Total Taxa: 43
05900	<i>Lirceus sp</i>	+	No. Qualitative Taxa: 43		ICI:
07840	<i>Cambarus (Cambarus) sciotensis</i>	+	Number of Organisms: 0		Qual EPT: 13
08260	<i>Orconectes (Crockerinus) sanbornii sanbornii</i>	+			
11120	<i>Baetis flavistriga</i>	+			
11250	<i>Centroptilum sp (w/o hindwing pads)</i>	+			
11651	<i>Procloeon sp (w/o hindwing pads)</i>	+			
13400	<i>Stenacron sp</i>	+			
13521	<i>Stenonema femoratum</i>	+			
13590	<i>Maccaffertium vicarium</i>	+			
15000	<i>Paraleptophlebia sp</i>	+			
16200	<i>Eurylophella sp</i>	+			
21200	<i>Calopteryx sp</i>	+			
23909	<i>Boyeria vinosa</i>	+			
27340	<i>Helocordulia uhleri</i>	+			
33100	<i>Leuctra sp</i>	+			
34500	<i>Perlesta placida complex</i>	+			
47600	<i>Sialis sp</i>	+			
48620	<i>Nigronia serricornis</i>	+			
52200	<i>Cheumatopsyche sp</i>	+			
57400	<i>Neophylax sp</i>	+			
57900	<i>Pycnopsyche sp</i>	+			
63300	<i>Hydroporus sp</i>	+			
68075	<i>Psephenus herricki</i>	+			
71100	<i>Hexatoma sp</i>	+			
71910	<i>Tipula abdominalis</i>	+			
77120	<i>Ablabesmyia mallochi</i>	+			
77500	<i>Conchapelopia sp</i>	+			
77800	<i>Helopelopia sp</i>	+			
80410	<i>Cricotopus (C.) sp</i>	+			
82730	<i>Chironomus (C.) decorus group</i>	+			
82820	<i>Cryptochironomus sp</i>	+			
83003	<i>Dicrotendipes fumidus</i>	+			
83040	<i>Dicrotendipes neomodestus</i>	+			
83820	<i>Microtendipes "caelum" (sensu Simpson & Bode, 1980)</i>	+			
83840	<i>Microtendipes pedellus group</i>	+			
83860	<i>Microtendipes rydalensis</i>	+			
84210	<i>Paratendipes albimanus or P. duplicatus</i>	+			
84750	<i>Stictochironomus sp</i>	+			
85481	<i>Neozavrelia sp 1</i>	+			
85625	<i>Rheotanytarsus sp</i>	+			
85800	<i>Tanytarsus sp</i>	+			

**Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection**

Site: Bear Creek

Collection Date: 07/05/2006 River Code: 02-705 RM: 3.50

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01801	<i>Turbellaria</i>	+			
03600	<i>Oligochaeta</i>	+			
05900	<i>Lirceus sp</i>	+			
07840	<i>Cambarus (Cambarus) sciotensis</i>	+			
11012	<i>Acentrella n.sp 1</i>	+			
11018	<i>Acerpenna macdunnoughi</i>	+			
11120	<i>Baetis flavistriga</i>	+			
11130	<i>Baetis intercalaris</i>	+			
11651	<i>Procloeon sp (w/o hindwing pads)</i>	+			
13000	<i>Leucrocuta sp</i>	+			
13400	<i>Stenacron sp</i>	+			
13521	<i>Stenonema femoratum</i>	+			
13590	<i>Maccaffertium vicarium</i>	+			
14600	<i>Choroterpes sp</i>	+			
23909	<i>Boyeria vinosa</i>	+			
25510	<i>Stylogomphus albistylus</i>	+			
33100	<i>Leuctra sp</i>	+			
34120	<i>Acroneuria carolinensis</i>	+			
34130	<i>Acroneuria frisoni</i>	+			
34300	<i>Neoperla clymene complex</i>	+			
34500	<i>Perlesta placida complex</i>	+			
48620	<i>Nigronia serricornis</i>	+			
50301	<i>Chimarra aterrima</i>	+			
52200	<i>Cheumatopsyche sp</i>	+			
57900	<i>Pycnopsyche sp</i>	+			
68075	<i>Psephenus herricki</i>	+			
77800	<i>Helopelopia sp</i>	+			
79300	<i>Trissopelopia ogemawi</i>	+			
80410	<i>Cricotopus (C.) sp</i>	+			
83820	<i>Microtendipes "caelum" (sensu Simpson & Bode, 1980)</i>	+			
83840	<i>Microtendipes pedellus group</i>	+			
84210	<i>Paratendipes albimanus or P. duplicatus</i>	+			
84300	<i>Phaenopsectra obediens group</i>	+			
85800	<i>Tanytarsus sp</i>	+			
85821	<i>Tanytarsus glabrescens group sp 7</i>	+			

No. Quantitative Taxa: 0 Total Taxa: 35

No. Qualitative Taxa: 35 ICI:

Number of Organisms: 0 Qual EPT: 18

Ohio EPA/DSW Ecological Assessment Section
 Macroinvertebrate Collection

Site: Bear Creek

Collection Date: 07/05/2006 River Code: 02-705 RM: 1.40

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
03600	<i>Oligochaeta</i>	+	85800	<i>Tanytarsus sp</i>	+
05900	<i>Lirceus sp</i>	+			
08260	<i>Orconectes (Crockerinus) sanbornii sanbornii</i>	+	No. Quantitative Taxa: 0		Total Taxa: 45
11012	<i>Acentrella n.sp 1</i>	+	No. Qualitative Taxa: 45		ICI:
11014	<i>Acentrella turbida</i>	+	Number of Organisms: 0		Qual EPT: 18
11119	<i>Plauditus dubius or P. virilis</i>	+			
11130	<i>Baetis intercalaris</i>	+			
13400	<i>Stenacron sp</i>	+			
13521	<i>Stenonema femoratum</i>	+			
13590	<i>Maccaffertium vicarium</i>	+			
17200	<i>Caenis sp</i>	+			
18600	<i>Ephemera sp</i>	+			
22300	<i>Argia sp</i>	+			
25510	<i>Stylogomphus albistylus</i>	+			
27001	<i>Corduliidae</i>	+			
33100	<i>Leuctra sp</i>	+			
34300	<i>Neoperla clymene complex</i>	+			
34500	<i>Perlesta placida complex</i>	+			
47600	<i>Sialis sp</i>	+			
48410	<i>Corydalus cornutus</i>	+			
48620	<i>Nigronia serricornis</i>	+			
50301	<i>Chimarra aterrima</i>	+			
51400	<i>Nyctiophylax sp</i>	+			
52200	<i>Cheumatopsyche sp</i>	+			
53501	<i>Hydroptilidae</i>	+			
57400	<i>Neophylax sp</i>	+			
59300	<i>Mystacides sp</i>	+			
68075	<i>Psephenus herricki</i>	+			
71100	<i>Hexatoma sp</i>	+			
71900	<i>Tipula sp</i>	+			
74100	<i>Simulium sp</i>	+			
74501	<i>Ceratopogonidae</i>	+			
77120	<i>Ablabesmyia mallochi</i>	+			
77500	<i>Conchapelopia sp</i>	+			
77750	<i>Hayesomyia senata or Thienemannimyia norena</i>	+			
77800	<i>Helopelopia sp</i>	+			
82101	<i>Thienemanniella taurocapita</i>	+			
83003	<i>Dicrotendipes fumidus</i>	+			
83840	<i>Microtendipes pedellus group</i>	+			
84210	<i>Paratendipes albimanus or P. duplicatus</i>	+			
84470	<i>Polypedilum (P.) illinoense</i>	+			
84540	<i>Polypedilum (Tripodura) scalaenum group</i>	+			
84750	<i>Stictochironomus sp</i>	+			
85625	<i>Rheotanytarsus sp</i>	+			

**Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection**

Site: Saw Pit Run
at mouth

Collection Date: 07/05/2006 River Code: 02-706 RM: 0.10

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01801	<i>Turbellaria</i>	+			
03600	<i>Oligochaeta</i>	+			
08260	<i>Orconectes (Crockerinus) sanbornii sanbornii</i>	+			
13521	<i>Stenonema femoratum</i>	+			
16200	<i>Eurylophella sp</i>	+			
17200	<i>Caenis sp</i>	+			
27500	<i>Somatochlora sp</i>	+			
34500	<i>Perlesta placida complex</i>	+			
45900	<i>Notonecta sp</i>	+			
52200	<i>Cheumatopsyche sp</i>	+			
63300	<i>Hydroporus sp</i>	+			
68075	<i>Psephenus herricki</i>	+			
69400	<i>Stenelmis sp</i>	+			
71300	<i>Limonia sp</i>	+			
71900	<i>Tipula sp</i>	+			
72600	<i>Aedes sp</i>	+			
77120	<i>Ablabesmyia mallochii</i>	+			
77500	<i>Conchapelopia sp</i>	+			
82730	<i>Chironomus (C.) decorus group</i>	+			
83003	<i>Dicrotendipes fumidus</i>	+			
83820	<i>Microtendipes "caelum" (sensu Simpson & Bode, 1980)</i>	+			
83840	<i>Microtendipes pedellus group</i>	+			
84210	<i>Paratendipes albimanus or P. duplicatus</i>	+			
84470	<i>Polypedilum (P.) illinoense</i>	+			
84750	<i>Stictochironomus sp</i>	+			
85500	<i>Paratanytarsus sp</i>	+			
85800	<i>Tanytarsus sp</i>	+			
85821	<i>Tanytarsus glabrescens group sp 7</i>	+			
95100	<i>Physella sp</i>	+			

No. Quantitative Taxa: 0 Total Taxa: 29
 No. Qualitative Taxa: 29 ICI:
 Number of Organisms: 0 Qual EPT: 5

Ohio EPA/DSW Ecological Assessment Section
 Macroinvertebrate Collection

Site: South Fork Scioto Brush Creek
 adj. Blue Creek Rd.

Collection Date: 09/07/2006 River Code: 02-710 RM: 12.30

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01801	<i>Turbellaria</i>	1	74501	<i>Ceratopogonidae</i>	+
03360	<i>Plumatella sp</i>	1 +	77120	<i>Ablabesmyia mallochi</i>	+
03600	<i>Oligochaeta</i>	32 +	77500	<i>Conchapelopia sp</i>	26 +
08260	<i>Orconectes (Crockerinus) sanbornii sanbornii</i>	+	77800	<i>Helopelopia sp</i>	64
11130	<i>Baetis intercalaris</i>	80 +	78401	<i>Natarsia species A (sensu Roback, 1978)</i>	+
11250	<i>Centroptilum sp (w/o hindwing pads)</i>	+	78450	<i>Nilotanypus fimbriatus</i>	26
11651	<i>Procloeon sp (w/o hindwing pads)</i>	+	78655	<i>Procladius (Holotanypus) sp</i>	+
12200	<i>Isonychia sp</i>	5 +	80370	<i>Corynoneura lobata</i>	52
13000	<i>Leucrocuta sp</i>	4 +	81650	<i>Parametriocnemus sp</i>	8
13400	<i>Stenacron sp</i>	8 +	82101	<i>Thienemanniella taurocapita</i>	8
13521	<i>Stenonema femoratum</i>	+	82820	<i>Cryptochironomus sp</i>	11
13590	<i>Maccaffertium vicarium</i>	46 +	82885	<i>Cryptotendipes pseudotener</i>	+
14600	<i>Choroterpes sp</i>	+	83820	<i>Microtendipes "caelum" (sensu Simpson & Bode, 1980)</i>	11
14950	<i>Leptophlebia sp or Paraleptophlebia sp</i>	+	83840	<i>Microtendipes pedellus group</i>	+
16200	<i>Eurylophella sp</i>	8	84155	<i>Paralauterborniella nigrohalteralis</i>	4
16700	<i>Tricorythodes sp</i>	1	84210	<i>Paratendipes albimanus or P. duplicatus</i>	53 +
17200	<i>Caenis sp</i>	40 +	84300	<i>Phaenopsectra obediens group</i>	57 +
18600	<i>Ephemera sp</i>	+	84450	<i>Polypedilum (Uresipedilum) flavum</i>	26 +
21200	<i>Calopteryx sp</i>	+	84460	<i>Polypedilum (P.) fallax group</i>	30
22001	<i>Coenagrionidae</i>	+	84470	<i>Polypedilum (P.) illinoense</i>	4
22300	<i>Argia sp</i>	4 +	84540	<i>Polypedilum (Tripodura) scalaenum group</i>	38
23909	<i>Boyeria vinosa</i>	+	84750	<i>Stictochironomus sp</i>	+
25510	<i>Stylogomphus albistylus</i>	+	85615	<i>Rheotanytarsus pellucidus</i>	4
27340	<i>Helocordulia uhleri</i>	+	85625	<i>Rheotanytarsus sp</i>	23
34130	<i>Acroneuria frisoni</i>	6 +	85800	<i>Tanytarsus sp</i>	8
43570	<i>Neoplea sp</i>	+	85802	<i>Tanytarsus curticornis</i>	15
47600	<i>Sialis sp</i>	+	85821	<i>Tanytarsus glabrescens group sp 7</i>	4
48410	<i>Corydalus cornutus</i>	2 +	87540	<i>Hemerodromia sp</i>	1
48620	<i>Nigronia serricornis</i>	+	93900	<i>Elimia sp</i>	102 +
50315	<i>Chimarra obscura</i>	41 +	96002	<i>Helisoma anceps anceps</i>	+
51400	<i>Nyctiophylax sp</i>	+	96900	<i>Ferrissia sp</i>	2 +
52200	<i>Cheumatopsyche sp</i>	32 +	97601	<i>Corbicula fluminea</i>	2
53800	<i>Hydroptila sp</i>	1 +			
59300	<i>Mystacides sp</i>	+			
60300	<i>Dineutus sp</i>	+	No. Quantitative Taxa: 46		Total Taxa: 76
68075	<i>Psephenus herricki</i>	21 +	No. Qualitative Taxa: 54		ICI: 44
68130	<i>Helichus sp</i>	2 +	Number of Organisms: 927		Qual EPT: 18
68601	<i>Ancyronyx variegata</i>	1			
68901	<i>Macronychus glabratus</i>	11 +			
69400	<i>Stenelmis sp</i>	1 +			
71300	<i>Limonia sp</i>	+			
71900	<i>Tipula sp</i>	+			
72340	<i>Dixella sp</i>	+			
74100	<i>Simulium sp</i>	+			

Ohio EPA/DSW Ecological Assessment Section
 Macroinvertebrate Collection

Site: South Fork Scioto Brush Creek

Collection Date: 09/07/2006 River Code: 02-710 RM: 7.00

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01320	<i>Hydra sp</i>	12	68601	<i>Ancyronyx variegata</i>	1 +
01801	<i>Turbellaria</i>	1	68708	<i>Dubiraphia vittata group</i>	2 +
01900	<i>Nemertea</i>	6	68901	<i>Macronychus glabratus</i>	24 +
03360	<i>Plumatella sp</i>	1 +	69225	<i>Optioservus fastiditus</i>	+
03600	<i>Oligochaeta</i>	+	69400	<i>Stenelmis sp</i>	+
08260	<i>Orconectes (Crokerinus) sanbornii sanbornii</i>	+	71900	<i>Tipula sp</i>	+
08601	<i>Hydrachnidia</i>	2	74100	<i>Simulium sp</i>	+
11130	<i>Baetis intercalaris</i>	+	77120	<i>Ablabesmyia mallochi</i>	4
11250	<i>Centroptilum sp (w/o hindwing pads)</i>	+	77800	<i>Helopelopia sp</i>	+
12200	<i>Isonychia sp</i>	1	78140	<i>Labrundinia pilosella</i>	6
13400	<i>Stenacron sp</i>	79 +	78655	<i>Procladius (Holotanypus) sp</i>	2
13521	<i>Stenonema femoratum</i>	4 +	80370	<i>Corynoneura lobata</i>	23
13590	<i>Maccaffertium vicarium</i>	19 +	82101	<i>Thienemanniella taurocapita</i>	16
14950	<i>Leptophlebia sp or Paraleptophlebia sp</i>	1	83900	<i>Nilothauma sp</i>	2
16200	<i>Eurylophella sp</i>	2 +	84210	<i>Paratendipes albimanus or P. duplicatus</i>	78
16700	<i>Tricorythodes sp</i>	2	84300	<i>Phaenopsectra obediens group</i>	8
17200	<i>Caenis sp</i>	1 +	84315	<i>Phaenopsectra flavipes</i>	+
21001	<i>Calopterygidae</i>	1	84450	<i>Polypedilum (Uresipedilum) flavum</i>	4 +
22001	<i>Coenagrionidae</i>	+	84460	<i>Polypedilum (P.) fallax group</i>	16
22300	<i>Argia sp</i>	10 +	84470	<i>Polypedilum (P.) illinoense</i>	2
23909	<i>Boyeria vinosa</i>	+	84800	<i>Tribelos jucundum</i>	2
24900	<i>Gomphus sp</i>	4	85625	<i>Rheotanytarsus sp</i>	2 +
25510	<i>Stylogomphus albistylus</i>	+	85800	<i>Tanytarsus sp</i>	4 +
26700	<i>Macromia sp</i>	+	85802	<i>Tanytarsus curticornis</i>	2
27340	<i>Helocordulia uhleri</i>	+	85821	<i>Tanytarsus glabrescens group sp 7</i>	2
34130	<i>Acroneuria frisoni</i>	1	85840	<i>Tanytarsus sepp</i>	6
43300	<i>Ranatra sp</i>	+	87540	<i>Hemerodromia sp</i>	3
47600	<i>Sialis sp</i>	+	93900	<i>Elimia sp</i>	78 +
48410	<i>Corydalus cornutus</i>	2 +	95100	<i>Physella sp</i>	3 +
48620	<i>Nigronia serricornis</i>	+	96002	<i>Helisoma anceps anceps</i>	1 +
50315	<i>Chimarra obscura</i>	+	96900	<i>Ferrissia sp</i>	9
51400	<i>Nyctiophylax sp</i>	2	97601	<i>Corbicula fluminea</i>	16 +
52200	<i>Cheumatopsyche sp</i>	+			
52430	<i>Ceratopsyche morosa group</i>	+	No. Quantitative Taxa: 48		Total Taxa: 76
59110	<i>Ceraclea ancylus</i>	1 +	No. Qualitative Taxa: 49		ICI: 42
59300	<i>Mystacides sp</i>	+	Number of Organisms: 497		Qual EPT: 15
59500	<i>Oecetis sp</i>	28 +			
59720	<i>Triaenodes ignitus</i>	+			
59724	<i>Triaenodes injustus</i>	+			
60300	<i>Dineutus sp</i>	+			
60900	<i>Peltodytes sp</i>	+			
63300	<i>Hydroporus sp</i>	+			
68075	<i>Psephenus herricki</i>	+			
68130	<i>Helichus sp</i>	1 +			

Ohio EPA/DSW Ecological Assessment Section
 Macroinvertebrate Collection

Site: South Fork Scioto Brush Creek

Collection Date: 09/07/2006 River Code: 02-710 RM: 5.80

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01801	<i>Turbellaria</i>	+			
03600	<i>Oligochaeta</i>	+			
08260	<i>Orconectes (Crockerinus) sanbornii sanbornii</i>	+	No. Quantitative Taxa: 0	Total Taxa: 44	
08601	<i>Hydrachnidia</i>	+	No. Qualitative Taxa: 44	ICI:	
11130	<i>Baetis intercalaris</i>	+	Number of Organisms: 0	Qual EPT: 15	
11200	<i>Callibaetis sp</i>	+			
11250	<i>Centroptilum sp (w/o hindwing pads)</i>	+			
11651	<i>Procladius sp (w/o hindwing pads)</i>	+			
13400	<i>Stenacron sp</i>	+			
13521	<i>Stenonema femoratum</i>	+			
16200	<i>Eurylophella sp</i>	+			
16700	<i>Tricorythodes sp</i>	+			
17200	<i>Caenis sp</i>	+			
22001	<i>Coenagrionidae</i>	+			
22300	<i>Argia sp</i>	+			
23804	<i>Basiaeschna janata</i>	+			
27307	<i>Epiheca (Epicordulia) princeps</i>	+			
45300	<i>Sigara sp</i>	+			
47600	<i>Sialis sp</i>	+			
50315	<i>Chimarra obscura</i>	+			
52200	<i>Cheumatopsyche sp</i>	+			
53501	<i>Hydroptilidae</i>	+			
57900	<i>Pycnopsyche sp</i>	+			
59110	<i>Ceraclea ancylus</i>	+			
59700	<i>Triaenodes sp</i>	+			
59970	<i>Petrophila sp</i>	+			
60300	<i>Dineutus sp</i>	+			
60900	<i>Peltodytes sp</i>	+			
66500	<i>Enochrus sp</i>	+			
69400	<i>Stenelmis sp</i>	+			
77120	<i>Ablabesmyia mallochii</i>	+			
77355	<i>Clinotanytus pinguis</i>	+			
77500	<i>Conchapelopia sp</i>	+			
77750	<i>Hayesomyia senata or Thienemannimyia norena</i>	+			
82820	<i>Cryptochironomus sp</i>	+			
82885	<i>Cryptotendipes pseudotener</i>	+			
84210	<i>Paratendipes albimanus or P. duplicatus</i>	+			
84450	<i>Polypedilum (Uresipedilum) flavum</i>	+			
85500	<i>Paratanytarsus sp</i>	+			
85800	<i>Tanytarsus sp</i>	+			
93900	<i>Elimia sp</i>	+			
95100	<i>Physella sp</i>	+			
96002	<i>Helisoma anceps anceps</i>	+			
97601	<i>Corbicula fluminea</i>	+			

Ohio EPA/DSW Ecological Assessment Section
 Macroinvertebrate Collection

Site: South Fork Scioto Brush Creek

Collection Date: 09/07/2006 River Code: 02-710 RM: 1.10

Tick Ridge Rd.

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01320	<i>Hydra sp</i>	164	78401	<i>Natarsia species A (sensu Roback, 1978)</i>	+
01801	<i>Turbellaria</i>	8	78655	<i>Procladius (Holotanypus) sp</i>	+
03360	<i>Plumatella sp</i>	3 +	80370	<i>Corynoneura lobata</i>	35
03600	<i>Oligochaeta</i>	8 +	81231	<i>Nanocladius (N.) crassicornus or N. (N.) "rectinervis"</i>	+
08260	<i>Orconectes (Crockerinus) sanbornii sanbornii</i>	+	82730	<i>Chironomus (C.) decorus group</i>	+
08601	<i>Hydrachnidia</i>	12	83310	<i>Glyptotendipes (Heynotendipes) amplus</i>	3
12200	<i>Isonychia sp</i>	+	84060	<i>Parachironomus pectinatellae</i>	3
13400	<i>Stenacron sp</i>	62 +	84210	<i>Paratendipes albimanus or P. duplicatus</i>	14
13521	<i>Stenonema femoratum</i>	4	84300	<i>Phaenopsectra obediens group</i>	3
13561	<i>Maccaffertium pulchellum</i>	31 +	84450	<i>Polypedilum (Uresipedilum) flavum</i>	6
13590	<i>Maccaffertium vicarium</i>	41 +	84460	<i>Polypedilum (P.) fallax group</i>	41
14950	<i>Leptophlebia sp or Paraleptophlebia sp</i>	2	84470	<i>Polypedilum (P.) illinoense</i>	+
16200	<i>Eurylophella sp</i>	14 +	84700	<i>Stenochironomus sp</i>	3
16700	<i>Tricorythodes sp</i>	1	84750	<i>Stictochironomus sp</i>	+
18700	<i>Hexagenia sp</i>	+	84888	<i>Xenochironomus xenolabis</i>	3
21200	<i>Calopteryx sp</i>	+	85615	<i>Rheotanytarsus pellucidus</i>	3
22001	<i>Coenagrionidae</i>	+	85625	<i>Rheotanytarsus sp</i>	33
22300	<i>Argia sp</i>	8 +	85800	<i>Tanytarsus sp</i>	25
23804	<i>Basiaeschna janata</i>	+	85840	<i>Tanytarsus sepp</i>	3
23909	<i>Boyeria vinosa</i>	1 +	87540	<i>Hemerodromia sp</i>	1
24900	<i>Gomphus sp</i>	+	93900	<i>Elimia sp</i>	74 +
25010	<i>Hagenius brevistylus</i>	+	95100	<i>Physella sp</i>	+
25510	<i>Stylogomphus albistylus</i>	+	96002	<i>Helisoma anceps anceps</i>	+
27001	<i>Corduliidae</i>	+	96900	<i>Ferrissia sp</i>	2
27340	<i>Helocordulia uhleri</i>	+	97601	<i>Corbicula fluminea</i>	+
43300	<i>Ranatra sp</i>	+	98600	<i>Sphaerium sp</i>	+
47600	<i>Sialis sp</i>	+			
48410	<i>Corydalus cornutus</i>	2 +	No. Quantitative Taxa: 40		Total Taxa: 70
48620	<i>Nigronia serricornis</i>	+	No. Qualitative Taxa: 47		ICI: 38
50315	<i>Chimarra obscura</i>	1 +	Number of Organisms: 669		Qual EPT: 11
51600	<i>Polycentropus sp</i>	1			
52200	<i>Cheumatopsyche sp</i>	1			
59110	<i>Ceraclea ancylus</i>	+			
59580	<i>Oecetis persimilis</i>	2 +			
59720	<i>Triaenodes ignitus</i>	+			
59724	<i>Triaenodes injustus</i>	+			
68075	<i>Psephenus herricki</i>	+			
68130	<i>Helichus sp</i>	1 +			
68601	<i>Ancyronyx variegata</i>	+			
68708	<i>Dubiraphia vittata group</i>	1 +			
68901	<i>Macronychus glabratus</i>	32 +			
69400	<i>Stenelmis sp</i>	+			
77120	<i>Ablabesmyia mallochi</i>	14 +			
77800	<i>Helopelopia sp</i>	3 +			

**Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection**

Site: Rocky Fork Scioto Brush Creek

Collection Date: 07/31/2006 River Code: 02-711 RM: 8.80

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
03360	<i>Plumatella sp</i>	+			
08260	<i>Orconectes (Crockerinus) sanbornii sanbornii</i>	+			
08601	<i>Hydrachnidia</i>	+			
11014	<i>Acentrella turbida</i>	+			
11018	<i>Acerpenna macdunnoughi</i>	+			
13400	<i>Stenacron sp</i>	+			
13521	<i>Stenonema femoratum</i>	+			
13590	<i>Maccaffertium vicarium</i>	+			
14600	<i>Choroterpes sp</i>	+			
17200	<i>Caenis sp</i>	+			
22300	<i>Argia sp</i>	+			
25510	<i>Stylogomphus albistylus</i>	+			
33100	<i>Leuctra sp</i>	+			
34130	<i>Acroneuria frisoni</i>	+			
50301	<i>Chimarra aterrima</i>	+			
51600	<i>Polycentropus sp</i>	+			
52200	<i>Cheumatopsyche sp</i>	+			
63300	<i>Hydroporus sp</i>	+			
70600	<i>Antocha sp</i>	+			
71100	<i>Hexatoma sp</i>	+			
77120	<i>Ablabesmyia mallochi</i>	+			
77500	<i>Conchapelopia sp</i>	+			
77800	<i>Helopelopia sp</i>	+			
79300	<i>Trissopelopia ogemawi</i>	+			
83840	<i>Microtendipes pedellus group</i>	+			
83860	<i>Microtendipes rydalensis</i>	+			
84210	<i>Paratendipes albimanus or P. duplicatus</i>	+			
84440	<i>Polypedilum (Uresipedilum) aviceps</i>	+			
85802	<i>Tanytarsus curticornis</i>	+			

No. Quantitative Taxa: 0	Total Taxa: 29
No. Qualitative Taxa: 29	ICI:
Number of Organisms: 0	Qual EPT: 12

**Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection**

Site: Rocky Fork Scioto Brush Creek

Collection Date: 07/31/2006 River Code: 02-711 RM: 7.00

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01801	<i>Turbellaria</i>	+			
03600	<i>Oligochaeta</i>	+			
08260	<i>Orconectes (Crockerinus) sanbornii sanbornii</i>	+			
11014	<i>Acentrella turbida</i>	+			
11018	<i>Acerpenna macdunnoughi</i>	+			
11120	<i>Baetis flavistriga</i>	+			
11130	<i>Baetis intercalaris</i>	+			
12200	<i>Isonychia sp</i>	+			
13400	<i>Stenacron sp</i>	+			
13521	<i>Stenonema femoratum</i>	+			
13590	<i>Maccaffertium vicarium</i>	+			
14600	<i>Choroterpes sp</i>	+			
17200	<i>Caenis sp</i>	+			
18600	<i>Ephemera sp</i>	+			
22300	<i>Argia sp</i>	+			
25510	<i>Stylogomphus albistylus</i>	+			
30000	<i>Plecoptera</i>	+			
34130	<i>Acroneuria frisoni</i>	+			
47600	<i>Sialis sp</i>	+			
48620	<i>Nigronia serricornis</i>	+			
50301	<i>Chimarra aterrima</i>	+			
51400	<i>Nyctiophylax sp</i>	+			
52200	<i>Cheumatopsyche sp</i>	+			
53800	<i>Hydroptila sp</i>	+			
57900	<i>Pycnopsyche sp</i>	+			
59300	<i>Mystacides sp</i>	+			
68075	<i>Psephenus herricki</i>	+			
69400	<i>Stenelmis sp</i>	+			
74100	<i>Simulium sp</i>	+			
77120	<i>Ablabesmyia mallochi</i>	+			
77500	<i>Conchapelopia sp</i>	+			
77800	<i>Helopelopia sp</i>	+			
82730	<i>Chironomus (C.) decorus group</i>	+			
83840	<i>Microtendipes pedellus group</i>	+			
84210	<i>Paratendipes albimanus or P. duplicatus</i>	+			
84440	<i>Polypedilum (Uresipedilum) aviceps</i>	+			
84450	<i>Polypedilum (Uresipedilum) flavum</i>	+			
84800	<i>Tribelos jucundum</i>	+			
85481	<i>Neozavrelia sp 1</i>	+			
96002	<i>Helisoma anceps anceps</i>	+			

No. Quantitative Taxa: 0 Total Taxa: 40
 No. Qualitative Taxa: 40 ICI:
 Number of Organisms: 0 Qual EPT: 19

Ohio EPA/DSW Ecological Assessment Section
 Macroinvertebrate Collection

Site: Rocky Fork Scioto Brush Creek

Collection Date: 06/29/2006 River Code: 02-711 RM: 3.50

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01801	<i>Turbellaria</i>	+	84450	<i>Polypedilum (Uresipedilum) flavum</i>	+
03360	<i>Plumatella sp</i>	+	84800	<i>Tribelos jucundum</i>	+
07840	<i>Cambarus (Cambarus) sciotensis</i>	+	85500	<i>Paratanytarsus sp</i>	+
08260	<i>Orconectes (Crockerinus) sanbornii sanbornii</i>	+	85615	<i>Rheotanytarsus pellucidus</i>	+
11018	<i>Acerpenna macdunnoughi</i>	+	85625	<i>Rheotanytarsus sp</i>	+
11120	<i>Baetis flavistriga</i>	+	85821	<i>Tanytarsus glabrescens group sp 7</i>	+
11130	<i>Baetis intercalaris</i>	+	96002	<i>Helisoma anceps anceps</i>	+
11650	<i>Procloeon sp (w/ hindwing pads)</i>	+			
12200	<i>Isonychia sp</i>	+	No. Quantitative Taxa: 0		Total Taxa: 51
13400	<i>Stenacron sp</i>	+	No. Qualitative Taxa: 51		ICI:
13521	<i>Stenonema femoratum</i>	+	Number of Organisms: 0		Qual EPT: 21
13590	<i>Maccaffertium vicarium</i>	+			
14600	<i>Choroterpes sp</i>	+			
23905	<i>Boyeria grafiana</i>	+			
25510	<i>Stylogomphus albistylus</i>	+			
27340	<i>Helocordulia uhleri</i>	+			
33100	<i>Leuctra sp</i>	+			
34130	<i>Acroneuria frisoni</i>	+			
34300	<i>Neoperla clymene complex</i>	+			
34700	<i>Agneta capitata complex</i>	+			
47600	<i>Sialis sp</i>	+			
48610	<i>Nigronia fasciatus</i>	+			
50301	<i>Chimarra aterrima</i>	+			
51400	<i>Nyctiophylax sp</i>	+			
51600	<i>Polycentropus sp</i>	+			
52200	<i>Cheumatopsyche sp</i>	+			
53800	<i>Hydroptila sp</i>	+			
57400	<i>Neophylax sp</i>	+			
57900	<i>Pycnopsyche sp</i>	+			
59310	<i>Mystacides sepulchralis</i>	+			
68075	<i>Psephenus herricki</i>	+			
71100	<i>Hexatoma sp</i>	+			
77120	<i>Ablabesmyia mallochi</i>	+			
77800	<i>Helopelopia sp</i>	+			
80370	<i>Corynoneura lobata</i>	+			
81825	<i>Rheocricotopus (Psilocricotopus) robacki</i>	+			
82730	<i>Chironomus (C.) decorus group</i>	+			
83003	<i>Dicrotendipes fumidus</i>	+			
83040	<i>Dicrotendipes neomodestus</i>	+			
83820	<i>Microtendipes "caelum" (sensu Simpson & Bode, 1980)</i>	+			
83840	<i>Microtendipes pedellus group</i>	+			
84210	<i>Paratendipes albimanus or P. duplicatus</i>	+			
84300	<i>Phaenopsectra obediens group</i>	+			
84440	<i>Polypedilum (Uresipedilum) aviceps</i>	+			

**Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection**

Site: Spruce Run

Collection Date: 06/29/2006 River Code: 02-713 RM: 0.10

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
05900	<i>Lirceus sp</i>	+			
07840	<i>Cambarus (Cambarus) sciotensis</i>	+			
08260	<i>Orconectes (Crockerinus) sanbornii sanbornii</i>	+			
11250	<i>Centroptilum sp (w/o hindwing pads)</i>	+			
11430	<i>Dipheter hageni</i>	+			
11651	<i>Procloeon sp (w/o hindwing pads)</i>	+			
13400	<i>Stenacron sp</i>	+			
13521	<i>Stenonema femoratum</i>	+			
13590	<i>Maccaffertium vicarium</i>	+			
15000	<i>Paraleptophlebia sp</i>	+			
18600	<i>Ephemera sp</i>	+			
25510	<i>Stylogomphus albistylus</i>	+			
33100	<i>Leuctra sp</i>	+			
34130	<i>Acroneuria frisoni</i>	+			
34500	<i>Perlesta placida complex</i>	+			
45400	<i>Trichocorixa sp</i>	+			
47600	<i>Sialis sp</i>	+			
48610	<i>Nigronia fasciatus</i>	+			
50301	<i>Chimarra aterrima</i>	+			
51400	<i>Nyctiophylax sp</i>	+			
52200	<i>Cheumatopsyche sp</i>	+			
52530	<i>Hydropsyche depravata group</i>	+			
57900	<i>Pycnopsyche sp</i>	+			
63300	<i>Hydroporus sp</i>	+			
67500	<i>Laccobius sp</i>	+			
68075	<i>Psephenus herricki</i>	+			
71100	<i>Hexatoma sp</i>	+			
80370	<i>Corynoneura lobata</i>	+			
83003	<i>Dicrotendipes fumidus</i>	+			
83040	<i>Dicrotendipes neomodestus</i>	+			
83840	<i>Microtendipes pedellus group</i>	+			
84210	<i>Paratendipes albimanus or P. duplicatus</i>	+			
84440	<i>Polypedilum (Uresipedilum) aviceps</i>	+			
84450	<i>Polypedilum (Uresipedilum) flavum</i>	+			
84540	<i>Polypedilum (Tripodura) scalaenum group</i>	+			
84800	<i>Tribelos jucundum</i>	+			
85818	<i>Tanytarsus glabrescens group sp 4</i>	+			

No. Quantitative Taxa: 0 Total Taxa: 37

No. Qualitative Taxa: 37 ICI:

Number of Organisms: 0 Qual EPT: 16

**Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection**

Site: Beech Fork

Collection Date: 07/10/2006 River Code: 02-717 RM: 1.90

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
05900	<i>Lirceus sp</i>	+			
07820	<i>Cambarus (Cambarus) sp A</i>	+			
07840	<i>Cambarus (Cambarus) sciotensis</i>	+			
08260	<i>Orconectes (Crockerinus) sanbornii sanbornii</i>	+			
11014	<i>Acentrella turbida</i>	+			
11130	<i>Baetis intercalaris</i>	+			
11250	<i>Centroptilum sp (w/o hindwing pads)</i>	+			
11651	<i>Procloeon sp (w/o hindwing pads)</i>	+			
13400	<i>Stenacron sp</i>	+			
13521	<i>Stenonema femoratum</i>	+			
13590	<i>Maccaffertium vicarium</i>	+			
33100	<i>Leuctra sp</i>	+			
47600	<i>Sialis sp</i>	+			
51600	<i>Polycentropus sp</i>	+			
52200	<i>Cheumatopsyche sp</i>	+			
52530	<i>Hydropsyche depravata group</i>	+			
53800	<i>Hydroptila sp</i>	+			
57400	<i>Neophylax sp</i>	+			
71900	<i>Tipula sp</i>	+			
74501	<i>Ceratopogonidae</i>	+			
77120	<i>Ablabesmyia mallochi</i>	+			
77800	<i>Helopelopia sp</i>	+			
80204	<i>Brillia flavifrons group</i>	+			
82101	<i>Thienemanniella taurocapita</i>	+			
82141	<i>Thienemanniella xena</i>	+			
83003	<i>Dicrotendipes fumidus</i>	+			
83820	<i>Microtendipes "caelum" (sensu Simpson & Bode, 1980)</i>	+			
84300	<i>Phaenopsectra obediens group</i>	+			
84440	<i>Polypedilum (Uresipedilum) aviceps</i>	+			
84750	<i>Stictochironomus sp</i>	+			
85625	<i>Rheotanytarsus sp</i>	+			
85800	<i>Tanytarsus sp</i>	+			

No. Quantitative Taxa: 0	Total Taxa: 32
No. Qualitative Taxa: 32	ICI:
Number of Organisms: 0	Qual EPT: 13

Ohio EPA/DSW Ecological Assessment Section
 Macroinvertebrate Collection

Site: Turkey Creek

Collection Date: 07/19/2006 River Code: 02-719 RM: 6.00

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
03360	<i>Plumatella sp</i>	+	81200	<i>Nanocladius sp</i>	+
07880	<i>Cambarus (Tubericambarus) thomai</i>	+	84750	<i>Stictochironomus sp</i>	+
11018	<i>Acerpenna macdunnoughi</i>	+	85615	<i>Rheotanytarsus pellucidus</i>	+
11020	<i>Acerpenna pygmaea</i>	+	85625	<i>Rheotanytarsus sp</i>	+
11120	<i>Baetis flavistriga</i>	+	85821	<i>Tanytarsus glabrescens group sp 7</i>	+
11130	<i>Baetis intercalaris</i>	+	95100	<i>Physella sp</i>	+
13000	<i>Leucrocuta sp</i>	+	96900	<i>Ferrissia sp</i>	+
13400	<i>Stenacron sp</i>	+	98200	<i>Pisidium sp</i>	+
13521	<i>Stenonema femoratum</i>	+			
13561	<i>Maccaffertium pulchellum</i>	+	No. Quantitative Taxa: 0		Total Taxa: 52
13590	<i>Maccaffertium vicarium</i>	+	No. Qualitative Taxa: 52		ICI:
14700	<i>Habrophlebiodes sp</i>	+	Number of Organisms: 0		Qual EPT: 25
17200	<i>Caenis sp</i>	+			
18600	<i>Ephemera sp</i>	+			
22300	<i>Argia sp</i>	+			
23600	<i>Aeshna sp</i>	+			
23909	<i>Boyeria vinosa</i>	+			
24900	<i>Gomphus sp</i>	+			
33100	<i>Leuctra sp</i>	+			
34130	<i>Acroneuria frisoni</i>	+			
34300	<i>Neoperla clymene complex</i>	+			
45300	<i>Sigara sp</i>	+			
47600	<i>Sialis sp</i>	+			
48620	<i>Nigronia serricornis</i>	+			
51400	<i>Nyctiophylax sp</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>	+			
59300	<i>Mystacides sp</i>	+			
59700	<i>Triaenodes sp</i>	+			
60900	<i>Peltodytes sp</i>	+			
67700	<i>Paracymus sp</i>	+			
68025	<i>Ectopria sp</i>	+			
68075	<i>Psephenus herricki</i>	+			
68700	<i>Dubiraphia sp</i>	+			
69225	<i>Optioservus fastiditus</i>	+			
69400	<i>Stenelmis sp</i>	+			
74501	<i>Ceratopogonidae</i>	+			
77355	<i>Clinotanypus pinguis</i>	+			
77800	<i>Helopelopia sp</i>	+			

**Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection**

Site: Turkey Creek

Collection Date: 07/19/2006 River Code: 02-719 RM: 4.00

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
03600	<i>Oligochaeta</i>	+	98200	<i>Pisidium sp</i>	+
08260	<i>Orconectes (Crockerinus) sanbornii sanbornii</i>	+	<hr/>		
11651	<i>Procloeon sp (w/o hindwing pads)</i>	+	No. Quantitative Taxa: 0		Total Taxa: 45
12200	<i>Isonychia sp</i>	+	No. Qualitative Taxa: 45		ICI:
13000	<i>Leucrocuta sp</i>	+	Number of Organisms: 0		Qual EPT: 17
13521	<i>Stenonema femoratum</i>	+			
13590	<i>Maccaffertium vicarium</i>	+			
17200	<i>Caenis sp</i>	+			
18600	<i>Ephemera sp</i>	+			
22001	<i>Coenagrionidae</i>	+			
23909	<i>Boyeria vinosa</i>	+			
24900	<i>Gomphus sp</i>	+			
25010	<i>Hagenius brevistylus</i>	+			
25510	<i>Stylogomphus albistylus</i>	+			
27001	<i>Corduliidae</i>	+			
33100	<i>Leuctra sp</i>	+			
34130	<i>Acroneuria frisoni</i>	+			
34300	<i>Neoperla clymene complex</i>	+			
45100	<i>Palmacorixa sp</i>	+			
47600	<i>Sialis sp</i>	+			
48410	<i>Corydalus cornutus</i>	+			
48620	<i>Nigronia serricornis</i>	+			
50301	<i>Chimarra aterrima</i>	+			
50315	<i>Chimarra obscura</i>	+			
51400	<i>Nyctiophylax sp</i>	+			
52200	<i>Cheumatopsyche sp</i>	+			
53501	<i>Hydroptilidae</i>	+			
57400	<i>Neophylax sp</i>	+			
59300	<i>Mystacides sp</i>	+			
68025	<i>Ectopria sp</i>	+			
68075	<i>Psephenus herricki</i>	+			
68130	<i>Helichus sp</i>	+			
68700	<i>Dubiraphia sp</i>	+			
68901	<i>Macronychus glabratus</i>	+			
69275	<i>Optioservus trivittatus</i>	+			
77800	<i>Helopelopia sp</i>	+			
83840	<i>Microtendipes pedellus group</i>	+			
84210	<i>Paratendipes albimanus or P. duplicatus</i>	+			
84450	<i>Polypedilum (Uresipedilum) flavum</i>	+			
84800	<i>Tribelos jucundum</i>	+			
85625	<i>Rheotanytarsus sp</i>	+			
85802	<i>Tanytarsus curticornis</i>	+			
87540	<i>Hemerodromia sp</i>	+			
93900	<i>Elimia sp</i>	+			

**Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection**

Site: Turkey Creek

Collection Date: 08/21/2006 River Code: 02-719 RM: 0.40

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
03040	<i>Fredericella sp</i>	+			
03360	<i>Plumatella sp</i>	+			
03600	<i>Oligochaeta</i>	+			
08260	<i>Orconectes (Crockerinus) sanbornii sanbornii</i>	+			
08601	<i>Hydrachnidia</i>	+			
11012	<i>Acentrella n.sp 1</i>	+			
11130	<i>Baetis intercalaris</i>	+			
11250	<i>Centroptilum sp (w/o hindwing pads)</i>	+			
13400	<i>Stenacron sp</i>	+			
13590	<i>Maccaffertium vicarium</i>	+			
16700	<i>Tricorythodes sp</i>	+			
17200	<i>Caenis sp</i>	+			
18600	<i>Ephemera sp</i>	+			
22001	<i>Coenagrionidae</i>	+			
22300	<i>Argia sp</i>	+			
23909	<i>Boyeria vinosa</i>	+			
25510	<i>Stylogomphus albistylus</i>	+			
26700	<i>Macromia sp</i>	+			
34130	<i>Acroneuria frisoni</i>	+			
47600	<i>Sialis sp</i>	+			
48410	<i>Corydalus cornutus</i>	+			
50315	<i>Chimarra obscura</i>	+			
52200	<i>Cheumatopsyche sp</i>	+			
52530	<i>Hydropsyche depravata group</i>	+			
53800	<i>Hydroptila sp</i>	+			
57900	<i>Pycnopsyche sp</i>	+			
68075	<i>Psephenus herricki</i>	+			
68130	<i>Helichus sp</i>	+			
69200	<i>Optioservus sp</i>	+			
69400	<i>Stenelmis sp</i>	+			
74100	<i>Simulium sp</i>	+			
77120	<i>Ablabesmyia mallochi</i>	+			
78655	<i>Procladius (Holotanypus) sp</i>	+			
83840	<i>Microtendipes pedellus group</i>	+			
84520	<i>Polypedilum (Tripodura) halterale group</i>	+			
84750	<i>Stictochironomus sp</i>	+			
93900	<i>Elimia sp</i>	+			

No. Quantitative Taxa: 0 Total Taxa: 37

No. Qualitative Taxa: 37 ICI:

Number of Organisms: 0 Qual EPT: 14

**Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection**

Site: Dry Fork

Collection Date: 07/19/2006 River Code: 02-720 RM: 0.20

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
06700	<i>Crangonyx sp</i>	+			
07840	<i>Cambarus (Cambarus) sciotensis</i>	+			
08260	<i>Orconectes (Crockerinus) sanbornii sanbornii</i>	+			
11650	<i>Procloeon sp (w/ hindwing pads)</i>	+			
13000	<i>Leucrocuta sp</i>	+			
13400	<i>Stenacron sp</i>	+			
13521	<i>Stenonema femoratum</i>	+			
13590	<i>Maccaffertium vicarium</i>	+			
17200	<i>Caenis sp</i>	+			
18600	<i>Ephemera sp</i>	+			
22300	<i>Argia sp</i>	+			
23909	<i>Boyeria vinosa</i>	+			
25510	<i>Stylogomphus albistylus</i>	+			
27340	<i>Helocordulia uhleri</i>	+			
33100	<i>Leuctra sp</i>	+			
34300	<i>Neoperla clymene complex</i>	+			
47600	<i>Sialis sp</i>	+			
48620	<i>Nigronia serricornis</i>	+			
50301	<i>Chimarra aterrima</i>	+			
51400	<i>Nyctiophylax sp</i>	+			
52200	<i>Cheumatopsyche sp</i>	+			
57900	<i>Pycnopsyche sp</i>	+			
63300	<i>Hydroporus sp</i>	+			
67500	<i>Laccobius sp</i>	+			
68075	<i>Psephenus herricki</i>	+			
71900	<i>Tipula sp</i>	+			
74501	<i>Ceratopogonidae</i>	+			
77500	<i>Conchapelopia sp</i>	+			
77800	<i>Helopelopia sp</i>	+			
83040	<i>Dicrotendipes neomodestus</i>	+			
83840	<i>Microtendipes pedellus group</i>	+			
84440	<i>Polypedilum (Uresipedilum) aviceps</i>	+			
84800	<i>Tribelos jucundum</i>	+			
85625	<i>Rheotanytarsus sp</i>	+			

No. Quantitative Taxa: 0 Total Taxa: 34
 No. Qualitative Taxa: 34 ICI:
 Number of Organisms: 0 Qual EPT: 13

Ohio EPA/DSW Ecological Assessment Section
 Macroinvertebrate Collection

Site: Turkey Run

Collection Date: 08/31/2006 River Code: 02-722 RM: 0.40

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
03360	<i>Plumatella sp</i>	+	85615	<i>Rheotanytarsus pellucidus</i>	+
07840	<i>Cambarus (Cambarus) sciotensis</i>	+	85625	<i>Rheotanytarsus sp</i>	+
08260	<i>Orconectes (Crockerinus) sanbornii sanbornii</i>	+			
08601	<i>Hydrachnidia</i>	+	No. Quantitative Taxa: 0		Total Taxa: 46
11018	<i>Acerpenna macdunnoughi</i>	+	No. Qualitative Taxa: 46		ICI:
11130	<i>Baetis intercalaris</i>	+	Number of Organisms: 0		Qual EPT: 18
11250	<i>Centroptilum sp (w/o hindwing pads)</i>	+			
11651	<i>Procloeon sp (w/o hindwing pads)</i>	+			
11670	<i>Procloeon viridoculare</i>	+			
12200	<i>Isonychia sp</i>	+			
13400	<i>Stenacron sp</i>	+			
13521	<i>Stenonema femoratum</i>	+			
13590	<i>Maccaffertium vicarium</i>	+			
15000	<i>Paraleptophlebia sp</i>	+			
16200	<i>Eurylophella sp</i>	+			
17200	<i>Caenis sp</i>	+			
18600	<i>Ephemera sp</i>	+			
21200	<i>Calopteryx sp</i>	+			
23909	<i>Boyeria vinosa</i>	+			
24900	<i>Gomphus sp</i>	+			
25510	<i>Stylogomphus albistylus</i>	+			
26700	<i>Macromia sp</i>	+			
27340	<i>Helocordulia uhleri</i>	+			
47600	<i>Sialis sp</i>	+			
50301	<i>Chimarra aterrima</i>	+			
51400	<i>Nyctiophylax sp</i>	+			
52200	<i>Cheumatopsyche sp</i>	+			
52315	<i>Diplectrona modesta</i>	+			
59300	<i>Mystacides sp</i>	+			
63300	<i>Hydroporus sp</i>	+			
68075	<i>Psephenus herricki</i>	+			
68130	<i>Helichus sp</i>	+			
71100	<i>Hexatoma sp</i>	+			
71700	<i>Pilaria sp</i>	+			
72700	<i>Anopheles sp</i>	+			
74100	<i>Simulium sp</i>	+			
77800	<i>Helopelopia sp</i>	+			
78655	<i>Procladius (Holotanypus) sp</i>	+			
82885	<i>Cryptotendipes pseudotener</i>	+			
83840	<i>Microtendipes pedellus group</i>	+			
84210	<i>Paratendipes albimanus or P. duplicatus</i>	+			
84440	<i>Polypedilum (Uresipedilum) aviceps</i>	+			
84540	<i>Polypedilum (Tripodura) scalaenum group</i>	+			
85201	<i>Cladotanytarsus species group A</i>	+			

**Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection**

Site: Winterstein Run

Collection Date: 08/02/2006 River Code: 02-727 RM: 0.10

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
08260	<i>Orconectes (Crockerinus) sanbornii sanbornii</i>	+			
11001	<i>Baetidae</i>	+			
11120	<i>Baetis flavistriga</i>	+			
11130	<i>Baetis intercalaris</i>	+			
13000	<i>Leucrocuta sp</i>	+			
13400	<i>Stenacron sp</i>	+			
13521	<i>Stenonema femoratum</i>	+			
13590	<i>Maccaffertium vicarium</i>	+			
17200	<i>Caenis sp</i>	+			
22300	<i>Argia sp</i>	+			
25510	<i>Stylogomphus albistylus</i>	+			
27340	<i>Helocordulia uhleri</i>	+			
33100	<i>Leuctra sp</i>	+			
34120	<i>Acroneuria carolinensis</i>	+			
34130	<i>Acroneuria frisoni</i>	+			
47600	<i>Sialis sp</i>	+			
50301	<i>Chimarra aterrima</i>	+			
51600	<i>Polycentropus sp</i>	+			
52200	<i>Cheumatopsyche sp</i>	+			
52430	<i>Ceratopsyche morosa group</i>	+			
53800	<i>Hydroptila sp</i>	+			
63300	<i>Hydroporus sp</i>	+			
68075	<i>Psephenus herricki</i>	+			
69400	<i>Stenelmis sp</i>	+			
71100	<i>Hexatoma sp</i>	+			
71700	<i>Pilaria sp</i>	+			
71910	<i>Tipula abdominalis</i>	+			
74100	<i>Simulium sp</i>	+			
74501	<i>Ceratopogonidae</i>	+			
83840	<i>Microtendipes pedellus group</i>	+			
84155	<i>Paralauterborniella nigrohalteralis</i>	+			
84750	<i>Stictochironomus sp</i>	+			
85625	<i>Rheotanytarsus sp</i>	+			
93900	<i>Elimia sp</i>	+			

No. Quantitative Taxa: 0 Total Taxa: 34
 No. Qualitative Taxa: 34 ICI:
 Number of Organisms: 0 Qual EPT: 16

**Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection**

Site: Mill Creek

Collection Date: 06/26/2006 River Code: 02-728 RM: 2.20

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
03600	<i>Oligochaeta</i>	+			
05800	<i>Caecidotea sp</i>	+			
06830	<i>Gammarus minus</i>	+			
07840	<i>Cambarus (Cambarus) sciotensis</i>	+			
08260	<i>Orconectes (Crockerinus) sanbornii sanbornii</i>	+			
13000	<i>Leucrocuta sp</i>	+			
13521	<i>Stenonema femoratum</i>	+			
13590	<i>Maccaffertium vicarium</i>	+			
17200	<i>Caenis sp</i>	+			
23909	<i>Boyeria vinosa</i>	+			
25510	<i>Stylogomphus albistylus</i>	+			
27001	<i>Corduliidae</i>	+			
33100	<i>Leuctra sp</i>	+			
47600	<i>Sialis sp</i>	+			
48620	<i>Nigronia serratocornis</i>	+			
50301	<i>Chimarra aterrima</i>	+			
51400	<i>Nyctiophylax sp</i>	+			
51600	<i>Polycentropus sp</i>	+			
52200	<i>Cheumatopsyche sp</i>	+			
57900	<i>Pycnopsyche sp</i>	+			
60300	<i>Dineutus sp</i>	+			
68025	<i>Ectopria sp</i>	+			
68075	<i>Psephenus herricki</i>	+			
68130	<i>Helichus sp</i>	+			
68901	<i>Macronychus glabratus</i>	+			
69225	<i>Optioservus fastiditus</i>	+			
69400	<i>Stenelmis sp</i>	+			
71900	<i>Tipula sp</i>	+			
72700	<i>Anopheles sp</i>	+			
74100	<i>Simulium sp</i>	+			
77500	<i>Conchapelopia sp</i>	+			
77800	<i>Helopelopia sp</i>	+			
83840	<i>Microtendipes pedellus group</i>	+			
84750	<i>Stictochironomus sp</i>	+			
85625	<i>Rheotanytarsus sp</i>	+			
93900	<i>Elimia sp</i>	+			
96900	<i>Ferrissia sp</i>	+			
98200	<i>Pisidium sp</i>	+			

No. Quantitative Taxa: 0 Total Taxa: 38
 No. Qualitative Taxa: 38 ICI:
 Number of Organisms: 0 Qual EPT: 10

Ohio EPA/DSW Ecological Assessment Section
 Macroinvertebrate Collection

Site: Mill Creek

Collection Date: 08/01/2006 River Code: 02-728 RM: 0.80

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
03360	<i>Plumatella sp</i>	+	83820	<i>Microtendipes "caelum" (sensu Simpson & Bode, 1980)</i>	+
03600	<i>Oligochaeta</i>	+			
05800	<i>Caecidotea sp</i>	+	83840	<i>Microtendipes pedellus group</i>	+
06830	<i>Gammarus minus</i>	+	84450	<i>Polypedilum (Uresipedilum) flavum</i>	+
08260	<i>Orconectes (Crockerinus) sanbornii sanbornii</i>	+	84750	<i>Stictochironomus sp</i>	+
11130	<i>Baetis intercalaris</i>	+	85625	<i>Rheotanytarsus sp</i>	+
11651	<i>Procloeon sp (w/o hindwing pads)</i>	+	87540	<i>Hemerodromia sp</i>	+
13521	<i>Stenonema femoratum</i>	+	93900	<i>Elimia sp</i>	+
13590	<i>Maccaffertium vicarium</i>	+	96002	<i>Helisoma anceps anceps</i>	+
17200	<i>Caenis sp</i>	+	96900	<i>Ferrissia sp</i>	+
18600	<i>Ephemera sp</i>	+	97601	<i>Corbicula fluminea</i>	+
22300	<i>Argia sp</i>	+			
23909	<i>Boyeria vinosa</i>	+	No. Quantitative Taxa: 0		Total Taxa: 54
25510	<i>Stylogomphus albistylus</i>	+	No. Qualitative Taxa: 54		ICI:
27340	<i>Helocordulia uhleri</i>	+	Number of Organisms: 0		Qual EPT: 16
33100	<i>Leuctra sp</i>	+			
34130	<i>Acroneuria frisoni</i>	+			
45100	<i>Palmacorixa sp</i>	+			
47600	<i>Sialis sp</i>	+			
48620	<i>Nigronia serricornis</i>	+			
50301	<i>Chimarra aterrima</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>	+			
57900	<i>Pycnopsyche sp</i>	+			
59500	<i>Oecetis sp</i>	+			
60900	<i>Peltodytes sp</i>	+			
67800	<i>Tropisternus sp</i>	+			
68010	<i>Dicranopselaphus variegata</i>	+			
68075	<i>Psephenus herricki</i>	+			
68708	<i>Dubiraphia vittata group</i>	+			
68901	<i>Macronychus glabratus</i>	+			
69400	<i>Stenelmis sp</i>	+			
72340	<i>Dixella sp</i>	+			
72700	<i>Anopheles sp</i>	+			
77500	<i>Conchapelopia sp</i>	+			
77800	<i>Helopelopia sp</i>	+			
80420	<i>Cricotopus (C.) bicinctus</i>	+			
82141	<i>Thienemanniella xena</i>	+			
82730	<i>Chironomus (C.) decorus group</i>	+			
82820	<i>Cryptochironomus sp</i>	+			
83040	<i>Dicrotendipes neomodestus</i>	+			

Ohio EPA/DSW Ecological Assessment Section
 Macroinvertebrate Collection

Site: Middle Branch Mill Creek

Collection Date: 08/09/2006 River Code: 02-730 RM: 1.90

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
03360	<i>Plumatella sp</i>	+	85615	<i>Rheotanytarsus pellucidus</i>	+
07840	<i>Cambarus (Cambarus) sciotensis</i>	+	85821	<i>Tanytarsus glabrescens group sp 7</i>	+
08260	<i>Orconectes (Crockerinus) sanbornii sanbornii</i>	+	93900	<i>Elimia sp</i>	+
08601	<i>Hydrachnidia</i>	+			
11650	<i>Procloeon sp (w/ hindwing pads)</i>	+	No. Quantitative Taxa: 0		Total Taxa: 47
12200	<i>Isonychia sp</i>	+	No. Qualitative Taxa: 47		ICI:
13000	<i>Leucrocota sp</i>	+	Number of Organisms: 0		Qual EPT: 12
13400	<i>Stenacron sp</i>	+			
13521	<i>Stenonema femoratum</i>	+			
13590	<i>Maccaffertium vicarium</i>	+			
17200	<i>Caenis sp</i>	+			
18600	<i>Ephemera sp</i>	+			
21200	<i>Calopteryx sp</i>	+			
22001	<i>Coenagrionidae</i>	+			
22300	<i>Argia sp</i>	+			
23804	<i>Basiaeschna janata</i>	+			
24501	<i>Gomphidae</i>	+			
25510	<i>Stylogomphus albistylus</i>	+			
47600	<i>Sialis sp</i>	+			
48620	<i>Nigronia serricornis</i>	+			
50301	<i>Chimarra aterrima</i>	+			
52200	<i>Cheumatopsyche sp</i>	+			
52530	<i>Hydropsyche depravata group</i>	+			
58505	<i>Helicopsyche borealis</i>	+			
60900	<i>Peltodytes sp</i>	+			
66200	<i>Cymbiodyta sp</i>	+			
67500	<i>Laccobius sp</i>	+			
67800	<i>Tropisternus sp</i>	+			
68075	<i>Psephenus herricki</i>	+			
68130	<i>Helichus sp</i>	+			
68708	<i>Dubiraphia vittata group</i>	+			
68901	<i>Macronychus glabratus</i>	+			
69225	<i>Optioservus fastiditus</i>	+			
69400	<i>Stenelmis sp</i>	+			
71300	<i>Limonia sp</i>	+			
72600	<i>Aedes sp</i>	+			
72700	<i>Anopheles sp</i>	+			
77120	<i>Ablabesmyia mallochi</i>	+			
77800	<i>Helopelopia sp</i>	+			
81825	<i>Rheocricotopus (Psilocricotopus) robacki</i>	+			
82101	<i>Thienemanniella taurocapita</i>	+			
82730	<i>Chironomus (C.) decorus group</i>	+			
84155	<i>Paralauterborniella nigrohalteralis</i>	+			
84210	<i>Paratendipes albimanus or P. duplicatus</i>	+			

**Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection**

Site: Middle Branch Mill Creek

Collection Date: 08/09/2006 River Code: 02-730 RM: 1.80

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
06800	<i>Gammarus sp</i>	+			
08260	<i>Orconectes (Crockerinus) sanbornii sanbornii</i>	+			
08601	<i>Hydrachnidia</i>	+			
11120	<i>Baetis flavistriga</i>	+			
13000	<i>Leucrocuta sp</i>	+			
13400	<i>Stenacron sp</i>	+			
13521	<i>Stenonema femoratum</i>	+			
13590	<i>Maccaffertium vicarium</i>	+			
17200	<i>Caenis sp</i>	+			
18600	<i>Ephemera sp</i>	+			
21200	<i>Calopteryx sp</i>	+			
23909	<i>Boyeria vinosa</i>	+			
24501	<i>Gomphidae</i>	+			
25510	<i>Stylogomphus albistylus</i>	+			
33100	<i>Leuctra sp</i>	+			
34130	<i>Acroneuria frisoni</i>	+			
48620	<i>Nigronia serricornis</i>	+			
50301	<i>Chimarra aterrima</i>	+			
51600	<i>Polycentropus sp</i>	+			
52200	<i>Cheumatopsyche sp</i>	+			
52530	<i>Hydropsyche depravata group</i>	+			
57900	<i>Pycnopsyche sp</i>	+			
58505	<i>Helicopsyche borealis</i>	+			
59580	<i>Oecetis persimilis</i>	+			
63300	<i>Hydroporus sp</i>	+			
68075	<i>Psephenus herricki</i>	+			
68130	<i>Helichus sp</i>	+			
69225	<i>Optioservus fastiditus</i>	+			
69400	<i>Stenelmis sp</i>	+			
70600	<i>Antocha sp</i>	+			
72340	<i>Dixella sp</i>	+			
74100	<i>Simulium sp</i>	+			
77500	<i>Conchapelopia sp</i>	+			
77800	<i>Helopelopia sp</i>	+			
81280	<i>Nanocladius (Plecopteracoluthus) downesi</i>	+			
84210	<i>Paratendipes albimanus or P. duplicatus</i>	+			
85615	<i>Rheotanytarsus pellucidus</i>	+			
85625	<i>Rheotanytarsus sp</i>	+			
93900	<i>Elimia sp</i>	+			

No. Quantitative Taxa: 0 Total Taxa: 39
 No. Qualitative Taxa: 39 ICI:
 Number of Organisms: 0 Qual EPT: 16

**Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection**

Site: Hickman Run

Collection Date: 08/09/2006 River Code: 02-732 RM: 0.10

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
03600	<i>Oligochaeta</i>	+			
05800	<i>Caecidotea sp</i>	+			
06700	<i>Crangonyx sp</i>	+			
06830	<i>Gammarus minus</i>	+			
07880	<i>Cambarus (Tubericambarus) thomai</i>	+			
08260	<i>Orconectes (Crockerinus) sanbornii sanbornii</i>	+			
13000	<i>Leucrocuta sp</i>	+			
13521	<i>Stenonema femoratum</i>	+			
13590	<i>Maccaffertium vicarium</i>	+			
15000	<i>Paraleptophlebia sp</i>	+			
17200	<i>Caenis sp</i>	+			
21200	<i>Calopteryx sp</i>	+			
24900	<i>Gomphus sp</i>	+			
25510	<i>Stylogomphus albistylus</i>	+			
26100	<i>Cordulegaster sp</i>	+			
33100	<i>Leuctra sp</i>	+			
34100	<i>Acroneuria sp</i>	+			
45300	<i>Sigara sp</i>	+			
47600	<i>Sialis sp</i>	+			
48620	<i>Nigronia serricornis</i>	+			
50301	<i>Chimarra aterrima</i>	+			
51400	<i>Nyctiophylax sp</i>	+			
52200	<i>Cheumatopsyche sp</i>	+			
52315	<i>Diplectrona modesta</i>	+			
52530	<i>Hydropsyche depravata group</i>	+			
57900	<i>Pycnopsyche sp</i>	+			
68075	<i>Psephenus herricki</i>	+			
68130	<i>Helichus sp</i>	+			
68708	<i>Dubiraphia vittata group</i>	+			
69225	<i>Optioservus fastiditus</i>	+			
72340	<i>Dixella sp</i>	+			
78655	<i>Procladius (Holotanypus) sp</i>	+			
82730	<i>Chironomus (C.) decorus group</i>	+			
83840	<i>Microtendipes pedellus group</i>	+			
84155	<i>Paralauterborniella nigrohalteralis</i>	+			
93900	<i>Elimia sp</i>	+			

No. Quantitative Taxa: 0	Total Taxa: 36
No. Qualitative Taxa: 36	ICI:
Number of Organisms: 0	Qual EPT: 13

**Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection**

Site: Churn Creek

Collection Date: 08/14/2006 River Code: 02-736 RM: 3.90

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
05900	<i>Lirceus sp</i>	+			
08260	<i>Orconectes (Crockerinus) sanbornii sanbornii</i>	+			
11018	<i>Acerpenna macdunnoughi</i>	+			
11120	<i>Baetis flavistriga</i>	+			
11250	<i>Centroptilum sp (w/o hindwing pads)</i>	+			
11651	<i>Procloeon sp (w/o hindwing pads)</i>	+			
13400	<i>Stenacron sp</i>	+			
13521	<i>Stenonema femoratum</i>	+			
13590	<i>Maccaffertium vicarium</i>	+			
14600	<i>Choroterpes sp</i>	+			
17200	<i>Caenis sp</i>	+			
18600	<i>Ephemera sp</i>	+			
25510	<i>Stylogomphus albistylus</i>	+			
33100	<i>Leuctra sp</i>	+			
34130	<i>Acroneuria frisoni</i>	+			
47600	<i>Sialis sp</i>	+			
48620	<i>Nigronia serricornis</i>	+			
50301	<i>Chimarra aterrima</i>	+			
51400	<i>Nyctiophylax sp</i>	+			
52200	<i>Cheumatopsyche sp</i>	+			
68075	<i>Psephenus herricki</i>	+			
71900	<i>Tipula sp</i>	+			
74501	<i>Ceratopogonidae</i>	+			
77120	<i>Ablabesmyia mallochi</i>	+			
77500	<i>Conchapelopia sp</i>	+			
77800	<i>Helopelopia sp</i>	+			
82730	<i>Chironomus (C.) decorus group</i>	+			
83840	<i>Microtendipes pedellus group</i>	+			
84210	<i>Paratendipes albimanus or P. duplicatus</i>	+			
84300	<i>Phaenopsectra obediens group</i>	+			
85800	<i>Tanytarsus sp</i>	+			

No. Quantitative Taxa: 0	Total Taxa: 31
No. Qualitative Taxa: 31	ICI:
Number of Organisms: 0	Qual EPT: 15

Ohio EPA/DSW Ecological Assessment Section
 Macroinvertebrate Collection

Site: Churn Creek

Collection Date: 08/14/2006 River Code: 02-736 RM: 2.70

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
05900	<i>Lirceus sp</i>	+			
07701	<i>Cambaridae</i>	+	No. Quantitative Taxa: 0		Total Taxa: 40
08260	<i>Orconectes (Crockerinus) sanbornii sanbornii</i>	+	No. Qualitative Taxa: 40		ICI:
11012	<i>Acentrella n.sp 1</i>	+	Number of Organisms: 0		Qual EPT: 20
11119	<i>Plauditus dubius or P. virilis</i>	+			
11130	<i>Baetis intercalaris</i>	+			
11651	<i>Procloeon sp (w/o hindwing pads)</i>	+			
12200	<i>Isonychia sp</i>	+			
13000	<i>Leucrocuta sp</i>	+			
13400	<i>Stenacron sp</i>	+			
13521	<i>Stenonema femoratum</i>	+			
13590	<i>Maccaffertium vicarium</i>	+			
14600	<i>Choroterpes sp</i>	+			
17200	<i>Caenis sp</i>	+			
18600	<i>Ephemera sp</i>	+			
25510	<i>Stylogomphus albistylus</i>	+			
27001	<i>Corduliidae</i>	+			
33100	<i>Leuctra sp</i>	+			
34130	<i>Acroneuria frisoni</i>	+			
34300	<i>Neoperla clymene complex</i>	+			
47600	<i>Sialis sp</i>	+			
50301	<i>Chimarra aterrima</i>	+			
51600	<i>Polycentropus sp</i>	+			
52200	<i>Cheumatopsyche sp</i>	+			
52315	<i>Diplectrona modesta</i>	+			
52530	<i>Hydropsyche depravata group</i>	+			
63300	<i>Hydroporus sp</i>	+			
68075	<i>Psephenus herricki</i>	+			
71100	<i>Hexatoma sp</i>	+			
74501	<i>Ceratopogonidae</i>	+			
77120	<i>Ablabesmyia mallochi</i>	+			
77800	<i>Helopelopia sp</i>	+			
81650	<i>Parametriocnemus sp</i>	+			
83820	<i>Microtendipes "caelum" (sensu Simpson & Bode, 1980)</i>	+			
83840	<i>Microtendipes pedellus group</i>	+			
83860	<i>Microtendipes rydalensis</i>	+			
84210	<i>Paratendipes albimanus or P. duplicatus</i>	+			
84440	<i>Polypedilum (Uresipedilum) aviceps</i>	+			
86200	<i>Tabanus sp</i>	+			
87540	<i>Hemerodromia sp</i>	+			

Ohio EPA/DSW Ecological Assessment Section
 Macroinvertebrate Collection

Site: Churn Creek

Collection Date: 08/02/2006 River Code: 02-736 RM: 0.10

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
03360	<i>Plumatella sp</i>	+			
03600	<i>Oligochaeta</i>	+			
08260	<i>Orconectes (Crockerinus) sanbornii sanbornii</i>	+	No. Quantitative Taxa: 0		Total Taxa: 43
11650	<i>Procladius sp (w/ hindwing pads)</i>	+	No. Qualitative Taxa: 43		ICI:
12200	<i>Isonychia sp</i>	+	Number of Organisms: 0		Qual EPT: 13
13000	<i>Leucrocuta sp</i>	+			
13400	<i>Stenacron sp</i>	+			
13521	<i>Stenonema femoratum</i>	+			
13590	<i>Maccaffertium vicarium</i>	+			
17200	<i>Caenis sp</i>	+			
18600	<i>Ephemera sp</i>	+			
22300	<i>Argia sp</i>	+			
23804	<i>Basiaeschna janata</i>	+			
24900	<i>Gomphus sp</i>	+			
25510	<i>Stylogomphus albistylus</i>	+			
26700	<i>Macromia sp</i>	+			
27340	<i>Helocordulia uhleri</i>	+			
34130	<i>Acroneuria frisoni</i>	+			
47600	<i>Sialis sp</i>	+			
48620	<i>Nigronia serricornis</i>	+			
50301	<i>Chimarra aterrima</i>	+			
52200	<i>Cheumatopsyche sp</i>	+			
52430	<i>Ceratopsyche morosa group</i>	+			
52530	<i>Hydropsyche depravata group</i>	+			
63300	<i>Hydroporus sp</i>	+			
68075	<i>Psephenus herricki</i>	+			
68130	<i>Helichus sp</i>	+			
68601	<i>Ancyronyx variegata</i>	+			
68708	<i>Dubiraphia vittata group</i>	+			
69400	<i>Stenelmis sp</i>	+			
71100	<i>Hexatoma sp</i>	+			
74501	<i>Ceratopogonidae</i>	+			
77120	<i>Ablabesmyia mallochi</i>	+			
77500	<i>Conchapelopia sp</i>	+			
84210	<i>Paratendipes albimanus or P. duplicatus</i>	+			
84440	<i>Polypedilum (Uresipedilum) aviceps</i>	+			
84450	<i>Polypedilum (Uresipedilum) flavum</i>	+			
84750	<i>Stictochironomus sp</i>	+			
84800	<i>Tribelos jucundum</i>	+			
85625	<i>Rheotanytarsus sp</i>	+			
93900	<i>Elimia sp</i>	+			
95100	<i>Physella sp</i>	+			
96002	<i>Helisoma anceps anceps</i>	+			

**Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection**

Site: Blue Creek

Collection Date: 08/14/2006 River Code: 02-737 RM: 2.20

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
03360	<i>Plumatella sp</i>	+			
05800	<i>Caecidotea sp</i>	+			
08260	<i>Orconectes (Crockerinus) sanbornii sanbornii</i>	+			
11250	<i>Centroptilum sp (w/o hindwing pads)</i>	+			
13521	<i>Stenonema femoratum</i>	+			
17200	<i>Caenis sp</i>	+			
18600	<i>Ephemera sp</i>	+			
23909	<i>Boyeria vinosa</i>	+			
25510	<i>Stylogomphus albistylus</i>	+			
27340	<i>Helocordulia uhleri</i>	+			
47600	<i>Sialis sp</i>	+			
57400	<i>Neophylax sp</i>	+			
57900	<i>Pycnopsyche sp</i>	+			
63300	<i>Hydroporus sp</i>	+			
68075	<i>Psephenus herricki</i>	+			
77001	<i>Tanypodinae</i>	+			
82730	<i>Chironomus (C.) decorus group</i>	+			
83840	<i>Microtendipes pedellus group</i>	+			
84210	<i>Paratendipes albimanus or P. duplicatus</i>	+			
84750	<i>Stictochironomus sp</i>	+			
85800	<i>Tanytarsus sp</i>	+			
85802	<i>Tanytarsus curticornis</i>	+			

No. Quantitative Taxa: 0	Total Taxa: 22
No. Qualitative Taxa: 22	ICI:
Number of Organisms: 0	Qual EPT: 6

**Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection**

Site: Dry Run

Collection Date: 07/06/2006 River Code: 02-759 RM: 0.10

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
03600	<i>Oligochaeta</i>	+			
08260	<i>Orconectes (Crockerinus) sanbornii sanbornii</i>	+			
13400	<i>Stenacron sp</i>	+			
13521	<i>Stenonema femoratum</i>	+			
13590	<i>Maccaffertium vicarium</i>	+			
17200	<i>Caenis sp</i>	+			
26700	<i>Macromia sp</i>	+			
33100	<i>Leuctra sp</i>	+			
34300	<i>Neoperla clymene complex</i>	+			
34700	<i>Agnatina capitata complex</i>	+			
47600	<i>Sialis sp</i>	+			
50301	<i>Chimarra aterrima</i>	+			
52200	<i>Cheumatopsyche sp</i>	+			
52430	<i>Ceratopsyche morosa group</i>	+			
57900	<i>Pycnopsyche sp</i>	+			
63300	<i>Hydroporus sp</i>	+			
67700	<i>Paracymus sp</i>	+			
67800	<i>Tropisternus sp</i>	+			
68075	<i>Psephenus herricki</i>	+			
71100	<i>Hexatoma sp</i>	+			
71900	<i>Tipula sp</i>	+			
77500	<i>Conchapelopia sp</i>	+			
77800	<i>Helopelopia sp</i>	+			
81825	<i>Rheocricotopus (Psilocricotopus) robacki</i>	+			
82730	<i>Chironomus (C.) decorus group</i>	+			
83003	<i>Dicrotendipes fumidus</i>	+			
83820	<i>Microtendipes "caelum" (sensu Simpson & Bode, 1980)</i>	+			
84210	<i>Paratendipes albimanus or P. duplicatus</i>	+			
84440	<i>Polypedilum (Uresipedilum) aviceps</i>	+			
84470	<i>Polypedilum (P.) illinoense</i>	+			
84750	<i>Stictochironomus sp</i>	+			
85625	<i>Rheotanytarsus sp</i>	+			

No. Quantitative Taxa: 0	Total Taxa: 32
No. Qualitative Taxa: 32	ICI:
Number of Organisms: 0	Qual EPT: 11

**Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection**

Site: Dunlap Creek

Collection Date: 07/17/2006 River Code: 02-768 RM: 2.00

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
03360	<i>Plumatella sp</i>	+			
08250	<i>Orconectes (Procericambarus) rusticus</i>	+			
11018	<i>Acerpenna macdunnoughi</i>	+			
13521	<i>Stenonema femoratum</i>	+			
13590	<i>Maccaffertium vicarium</i>	+			
17200	<i>Caenis sp</i>	+			
22300	<i>Argia sp</i>	+			
23909	<i>Boyeria vinosa</i>	+			
25510	<i>Stylogomphus albistylus</i>	+			
27500	<i>Somatochlora sp</i>	+			
33100	<i>Leuctra sp</i>	+			
34300	<i>Neoperla clymene complex</i>	+			
34500	<i>Perlesta placida complex</i>	+			
47600	<i>Sialis sp</i>	+			
48620	<i>Nigronia serricornis</i>	+			
50301	<i>Chimarra aterrima</i>	+			
51400	<i>Nyctiophylax sp</i>	+			
52200	<i>Cheumatopsyche sp</i>	+			
63300	<i>Hydroporus sp</i>	+			
68130	<i>Helichus sp</i>	+			
71100	<i>Hexatoma sp</i>	+			
72340	<i>Dixella sp</i>	+			
72700	<i>Anopheles sp</i>	+			
74501	<i>Ceratopogonidae</i>	+			
84300	<i>Phaenopsectra obediens group</i>	+			
84470	<i>Polypedilum (P.) illinoense</i>	+			
85800	<i>Tanytarsus sp</i>	+			
85802	<i>Tanytarsus curticornis</i>	+			

No. Quantitative Taxa: 0	Total Taxa: 28
No. Qualitative Taxa: 28	ICI:
Number of Organisms: 0	Qual EPT: 10

Ohio EPA/DSW Ecological Assessment Section
 Macroinvertebrate Collection

Site: Dunlap Creek

Collection Date: 07/17/2006 River Code: 02-768 RM: 0.60

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
03360	<i>Plumatella sp</i>	+			
03600	<i>Oligochaeta</i>	+			
07880	<i>Cambarus (Tubericambarus) thomai</i>	+			
08260	<i>Orconectes (Crockerinus) sanbornii sanbornii</i>	+			
08601	<i>Hydrachnidia</i>	+			
11018	<i>Acerpenna macdunnoughi</i>	+			
11130	<i>Baetis intercalaris</i>	+			
11250	<i>Centroptilum sp (w/o hindwing pads)</i>	+			
11651	<i>Procloeon sp (w/o hindwing pads)</i>	+			
13521	<i>Stenonema femoratum</i>	+			
13590	<i>Maccaffertium vicarium</i>	+			
17200	<i>Caenis sp</i>	+			
23804	<i>Basiaeschna janata</i>	+			
23909	<i>Boyeria vinosa</i>	+			
25510	<i>Stylogomphus albistylus</i>	+			
27340	<i>Helocordulia uhleri</i>	+			
34300	<i>Neoperla clymene complex</i>	+			
43205	<i>Nepa apiculata</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>	+			
57400	<i>Neophylax sp</i>	+			
63300	<i>Hydroporus sp</i>	+			
68075	<i>Psephenus herricki</i>	+			
68130	<i>Helichus sp</i>	+			
69400	<i>Stenelmis sp</i>	+			
71100	<i>Hexatoma sp</i>	+			
72340	<i>Dixella sp</i>	+			
77500	<i>Conchapelopia sp</i>	+			
77800	<i>Helopelopia sp</i>	+			
81650	<i>Parametriocnemus sp</i>	+			
83840	<i>Microtendipes pedellus group</i>	+			
84470	<i>Polypedilum (P.) illinoense</i>	+			
84750	<i>Stictochironomus sp</i>	+			
85615	<i>Rheotanytarsus pellucidus</i>	+			
85625	<i>Rheotanytarsus sp</i>	+			
85800	<i>Tanytarsus sp</i>	+			

No. Quantitative Taxa: 0 Total Taxa: 39
 No. Qualitative Taxa: 39 ICI:
 Number of Organisms: 0 Qual EPT: 12

**Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection**

Site: Rarden Creek

Collection Date: 07/18/2006 River Code: 02-769 RM: 3.90

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
07840	<i>Cambarus (Cambarus) sciotensis</i>	+			
08260	<i>Orconectes (Crockerinus) sanbornii sanbornii</i>	+			
11012	<i>Acentrella n.sp 1</i>	+			
11014	<i>Acentrella turbida</i>	+			
11018	<i>Acerpenna macdunnoughi</i>	+			
11120	<i>Baetis flavistriga</i>	+			
13400	<i>Stenacron sp</i>	+			
13521	<i>Stenonema femoratum</i>	+			
13590	<i>Maccaffertium vicarium</i>	+			
27340	<i>Helocordulia uhleri</i>	+			
33100	<i>Leuctra sp</i>	+			
48620	<i>Nigronia serricornis</i>	+			
50000	<i>Trichoptera</i>	+			
50301	<i>Chimarra aterrima</i>	+			
52200	<i>Cheumatopsyche sp</i>	+			
52430	<i>Ceratopsyche morosa group</i>	+			
52530	<i>Hydropsyche depravata group</i>	+			
53800	<i>Hydroptila sp</i>	+			
68075	<i>Psephenus herricki</i>	+			
69275	<i>Optioservus trivittatus</i>	+			
71100	<i>Hexatoma sp</i>	+			
71900	<i>Tipula sp</i>	+			
74501	<i>Ceratopogonidae</i>	+			
77500	<i>Conchapelopia sp</i>	+			
77800	<i>Helopelopia sp</i>	+			
80420	<i>Cricotopus (C.) bicinctus</i>	+			
84210	<i>Paratendipes albimanus or P. duplicatus</i>	+			
84540	<i>Polypedilum (Tripodura) scalaenum group</i>	+			
85625	<i>Rheotanytarsus sp</i>	+			

No. Quantitative Taxa: 0 Total Taxa: 29
 No. Qualitative Taxa: 29 ICI:
 Number of Organisms: 0 Qual EPT: 14

**Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection**

Site: Rarden Creek

Collection Date: 07/06/2006 River Code: 02-769 RM: 0.30

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
03600	<i>Oligochaeta</i>	+			
04687	<i>Placobdella parasitica</i>	+			
07880	<i>Cambarus (Tubericambarus) thomai</i>	+			
08260	<i>Orconectes (Crockerinus) sanbornii sanbornii</i>	+			
11651	<i>Procloeon sp (w/o hindwing pads)</i>	+			
13521	<i>Stenonema femoratum</i>	+			
16200	<i>Eurylophella sp</i>	+			
23909	<i>Boyeria vinosa</i>	+			
24900	<i>Gomphus sp</i>	+			
25510	<i>Stylogomphus albistylus</i>	+			
26700	<i>Macromia sp</i>	+			
27340	<i>Helocordulia uhleri</i>	+			
34500	<i>Perlesta placida complex</i>	+			
47600	<i>Sialis sp</i>	+			
52200	<i>Cheumatopsyche sp</i>	+			
63300	<i>Hydroporus sp</i>	+			
68130	<i>Helichus sp</i>	+			
69225	<i>Optioservus fastiditus</i>	+			
69250	<i>Optioservus ovalis</i>	+			
69400	<i>Stenelmis sp</i>	+			
71100	<i>Hexatoma sp</i>	+			
72700	<i>Anopheles sp</i>	+			
81650	<i>Parametriocnemus sp</i>	+			
82730	<i>Chironomus (C.) decorus group</i>	+			
83840	<i>Microtendipes pedellus group</i>	+			
84118	<i>Paracladopelma undine</i>	+			
84210	<i>Paratendipes albimanus or P. duplicatus</i>	+			
84440	<i>Polypedilum (Uresipedilum) aviceps</i>	+			
84460	<i>Polypedilum (P.) fallax group</i>	+			
84470	<i>Polypedilum (P.) illinoense</i>	+			
84800	<i>Tribelos jucundum</i>	+			
85800	<i>Tanytarsus sp</i>	+			

No. Quantitative Taxa: 0	Total Taxa: 32
No. Qualitative Taxa: 32	ICI:
Number of Organisms: 0	Qual EPT: 5

Ohio EPA/DSW Ecological Assessment Section
 Macroinvertebrate Collection

Site: Dry Fork

Collection Date: 08/17/2006 River Code: 02-770 RM: 0.90

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
06700	<i>Crangonyx sp</i>	+			
07840	<i>Cambarus (Cambarus) sciotensis</i>	+			
08260	<i>Orconectes (Crockerinus) sanbornii sanbornii</i>	+			
11120	<i>Baetis flavistriga</i>	+			
11250	<i>Centroptilum sp (w/o hindwing pads)</i>	+			
13400	<i>Stenacron sp</i>	+			
13521	<i>Stenonema femoratum</i>	+			
14950	<i>Leptophlebia sp or Paraleptophlebia sp</i>	+			
27340	<i>Helocordulia uhleri</i>	+			
33100	<i>Leuctra sp</i>	+			
34130	<i>Acroneuria frisoni</i>	+			
45300	<i>Sigara sp</i>	+			
47600	<i>Sialis sp</i>	+			
48620	<i>Nigronia serricornis</i>	+			
50301	<i>Chimarra aterrima</i>	+			
51400	<i>Nyctiophylax sp</i>	+			
51600	<i>Polycentropus sp</i>	+			
52200	<i>Cheumatopsyche sp</i>	+			
52315	<i>Diplectrona modesta</i>	+			
52530	<i>Hydropsyche depravata group</i>	+			
57400	<i>Neophylax sp</i>	+			
63300	<i>Hydroporus sp</i>	+			
68130	<i>Helichus sp</i>	+			
69400	<i>Stenelmis sp</i>	+			
71100	<i>Hexatoma sp</i>	+			
71800	<i>Pseudolimnophila sp</i>	+			
71900	<i>Tipula sp</i>	+			
74501	<i>Ceratopogonidae</i>	+			
77120	<i>Ablabesmyia mallochi</i>	+			
77500	<i>Conchapelopia sp</i>	+			
77800	<i>Helopelopia sp</i>	+			
78599	<i>Pentaneura sp</i>	+			
81650	<i>Parametriocnemus sp</i>	+			
82730	<i>Chironomus (C.) decorus group</i>	+			
83003	<i>Dicrotendipes fumidus</i>	+			
83820	<i>Microtendipes "caelum" (sensu Simpson & Bode, 1980)</i>	+			
84210	<i>Paratendipes albimanus or P. duplicatus</i>	+			
85800	<i>Tanytarsus sp</i>	+			

No. Quantitative Taxa: 0 Total Taxa: 38
 No. Qualitative Taxa: 38 ICI:
 Number of Organisms: 0 Qual EPT: 14

**Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection**

Site: Cedar Fork

Collection Date: 08/17/2006 River Code: 02-771 RM: 2.70

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
07840	<i>Cambarus (Cambarus) sciotensis</i>	+			
08260	<i>Orconectes (Crockerinus) sanbornii sanbornii</i>	+			
13590	<i>Maccaffertium vicarium</i>	+			
14950	<i>Leptophlebia sp or Paraleptophlebia sp</i>	+			
18600	<i>Ephemera sp</i>	+			
24900	<i>Gomphus sp</i>	+			
25510	<i>Stylogomphus albistylus</i>	+			
27340	<i>Helocordulia uhleri</i>	+			
47600	<i>Sialis sp</i>	+			
48410	<i>Corydalus cornutus</i>	+			
48620	<i>Nigronia serricornis</i>	+			
50301	<i>Chimarra aterrima</i>	+			
51400	<i>Nyctiophylax sp</i>	+			
51600	<i>Polycentropus sp</i>	+			
52200	<i>Cheumatopsyche sp</i>	+			
52430	<i>Ceratopsyche morosa group</i>	+			
57900	<i>Pycnopsyche sp</i>	+			
68025	<i>Ectopria sp</i>	+			
68075	<i>Psephenus herricki</i>	+			
77120	<i>Ablabesmyia mallochi</i>	+			
78655	<i>Procladius (Holotanypus) sp</i>	+			
84210	<i>Paratendipes albimanus or P. duplicatus</i>	+			
84750	<i>Stictochironomus sp</i>	+			
85625	<i>Rheotanytarsus sp</i>	+			
93900	<i>Elimia sp</i>	+			
95100	<i>Physella sp</i>	+			

No. Quantitative Taxa: 0 Total Taxa: 26

No. Qualitative Taxa: 26 ICI:

Number of Organisms: 0 Qual EPT: 9

Ohio EPA/DW Ecological Assessment Section
 Macroinvertebrate Collection

Site: Plum Run

Collection Date: 08/16/2006 River Code: 02-772 RM: 0.20

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
03600	<i>Oligochaeta</i>	+	93900	<i>Elimia sp</i>	+
05800	<i>Caecidotea sp</i>	+	95100	<i>Physella sp</i>	+
05900	<i>Lirceus sp</i>	+	96264	<i>Planorbella (Pierosoma) pilsbryi</i>	+
07875	<i>Cambarus (Tubericambarus) sp A</i>	+			
08260	<i>Orconectes (Crockerinus) sanbornii sanbornii</i>	+	No. Quantitative Taxa: 0	Total Taxa: 47	
08601	<i>Hydrachnidia</i>	+	No. Qualitative Taxa: 47	ICI:	
11200	<i>Callibaetis sp</i>	+	Number of Organisms: 0	Qual EPT: 8	
11250	<i>Centroptilum sp (w/o hindwing pads)</i>	+			
17200	<i>Caenis sp</i>	+			
22001	<i>Coenagrionidae</i>	+			
23600	<i>Aeshna sp</i>	+			
23909	<i>Boyeria vinosa</i>	+			
27500	<i>Somatochlora sp</i>	+			
47600	<i>Sialis sp</i>	+			
48410	<i>Corydalus cornutus</i>	+			
48620	<i>Nigronia serricornis</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>	+			
60900	<i>Peltodytes sp</i>	+			
66200	<i>Cymbiodyta sp</i>	+			
68075	<i>Psephenus herricki</i>	+			
69400	<i>Stenelmis sp</i>	+			
71900	<i>Tipula sp</i>	+			
74501	<i>Ceratopogonidae</i>	+			
77750	<i>Hayesomyia senata or Thienemannimyia norena</i>	+			
78401	<i>Natarsia species A (sensu Roback, 1978)</i>	+			
78655	<i>Procladius (Holotanypus) sp</i>	+			
80410	<i>Cricotopus (C.) sp</i>	+			
80420	<i>Cricotopus (C.) bicinctus</i>	+			
80430	<i>Cricotopus (C.) tremulus group</i>	+			
81825	<i>Rheocricotopus (Psilocricotopus) robacki</i>	+			
82200	<i>Tvetenia bavarica group</i>	+			
82820	<i>Cryptochironomus sp</i>	+			
83003	<i>Dicrotendipes fumidus</i>	+			
83840	<i>Microtendipes pedellus group</i>	+			
84210	<i>Paratendipes albimanus or P. duplicatus</i>	+			
84460	<i>Polypedilum (P.) fallax group</i>	+			
84750	<i>Stictochironomus sp</i>	+			
85625	<i>Rheotanytarsus sp</i>	+			
85800	<i>Tanytarsus sp</i>	+			
86100	<i>Chrysops sp</i>	+			

**Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection**

Site: Betty's Fork

Collection Date: 08/11/2006 River Code: 02-773 RM: 1.50

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
07840	<i>Cambarus (Cambarus) sciotensis</i>	+			
08260	<i>Orconectes (Crockerinus) sanbornii sanbornii</i>	+			
11018	<i>Acerpenna macdunnoughi</i>	+			
11250	<i>Centroptilum sp (w/o hindwing pads)</i>	+			
11651	<i>Procloeon sp (w/o hindwing pads)</i>	+			
13400	<i>Stenacron sp</i>	+			
13590	<i>Maccaffertium vicarium</i>	+			
21200	<i>Calopteryx sp</i>	+			
23001	<i>Anisoptera</i>	+			
23600	<i>Aeshna sp</i>	+			
23909	<i>Boyeria vinosa</i>	+			
24501	<i>Gomphidae</i>	+			
26100	<i>Cordulegaster sp</i>	+			
27500	<i>Somatochlora sp</i>	+			
33100	<i>Leuctra sp</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>	+			
57900	<i>Pycnopsyche sp</i>	+			
59700	<i>Triaenodes sp</i>	+			
61400	<i>Agabus sp</i>	+			
68130	<i>Helichus sp</i>	+			
69225	<i>Optioservus fastiditus</i>	+			
69400	<i>Stenelmis sp</i>	+			
71100	<i>Hexatoma sp</i>	+			
71900	<i>Tipula sp</i>	+			
74100	<i>Simulium sp</i>	+			
74501	<i>Ceratopogonidae</i>	+			
77500	<i>Conchapelopia sp</i>	+			
77800	<i>Helopelopia sp</i>	+			
82200	<i>Tvetenia bavarica group</i>	+			
84440	<i>Polypedilum (Uresipedilum) aviceps</i>	+			
85500	<i>Paratanytarsus sp</i>	+			
87540	<i>Hemerodromia 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: Jaybird Branch

Collection Date: 07/17/2006 River Code: 02-774 RM: 0.90 A

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
03600	<i>Oligochaeta</i>	+			
06700	<i>Crangonyx sp</i>	+			
07840	<i>Cambarus (Cambarus) sciotensis</i>	+			
07880	<i>Cambarus (Tubericambarus) thomai</i>	+			
11250	<i>Centroptilum sp (w/o hindwing pads)</i>	+			
23600	<i>Aeshna sp</i>	+			
27500	<i>Somatochlora sp</i>	+			
33100	<i>Leuctra sp</i>	+			
45300	<i>Sigara sp</i>	+			
47600	<i>Sialis sp</i>	+			
48620	<i>Nigronia serricornis</i>	+			
51600	<i>Polycentropus sp</i>	+			
52315	<i>Diplectrone modesta</i>	+			
57900	<i>Pycnopsyche sp</i>	+			
63300	<i>Hydroporus sp</i>	+			
71900	<i>Tipula sp</i>	+			
74501	<i>Ceratopogonidae</i>	+			
77120	<i>Ablabesmyia mallochi</i>	+			
81712	<i>Psectrocladius (P.) psilopterus group</i>	+			
83040	<i>Dicrotendipes neomodestus</i>	+			
84800	<i>Tribelos jucundum</i>	+			
85801	<i>Tanytarsus Type 1</i>	+			

No. Quantitative Taxa: 0	Total Taxa: 22
No. Qualitative Taxa: 22	ICI:
Number of Organisms: 0	Qual EPT: 5

**Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection**

Site: Jaybird Branch

Collection Date: 08/21/2006 River Code: 02-774 RM: 0.90 B

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
07820	<i>Cambarus (Cambarus) sp A</i>	+			
07880	<i>Cambarus (Tubericambarus) thomai</i>	+			
27500	<i>Somatochlora sp</i>	+			
33100	<i>Leuctra sp</i>	+			
45300	<i>Sigara sp</i>	+			
47600	<i>Sialis sp</i>	+			
48620	<i>Nigronia serricornis</i>	+			
63300	<i>Hydroporus sp</i>	+			
72700	<i>Anopheles sp</i>	+			
77120	<i>Ablabesmyia mallochi</i>	+			
82730	<i>Chironomus (C.) decorus group</i>	+			
83040	<i>Dicrotendipes neomodestus</i>	+			
85815	<i>Tanytarsus glabrescens group sp 1</i>	+			

No. Quantitative Taxa: 0	Total Taxa: 13
No. Qualitative Taxa: 13	ICI:
Number of Organisms: 0	Qual EPT: 1

**Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection**

Site: Bull Run

Collection Date: 07/18/2006 River Code: 02-787 RM: 0.10

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
03600	<i>Oligochaeta</i>	+			
08260	<i>Orconectes (Crockerinus) sanbornii sanbornii</i>	+			
11018	<i>Acerpenna macdunnoughi</i>	+			
13400	<i>Stenacron sp</i>	+			
13521	<i>Stenonema femoratum</i>	+			
13590	<i>Maccaffertium vicarium</i>	+			
17200	<i>Caenis sp</i>	+			
27001	<i>Corduliidae</i>	+			
33100	<i>Leuctra sp</i>	+			
34100	<i>Acroneuria sp</i>	+			
47600	<i>Sialis sp</i>	+			
52200	<i>Cheumatopsyche sp</i>	+			
68075	<i>Psephenus herricki</i>	+			
68130	<i>Helichus sp</i>	+			
69275	<i>Optioservus trivittatus</i>	+			
69400	<i>Stenelmis sp</i>	+			
71100	<i>Hexatoma sp</i>	+			
71800	<i>Pseudolimnophila sp</i>	+			
71900	<i>Tipula sp</i>	+			
71910	<i>Tipula abdominalis</i>	+			
77800	<i>Helopelopia sp</i>	+			
83840	<i>Microtendipes pedellus group</i>	+			
84210	<i>Paratendipes albimanus or P. duplicatus</i>	+			
84440	<i>Polypedilum (Uresipedilum) aviceps</i>	+			
84800	<i>Tribelos jucundum</i>	+			
85802	<i>Tanytarsus curticornis</i>	+			

No. Quantitative Taxa: 0	Total Taxa: 26
No. Qualitative Taxa: 26	ICI:
Number of Organisms: 0	Qual EPT: 8

**Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection**

Site: Straight Fork Rarden Creek

Collection Date: 07/18/2006 River Code: 02-788 RM: 0.30

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
03600	<i>Oligochaeta</i>	+			
06700	<i>Crangonyx sp</i>	+			
07840	<i>Cambarus (Cambarus) sciotensis</i>	+			
11250	<i>Centroptilum sp (w/o hindwing pads)</i>	+			
13521	<i>Stenonema femoratum</i>	+			
16200	<i>Eurylophella sp</i>	+			
27340	<i>Helocordulia uhleri</i>	+			
33100	<i>Leuctra sp</i>	+			
47600	<i>Sialis sp</i>	+			
48620	<i>Nigronia serricornis</i>	+			
63300	<i>Hydroporus sp</i>	+			
71100	<i>Hexatoma sp</i>	+			
71910	<i>Tipula abdominalis</i>	+			
74501	<i>Ceratopogonidae</i>	+			
77800	<i>Helopelopia sp</i>	+			
80370	<i>Corynoneura lobata</i>	+			
82730	<i>Chironomus (C.) decorus group</i>	+			
83840	<i>Microtendipes pedellus group</i>	+			
84210	<i>Paratendipes albimanus or P. duplicatus</i>	+			
84440	<i>Polypedilum (Uresipedilum) aviceps</i>	+			
84800	<i>Tribelos jucundum</i>	+			

No. Quantitative Taxa: 0	Total Taxa: 21
No. Qualitative Taxa: 21	ICI:
Number of Organisms: 0	Qual EPT: 4

Appendix Table 10. Methods, Biosurvey Background Information, and Notice to Users

METHODS

All chemical, physical, and biological field, EPA laboratory, data processing, and data analysis methods and procedures adhere to those specified in the Manual of Ohio EPA Surveillance Methods and Quality Assurance Practices (Ohio Environmental Protection Agency 2006d), Manual of Laboratory Operating Procedures, Volumes I-IV (Ohio EPA 2002), Biological Criteria for the Protection of Aquatic Life, Volumes II-III (Ohio Environmental Protection Agency 1987b, 1989a, 1989b, 2006a, 2006b), The Qualitative Habitat Evaluation Index (QHEI); Rationale, Methods, and Application (Rankin 1989, Ohio EPA 2006c) for habitat assessment, and Ohio EPA Sediment Sampling Guide and Methodologies (Ohio EPA 2001).

Determining Use Attainment

Use attainment status is a term describing the degree to which environmental indicators are either above or below criteria specified by the Ohio Water Quality Standards (WQS; Ohio Administrative Code 3745-1). Assessing aquatic use attainment status involves a primary reliance on the Ohio EPA biological criteria (OAC 3745-1-07; Table 7-15). These are confined to ambient assessments and apply to rivers and streams outside of mixing zones. Numerical biological criteria are based on multimetric biological indices including the Index of Biotic Integrity (IBI) and modified Index of Well-Being (MIwb), indices measuring the response of the fish community, and the Invertebrate Community Index (ICI), which indicates the response of the macroinvertebrate community. Three attainment status results are possible at each sampling location - full, partial, or non-attainment. Full attainment means that all of the applicable indices meet the biocriteria. Partial attainment means that one or more of the applicable indices fails to meet the biocriteria. Non-attainment means that none of the applicable indices meet the biocriteria or one of the organism groups reflects poor or very poor performance. An aquatic life use attainment table (Table 1) is constructed based on the sampling results and is arranged from upstream to downstream and includes the sampling locations indicated by river mile, the applicable biological indices, the use attainment status (*i.e.*, full, partial, or non), the Qualitative Habitat Evaluation Index (QHEI), and a sampling location description. All biological results were compared to WWH or EWH biocriteria for the Western Allegheny Plateau ecoregion.

Stream Habitat Evaluation

Physical habitat is evaluated using the Qualitative Habitat Evaluation Index (QHEI) developed by the Ohio EPA for streams and rivers in Ohio (Rankin 1989, 1995). Various attributes of the available habitat are scored based on their overall importance to the establishment of viable, diverse aquatic faunas. Evaluations of type and quality of substrate, amount of instream cover, channel morphology, extent of riparian canopy, pool and riffle development and quality, and stream gradient are among the metrics used to evaluate the characteristics of a stream segment, not just the characteristics of a single sampling site. As such, individual sites may have much poorer physical habitat due to a localized disturbance yet still support aquatic communities closely resembling those sampled at adjacent sites with better habitat, provided water quality conditions are similar. QHEI scores from hundreds of segments around the state have indicated that values higher than 60 were generally conducive to the establishment of warmwater faunas while those which scored in excess of 75-80 often typify habitat conditions which have the ability to support exceptional faunas.

Sediment and Surface Water Assessment

Fine grain sediment samples were collected multi-incrementally in the upper four inches of bottom material at each location using decontaminated stainless steel scoops. Decontamination of sediment sampling equipment followed the procedures outlined in the Ohio EPA sediment sampling guidance manual (Ohio EPA 2001). Sediment incremental samples were homogenized in stainless steel pans, transferred into glass jars with teflon lined lids, placed on ice (to maintain 4°C) in a cooler, and delivered to Ohio EPA's Environmental Services laboratory. Sediment data is reported on a dry weight basis. Surface water samples were collected directly into appropriate containers, preserved and delivered to Ohio EPA's Environmental Services laboratory. Surface water samples were collected three to five times from each location from the upper 12 inches of water. Collected water was preserved using appropriate methods, as outlined in Parts II and III of the Manual of Ohio EPA Surveillance Methods and Quality Assurance Practices (Ohio EPA 2006d). Bacteriological samples were collected three to five times at each location. Bacteriological samples were collected directly from the river into sterilized polyethylene containers, cooled to 4°C, and transported to the Ohio EPA laboratory for analysis within 6 hours of sample collection. All samples were analyzed for fecal coliform and *E. coli* bacteria using U.S.EPA approved methods.

Surface water samples were evaluated using comparisons to Ohio Water Quality Standards criteria, reference conditions, or published literature. Sediment evaluations were conducted using guidelines established in MacDonald *et al.* (2000), along with a comparison of metals results to Ohio Sediment Reference Values (Ohio EPA 2003).

Macroinvertebrate Community Assessment

Macroinvertebrates were collected from artificial substrates and from the natural habitats. The artificial substrate collection provided quantitative data and consisted of a composite sample of five modified Hester-Dendy multiple-plate samplers colonized for six weeks. At the time of the artificial substrate collection, a qualitative multihabitat composite sample was also collected. This sampling effort consisted of an inventory of all observed macroinvertebrate taxa from the natural habitats at each site with no attempt to quantify populations other than notations on the predominance of specific taxa or taxa groups within major macrohabitat types (e.g., riffle, run, pool, margin). Due to marginal flow conditions, most watershed sites were collected using only qualitative sampling. Detailed discussion of macroinvertebrate field and laboratory procedures is contained in Biological Criteria for the Protection of Aquatic Life: Volume III, Standardized Biological Field Sampling and Laboratory Methods for Assessing Fish and Macroinvertebrate Communities (Ohio EPA 1989a), including errata updates.

Fish Community Assessment

Fish were sampled once or twice at each site using pulsed DC electrofishing methods. The Scioto Brush Creek basin was sampled using either the boat electrofishing method, with sampling distances of 500 meters or the wading electrofishing method with sampling distances of 100 to 200 meters. Fish were processed in the field, and included identifying each individual to species, counting, weighing (at sites greater than 20 sq. mi.), and recording any external abnormalities. Discussion of the fish community assessment methodology used in this report is contained in Biological Criteria for the Protection of Aquatic Life: Volume III, Standardized Biological Field Sampling and Laboratory Methods for Assessing Fish and Macroinvertebrate Communities (Ohio EPA 1989a).

Field Instrument Calibration

Field instruments are calibrated using manufacturer recommended procedures along with procedures noted in the Manual of Ohio EPA Surveillance Methods and Quality Assurance Practices (2006d) and Biological Criteria for the Protection of Aquatic Life, Volume III (1989b). pH, conductivity, and dissolved oxygen meters were calibrated daily before the start of field work. Laser rangefinders, used to measure sampling distance, were calibrated once at the Groveport Field Facility prior to summer field sampling activities. Fish weighing scales were checked against certified weights once per week during the field season. Calibration of pH, conductivity, dissolved oxygen, fish weighing scales, and laser rangefinders were recorded in a logbook maintained by Ohio EPA, Ecological Assessment Section and Southeast District Office.

Causal Associations

Using the results, conclusions, and recommendations of this report requires an understanding of the methodology used to determine the use attainment status and assigning probable causes and sources of impairment. The identification of impairment in rivers and streams is straightforward - the numerical biological criteria are used to judge aquatic life use attainment and impairment (partial and non-attainment). The rationale for using the biological criteria, within a weight of evidence framework, has been extensively discussed elsewhere (Karr *et al.* 1986; Karr 1991; Ohio EPA 1987a,b; Yoder 1989; Miner and Borton 1991; Yoder 1991; Yoder 1995). Describing the causes and sources associated with observed impairments relies on an interpretation of multiple lines of evidence including water chemistry data, sediment data, habitat data, effluent data, land use data, and biological results (Yoder and Rankin 1995). Thus the assignment of principal causes and sources of impairment in this report represent the association of impairments (based on response indicators) with stressor and exposure indicators. The reliability of the identification of probable causes and sources is increased where many such prior associations have been identified, or have been experimentally or statistically linked together. The ultimate measure of success in water resource management is the restoration of lost or damaged ecosystem attributes including aquatic community structure and function. While there have been criticisms of misapplying the metaphor of ecosystem "health" compared to human patient "health" (Suter 1993), in this document we are referring to the process for evaluating biological integrity and causes or sources associated with observed impairments, not whether human health and ecosystem health are analogous concepts.

BIOSURVEY BACKGROUND INFORMATION

What is a Biological and Water Quality Survey?

A biological and water quality survey, or "biosurvey," is an interdisciplinary monitoring effort coordinated on a waterbody specific or watershed scale. This effort may involve a relatively simple setting focusing on one or two small streams, one or two principal stressors, and a handful of sampling sites or a much more complex effort including entire drainage basins, multiple and overlapping stressors, and tens of sites. Each year Ohio EPA conducts biosurveys in 4-5 watersheds study areas with an aggregate total of 250-300 sampling sites.

The Ohio EPA employs biological, chemical, and physical monitoring and assessment techniques in biosurveys in order to meet three major objectives: 1) determine the extent to which use designations assigned in the Ohio Water Quality Standards (WQS) are either attained or not attained; 2) determine if use designations assigned to a given water body are appropriate and attainable; and 3) determine if any changes in key ambient biological, chemical, or physical indicators have taken place over time, particularly before and after the implementation of point source pollution controls or best management practices. The data gathered by a biosurvey is processed, evaluated, and synthesized in a biological and water quality report. Each biological and water quality study contains a summary of major findings and recommendations for revisions to WQS, future monitoring needs, or other actions which may be needed to resolve existing impairment of designated uses. While the principal focus of a biosurvey is on the status of aquatic life uses, the status of other uses such as recreation and water supply, as well as human health concerns, are also addressed.

The findings and conclusions of a biological and water quality study may factor into regulatory actions taken by Ohio EPA (e.g., NPDES permits, Director's Orders, the Ohio Water Quality Standards [OAC 3745-1], Water Quality Permit Support Documents [WQPSDs]), and are eventually incorporated into State Water Quality Management Plans, the Ohio Nonpoint Source Assessment, and the biennial Integrated Water Quality Monitoring and Assessment Report (305[b] and 303[d]).

Hierarchy of Indicators

A carefully conceived ambient monitoring approach, using cost-effective indicators consisting of ecological, chemical, and toxicological measures, can ensure that all relevant pollution sources are judged objectively on the basis of environmental results. Ohio EPA relies on a tiered approach in attempting to link the results of administrative activities with true environmental measures. This integrated approach includes a hierarchical continuum from administrative to true environmental indicators (Figure 1). The six "levels" of indicators include: 1) actions taken by regulatory agencies (permitting, enforcement, grants); 2) responses by the regulated community (treatment works, pollution prevention); 3) changes in discharged quantities (pollutant loadings); 4) changes in ambient conditions (water quality, habitat); 5) changes in uptake and/or assimilation (tissue contamination, biomarkers, wasteload allocation); and, 6) changes in health, ecology, or other effects (ecological condition, pathogens). In this process the results of administrative activities (levels 1 and 2) can be linked to efforts to improve water quality (levels 3, 4, and 5) which should translate into the environmental "results" (level 6). Thus, the aggregate effect of billions of dollars spent on water pollution control since the early 1970s can now be determined with quantifiable measures of environmental condition. Superimposed on this hierarchy is the concept of stressor, exposure, and response indicators. *Stressor* indicators generally include activities which have the potential to degrade the aquatic environment such as pollutant discharges (permitted and unpermitted), land use effects, and habitat modifications. *Exposure* indicators are those which measure the effects of stressors and can include whole effluent toxicity tests, tissue residues, and biomarkers, each of which provides evidence of biological exposure to a stressor or bioaccumulative agent. *Response* indicators are generally composite measures of the cumulative effects of stress and exposure and include the more direct measures of community and population response that are represented here by the biological indices which comprise Ohio's biological criteria. Other response indicators could include target assemblages, i.e., rare, threatened, endangered, special status, and declining species or bacterial levels which serve as surrogates for the recreation uses. These indicators represent the essential technical elements for watershed-based management approaches. The key, however, is to use the different indicators *within* the roles which are most appropriate for each.

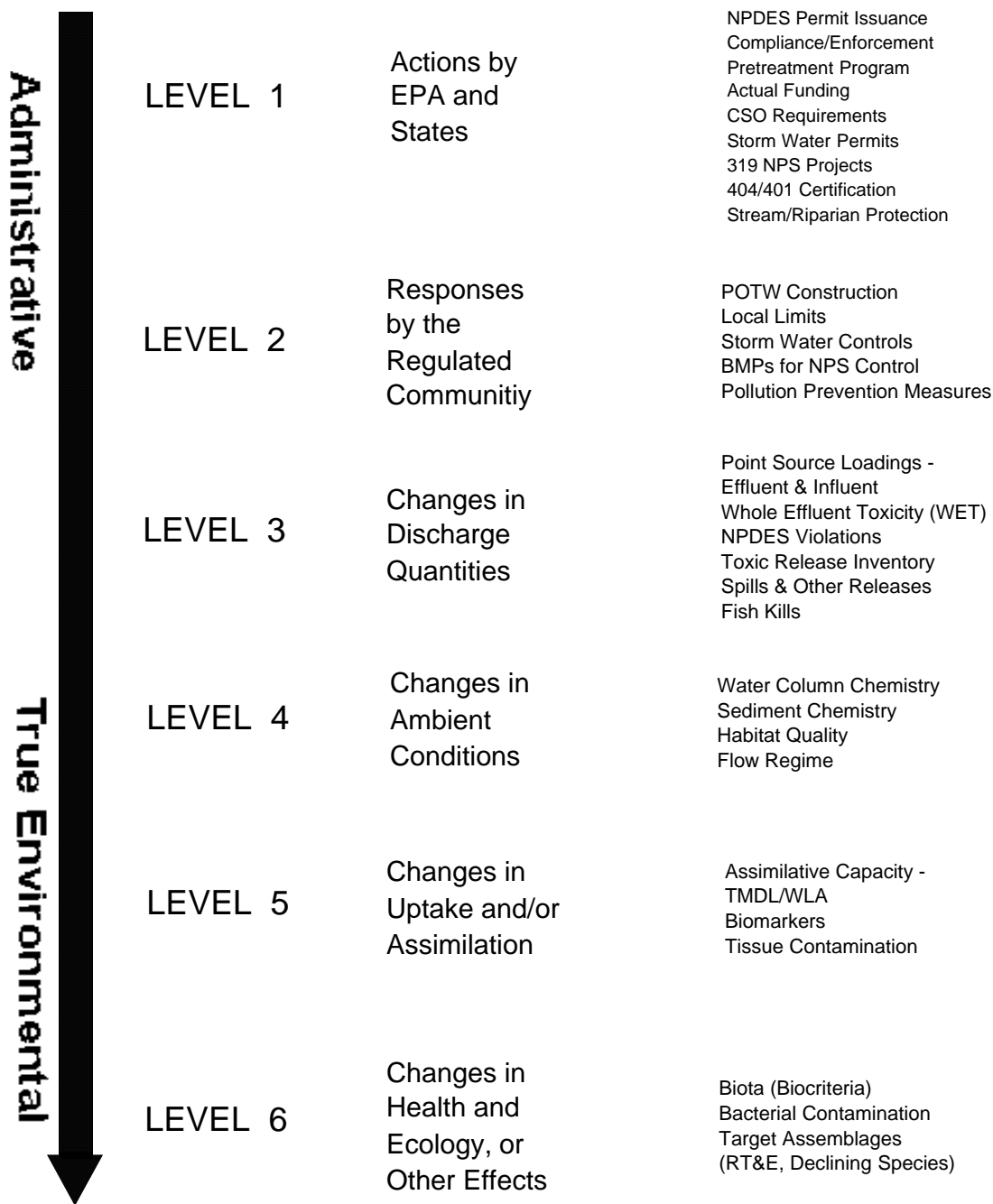


Figure 1. Hierarchy of administrative and environmental indicators which can be used for water quality management activities such as monitoring and assessment, reporting, and the evaluation of overall program effectiveness. This is patterned after a model developed by the U.S. EPA.

Describing the causes and sources associated with observed impairments revealed by the biological criteria and linking this with pollution sources involves an interpretation of multiple lines of evidence including water chemistry data, sediment data, habitat data, effluent data, biomonitoring results, land use data, and biological response signatures within the biological data itself. Thus the assignment of principal causes and sources of impairment represents the association of impairments (defined by response indicators) with stressor and exposure indicators. The principal reporting venue for this process on a watershed or subbasin scale is a biological and water quality report. These reports then provide the foundation for aggregated assessments such as the Integrated Water Quality Monitoring and Assessment Report (305[b] and 303[d]), the Ohio Nonpoint Source Assessment, and other technical bulletins.

Ohio Water Quality Standards: Designated Aquatic Life Use

The Ohio Water Quality Standards (WQS; Ohio Administrative Code 3745-1) consist of designated uses and chemical, physical, and biological criteria designed to represent measurable properties of the environment that are consistent with the goals specified by each use designation. Use designations consist of two broad groups, aquatic life and non-aquatic life uses. In applications of the Ohio WQS to the management of water resource issues in Ohio's rivers and streams, the aquatic life use criteria frequently result in the most stringent protection and restoration requirements, hence their emphasis in biological and water quality reports. Also, an emphasis on protecting for aquatic life generally results in water quality suitable for all uses. The five different aquatic life uses currently defined in the Ohio WQS are described as follows:

1) *Warmwater Habitat (WWH)* - this use designation defines the "typical" warmwater assemblage of aquatic organisms for Ohio rivers and streams; *this use represents the principal restoration target for the majority of water resource management efforts in Ohio.*

2) *Exceptional Warmwater Habitat (EWH)* - this use designation is reserved for waters which support "unusual and exceptional" assemblages of aquatic organisms which are characterized by a high diversity of species, particularly those which are highly intolerant and/or rare, threatened, endangered, or special status (*i.e.*, declining species); *this designation represents a protection goal for water resource management efforts dealing with Ohio's best water resources.*

3) *Coldwater Habitat (CWH)* - this use is intended for waters which support assemblages of cold water organisms and/or those which are stocked with salmonids with the intent of providing a put-and-take fishery on a year round basis which is further sanctioned by the Ohio DNR, Division of Wildlife; this use should not be confused with the Seasonal Salmonid Habitat (SSH) use which applies to the Lake Erie tributaries which support periodic "runs" of salmonids during the spring, summer, and/or fall.

4) *Modified Warmwater Habitat (MWH)* - this use applies to streams and rivers which have been subjected to extensive, maintained, and essentially permanent hydromodifications such that the biocriteria for the WWH use are not attainable *and where the activities have been sanctioned by state or federal law*; the representative aquatic assemblages are generally composed of species which are tolerant to low dissolved oxygen, silt, nutrient enrichment, and poor quality habitat.

5) *Limited Resource Water (LRW)* - this use applies to small streams (usually <3 mi² drainage area) and other water courses which have been irretrievably altered to the extent that no appreciable assemblage of aquatic life can be supported; such waterways generally include small streams in extensively urbanized areas, those which lie in watersheds with extensive drainage modifications, those which completely lack water on a recurring annual basis (*i.e.*, true ephemeral streams), or other irretrievably altered waterways.

Chemical, physical, and/or biological criteria are generally assigned to each use designation in accordance with the broad goals defined by each. As such the system of use designations employed in the Ohio WQS constitutes a "tiered" approach in that varying and graduated levels of protection are provided by each. This hierarchy is especially apparent for parameters such as dissolved oxygen, ammonia-nitrogen, temperature, and the biological criteria. For other parameters such as heavy metals, the technology to construct an equally graduated set of criteria has been lacking, thus the same water quality criteria may apply to two or three different use designations.

Ohio Water Quality Standards: Non-Aquatic Life Uses

In addition to assessing the appropriateness and status of aquatic life uses, each biological and water quality survey also addresses non-aquatic life uses such as recreation, water supply, and human health concerns as appropriate. The recreation uses most applicable to rivers and streams are the Primary Contact Recreation (PCR) and Secondary Contact Recreation (SCR) uses. The criterion for designating the PCR use can be having a water depth of at least one meter over an area of at least 100 square feet or, lacking this, where frequent human contact is a reasonable expectation. If a water body does not meet either criterion, the SCR use applies. The attainment status of PCR and SCR is determined using bacterial indicators (*e.g.*, fecal coliform, *E. coli*) and the criteria for each are specified in the Ohio WQS.

Attainment of recreation uses are evaluated based on monitored bacteria levels. The Ohio Water Quality Standards state that all waters should be free from any public health nuisance associated with raw or poorly treated sewage (Administrative Code 3745-1-04, Part F). Additional criteria (Administrative Code 3745-1-07) apply to waters that are designated as suitable for full body contact such as swimming (PCR- primary contact recreation) or for partial body contact such as wading (SCR- secondary contact recreation). These standards were developed to protect human health, because even though fecal coliform bacteria are relatively harmless in most cases, their presence indicates that the water has been contaminated with fecal matter.

Water supply uses include Public Water Supply (PWS), Agricultural Water Supply (AWS), and Industrial Water Supply (IWS). Public Water Supplies are simply defined as segments within 500 yards of a potable water supply or food processing industry intake. The AWS and IWS use designations generally apply to all waters unless it can be clearly shown that they are not applicable. An example of this would be an urban area where livestock watering or pasturing does not take place, thus the AWS use would not apply. Chemical criteria are specified in the Ohio WQS for each use and attainment status is based primarily on chemical-specific indicators. Human health concerns are additionally addressed with fish tissue data, but any consumption advisories are issued by the Ohio Department of Health.

NOTICE TO USERS

Ohio EPA incorporated biological criteria into the Ohio Water Quality Standards (WQS; Ohio Administrative Code 3745-1) regulations in February 1990 (effective May 1990). These criteria consist of numeric values for the Index of Biotic Integrity (IBI) and Modified Index of Well-Being (MIwb), both of which are based on fish assemblage data, and the Invertebrate Community Index (ICI), which is based on macroinvertebrate assemblage data. Criteria for each index are specified for each of Ohio's five ecoregions (as described by Omernik 1987), and are further organized by organism group, index, site type, and aquatic life use designation. These criteria, along with the existing chemical and whole effluent toxicity evaluation methods and criteria, figure prominently in the monitoring and assessment of Ohio's surface water resources.

The following documents support the use of biological criteria by outlining the rationale for using biological information, the methods by which the biocriteria were derived and calculated, the field methods by which sampling must be conducted, and the process for evaluating results:

Ohio Environmental Protection Agency. 1987a. Biological criteria for the protection of aquatic life: Volume I. The role of biological data in water quality assessment. Div. Water Qual. Monit. & Assess., Surface Water Section, Columbus, Ohio.

Ohio Environmental Protection Agency. 1987b. Biological criteria for the protection of aquatic life: Volume II. Users manual for biological field assessment of Ohio surface waters. Div. Water Qual. Monit. & Assess., Surface Water Section, Columbus, Ohio.

Ohio Environmental Protection Agency. 1989b. Addendum to Biological criteria for the protection of aquatic life: Volume II. Users manual for biological field assessment of Ohio surface waters. Div. Water Qual. Plan. & Assess., Ecol. Assess. Sect., Columbus, Ohio.

Ohio Environmental Protection Agency. 1989c. Biological criteria for the protection of aquatic life: Volume III. Standardized biological field sampling and laboratory methods for assessing fish and macroinvertebrate communities. Div. Water Quality Plan. & Assess., Ecol. Assess. Sect., Columbus, Ohio.

Ohio Environmental Protection Agency. 1990. The use of biological criteria in the Ohio EPA surface water monitoring and assessment program. Div. Water Qual. Plan. & Assess., Ecol. Assess. Sect., Columbus, Ohio.

Ohio Environmental Protection Agency. 2006a. 2006 updates to Biological Criteria for the Protection of Aquatic Life: Volume II and Volume II Addendum. Users manual for biological field assessment of Ohio surface waters. Div. of Surface Water, Ecol. Assess. Sect., Columbus, Ohio.

Ohio Environmental Protection Agency. 2006b. 2006 updates to Biological Criteria for the Protection of Aquatic Life: Volume III. Standardized biological field sampling and laboratory methods for assessing fish and macroinvertebrate communities. Div. of Surface Water, Ecol. Assess. Sect., Columbus, Ohio.

Ohio Environmental Protection Agency. 2006c. Methods for assessing habitat in flowing waters: Using the Qualitative Habitat Evaluation Index (QHEI). Ohio EPA Tech. Bull. EAS/2006-06-1. Div. of Surface Water, Ecol. Assess. Sect., Columbus, Ohio.

Rankin, E.T. 1989. The qualitative habitat evaluation index (QHEI): rationale, methods, and application. Div. Water Qual. Plan. & Assess., Ecol. Assess. Sect., Columbus, Ohio.

In addition to the preceding guidance documents, the following publications by the Ohio EPA should also be consulted as they present supplemental information and analyses used by the Ohio EPA to implement the biological criteria.

- DeShon, J.D. 1995. Development and application of the invertebrate community index (ICI), pp. 217-243. in W.S. Davis and T. Simon (eds.). *Biological Assessment and Criteria: Tools for Risk-based Planning and Decision Making*. Lewis Publishers, Boca Raton, FL.
- Rankin, E. T. 1995. The use of habitat assessments in water resource management programs, pp. 181-208. in W. Davis and T. Simon (eds.). *Biological Assessment and Criteria: Tools for Water Resource Planning and Decision Making*. Lewis Publishers, Boca Raton, FL.
- Yoder, C.O. and E.T. Rankin. 1995. Biological criteria program development and implementation in Ohio, pp. 109-144. in W. Davis and T. Simon (eds.). *Biological Assessment and Criteria: Tools for Water Resource Planning and Decision Making*. Lewis Publishers, Boca Raton, FL.
- Yoder, C.O. and E.T. Rankin. 1995. Biological response signatures and the area of degradation value: new tools for interpreting multimetric data, pp. 263-286. in W. Davis and T. Simon (eds.). *Biological Assessment and Criteria: Tools for Water Resource Planning and Decision Making*. Lewis Publishers, Boca Raton, FL.
- Yoder, C.O. 1995. Policy issues and management applications for biological criteria, pp. 327-344. in W. Davis and T. Simon (eds.). *Biological Assessment and Criteria: Tools for Water Resource Planning and Decision Making*. Lewis Publishers, Boca Raton, FL.
- Yoder, C.O. and E.T. Rankin. 1995. The role of biological criteria in water quality monitoring, assessment, and regulation. *Environmental Regulation in Ohio: How to Cope With the Regulatory Jungle*. Inst. of Business Law, Santa Monica, CA. 54 pp.
- Yoder, C.O. and M.A. Smith. 1999. Using fish assemblages in a State biological assessment and criteria program: essential concepts and considerations, pp. 17-63. in T. Simon (ed.). *Assessing the Sustainability and Biological Integrity of Water Resources Using Fish Communities*. CRC Press, Boca Raton, FL.

These documents and this report may be obtained by writing to:

Ohio EPA, Division of Surface Water
Ecological Assessment Section
4675 Homer Ohio Lane
Groveport, Ohio 43125

or

www.epa.state.oh.us/dsw/formspubs.html