



Biological and Habitat Studies: 16 River and Stream Projects in Ohio

Year 2012 Section 319(h) Grants (Baseline Monitoring)
Prior Year Section 319(h) Grants (Post-Project Monitoring)



Division of Surface Water
Ecological Assessment Section
August 29, 2014

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INTRODUCTION

In 1987 the federal Clean Water Act amendments created a national program to control nonpoint source pollution (NPS), established under Section 319 of the Clean Water Act. Ohio EPA is the designated water quality agency responsible for administering the Ohio 319 program. Since 1990, Ohio EPA has annually applied for, received, and distributed Section 319 grant funds to correct NPS caused water quality impairment to Ohio's surface water resources. Section 319(h) implementation grant funding is targeted to Ohio waters where NPS pollution is a significant cause of aquatic life use impairments. The cornerstone of Ohio's 319 program is working with watershed groups and others who are implementing locally developed watershed management plans and restoring surface waters impaired by NPS pollution.

A requirement of each project is a baseline and post-project water quality monitoring study, used to gauge the effectiveness of the NPS project improvement. For projects approved prior to FFY2008, the baseline and post-project monitoring was conducted by the subgrantees. Starting with FFY2008 approved Section 319 projects, all baseline and post-project environmental monitoring is being completed by the Ohio EPA, Ecological Assessment Section (EAS). Monitoring includes evaluating biological and physical habitat conditions. The following summaries in this report include baseline monitoring conducted at each of nine FFY2012 319(h) grant project areas during the summer and fall of 2012 (Table 1). Seven additional projects were monitored during 2012, but are listed under FFY2010, FFY2009, and FFY2008 funding years for the Section 319(h) grant program. These seven projects evaluated biological and habitat conditions after each project had been completed (Table 2).

The following pages include summaries of monitoring and assessment results for each project listed in Tables 1 and 2. Each summary includes an attainment table, site location table, and site location map. Appendices A-E include a compilation of biological and habitat data collected at all sites in all project areas and are organized as follows.

- Appendix A. Qualitative Habitat Evaluation Index (QHEI) Scores and Attributes.
- Appendix B. Fish Index of Biotic Integrity (IBI) Scores and Metrics.
- Appendix C. Fish Species and Abundance for Each Sampling Location.
- Appendix D. Invertebrate Community Index (ICI) Scores and Metrics.
- Appendix E. Macroinvertebrate Collection Results.

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Stream sampling/lab analysis: Dale Eicher, Jack Freda, Chuck McKnight, Bob Miltner, Ben Rich, Holly Tucker

Data support: Dennis Mishne

Report preparation and analysis: Laura Hughes, Jeff DeShon

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Table 1. FFY2012 Section 319(h) Grant Projects (Pre-Project Baseline Monitoring – 2012)

Project #	Project Title	Project Sponsor	Grant Amount
12(h)EPA-19	Black River Creek Restoration	City of Elyria	\$260,586
12(h)EPA-22	Swan Creek River and Floodplain Restoration	TMACOGG	\$80,471
12(h)EPA-23	Powderlick Run Restoration	The River Institute	\$214,306
12(h)EPA-25	Salt Lick Creek Protection and Restoration	Ohio Valley Conservation Coalition	\$318,336
12(h)EPA-27	Rose Run Stormwater and Riparian Enhancements	City of New Albany	\$230,885
12(h)EPA-28	Blacklick Creek Stream Restoration	Franklin County MetroParks	\$308,220
12(h)EPA-33	Pond Brook Restoration	Metroparks Serving Summit Co.	\$326,900
12(h)EPA-36	East Branch Chagrin River Stream Restoration	Holden Arboretum	\$163,400
10(h)EPA-21	Sycamore Creek at Shawnee Crossing Bank Stabilization	City of Pickerington	\$139,537

Table 2. Prior Year Section 319(h) Grant Projects (Post-Project Monitoring – 2012)

Project #	Project Title	Project Sponsor	Year Completed	Year Grant Closed
10(h)EPA-11	West Branch Raccoon Creek- Harble Griffith Road Acid Mine Drainage	Ohio University-ILGARD	2011	2014
09(h)EPA-14	Furnace Run Restoration & Conservation	Metroparks Serving Summit Co.	2011	2013
08(h)EPA-17	Huff Run Restoration	Rural Action, Inc.	2010	2011
08(h) EPA-19	Big Darby Headwater, Stream & Wetlands Restoration	The Nature Conservancy	2011	2012
08(h)EPA-06	Kenston Lake Dam Modification & Stream Restoration	Bainbridge Township Trustees	2011	2012
09(h)EPA-17	Village of New Albany Stream Restoration	New Albany	2010	2012
08(h)EPA-35	Waterman Farm Agricultural BMP Demonstration	The Ohio State University	2011	2013

PROJECT NAME: BLACK RIVER RESTORATION**Pre-Project Baseline Monitoring**

PROJECT NUMBER: 12(h)EPA-19

STREAMS SAMPLED: Black River, East Branch Black River, West Branch Black River

SUMMARY

Funding for this project will be used to restore 1,300 linear feet of stream channel and to protect 1.6 acres of forested riparian buffer on the mainstem of the Black River. The project will include the installation of in-stream structure(s) and flow control, stream bank stabilization and bio-engineering, and establishment/enhancement of vegetated riparian buffers. Successful completion of this project will stabilize and restore the stream bank to reduce erosion and its contribution to the sediment load.

Biological sampling occurred upstream from the project area on the East Branch Black River (RM 0.36) and the West Branch Black River (RM 1.2), within the proposed project area on the Black River (RM 14.95), and at a downstream location on the Black River (RM 11.5). The two Black River sites (RMs 11.5 & 14.95) met the WWH biocriteria with good to very good biological communities (Tables 3 & 4, Figure 1). The West Branch site at RM 1.2 had an exceptional macroinvertebrate community but fair fish community resulting in partial attainment of the WWH aquatic life use. The East Branch at RM 0.36 was impounded by a dam resulting in a fair fish community and poor macroinvertebrate community; neither met applicable WWH biocriteria.

TABLE 3. AQUATIC LIFE USE ATTAINMENT – BLACK RIVER 2012.

The Index of Biotic Integrity (IBI), Modified Index of Well-being (MIwb), and Invertebrate Community Index (ICI) scores are based on the performance of the biological community. The Qualitative Habitat Evaluation Index (QHEI) is a measure of the ability of the physical habitat to support a biological community. Stream sites are located in the Erie-Ontario Lake Plain (EOLP) ecoregion. In the Ohio Water Quality Standards, the East Branch of the Black River, the West Branch of the Black River, and the Black River are designated Warmwater Habitat (WWH) within the study area.

River Mile ^a (drainage mi ²)	Attainment Status	IBI	MIwb	ICI	QHEI	Narrative Assessment Fish/Macroinvertebrates
Black River - WWH Existing						
RM 14.95 ^B (396)	FULL	45	9.4	36	83.0 (excellent)	Very Good/Good
RM 11.5 ^B (398)	FULL	42	9.5	36	72.5 (good)	Good/Good
West Branch Black River - WWH Existing						
RM 1.2 ^W (176)	PARTIAL	38	6.1*	46	80.0 (excellent)	Fair/Exceptional
East Branch Black River - WWH Existing						
RM 0.36 ^B (222)	NON	33*	7.7*	<u>8</u> *	64.5 (good)	Fair/Poor

Ecoregion Biocriteria: Erie-Ontario Lake Plain	
INDEX – SITE TYPE	WWH
IBI: Boat	40
IBI: Wading	38
MIwb: Boat	8.7
MIwb: Wading	7.9
ICI	34

a B – boat electrofishing site; W – wading electrofishing site.

* Indicates significant departure from applicable biocriteria (>4 IBI or ICI units, or >0.5 MIwb units). Underlined scores are in the Poor or Very Poor range.

Table 4. Sampling locations in the Black River study area, 2012.

River Mile	Latitude	Longitude	Stream Name and Sampling Location
14.95	41.379300	-82.107710	Black R. at Elyria @ Cascade Park
11.5	41.396900	-82.097800	Black R. dst. Elyria, near Spring Valley Golf Club
1.2	41.365200	-82.112200	W. Br. Black R. @ Elyria, upst. Third St.
0.36	41.3687500	-82.106400	E. Br. Black R. @ Elyria @ Washington St.



Figure 1: Black River study area sampling locations, 2012.

PROJECT NAME: SWAN CREEK RIVER AND FLOODPLAIN RESTORATION**Pre-Project Baseline Monitoring**

PROJECT NUMBER: 12(h)EPA-22

STREAM SAMPLED: Swan Creek

SUMMARY

Funding for this project will be used to restore eight acres of floodplain along upper Swan Creek. Restoration activities will include the installation of riparian buffer/vegetation strips, location-specific conservation buffers and acquiring conservation easements. The project will also stabilize 2,400 linear feet of stream bank using bio-engineering, and will have trees, shrubs, and/or live stakes planted in 3.2 acres of the riparian area. The project will include reconstruction/restoration of 8.8 acres of wetlands by planting wetland species over the entire site. This project will add at least 4.2 acres of new buffer area, with the remaining acreage consisting of wetland restoration and non-invasive stream bank stabilization work using natural techniques.

In 2012, the three stations sampled in Swan Creek exhibited fair to poor habitat conditions with good to fair biological communities (Tables 5 & 6, Figure 2). Swan creek is designated Warmwater Habitat (WWH). The upstream (RM 27.1) and downstream (RM 24.7) sites sampled in Swan Creek were partially attaining the WWH aquatic life use with fair to good biological communities and fair physical habitat conditions. The downstream site (RM 24.7) was noted to be sluggish and silty with soft, mucky substrates. The site located in the project area at RM 25.6 had poor habitat conditions but biological results were good and met the WWH biological criteria. Completion of this project will stabilize the stream bank and add new buffer areas along the creek bank.

TABLE 5. AQUATIC LIFE USE ATTAINMENT – SWAN CREEK 2012.

The Index of Biotic Integrity (IBI), Modified Index of Well-being (MIwb), and Invertebrate Community Index (ICI) scores are based on the performance of the biological community. The Qualitative Habitat Evaluation Index (QHEI) is a measure of the ability of the physical habitat to support a biological community. Stream sites are located in the Huron-Erie Lake Plain (HELP) ecoregion. In the Ohio Water Quality Standards, Swan Creek is designated Warmwater Habitat (WWH).

River Mile ^a (drainage mi ²)	Attainment Status	IBI	MIwb	ICI	QHEI	Narrative Assessment Fish/Macroinvertebrates
Swan Creek - WWH Existing						
RM 27.1 ^W (65.7)	PARTIAL	41	8.3	26*	58.8 (fair)	Good/Fair
RM 25.6 ^W (68.5)	FULL	42	7.8	36	39.3 (poor)	Good/Good
RM 24.7 ^W (89)	PARTIAL	35	7.2 ^{ns}	18*	51.0 (fair)	Marginally Good/Fair

Ecoregion Biocriteria: Huron-Erie Lake Plains	
INDEX – SITE TYPE	WWH
IBI: Wading	32
MIwb: Wading	7.3
ICI	34

a W – wading electrofishing site.

* Indicates significant departure from applicable biocriteria (>4 IBI or ICI units, or >0.5 MIwb units). Underlined scores are in the Poor or Very Poor range.

ns Nonsignificant departure from biocriteria (≤4 IBI or ICI units, or ≤0.5 MIwb units).

Table 6. Sampling locations in the Swan Creek study area, 2012.

River Mile	Latitude	Longitude	Stream Name and Sampling Location
27.1	41.543100	-83.839400	Swan Creek NW of Whitehouse @ Wilkins Rd.
25.6	41.536600	-83.818670	Swan Creek NW of Whitehouse, dst. St. Rt. 295, S of Obee Rd.
24.7	41.533600	-83.806900	Swan Creek N of Whitehouse @ Spencer Rd.

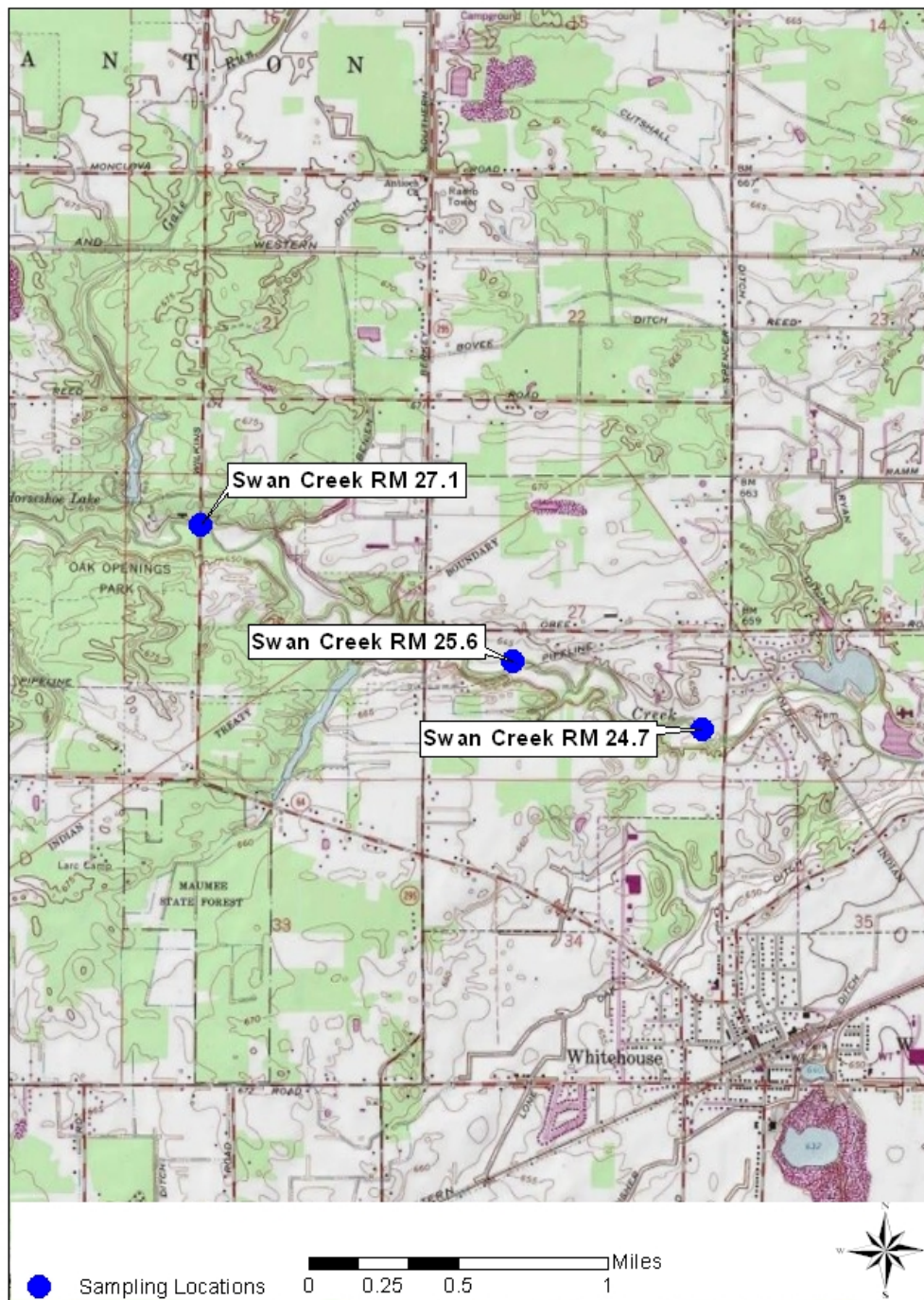


Figure 2: Swan Creek study area sampling locations, 2012.

PROJECT NAME: POWDER LICK RUN RESTORATION PROJECT**Pre-Project Baseline Monitoring**

PROJECT NUMBER: 12(h)EPA-23

STREAM SAMPLED: Powder Lick Run

SUMMARY

Funding for this project will be used to restore approximately 2,350 feet of Powder Lick Run, a tributary to Bokes Creek. The project will also re-establish 1,550 linear feet of floodplain and restore nearly 400 linear feet of riparian areas. Restoration will be accomplished by excavating a new channel and floodplain at the bed invert of the existing channel. Approximately 4.5 acres of riparian area will be planted with native grasses, trees, shrubs and/or live stakes. Successful completion of this project will reduce nonpoint source pollutant loadings to Bokes Creek and will create a stable channel form within a vegetated active floodplain. The restored channel form will provide better morphological functionality and an overall better ecosystem capable of achieving WWH biocriteria.

In 2012, the five stations sampled in Powder Lick Run exhibited good to fair habitat conditions with marginally good to poor biological communities (Tables 7 & 8, Figure 3). Powder Lick Run is designated WWH but the sites sampled in Powder Lick Run were not attaining the WWH aquatic life use. Fish communities were poor and the qualitative macroinvertebrate evaluations were poor at the upstream (RM 2.6) and downstream (RM 1.2) sites. Within the proposed restoration area (RMs 2.15 and 1.6), fish communities were marginally good to fair but the macroinvertebrate evaluations were poor. RM 1.3 was also within the proposed restoration area but only physical habitat conditions were assessed and the site exhibited fair habitat. The impairment found at these sites was due to channelization with a bottom dominated by silty muck substrates. At RMs 1.6 and 2.15 the stream was noted to be full of filamentous algae.

TABLE 7. AQUATIC LIFE USE ATTAINMENT – POWDER LICK RUN 2012.

The Index of Biotic Integrity (IBI), Modified Index of Well-being (MIwb), and Invertebrate Community Index (ICI) scores are based on the performance of the biological community. The Qualitative Habitat Evaluation Index (QHEI) is a measure of the ability of the physical habitat to support a biological community. Stream sites are located in the Eastern Corn Belt Plains (ECBP) ecoregion. In the Ohio Water Quality Standards, Powder Lick Run is designated Warmwater Habitat (WWH). A narrative evaluation was used to assess macroinvertebrate quality. Only a Qualitative Habitat Evaluation Index (QHEI) assessment was completed at RM 1.35.

River Mile ^a (drainage mi ²)	Attainment Status	IBI	MIwb ^b	ICI ^c	QHEI	Narrative Assessment Fish/Macroinvertebrates
Powder Lick Run - WWH Existing						
RM 2.6 ^H (2.5)	NON	<u>20</u> *	-	<u>P</u> *	44.3 (fair)	Poor/Poor
RM 2.15 ^H (2.6)	NON	28*	-	<u>P</u> *	55.3 (good)	Fair/Poor
RM 1.6 ^H (3.3)	NON	36 ^{ns}	-	<u>P</u> *	59.5 (good)	Marginally Good/Poor
RM 1.35 ^H (3.5)	-	-	-	-	53.3 (fair)	-
RM 1.2 ^H (3.5)	NON	<u>26</u> *	-	<u>P</u> *	57.5 (good)	Poor/Poor

Ecoregion Biocriteria: Eastern Corn Belt Plains	
INDEX – SITE TYPE	WWH
IBI: Headwater	40
ICI	36

a H – headwater electrofishing site.

b MIwb is not applicable to headwater streams with drainage areas ≤ 20 mi².

c Narrative evaluation used in lieu of ICI when score not available (P-Poor).

* Indicates significant departure from applicable biocriteria (>4 IBI or ICI units, or >0.5 MIwb units) or WWH narrative expectation. Underlined scores are in the Poor or Very Poor range.

ns Nonsignificant departure from biocriteria (≤ 4 IBI or ICI units, or ≤ 0.5 MIwb units).

Table 8. Sampling locations in the Powder Lick Run study area, 2012.

River Mile	Latitude	Longitude	Stream Name and Sampling Location
2.6	40.381680	-83.445620	Powder Lick Run dst. Day Lay #1
2.15	40.385600	-83.438900	Powder Lick Run @ Powder Lick Rd. (3 rd crossing)
1.6	40.385100	-83.433130	Powder Lick Run @ Powder Lick Rd. (2 nd crossing upst. mouth)
1.35	40.383830	-83.429120	Powder Lick Run upst. Powder Lick Rd. (lower crossing)
1.2	40.384200	-83.427200	Powder Lick Run @ Powder Lick Rd. (lower crossing)

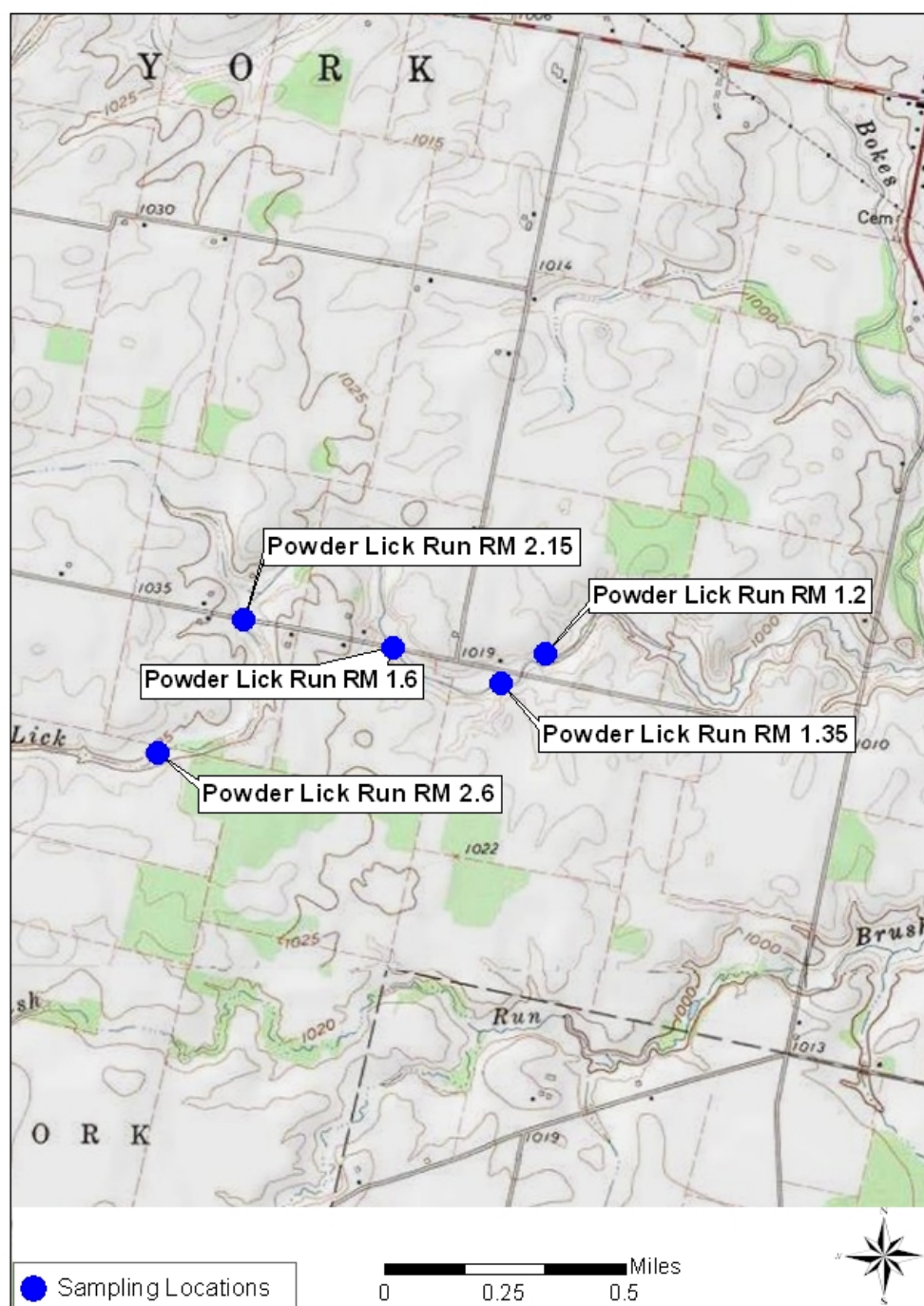


Figure 3: Powder Lick Run study area sampling locations, 2012.

PROJECT NAME: SALT LICK CREEK PROTECTION AND RESTORATION**Pre-Project Baseline Monitoring**

PROJECT NUMBER: 12(h)EPA-25

STREAMS SAMPLED: Salt Lick Creek and Tributary to Salt Lick Creek

SUMMARY

Funding for this project will be used to restore approximately 1,500 linear feet of stream bank of a tributary at the confluence with Salt Lick Creek and to create/expand 1.5 acres of floodplain wetlands. In addition, approximately 100 acres of conservation easements will be donated by the city of Jackson. Successful completion of this project will reduce nonpoint source pollutant loadings to Salt Lick Creek and restore important riparian areas.

In 2012, the one station sampled in Salt Lick Creek (RM 23.7) and the site on the unnamed tributary to Salt Lick Creek (RM 23.82) at RM 0.3 exhibited very poor to fair habitat conditions with very poor to good biological communities (Tables 9 & 10, Figure 5). The sampling sites were located upstream (RM 0.3-tributary to Salt Lick Creek) and downstream (RM 23.7- Salt Lick Creek) from the restoration area. The fish community from Salt Lick Creek at RM 23.7 was good but the qualitative macroinvertebrate evaluation was very poor resulting in non-attainment of the WWH aquatic life use. The tributary to Salt Lick Creek is undesignated. Fish communities from the tributary to Salt Lick Creek at RM 0.3 were fair but no macroinvertebrates were sampled because the site was dry when the macroinvertebrate crew went to sample. Attempts were made to sample the tributary to Salt Lick Creek at RM 0.1 but it was dry during the summer and no data were collected. Sources of biological impairment in Salt Lick Creek include channelization and urban influence.

TABLE 9. AQUATIC LIFE USE ATTAINMENT – SALT LICK CREEK 2012.

The Index of Biotic Integrity (IBI), Modified Index of Well-being (MIwb), and Invertebrate Community Index (ICI) scores are based on the performance of the biological community. The Qualitative Habitat Evaluation Index (QHEI) is a measure of the ability of the physical habitat to support a biological community. Stream sites are located in the Western Allegheny Plateau (WAP) ecoregion. In the Ohio Water Quality Standards, Salt Lick Creek is designated Warmwater Habitat (WWH) and the tributary to Salt Lick Creek (RM 23.82) is undesignated. The site on the tributary to Salt Lick Creek at RM 0.3 was dry when the macroinvertebrate crew visited, so no macroinvertebrate sample was collected. The site on the tributary to Salt Lick Creek at RM 0.1 was dry during the summer and, while attempted, neither fish nor macroinvertebrates were collected.

River Mile ^a (drainage mi ²)	Attainment Status	IBI	MIwb ^b	ICI	QHEI	Narrative Assessment Fish/Macroinvertebrates
Salt Lick Creek – WWH existing						
RM 23.7 ^W (33.6)	NON	45	8.4	<u>6</u> *	47.8 (fair)	Good/Very Poor
Tributary to Salt Lick Creek (RM 23.82) – Undesignated^c						
RM 0.3 ^H (4.7)	NON	34*	-	-	29.5 (very poor)	Fair/-
RM 0.1 ^H (4.6)	-	-	-	-	-	-

Ecoregion Biocriteria: Western Allegheny Plateau	
INDEX – SITE TYPE	WWH
IBI: Headwater	44
IBI: Wading	44
MIwb: Wading	8.4
ICI	36

a H – headwater electrofishing site; W - wading electrofishing site.

b MIwb is not applicable to headwater streams with drainage areas ≤ 20 mi².

c WWH criteria apply to the undesignated site

* Indicates significant departure from applicable biocriteria (>4 IBI or ICI units, or >0.5 MIwb units). Underlined scores are in the Poor or Very Poor range.

Table 10. Sampling locations in the Salt Lick Creek study area, 2012.

River Mile	Latitude	Longitude	Stream Name and Sampling Location
23.7	39.053430	-82.634590	Salt Lick Cr. @ Jackson @ Broadway St. (old St. Rt. 35)
0.3	39.047410	-82.631580	Trib. to Salt Lick Cr. (RM 23.82) @ Jackson @ St. Rt. 93
0.1	39.052960	-82.634516	Trib. To Salt Lick Cr. (RM 23.82) dst. St. Rt. 93

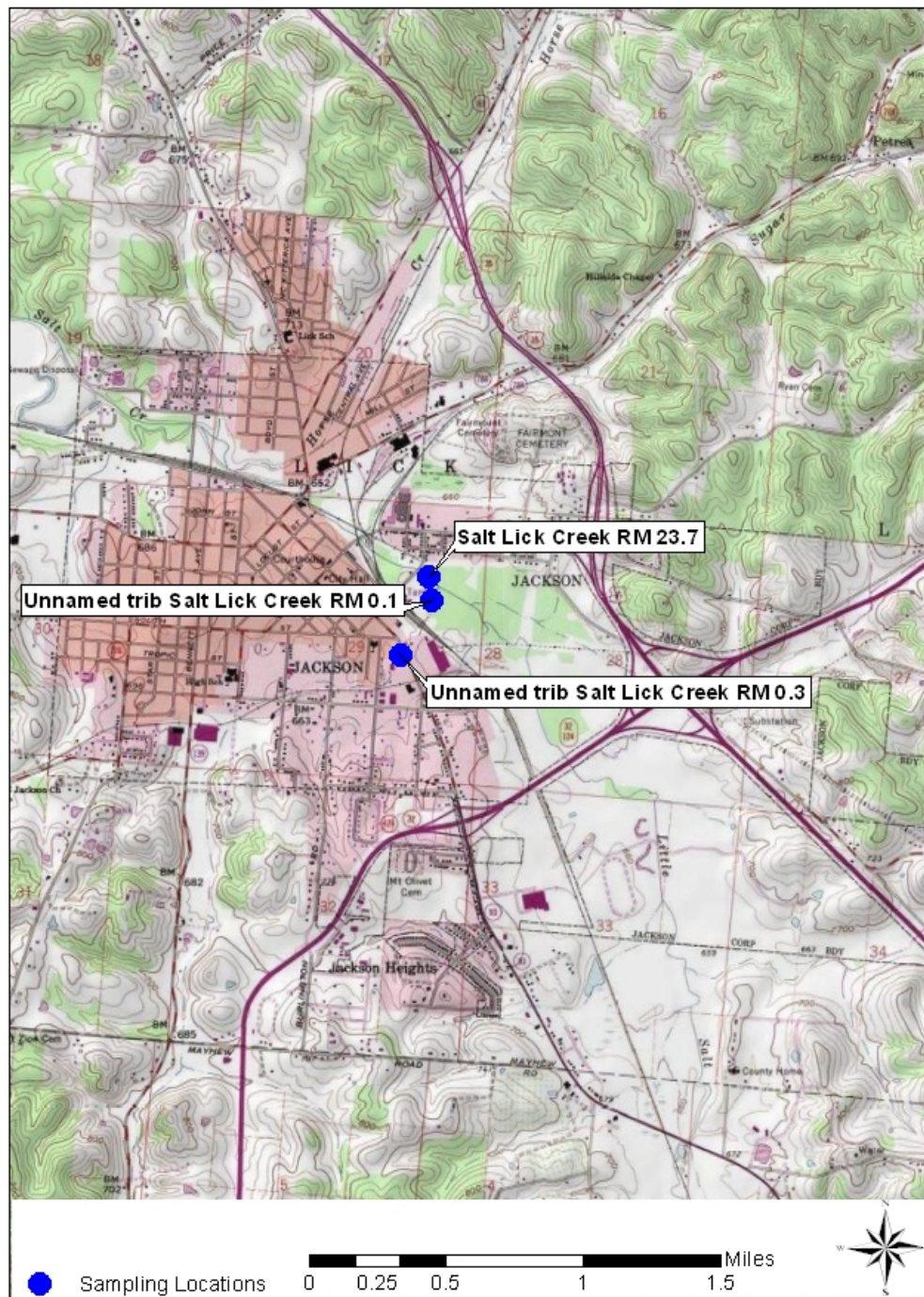


Figure 4: Salt Lick Creek study area sampling locations, 2012.

PROJECT NAME: ROSE RUN STORMWATER AND RIPARIAN ENHANCEMENTS**Pre-Project Baseline Monitoring**

PROJECT NUMBER: 12(h)EPA-27

STREAM SAMPLED: Rose Run

SUMMARY

Funding for this project will be used to facilitate storm water improvements at New Albany High School and to restore riparian enhancements along Rose Run (downstream from the high school). At the high school, an existing storm water detention basin will be retrofitted into a treatment wetland including varying water elevations and micro pools. The existing storm water conveyance ditch will be retrofitted into a linear high marsh and function as the initial treatment area, prior to discharge to the larger wetland complex within the pond. This proposed approach will provide two discreet stages of storm water treatment prior to discharge into Rose Run. The project will also be integrated into New Albany's environmental science curriculum. Riparian enhancements on Rose Run include restoration and stabilization of 291 feet of Rose Run. Bank stabilization will consist of live branch plantings and coir rolls and matting which will replace riprap currently present on the existing meander. This project also includes the removal of invasive species in the riparian area and subsequent restoration of the area by planting approximately 4 acres of native trees and grasses.

Rose Run biological communities were assessed upstream (RM 1.9), downstream (RM 0.5), and within the proposed restoration area (RM 1.7). At the three stations sampled, good physical habitat conditions were present and poor to good biological communities were documented (Tables 11 & 12, Figure 6). Fish communities at the three sites on Rose Run (RMs 0.5, 1.7, and 1.9) were fair to good, but the qualitative macroinvertebrate evaluations were poor to fair; all sites were in non-attainment of the WWH aquatic life use. Impairment of the WWH use at the upstream site (RM 1.9) may be due to the extended drought conditions from May through July. The downstream site (RM 0.5) had urban, residential, and golf course runoff as impacts to the water quality. A contributing issue to the impaired biological communities within the proposed restoration area (RM 1.7) is the New Albany High School storm sewer which is planned to be retrofitted into a marsh and wetland complex. Completion of the project will increase the amount of riparian buffers and bank stabilization to help reduce the rate of runoff and should improve stream biological community condition.

TABLE 11. AQUATIC LIFE USE ATTAINMENT – ROSE RUN 2012.

The Index of Biotic Integrity (IBI), Modified Index of Well-being (MIwb), and Invertebrate Community Index (ICI) scores are based on the performance of the biological community. The Qualitative Habitat Evaluation Index (QHEI) is a measure of the ability of the physical habitat to support a biological community. Stream sites are located in the Eastern Corn Belt Plains (ECBP) ecoregion. In the Ohio Water Quality Standards, Rose Run is designated Warmwater Habitat (WWH) within the study area. A narrative evaluation was used to assess macroinvertebrate quality.

River Mile ^a (drainage mi ²)	Attainment Status	IBI	MIwb ^b	ICI	QHEI	Narrative Assessment Fish/Macroinvertebrates
Rose Run - WWH Existing						
RM 1.9 ^H (1.9)	NON	34*	-	<u>P</u> *	60.5 (good)	Fair/Poor
RM 1.7 ^H (1.9)	NON	32*	-	F*	63.3 (good)	Fair/Fair
RM 0.5 ^H (2.9)	NON	42	-	F*	67.5 (good)	Good/Fair

Ecoregion Biocriteria: Eastern Corn Belt Plains	
INDEX – SITE TYPE	WWH
IBI: Headwater	40
MIwb ^b :	-
ICI	36

a H - headwater electrofishing site.

b MIwb is not applicable to headwater streams with drainage areas ≤ 20 mi².

c Narrative evaluation used in lieu of ICI when score not available (F-Fair; P-Poor).

* Indicates significant departure from applicable biocriteria (>4 IBI or ICI units, or >0.5 MIwb units) or WWH narrative expectation. Underlined scores are in the Poor or Very Poor range.

Table 12. Sampling locations in the Rose Run study area, 2012.

River Mile	Latitude	Longitude	Stream Name and Sampling Location
1.9	40.082500	-82.813900	Rose Run @ New Albany, 0.2 MI. DST. U.S. RT. 62
1.7	40.081400	-82.821600	Rose Run @ New Albany @ Fodor Rd.
0.5	40.072600	-82.831600	Rose Run dst. New Albany @ Harlem Rd.

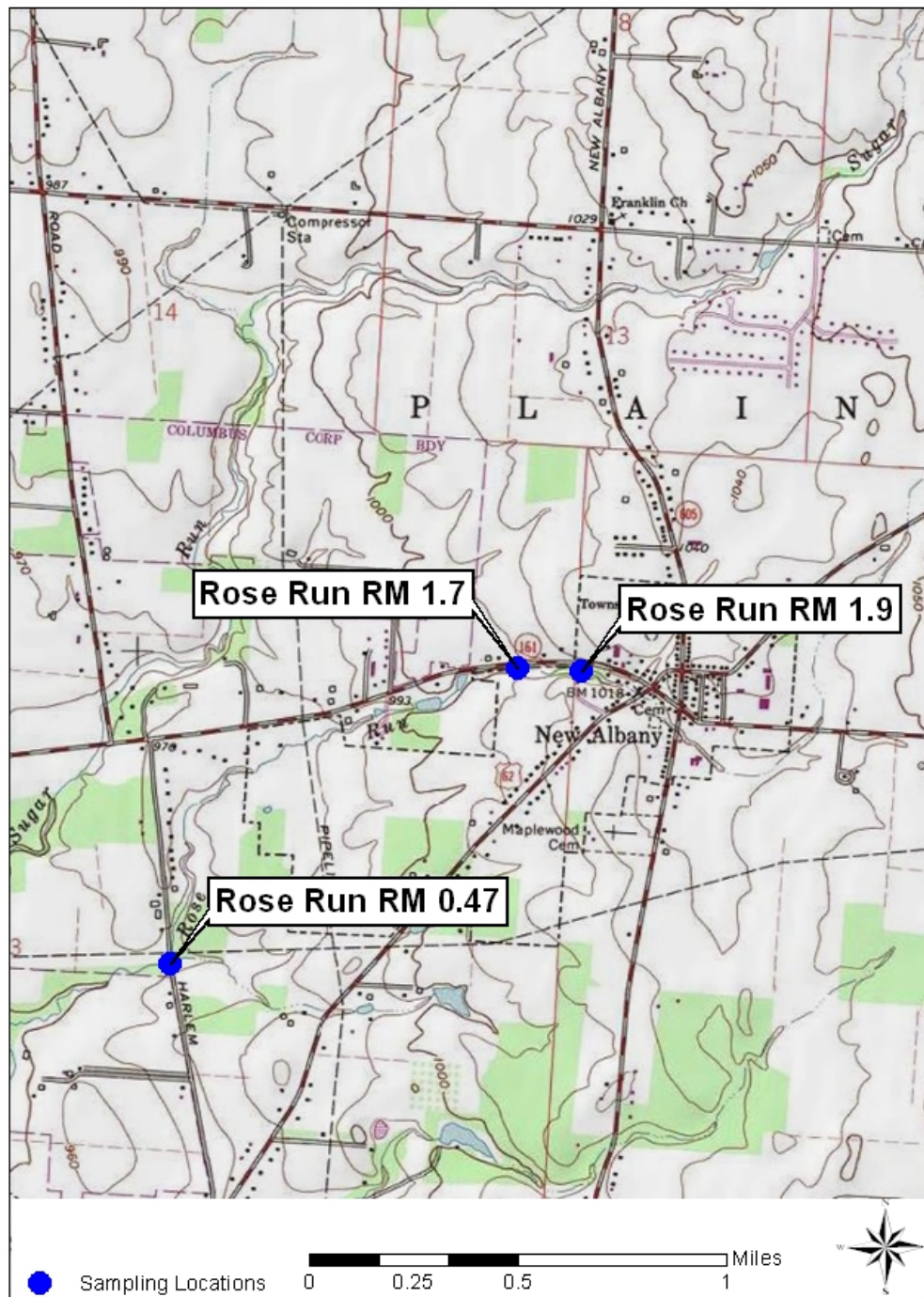


Figure 5: Rose Run study area sampling locations, 2012.

PROJECT NAME: BLACKLICK CREEK STREAM RESTORATION**Pre-Project Baseline Monitoring**

PROJECT NUMBER: 12(h)EPA-28

STREAM SAMPLED: Blacklick Creek

SUMMARY

Funding for this project will be used to stabilize severely eroding banks and implement significant in-stream habitat improvements along the mainstem of Blacklick Creek between U.S. Route 33 and Winchester Pike. This project will restore natural flow to the permanent channel of Blacklick Creek that has been disrupted by a breach between Blacklick Creek and an adjacent storm water detention basin. Approximately 895 linear feet of stream channel will be restored through a combination of natural channel design techniques, including in-stream habitat and grade control features and riparian plantings. Additionally, the 23.76 acre area is inside designated parkland that contains the Blacklick Greenway Trail, and will be permanently protected by a conservation easement. Successful completion of this project will reduce nonpoint source pollutant loadings to Blacklick Creek by stabilizing two severely eroded stream banks, and providing sufficient streamside (riparian plantings and bank stabilization) and in-stream structures to minimize future problems.

The three sites sampled in Blacklick Creek (RMs 4.8, 4.35, and 2.4) during 2012 were partially attaining the WWH aquatic life use. Fish communities at the three sites sampled were very good, but macroinvertebrates were fair and not meeting the WWH biocriterion (Tables 13 & 14, Figure 6). Excellent physical habitat conditions were present at each of the three sites. A possible additional source of impairment at the three sites is the upstream wastewater treatment plant. Resource quality within the proposed restoration area was negatively influenced by the breach between Blacklick Creek and the adjacent storm water detention pond.

TABLE 13. AQUATIC LIFE USE ATTAINMENT – BLACKLICK CREEK 2012.

The Index of Biotic Integrity (IBI), Modified Index of Well-being (MIwb), and Invertebrate Community Index (ICI) scores are based on the performance of the biological community. The Qualitative Habitat Evaluation Index (QHEI) is a measure of the ability of the physical habitat to support a biological community. Stream sites are located in the Eastern Corn Belt Plains (ECBP) ecoregion. In the Ohio Water Quality Standards, Blacklick Creek is designated Warmwater Habitat (WWH).

River Mile ^a (drainage mi ²)	Attainment Status	IBI	MIwb	ICI	QHEI	Narrative Assessment Fish/Macroinvertebrates
Blacklick Creek - WWH Existing						
RM 4.8 ^W (57.2)	PARTIAL	49	9.1	26*	71.8 (excellent)	Very Good/Fair
RM 4.35 ^W (57.4)	PARTIAL	40	8.7	26*	78.8 (excellent)	Very Good/Fair
RM 2.4 ^W (58.5)	PARTIAL	48	9.8	26*	80.5 (excellent)	Very Good/Fair

Ecoregion Biocriteria: Eastern Corn Belt Plains	
INDEX – SITE TYPE	WWH
IBI: Wading	40
MIwb: Wading	8.3
ICI	36

a W - wading electrofishing site.

* Indicates significant departure from applicable biocriteria (>4 IBI or ICI units, or >0.5 MIwb units).

Table 14. Sampling locations in the Blacklick Creek study area, 2012.

River Mile	Latitude	Longitude	Stream Name and Sampling Location
4.8	39.894400	-82.859400	Blacklick Creek just dst. Blacklick Estates WWTP
4.35	39.890600	-82.863600	Blacklick Creek South of Whitehall @ Winchester Pike
2.4	39.873200	-82.878100	Blacklick Creek @ Groveport, behind Ohio EPA Building

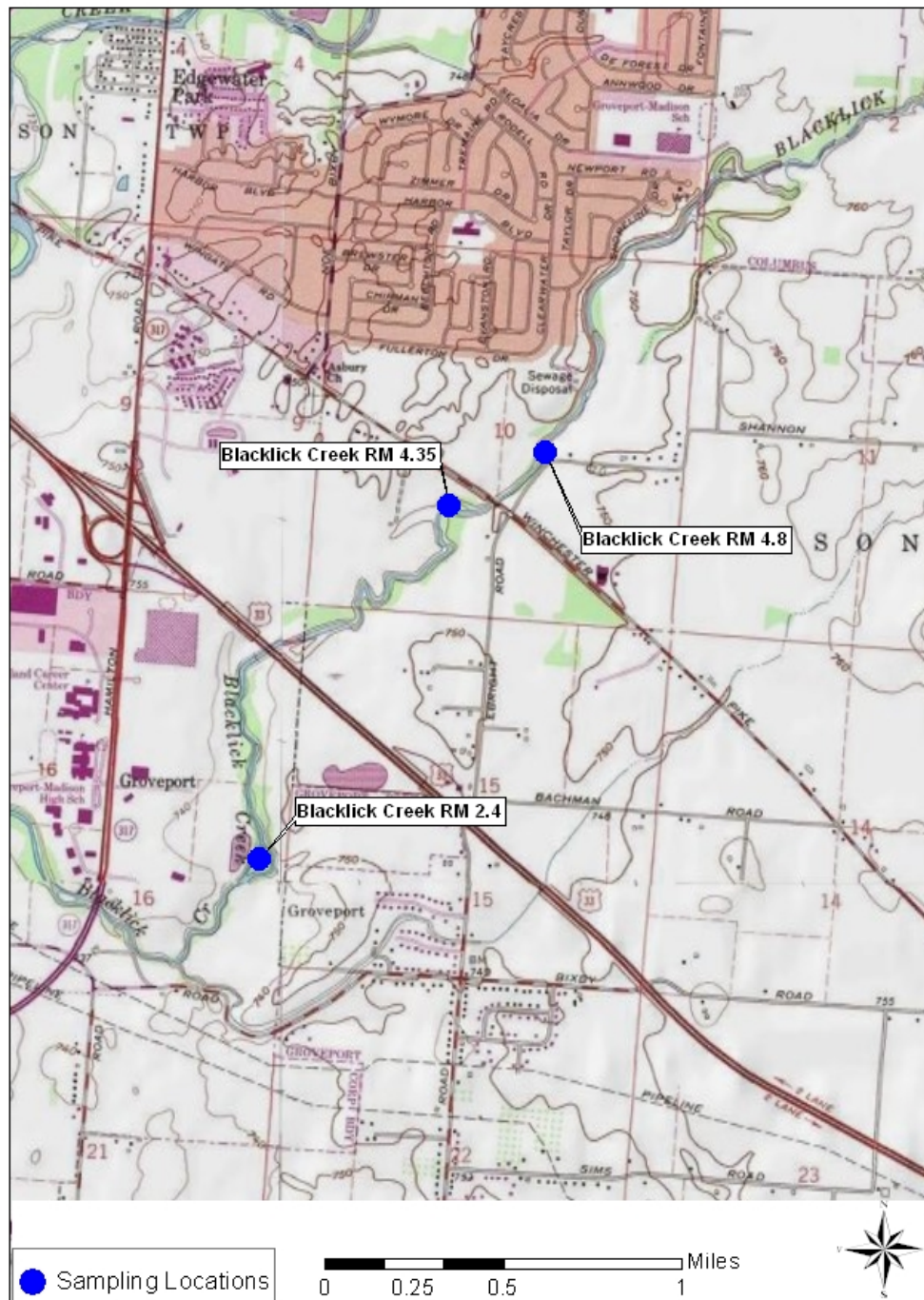


Figure 6: Blacklick Creek study area sampling locations, 2012.

PROJECT NAME: POND BROOK RESTORATION**Pre-Project Baseline Monitoring**

PROJECT NUMBER: 12(h)EPA-33

STREAM SAMPLED: Pond Brook

SUMMARY

Funding for this project will be used to restore 1,150 linear feet of floodplain and stream channel in Pond Brook, which is currently channelized and entrenched through the project length. Natural flow will be restored by reducing stream channel width, and establishing meanders through a 120 foot wide floodplain. In-stream habitat will be restored, including coarse sand substrates, root-wads, boulders, and over-hanging vegetation, and significant riparian re-vegetation. Although not the primary goal of the project, several wetlands will be created in the newly modified floodplain. Successful completion of this project will reduce nonpoint source pollutant loadings to Tinkers Creek from Pond Brook as well as provide additional benefits to water quality in Pond Brook itself. These improvements include natural development of riffle/pool sequences, enhancement of floodplain and riparian connection, and a reduction in thermal impairment.

In 2011 and 2012, the five stations sampled in Pond Brook (RMs 3.7, 3.4, 2.59, 2.39, and 1.41) exhibited fair to very poor physical habitat conditions with poor to marginally good biological communities (Tables 15 & 16, Figure 7). Pond Brook is designated Modified Warmwater Habitat–Channelized (MWH-C). None of the five sites met MWH-C biological criteria despite this aquatic life use having lower expectations than the WWH use, the threshold for meeting the Clean Water Act fishable/swimmable goal in Ohio. The two upstream sites (RMs 3.7 and 3.4) were noted to be covered with a thick layer of muck and peat. Macroinvertebrate communities were poor and fish communities were fair to marginally good at these two upstream sites. The sites within the proposed restoration area (RMs 2.59 and 2.39) were channelized. The macroinvertebrate community was poor and fair, respectively, and fish community fair and poor, respectively, at these two sites. The downstream site (RM 1.41) was formerly channelized and covered with a thick layer of muck and peat.

TABLE 15. AQUATIC LIFE USE ATTAINMENT – POND BROOK 2012.

The Index of Biotic Integrity (IBI), Modified Index of Well-being (MIwb), and Invertebrate Community Index (ICI) scores are based on the performance of the biological community. The Qualitative Habitat Evaluation Index (QHEI) is a measure of the ability of the physical habitat to support a biological community. Stream sites are located in the Erie-Ontario Lake Plains (EOLP) ecoregion. In the Ohio Water Quality Standards, Pond Brook is designated Modified Warmwater Habitat - Channelized (MWH-C). A narrative evaluation was used to assess macroinvertebrate quality.

River Mile ^a (drainage mi ²)	Attainment Status	IBI	MIwb ^b	ICI ^c	QHEI	Narrative Assessment Fish/Macroinvertebrates
Pond Brook - MWH-C Existing						
RM 3.7 ^H (1.5)	NON	38	-	<u>P</u> *	25.8 (very poor)	Marginally Good/Poor
RM 3.4 ^H (5.0)	NON	32	-	<u>P</u> *	35.0 (poor)	Fair/Poor
RM 2.59 ^H (9.8) ^d	NON	34	-	<u>P</u> *	45.5 (fair)	Fair/Poor
RM 2.39 ^H (11.6)	NON	<u>20</u> *	-	F*	38.0 (poor)	Poor/Fair
RM 1.41 ^H (12.6)	NON	<u>22</u> *	-	F*	32.5 (poor)	Poor/Fair

Ecoregion Biocriteria: Erie-Ontario Lake Plains		
INDEX – SITE TYPE	WWH	MWH-C
IBI: Headwaters	40	24
ICI	34	22

a H - headwater electrofishing site.

b MIwb is not applicable to headwater streams with drainage areas ≤ 20 mi².

c Narrative evaluation used in lieu of ICI when score not available (F-Fair; P-Poor).

d Fish and habitat assessments conducted in 2011.

* Indicates significant departure from applicable biocriteria (>4 IBI or ICI units, or >0.5 MIwb units). Underlined scores are in the Poor or Very Poor range.

Table 16. Sampling locations in the Pond Brook study area, 2012.

River Mile	Latitude	Longitude	Stream Name and Sampling Location
3.7	41.335650	-81.402100	Pond Brook @ Tradewind Cove Rd.
3.4	41.331400	-81.402800	Pond Brook Dst. Aurora and Geauga WWTPs
2.59	41.321600	-81.401300	Pond Brook in Restoration Area
2.39	41.318600	-81.400400	Pond Brook just dst. of Trib.
1.41	41.305000	-81.399700	Pond Brook near Aurora @ St. Rt. 82

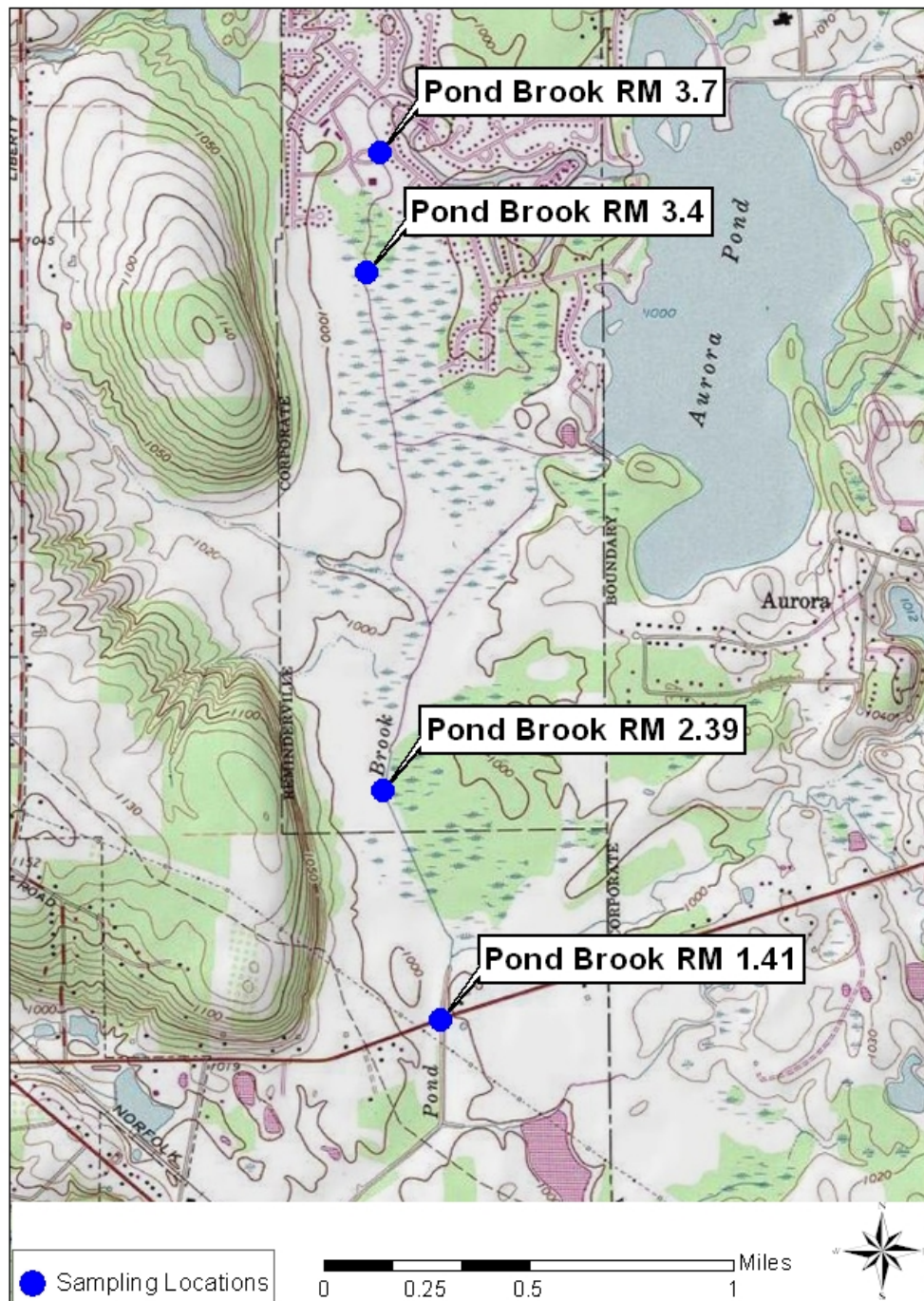


Figure 7: Pond Brook study area sampling locations, 2012.

PROJECT NAME: EAST BRANCH CHAGRIN RIVER STREAM RESTORATION**Pre-Project Baseline Monitoring**

PROJECT NUMBER: 12(h)EPA-36

STREAM SAMPLED: East Branch Chagrin River

SUMMARY

Funding for this project will be used to remove 385 linear feet of levee and stabilize the stream bank along the East Branch Chagrin River (a State Scenic River) and to restore 330 linear feet of an adjacent unnamed tributary and 3.5 acres of floodplain. The East Branch will be stabilized using bio-engineering principles such as dormant willow posting, root wads and branch layering. The unnamed headwater tributary restoration will include a meandering stream channel that has connectivity to a floodplain with riparian corridor plantings. Successful completion of this project will reduce nonpoint source pollutant loadings to the East Branch Chagrin River by providing sufficient streamside stabilization via levee removal and riparian plantings; and restoring a channelized headwater tributary using natural channel principles along with reconnection with a forested floodplain.

Biological and habitat assessments were completed on the East Branch Chagrin River upstream (RM 12.1), downstream (RM 11.4), and within the proposed restoration reach (RM 11.75). The East Branch Chagrin River is designated Coldwater Habitat (CWH) and the three sites sampled are fully attaining the CWH aquatic life use. At all three sites, good to excellent physical habitat conditions were present and marginally good to exceptional biological communities were documented (Tables 17 & 18, Figure 8). Requisite coldwater signature fish species present at the sites included American brook lamprey, longnose dace, and reidside dace; coldwater signature macroinvertebrate taxa included a dragonfly species, a caddisfly species, a crane fly species, and four midge species.

TABLE 17. AQUATIC LIFE USE ATTAINMENT – EAST BRANCH CHAGRIN RIVER 2012.

The Index of Biotic Integrity (IBI), Modified Index of Well-being (MIwb), and Invertebrate Community Index (ICI) scores are based on the performance of the biological community. The Qualitative Habitat Evaluation Index (QHEI) is a measure of the ability of the physical habitat to support a biological community. Stream sites are located in the Erie-Ontario Lake Plains (EOLP) ecoregion. In the Ohio Water Quality Standards, the East Branch Chagrin River is designated Coldwater Habitat (CWH). The site at the Unnamed Tributary to the East Branch Chagrin River (RM 0.1) was dry during the summer and no data was collected.

River Mile ^a (drainage mi ²)	Attainment Status	IBI	MIwb	ICI	QHEI	Narrative Assessment Fish/Macroinvertebrates
East Branch Chagrin River - CWH Existing						
RM 12.1 ^W (22.4)	FULL	42	8.3	54	67.0 (good)	Good/Exceptional
RM 11.75 ^W (23.4)	FULL	44	8.2	56	82.3 (excellent)	Good/Exceptional
RM 11.4 ^W (24.1)	FULL	40	7.7 ^{ns}	46	67.8 (good)	Marginally Good/Exceptional

Ecoregion Biocriteria: Erie-Ontario Lake Plains		
INDEX – SITE TYPE	WWH	EWH
IBI: Wading	38	50
MIwb: Wading	7.9	9.4
ICI	34	46

a W - wading electrofishing site.

ns Nonsignificant departure from biocriteria (≤ 4 IBI or ICI units, or ≤ 0.5 MIwb units).

Table 18. Sampling locations in the East Branch Chagrin River study area, 2012.

River Mile	Latitude	Longitude	Stream Name and Sampling Location
12.1	41.596080	-81.294870	East Branch Chagrin River @ Kirtland Road
11.75	41.600910	-81.290870	East Branch Chagrin River @ Wisner Road (Riverwood Farm)
11.4	41.605540	-81.291760	East Branch Chagrin River @ Wisner Road



Figure 8: East Branch Chagrin River study area sampling locations, 2012.

PROJECT NAME: SYCAMORE CREEK AT SHAWNEE CROSSING BANK STABILIZATION**Pre-Project Baseline Monitoring**

PROJECT NUMBER: 10(h)EPA-21

STREAM SAMPLED: Sycamore Creek

SUMMARY

Funding for this project will be used to regrade and stabilize eroding banks on Sycamore Creek in the Walnut Creek watershed. The work will include stabilization and restoration of 480 linear feet of severely eroded stream bank along Sycamore Creek. Riparian restoration and streambank stabilization will employ riprap toe reinforcement with regrading, recontouring, and bioengineering methods such as root wads, live stakes and/or filter socks with live plantings. Grading will be completed to reconnect the creek to its floodplain. Removal of one acre of invasive plants will be incidental with this work and the city of Pickerington will reintroduce native riparian vegetation and maintain established trees to the best extent possible.

Sycamore Creek biological communities and habitats were assessed upstream (RM 7.05), downstream (RM 5.9), and within the proposed restoration reach (RM 6.64). Sycamore Creek is designated Warmwater Habitat (WWH) and the three sites are meeting the WWH biological criteria. Fish communities at the three sites were very good to exceptional and the qualitative macroinvertebrate evaluations were good (Table 19 & 20, Figure 9). Completion of this project will stabilize and protect a severely eroded stream bank which will help Sycamore Creek continue to support good biological communities.

TALBE 19. AQUATIC LIFE USE ATTAINMENT – SYCAMORE CREEK 2012.

The Index of Biotic Integrity (IBI), Modified Index of Well-being (MIwb), and Invertebrate Community Index (ICI) scores are based on the performance of the biological community. The Qualitative Habitat Evaluation Index (QHEI) is a measure of the ability of the physical habitat to support a biological community. Stream sites are located in the Eastern Corn Belt Plains (ECBP) ecoregion. In the Ohio Water Quality Standards, Sycamore Creek is designated Warmwater Habitat (WWH). A narrative evaluation was used to assess macroinvertebrate quality.

River Mile ^a (drainage mi ²)	Attainment Status	IBI	MIwb	ICI ^b	QHEI	Narrative Assessment Fish/Macroinvertebrates
Sycamore Creek - WWH Existing						
RM 7.05 ^H (9.8)	FULL	56	-	G	71.8 (excellent)	Exceptional/Good
RM 6.64 ^H (10.5)	FULL	52	-	G	80.3 (excellent)	Exceptional/Good
RM 5.9 ^H (14.8)	FULL	48	-	G	72.8 (excellent)	Very Good/Good

Ecoregion Biocriteria: Eastern Corn Belt Plains	
INDEX – SITE TYPE	WWH
IBI: Headwater	40
ICI	36

a H - headwater electrofishing site.

b Narrative evaluation used in lieu of ICI when score not available (G-good).

Table 20. Sampling locations in the Sycamore Creek study area, 2012.

River Mile	Latitude	Longitude	Stream Name and Sampling Location
7.05	39.878800	-82.725790	Sycamore Creek upst. Pickerington @ driveway off St. Rt. 256
6.64	39.878600	-82.733600	Sycamore Creek @ St. Rt. 256
5.9	39.879200	-82.733100	Sycamore Creek @ Pickerington, dst. RR, dst. St. Rt. 256

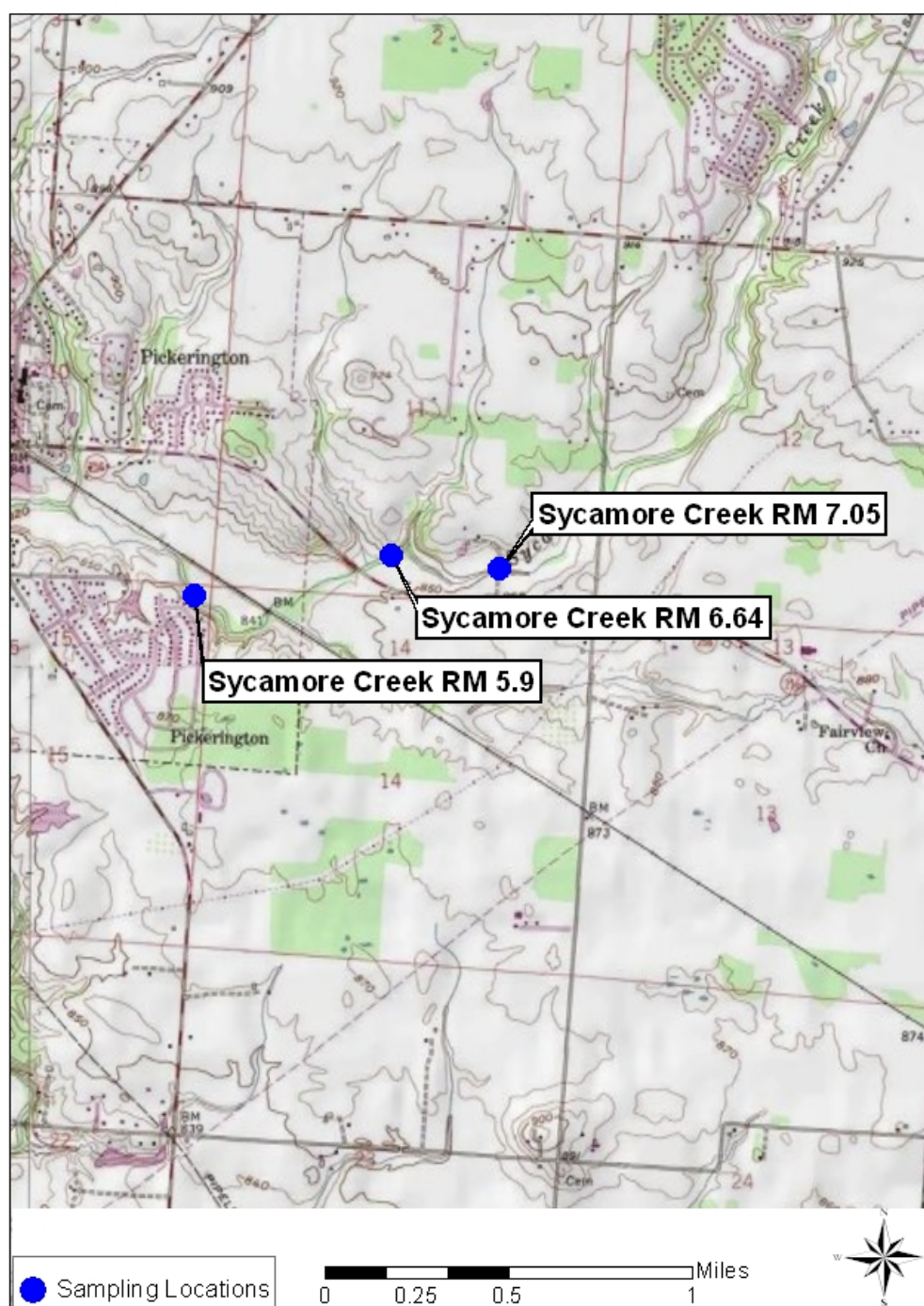


Figure 9: Sycamore Creek study area sampling locations, 2012.

PROJECT NAME: WEST BRANCH RACCOON CREEK-HARBLE GRIFFITH ROAD ACID MINE DRAINAGE**Post-Project Monitoring**

PROJECT NUMBER: 10(h)EPA-11

STREAM SAMPLED: West Branch Raccoon Creek

SUMMARY

Funding for this project was used to address acid mine drainage resulting from unreclaimed pre-law surface coal mining activity in the headwater region of the West Branch Raccoon Creek. West Branch is considered a priority for restoration by the Raccoon Creek Partnership and is specifically identified as a priority project in the Raccoon Creek Watershed Action Plan as well as the Upper Basin Raccoon Creek TMDL that was approved in 2002. The project involved reclaiming approximately 29 acres of abandoned coal mine spoil to reduce acid mine drainage generation. Reclamation activities consisted of regrading, selective handling and placement of the acid mine drainage (AMD) generating spoil, re-soiling and establishing vegetation. Reclamation included the installation of 1,700 linear feet of open limestone channels as well as 20,000 square feet of passive wetland treatment areas. Additionally, two large surface impoundments containing more than 1.5 million gallons of highly acidic water were drained and filled.

Biological sampling occurred in the West Branch Raccoon Creek before (2010) and after (2012) AMD restoration projects were completed. All three sampling locations in West Branch Raccoon Creek (RMs 5.7, 4.1, and 3.0) were represented by fair to good stream habitat and natural channel conditions (Tables 21 & 22, Figure 10). Habitat conditions were adequate for supporting WWH biological communities; however, intermittent stream flows were documented during the summer of 2010 and 2012 as a result of low rainfall in the area. The decline in the Qualitative Habitat Evaluation Index (QHEI) from 2010 to 2012 at RM 5.7 was related to lower water levels and less functional instream habitats in 2012. In both 2010 and 2012, all three sampling sites in the West Branch were in non-attainment of the WWH aquatic life use. Non-attainment in the upper section of this small watershed (RM 5.7) was influenced by natural low flow conditions during the summer months. The sampling site (RM 4.1) located within the Harble Griffith Road restoration project area was impaired by acid mine drainage. In 2010 and 2012, the fish communities were poor and the macroinvertebrate communities were fair at that site. At the downstream site (RM 3.0) macroinvertebrate communities improved from poor to fair in 2012. The two downstream sites (RMs 4.1 and 3.0) need additional time for the reclamation activities to be effective and the biological communities to show recovery because of the extensive, long-term impairment caused by acid mine drainage from unreclaimed surface coal mines.

TABLE 21. AQUATIC LIFE USE ATTAINMENT – WEST BRANCH RACCOON CREEK, 2010 & 2012.

The Index of Biotic Integrity (IBI), Modified Index of Well-being (MIwb), and Invertebrate Community Index (ICI) scores are based on the performance of the biological community. The Qualitative Habitat Evaluation Index (QHEI) is a measure of the ability of the physical habitat to support a biological community. Stream sites are located in the Western Allegheny Plateau (WAP) ecoregion. In the Ohio Water Quality Standards, the West Branch Raccoon Creek is designated Warmwater Habitat (WWH). A narrative evaluation was used to assess macroinvertebrate quality.

River Mile ^a (drainage mi ²)	Attainment Status	IBI	MIwb ^b	ICI ^c	QHEI	Narrative Assessment Fish/Macroinvertebrates
West Branch Raccoon Creek - WWH Existing						
RM 5.7 ^H (3.8) - 2010	NON	30*	-	F*	67.8 (good)	Fair/Fair
RM 5.7 ^H (3.8) - 2012	NON	<u>22</u> *	-	<u>P</u> *	47.0 (fair)	Poor/Poor
RM 4.1 ^H (6.8) - 2010	NON	<u>20</u> *	-	F*	65.3 (good)	Poor/Fair
RM 4.1 ^H (6.8) - 2012	NON	<u>20</u> *	-	F*	59.5 (good)	Poor/Fair
RM 3.0 ^H (7.7) - 2010	NON	28*	-	<u>P</u> *	60.5 (good)	Fair/Poor
RM 3.0 ^H (7.7) - 2012	NON	<u>22</u> *	-	F*	62.5 (good)	Poor/Fair

Ecoregion Biocriteria: Western Allegheny Plateau	
INDEX – SITE TYPE	WWH
IBI: Headwater	44
ICI	36

a H - headwater electrofishing site.

b MIwb is not applicable to headwater streams with drainage areas ≤ 20 mi².

c Narrative evaluation used in lieu of ICI when score not available (F=fair; P=poor).

* Indicates significant departure from applicable biocriteria (>4 IBI or ICI units, or >0.5 MIwb units). Underlined scores are in the Poor or Very Poor range.

Table 22. Sampling locations in the West Branch Raccoon Creek study area, 2010 & 2012.

River Mile	Latitude	Longitude	Stream Name and Sampling Location
5.7	39.972910	-83.020420	W. Br. Raccoon Creek @ Ilesboro-Cedar Falls Rd.
4.1	39.991460	-83.024610	W. Br. Raccoon Creek @ St. Rt. 93
3.0	40.015820	-83.016180	W. Br. Raccoon Creek @ N. Fairview Rd.

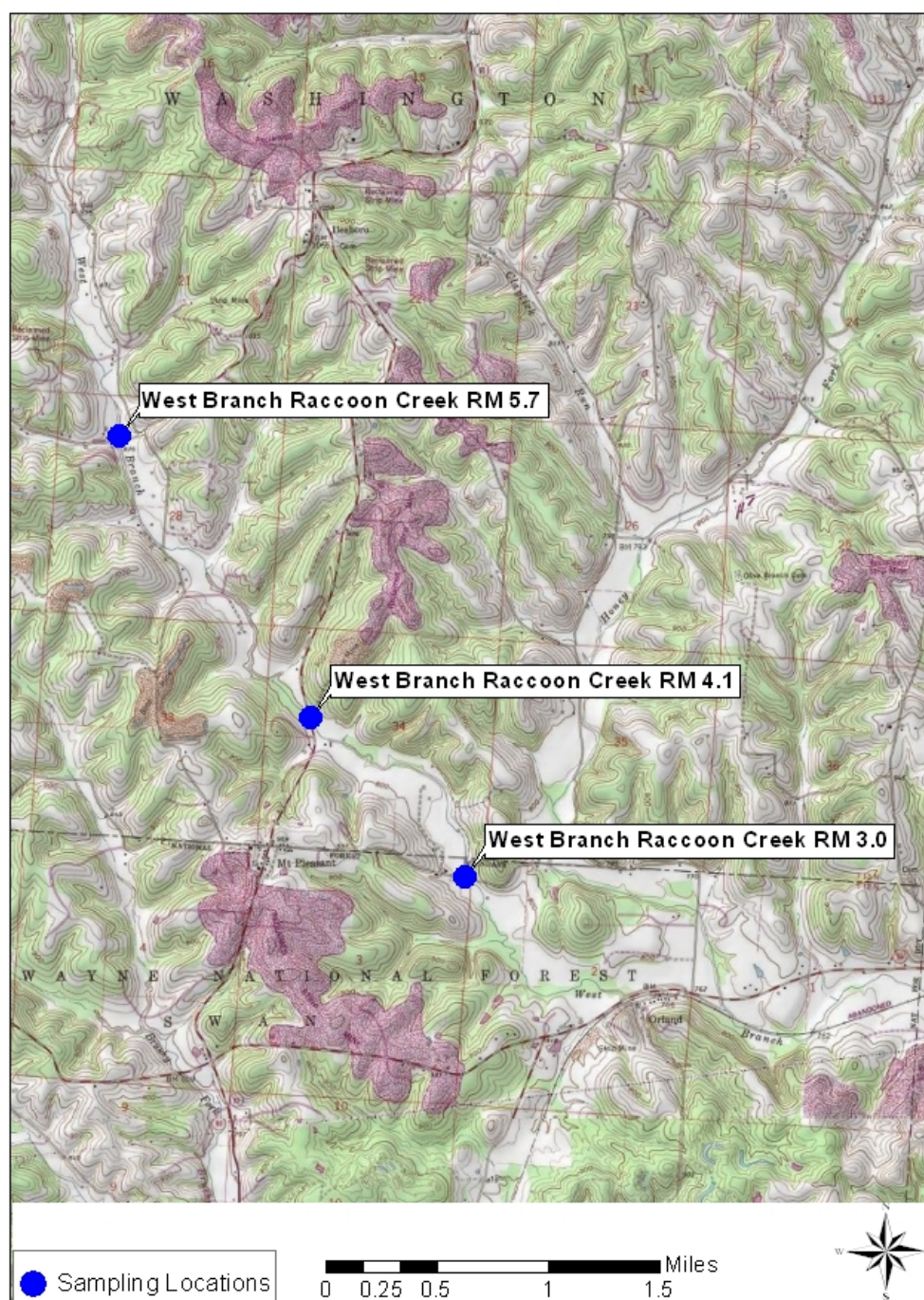


Figure 10: West Branch Raccoon Creek study area sampling locations, 2010 & 2012.

PROJECT NAME: FURNACE RUN RESTORATION & CONSERVATION**Post-Project Monitoring**

PROJECT NUMBER: 09(h)EPA-14

STREAM SAMPLED: Furnace Run

SUMMARY

Funding for this project was used to restore degraded sections of Furnace Run within Furnace Run Metro Park. Furnace Run is a tributary to the Cuyahoga River in northwest Summit County. Successful completion of this project resulted in the natural channel design restoration of approximately 1,500 linear feet of the Furnace Run mainstem. Restored segments completed under this project were placed under a 5-acre conservation easement and protected in perpetuity. Throughout the project areas, there are indicators of rapid and significant bank erosion, changing depositional patterns of bed material and alterations in the channel shape and location. In addition to added nonpoint source pollution created by this severe erosion, the resulting high flow velocities and loss of stream equilibrium have also impacted stream biology. As a result, the primary design practices that were incorporated into this project were intended to stabilize the channel integrity by installing grade control using installed riffle complexes and reconnecting the channel with the stream's natural floodplains. In addition to riffle grade controls and floodplain reconnection, the design also incorporated bioengineered bank stabilization methods and practices. The need for riparian plantings was minimized due to the existing high quality riparian habitat that is already present. Successful completion of this project restored natural stream channels, stabilized stream banks and improved habitat conditions along approximately 1,500 linear feet of Furnace Run.

In 2012, five biological sites were sampled after the restoration work was completed while six sites were sampled before the restoration work in 2009. In 2012, biological sampling was not conducted at RMs 0.8 or 0.9 in the overflow channel as it was dry; macroinvertebrate sampling was conducted at RM 0.9 but it was completed within the main channel.

Furnace Run is designated Warmwater Habitat (WWH). In 2009, five of the six sites were fully meeting the WWH biological criteria. The upstream site (RM 7.25) was partly attaining the WWH biological criteria due to fair macroinvertebrate communities (Tables 23 & 24, Figure 11). In 2012, all sites (RMs 7.25, 6.95, 6.5, and 0.27) with complete data sets were fully attaining the WWH aquatic life use. Within the restoration work area (RM 6.95), fish communities improved from very good to exceptional and at the downstream site (RM 6.5) fish communities improved from good to very good. At RM 6.95, the recently constructed channel had imported boulders and dirt banks that were reseeded but the stream was still in the process of recovering and stabilizing. A thick layer of silt in the bottom of the pool was noted and stream margins had soft sand and silt.

TABLE 23. AQUATIC LIFE USE ATTAINMENT – FURNACE RUN 2009 & 2012.

The Index of Biotic Integrity (IBI), Modified Index of Well-being (MIwb), and Invertebrate Community Index (ICI) scores are based on the performance of the biological community. The Qualitative Habitat Evaluation Index (QHEI) is a measure of the ability of the physical habitat to support a biological community. Stream sites are located in the Erie-Ontario Lake Plain (EOLP) ecoregion. In the Ohio Water Quality Standards, Furnace Run is designated Warmwater Habitat (WWH). In the absence of quantitative data, a narrative evaluation was used to assess macroinvertebrate quality.

River Mile ^a (drainage mi ²)	Attainment Status	IBI	MIwb ^b	ICI ^c	QHEI	Narrative Assessment Fish/Macroinvertebrates
RM 7.25 ^H (5.6)- 2009	PARTIAL	42	-	F*	85.0 (Excellent)	Good/Fair
RM 7.25 ^H (5.6)- 2012	FULL	50	-	MG ^{ns}	79.5 (Excellent)	Exceptional/Marg. Good
RM 6.95 ^H (5.9)- 2009	FULL	46	-	MG ^{ns}	80.0 (Excellent)	Very Good/Marg. Good
RM 6.95 ^H (5.9)- 2012	FULL	52	-	MG ^{ns}	66.5 (Good)	Exceptional/Marg. Good
RM 6.5 ^H (7.6)- 2009	FULL	44	-	MG ^{ns}	81.0 (Excellent)	Good/Marginally Good
RM 6.5 ^H (7.6)- 2012	FULL	46	-	G	78.8 (Excellent)	Very Good/Good
RM 0.9 ^H (19.8)- 2009	FULL	42	-	38	74.0 (Excellent)	Good/Good
RM 0.9 ^H (19.8)- 2012	-	-	-	G		-/Good
RM 0.8 ^H (19.8)- 2009	FULL	44	-	G	71.0 (Excellent)	Good/Good
RM 0.27 ^W (19.9)- 2009	FULL	44	-	40	77.5 (Excellent)	Good/Good
RM 0.27 ^W (20.3)- 2012	FULL	42	8.6	MG ^{ns}	76.0 (Excellent)	Good/Marginally Good

Ecoregion Biocriteria: Erie-Ontario Lake Plain	
INDEX – SITE TYPE	WWH
IBI: Headwater	40
IBI: Wading	38
MIwb: Wading	7.9
ICI	34

a H - headwater electrofishing site, W - wading electrofishing site

b MIwb is not applicable to headwater streams with drainage areas ≤ 20 mi².

c Narrative evaluation used in lieu of ICI when score not available (G-good; MG-marginally good; F-fair).

* Indicates significant departure from applicable biocriteria (>4 IBI or ICI units, or >0.5 MIwb units).

ns Nonsignificant departure from biocriteria (≤ 4 IBI or ICI units, or ≤ 0.5 MIwb units).

Table 24. Sampling locations in Furnace Run study area, 2009 & 2012.

River Mile	Latitude	Longitude	Stream Name and Sampling Location
7.25	41.259700	-81.636410	Furnace Run dst. Confluence with Rock Creek
6.95	41.257800	-81.633410	Furnace Run @ St. Rt. 21
6.5	41.253190	-81.629500	Furnace Run @ Brush Rd.
0.9	41.203900	-81.583600	Furnace Run near Everett @ Everett Rd.
0.8	41.201550	-81.582950	Furnace Run dst. Everett Rd, in Restoration Area (Pre)
0.27	41.201400	-81.573600	Furnace Run near Everett @ Riverview Rd.



Figure 11: Furnace Run study area sampling locations, 2009 & 2012.

PROJECT NAME: Huff Run Restoration**Post-Project Monitoring**

PROJECT NUMBER: 08(h)EPA-17

STREAM SAMPLED: Huff Run

SUMMARY

Funding for this project was used to eliminate six existing acidic impoundments, coal spoil, two AMD discharges and several acid seeps at the Thomas Reclamation site. The Thomas site is near the Linden Bio-remediation Project that was completed in 2003 as part of ongoing efforts to address abandoned mine land issues affecting the Huff Run watershed. Reclamation at the Thomas site reduced acid mine drainage loadings to the recently completed Linden treatment system and maximizes the life and effectiveness of that project site. In addition six surface impoundments were dewatered and treated resulting in the prevention of additional AMD that existed due to filtration of water into a nearby abandoned underground mine complex. This project was part of more than a decade of AMD remediation efforts in Huff Run and was consistent with recommendations that are included in the state endorsed Huff Run Watershed Action Plan.

Biological sampling in Huff Run occurred before construction (six sites in 2008) and after the AMD restoration project was completed (five sites in 2012). All sampling locations in Huff Run were represented by good to excellent stream habitat. Poor to marginally good biological communities were documented in 2008 and 2012 at five co-located sampling sites (Tables 25 & 26, Figure 12). Although habitat conditions were good, excessive orange AMD sedimentation covered all substrates at RMs 4.2, 3.8, 2.83, and 0.3. The sedimentation was associated with AMD effects from old mine seeps draining into Huff Run. In 2012, the furthest upstream site (RM 7.85) on Huff Run was in partial attainment of the WWH biological criteria. In both 2008 and 2012, the sampling sites at RMs 4.2, 3.8, 2.83, and 0.3 were in nonattainment of the WWH biological criteria. At RMs 3.8, 2.83, and 0.3, fish communities improved from poor in 2008 to fair in 2012 and the furthest downstream site (RM 0.3) was noted to have greater density and diversity of macroinvertebrates. While positive changes are occurring, additional time is needed for the biological communities to show further recovery as a response to the reclamation activities.

TABLE 25. AQUATIC LIFE USE ATTAINMENT – HUFF RUN 2008 & 2012.

The Index of Biotic Integrity (IBI), Modified Index of Well-being (MIwb), and Invertebrate Community Index (ICI) scores are based on the performance of the biological community. The Qualitative Habitat Evaluation Index (QHEI) is a measure of the ability of the physical habitat to support a biological community. Stream sites are located in the Western Allegheny Plateau (WAP) ecoregion. In the Ohio Water Quality Standards, Huff Run is designated Warmwater Habitat (WWH). A narrative evaluation was used to assess macroinvertebrate quality. In 2008, macroinvertebrate sampling was not done at RMs 7.85, 3.8, 2.83, and 0.3.

River Mile ^a (drainage mi ²)	Attainment Status	IBI	MIwb ^b	ICI ^c	QHEI	Narrative Assessment Fish/Macroinvertebrates
RM 7.85 ^H (3.3)- 2008	(FULL)	40 ^{ns}	-	-	59.0 (good)	Marginally Good
RM 7.85 ^H (3.3)- 2012	PARTIAL	38*	-	MG ^{ns}	69.8 (good)	Fair/Marginally Good
RM 4.8 ^H (7.7)- 2008	NON	29*	-	P*	66.5 (good)	Fair/Poor
RM 4.2 ^H (8.3)- 2008	NON	32*	-	LF*	57.5 (good)	Fair/Low Fair
RM 4.2 ^H (8.3)- 2012	NON	<u>22</u> *	-	P*	57.3 (good)	Poor/Poor
RM 3.8 ^H (9.3)- 2008	(NON)	<u>26</u> *	-	-	71.5 (excellent)	Poor/-
RM 3.8 ^H (9.3)- 2012	NON	38*	-	VP*	57.8 (good)	Fair/Very Poor
RM 2.83 ^H (10.1)- 2008	(NON)	<u>22</u> *	-	-	55.0 (good)	Poor/-
RM 2.83 ^H (10.1)- 2012	NON	38*	-	VP*	62.0 (good)	Fair/Very Poor
RM 0.3 ^H (13.8)- 2008	(NON)	<u>22</u> *	-	-	69.5 (good)	Poor/-
RM 0.3 ^H (13.8)- 2012	NON	28*	-	P*	69.5 (good)	Fair/Poor

Ecoregion Biocriteria: Western Allegheny Plateau	
INDEX – SITE TYPE	WWH
IBI: Headwater	44
ICI	36

a H - headwater electrofishing site.

b MIwb is not applicable to headwater streams with drainage areas ≤ 20 mi².

c Narrative evaluation used in lieu of ICI when score not available (MG-marginally good; LF-low fair; P-poor; VP-very poor).

* Indicates significant departure from applicable biocriteria (>4 IBI or ICI units, or >0.5 MIwb units). Underlined scores are in the Poor or Very Poor range.

ns Nonsignificant departure from biocriteria (≤ 4 IBI or ICI units, or ≤ 0.5 MIwb units).

Table 26. Sampling locations in Huff Run study area, 2008 & 2012.

River Mile	Latitude	Longitude	Stream Name and Sampling Location
7.85	40.619810	-81.252900	Huff Run @ Greques farm, off Heritage
4.8	40.604110	-81.302000	Huff Run @ Hope Rd. (site sampled in 2008 only)
4.2	40.604440	-81.312500	Huff Run adj. Brass Rd, upst. Hilltop Energy
3.8	40.604430	-81.320010	Huff Run @ Hilltop Energy
2.83	40.605470	-81.337100	Huff Run adj. Brass Rd.
0.3	40.586900	-81.370800	Huff Run S of Mineral City @ Co. Rd. 47



Figure 12: Co-located Huff Run study area sampling locations, 2008 & 2012.

PROJECT NAME: BIG DARBY HEADWATERS, STREAM & WETLAND RESTORATION**Post-Project Monitoring**

PROJECT NUMBER: 08(h) EPA-19

STREAM SAMPLED: Big Darby Creek

SUMMARY

This project took place on the Joseph Glenn Ebersole Stream Restoration Site at The Nature Conservancy's 800-acre Big Darby Headwaters Nature Preserve in Logan County. It aimed to restore the only stream segment on the Big Darby Creek that had been diverted from its natural course. Pre-implementation, the stream and tributaries were experiencing significant habitat limitations and headcutting due to past channelization. The Big Darby Creek served as the roadside ditch for CR 144 along part of its length. The designated Exceptional Warmwater Habitat and Coldwater Habitat (EWH/CWH) aquatic life uses were impaired at the project site due to habitat damage (lack of riparian vegetation) and hydromodification (channelization for highway and agricultural drainage). The project restored 4,200 linear feet of stream, reconnected the entire length to a reconstructed floodplain, and restored 10 acres of riparian area with grasses, native trees, and shrubs.

Five biological sites were sampled in 2012 after the restoration work was completed while four sites were sampled before the restoration work in 2008 (Tables 27 & 28, Figure 13). At an upstream background site at RM 83.2 in 2012, only macroinvertebrates were sampled and the results showed very good macroinvertebrate communities (meeting EWH expectations) but coldwater signature taxa were less than expected. RM 83.2 was noted to have excellent riffle/pool development and sinuosity. At RM 82.5, Big Darby Creek was formerly channelized and the substrate was hardpan with occasional rubble deposits. Fish communities were very good and macroinvertebrate results were good. Both of these two sites (RMs 83.2 and 82.5), which were upstream from the restoration area, were partially meeting EWH biological expectations. RM 81.9 was sampled in 2008 as a site upstream from the restoration area but in 2012 the site was found to have been included in the restoration reach and could no longer be considered representative of background conditions. As a result, RMs 83.2 and 82.5 were sampled in 2012 to document upstream background conditions.

Contiguous sites at RM 81.6 within the old channel and within the new restored reach were sampled in 2008 and 2012, respectively. Sampling in 2012 showed that Big Darby Creek was still recovering from the restoration work but had scattered riffles and long pools ranging from hardpan with deposits of gravel to soft mucky sand and silt. The habitat was not well developed and had significant amounts of filamentous algal growth due to the open canopy. In 2012, habitat quality was considered fair at RM 81.6 with a QHEI score of 53.5 and biological results were marginally good to good but the site was not meeting EWH/CWH expectations.

The site within the restoration reach at RM 81.1 was sampled both before (2008) and after (2012) the restoration. It was noted during the 2012 sampling that the redesigned channel had riffles and slow runs with coarse substrates and well defined habitats. The site at RM 81.1 looked to be further along in recovery than the upstream site (RM 81.6) but still had substrates overlain with filamentous algae. In 2008, the site was partially meeting the EWH/CWH aquatic life use as fish communities were very good and macroinvertebrates were good. However, some decline occurred in 2012 with non-attainment of the EWH/CWH aquatic life use due to good fish communities and marginally good macroinvertebrate communities (Table 27).

In 2008, the site at RM 80.75 was in full attainment of the EWH/CWH aquatic life use. In 2012, the site was partially meeting the use. RM 80.75 is downstream from the restoration work and had excellent physical habitat scores both years. It was noted during sampling in 2012 that there was much less algae at this site than the upstream sites and the stream bottom contained mostly coarse, unembedded substrates. However, it seemed apparent that there were some lingering influences from the fairly recent and significant channel restoration activities completed just upstream.

While positive changes were hard to see in 2012 due to the still rather raw nature of the restoration, it is anticipated that with additional time, biological communities will begin to show rapid recovery as a response to the reclamation activities in this high quality headwater habitat reach. Additional, more refined sampling in the project area is being conducted in 2014 as part of the overall Big Darby Creek basin study.

TABLE 27. AQUATIC LIFE USE ATTAINMENT – BIG DARBY CREEK 2008 & 2012.

The Index of Biotic Integrity (IBI), Modified Index of Well-being (MIwb), and Invertebrate Community Index (ICI) scores are based on the performance of the biological community. The Qualitative Habitat Evaluation Index (QHEI) is a measure of the ability of the physical habitat to support a biological community. Stream sites are located in the Eastern Corn Belt Plains (ECBP) ecoregion. In the Ohio Water Quality Standards, Big Darby Creek in this reach is designated Exceptional Warmwater Habitat/Coldwater Habitat. In the absence of quantitative data, a narrative evaluation was used to assess macroinvertebrate quality. Only macroinvertebrate sampling was done at RM 83.2.

River Mile ^a (drainage mi ²)	Attainment Status	IBI	MIwb ^b	ICI ^c	QHEI	Narrative Assessment Fish/Macroinvertebrates
RM 83.2 ^H (1.5)- 2012	-	-	-	VG*	-	-/Very Good
RM 82.5 ^H (1.7)- 2012	PARTIAL	46 ^{ns}	-	G*	64.0 (good)	Very Good/Good
RM 81.9 ^H (2.2)- 2008	NON	44*	-	22*	52.0 (fair)	Good/Fair
RM 81.6 ^H (2.2)- 2008	PARTIAL	46 ^{ns}	-	36*	51.5 (fair)	Very Good/Good
RM 81.6 ^H (2.2)- 2012	NON	44*	-	MG*	53.5 (fair)	Good/Marg.Good
RM 81.1 ^H (3.1)- 2008	NON	44*	-	20*	70.5 (excellent)	Good/Fair
RM 81.1 ^H (3.1)- 2012	PARTIAL	50	-	VG*	65.5 (good)	Exceptional/Very Good
RM 80.75 ^H (4.5)- 2008	FULL	50	-	50	75.5 (excellent)	Exceptional
RM 80.75 ^H (4.5)- 2012	PARTIAL	48 ^{ns}	-	E	70.0 (excellent)	Very Good/Exceptional

Ecoregion Biocriteria: Eastern Corn Belt Plains	
INDEX – SITE TYPE	EWB
IBI: Headwater	50
ICI	46

a H - headwater electrofishing site.

b MIwb is not applicable to headwater streams with drainage areas ≤ 20 mi².

c Narrative evaluation used in lieu of ICI when score not available (E-exceptional; VG-very good; G-good; MG-marginally good).

* Indicates significant departure from applicable biocriteria (>4 IBI or ICI units, or >0.5 MIwb units).

ns Nonsignificant departure from biocriteria (≤ 4 IBI or ICI units, or ≤ 0.5 MIwb units).

Table 28. Sampling locations in the Big Darby Creek study area, 2008 & 2012.

River Mile	Latitude	Longitude	Stream Name and Sampling Location
83.2 - 2012	40.3156	-83.591900	Big Darby Creek in headwaters @ private residence
82.5 - 2012	40.3200	-83.582500	Big Darby Creek S of East Liberty @ Co. Rd. 152
81.9 - 2008	40.3124	-83.572960	Big Darby Creek S of E Liberty, upst. Lane off Old U.S. 33
81.6 - 2008 & 2012	40.3087	-83.570200	Big Darby Creek Lane off Old U.S.RT. 33 (Showe Property)
81.1 - 2008 & 2012	40.3029	-83.568900	Big Darby Creek NE of Middleburg, 0.4 mi upst. St. Rt. 287
80.75 - 2008 & 2012	40.2983	-83.570000	Big Darby Creek NE of Middleburg @ St. Rt. 287



Figure 13: Big Darby Creek study area sampling locations, 2008 & 2012

PROJECT NAME: KENSTON LAKE DAM MODIFICATION & STREAM RESTORATION**Post-Project Monitoring**

PROJECT NUMBER: 08(h)EPA-06

STREAM SAMPLED: Tributary to Linton Creek

SUMMARY

Funding for this project was used to modify the Kenston Lake dam to restore the associated stream channel and reduce downstream thermal impacts to Linton Creek. The existing dam is used as a roadway serving several homes in the adjacent subdivision; therefore, complete dam removal was not feasible. The riparian corridor along the project site is now protected by a 75 foot riparian setback, resulting in a minimum of 150 feet of unimpacted stream riparian corridor.

Biological sampling occurred in the tributary to Linton Creek before (2008) and after (2012) removal of the dam. The tributary to Linton Creek is currently undesignated in the Ohio Water Quality Standards but a WWH use designation is recommended. In 2008, the site sampled downstream from the dam (RM 0.4) was partially attaining the WWH biological criteria while sampling results within the impoundment (RM 0.6) were in non-attainment of the WWH biocriteria (Tables 29 & 30, Figure 14). The low biological scores within the impoundment were associated with reduced habitat diversity (no riffles and extensive sediment deposits).

Sampling in 2012, within the previously impounded section of stream and further downstream (RMs 0.6 and 0.4) showed that macroinvertebrate communities had improved from poor to fair but the site was still not meeting WWH aquatic life use expectations. Macroinvertebrate communities should improve as they repopulate the newly restored areas. In 2012, fish communities at RM 0.6 had declined from fair to very poor. Fish communities were very poor at RM 0.6 because fish were unable to move upstream due to a culvert that drops several feet as the stream is piped under the road. Unless some mitigation is completed to alleviate the impact from the culvert drop, fish communities at RM 0.6 are unlikely to improve and meet WWH expectations because the culvert restricts fish recolonization from downstream population sources. At RM 0.4, fish communities were good and macroinvertebrate communities were fair resulting in partial attainment of the WWH aquatic life use.

TABLE 29. AQUATIC LIFE USE ATTAINMENT – TRIBUTARY TO LINTON CREEK, 2008 & 2012.

The Index of Biotic Integrity (IBI), Modified Index of Well-being (MIwb), and Invertebrate Community Index (ICI) scores are based on the performance of the biological community. The Qualitative Habitat Evaluation Index (QHEI) is a measure of the ability of the physical habitat to support a biological community. Stream sites are located in the Erie-Ontario Lake Plain (EOLP) ecoregion. In the Ohio Water Quality Standards, the tributary to Linton Creek is undesignated but WWH is recommended. A narrative evaluation was used to assess macroinvertebrate quality.

River Mile ^a (drainage mi ²)	Attainment Status	IBI	MIwb ^b	ICI ^c	QHEI	Narrative Assessment Fish/Macroinvertebrates
RM 0.6 ^B (0.5)– 2008	NON	36 ^{ns}	6.8*	P*	45.5 (fair)	Fair/Poor
RM 0.6 ^H (0.5)– 2012	NON	<u>12</u> *	-	F*	61.0 (good)	Very Poor/Fair
RM 0.4 ^H (0.6)– 2008	PARTIAL	42	-	F*	57.0 (good)	Good/Fair
RM 0.4 ^H (0.6)– 2012	PARTIAL	38 ^{ns}	-	F*	65.0 (good)	Marginally Good/Fair

Ecoregion Biocriteria: Erie-Ontario Lake Plain	
INDEX – SITE TYPE	WWH
IBI: Headwater	40
IBI: Boat	40
MIwb: Boat	8.7
ICI	34

a H - headwater electrofishing site, B - boat electrofishing site.

b MIwb is not applicable to headwater streams with drainage areas ≤ 20 mi².

c Narrative evaluation used in lieu of ICI when score not available (F-fair; P-poor).

* Indicates significant departure from applicable biocriteria (>4 IBI or ICI units, or >0.5 MIwb units). Underlined scores are in the Poor or Very Poor range.

ns Nonsignificant departure from biocriteria (≤ 4 IBI or ICI units, or ≤ 0.5 MIwb units).

Table 30. Sampling locations in the Tributary to Linton Creek study area, 2008 & 2012.

River Mile	Latitude	Longitude	Stream Name and Sampling Location
0.6 - 2008	41.381590	-81.347640	Trib. to Linton Cr. near Bainbridge, Kenston L. (impounded)
0.6 - 2012	41.381591	-81.347645	Trib. to Linton Cr. near Bainbridge (free-flowing)
0.4 - 2008 & 2012	41.379610	-81.350280	Trib. to Linton Cr. near Bainbridge, dst. Kenston L. project

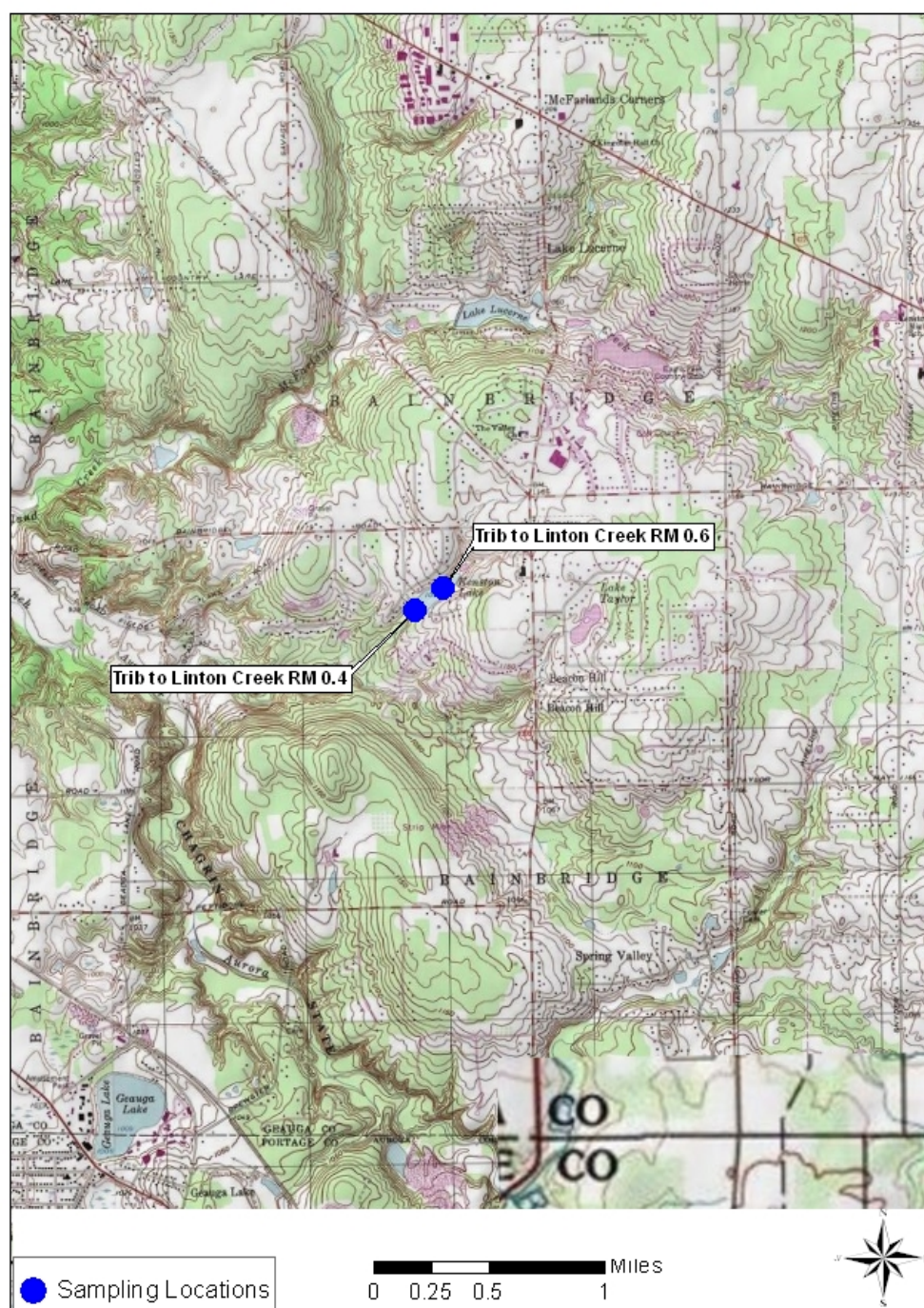


Figure 14: Tributary to Linton Creek study area sampling locations, 2008 & 2012.

PROJECT NAME: VILLAGE OF NEW ALBANY STREAM RESTORATION**Post-Project Monitoring**

PROJECT NUMBER: 09(h)EPA-17

STREAM SAMPLED: Tributary to Rocky Fork (RM 5.4)

SUMMARY

The stream restoration project along this small tributary to Rocky Fork has been completed in the Rocky Fork Big Walnut Creek watershed. Natural channel design restoration methods were used along 340 linear feet and included the removal of more than 130 linear feet of box culverts, enhancement of riparian habitat conditions and the construction of riffles and runs to improve instream aquatic habitat conditions.

Two sites in the tributary to Rocky Fork (RM 5.4) were measured for biological condition and physical habitat quality in 2009 and 2012. In 2009 and 2012, the upstream sampling site (RM 0.8) had good to excellent physical habitat conditions but was noted to have black odiferous muck leeching in along the stream edge. This section of the stream was ditched and straight with long shallow pools and one gravelly riffle. The site within the restoration area (RM 0.7) had a redesigned channel with good physical habitat conditions and good riffle/pool development but was noted to be in an open canopy and choked with filamentous algae during the 2012 sampling event.

The tributary to Rocky Fork (RM 5.4) is currently undesignated in the Ohio Water Quality Standards and, for purposes of this restoration project, a WWH aquatic life use designation is recommended. Fish sampling results at the two stations from both 2009 and 2012 were marginally good to very good, but poor macroinvertebrate results were noted at each location both years (Tables 31 & 32, Figure 15). The poor condition of the macroinvertebrate community resulted in non-attainment of the WWH use. The sites looked to be enriched and the open canopy stimulated extensive algae growth. The recently completed restoration work at RM 0.7 during the 2012 sampling appeared to still be going through channel stabilization and recovery processes. It is apparent that additional time is needed for the biological communities (particularly the macroinvertebrates) to show positive progress and recovery towards WWH expectations in response to the restoration activities.

TABLE 31. AQUATIC LIFE USE ATTAINMENT – TRIBUTARY TO ROCKY FORK (RM 5.4) 2009 & 2012.

The Index of Biotic Integrity (IBI), Modified Index of Well-being (MIwb), and Invertebrate Community Index (ICI) scores are based on the performance of the biological community. The Qualitative Habitat Evaluation Index (QHEI) is a measure of the ability of the physical habitat to support a biological community. Stream sites are located in the Eastern Corn Belt Plains (ECBP) ecoregion. In the Ohio Water Quality Standards, the tributary to Rocky Fork (RM 5.4) is undesignated but WWH is recommended. A narrative evaluation was used to assess macroinvertebrate quality.

River Mile ^a (drainage mi ²)	Attainment Status	IBI	MIwb ^b	ICI ^c	QHEI	Narrative Assessment Fish/Macroinvertebrates
RM 0.8 ^H (1.2)- 2009	NON	38 ^{ns}	-	<u>P</u> *	70.5 (excellent)	Marginally Good/Poor
RM 0.8 ^H (1.2)- 2012	NON	38 ^{ns}	-	<u>P</u> *	63.0 (good)	Marginally Good/Poor
RM 0.7 ^H (1.2)- 2009	NON	46	-	<u>P</u> *	61.0 (good)	Very Good/Poor
RM 0.7 ^H (1.2)- 2012	NON	44	-	<u>P</u> *	54.3 (good)	Good/Poor

Ecoregion Biocriteria: Eastern Corn Belt Plains	
INDEX – SITE TYPE	WWH
IBI: Headwater	40
ICI	36

a H – headwater electrofishing site.

b MIwb is not applicable to headwater streams with drainage areas ≤ 20 mi².

c Narrative evaluation used in lieu of ICI when score not available (P-poor).

* Indicates significant departure from applicable biocriteria (>4 IBI or ICI units, or >0.5 MIwb units). Underlined scores are in the Poor or Very Poor range.

ns Nonsignificant departure from biocriteria (≤ 4 IBI or ICI units, or ≤ 0.5 MIwb units).

Table 32. Sampling locations in the tributary to Rocky Fork (RM 5.4) study area, 2009 & 2012.

River Mile	Latitude	Longitude	Stream Name and Sampling Location
0.8	40.0629361	-82.8273111	Trib to Rocky FK (RM 5.4) near New Albany, upst Rt 62/Harlem Rd.
0.7	40.0629361	-82.8273111	Trib to Rocky FK (RM 5.4) near New Albany, upst Rt 62/Harlem Rd.

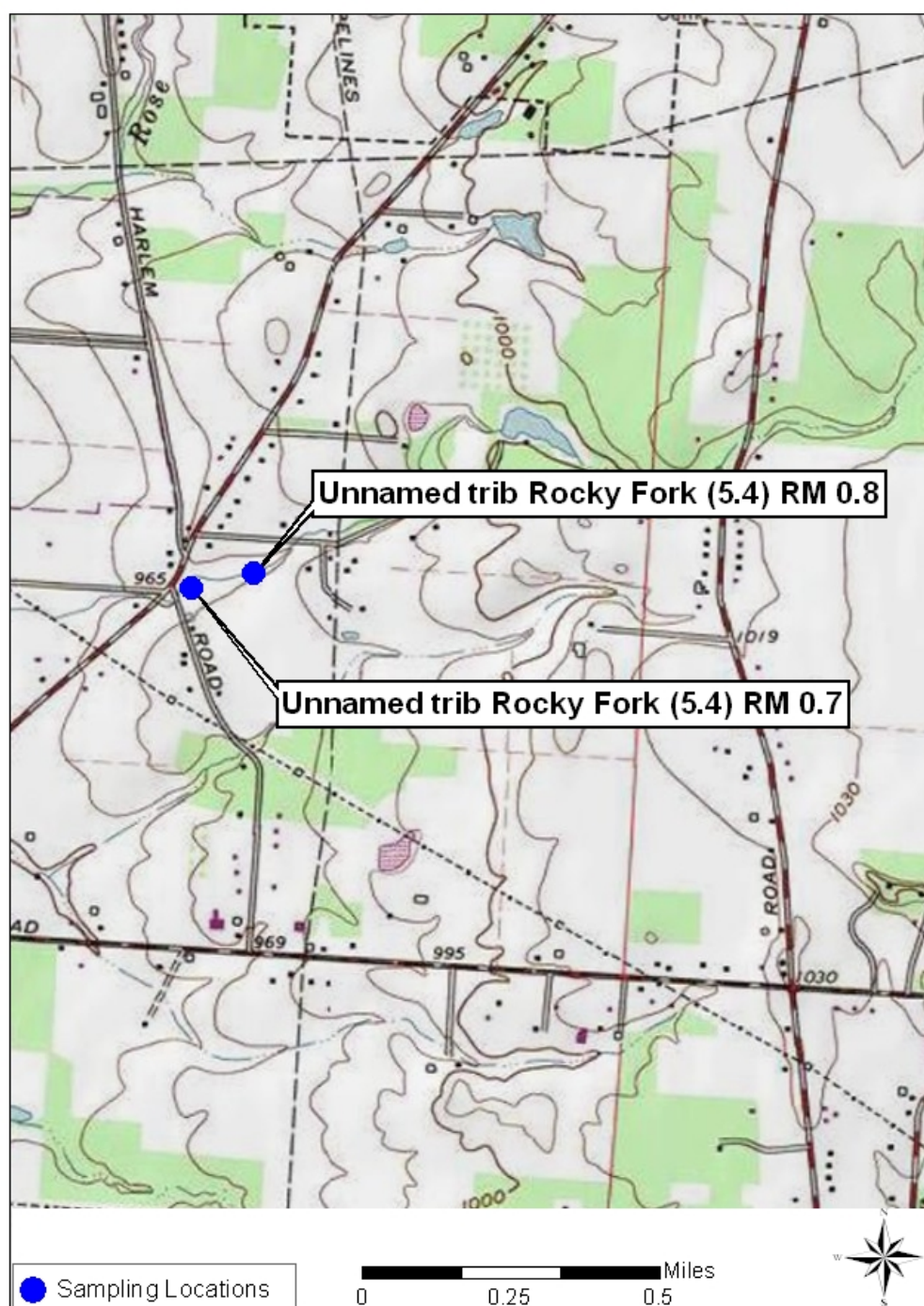


Figure 15: Tributary to Rocky Fork (RM 5.4) study area sampling locations, 2009 & 2012.

PROJECT NAME: WATERMAN FARM AGRICULTURAL BMP DEMONSTRATION (PHASE 1)**Post-Project Monitoring**

PROJECT NUMBER: 08(h)EPA-35

STREAM SAMPLED: Waterman Ditch

SUMMARY

Funding for this project was used to improve the water quality of a small tributary to the Olentangy River by implementing an array of agricultural best management practices at the Ohio State University's Waterman Farm. The project provided examples of how to improve the sustainability of production, reduce maintenance costs, assure compliance with state and federal regulations, and improve water resources both on the farm and downstream. The project site is located on the main campus of the Ohio State University in Columbus, Ohio, and is home to education and research projects in an extensive list of agriculture disciplines. The site exhibited physical and operational characteristics that were detrimental to the water quality of the small tributary (Waterman Ditch) that runs through the farm. Resource concerns addressed during this project included unrestricted access of livestock to the stream, channels that had been deepened and straightened for drainage purposes, lack of vegetated buffers and a lack of an established conservation and manure management plan.

In 2010 and 2012, two sites in Waterman Ditch at RMs 1.4 and 1.3 were measured for biological condition and physical habitat quality (Tables 33 & 34, Figure 16). The drainage area at both sites is 0.4 square miles. This stream is currently undesignated in the Ohio Water Quality Standards, and, for purposes of this restoration project, a WWH aquatic life use designation is recommended. Fair to good physical habitat conditions were present at both sites. In 2010 and 2012, fish communities were very poor and macroinvertebrate communities were poor at both RMs 1.4 and 1.3. Downstream from the project site, a natural waterfall impedes potential fish migration and recolonization from downstream population sources in the Olentangy River, so fish recovery and recruitment will not likely be successful without some intervention. Recovery of macroinvertebrate communities should occur as the restoration work further matures and aquatic habitat stabilizes and recovers.

TALBE 33. AQUATIC LIFE USE ATTAINMENT – WATERMAN DITCH 2010 & 2012.

The Index of Biotic Integrity (IBI), Modified Index of Well-being (MIwb), and Invertebrate Community Index (ICI) scores are based on the performance of the biological community. The Qualitative Habitat Evaluation Index (QHEI) is a measure of the ability of the physical habitat to support a biological community. Stream sites are located in the Eastern Corn Belt Plains (ECBP) ecoregion. In the Ohio Water Quality Standards, Waterman Ditch is undesignated but WWH is recommended. A narrative evaluation was used to assess macroinvertebrate quality.

River Mile ^a (drainage mi ²)	Attainment Status	IBI	MIwb ^b	ICI	QHEI	Narrative Assessment Fish/Macroinvertebrates
RM 1.4 ^H (0.4)- 2010	NON	<u>12</u> *	-	<u>P</u> *	55.3 (good)	Very Poor/Poor
RM 1.4 ^H (0.4)- 2012	NON	<u>12</u> *	-	<u>P</u> *	46.5 (fair)	Very Poor/Poor
RM 1.3 ^H (0.4)- 2010	NON	<u>16</u> *	-	<u>P</u> *	44.3 (fair)	Very Poor/Poor
RM 1.3 ^H (0.4)- 2012	NON	<u>12</u> *	-	<u>P</u> *	54.5 (good)	Very Poor/Poor

Ecoregion Biocriteria: Eastern Corn Belt Plains	
INDEX – SITE TYPE	WWH
IBI: Headwater	40
ICI	36

a H – headwater electrofishing site.

b MIwb is not applicable to headwater streams with drainage areas ≤ 20 mi².

c Narrative evaluation used in lieu of ICI when score not available (P-poor).

* Indicates significant departure from applicable biocriteria (>4 IBI or ICI units, or >0.5 MIwb units). Underlined scores are in the Poor or Very Poor range.

Table 34. Sampling locations in the Waterman Ditch study area, 2010 & 2012.

River Mile	Latitude	Longitude	Stream Name and Sampling Location
1.4	40.010020	-83.036820	Waterman Ditch @ Ohio State University Farm, upst. Kenny Rd.
1.3	40.010420	-83.034960	Waterman Ditch @ Ohio State University, dst. Kenny Rd.

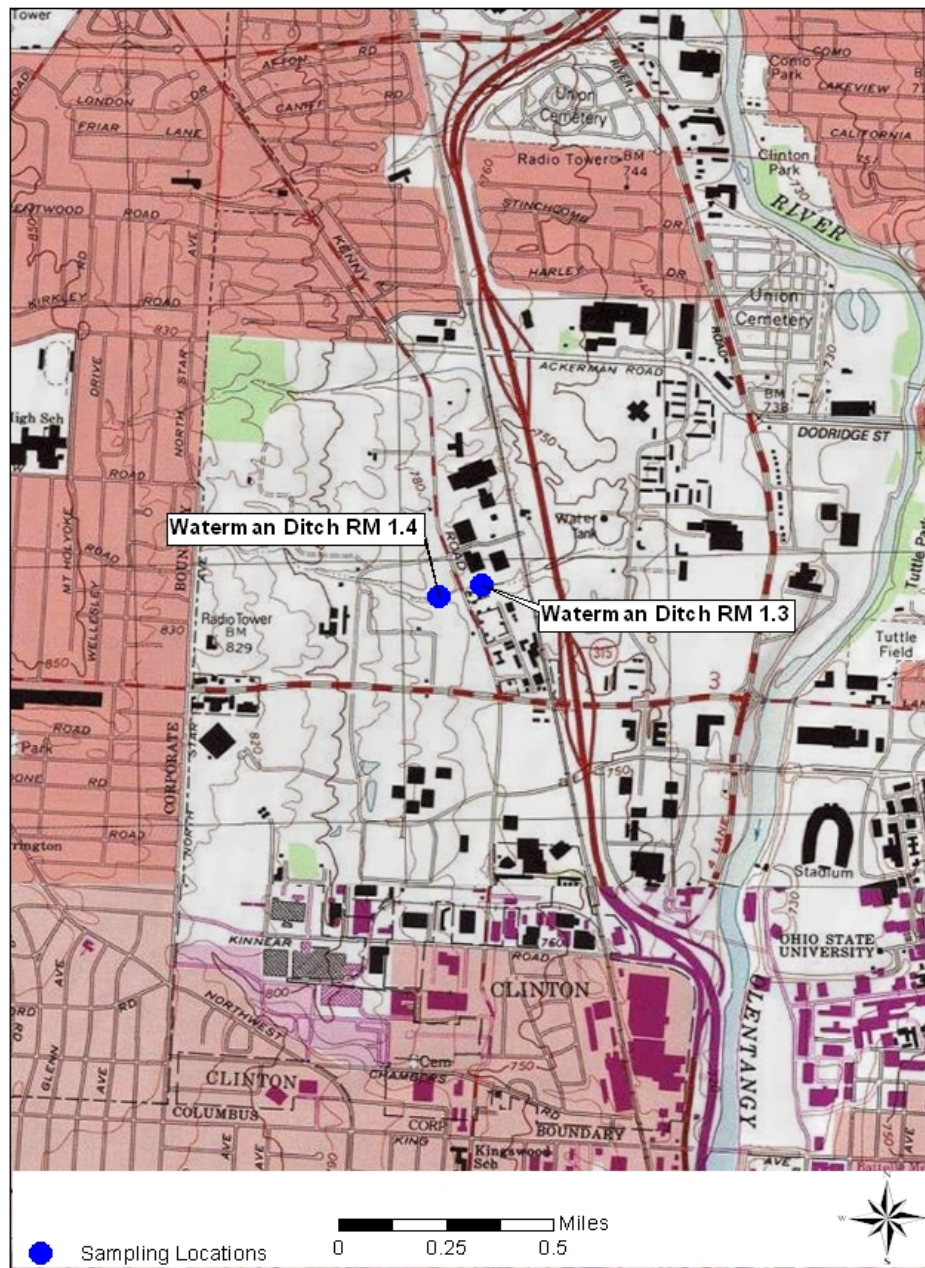


Figure 16: Waterman Ditch study area sampling locations, 2010 & 2012.

APPENDICES

Appendix A. Qualitative Habitat Evaluation (QHEI) Index Scores and Attributes.

Appendix B. Fish Index of Biotic Integrity (IBI) Scores and Metrics.

Appendix C. Fish Species and Abundance for Each Sampling Location.

Appendix D. Invertebrate Community Index (ICI) Scores and Metrics.

Appendix E. Macroinvertebrate Collection Results.

Appendix A. Qualitative Habitat Evaluation (QHEI) Index Scores and Attributes.

Appendix A: Qualitative Habitat Evaluation (QHEI) Index Scores and Attributes.

River Mile	QHEI	Gradient (ft/mile)	WWH Attributes										MWH Attributes										Total M.L. MWH Attributes	(MWH LL+1)-(MWH+1) Ratio	(MWH LL+1)/(MWH+1) Ratio		
			No Channelization or Recovered Boulder/Cobble/Gravel Substrates	Silt Free Substrates	Good/Excellent Substrates	Moderate/Fair Sinuosity	Extensive/Moderate Cover	Fast Current/Eddies	Low-Normal Overall Embeddedness	Max Depth > 40 cm	Low-Normal Rifle 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)	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
			Key QHEI Components																								
(02-200) Big Darby Creek																											
Year: 2012																											
82.7	64.0	30.30		7		1		3	0.25	0.63																	
81.6	53.5	17.24		5		1		6	0.33	1.33																	
80.9	65.5	19.61		7		1		4	0.25	0.75																	
80.7	70.0	19.61		6		1		4	0.29	0.86																	
Year: 2008																											
81.9	52.0	16.39		3		2		7	0.75	2.50																	
81.4	51.5	16.95		3		2		5	0.75	2.00																	
81.1	70.5	16.95		8		0		4	0.11	0.56																	
80.8	75.5	19.61		8		0		2	0.11	0.33																	
(02-397) Trib. to Rocky Fork (RM 5.40)																											
Year: 2012																											
0.8	63.0	15.38		4		2		5	0.60	1.60																	
0.7	54.3	15.38		3		3		5	1.00	2.25																	
Year: 2009																											
0.8	70.5	15.38		6		0		5	0.14	0.86																	
0.7	61.0	15.38		4		1		6	0.40	1.60																	
(15-053) Trib. to Linton Creek (RM 1.36)																											
Year: 2012																											
0.6	61.0	185.2		7		1		4	0.25	0.75																	
0.4	65.0	125.0		6		1		4	0.29	0.86																	
Year: 2008																											
0.6	45.5	0.10		3		3		6	1.00	2.50																	
0.4	57.0	125.0		5		1		5	0.33	1.17																	

Appendix A: Continued

River Mile	QHEI	Gradient (ft/mile)	WWH Attributes										MWH Attributes										Total MWH Attributes	Channelized or No Recovery Silt/Fill Substitutes	No Sinuosity Sparsely No Cover Max Depth < 40 cm (MD, HD)	Total H.L. MWH Attributes	Moderate Influence										Recovering Channel Heavy/Moderate Silt Cover Sand Substrates (Biot) Hardpan Substrates Origin Fair/Poor Development Low Sinuosity Only 1-2 Cover Types Intermittent and Poor Pools No Fast Current High/Low Overall Embedment High/Low Riffle Embedment No Riffle	Total ALL MWH Attributes	QHEI-HL = (QHEI-MH+1) Ratio	QHEI-HL = (QHEI-MH+1) Ratio
			Key QHEI Components																																					
			No Channelization or Barriers Bcu cul/Culverts/Clavel Substitutes Silt/Fill Substitutes	Good/Excellent Substitutes Moderate/Low Sinuosity Extensive Moderate Cover Fast Current/Eddies Low-Normal Overall Embedment Max Depth > 40 cm Low-Normal Riffle Embedment	Total WWH Attributes																																			
(17-101) Huff Run																																								
Year: 2012																																								
7.8	69.8	18.52	■	■	■	■	■	■	■	■	■	8				0				■			■	■	■	■	■	■	■	■	4	0.11	0.56							
4.2	57.3	10.70					■				■	2	■	■	■	2	■	■			■		■	■	■	■	■	■	■	■	6	1.00	3.00							
3.8	57.8	10.70		■				■			■	3			■	1	■	■			■			■	■	■	■		■	■	6	0.50	2.00							
2.8	62.0	9.43	■			■	■	■	■	■	■	6	■	■		1	■	■			■			■	■	■	■	■	■	■	5	0.29	1.00							
0.3	69.5	16.48	■	■	■	■	■	■	■	■	■	7			■	1	■	■			■			■	■	■	■	■	■	■	5	0.25	0.88							
Year: 2008																																								
7.8	59.0	18.52	■					■	■	■	■	4			■	1	■	■			■					■	■	■	■	■	5	0.40	1.40							
6.6	63.0	20.83	■			■	■	■	■		■	5				■	1	■	■						■	■	■	■	■	■	4	0.33	1.00							
5.5	73.5	25.32	■	■	■	■	■	■	■	■	■	8				0									■					1	0.11	0.22								
4.8	64.5	10.70	■			■	■	■	■	■	■	6				0		■									■	■	■	■	3	0.14	0.57							
4.8	66.5	10.70	■			■	■	■	■		■	5			■	1	■	■									■	■	■	■	4	0.33	1.00							
4.2	57.5	10.70	■			■	■	■	■		■	5	■	■	■	2	■	■							■	■	■	■	■	■	5	0.50	1.33							
3.8	71.5	10.70	■			■	■	■	■	■	■	6				0		■									■	■	■	■	3	0.14	0.57							
2.8	55.0	9.43						■			■	2	■	■	■	2	■	■			■				■	■	■	■	■	■	6	1.00	3.00							
1.3	71.0	9.43	■			■	■	■	■	■	■	6				0		■	■	■							■	■	■	■	5	0.14	0.86							
0.3	69.5	16.48				■	■	■	■	■	■	4			■	1	■	■									■	■	■	■	4	0.40	1.20							
(19-020) Furnace Run																																								
Year: 2012																																								
7.2	79.5	27.78	■	■	■	■	■	■	■	■	■	9				0					■									1	0.10	0.20								
6.9	66.5	40.00	■	■	■	■	■	■	■	■	■	8			■	1					■									1	0.22	0.33								
6.5	78.8	26.32	■	■	■	■	■	■	■	■	■	9			■	1					■									1	0.20	0.30								
0.2	76.0	22.73	■	■	■	■	■	■	■	■	■	7				0		■			■	■				■				4	0.13	0.63								
Year: 2011																																								
0.2	62.5	22.73	■			■		■			■	5	■	■		1	■	■			■	■	■	■	■	■	■	■	■	■	6	0.33	1.33							
Year: 2010																																								
7.2	84.3	27.78	■	■	■	■	■	■	■	■	■	8				0						■								1	0.11	0.22								
0.2	69.5	22.73	■	■				■	■	■	■	5			■	1	■	■			■	■				■	■	■	■	■	5	0.33	1.17							
Year: 2009																																								
7.2	85.0	27.78	■	■	■	■	■	■	■	■	■	9				0														0	0.10	0.10								
6.9	80.0	40.00	■	■	■	■	■	■	■	■	■	9				0														0	0.10	0.10								
6.5	81.0	26.32	■	■	■	■	■	■	■	■	■	8			■	1	■	■							■					2	0.22	0.44								
1.1	74.0	37.04	■	■	■	■	■	■	■	■	■	9				0														0	0.10	0.10								
0.9	75.0	32.26	■	■	■	■	■	■	■	■	■	7				0		■							■	■	■			3	0.13	0.50								

Appendix A: Continued

		WWH Attributes										MWH Attributes																						
												High Influence					Moderate Influence																	
												Channelized or No Recovery Silt/Cluck Substrates					No Sinuosity Sparsely No Cover Max Depth < 40 cm (WD, HD)					Recovering Channel Heavy/Moderate Silt Cover Sand Substrates (Biot) Hardpan Substrate Origin Faint 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					Total ALL MWH Attributes		
												Channelized or No Recovery Silt/Cluck Substrates					No Sinuosity Sparsely No Cover Max Depth < 40 cm (WD, HD)					Recovering Channel Heavy/Moderate Silt Cover Sand Substrates (Biot) Hardpan Substrate Origin Faint 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					Total ALL MWH Attributes		
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												Channelized or No Recovery Silt/Cluck Substrates					No Sinuosity Sparsely No Cover Max Depth < 40 cm (WD, HD)					Recovering Channel Heavy/Moderate Silt Cover Sand Substrates (Biot) Hardpan Substrate Origin Faint 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					Total ALL MWH Attributes		
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												Channelized or No Recovery Silt/Cluck Substrates					No Sinuosity Sparsely No Cover Max Depth < 40 cm (WD, HD)					Recovering Channel Heavy/Moderate Silt Cover Sand Substrates (Biot) Hardpan Substrate Origin Faint 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					Total ALL MWH Attributes		
												Channelized or No Recovery Silt/Cluck Substrates					No Sinuosity Sparsely No Cover Max Depth < 40 cm (WD, HD)					Recovering Channel Heavy/Moderate Silt Cover Sand Substrates (Biot) Hardpan Substrate Origin Faint 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					Total ALL MWH Attributes		
												Channelized or No Recovery Silt/Cluck Substrates					No Sinuosity Sparsely No Cover Max Depth < 40 cm (WD, HD)					Recovering Channel Heavy/Moderate Silt Cover Sand Substrates (Biot) Hardpan Substrate Origin Faint 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					Total ALL MWH Attributes		
												Channelized or No Recovery Silt/Cluck Substrates					No Sinuosity Sparsely No Cover Max Depth < 40 cm (WD, HD)					Recovering Channel Heavy/Moderate Silt Cover Sand Substrates (Biot) Hardpan Substrate Origin Faint 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					Total ALL MWH Attributes		
												Channelized or No Recovery Silt/Cluck Substrates					No Sinuosity Sparsely No Cover Max Depth < 40 cm (WD, HD)					Recovering Channel Heavy/Moderate Silt Cover Sand Substrates (Biot) Hardpan Substrate Origin Faint 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					Total ALL MWH Attributes		
												Channelized or No Recovery Silt/Cluck Substrates					No Sinuosity Sparsely No Cover Max Depth < 40 cm (WD, HD)					Recovering Channel Heavy/Moderate Silt Cover Sand Substrates (Biot) Hardpan Substrate Origin Faint 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					Total ALL MWH Attributes		
												Channelized or No Recovery Silt/Cluck Substrates					No Sinuosity Sparsely No Cover Max Depth < 40 cm (WD, HD)					Recovering Channel Heavy/Moderate Silt Cover Sand Substrates (Biot) Hardpan Substrate Origin Faint 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					Total ALL MWH Attributes		
												Channelized or No Recovery Silt/Cluck Substrates					No Sinuosity Sparsely No Cover Max Depth < 40 cm (WD, HD)					Recovering Channel Heavy/Moderate Silt Cover Sand Substrates (Biot) Hardpan Substrate Origin Faint 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					Total ALL MWH Attributes		
												Channelized or No Recovery Silt/Cluck Substrates					No Sinuosity Sparsely No Cover Max Depth < 40 cm (WD, HD)					Recovering Channel Heavy/Moderate Silt Cover Sand Substrates (Biot) Hardpan Substrate Origin Faint 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					Total ALL MWH Attributes		
												Channelized or No Recovery Silt/Cluck Substrates					No Sinuosity Sparsely No Cover Max Depth < 40 cm (WD																	

Appendix A: Continued

River Mile	QHEI	Gradient (ft/mile)	WWH Attributes										MWH Attributes										Total M.L. MWH Attributes	Q(MWH HL+1)/(MWH+1) Ratio	Q(MWH HL+1)/(MWH+1) Ratio
			No Channelization or Recovered Boulder/Cobble/Gravel Substrates	Silt Free Substrates	Good/Excellent Substrates	Moderate/Fair Sinuosity	Extensive/Moderate Cover	Fast Current: Eddies	Low Normal Overall Effectiveness	Max Depth > 40 cm	Low Normal Riffle Embeddedness	Total WWH Attributes	High Influence				Moderate Influence								
													Channelized or No Recovery Silt/Muck Substrates	No Sinuosity	Sparsely No Cover	Max Depth < 40 cm (W/D, HW)	Total H.L. MWH Attributes	Recovering Channel	Heavy/Moderate Silt Cover	Sand Substrates (Boat)	Hardpan Substrate Origin	Fair/Poor Development			
Key QHEI Components																									
(02-252) Rose Run																									
Year: 2012																									
1.9	60.5	41.67		5		2		3	0.50	1.00															
1.7	63.3	34.48		7		1		2	0.25	0.50															
0.5	67.5	22.22		7		1		1	0.25	0.38															
(02-397) Trib. to Rocky Fork (RM 5.40)																									
Year: 2012																									
0.8	63.0	15.38		4		2		5	0.60	1.60															
0.7	54.3	15.38		3		3		5	1.00	2.25															
(02-610) Salt Lick Creek																									
Year: 2012																									
23.7	47.8	5.36		3		1		6	0.50	2.00															
(02-684) Trib. to Salt Lick Creek (RM 23.82)																									
Year: 2012																									
0.3	29.5	12.66		0		5		7	6.00	***															
(04-003) Swan Creek																									
Year: 2012																									
27.1	58.8	1.86		5		0		6	0.17	1.17															
25.6	39.3	2.39		3		2		7	0.75	2.50															
24.7	49.0	2.39		3		1		7	0.50	2.25															
(15-002) East Branch Chagrin River																									
Year: 2012																									
12.1	67.0	20.41		3		0		6	0.25	1.75															
11.8	82.3	20.00		9		0		0	0.10	0.10															
11.4	67.8	20.00		9		1		2	0.20	0.40															

Appendix A: Continued

River Mile	QHEI	Gradient (ft/mile)	WWH Attributes										MWH Attributes										Total M.L. MWH Attributes	(MWH ML+1)/(MWH+1) Ratio	(MWH ML+1)/(MWH+1) Ratio					
													High Influence					Moderate Influence												
			No Channelization or Reduced Bank Stability	Barren/Cobble/Gravel Substrates	Silt Free Substrates	Good/Excellent Substrates	Moderate/High Sinuosity	Extensive/Moderate Cover	Fast Current/Eddies	Low Normal Overall Embedment	Max Depth > 40 cm	Low Normal Rifle Embedment	Total WWH Attributes	Channelized or No Recovery Silt/Cluck Substrates	No Sinuosity	Sparse/No Cover	Max Depth < 40 cm (WD, HW)	Total H.L. 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
Key QHEI Components																														
(19-008) Pond Brook																														
Year: 2012																														
3.7	25.8	3.56									1					4												6	2.50	5.50
3.4	35.0	3.56									2					2												6	1.00	3.00
2.3	38.0	3.57									2					4												6	1.67	3.67
1.4	32.5	4.52									1					4												6	2.50	5.50
(20-001) Black River																														
Year: 2012																														
15.4	82.5	8.62									8					0												3	0.11	0.44
11.5	72.0	5.62									7					1												3	0.25	0.63
(20-020) West Branch Black River																														
Year: 2012																														
0.4	80.0	6.49									8					0												3	0.11	0.44
(20-010) East Branch Black River																														
Year: 2012																														
0.8	64.5	0.10									5					0												5	0.17	1.00
(09-575) West Branch Raccoon Creek																														
Year: 2012																														
5.7	47.0	22.22									3					3												4	1.00	2.00
4.1	59.5	20.83									6					2												2	0.43	0.71
3.0	62.5	10.64									6					1												5	0.29	1.00
Year: 2011																														
0.1	68.5	10.20									6					0												5	0.14	0.86
Year: 2010																														
3.0	60.5	10.64									4					2												4	0.60	1.40
1.7	59.5	10.20									4					0												6	0.20	1.40

Appendix B. Fish Index of Biotic Integrity (IBI) Scores and Metrics.

Appendix B: Fish Index of Biotic Integrity (IBI) Scores and Metrics

Headwaters IBI:

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	Omnivores	Pioneering fishes	Insectivores	DELT anomalies			
Sycamore Creek - (02-085)																	
Year: 2012																	
7.10	E	07/09/2012	10.6	18(5)	8(5)	2(3)	5(3)	5(5)	8(5)	24(5)	7(5)	20(5)	44(5)	0.0(5)	1133(5)	56	
6.70	E	07/30/2012	11.7	18(5)	6(3)	2(3)	4(3)	5(5)	7(5)	28(5)	8(5)	21(5)	37(3)	0.0(5)	1734(5)	52	
5.90	E	07/09/2012	14.8	20(5)	8(5)	1(1)	6(5)	5(5)	7(5)	43(3)	16(5)	32(3)	42(3)	0.0(5)	606(3)	48	
Powderlick Run - (02-144)																	
Year: 2012																	
2.60	E	08/21/2012	2.6	7(3)	4(3)	0(1)	0(1)	1(1)	0(1)	90(1)	70(1)	90(1)	8(1)	0.0(5)	46(1)	20	
2.20	E	08/21/2012	2.6	6(3)	2(1)	0(1)	0(1)	0(1)	0(1)	83(1)	2(5)	54(3)	69(5)	0.0(5)	28(1) *	28	
1.60	E	08/21/2012	3.3	11(5)	5(5)	0(1)	0(1)	0(1)	1(1)	69(1)	4(5)	44(3)	75(5)	0.0(5)	96(3)	36	
1.20	E	08/21/2012	3.5	10(3)	6(5)	0(1)	0(1)	0(1)	1(1)	72(1)	32(1)	71(1)	25(3)	0.0(5)	128(3)	26	
Rose Run - (02-252)																	
Year: 2012																	
1.90	E	08/16/2012	1.7	8(5)	3(3)	0(1)	0(1)	1(3)	1(1)	84(1)	1(5)	88(1)	27(5)	0.0(5)	134(3)	34	
1.70	E	08/16/2012	1.8	8(3)	3(3)	0(1)	0(1)	1(3)	1(1)	72(1)	5(5)	77(1)	19(3)	0.0(5)	218(5)	32	
0.50	E	07/30/2012	2.9	11(5)	3(3)	0(1)	2(3)	3(5)	3(3)	55(3)	22(1)	53(3)	44(5)	0.0(5)	578(5)	42	
Trib. to Rocky Fork - (02-397)																	
Year: 2012																	
0.80	E	08/16/2012	1.2	9(5)	2(3)	1(1)	0(1)	2(5)	1(1)	75(1)	1(5)	74(1)	25(5)	0.0(5)	190(5)	38	
0.70	E	08/16/2012	1.2	9(5)	4(5)	2(3)	0(1)	2(5)	1(1)	32(5)	1(5)	35(3)	9(1)	0.2(5)	1475(5)	44	
Pond Brook - (19-008)																	
Year: 2012																	
3.70	E	09/17/2012	1.6	11(5)	0(1)	0(1)	1(1)	0(1)	1(1)	41(3)	9(5)	12(5)	86(5)	0.0(5)	303(5)	38	
3.40	E	09/17/2012	5.0	10(3)	1(1)	0(1)	1(1)	0(1)	1(1)	61(1)	13(5)	18(5)	73(5)	0.5(5)	170(3)	32	
2.30	E	09/17/2012	10.9	9(3)	3(1)	0(1)	0(1)	0(1)	1(1)	78(1)	64(1)	64(1)	33(3)	0.0(5)	66(1)	20	
1.40	E	09/17/2012	15.7	9(3)	2(1)	0(1)	1(1)	0(1)	1(1)	77(1)	62(1)	68(1)	35(3)	0.0(5)	201(3)	22	

Appendix B: Continued

Headwaters IBI:

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			
Waterman Ditch - (02-485)																	
Year: 2012																	
1.40	E	07/05/2012	0.4	1(1)	0(1)	0(1)	0(1)	0(1)	0(1)	0(1)	0(1)	0(1)	100(1)	0.0(1)	2(1) * *	12	
1.30	E	07/05/2012	0.4	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	
Year: 2010																	
1.40	E	06/23/2010	0.4	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	
1.30	E	06/23/2010	0.4	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	
Big Darby Creek - (02-200)																	
Year: 2012																	
82.70	E	07/16/2012	1.6	14(5)	7(5)	3(3)	1(1)	4(5)	6(5)	55(3)	15(3)	46(3)	15(3)	0.0(5)	1270(5)	46	
81.60	E	07/16/2012	3.0	12(5)	6(5)	2(3)	0(1)	3(5)	4(5)	77(1)	10(5)	87(1)	21(3)	0.0(5)	428(5)	44	
80.90	E	07/16/2012	3.9	18(5)	6(5)	2(3)	2(3)	5(5)	6(5)	48(3)	12(5)	65(1)	54(5)	0.0(5)	646(5)	50	
80.70	E	07/16/2012	4.5	17(5)	6(5)	2(3)	2(3)	5(5)	5(5)	56(3)	38(1)	42(3)	41(5)	0.0(5)	534(5)	48	
Year: 2008																	
81.90	E	08/13/2008	3.2	20(5)	7(5)	3(3)	2(3)	6(5)	7(5)	58(1)	29(1)	57(1)	44(5)	0.1(5)	580(5)	44	
81.40	E	08/13/2008	3.3	20(5)	6(5)	3(3)	3(3)	6(5)	7(5)	66(1)	30(1)	49(3)	47(5)	0.2(5)	420(5)	46	
81.10	E	08/13/2008	3.4	17(5)	5(3)	1(1)	4(5)	6(5)	7(5)	66(1)	23(1)	51(3)	51(5)	0.2(5)	372(5)	44	
80.80	E	08/13/2008	4.4	19(5)	6(5)	3(3)	4(5)	7(5)	8(5)	49(3)	31(1)	39(3)	52(5)	0.0(5)	1014(5)	50	
Trib. to Rocky Fork - (02-397)																	
Year: 2012																	
0.80	E	08/16/2012	1.2	9(5)	2(3)	1(1)	0(1)	2(5)	1(1)	75(1)	1(5)	74(1)	25(5)	0.0(5)	190(5)	38	
0.70	E	08/16/2012	1.2	9(5)	4(5)	2(3)	0(1)	2(5)	1(1)	32(5)	1(5)	35(3)	9(1)	0.2(5)	1475(5)	44	
Year: 2009																	
0.80	E	09/03/2009	1.2	9(5)	2(3)	1(1)	0(1)	2(5)	1(1)	62(1)	2(5)	63(1)	25(5)	0.0(5)	195(5)	38	
0.70	E	09/03/2009	1.2	10(5)	3(3)	2(3)	0(1)	2(5)	2(3)	54(3)	1(5)	54(3)	29(5)	0.0(5)	266(5)	46	
W. Br. Raccoon Creek - (09-575)																	
Year: 2012																	
3.00	E	09/27/2012	7.7	6(1)	3(3)	1(1)	1(1)	0(1)	2(1)	98(1)	0(5)	98(1)	3(1)	0.1(5)	36(1)	22	
Year: 2010																	
3.00	E	09/29/2010	7.7	5(1)	2(1)	0(1)	1(1)	0(1)	0(1)	48(3)	0(5)	44(3)	64(5)	0.0(5)	33(1) *	28	
Trib to Linton Creek - (15-053)																	
Year: 2012																	
0.60	E	08/27/2012	0.6	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	
0.40	E	08/27/2012	0.6	8(5)	5(5)	1(1)	0(1)	0(1)	1(3)	92(1)	1(5)	62(1)	27(5)	0.0(5)	123(5)	38	
Year: 2008																	
0.40	E	08/13/2008	0.6	9(5)	4(5)	1(1)	1(3)	0(1)	4(5)	84(1)	4(5)	39(3)	29(5)	0.0(5)	90(3)	42	
Huff Run - (17-101)																	
Year: 2012																	
7.80	E	09/24/2012	3.3	10(3)	5(5)	4(5)	1(1)	2(3)	4(3)	64(1)	33(1)	49(3)	22(3)	0.0(5)	496(5)	38	
4.20	E	09/28/2012	8.3	6(1)	3(1)	2(3)	1(1)	1(1)	3(3)	83(1)	25(3)	60(1)	13(1)	0.0(5)	18(1) *	22	
3.80	E	09/24/2012	9.0	5(1)	4(3)	3(3)	1(1)	0(1)	4(3)	30(5)	3(5)	18(5)	61(5)	0.0(5)	53(1) *	38	
2.80	E	09/28/2012	10.1	6(1)	4(3)	3(3)	1(1)	1(1)	4(3)	26(5)	4(5)	22(5)	73(5)	0.0(5)	166(1)	38	
0.30	E	09/24/2012	13.8	9(3)	6(3)	2(3)	1(1)	1(1)	4(3)	89(1)	6(5)	90(1)	21(1)	0.0(5)	30(1)	28	

Appendix B: Continued

Headwaters IBI:

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: 2008																
7.80	E	08/05/2008	3.3	12(5)	5(5)	5(5)	1(1)	2(3)	4(3)	67(1)	30(1)	50(3)	23(3)	0.0(5)	346(5)	40
6.60	E	08/06/2008	5.0	15(5)	6(5)	5(5)	1(1)	2(3)	4(3)	81(1)	51(1)	63(1)	20(3)	0.0(5)	221(3)	36
5.50	E	08/06/2008	6.5	9(3)	5(3)	4(5)	1(1)	2(3)	4(3)	65(1)	13(5)	49(3)	35(3)	0.0(5)	326(3)	38
4.80	E	08/06/2008	7.7	9(3)	4(3)	2(3)	1(1)	1(1)	3(3)	77(1)	33(1)	54(3)	24(3)	0.0(5)	103(1)	28
4.80	E	08/14/2008	7.7	10(3)	4(3)	3(3)	1(1)	2(3)	3(3)	74(1)	18(3)	59(1)	33(3)	0.0(5)	131(1)	30
4.20	E	08/14/2008	8.3	11(3)	6(3)	4(5)	1(1)	2(3)	4(3)	78(1)	16(3)	72(1)	28(3)	0.0(5)	96(1)	32
3.80	E	08/06/2008	9.0	6(1)	3(1)	3(3)	1(1)	2(3)	3(3)	81(1)	1(5)	83(1)	19(1)	0.0(5)	70(1)	26
2.80	E	08/06/2008	10.1	7(1)	3(1)	2(3)	1(1)	1(1)	3(3)	84(1)	27(3)	58(1)	20(1)	0.0(5)	28(1) *	22
1.30	E	08/05/2008	11.8	11(3)	4(3)	2(3)	1(1)	1(1)	4(3)	91(1)	29(3)	56(1)	21(1)	0.0(5)	12(1) *	26
0.30	E	08/05/2008	13.8	9(3)	2(1)	0(1)	0(1)	1(1)	1(1)	78(1)	19(3)	65(1)	33(3)	0.0(5)	27(1) *	22
Furnace Run - (19-020)																
Year: 2012																
7.20	E	09/13/2012	5.7	13(5)	5(3)	3(3)	3(3)	3(3)	5(5)	14(5)	3(5)	16(5)	30(3)	0.0(5)	2939(5)	50
6.90	E	09/13/2012	5.9	14(5)	6(5)	3(3)	3(3)	3(3)	6(5)	15(5)	2(5)	26(5)	36(3)	0.0(5)	3049(5)	52
6.50	E	09/10/2012	7.6	12(3)	5(3)	3(3)	3(3)	3(3)	5(3)	14(5)	4(5)	15(5)	26(3)	0.0(5)	2877(5)	46
Year: 2010																
7.20	E	08/10/2010	5.7	10(3)	4(3)	1(1)	1(1)	2(3)	4(3)	28(5)	10(5)	20(5)	24(3)	0.0(5)	692(5)	42
Year: 2009																
7.20	E	09/01/2009	5.7	8(3)	3(3)	1(1)	1(1)	2(3)	3(3)	21(5)	11(5)	12(5)	26(3)	0.0(5)	798(5)	42
6.90	E	09/01/2009	5.9	12(3)	4(3)	3(3)	3(3)	3(3)	5(3)	26(5)	11(5)	17(5)	29(3)	0.0(5)	778(5)	46
6.50	E	09/01/2009	7.6	11(3)	4(3)	2(3)	2(1)	3(3)	4(3)	27(5)	8(5)	15(5)	33(3)	0.0(5)	1080(5)	44
1.10	E	09/01/2009	19.7	10(3)	5(3)	2(3)	2(1)	3(3)	5(3)	21(5)	3(5)	8(5)	21(1)	0.0(5)	1348(5)	42
0.90	E	08/20/2009	19.8	16(3)	7(5)	2(3)	2(1)	3(3)	6(3)	28(5)	10(5)	14(5)	26(3)	0.0(5)	659(3)	44
0.40	E	09/01/2009	19.9	14(3)	6(3)	2(3)	3(1)	4(3)	6(3)	11(5)	4(5)	6(5)	27(3)	0.0(5)	1928(5)	44

Appendix B: Continued

Wading IBI:

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			
Blacklick Creek - (02130)																	
Year: 2012																	
4.60	D	07/06/2012	57	24(5)	4(5)	2(3)	2(1)	4(3)	25(3)	18(5)	13(5)	1.7(3)	64(5)	0.0(5)	897(5)	48	9.0
4.60	D	09/07/2012	57	22(5)	4(5)	2(3)	3(3)	4(3)	38(5)	15(5)	3(5)	2.2(3)	83(5)	0.0(5)	702(3)	50	8.9
4.10	D	07/06/2012	57	23(5)	4(5)	3(3)	3(3)	3(3)	28(3)	21(5)	13(5)	2.2(3)	60(5)	0.0(5)	442(3)	48	8.8
4.10	D	09/07/2012	57	23(5)	4(5)	3(3)	1(1)	4(3)	10(1)	49(1)	37(1)	0.9(1)	40(3)	0.0(5)	718(3)	32	8.4
2.60	D	06/27/2012	60	34(5)	4(5)	9(5)	4(3)	4(3)	21(3)	28(3)	9(5)	1.2(3)	64(5)	0.1(5)	960(5)	50	10.4
2.60	D	09/17/2012	60	31(5)	5(5)	3(3)	3(3)	4(3)	20(3)	38(3)	6(5)	1.6(3)	78(5)	0.0(5)	704(3)	46	9.0
Salt Lick Creek - (02610)																	
Year: 2012																	
23.70	D	08/03/2012	33	21(5)	4(5)	3(3)	1(1)	4(3)	15(1)	20(5)	8(5)	9.1(5)	51(3)	0.8(3)	461(3)	42	7.2
23.70	E	08/28/2012	33	21(5)	5(5)	2(3)	0(1)	4(3)	19(3)	18(5)	7(5)	7.2(5)	83(5)	0.0(5)	552(3)	48	8.2
E. Br. Chagrin River - (15002)																	
Year: 2012																	
12.10	E	08/06/2012	22	19(5)	2(3)	2(3)	4(5)	3(3)	43(5)	19(5)	13(5)	0.0(1)	47(3)	0.0(5)	1341(5)	48	8.7
12.10	E	09/06/2012	22	14(3)	1(1)	2(3)	3(3)	2(3)	43(5)	33(3)	20(3)	0.0(1)	42(3)	0.0(5)	558(3)	36	7.8
11.80	E	08/06/2012	23	21(5)	3(3)	2(3)	5(5)	3(3)	46(5)	16(5)	7(5)	0.0(1)	52(5)	0.0(5)	2006(5)	48	8.8
11.80	E	09/06/2012	23	16(3)	1(1)	2(3)	4(5)	2(3)	35(3)	22(5)	10(5)	0.0(1)	39(3)	0.0(5)	706(3)	40	7.6
11.40	E	08/06/2012	24	16(3)	0(1)	2(3)	4(5)	2(3)	29(3)	14(5)	7(5)	0.0(1)	41(3)	0.0(5)	1143(5)	42	8.1
11.40	E	09/06/2012	24	14(3)	0(1)	1(1)	3(3)	3(3)	31(3)	7(5)	3(5)	0.0(1)	40(3)	0.0(5)	950(5)	38	7.3

Appendix B: Continued

Boating IBI:

River Mile	Type	Date	Drainage area (sq mi)	Number of				Percent of Individuals							DELTA anomalies	Rel.No. minus tolerants /(1.0 km)	IBI	Modified Iwb
				Total species	Sunfish species	Sucker species	Intolerant species	Rnd-bodied suckers	Simple Lithophils	Tolerant fishes	Omni- vores	Top carnivores	Insect- ivores					
Black River - (20-001)																		
Year: 2012																		
15.40	A	07/09/2012	396	22(5)	4(5)	6(5)	0(1)	25(3)	28(3)	17(3)	35(1)	16(5)	47(3)	0.0(5)	466(5)	44	9.5	
15.40	A	09/11/2012	396	25(5)	6(5)	7(5)	0(1)	12(1)	30(3)	25(3)	25(3)	10(5)	63(5)	0.0(5)	610(5)	46	9.2	
11.50	A	07/10/2012	398	18(3)	4(5)	5(3)	0(1)	41(5)	55(5)	21(3)	23(3)	8(3)	66(5)	0.0(5)	383(3)	44	9.1	
11.50	A	09/12/2012	398	24(5)	4(5)	6(5)	0(1)	26(3)	40(3)	26(3)	46(1)	4(1)	49(3)	0.0(5)	691(5)	40	9.9	
W. Br. Black River - (20020)																		
Year: 2012																		
0.40	D	07/24/2012	174	10(1)	2(3)	1(1)	0(1)	2(1)	59(5)	31(3)	13(5)	7.7(5)	80(5)	0.5(5)	286(3)	38	6.1	
E. Br. Black River - (20-010)																		
Year: 2012																		
0.80	A	07/05/2012	222	11(3)	5(5)	2(1)	0(1)	30(3)	33(3)	42(1)	21(3)	11(5)	67(5)	0.0(5)	186(1)	36	7.4	
0.80	A	09/11/2012	222	15(3)	5(5)	2(1)	0(1)	14(1)	22(1)	49(1)	22(3)	9(3)	67(5)	0.0(5)	198(1)	30	7.9	
Swan Creek - (04003)																		
Year: 2012																		
27.10	E	06/28/2012	86	19(3)	3(3)	2(3)	0(1)	4(3)	36(3)	25(3)	16(5)	4.3(3)	75(5)	0.8(3)	795(5)	40	8.1	
27.10	E	08/22/2012	86	17(3)	3(3)	2(3)	0(1)	3(3)	34(3)	24(3)	16(5)	5.5(5)	75(5)	0.0(5)	417(3)	42	8.3	
25.60	E	08/09/2012	88	15(3)	3(3)	1(1)	0(1)	3(3)	44(5)	22(5)	17(5)	2.9(3)	77(5)	0.0(5)	804(5)	44	8.1	
25.60	E	08/22/2012	88	15(3)	2(3)	1(1)	0(1)	3(3)	42(5)	28(3)	18(5)	1.8(3)	70(5)	0.0(5)	638(3)	40	7.6	
24.70	E	08/07/2012	89	21(3)	3(3)	2(3)	0(1)	3(3)	7(1)	46(1)	41(1)	5.7(5)	51(3)	0.0(5)	497(3)	32	7.0	
24.70	E	08/22/2012	89	16(3)	3(3)	2(3)	0(1)	3(3)	16(1)	30(3)	19(3)	18.6(5)	61(5)	0.0(5)	242(3)	38	7.3	

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 C. Fish Species and Abundance for Each Sampling Location.

Species List

River Code: 02-085	Stream: Sycamore Creek	Sample Date: 2012
River Mile: 7.10	Location: driveway off St. Rt. 256	Date Range: 07/09/2012
Time Fished: 2330 sec	Drainage: 10.6 sq mi	
Dist Fished: 0.21 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	12	17.14	1.15			
White Sucker	W	O	S	T	54	77.14	5.17			
Western Blacknose Dace	N	G	S	T	5	7.14	0.48			
Creek Chub	N	G	N	T	170	242.86	16.28			
Silver Shiner	N	I	S	I	19	27.14	1.82			
Striped Shiner	N	I	S		99	141.43	9.48			
Spotfin Shiner	N	I	M		7	10.00	0.67			
Silverjaw Minnow	N	I	M		6	8.57	0.57			
Bluntnose Minnow	N	O	C	T	15	21.43	1.44			
Central Stoneroller	N	H	N		332	474.29	31.80			
Rock Bass	S	C	C		7	10.00	0.67			
Largemouth Bass	F	C	C		4	5.71	0.38			
Green Sunfish	S	I	C	T	7	10.00	0.67			
Green Sf X Hybrid					1	1.43	0.10			
Johnny Darter	D	I	C		10	14.29	0.96			
Greenside Darter	D	I	S	M	42	60.00	4.02			
Banded Darter	D	I	S	I	1	1.43	0.10			
Rainbow Darter	D	I	S	M	87	124.29	8.33			
Mottled Sculpin		I	C		166	237.14	15.90			
<i>Mile Total</i>					1,044	1,491.43				
<i>Number of Species</i>					18					
<i>Number of Hybrids</i>					1					

Species List

River Code: 02-085	Stream: Sycamore Creek	Sample Date: 2012
River Mile: 6.70	Location: upst. St. Rt. 256	Date Range: 07/30/2012
Time Fished: 1800 sec	Drainage: 11.7 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	7	14.00	0.58			
White Sucker	W	O	S	T	47	94.00	3.92			
Western Blacknose Dace	N	G	S	T	38	76.00	3.17			
Creek Chub	N	G	N	T	194	388.00	16.19			
Striped Shiner	N	I	S		30	60.00	2.50			
Spotfin Shiner	N	I	M		12	24.00	1.00			
Bluntnose Minnow	N	O	C	T	50	100.00	4.17			
Central Stoneroller	N	H	N		421	842.00	35.14			
Yellow Bullhead		I	C	T	1	2.00	0.08			
Rock Bass	S	C	C		4	8.00	0.33			
Largemouth Bass	F	C	C		2	4.00	0.17			
Green Sunfish	S	I	C	T	1	2.00	0.08			
Bluegill Sunfish	S	I	C	P	9	18.00	0.75			
Hybrid X Sunfish					5	10.00	0.42			
Johnny Darter	D	I	C		5	10.00	0.42			
Greenside Darter	D	I	S	M	7	14.00	0.58			
Banded Darter	D	I	S	I	4	8.00	0.33			
Rainbow Darter	D	I	S	M	59	118.00	4.92			
Mottled Sculpin		I	C		302	604.00	25.21			
<i>Mile Total</i>					1,198	2,396.00				
<i>Number of Species</i>					18					
<i>Number of Hybrids</i>					1					

Species List

River Code: 02-085	Stream: Sycamore Creek	Sample Date: 2012
River Mile: 5.90	Location: dst. St. Rt. 256, dst. RR	Date Range: 07/09/2012
Time Fished: 3915 sec	Drainage: 14.8 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	8	12.00	1.14			
White Sucker	W	O	S	T	94	141.00	13.37			
Creek Chub	N	G	N	T	179	268.50	25.46			
Silver Shiner	N	I	S	I	2	3.00	0.28			
Striped Shiner	N	I	S		14	21.00	1.99			
Spotfin Shiner	N	I	M		1	1.50	0.14			
Sand Shiner	N	I	M	M	4	6.00	0.57			
Silverjaw Minnow	N	I	M		1	1.50	0.14			
Bluntnose Minnow	N	O	C	T	18	27.00	2.56			
Central Stoneroller	N	H	N		107	160.50	15.22			
Yellow Bullhead		I	C	T	4	6.00	0.57			
Brown Bullhead		I	C	T	1	1.50	0.14			
Rock Bass	S	C	C		4	6.00	0.57			
Green Sunfish	S	I	C	T	3	4.50	0.43			
Bluegill Sunfish	S	I	C	P	5	7.50	0.71			
Green Sf X Hybrid					7	10.50	1.00			
Johnny Darter	D	I	C		21	31.50	2.99			
Greenside Darter	D	I	S	M	18	27.00	2.56			
Banded Darter	D	I	S	I	2	3.00	0.28			
Rainbow Darter	D	I	S	M	59	88.50	8.39			
Mottled Sculpin		I	C		151	226.50	21.48			
<i>Mile Total</i>					703	1,054.50				
<i>Number of Species</i>					20					
<i>Number of Hybrids</i>					1					

Species List

River Code: 02-130	Stream: Blacklick Creek	Sample Date: 2012
River Mile: 4.60	Location: dst. Blacklick Estates WWTP	Date Range: 07/06/2012
Time Fished: 5400 sec	Drainage: 57.0 sq mi	Thru: 09/07/2012
Dist Fished: 0.40 km	Basin: Scioto River	Sampler Type: D
	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
Northern Hog Sucker	R	I	S	M	155	116.25	12.10	11.99	48.11	103.10
White Sucker	W	O	S	T	8	6.00	0.62	1.59	6.38	264.75
Creek Chub	N	G	N	T	3	2.25	0.23	0.01	0.03	3.00
Suckermouth Minnow	N	I	S		16	12.00	1.25	0.01	0.06	1.13
Silver Shiner	N	I	S	I	22	16.50	1.72	0.06	0.23	3.43
Rosyface Shiner	N	I	S	I	1	0.75	0.08	0.00	0.01	3.00
Striped Shiner	N	I	S		1	0.75	0.08	0.03	0.10	33.00
Spotfin Shiner	N	I	M		43	32.25	3.36	0.11	0.42	3.26
Sand Shiner	N	I	M	M	259	194.25	20.22	0.37	1.48	1.90
Silverjaw Minnow	N	I	M		7	5.25	0.55	0.01	0.05	2.38
Bluntnose Minnow	N	O	C	T	101	75.75	7.88	0.25	1.01	3.32
Central Stoneroller	N	H	N		201	150.75	15.69	0.40	1.60	2.63
Channel Catfish	F		C		2	1.50	0.16	1.46	5.87	975.00
Yellow Bullhead		I	C	T	15	11.25	1.17	1.07	4.30	95.13
Brown Bullhead		I	C	T	1	0.75	0.08	0.21	0.83	275.00
Rock Bass	S	C	C		6	4.50	0.47	0.53	2.11	117.00
Smallmouth Bass	F	C	C	M	7	5.25	0.55	0.19	0.76	36.00
Largemouth Bass	F	C	C		11	8.25	0.86	1.87	7.49	226.20
Green Sunfish	S	I	C	T	87	65.25	6.79	1.42	5.68	21.69
Bluegill Sunfish	S	I	C	P	102	76.50	7.96	2.10	8.43	27.46
Longear Sunfish	S	I	C	M	25	18.75	1.95	0.47	1.87	24.80
Hybrid X Sunfish					18	13.50	1.41	0.62	2.48	45.72
Logperch	D	I	S	M	1	0.75	0.08	0.02	0.09	31.00
Johnny Darter	D	I	C		2	1.50	0.16	0.00	0.01	1.00
Greenside Darter	D	I	S	M	33	24.75	2.58	0.05	0.21	2.08
Banded Darter	D	I	S	I	17	12.75	1.33	0.02	0.07	1.29
Rainbow Darter	D	I	S	M	137	102.75	10.69	0.09	0.36	0.87
<i>Mile Total</i>					1,281	960.75		24.91		
<i>Number of Species</i>					26					
<i>Number of Hybrids</i>					1					

Species List

River Code: 02-130	Stream: Blacklick Creek	Sample Date: 2012
River Mile: 4.10	Location: dst. bike path bridge	Date Range: 07/06/2012
Time Fished: 5400 sec	Drainage: 57.0 sq mi	Thru: 09/07/2012
Dist Fished: 0.38 km	Basin: Scioto River	Sampler Type: D
	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
Longnose Gar		P	M		1	0.68	0.07	0.01	0.04	18.00
Silver Redhorse	R	I	S	M	5	3.41	0.35	7.78	26.64	2,282.00
Golden Redhorse	R	I	S	M	1	0.94	0.10	0.02	0.06	19.00
Northern Hog Sucker	R	I	S	M	47	35.37	3.59	5.28	18.09	162.00
White Sucker	W	O	S	T	48	38.10	3.87	8.65	29.61	257.25
Creek Chub	N	G	N	T	30	24.80	2.52	0.14	0.49	5.20
Suckermouth Minnow	N	I	S		4	2.73	0.28	0.00	0.01	1.00
Silver Shiner	N	I	S	I	4	2.73	0.28	0.00	0.01	1.00
Striped Shiner	N	I	S		19	16.28	1.65	0.20	0.67	11.16
Spotfin Shiner	N	I	M		23	20.80	2.11	0.03	0.09	1.31
Sand Shiner	N	I	M	M	89	68.61	6.96	0.11	0.39	1.76
Mimic Shiner	N	I	M	I	4	2.73	0.28	0.01	0.02	2.25
Silverjaw Minnow	N	I	M		27	25.31	2.57	0.04	0.12	1.41
Bluntnose Minnow	N	O	C	T	286	260.97	26.48	0.61	2.10	2.45
Central Stoneroller	N	H	N		229	194.49	19.74	0.89	3.03	4.42
Yellow Bullhead		I	C	T	21	19.43	1.97	0.88	3.02	45.69
Blackstripe Topminnow		I	M		3	2.81	0.29	0.00	0.01	1.00
Brook Silverside		I	M	M	16	14.74	1.50	0.02	0.06	1.19
Rock Bass	S	C	C		3	2.56	0.26	0.07	0.23	31.00
Smallmouth Bass	F	C	C	M	1	0.94	0.10	0.01	0.03	10.00
Largemouth Bass	F	C	C		11	8.52	0.86	1.58	5.40	207.82
Green Sunfish	S	I	C	T	71	62.22	6.31	0.96	3.27	15.85
Bluegill Sunfish	S	I	C	P	133	108.84	11.04	1.03	3.53	10.68
Longear Sunfish	S	I	C	M	18	13.81	1.40	0.45	1.55	35.33
Hybrid X Sunfish					7	4.77	0.48	0.37	1.28	78.50
Johnny Darter	D	I	C		1	0.94	0.10	0.00	0.00	1.00
Greenside Darter	D	I	S	M	5	3.67	0.37	0.02	0.07	5.40
Banded Darter	D	I	S	I	6	4.60	0.47	0.01	0.02	1.33
Rainbow Darter	D	I	S	M	50	39.72	4.03	0.05	0.16	1.19
<i>Mile Total</i>					1,163	985.48		29.21		
<i>Number of Species</i>					28					
<i>Number of Hybrids</i>					1					

Species List

River Code: 02-130		Stream: Blacklick Creek						Sample Date: 2012		
River Mile: 2.60		Location: behind Ohio EPA building						Date Range: 06/27/2012		
Time Fished: 5400 sec		Drainage: 58.6 sq mi						Thru: 09/17/2012		
Dist Fished: 0.40 km		Basin: Scioto River			No of Passes: 2			Sampler Type: D		
Species Name / ODNR status	IBI Grp	Feed Guild	Breed Guild Tol	# of Fish	Relative Number	% by Number	Relative Weight	% by Weight	Ave(gm) Weight	
Gizzard Shad		O	M	6	4.50	0.36	0.31	0.70	68.67	
Black Buffalo	C	I	M	1	0.75	0.06	2.54	5.74	3,385.00	
Quillback	C	O	M	2	1.50	0.12	2.20	4.98	1,467.50	
River Carpsucker	C	O	M	5	3.75	0.30	3.94	8.91	1,050.20	
Highfin Carpsucker	C	O	M	1	0.75	0.06	0.82	1.85	1,089.00	
Silver Redhorse	R	I	S M	1	0.75	0.06	1.05	2.37	1,400.00	
Black Redhorse	R	I	S I	1	0.75	0.06	0.08	0.17	100.00	
Golden Redhorse	R	I	S M	4	3.00	0.24	1.70	3.84	565.25	
Northern Hog Sucker	R	I	S M	144	108.00	8.71	7.59	17.16	70.23	
White Sucker	W	O	S T	17	12.75	1.03	0.30	0.68	23.48	
Common Carp	G	O	M T	8	6.00	0.48	8.91	20.15	1,485.00	
Western Blacknose Dace	N	G	S T	8	6.00	0.48	0.02	0.04	3.00	
Creek Chub	N	G	N T	44	33.00	2.66	0.19	0.42	5.60	
Suckermouth Minnow	N	I	S	2	1.50	0.12	0.00	0.01	3.00	
Emerald Shiner	N	I	M	3	2.25	0.18	0.01	0.03	6.00	
Silver Shiner	N	I	S I	9	6.75	0.54	0.02	0.04	2.89	
Rosyface Shiner	N	I	S I	2	1.50	0.12	0.01	0.02	4.50	
Striped Shiner	N	I	S	63	47.25	3.81	0.47	1.05	9.86	
Spotfin Shiner	N	I	M	107	80.25	6.47	0.37	0.83	4.60	
Sand Shiner	N	I	M M	160	120.00	9.68	0.28	0.64	2.36	
Mimic Shiner	N	I	M I	5	3.75	0.30	0.01	0.02	2.40	
Silverjaw Minnow	N	I	M	11	8.25	0.67	0.03	0.06	3.27	
Fathead Minnow	N	O	C T	1	0.75	0.06	0.00	0.00	2.00	
Bluntnose Minnow	N	O	C T	89	66.75	5.38	0.20	0.45	3.00	
Central Stoneroller	N	H	N	265	198.75	16.03	0.76	1.72	3.82	
Channel Catfish	F		C	7	5.25	0.42	0.17	0.38	32.00	
Yellow Bullhead		I	C T	24	18.00	1.45	0.99	2.24	54.92	
Flathead Catfish	F	P	C	1	0.75	0.06	0.01	0.03	19.00	
Blackstripe Topminnow		I	M	1	0.75	0.06	0.01	0.02	10.00	
Brook Silverside		I	M M	7	5.25	0.42	0.01	0.01	1.00	
White Crappie	S	I	C	1	0.75	0.06	0.14	0.32	190.00	
Rock Bass	S	C	C	5	3.75	0.30	0.09	0.20	23.20	
Smallmouth Bass	F	C	C M	4	3.00	0.24	0.46	1.03	152.33	
Spotted Bass	F	C	C	3	2.25	0.18	0.05	0.12	23.00	
Largemouth Bass	F	C	C	8	6.00	0.48	0.51	1.16	85.13	
Green Sunfish	S	I	C T	353	264.75	21.36	4.68	10.58	17.66	
Bluegill Sunfish	S	I	C P	168	126.00	10.16	2.35	5.32	18.67	
Longear Sunfish	S	I	C M	13	9.75	0.79	0.21	0.47	21.38	
Green Sf X Longear Sf				3	2.25	0.18	0.22	0.50	97.67	
Hybrid X Sunfish				6	4.50	0.36	0.09	0.21	20.83	
Sauger	F	P	S	2	1.50	0.12	0.75	1.70	501.00	
Logperch	D	I	S M	1	0.75	0.06	0.01	0.01	7.00	
Johnny Darter	D	I	C	3	2.25	0.18	0.00	0.01	1.00	
Greenside Darter	D	I	S M	11	8.25	0.67	0.04	0.09	4.91	
Banded Darter	D	I	S I	31	23.25	1.88	0.05	0.10	1.96	
Rainbow Darter	D	I	S M	40	30.00	2.42	0.03	0.07	1.03	
Freshwater Drum			M P	2	1.50	0.12	1.58	3.56	1,050.00	
Mile Total				1,653	1,239.75		44.22			
Number of Species				45						
Number of Hybrids				2						

Species List

River Code: 02-144	Stream: Powderlick Run	Sample Date: 2012
River Mile: 2.60	Location: dst. Day Lay #1	Date Range: 08/21/2012
Time Fished: 1324 sec	Drainage: 2.6 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
Creek Chub	N	G	N T	41	82.00	17.83			
Fathead Minnow	N	O	C T	29	58.00	12.61			
Bluntnose Minnow	N	O	C T	131	262.00	56.96			
Central Stoneroller	N	H	N	10	20.00	4.35			
Blackstripe Topminnow		I	M	12	24.00	5.22			
Green Sunfish	S	I	C T	6	12.00	2.61			
Johnny Darter	D	I	C	1	2.00	0.43			
<i>Mile Total</i>				230	460.00				
<i>Number of Species</i>				7					
<i>Number of Hybrids</i>				0					

Species List

River Code: 02-144	Stream: Powderlick Run	Sample Date: 2012
River Mile: 2.20	Location: Powder Lick Rd. (3rd crossing)	Date Range: 08/21/2012
Time Fished: 1391 sec	Drainage: 2.6 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
Redfin Pickerel		P	M	P	2	4.00	2.41			
Creek Chub	N	G	N	T	22	44.00	26.51			
Bluntnose Minnow	N	O	C	T	2	4.00	2.41			
Yellow Bullhead		I	C	T	24	48.00	28.92			
Blackstripe Topminnow		I	M		12	24.00	14.46			
Green Sunfish	S	I	C	T	21	42.00	25.30			
	<i>Mile Total</i>				83	166.00				
	<i>Number of Species</i>				6					
	<i>Number of Hybrids</i>				0					

Species List

River Code: 02-144	Stream: Powderlick Run	Sample Date: 2012
River Mile: 1.60	Location: Powder Lick Rd. (2nd crossing upst. mouth)	Date Range: 08/21/2012
Time Fished: 2535 sec	Drainage: 3.3 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
Redfin Pickerel		P	M	P	16	32.00	10.39			
White Sucker	W	O	S	T	1	2.00	0.65			
Golden Shiner	N	I	M	T	8	16.00	5.19			
Creek Chub	N	G	N	T	16	32.00	10.39			
Fathead Minnow	N	O	C	T	1	2.00	0.65			
Bluntnose Minnow	N	O	C	T	4	8.00	2.60			
Central Stoneroller	N	H	N		1	2.00	0.65			
Yellow Bullhead		I	C	T	30	60.00	19.48			
Black Bullhead		I	C	P	4	8.00	2.60			
Blackstripe Topminnow		I	M		27	54.00	17.53			
Green Sunfish	S	I	C	T	46	92.00	29.87			
<i>Mile Total</i>					154	308.00				
<i>Number of Species</i>					11					
<i>Number of Hybrids</i>					0					

Species List

River Code: 02-144	Stream: Powderlick Run	Sample Date: 2012
River Mile: 1.20	Location: dst Powder Lick Rd.	Date Range: 08/21/2012
Time Fished: 1112 sec	Drainage: 3.5 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
Redfin Pickerel		P	M	P	4	8.00	1.73			
Golden Shiner	N	I	M	T	1	2.00	0.43			
Creek Chub	N	G	N	T	80	160.00	34.63			
Striped Shiner	N	I	S		15	30.00	6.49			
Fathead Minnow	N	O	C	T	2	4.00	0.87			
Bluntnose Minnow	N	O	C	T	71	142.00	30.74			
Central Stoneroller	N	H	N		16	32.00	6.93			
Yellow Bullhead		I	C	T	1	2.00	0.43			
Blackstripe Topminnow		I	M		29	58.00	12.55			
Green Sunfish	S	I	C	T	12	24.00	5.19			
<i>Mile Total</i>					231	462.00				
<i>Number of Species</i>					10					
<i>Number of Hybrids</i>					0					

Species List

River Code: 02-200	Stream: Big Darby Creek	Sample Date: 2012
River Mile: 82.70	Location: upst. Co. Rd. 152	Date Range: 07/16/2012
Time Fished: 2103 sec	Drainage: 1.6 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
White Sucker	W	O	S	T	21	52.50	1.85			
Western Blacknose Dace	N	G	S	T	124	310.00	10.93			
Creek Chub	N	G	N	T	311	777.50	27.43			
South. Redbelly Dace	N	H	S		243	607.50	21.43			
Striped Shiner	N	I	S		45	112.50	3.97			
Silverjaw Minnow	N	I	M		6	15.00	0.53			
Bluntnose Minnow	N	O	C	T	143	357.50	12.61			
Central Stoneroller	N	H	N		124	310.00	10.93			
Green Sunfish	S	I	C	T	27	67.50	2.38			
Bluegill Sunfish	S	I	C	P	2	5.00	0.18			
Johnny Darter	D	I	C		7	17.50	0.62			
Greenside Darter	D	I	S	M	2	5.00	0.18			
Orangethroat Darter	D	I	S		32	80.00	2.82			
Mottled Sculpin		I	C		47	117.50	4.14			
<i>Mile Total</i>					1,134	2,835.00				
<i>Number of Species</i>					14					
<i>Number of Hybrids</i>					0					

Species List

River Code: 02-200	Stream: Big Darby Creek	Sample Date: 2008
River Mile: 81.90	Location: near north border of Showe property	Date Range: 08/13/2008
Time Fished: 1806 sec	Drainage: 2.2 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
Redfin Pickerel		P	M	P	1	2.00	0.14			
Northern Hog Sucker	R	I	S	M	4	8.00	0.58			
White Sucker	W	O	S	T	119	238.00	17.20			
Golden Shiner	N	I	M	T	2	4.00	0.29			
Western Blacknose Dace	N	G	S	T	2	4.00	0.29			
Creek Chub	N	G	N	T	152	304.00	21.97			
Striped Shiner	N	I	S		90	180.00	13.01			
Silverjaw Minnow	N	I	M		58	116.00	8.38			
Bluntnose Minnow	N	O	C	T	83	166.00	11.99			
Central Stoneroller	N	H	N		24	48.00	3.47			
Black Bullhead		I	C	P	3	6.00	0.43			
Largemouth Bass	F	C	C		8	16.00	1.16			
Green Sunfish	S	I	C	T	44	88.00	6.36			
Bluegill Sunfish	S	I	C	P	9	18.00	1.30			
Blackside Darter	D	I	S		2	4.00	0.29			
Johnny Darter	D	I	C		29	58.00	4.19			
Greenside Darter	D	I	S	M	8	16.00	1.16			
Orangethroat Darter	D	I	S		29	58.00	4.19			
Fantail Darter	D	I	C		1	2.00	0.14			
Mottled Sculpin		I	C		24	48.00	3.47			
<i>Mile Total</i>					692	1,384.00				
<i>Number of Species</i>					20					
<i>Number of Hybrids</i>					0					

Species List

River Code: 02-200	Stream: Big Darby Creek	Sample Date: 2012
River Mile: 81.60	Location: dst. from old bridge on Showe property	Date Range: 07/16/2012
Time Fished: 896 sec	Drainage: 3.0 sq mi	
Dist Fished: 0.19 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	3.16	0.17			
White Sucker	W	O	S	T	57	90.00	4.84			
Western Blacknose Dace	N	G	S	T	16	25.26	1.36			
Creek Chub	N	G	N	T	772	1,218.95	65.53			
Striped Shiner	N	I	S		41	64.74	3.48			
Silverjaw Minnow	N	I	M		6	9.47	0.51			
Bluntnose Minnow	N	O	C	T	58	91.58	4.92			
Central Stoneroller	N	H	N		31	48.95	2.63			
Green Sunfish	S	I	C	T	4	6.32	0.34			
Johnny Darter	D	I	C		38	60.00	3.23			
Orangethroat Darter	D	I	S		151	238.42	12.82			
Mottled Sculpin		I	C		2	3.16	0.17			
<i>Mile Total</i>					1,178	1,860.00				
<i>Number of Species</i>					12					
<i>Number of Hybrids</i>					0					

Species List

River Code: 02-200	Stream: Big Darby Creek	Sample Date: 2008
River Mile: 81.40	Location: old farm bridge, 0.3 mi. upst. St. Rt. 287	Date Range: 08/13/2008
Time Fished: 1946 sec	Drainage: 3.2 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		1	2.00	0.16			
Redfin Pickerel		P	M	P	11	22.00	1.81			
Northern Hog Sucker	R	I	S	M	1	2.00	0.16			
White Sucker	W	O	S	T	127	254.00	20.85			
Spotted Sucker	R	I	S		1	2.00	0.16			
Golden Shiner	N	I	M	T	1	2.00	0.16			
Creek Chub	N	G	N	T	114	228.00	18.72			
Striped Shiner	N	I	S		109	218.00	17.90			
Silverjaw Minnow	N	I	M		12	24.00	1.97			
Bluntnose Minnow	N	O	C	T	55	110.00	9.03			
Central Stoneroller	N	H	N		11	22.00	1.81			
Largemouth Bass	F	C	C		3	6.00	0.49			
Green Sunfish	S	I	C	T	102	204.00	16.75			
Bluegill Sunfish	S	I	C	P	27	54.00	4.43			
Johnny Darter	D	I	C		9	18.00	1.48			
Greenside Darter	D	I	S	M	4	8.00	0.66			
Rainbow Darter	D	I	S	M	2	4.00	0.33			
Orangethroat Darter	D	I	S		4	8.00	0.66			
Fantail Darter	D	I	C		1	2.00	0.16			
Mottled Sculpin		I	C		14	28.00	2.30			
<i>Mile Total</i>					609	1,218.00				
<i>Number of Species</i>					20					
<i>Number of Hybrids</i>					0					

Species List

River Code: 02-200	Stream: Big Darby Creek	Sample Date: 2008
River Mile: 81.10	Location: old farm bridge, 0.3 mi. upst. St. Rt. 287	Date Range: 08/13/2008
Time Fished: 1873 sec	Drainage: 3.2 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
Redfin Pickerel		P	M	P	14	28.00	2.56			
Northern Hog Sucker	R	I	S	M	4	8.00	0.73			
White Sucker	W	O	S	T	124	248.00	22.67			
Creek Chub	N	G	N	T	128	256.00	23.40			
Striped Shiner	N	I	S		71	142.00	12.98			
Silverjaw Minnow	N	I	M		1	2.00	0.18			
Bluntnose Minnow	N	O	C	T	1	2.00	0.18			
Central Stoneroller	N	H	N		1	2.00	0.18			
Largemouth Bass	F	C	C		1	2.00	0.18			
Green Sunfish	S	I	C	T	108	216.00	19.74			
Bluegill Sunfish	S	I	C	P	2	4.00	0.37			
Logperch	D	I	S	M	1	2.00	0.18			
Johnny Darter	D	I	C		21	42.00	3.84			
Greenside Darter	D	I	S	M	6	12.00	1.10			
Rainbow Darter	D	I	S	M	5	10.00	0.91			
Orangethroat Darter	D	I	S		20	40.00	3.66			
Mottled Sculpin		I	C		39	78.00	7.13			
<i>Mile Total</i>					547	1,094.00				
<i>Number of Species</i>					17					
<i>Number of Hybrids</i>					0					

Species List

River Code: 02-200	Stream: Big Darby Creek	Sample Date: 2012
River Mile: 80.90	Location: upst. St. Rt. 287	Date Range: 07/16/2012
Time Fished: 1770 sec	Drainage: 3.9 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
Redfin Pickerel		P	M	P	24	48.00	3.85			
White Sucker	W	O	S	T	22	44.00	3.53			
Western Blacknose Dace	N	G	S	T	1	2.00	0.16			
Creek Chub	N	G	N	T	155	310.00	24.84			
Striped Shiner	N	I	S		69	138.00	11.06			
Silverjaw Minnow	N	I	M		1	2.00	0.16			
Bluntnose Minnow	N	O	C	T	54	108.00	8.65			
Central Stoneroller	N	H	N		24	48.00	3.85			
Yellow Bullhead		I	C	T	1	2.00	0.16			
Black Bullhead		I	C	P	1	2.00	0.16			
Largemouth Bass	F	C	C		6	12.00	0.96			
Green Sunfish	S	I	C	T	68	136.00	10.90			
Bluegill Sunfish	S	I	C	P	46	92.00	7.37			
Green Sf X Bluegill Sf					3	6.00	0.48			
Johnny Darter	D	I	C		24	48.00	3.85			
Greenside Darter	D	I	S	M	1	2.00	0.16			
Rainbow Darter	D	I	S	M	9	18.00	1.44			
Orangethroat Darter	D	I	S		103	206.00	16.51			
Rainbow X Orangethroat		I			4	8.00	0.64			
Mottled Sculpin		I	C		8	16.00	1.28			
<i>Mile Total</i>					624	1,248.00				
<i>Number of Species</i>					18					
<i>Number of Hybrids</i>					2					

Species List

River Code: 02-200	Stream: Big Darby Creek	Sample Date: 2008
River Mile: 80.80	Location: St. Rt. 287	Date Range: 08/13/2008
Time Fished: 1937 sec	Drainage: 4.5 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
Redfin Pickerel		P	M	P	12	24.00	1.20			
Northern Hog Sucker	R	I	S	M	12	24.00	1.20			
White Sucker	W	O	S	T	191	382.00	19.14			
Common Carp	G	O	M	T	5	10.00	0.50			
Western Blacknose Dace	N	G	S	T	15	30.00	1.50			
Creek Chub	N	G	N	T	97	194.00	9.72			
Striped Shiner	N	I	S		195	390.00	19.54			
Silverjaw Minnow	N	I	M		52	104.00	5.21			
Bluntnose Minnow	N	O	C	T	116	232.00	11.62			
Central Stoneroller	N	H	N		36	72.00	3.61			
Largemouth Bass	F	C	C		4	8.00	0.40			
Green Sunfish	S	I	C	T	67	134.00	6.71			
Bluegill Sunfish	S	I	C	P	1	2.00	0.10			
Logperch	D	I	S	M	2	4.00	0.20			
Johnny Darter	D	I	C		31	62.00	3.11			
Greenside Darter	D	I	S	M	18	36.00	1.80			
Rainbow Darter	D	I	S	M	28	56.00	2.81			
Orangethroat Darter	D	I	S		24	48.00	2.40			
Fantail Darter	D	I	C		1	2.00	0.10			
Mottled Sculpin		I	C		91	182.00	9.12			
<i>Mile Total</i>					998	1,996.00				
<i>Number of Species</i>					20					
<i>Number of Hybrids</i>					0					

Species List

River Code: 02-200	Stream: Big Darby Creek	Sample Date: 2012
River Mile: 80.70	Location: St. Rt. 287	Date Range: 07/16/2012
Time Fished: 1620 sec	Drainage: 4.5 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
Redfin Pickerel		P	M	P	30	60.00	5.00			
White Sucker	W	O	S	T	100	200.00	16.67			
Creek Chub	N	G	N	T	63	126.00	10.50			
Scarlet Shiner	N	I	S	M	1	2.00	0.17			
Striped Shiner	N	I	S		122	244.00	20.33			
Silverjaw Minnow	N	I	M		3	6.00	0.50			
Bluntnose Minnow	N	O	C	T	129	258.00	21.50			
Central Stoneroller	N	H	N		30	60.00	5.00			
Yellow Bullhead		I	C	T	2	4.00	0.33			
Largemouth Bass	F	C	C		2	4.00	0.33			
Green Sunfish	S	I	C	T	39	78.00	6.50			
Bluegill Sunfish	S	I	C	P	41	82.00	6.83			
Green Sf X Hybrid					1	2.00	0.17			
Johnny Darter	D	I	C		2	4.00	0.33			
Greenside Darter	D	I	S	M	2	4.00	0.33			
Orangethroat Darter	D	I	S		15	30.00	2.50			
Fantail Darter	D	I	C		1	2.00	0.17			
Mottled Sculpin		I	C		17	34.00	2.83			
<i>Mile Total</i>					600	1,200.00				
<i>Number of Species</i>					17					
<i>Number of Hybrids</i>					1					

Species List

River Code: 02-252	Stream: Rose Run	Sample Date: 2012
River Mile: 1.90	Location: dst. U.S. Rt. 62	Date Range: 08/16/2012
Time Fished: 1408 sec	Drainage: 1.7 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	1	2.00	0.24			
Creek Chub	N	G	N	T	261	522.00	61.56			
Bluntnose Minnow	N	O	C	T	5	10.00	1.18			
Central Stoneroller	N	H	N		32	64.00	7.55			
Largemouth Bass	F	C	C		2	4.00	0.47			
Green Sunfish	S	I	C	T	90	180.00	21.23			
Bluegill Sunfish	S	I	C	P	7	14.00	1.65			
Green Sf X Hybrid					10	20.00	2.36			
Johnny Darter	D	I	C		16	32.00	3.77			
<i>Mile Total</i>					424	848.00				
<i>Number of Species</i>					8					
<i>Number of Hybrids</i>					1					

Species List

River Code: 02-252	Stream: Rose Run	Sample Date: 2012
River Mile: 1.70	Location: Fodor Rd.	Date Range: 08/16/2012
Time Fished: 2035 sec	Drainage: 1.8 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	0.51			
Creek Chub	N	G	N	T	222	444.00	56.78			
Bluntnose Minnow	N	O	C	T	16	32.00	4.09			
Central Stoneroller	N	H	N		65	130.00	16.62			
Largemouth Bass	F	C	C		3	6.00	0.77			
Green Sunfish	S	I	C	T	42	84.00	10.74			
Bluegill Sunfish	S	I	C	P	11	22.00	2.81			
Green Sf X Hybrid					10	20.00	2.56			
Johnny Darter	D	I	C		20	40.00	5.12			
<i>Mile Total</i>					391	782.00				
<i>Number of Species</i>					8					
<i>Number of Hybrids</i>					1					

Species List

River Code: 02-252	Stream: Rose Run	Sample Date: 2012
River Mile: 0.50	Location: Harlem Rd.	Date Range: 07/30/2012
Time Fished: 1800 sec	Drainage: 2.9 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	3	6.00	0.46			
Creek Chub	N	G	N	T	122	244.00	18.86			
Bluntnose Minnow	N	O	C	T	142	284.00	21.95			
Central Stoneroller	N	H	N		66	132.00	10.20			
Yellow Bullhead		I	C	T	14	28.00	2.16			
Largemouth Bass	F	C	C		16	32.00	2.47			
Green Sunfish	S	I	C	T	77	154.00	11.90			
Bluegill Sunfish	S	I	C	P	175	350.00	27.05			
Redear Sunfish	E	I	C		7	14.00	1.08			
Green Sf X Hybrid					8	16.00	1.24			
Hybrid X Sunfish					3	6.00	0.46			
Johnny Darter	D	I	C		3	6.00	0.46			
Greenside Darter	D	I	S	M	9	18.00	1.39			
Rainbow Darter	D	I	S	M	2	4.00	0.31			
<i>Mile Total</i>					647	1,294.00				
<i>Number of Species</i>					12					
<i>Number of Hybrids</i>					2					

Species List

River Code: 02-397	Stream: Trib. to Rocky Fork (RM 5.40)	Sample Date: 2009
River Mile: 0.80	Location: upst. U.S. Rt. 62/Harlem Rd.	Date Range: 09/03/2009
Time Fished: 1295 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
White Sucker	W	O	S	T	3	9.00	1.75	1.53	15.11	170.00
Creek Chub	N	G	N	T	80	240.00	46.78	4.67	46.11	19.46
Central Stoneroller	N	H	N		38	114.00	22.22	1.81	17.86	15.87
Yellow Bullhead		I	C	T	4	12.00	2.34	0.34	3.32	28.00
Largemouth Bass	F	C	C		8	24.00	4.68	0.17	1.63	6.88
Green Sunfish	S	I	C	T	19	57.00	11.11	1.12	11.03	19.60
Bluegill Sunfish	S	I	C	P	10	30.00	5.85	0.45	4.47	15.10
Johnny Darter	D	I	C		8	24.00	4.68	0.04	0.41	1.75
Fantail Darter	D	I	C		1	3.00	0.58	0.01	0.06	2.00
<i>Mile Total</i>					171	513.00		10.13		
<i>Number of Species</i>					9					
<i>Number of Hybrids</i>					0					

Species List

River Code: 02-397	Stream: Trib. to Rocky Fork (RM 5.40)	Sample Date: 2012
River Mile: 0.80	Location: upst. U.S. Rt. 62/Harlem Rd.	Date Range: 08/16/2012
Time Fished: 2006 sec	Drainage: 1.2 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
White Sucker	W	O	S	T	3	7.50	0.97			
Creek Chub	N	G	N	T	183	457.50	59.42			
Central Stoneroller	N	H	N		41	102.50	13.31			
Yellow Bullhead		I	C	T	17	42.50	5.52			
Largemouth Bass	F	C	C		3	7.50	0.97			
Green Sunfish	S	I	C	T	29	72.50	9.42			
Bluegill Sunfish	S	I	C	P	11	27.50	3.57			
Green Sf X Hybrid					1	2.50	0.32			
Johnny Darter	D	I	C		17	42.50	5.52			
Fantail Darter	D	I	C		3	7.50	0.97			
<i>Mile Total</i>					308	770.00				
<i>Number of Species</i>					9					
<i>Number of Hybrids</i>					1					

Species List

River Code: 02-397	Stream: Trib. to Rocky Fork (RM 5.40)	Sample Date: 2009
River Mile: 0.70	Location: U.S. Rt. 62/Harlem Rd.	Date Range: 09/03/2009
Time Fished: 1471 sec	Drainage: 1.2 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
White Sucker	W	O	S	T	2	4.00	0.69	0.05	0.93	13.00
Western Blacknose Dace	N	G	S	T	9	18.00	3.10	0.11	2.01	6.22
Creek Chub	N	G	N	T	118	236.00	40.69	2.67	47.97	11.31
Central Stoneroller	N	H	N		75	150.00	25.86	1.30	23.36	8.67
Yellow Bullhead		I	C	T	6	12.00	2.07	0.22	4.02	18.67
Largemouth Bass	F	C	C		2	4.00	0.69	0.02	0.36	5.00
Green Sunfish	S	I	C	T	22	44.00	7.59	0.76	13.62	17.23
Bluegill Sunfish	S	I	C	P	36	72.00	12.41	0.34	6.04	4.67
Johnny Darter	D	I	C		15	30.00	5.17	0.06	1.01	1.87
Fantail Darter	D	I	C		5	10.00	1.72	0.04	0.68	3.80
<i>Mile Total</i>					290	580.00		5.57		
<i>Number of Species</i>					10					
<i>Number of Hybrids</i>					0					

Species List

River Code: 02-397	Stream: Trib. to Rocky Fork (RM 5.40)	Sample Date: 2012
River Mile: 0.70	Location: U.S. Rt. 62/Harlem Rd.	Date Range: 08/16/2012
Time Fished: 960 sec	Drainage: 1.2 sq mi	
Dist Fished: 0.06 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	9	45.00	2.07			
Creek Chub	N	G	N	T	115	575.00	26.50			
Bluntnose Minnow	N	O	C	T	5	25.00	1.15			
Central Stoneroller	N	H	N		267	1,335.00	61.52			
Yellow Bullhead		I	C	T	1	5.00	0.23			
Green Sunfish	S	I	C	T	9	45.00	2.07			
Bluegill Sunfish	S	I	C	P	1	5.00	0.23			
Johnny Darter	D	I	C		23	115.00	5.30			
Fantail Darter	D	I	C		4	20.00	0.92			
<i>Mile Total</i>					434	2,170.00				
<i>Number of Species</i>					9					
<i>Number of Hybrids</i>					0					

Species List

River Code: 02-485	Stream: Waterman Ditch	Sample Date: 2010
River Mile: 1.40	Location: upst. Kenny Rd.	Date Range: 06/23/2010
Time Fished: 940 sec	Drainage: 0.4 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
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No Fish 0 0.00 0

Mile Total 0

Number of Species 0

Number of Hybrids 0

Species List

River Code: 02-485	Stream: Waterman Ditch	Sample Date: 2012
River Mile: 1.40	Location: upst. Kenny Rd.	Date Range: 07/05/2012
Time Fished: 1204 sec	Drainage: 0.4 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
Bluegill Sunfish	S	I	C	P	1	2.00	100.00			
	<i>Mile Total</i>				1	2.00				
	<i>Number of Species</i>				1					
	<i>Number of Hybrids</i>				0					

Species List

River Code: 02-485	Stream: Waterman Ditch	Sample Date: 2010
River Mile: 1.30	Location: dst. Kenny Rd.	Date Range: 06/23/2010
Time Fished: 900 sec	Drainage: 0.4 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
No Fish					0	0.00	0			
					0					
					0					
					0					

Species List

River Code: 02-485	Stream: Waterman Ditch	Sample Date: 2012
River Mile: 1.30	Location: dst. Kenny Rd.	Date Range: 07/05/2012
Time Fished: 1452 sec	Drainage: 0.4 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
No Fish					0	0.00	0			
					0					
					0					
					0					

Species List

River Code: 02-610	Stream: Salt Lick Creek	Sample Date: 2012
River Mile: 23.70	Location: upst. Harding St. in Eddie Jones Park	Date Range: 08/03/2012
Time Fished: 3819 sec	Drainage: 33.6 sq mi	Thru: 08/28/2012
Dist Fished: 0.40 km	Basin: Scioto River	Sampler Type: D 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
Silver Lamprey		P	N		1	0.75	0.12	0.01	0.07	12.00
Gizzard Shad		O	M		2	1.50	0.24	0.03	0.24	20.50
Redfin Pickerel		P	M	P	53	39.75	6.38	1.52	11.91	38.19
Northern Hog Sucker	R	I	S	M	1	0.75	0.12	0.12	0.91	155.00
White Sucker	W	O	S	T	20	15.00	2.41	2.55	20.04	170.30
Spotted Sucker	R	I	S		6	4.50	0.72	0.32	2.50	70.67
Scarlet Shiner	N	I	S	M	30	22.50	3.61	0.03	0.25	1.43
Striped Shiner	N	I	S		78	58.50	9.39	0.45	3.54	7.72
Spotfin Shiner	N	I	M		2	1.50	0.24	0.00	0.04	3.00
Bluntnose Minnow	N	O	C	T	40	30.00	4.81	0.05	0.38	1.60
Central Stoneroller	N	H	N		1	0.75	0.12	0.02	0.16	28.00
Hybrid X Minnow					1	0.75	0.12	0.00	0.01	1.00
Yellow Bullhead		I	C	T	24	18.00	2.89	1.11	8.68	61.44
Blackstripe Topminnow		I	M		42	31.50	5.05	0.03	0.20	0.78
Brook Silverside		I	M	M	39	29.25	4.69	0.03	0.22	0.94
Rock Bass	S	C	C		2	1.50	0.24	0.20	1.58	134.00
Largemouth Bass	F	C	C		3	2.25	0.36	0.13	0.98	55.67
Warmouth Sunfish	S	C	C		8	6.00	0.96	0.15	1.18	25.00
Green Sunfish	S	I	C	T	72	54.00	8.66	0.72	5.61	13.25
Bluegill Sunfish	S	I	C	P	28	21.00	3.37	0.32	2.52	15.31
Longear Sunfish	S	I	C	M	216	162.00	25.99	3.61	28.34	22.30
Redear Sunfish	E	I	C		2	1.50	0.24	0.09	0.74	62.50
Green Sf X Hybrid					137	102.75	16.49	1.21	9.49	11.77
Blackside Darter	D	I	S		4	3.00	0.48	0.01	0.04	1.63
Logperch	D	I	S	M	2	1.50	0.24	0.04	0.29	24.50
Johnny Darter	D	I	C		13	9.75	1.56	0.01	0.08	1.00
Banded Darter	D	I	S	I	1	0.75	0.12	0.00	0.01	1.00
Fantail Darter	D	I	C		3	2.25	0.36	0.00	0.04	2.00
Mile Total					831	623.25		12.75		
Number of Species					26					
Number of Hybrids					2					

Species List

River Code: 02-684	Stream: Trib. to Salt Lick Creek (RM 23.82)	Sample Date: 2012
River Mile: 0.30	Location: St. Rt. 93	Date Range: 08/28/2012
Time Fished: 615 sec	Drainage: 4.7 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
Redfin Pickerel		P	M	P	4	6.00	1.55			
Western Blacknose Dace	N	G	S	T	1	1.50	0.39			
Creek Chub	N	G	N	T	52	78.00	20.16			
Striped Shiner	N	I	S		3	4.50	1.16			
Silverjaw Minnow	N	I	M		11	16.50	4.26			
Bluntnose Minnow	N	O	C	T	65	97.50	25.19			
Central Stoneroller	N	H	N		10	15.00	3.88			
Yellow Bullhead		I	C	T	9	13.50	3.49			
Blackstripe Topminnow		I	M		90	135.00	34.88			
Green Sunfish	S	I	C	T	6	9.00	2.33			
Bluegill Sunfish	S	I	C	P	1	1.50	0.39			
Johnny Darter	D	I	C		6	9.00	2.33			
<i>Mile Total</i>					258	387.00				
<i>Number of Species</i>					12					
<i>Number of Hybrids</i>					0					

Species List

River Code: 04-003	Stream: Swan Creek	Sample Date: 2012
River Mile: 27.10	Location: Wilkins Rd.	Date Range: 06/28/2012
Time Fished: 4446 sec	Drainage: 86.0 sq mi	Thru: 08/22/2012
Dist Fished: 0.40 km	Basin: Maumee 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
Redfin Pickerel		P	M	P	11	8.25	1.03	0.70	4.01	84.55
White Sucker	W	O	S	T	33	24.75	3.09	2.37	13.63	95.88
Spotted Sucker	R	I	S		14	10.50	1.31	1.36	7.80	129.29
Common Carp	G	O	M	T	5	3.75	0.47	7.13	40.91	1,900.00
Creek Chub	N	G	N	T	42	31.50	3.94	0.33	1.90	10.52
Redfin Shiner	N	I	N		241	180.75	22.59	0.25	1.42	1.37
Striped Shiner	N	I	S		1	0.75	0.09	0.02	0.14	32.00
Common Shiner	N	I	S		3	2.25	0.28	0.01	0.03	2.67
Bluntnose Minnow	N	O	C	T	134	100.50	12.56	0.19	1.07	1.86
Central Stoneroller	N	H	N		2	1.50	0.19	0.01	0.04	4.50
Yellow Bullhead		I	C	T	14	10.50	1.31	0.66	3.80	63.07
Tadpole Madtom		I	C		6	4.50	0.56	0.04	0.25	9.71
Rock Bass	S	C	C		27	20.25	2.53	1.47	8.44	72.58
Largemouth Bass	F	C	C		12	9.00	1.12	0.53	3.02	58.33
Green Sunfish	S	I	C	T	31	23.25	2.91	0.71	4.06	30.37
Bluegill Sunfish	S	I	C	P	32	24.00	3.00	0.79	4.53	32.87
Redear Sunfish	E	I	C		2	1.50	0.19	0.07	0.43	49.50
Green Sf X Bluegill Sf					1	0.75	0.09	0.08	0.45	103.00
Green Sf X Longear Sf					3	2.25	0.28	0.25	1.42	110.00
Yellow Perch			M		1	0.75	0.09	0.01	0.08	19.00
Blackside Darter	D	I	S		58	43.50	5.44	0.15	0.86	3.43
Johnny Darter	D	I	C		129	96.75	12.09	0.09	0.53	0.95
Greenside Darter	D	I	S	M	263	197.25	24.65	0.21	1.18	1.04
Rainbow Darter	D	I	S	M	2	1.50	0.19	0.00	0.02	2.00
<i>Mile Total</i>					1,067	800.25		17.41		
<i>Number of Species</i>					22					
<i>Number of Hybrids</i>					2					

Species List

River Code: 04-003	Stream: Swan Creek	Sample Date: 2012
River Mile: 25.60	Location: dst. St. Rt. 295, S of Obee Rd.	Date Range: 08/09/2012
Time Fished: 4732 sec	Drainage: 88.0 sq mi	Thru: 08/22/2012
Dist Fished: 0.30 km	Basin: Maumee 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
Redfin Pickerel		P	M	P	8	8.00	0.84	0.50	14.76	63.00
White Sucker	W	O	S	T	6	6.00	0.63	0.15	4.31	24.50
Creek Chub	N	G	N	T	58	58.00	6.06	0.39	11.44	6.73
Redfin Shiner	N	I	N		10	10.00	1.04	0.01	0.38	1.30
Common Shiner	N	I	S		10	10.00	1.04	0.21	6.00	20.50
Bluntnose Minnow	N	O	C	T	158	158.00	16.51	0.13	3.69	0.80
Central Stoneroller	N	H	N		6	6.00	0.63	0.01	0.29	1.67
Yellow Bullhead		I	C	T	4	4.00	0.42	0.16	4.54	38.75
Tadpole Madtom		I	C		18	18.00	1.88	0.16	4.60	8.72
Rock Bass	S	C	C		14	14.00	1.46	0.62	18.01	43.91
Largemouth Bass	F	C	C		1	1.00	0.10	0.01	0.29	10.00
Green Sunfish	S	I	C	T	10	10.00	1.04	0.16	4.72	16.10
Bluegill Sunfish	S	I	C	P	3	3.00	0.31	0.08	2.37	27.00
Blackside Darter	D	I	S		68	68.00	7.11	0.21	6.25	3.14
Johnny Darter	D	I	C		255	255.00	26.65	0.17	5.02	0.67
Greenside Darter	D	I	S	M	328	328.00	34.27	0.46	13.33	1.39
<i>Mile Total</i>					957	957.00		3.41		
<i>Number of Species</i>					16					
<i>Number of Hybrids</i>					0					

Species List

River Code: 04-003	Stream: Swan Creek	Sample Date: 2012
River Mile: 24.70	Location: Spencer Rd.	Date Range: 08/07/2012
Time Fished: 4704 sec	Drainage: 89.0 sq mi	Thru: 08/22/2012
Dist Fished: 0.35 km	Basin: Maumee 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
Redfin Pickerel		P	M	P	5	4.75	0.75	0.17	0.47	36.00
Northern Pike	F	P	M		4	3.75	0.59	5.55	15.50	1,450.00
Muskellunge [S]	F	P	M		1	0.75	0.12	0.75	2.09	1,000.00
White Sucker	W	O	S	T	7	6.00	0.95	0.10	0.28	17.43
Spotted Sucker	R	I	S		3	2.50	0.39	0.10	0.28	40.67
Common Carp	G	O	M	T	9	6.75	1.07	22.05	61.57	3,266.67
Creek Chub	N	G	N	T	7	5.25	0.83	0.02	0.05	3.14
Redfin Shiner	N	I	N		263	209.50	33.08	0.20	0.57	0.95
Common Shiner	N	I	S		4	3.00	0.47	0.02	0.04	5.00
Fathead Minnow	N	O	C	T	3	2.25	0.36	0.00	0.01	1.00
Bluntnose Minnow	N	O	C	T	269	209.25	33.04	0.43	1.20	2.05
Central Stoneroller	N	H	N		3	2.50	0.39	0.00	0.01	1.33
Channel Catfish	F		C		1	0.75	0.12	2.48	6.91	3,300.00
Yellow Bullhead		I	C	T	3	2.50	0.39	0.42	1.18	178.33
Tadpole Madtom		I	C		3	2.50	0.39	0.02	0.07	10.33
Rock Bass	S	C	C		54	46.25	7.30	1.87	5.22	41.08
Largemouth Bass	F	C	C		3	2.75	0.43	0.11	0.32	38.00
Green Sunfish	S	I	C	T	37	32.00	5.05	0.89	2.48	27.20
Bluegill Sunfish	S	I	C	P	8	6.50	1.03	0.23	0.63	35.00
Green Sf X Bluegill Sf					1	1.00	0.16	0.11	0.30	109.00
Green Sf X Hybrid					2	1.50	0.24	0.14	0.39	92.50
Blackside Darter	D	I	S		24	20.50	3.24	0.07	0.19	3.25
Johnny Darter	D	I	C		41	33.50	5.29	0.04	0.11	1.13
Greenside Darter	D	I	S	M	32	27.25	4.30	0.06	0.16	2.13
<i>Mile Total</i>					787	633.25		35.81		
<i>Number of Species</i>					22					
<i>Number of Hybrids</i>					2					

Species List

River Code: 09-575	Stream: West Branch Raccoon Creek	Sample Date: 2010
River Mile: 5.70	Location: Ilesboro-Cedar Falls Rd.	Date Range: 09/29/2010
Time Fished: 1757 sec	Drainage: 3.8 sq mi	
Dist Fished: 0.12 km	Basin: Southeast Ohio River Tribs 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	290	725.00	50.52			
South. Redbelly Dace	N	H	S		268	670.00	46.69			
Yellow Bullhead		I	C	T	1	2.50	0.17			
Largemouth Bass	F	C	C		1	2.50	0.17			
Bluegill Sunfish	S	I	C	P	13	32.50	2.26			
Longear Sunfish	S	I	C	M	1	2.50	0.17			
<i>Mile Total</i>					574	1,435.00				
<i>Number of Species</i>					6					
<i>Number of Hybrids</i>					0					

Species List

River Code: 09-575	Stream: West Branch Raccoon Creek	Sample Date: 2012
River Mile: 5.70	Location: Ilesboro-Cedar Falls Rd.	Date Range: 09/27/2012
Time Fished: 1800 sec	Drainage: 3.8 sq mi	
Dist Fished: 0.15 km	Basin: Southeast Ohio River Tribs 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	738	1,476.00	80.74			
South. Redbelly Dace	N	H	S		170	340.00	18.60			
Cr Chub X S. Redbelly D					4	8.00	0.44			
Yellow Bullhead		I	C	T	2	4.00	0.22			
<i>Mile Total</i>					914	1,828.00				
<i>Number of Species</i>					3					
<i>Number of Hybrids</i>					1					

Species List

River Code: 09-575	Stream: West Branch Raccoon Creek	Sample Date: 2010
River Mile: 4.10	Location: St. Rt. 93	Date Range: 09/29/2010
Time Fished: 725 sec	Drainage: 6.8 sq mi	
Dist Fished: 0.12 km	Basin: Southeast Ohio River Tribs 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	26	65.00	100.00			
	<i>Mile Total</i>				26	65.00				
	<i>Number of Species</i>				1					
	<i>Number of Hybrids</i>				0					

Species List

River Code: 09-575	Stream: West Branch Raccoon Creek	Sample Date: 2012
River Mile: 4.10	Location: St. Rt. 93	Date Range: 09/27/2012
Time Fished: 1800 sec	Drainage: 6.8 sq mi	
Dist Fished: 0.15 km	Basin: Southeast Ohio River Tribs 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	635	1,270.00	89.56			
South. Redbelly Dace	N	H	S		73	146.00	10.30			
Green Sunfish	S	I	C	T	1	2.00	0.14			
<i>Mile Total</i>					709	1,418.00				
<i>Number of Species</i>					3					
<i>Number of Hybrids</i>					0					

Species List

River Code: 09-575	Stream: West Branch Raccoon Creek	Sample Date: 2010
River Mile: 3.00	Location: North Fairview Rd.	Date Range: 09/29/2010
Time Fished: 1230 sec	Drainage: 7.7 sq mi	
Dist Fished: 0.12 km	Basin: Southeast Ohio River Tribs 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 Shiner	N	I	M	T	1	2.50	4.00			
Creek Chub	N	G	N	T	9	22.50	36.00			
Green Sunfish	S	I	C	T	2	5.00	8.00			
Bluegill Sunfish	S	I	C	P	7	17.50	28.00			
Longear Sunfish	S	I	C	M	6	15.00	24.00			
<i>Mile Total</i>					25	62.50				
<i>Number of Species</i>					5					
<i>Number of Hybrids</i>					0					

Species List

River Code: 09-575	Stream: West Branch Raccoon Creek	Sample Date: 2012
River Mile: 3.00	Location: North Fairview Rd.	Date Range: 09/27/2012
Time Fished: 1800 sec	Drainage: 7.7 sq mi	
Dist Fished: 0.15 km	Basin: Southeast Ohio River Tribs 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
Goldfish	G	O	M	T	2	4.00	0.17			
Creek Chub	N	G	N	T	1,106	2,212.00	96.68			
South. Redbelly Dace	N	H	S		1	2.00	0.09			
Striped Shiner	N	I	S		3	6.00	0.26			
Green Sunfish	S	I	C	T	18	36.00	1.57			
Bluegill Sunfish	S	I	C	P	6	12.00	0.52			
Longear Sunfish	S	I	C	M	2	4.00	0.17			
Green Sf X Bluegill Sf					6	12.00	0.52			
	<i>Mile Total</i>				1,144	2,288.00				
	<i>Number of Species</i>				7					
	<i>Number of Hybrids</i>				1					

Species List

River Code: 15-002	Stream: East Branch Chagrin River	Sample Date: 2012
River Mile: 12.10	Location: Kirtland Rd.	Date Range: 08/06/2012
Time Fished: 5713 sec	Drainage: 22.4 sq mi	Thru: 09/06/2012
Dist Fished: 0.34 km	Basin: Chagrin 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
Amer Brook Lamprey		F	N	R	6	5.58	0.45	0.07	0.38	12.50
Rainbow Trout	E		N		2	2.00	0.16	0.01	0.05	5.00
Northern Hog Sucker	R	I	S	M	95	83.63	6.72	12.11	65.96	130.48
White Sucker	W	O	S	T	136	121.89	9.79	2.11	11.49	17.30
River Chub	N	I	N	I	123	107.42	8.63	0.67	3.67	6.27
Western Blacknose Dace	N	G	S	T	28	23.58	1.89	0.06	0.35	2.73
Longnose Dace [S]	N	I	S	R	64	54.74	4.40	0.12	0.66	2.21
Creek Chub	N	G	N	T	82	73.58	5.91	1.06	5.79	14.45
Striped Shiner	N	I	S		2	1.58	0.13	0.01	0.04	5.00
Common Shiner	N	I	S		193	158.26	12.71	0.78	4.25	4.93
Sand Shiner	N	I	M	M	2	1.58	0.13	0.00	0.02	2.00
Silverjaw Minnow	N	I	M		13	11.95	0.96	0.05	0.28	4.23
Bluntnose Minnow	N	O	C	T	84	69.68	5.60	0.09	0.51	1.34
Central Stoneroller	N	H	N		465	388.79	31.23	0.92	5.02	2.37
Stonecat Madtom		I	C	I	2	1.58	0.13	0.00	0.02	2.00
Green Sunfish	S	I	C	T	8	6.95	0.56	0.13	0.69	18.38
Bluegill Sunfish	S	I	C	P	1	0.79	0.06	0.01	0.04	9.00
Johnny Darter	D	I	C		37	31.53	2.53	0.04	0.20	1.17
Rainbow Darter	D	I	S	M	108	88.00	7.07	0.07	0.41	0.84
Fantail Darter	D	I	C		15	11.84	0.95	0.03	0.17	2.67
<i>Mile Total</i>					1,466	1,244.95		18.36		
<i>Number of Species</i>					20					
<i>Number of Hybrids</i>					0					

Species List

River Code: 15-002	Stream: East Branch Chagrin River	Sample Date: 2012
River Mile: 11.80	Location: Riverwood Farm	Date Range: 08/06/2012
Time Fished: 4822 sec	Drainage: 23.4 sq mi	Thru: 09/06/2012
Dist Fished: 0.35 km	Basin: Chagrin River	No of Passes: 2
		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
Amer Brook Lamprey		F	N	R	12	9.75	0.59	0.04	0.24	4.25
Rainbow Trout	E		N		18	14.25	0.86	0.04	0.26	2.92
Northern Hog Sucker	R	I	S	M	97	85.25	5.17	1.69	10.45	19.86
White Sucker	W	O	S	T	99	81.75	4.96	4.25	26.24	46.85
River Chub	N	I	N	I	133	108.75	6.60	0.66	4.08	6.08
Western Blacknose Dace	N	G	S	T	63	48.50	2.94	0.06	0.34	1.13
Longnose Dace [S]	N	I	S	R	153	117.50	7.13	0.27	1.65	2.27
Creek Chub	N	G	N	T	128	107.50	6.52	5.89	36.35	59.61
Redside Dace	N	I	S	I	2	1.50	0.09	0.03	0.20	22.00
Common Shiner	N	I	S		269	214.50	13.01	0.93	5.76	4.35
Sand Shiner	N	I	M	M	11	8.50	0.52	0.02	0.13	2.52
Silverjaw Minnow	N	I	M		13	10.50	0.64	0.01	0.08	1.23
Fathead Minnow	N	O	C	T	1	0.75	0.05	0.00	0.02	4.00
Bluntnose Minnow	N	O	C	T	64	52.00	3.15	0.12	0.73	2.26
Central Stoneroller	N	H	N		664	541.25	32.83	1.88	11.63	3.49
Stonecat Madtom		I	C	I	3	2.50	0.15	0.05	0.29	21.00
Green Sunfish	S	I	C	T	3	2.25	0.14	0.04	0.22	16.00
Bluegill Sunfish	S	I	C	P	4	3.25	0.20	0.01	0.08	4.00
Pumpkinseed Sunfish	S	I	C	P	2	1.50	0.09	0.02	0.13	14.00
Johnny Darter	D	I	C		27	22.50	1.36	0.02	0.15	1.04
Rainbow Darter	D	I	S	M	216	164.75	9.99	0.11	0.69	0.68
Fantail Darter	D	I	C		66	49.50	3.00	0.04	0.27	0.88
<i>Mile Total</i>					2,048	1,648.50		16.20		
<i>Number of Species</i>					22					
<i>Number of Hybrids</i>					0					

Species List

River Code: 15-002	Stream: East Branch Chagrin River	Sample Date: 2012
River Mile: 11.40	Location: Wisner Rd.	Date Range: 08/06/2012
Time Fished: 4378 sec	Drainage: 24.1 sq mi	Thru: 09/06/2012
Dist Fished: 0.35 km	Basin: Chagrin 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
Amer Brook Lamprey		F	N	R	9	6.75	0.57	0.04	1.43	5.78
Rainbow Trout	E		N		1	0.75	0.06	0.00	0.11	4.00
Northern Hog Sucker	R	I	S	M	73	62.25	5.30	0.54	19.67	8.62
White Sucker	W	O	S	T	17	12.75	1.08	0.30	10.86	23.25
River Chub	N	I	N	I	93	80.25	6.83	0.40	14.71	5.00
Western Blacknose Dace	N	G	S	T	38	31.50	2.68	0.03	1.15	1.00
Longnose Dace [S]	N	I	S	R	80	69.00	5.87	0.07	2.69	1.02
Creek Chub	N	G	N	T	41	32.50	2.77	0.41	14.91	12.51
Emerald Shiner	N	I	M		7	5.25	0.45	0.01	0.20	1.00
Common Shiner	N	I	S		105	91.25	7.76	0.13	4.60	1.37
Sand Shiner	N	I	M	M	11	9.25	0.79	0.02	0.68	2.00
Silverjaw Minnow	N	I	M		25	19.00	1.62	0.02	0.60	0.87
Bluntnose Minnow	N	O	C	T	64	52.00	4.42	0.05	1.90	1.00
Central Stoneroller	N	H	N		657	560.00	47.65	0.62	22.56	1.10
Hybrid X Minnow					2	2.00	0.17	0.00	0.15	2.00
Stonecat Madtom		I	C	I	4	3.50	0.30	0.03	0.97	7.50
Johnny Darter	D	I	C		67	51.75	4.40	0.02	0.73	0.38
Rainbow Darter	D	I	S	M	100	82.50	7.02	0.05	1.90	0.63
Fantail Darter	D	I	C		3	3.00	0.26	0.01	0.22	2.00
<i>Mile Total</i>					1,397	1,175.25		2.73		
<i>Number of Species</i>					18					
<i>Number of Hybrids</i>					1					

Species List

River Code: 15-053	Stream: Trib. to Linton Creek (RM 1.36)	Sample Date: 2008
River Mile: 0.60	Location: former Kenston Lake area	Date Range: 09/23/2008
Time Fished: 1609 sec	Drainage: 0.6 sq mi	
Dist Fished: 0.50 km	Basin: Chagrin 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
Yellow Bullhead		I	C	T	2	4.00	1.05	1.01	2.26	252.50
Black Crappie	S	I	C		3	6.00	1.58	0.59	1.32	98.33
Largemouth Bass	F	C	C		46	92.00	24.21	27.23	60.82	296.00
Bluegill Sunfish	S	I	C	P	112	224.00	58.95	10.65	23.77	47.52
Pumpkinseed Sunfish	S	I	C	P	20	40.00	10.53	4.00	8.93	100.00
Bluegill X Pumpkinseed					7	14.00	3.68	1.30	2.90	92.86
	<i>Mile Total</i>				190	380.00		44.78		
	<i>Number of Species</i>				5					
	<i>Number of Hybrids</i>				1					

Species List

River Code: 15-053	Stream: Trib. to Linton Creek (RM 1.36)	Sample Date: 2012
River Mile: 0.60	Location: former Kenston Lake area	Date Range: 08/27/2012
Time Fished: 735 sec	Drainage: 0.6 sq mi	
Dist Fished: 0.12 km	Basin: Chagrin 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
No Fish					0	0.00	0			
					0					
					0					
					0					

Species List

River Code: 15-053	Stream: Trib. to Linton Creek (RM 1.36)	Sample Date: 2008
River Mile: 0.40	Location: dst. Kenston Lake	Date Range: 08/13/2008
Time Fished: 1752 sec	Drainage: 0.6 sq mi	
Dist Fished: 0.15 km	Basin: Chagrin River	No of Passes: 1
		Sampler Type: E

Species Name / ODNR status	IBI Grp	Feed Guild	Breed Guild	Tol	# of Fish	Relative Number	% by Number	Relative Weight	% by Weight	Ave(gm) Weight
Northern Hog Sucker	R	I	S	M	1	2.00	0.36			
White Sucker	W	O	S	T	11	22.00	3.94			
Western Blacknose Dace	N	G	S	T	70	140.00	25.09			
Creek Chub	N	G	N	T	108	216.00	38.71			
Common Shiner	N	I	S		6	12.00	2.15			
Central Stoneroller	N	H	N		9	18.00	3.23			
Yellow Bullhead		I	C	T	45	90.00	16.13			
Largemouth Bass	F	C	C		1	2.00	0.36			
Bluegill Sunfish	S	I	C	P	28	56.00	10.04			
	<i>Mile Total</i>				279	558.00				
	<i>Number of Species</i>				9					
	<i>Number of Hybrids</i>				0					

Species List

River Code: 15-053	Stream: Trib. to Linton Creek (RM 1.36)	Sample Date: 2012
River Mile: 0.40	Location: dst. Kenston Lake	Date Range: 08/27/2012
Time Fished: 1673 sec	Drainage: 0.6 sq mi	
Dist Fished: 0.12 km	Basin: Chagrin 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 Shiner	N	I	M	T	5	12.50	0.85			
Western Blacknose Dace	N	G	S	T	166	415.00	28.14			
Creek Chub	N	G	N	T	238	595.00	40.34			
Fathead Minnow	N	O	C	T	3	7.50	0.51			
Central Stoneroller	N	H	N		22	55.00	3.73			
Yellow Bullhead		I	C	T	2	5.00	0.34			
Green Sunfish	S	I	C	T	127	317.50	21.53			
Bluegill Sunfish	S	I	C	P	17	42.50	2.88			
Redear Sunfish	E	I	C		8	20.00	1.36			
Green Sf X Hybrid					2	5.00	0.34			
	<i>Mile Total</i>				590	1,475.00				
	<i>Number of Species</i>				9					
	<i>Number of Hybrids</i>				1					

Species List

River Code: 17-101	Stream: Huff Run	Sample Date: 2008
River Mile: 7.80	Location: Creques Farm off Heritage Rd.	Date Range: 08/05/2008
Time Fished: 2520 sec	Drainage: 3.3 sq mi	
Dist Fished: 0.15 km	Basin: Muskingum 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		20	40.00	3.79			
White Sucker	W	O	S	T	42	84.00	7.95			
Western Blacknose Dace	N	G	S	T	68	136.00	12.88			
Creek Chub	N	G	N	T	125	250.00	23.67			
South. Redbelly Dace	N	H	S		35	70.00	6.63			
Redside Dace	N	I	S	I	42	84.00	7.95			
Bluntnose Minnow	N	O	C	T	115	230.00	21.78			
Largemouth Bass	F	C	C		4	8.00	0.76			
Green Sunfish	S	I	C	T	5	10.00	0.95			
Bluegill Sunfish	S	I	C	P	22	44.00	4.17			
Johnny Darter	D	I	C		21	42.00	3.98			
Fantail Darter	D	I	C		29	58.00	5.49			
<i>Mile Total</i>					528	1,056.00				
<i>Number of Species</i>					12					
<i>Number of Hybrids</i>					0					

Species List

River Code: 17-101	Stream: Huff Run	Sample Date: 2012
River Mile: 7.80	Location: Creques Farm off Heritage Rd.	Date Range: 09/24/2012
Time Fished: 2700 sec	Drainage: 3.3 sq mi	
Dist Fished: 0.15 km	Basin: Muskingum 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 Pike	F	P	M		1	2.00	0.15			
White Sucker	W	O	S	T	72	144.00	10.54			
Western Blacknose Dace	N	G	S	T	33	66.00	4.83			
Creek Chub	N	G	N	T	174	348.00	25.48			
South. Redbelly Dace	N	H	S		100	200.00	14.64			
Redside Dace	N	I	S	I	138	276.00	20.20			
Bluntnose Minnow	N	O	C	T	153	306.00	22.40			
Green Sunfish	S	I	C	T	3	6.00	0.44			
Johnny Darter	D	I	C		5	10.00	0.73			
Fantail Darter	D	I	C		4	8.00	0.59			
<i>Mile Total</i>					683	1,366.00				
<i>Number of Species</i>					10					
<i>Number of Hybrids</i>					0					

Species List

River Code: 17-101	Stream: Huff Run	Sample Date: 2008
River Mile: 6.60	Location: lane off Heritage Rd.	Date Range: 08/06/2008
Time Fished: 3480 sec	Drainage: 5.0 sq mi	
Dist Fished: 0.20 km	Basin: Muskingum 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	1.50	0.13			
White Sucker	W	O	S	T	142	213.00	18.14			
Golden Shiner	N	I	M	T	11	16.50	1.40			
Western Blacknose Dace	N	G	S	T	62	93.00	7.92			
Creek Chub	N	G	N	T	142	213.00	18.14			
South. Redbelly Dace	N	H	S		16	24.00	2.04			
Redside Dace	N	I	S	I	2	3.00	0.26			
Bluntnose Minnow	N	O	C	T	259	388.50	33.08			
Brown Bullhead		I	C	T	1	1.50	0.13			
Largemouth Bass	F	C	C		3	4.50	0.38			
Green Sunfish	S	I	C	T	19	28.50	2.43			
Bluegill Sunfish	S	I	C	P	20	30.00	2.55			
Pumpkinseed Sunfish	S	I	C	P	3	4.50	0.38			
Green Sf X Hybrid					1	1.50	0.13			
Johnny Darter	D	I	C		69	103.50	8.81			
Fantail Darter	D	I	C		32	48.00	4.09			
<i>Mile Total</i>					783	1,174.50				
<i>Number of Species</i>					15					
<i>Number of Hybrids</i>					1					

Species List

River Code: 17-101	Stream: Huff Run	Sample Date: 2008
River Mile: 5.50	Location: Brass Rd.	Date Range: 08/06/2008
Time Fished: 3000 sec	Drainage: 6.5 sq mi	
Dist Fished: 0.20 km	Basin: Muskingum 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	40	60.00	6.41			
Western Blacknose Dace	N	G	S	T	189	283.50	30.29			
Creek Chub	N	G	N	T	127	190.50	20.35			
South. Redbelly Dace	N	H	S		10	15.00	1.60			
Redside Dace	N	I	S	I	19	28.50	3.04			
Bluntnose Minnow	N	O	C	T	42	63.00	6.73			
Green Sunfish	S	I	C	T	9	13.50	1.44			
Johnny Darter	D	I	C		125	187.50	20.03			
Fantail Darter	D	I	C		63	94.50	10.10			
<i>Mile Total</i>					624	936.00				
<i>Number of Species</i>					9					
<i>Number of Hybrids</i>					0					

Species List

River Code: 17-101	Stream: Huff Run	Sample Date: 2008
River Mile: 4.80	Location: Hope Rd.	Date Range: 08/06/2008
Time Fished: 5034 sec	Drainage: 7.7 sq mi	Thru: 08/14/2008
Dist Fished: 0.26 km	Basin: Muskingum 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
White Sucker	W	O	S	T	80	93.57	19.67			
Western Blacknose Dace	N	G	S	T	40	45.89	9.65			
Creek Chub	N	G	N	T	145	165.89	34.87			
Redside Dace	N	I	S	I	30	35.36	7.43			
Bluntnose Minnow	N	O	C	T	20	24.11	5.07			
Largemouth Bass	F	C	C		6	6.61	1.39			
Green Sunfish	S	I	C	T	27	29.64	6.23			
Bluegill Sunfish	S	I	C	P	12	13.39	2.82			
Green Sf X Bluegill Sf					1	1.07	0.23			
Johnny Darter	D	I	C		42	48.39	10.17			
Fantail Darter	D	I	C		11	11.79	2.48			
<i>Mile Total</i>					414	475.71				
<i>Number of Species</i>					10					
<i>Number of Hybrids</i>					1					

Species List

River Code: 17-101	Stream: Huff Run	Sample Date: 2008
River Mile: 4.20	Location: gravel road, dst. Thomas project	Date Range: 08/14/2008
Time Fished: 1503 sec	Drainage: 8.3 sq mi	
Dist Fished: 0.14 km	Basin: Muskingum 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	25	53.57	12.25			
Western Blacknose Dace	N	G	S	T	14	30.00	6.86			
Creek Chub	N	G	N	T	96	205.71	47.06			
South. Redbelly Dace	N	H	S		3	6.43	1.47			
Redside Dace	N	I	S	I	13	27.86	6.37			
Fathead Minnow	N	O	C	T	1	2.14	0.49			
Bluntnose Minnow	N	O	C	T	7	15.00	3.43			
Largemouth Bass	F	C	C		1	2.14	0.49			
Green Sunfish	S	I	C	T	16	34.29	7.84			
Johnny Darter	D	I	C		27	57.86	13.24			
Fantail Darter	D	I	C		1	2.14	0.49			
<i>Mile Total</i>					204	437.14				
<i>Number of Species</i>					11					
<i>Number of Hybrids</i>					0					

Species List

River Code: 17-101	Stream: Huff Run	Sample Date: 2012
River Mile: 4.20	Location: gravel road, dst. Thomas project	Date Range: 09/28/2012
Time Fished: 1800 sec	Drainage: 8.3 sq mi	
Dist Fished: 0.12 km	Basin: Muskingum 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	10	25.00	25.00			
Western Blacknose Dace	N	G	S	T	1	2.50	2.50			
Creek Chub	N	G	N	T	22	55.00	55.00			
Redside Dace	N	I	S	I	3	7.50	7.50			
Largemouth Bass	F	C	C		2	5.00	5.00			
Johnny Darter	D	I	C		2	5.00	5.00			
<i>Mile Total</i>					40	100.00				
<i>Number of Species</i>					6					
<i>Number of Hybrids</i>					0					

Species List

River Code: 17-101	Stream: Huff Run	Sample Date: 2008
River Mile: 3.80	Location: Hilltop Energy	Date Range: 08/06/2008
Time Fished: 1800 sec	Drainage: 9.0 sq mi	
Dist Fished: 0.12 km	Basin: Muskingum 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	5.00	1.37			
Western Blacknose Dace	N	G	S	T	7	17.50	4.79			
Creek Chub	N	G	N	T	109	272.50	74.66			
Redside Dace	N	I	S	I	15	37.50	10.27			
Johnny Darter	D	I	C		12	30.00	8.22			
Fantail Darter	D	I	C		1	2.50	0.68			
<i>Mile Total</i>					146	365.00				
<i>Number of Species</i>					6					
<i>Number of Hybrids</i>					0					

Species List

River Code: 17-101	Stream: Huff Run	Sample Date: 2012
River Mile: 3.80	Location: Hilltop Energy	Date Range: 09/24/2012
Time Fished: 1800 sec	Drainage: 9.0 sq mi	
Dist Fished: 0.13 km	Basin: Muskingum 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	2.31	3.03			
Western Blacknose Dace	N	G	S	T	3	6.92	9.09			
Creek Chub	N	G	N	T	6	13.85	18.18			
South. Redbelly Dace	N	H	S		3	6.92	9.09			
Redside Dace	N	I	S	I	20	46.15	60.61			
	<i>Mile Total</i>				33	76.15				
	<i>Number of Species</i>				5					
	<i>Number of Hybrids</i>				0					

Species List

River Code: 17-101	Stream: Huff Run	Sample Date: 2008
River Mile: 2.80	Location: adj. Brass Rd.	Date Range: 08/06/2008
Time Fished: 2460 sec	Drainage: 10.1 sq mi	
Dist Fished: 0.15 km	Basin: Muskingum 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	23	46.00	27.06			
Western Blacknose Dace	N	G	S	T	2	4.00	2.35			
Creek Chub	N	G	N	T	42	84.00	49.41			
Redside Dace	N	I	S	I	10	20.00	11.76			
Largemouth Bass	F	C	C		1	2.00	1.18			
Green Sunfish	S	I	C	T	4	8.00	4.71			
Johnny Darter	D	I	C		3	6.00	3.53			
<i>Mile Total</i>					85	170.00				
<i>Number of Species</i>					7					
<i>Number of Hybrids</i>					0					

Species List

River Code: 17-101	Stream: Huff Run	Sample Date: 2012
River Mile: 2.80	Location: adj. Brass Rd.	Date Range: 09/28/2012
Time Fished: 1800 sec	Drainage: 10.1 sq mi	
Dist Fished: 0.13 km	Basin: Muskingum 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	4	9.23	4.12			
Western Blacknose Dace	N	G	S	T	2	4.62	2.06			
Creek Chub	N	G	N	T	19	43.85	19.59			
South. Redbelly Dace	N	H	S		1	2.31	1.03			
Redside Dace	N	I	S	I	69	159.23	71.13			
Johnny Darter	D	I	C		2	4.62	2.06			
	<i>Mile Total</i>				97	223.85				
	<i>Number of Species</i>				6					
	<i>Number of Hybrids</i>				0					

Species List

River Code: 17-101	Stream: Huff Run	Sample Date: 2008
River Mile: 1.30	Location: Co. Rd. 90	Date Range: 08/05/2008
Time Fished: 2700 sec	Drainage: 11.8 sq mi	
Dist Fished: 0.20 km	Basin: Muskingum 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
Central Mudminnow		I	C	T	2	3.00	2.13			
White Sucker	W	O	S	T	27	40.50	28.72			
Western Blacknose Dace	N	G	S	T	1	1.50	1.06			
Creek Chub	N	G	N	T	43	64.50	45.74			
Redside Dace	N	I	S	I	1	1.50	1.06			
Striped Shiner	N	I	S		1	1.50	1.06			
Brown Bullhead		I	C	T	4	6.00	4.26			
Largemouth Bass	F	C	C		2	3.00	2.13			
Green Sunfish	S	I	C	T	9	13.50	9.57			
Bluegill Sunfish	S	I	C	P	2	3.00	2.13			
Green Sf X Bluegill Sf					1	1.50	1.06			
Johnny Darter	D	I	C		1	1.50	1.06			
	<i>Mile Total</i>				94	141.00				
	<i>Number of Species</i>				11					
	<i>Number of Hybrids</i>				1					

Species List

River Code: 17-101	Stream: Huff Run	Sample Date: 2008
River Mile: 0.30	Location: Salters Bottom Rd.	Date Range: 08/05/2008
Time Fished: 2760 sec	Drainage: 13.8 sq mi	
Dist Fished: 0.20 km	Basin: Muskingum 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	3.00	2.47			
White Sucker	W	O	S	T	11	16.50	13.58			
Creek Chub	N	G	N	T	35	52.50	43.21			
Bluntnose Minnow	N	O	C	T	4	6.00	4.94			
Blackstripe Topminnow		I	M		10	15.00	12.35			
Trout-perch		I	M		1	1.50	1.23			
Green Sunfish	S	I	C	T	13	19.50	16.05			
Bluegill Sunfish	S	I	C	P	2	3.00	2.47			
Green Sf X Bluegill Sf					1	1.50	1.23			
Green Sf X Hybrid					1	1.50	1.23			
Johnny Darter	D	I	C		1	1.50	1.23			
<i>Mile Total</i>					81	121.50				
<i>Number of Species</i>					9					
<i>Number of Hybrids</i>					2					

Species List

River Code: 17-101	Stream: Huff Run	Sample Date: 2012
River Mile: 0.30	Location: Salters Bottom Rd.	Date Range: 09/24/2012
Time Fished: 1800 sec	Drainage: 13.8 sq mi	
Dist Fished: 0.20 km	Basin: Muskingum 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	7.50	2.73			
Western Blacknose Dace	N	G	S	T	8	12.00	4.37			
Creek Chub	N	G	N	T	125	187.50	68.31			
Redside Dace	N	I	S	I	2	3.00	1.09			
Striped Shiner	N	I	S		1	1.50	0.55			
Bluntnose Minnow	N	O	C	T	5	7.50	2.73			
Central Stoneroller	N	H	N		1	1.50	0.55			
Green Sunfish	S	I	C	T	20	30.00	10.93			
Hybrid X Sunfish					1	1.50	0.55			
Johnny Darter	D	I	C		15	22.50	8.20			
<i>Mile Total</i>					183	274.50				
<i>Number of Species</i>					9					
<i>Number of Hybrids</i>					1					

Species List

River Code: 19-008	Stream: Pond Brook	Sample Date: 2012
River Mile: 3.70	Location: Tradewind Cove Rd.	Date Range: 09/17/2012
Time Fished: 924 sec	Drainage: 1.6 sq mi	
Dist Fished: 0.10 km	Basin: Cuyahoga 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	6.00	1.17			
Muskellunge [S]	F	P	M		1	3.00	0.58			
White Sucker	W	O	S	T	11	33.00	6.43			
Common Carp	G	O	M	T	4	12.00	2.34			
Yellow Bullhead		I	C	T	35	105.00	20.47			
Brook Silverside		I	M	M	6	18.00	3.51			
Black Crappie	S	I	C		2	6.00	1.17			
Warmouth Sunfish	S	C	C		4	12.00	2.34			
Green Sunfish	S	I	C	T	20	60.00	11.70			
Bluegill Sunfish	S	I	C	P	40	120.00	23.39			
Pumpkinseed Sunfish	S	I	C	P	44	132.00	25.73			
Yellow Perch			M		2	6.00	1.17			
<i>Mile Total</i>					171	513.00				
<i>Number of Species</i>					12					
<i>Number of Hybrids</i>					0					

Species List

River Code: 19-008	Stream: Pond Brook	Sample Date: 2012
River Mile: 3.40	Location: dst. WWTPs	Date Range: 09/17/2012
Time Fished: 1800 sec	Drainage: 5.0 sq mi	
Dist Fished: 0.15 km	Basin: Cuyahoga 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
Central Mudminnow		I	C	T	3	6.00	1.38			
White Sucker	W	O	S	T	1	2.00	0.46			
Common Carp	G	O	M	T	4	8.00	1.83			
Bluntnose Minnow	N	O	C	T	24	48.00	11.01			
Yellow Bullhead		I	C	T	85	170.00	38.99			
Brook Silverside		I	M	M	34	68.00	15.60			
Largemouth Bass	F	C	C		22	44.00	10.09			
Warmouth Sunfish	S	C	C		7	14.00	3.21			
Green Sunfish	S	I	C	T	16	32.00	7.34			
Bluegill Sunfish	S	I	C	P	20	40.00	9.17			
Pumpkinseed Sunfish	S	I	C	P	2	4.00	0.92			
<i>Mile Total</i>					218	436.00				
<i>Number of Species</i>					11					
<i>Number of Hybrids</i>					0					

Species List

River Code: 19-008	Stream: Pond Brook	Sample Date: 2011
River Mile: 2.60	Location: in restoration area	Date Range: 07/12/2011
Time Fished: 3480 sec	Drainage: 9.8 sq mi	
Dist Fished: 0.20 km	Basin: Cuyahoga 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
Central Mudminnow		I	C	T	5	7.50	1.18			
Redfin Pickerel		P	M	P	8	12.00	1.89			
White Sucker	W	O	S	T	1	1.50	0.24			
Common Carp	G	O	M	T	12	18.00	2.83			
Golden Shiner	N	I	M	T	6	9.00	1.42			
Creek Chub	N	G	N	T	19	28.50	4.48			
Fathead Minnow	N	O	C	T	2	3.00	0.47			
Bluntnose Minnow	N	O	C	T	52	78.00	12.26			
Yellow Bullhead		I	C	T	125	187.50	29.48			
Largemouth Bass	F	C	C		5	7.50	1.18			
Green Sunfish	S	I	C	T	30	45.00	7.08			
Bluegill Sunfish	S	I	C	P	126	189.00	29.72			
Pumpkinseed Sunfish	S	I	C	P	30	45.00	7.08			
Bluegill X Pumpkinseed					1	1.50	0.24			
Yellow Perch			M		2	3.00	0.47			
<i>Mile Total</i>					424	636.00				
<i>Number of Species</i>					14					
<i>Number of Hybrids</i>					1					

Species List

River Code: 19-008	Stream: Pond Brook	Sample Date: 2012
River Mile: 2.30	Location: dst. restoration area	Date Range: 09/17/2012
Time Fished: 1800 sec	Drainage: 10.9 sq mi	
Dist Fished: 0.15 km	Basin: Cuyahoga 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	3	6.00	2.01			
White Sucker	W	O	S	T	3	6.00	2.01			
Golden Shiner	N	I	M	T	4	8.00	2.68			
Creek Chub	N	G	N	T	1	2.00	0.67			
Bluntnose Minnow	N	O	C	T	93	186.00	62.42			
Yellow Bullhead		I	C	T	14	28.00	9.40			
Green Sunfish	S	I	C	T	1	2.00	0.67			
Bluegill Sunfish	S	I	C	P	12	24.00	8.05			
Pumpkinseed Sunfish	S	I	C	P	18	36.00	12.08			
<i>Mile Total</i>					149	298.00				
<i>Number of Species</i>					9					
<i>Number of Hybrids</i>					0					

Species List

River Code: 19-008	Stream: Pond Brook	Sample Date: 2012
River Mile: 1.40	Location: St. Rt. 82	Date Range: 09/17/2012
Time Fished: 1800 sec	Drainage: 15.7 sq mi	
Dist Fished: 0.13 km	Basin: Cuyahoga 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	8	18.46	2.21			
White Sucker	W	O	S	T	4	9.23	1.10			
Common Carp	G	O	M	T	5	11.54	1.38			
Golden Shiner	N	I	M	T	7	16.15	1.93			
Bluntnose Minnow	N	O	C	T	217	500.77	59.94			
Yellow Bullhead		I	C	T	17	39.23	4.70			
Brook Silverside		I	M	M	54	124.62	14.92			
Green Sunfish	S	I	C	T	28	64.62	7.73			
Bluegill Sunfish	S	I	C	P	18	41.54	4.97			
Pumpkinseed Sunfish	S	I	C	P	4	9.23	1.10			
<i>Mile Total</i>					362	835.39				
<i>Number of Species</i>					10					
<i>Number of Hybrids</i>					0					

Species List

River Code: 19-020	Stream: Furnace Run	Sample Date: 2009
River Mile: 7.20	Location: dst. Rock Creek	Date Range: 09/01/2009
Time Fished: 1779 sec	Drainage: 5.7 sq mi	
Dist Fished: 0.15 km	Basin: Cuyahoga 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	54	108.00	10.74			
Western Blacknose Dace	N	G	S	T	6	12.00	1.19			
Creek Chub	N	G	N	T	33	66.00	6.56			
Central Stoneroller	N	H	N		278	556.00	55.27			
Largemouth Bass	F	C	C		3	6.00	0.60			
Green Sunfish	S	I	C	T	11	22.00	2.19			
Johnny Darter	D	I	C		14	28.00	2.78			
Rainbow Darter	D	I	S	M	104	208.00	20.68			
	<i>Mile Total</i>				503	1,006.00				
	<i>Number of Species</i>				8					
	<i>Number of Hybrids</i>				0					

Species List

River Code: 19-020	Stream: Furnace Run	Sample Date: 2012
River Mile: 7.20	Location: dst. Rock Creek	Date Range: 09/13/2012
Time Fished: 2285 sec	Drainage: 5.7 sq mi	
Dist Fished: 0.17 km	Basin: Cuyahoga 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	7	12.35	0.36			
White Sucker	W	O	S	T	51	90.00	2.62			
Western Blacknose Dace	N	G	S	T	41	72.35	2.11			
Creek Chub	N	G	N	T	168	296.47	8.63			
Redside Dace	N	I	S	I	2	3.53	0.10			
Silverjaw Minnow	N	I	M		55	97.06	2.82			
Central Stoneroller	N	H	N		1,098	1,937.65	56.39			
Largemouth Bass	F	C	C		2	3.53	0.10			
Green Sunfish	S	I	C	T	22	38.82	1.13			
Bluegill Sunfish	S	I	C	P	1	1.77	0.05			
Johnny Darter	D	I	C		60	105.88	3.08			
Rainbow Darter	D	I	S	M	428	755.29	21.98			
Fantail Darter	D	I	C		12	21.18	0.62			
<i>Mile Total</i>					1,947	3,435.88				
<i>Number of Species</i>					13					
<i>Number of Hybrids</i>					0					

Species List

River Code: 19-020	Stream: Furnace Run	Sample Date: 2009
River Mile: 6.90	Location: St. Rt. 21	Date Range: 09/01/2009
Time Fished: 1203 sec	Drainage: 5.9 sq mi	
Dist Fished: 0.15 km	Basin: Cuyahoga 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	9	18.00	1.72			
White Sucker	W	O	S	T	56	112.00	10.69			
Western Blacknose Dace	N	G	S	T	24	48.00	4.58			
Creek Chub	N	G	N	T	52	104.00	9.92			
Redside Dace	N	I	S	I	2	4.00	0.38			
Central Stoneroller	N	H	N		237	474.00	45.23			
Largemouth Bass	F	C	C		1	2.00	0.19			
Green Sunfish	S	I	C	T	3	6.00	0.57			
Bluegill Sunfish	S	I	C	P	2	4.00	0.38			
Johnny Darter	D	I	C		33	66.00	6.30			
Rainbow Darter	D	I	S	M	101	202.00	19.27			
Fantail Darter	D	I	C		4	8.00	0.76			
<i>Mile Total</i>					524	1,048.00				
<i>Number of Species</i>					12					
<i>Number of Hybrids</i>					0					

Species List

River Code: 19-020	Stream: Furnace Run	Sample Date: 2012
River Mile: 6.90	Location: St. Rt. 21	Date Range: 09/13/2012
Time Fished: 2825 sec	Drainage: 5.9 sq mi	
Dist Fished: 0.18 km	Basin: Cuyahoga 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	26	43.33	1.21			
White Sucker	W	O	S	T	40	66.67	1.86			
Western Blacknose Dace	N	G	S	T	148	246.67	6.89			
Creek Chub	N	G	N	T	99	165.00	4.61			
Redside Dace	N	I	S	I	14	23.33	0.65			
Common Shiner	N	I	S		2	3.33	0.09			
Silverjaw Minnow	N	I	M		279	465.00	12.99			
Central Stoneroller	N	H	N		1,094	1,823.33	50.93			
Largemouth Bass	F	C	C		1	1.67	0.05			
Green Sunfish	S	I	C	T	32	53.33	1.49			
Bluegill Sunfish	S	I	C	P	3	5.00	0.14			
Johnny Darter	D	I	C		147	245.00	6.84			
Rainbow Darter	D	I	S	M	247	411.67	11.50			
Fantail Darter	D	I	C		16	26.67	0.74			
<i>Mile Total</i>					2,148	3,580.00				
<i>Number of Species</i>					14					
<i>Number of Hybrids</i>					0					

Species List

River Code: 19-020	Stream: Furnace Run	Sample Date: 2009
River Mile: 6.50	Location: Brush Rd.	Date Range: 09/01/2009
Time Fished: 1200 sec	Drainage: 7.6 sq mi	
Dist Fished: 0.15 km	Basin: Cuyahoga 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	20	40.00	2.72			
White Sucker	W	O	S	T	61	122.00	8.29			
Western Blacknose Dace	N	G	S	T	44	88.00	5.98			
Creek Chub	N	G	N	T	76	152.00	10.33			
Silverjaw Minnow	N	I	M		8	16.00	1.09			
Central Stoneroller	N	H	N		306	612.00	41.58			
Largemouth Bass	F	C	C		6	12.00	0.82			
Green Sunfish	S	I	C	T	15	30.00	2.04			
Johnny Darter	D	I	C		14	28.00	1.90			
Rainbow Darter	D	I	S	M	185	370.00	25.14			
Fantail Darter	D	I	C		1	2.00	0.14			
<i>Mile Total</i>					736	1,472.00				
<i>Number of Species</i>					11					
<i>Number of Hybrids</i>					0					

Species List

River Code: 19-020	Stream: Furnace Run	Sample Date: 2012
River Mile: 6.50	Location: Brush Rd.	Date Range: 09/10/2012
Time Fished: 4123 sec	Drainage: 7.6 sq mi	
Dist Fished: 0.18 km	Basin: Cuyahoga 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	31	51.67	1.54			
White Sucker	W	O	S	T	83	138.33	4.13			
Western Blacknose Dace	N	G	S	T	47	78.33	2.34			
Creek Chub	N	G	N	T	108	180.00	5.37			
Redside Dace	N	I	S	I	3	5.00	0.15			
Silverjaw Minnow	N	I	M		104	173.33	5.17			
Central Stoneroller	N	H	N		1,256	2,093.33	62.43			
Largemouth Bass	F	C	C		1	1.67	0.05			
Green Sunfish	S	I	C	T	48	80.00	2.39			
Johnny Darter	D	I	C		43	71.67	2.14			
Rainbow Darter	D	I	S	M	265	441.67	13.17			
Fantail Darter	D	I	C		23	38.33	1.14			
<i>Mile Total</i>					2,012	3,353.33				
<i>Number of Species</i>					12					
<i>Number of Hybrids</i>					0					

Species List

River Code: 19-020	Stream: Furnace Run	Sample Date: 2009
River Mile: 1.10	Location: upst. Covered Bridge	Date Range: 09/01/2009
Time Fished: 858 sec	Drainage: 19.7 sq mi	
Dist Fished: 0.15 km	Basin: Cuyahoga 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
Rainbow Trout	E		N		10	20.00	1.17			
Northern Hog Sucker	R	I	S	M	22	44.00	2.57			
White Sucker	W	O	S	T	28	56.00	3.27			
Western Blacknose Dace	N	G	S	T	123	246.00	14.35			
Creek Chub	N	G	N	T	32	64.00	3.73			
Common Shiner	N	I	S		12	24.00	1.40			
Silverjaw Minnow	N	I	M		10	20.00	1.17			
Central Stoneroller	N	H	N		482	964.00	56.24			
Johnny Darter	D	I	C		28	56.00	3.27			
Rainbow Darter	D	I	S	M	106	212.00	12.37			
Fantail Darter	D	I	C		4	8.00	0.47			
<i>Mile Total</i>					857	1,714.00				
<i>Number of Species</i>					11					
<i>Number of Hybrids</i>					0					

Species List

River Code: 19-020	Stream: Furnace Run	Sample Date: 2009
River Mile: 0.90	Location: Everett Rd.	Date Range: 08/20/2009
Time Fished: 4200 sec	Drainage: 19.8 sq mi	
Dist Fished: 0.25 km	Basin: Cuyahoga 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
Rainbow Trout	E		N		7	8.40	0.92			
Northern Hog Sucker	R	I	S	M	12	14.40	1.58			
White Sucker	W	O	S	T	71	85.20	9.33			
Western Blacknose Dace	N	G	S	T	43	51.60	5.65			
Creek Chub	N	G	N	T	83	99.60	10.91			
Striped Shiner	N	I	S		24	28.80	3.15			
Common Shiner	N	I	S		71	85.20	9.33			
Silverjaw Minnow	N	I	M		3	3.60	0.39			
Bluntnose Minnow	N	O	C	T	4	4.80	0.53			
Central Stoneroller	N	H	N		348	417.60	45.73			
Largemouth Bass	F	C	C		5	6.00	0.66			
Green Sunfish	S	I	C	T	11	13.20	1.45			
Bluegill Sunfish	S	I	C	P	4	4.80	0.53			
Pumpkinseed Sunfish	S	I	C	P	3	3.60	0.39			
Johnny Darter	D	I	C		4	4.80	0.53			
Rainbow Darter	D	I	S	M	64	76.80	8.41			
Fantail Darter	D	I	C		4	4.80	0.53			
<i>Mile Total</i>					761	913.20				
<i>Number of Species</i>					17					
<i>Number of Hybrids</i>					0					

Species List

River Code: 19-020	Stream: Furnace Run	Sample Date: 2009
River Mile: 0.40	Location: upst. RR bridge	Date Range: 09/01/2009
Time Fished: 1490 sec	Drainage: 19.9 sq mi	
Dist Fished: 0.15 km	Basin: Cuyahoga 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
Rainbow Trout	E		N		6	12.00	0.56			
Northern Hog Sucker	R	I	S	M	12	24.00	1.11			
White Sucker	W	O	S	T	31	62.00	2.87			
Western Blacknose Dace	N	G	S	T	37	74.00	3.43			
Creek Chub	N	G	N	T	22	44.00	2.04			
Common Shiner	N	I	S		107	214.00	9.92			
Silverjaw Minnow	N	I	M		9	18.00	0.83			
Bluntnose Minnow	N	O	C	T	12	24.00	1.11			
Central Stoneroller	N	H	N		684	1,368.00	63.39			
Yellow Bullhead		I	C	T	1	2.00	0.09			
Green Sunfish	S	I	C	T	12	24.00	1.11			
Johnny Darter	D	I	C		10	20.00	0.93			
Greenside Darter	D	I	S	M	1	2.00	0.09			
Rainbow Darter	D	I	S	M	123	246.00	11.40			
Fantail Darter	D	I	C		12	24.00	1.11			
<i>Mile Total</i>					1,079	2,158.00				
<i>Number of Species</i>					15					
<i>Number of Hybrids</i>					0					

Species List

River Code: 19-020	Stream: Furnace Run	Sample Date: 2012
River Mile: 0.20	Location: Riverview Rd.	Date Range: 08/27/2012
Time Fished: 2870 sec	Drainage: 20.3 sq mi	
Dist Fished: 0.20 km	Basin: Cuyahoga 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
Northern Hog Sucker	R	I	S	M	14	21.00	1.32	0.45	2.89	21.43
White Sucker	W	O	S	T	125	187.50	11.75	1.50	9.64	8.00
Common Carp	G	O	M	T	1	1.50	0.09	0.04	0.24	25.00
Western Blacknose Dace	N	G	S	T	45	67.50	4.23	0.17	1.08	2.49
Creek Chub	N	G	N	T	39	58.50	3.67	0.60	3.86	10.26
Striped Shiner	N	I	S		349	523.50	32.80	4.51	29.00	8.62
Silverjaw Minnow	N	I	M		14	21.00	1.32	0.06	0.41	3.00
Bluntnose Minnow	N	O	C	T	68	102.00	6.39	0.31	1.97	3.00
Central Stoneroller	N	H	N		170	255.00	15.98	1.47	9.44	5.76
Yellow Bullhead		I	C	T	25	37.50	2.35	3.75	24.11	100.00
Smallmouth Bass	F	C	C	M	2	3.00	0.19	0.03	0.19	10.00
Largemouth Bass	F	C	C		6	9.00	0.56	0.09	0.58	10.00
Green Sunfish	S	I	C	T	96	144.00	9.02	2.16	13.89	15.00
Bluegill Sunfish	S	I	C	P	6	9.00	0.56	0.09	0.58	10.00
Green Sf X Hybrid					1	1.50	0.09	0.02	0.15	15.00
Johnny Darter	D	I	C		24	36.00	2.26	0.07	0.46	2.00
Rainbow Darter	D	I	S	M	45	67.50	4.23	0.14	0.87	2.00
Fantail Darter	D	I	C		34	51.00	3.20	0.10	0.66	2.00
<i>Mile Total</i>					1,064	1,596.00		15.56		
<i>Number of Species</i>					17					
<i>Number of Hybrids</i>					1					

Species List

River Code: 20-001	Stream: Black River	Sample Date: 2012
River Mile: 15.40	Location: Cascade Park	Date Range: 07/09/2012
Time Fished: 8200 sec	Drainage: 396.0 sq mi	Thru: 09/11/2012
Dist Fished: 1.00 km	Basin: Black 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		65	65.00	9.46	11.16	3.55	171.61
Rainbow Trout	E		N		1	1.00	0.15	1.90	0.60	1,900.00
Bigmouth Buffalo	C	I	M		3	3.00	0.44	12.70	4.04	4,233.33
Smallmouth Buffalo	C	I	M		2	2.00	0.29	6.70	2.13	3,350.00
Quillback	C	O	M		3	3.00	0.44	2.45	0.78	816.67
Silver Redhorse	R	I	S	M	2	2.00	0.29	3.85	1.22	1,925.00
Golden Redhorse	R	I	S	M	89	89.00	12.95	26.89	8.55	302.16
Northern Hog Sucker	R	I	S	M	17	17.00	2.47	2.40	0.76	141.24
White Sucker	W	O	S	T	13	13.00	1.89	0.90	0.29	69.09
Spotted Sucker	R	I	S		8	8.00	1.16	0.04	0.01	5.00
Common Carp	G	O	M	T	73	73.00	10.63	211.39	67.22	2,895.80
Golden Shiner	N	I	M	T	1	1.00	0.15	0.00	0.00	4.00
Emerald Shiner	N	I	M		3	3.00	0.44	0.02	0.00	5.00
Striped Shiner	N	I	S		27	27.00	3.93	0.40	0.13	14.89
Common Shiner	N	I	S		18	18.00	2.62	0.22	0.07	12.00
Spotfin Shiner	N	I	M		117	117.00	17.03	0.35	0.11	2.96
Sand Shiner	N	I	M	M	7	7.00	1.02	0.02	0.01	2.86
Bluntnose Minnow	N	O	C	T	46	46.00	6.70	0.16	0.05	3.43
Striped Sh X Common Sh		I			22	22.00	3.20	0.26	0.08	12.00
Channel Catfish	F		C		6	6.00	0.87	4.55	1.45	758.33
Yellow Bullhead		I	C	T	2	2.00	0.29	0.56	0.18	280.00
Black Bullhead		I	C	P	1	1.00	0.15	0.43	0.14	425.00
Flathead Catfish	F	P	C		1	1.00	0.15	3.50	1.11	3,500.00
White Crappie	S	I	C		6	6.00	0.87	1.41	0.45	235.00
Black Crappie	S	I	C		1	1.00	0.15	0.10	0.03	98.00
Rock Bass	S	C	C		28	28.00	4.08	3.32	1.06	118.54
Smallmouth Bass	F	C	C	M	44	44.00	6.40	12.10	3.85	275.05
Largemouth Bass	F	C	C		15	15.00	2.18	3.61	1.15	240.93
Green Sunfish	S	I	C	T	14	14.00	2.04	0.60	0.19	43.17
Bluegill Sunfish	S	I	C	P	37	37.00	5.39	2.07	0.66	56.06
Pumpkinseed Sunfish	S	I	C	P	6	6.00	0.87	0.20	0.06	33.67
Green Sf X Bluegill Sf					3	3.00	0.44	0.06	0.02	21.33
Green Sf X Pumpkinseed					1	1.00	0.15	0.12	0.04	124.00
Logperch	D	I	S	M	1	1.00	0.15	0.01	0.00	10.00
Johnny Darter	D	I	C		1	1.00	0.15	0.00	0.00	2.00
Greenside Darter	D	I	S	M	1	1.00	0.15	0.00	0.00	4.00
Rainbow Darter	D	I	S	M	1	1.00	0.15	0.00	0.00	3.00
Round Goby	E				1	1.00	0.15	0.00	0.00	2.00
<i>Mile Total</i>					687	687.00		314.47		
<i>Number of Species</i>					35					
<i>Number of Hybrids</i>					3					

Species List

River Code: 20-001	Stream: Black River	Sample Date: 2012
River Mile: 11.50	Location: dst. Elyria at Spring Valley Golf Club	Date Range: 07/10/2012
Time Fished: 5000 sec	Drainage: 398.0 sq mi	Thru: 09/12/2012
Dist Fished: 0.70 km	Basin: Black 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		76	108.57	15.29	12.29	7.08	113.21
Quillback	C	O	M		5	7.14	1.01	0.06	0.04	9.00
Silver Redhorse	R	I	S	M	2	2.86	0.40	2.29	1.32	800.00
Golden Redhorse	R	I	S	M	97	138.57	19.52	58.13	33.50	419.49
Northern Hog Sucker	R	I	S	M	39	55.71	7.85	11.88	6.85	213.28
White Sucker	W	O	S	T	39	55.71	7.85	6.28	3.62	112.69
Spotted Sucker	R	I	S		17	24.29	3.42	1.99	1.15	81.88
Common Carp	G	O	M	T	20	28.57	4.02	65.80	37.92	2,303.00
Golden Shiner	N	I	M	T	2	2.86	0.40	0.01	0.00	2.50
Emerald Shiner	N	I	M		1	1.43	0.20	0.01	0.01	8.00
Redfin Shiner	N	I	N		1	1.43	0.20	0.00	0.00	2.00
Striped Shiner	N	I	S		28	40.00	5.63	0.70	0.40	17.50
Spotfin Shiner	N	I	M		44	62.86	8.85	0.18	0.10	2.88
Sand Shiner	N	I	M	M	1	1.43	0.20	0.00	0.00	2.00
Bluntnose Minnow	N	O	C	T	49	70.00	9.86	0.17	0.10	2.37
Channel Catfish	F		C		3	4.29	0.60	2.26	1.30	526.67
White Perch	E		M		1	1.43	0.20	0.01	0.01	10.00
Rock Bass	S	C	C		4	5.71	0.80	0.77	0.44	134.00
Smallmouth Bass	F	C	C	M	19	27.14	3.82	5.66	3.26	208.58
Largemouth Bass	F	C	C		3	4.29	0.60	0.25	0.14	58.67
Green Sunfish	S	I	C	T	11	15.71	2.21	0.25	0.14	15.91
Bluegill Sunfish	S	I	C	P	20	28.57	4.02	0.96	0.56	33.75
Pumpkinseed Sunfish	S	I	C	P	5	7.14	1.01	0.13	0.07	18.00
Green Sf X Bluegill Sf					2	2.86	0.40	0.25	0.14	87.00
Logperch	D	I	S	M	1	1.43	0.20	0.02	0.01	12.00
Johnny Darter	D	I	C		3	4.29	0.60	0.01	0.00	2.00
Greenside Darter	D	I	S	M	2	2.86	0.40	0.01	0.01	3.50
Freshwater Drum			M	P	2	2.86	0.40	3.14	1.81	1,100.00
<i>Mile Total</i>					497	710.00		173.51		
<i>Number of Species</i>					27					
<i>Number of Hybrids</i>					1					

Species List

River Code: 20-010	Stream: East Branch Black River	Sample Date: 2012
River Mile: 0.80	Location: upst. Washington St.	Date Range: 07/05/2012
Time Fished: 7541 sec	Drainage: 222.0 sq mi	Thru: 09/11/2012
Dist Fished: 1.00 km	Basin: Black 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
Golden Redhorse	R	I	S	M	74	74.00	20.90	31.19	16.72	421.50
White Sucker	W	O	S	T	21	21.00	5.93	7.20	3.86	342.86
Common Carp	G	O	M	T	46	46.00	12.99	134.30	71.99	2,919.57
Golden Shiner	N	I	M	T	22	22.00	6.21	0.28	0.15	12.51
Redfin Shiner	N	I	N		2	2.00	0.56	0.00	0.00	2.00
Spotfin Shiner	N	I	M		2	2.00	0.56	0.01	0.00	3.50
Sand Shiner	N	I	M	M	9	9.00	2.54	0.01	0.01	1.63
Bluntnose Minnow	N	O	C	T	9	9.00	2.54	0.02	0.01	2.00
Yellow Bullhead		I	C	T	3	3.00	0.85	0.25	0.13	83.33
White Crappie	S	I	C		8	8.00	2.26	1.43	0.77	178.50
Rock Bass	S	C	C		3	3.00	0.85	0.39	0.21	130.00
Smallmouth Bass	F	C	C	M	28	28.00	7.91	6.52	3.49	232.72
Largemouth Bass	F	C	C		5	5.00	1.41	0.25	0.14	50.80
Green Sunfish	S	I	C	T	61	61.00	17.23	1.90	1.02	31.22
Bluegill Sunfish	S	I	C	P	20	20.00	5.65	1.15	0.62	57.41
Pumpkinseed Sunfish	S	I	C	P	37	37.00	10.45	1.38	0.74	37.33
Green Sf X Bluegill Sf					4	4.00	1.13	0.27	0.14	67.00
<i>Mile Total</i>					354	354.00		186.55		
<i>Number of Species</i>					16					
<i>Number of Hybrids</i>					1					

Species List

River Code: 20-020	Stream: West Branch Black River	Sample Date: 2012
River Mile: 0.40	Location: upst. Lake Rd.	Date Range: 07/24/2012
Time Fished: 2700 sec	Drainage:	
Dist Fished: 0.15 km	Basin: Black 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
White Sucker	W	O	S	T	1	2.00	0.48	0.01	0.13	4.00
Redfin Shiner	N	I	N		2	4.00	0.96	0.01	0.13	2.00
Sand Shiner	N	I	M	M	4	8.00	1.92	0.01	0.19	1.50
Bluntnose Minnow	N	O	C	T	25	50.00	12.02	0.08	1.29	1.60
Yellow Bullhead		I	C	T	28	56.00	13.46	2.92	47.21	52.14
Rock Bass	S	C	C		9	18.00	4.33	0.24	3.88	13.33
Smallmouth Bass	F	C	C	M	7	14.00	3.37	1.60	25.87	114.29
Green Sunfish	S	I	C	T	11	22.00	5.29	0.61	9.86	27.73
Blackside Darter	D	I	S		1	2.00	0.48	0.04	0.65	20.00
Greenside Darter	D	I	S	M	120	240.00	57.69	0.67	10.78	2.78
<i>Mile Total</i>					208	416.00		6.19		
<i>Number of Species</i>					10					
<i>Number of Hybrids</i>					0					

Appendix D. Invertebrate Community Index (ICI) scores and metrics.

Appendix D: Invertebrate Community Index (ICI) Scores and Metrics

River Mile	Drainage Area (sq mi)	Number of				Percent:					Qual. EPT	Eco- region	ICI
		Total Taxa	Mayfly Taxa	Caddisfly Taxa	Dipteran Taxa	Mayflies	Caddis- flies	Tany- tarsini	Other Dipt/NI	Tolerant Organisms			
Blacklick Creek (02-130)													
Year: 2012													
4.60	57.0	34(4)	5(2)	3(4)	17(4)	12.1(2)	7.0(4)	2.4(2)	68.1(0)	23.8(0)	9(4)	5	26
4.10	57.0	30(4)	4(2)	2(4)	13(2)	13.2(2)	1.1(2)	18.3(4)	65.8(0)	16.4(2)	9(4)	5	26
2.40	58.7	39(6)	3(2)	3(4)	19(4)	3.1(2)	4.9(2)	8.9(2)	80.5(0)	39.4(0)	10(4)	5	26
Big Darby Creek (02-200)													
Year: 2008													
81.90	3.2	21(2)	3(2)	0(0)	14(4)	2.8(2)	0.0(0)	14.5(4)	82.1(0)	13.1(4)	9(4)	5	22
81.40	3.2	32(4)	5(4)	0(0)	17(4)	30.8(6)	0.0(0)	22.5(6)	44.3(4)	12.9(4)	8(4)	5	36
81.10	3.4	25(4)	5(4)	0(0)	12(2)	3.9(2)	0.0(0)	8.5(2)	86.2(0)	22.0(2)	9(4)	5	20
80.80	4.4	47(6)	7(6)	3(6)	22(6)	6.1(2)	0.9(4)	38.9(6)	53.5(2)	4.5(6)	12(6)	5	50
Salt Lick Creek (02-610)													
Year: 2012													
23.70	33.6	22(2)	0(0)	0(0)	10(2)	0.0(0)	0.0(0)	1.3(2)	97.2(0)	43.7(0)	0(0)	4	6
Swan Creek (04-003)													
Year: 2012													
27.10	86.0	34(4)	1(0)	1(2)	18(4)	6.3(2)	12.6(4)	6.3(2)	61.1(2)	6.9(4)	8(2)	1	26
25.60	88.0	32(4)	2(0)	2(4)	17(4)	35.4(6)	22.6(6)	4.1(2)	33.3(4)	5.1(6)	4(0)	1	36
24.70	89.0	33(4)	1(0)	1(2)	17(4)	1.5(2)	0.1(2)	3.2(2)	89.9(0)	12.6(2)	2(0)	1	18

Appendix D: Continued

River Mile	Drainage Area (sq mi)	Number of				Percent:					Qual. EPT	Eco- region	ICI
		Total Taxa	Mayfly Taxa	Caddisfly Taxa	Dipteran Taxa	Mayflies	Caddis- flies	Tany- tarsini	Other Dipt/NI	Tolerant Organisms			
East Branch Chagrin River (15-002)													
Year: 2012													
12.15	22.4	48(6)	11(6)	5(6)	26(6)	4.9(2)	8.0(6)	52.5(6)	32.9(4)	7.7(6)	22(6)	3	54
11.75	23.5	41(6)	9(6)	5(6)	21(6)	11.5(2)	11.2(6)	56.6(6)	20.3(6)	1.7(6)	22(6)	3	56
11.20	24.2	31(4)	6(4)	4(6)	16(4)	2.4(2)	0.8(2)	67.5(6)	28.8(6)	1.7(6)	22(6)	3	46
Furnace Run (19-020)													
Year: 2009													
0.40	19.9	32(4)	4(2)	4(6)	19(4)	1.1(2)	3.6(4)	45.0(6)	50.3(2)	11.5(4)	14(6)	3	40
Black River (20-001)													
Year: 2012													
14.95	396.0	32(4)	3(2)	7(6)	14(4)	7.5(2)	34.0(6)	7.6(2)	50.3(0)	2.8(6)	15(4)	3	36
11.50	398.0	22(2)	7(4)	3(4)	8(2)	27.6(4)	33.7(6)	1.3(2)	37.3(2)	0.0(6)	15(4)	3	36
East Branch Black River (20-010)													
Year: 2012													
0.36	222.0	19(2)	2(0)	2(2)	4(0)	0.0(2)	0.2(2)	0.0(0)	99.3(0)	49.4(0)	2(0)	3	8
West Branch Black River (20-020)													
Year: 2012													
1.20	172.0	39(6)	7(4)	7(6)	9(2)	4.9(2)	5.7(2)	67.3(6)	20.8(6)	1.3(6)	16(6)	3	46

Appendix E. Macroinvertebrate Collection Results.

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: Sycamore Creek
driveway off St. Rt. 256

Collection Date: 07/26/2012 River Code: 02-085 RM: 7.10

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01320	<i>Hydra sp</i>	+	85821	<i>Tanytarsus glabrescens group sp 7</i>	+
01801	<i>Turbellaria</i>	+	87540	<i>Hemerodromia sp</i>	+
03360	<i>Plumatella sp</i>	+	93900	<i>Elimia sp</i>	+
03600	<i>Oligochaeta</i>	+	95100	<i>Physella sp</i>	+
05800	<i>Caecidotea sp</i>	+	96900	<i>Ferrissia sp</i>	+
08200	<i>Orconectes sp</i>	+			
08601	<i>Hydrachnidia</i>	+	No. Quantitative Taxa: 0		Total Taxa: 49
11130	<i>Baetis intercalaris</i>	+	No. Qualitative Taxa: 49		ICI:
11250	<i>Centroptilum sp (w/o hindwing pads)</i>	+	Number of Organisms: 0		Qual EPT: 13
13400	<i>Stenacron sp</i>	+			
13521	<i>Stenonema femoratum</i>	+			
17200	<i>Caenis sp</i>	+			
21200	<i>Calopteryx sp</i>	+			
22001	<i>Coenagrionidae</i>	+			
22300	<i>Argia sp</i>	+			
25510	<i>Stylogomphus albistylus</i>	+			
44501	<i>Corixidae</i>	+			
50315	<i>Chimarra obscura</i>	+			
52200	<i>Cheumatopsyche sp</i>	+			
52430	<i>Ceratopsyche morosa group</i>	+			
52530	<i>Hydropsyche depravata group</i>	+			
53800	<i>Hydroptila sp</i>	+			
58505	<i>Helicopsyche borealis</i>	+			
59300	<i>Mystacides sp</i>	+			
59720	<i>Triaenodes ignitus</i>	+			
68075	<i>Psephenus herricki</i>	+			
68130	<i>Helichus sp</i>	+			
68707	<i>Dubiraphia quadrinotata</i>	+			
68708	<i>Dubiraphia vittata group</i>	+			
68901	<i>Macronychus glabratus</i>	+			
69400	<i>Stenelmis sp</i>	+			
72700	<i>Anopheles sp</i>	+			
77120	<i>Ablabesmyia mallochi</i>	+			
77800	<i>Helopelopia sp</i>	+			
78655	<i>Procladius (Holotanypus) sp</i>	+			
82820	<i>Cryptochironomus sp</i>	+			
83040	<i>Dicrotendipes neomodestus</i>	+			
83820	<i>Microtendipes "caelum" (sensu Simpson & Bode, 1980)</i>	+			
84210	<i>Paratendipes albimanus</i> or <i>P. duplicatus</i>	+			
84450	<i>Polypedilum (Uresipedilum) flavum</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: Sycamore Creek
upst. St. Rt. 256

Collection Date: 07/25/2012 River Code: 02-085 RM: 6.70

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01801	<i>Turbellaria</i>	+	96900	<i>Ferrissia sp</i>	+
03360	<i>Plumatella sp</i>	+			
08260	<i>Orconectes (Crokerinus) sanbornii sanbornii</i>	+	No. Quantitative Taxa: 0		Total Taxa: 45
11130	<i>Baetis intercalaris</i>	+	No. Qualitative Taxa: 45		ICI:
11200	<i>Callibaetis sp</i>	+	Number of Organisms: 0		Qual EPT: 13
13400	<i>Stenacron sp</i>	+			
13521	<i>Stenonema femoratum</i>	+			
17200	<i>Caenis sp</i>	+			
21200	<i>Calopteryx sp</i>	+			
23909	<i>Boyeria vinosa</i>	+			
24501	<i>Gomphidae</i>	+			
24900	<i>Gomphus sp</i>	+			
50315	<i>Chimarra obscura</i>	+			
52200	<i>Cheumatopsyche sp</i>	+			
52430	<i>Ceratopsyche morosa group</i>	+			
52530	<i>Hydropsyche depravata group</i>	+			
58505	<i>Helicopsyche borealis</i>	+			
59140	<i>Ceraclea maculata</i>	+			
59300	<i>Mystacides sp</i>	+			
59720	<i>Triaenodes ignitus</i>	+			
68075	<i>Psephenus herricki</i>	+			
68130	<i>Helichus sp</i>	+			
68707	<i>Dubiraphia quadrinotata</i>	+			
68708	<i>Dubiraphia vittata group</i>	+			
68901	<i>Macronychus glabratus</i>	+			
69400	<i>Stenelmis sp</i>	+			
71900	<i>Tipula sp</i>	+			
74100	<i>Simulium sp</i>	+			
77800	<i>Helopelopia sp</i>	+			
81825	<i>Rheocricotopus (Psilocricotopus) robacki</i>	+			
82820	<i>Cryptochironomus sp</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</i> or <i>P. duplicatus</i>	+			
84300	<i>Phaenopsectra obediens group</i>	+			
84450	<i>Polypedilum (Uresipedilum) flavum</i>	+			
84470	<i>Polypedilum (P.) illinoense</i>	+			
84750	<i>Stictochironomus sp</i>	+			
85625	<i>Rheotanytarsus sp</i>	+			
85720	<i>Stempellinella fimbriata</i>	+			
85821	<i>Tanytarsus glabrescens group sp 7</i>	+			
93900	<i>Elimia sp</i>	+			
95100	<i>Physella sp</i>	+			

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: Sycamore Creek
dst. St. Rt. 256, dst. RR

Collection Date: 07/26/2012 River Code: 02-085 RM: 5.90

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01801	<i>Turbellaria</i>	+			
03600	<i>Oligochaeta</i>	+			
08260	<i>Orconectes (Crokerinus) sanbornii sanbornii</i>	+			
11120	<i>Baetis flavistriga</i>	+			
11130	<i>Baetis intercalaris</i>	+			
13400	<i>Stenacron sp</i>	+			
13521	<i>Stenonema femoratum</i>	+			
17200	<i>Caenis sp</i>	+			
21200	<i>Calopteryx sp</i>	+			
22001	<i>Coenagrionidae</i>	+			
22300	<i>Argia sp</i>	+			
50315	<i>Chimarra obscura</i>	+			
52200	<i>Cheumatopsyche sp</i>	+			
52430	<i>Ceratopsyche morosa group</i>	+			
52530	<i>Hydropsyche depravata group</i>	+			
58505	<i>Helicopsyche borealis</i>	+			
59300	<i>Mystacides sp</i>	+			
59720	<i>Triaenodes ignitus</i>	+			
68075	<i>Psephenus herricki</i>	+			
68708	<i>Dubiraphia vittata group</i>	+			
68901	<i>Macronychus glabratus</i>	+			
69400	<i>Stenelmis sp</i>	+			
71900	<i>Tipula sp</i>	+			
77800	<i>Helopelopia sp</i>	+			
78402	<i>Natarsia baltimoreus</i>	+			
78655	<i>Procladius (Holotanypus) sp</i>	+			
82820	<i>Cryptochironomus sp</i>	+			
82885	<i>Cryptotendipes pseudotener</i>	+			
83040	<i>Dicrotendipes neomodestus</i>	+			
83840	<i>Microtendipes pedellus group</i>	+			
84210	<i>Paratendipes albimanus or P. duplicatus</i>	+			
84300	<i>Phaenopsectra obediens group</i>	+			
84470	<i>Polypedilum (P.) illinoense</i>	+			
84540	<i>Polypedilum (Tripodura) scalaenum group</i>	+			
84750	<i>Stictochironomus sp</i>	+			
85615	<i>Rheotanytarsus pellucidus</i>	+			
85625	<i>Rheotanytarsus sp</i>	+			
85800	<i>Tanytarsus sp</i>	+			
85818	<i>Tanytarsus glabrescens group sp 4</i>	+			
87540	<i>Hemerodromia sp</i>	+			
95100	<i>Physella sp</i>	+			
96900	<i>Ferrissia sp</i>	+			

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: Blacklick Creek

Collection Date: 09/11/2012 River Code: 02-130 RM: 4.60

dst. Blacklick Estates WWTP

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01320	<i>Hydra sp</i>	8	83040	<i>Dicrotendipes neomodestus</i>	139 +
01801	<i>Turbellaria</i>	64 +	84210	<i>Paratendipes albimanus</i> or <i>P. duplicatus</i>	+
03600	<i>Oligochaeta</i>	528 +	84300	<i>Phaenopsectra obediens</i> group	100 +
04666	<i>Helobdella papillata</i>	+	84450	<i>Polypedilum (Uresipedilum) flavum</i>	379 +
04935	<i>Erpobdella punctata punctata</i>	+	84470	<i>Polypedilum (P.) illinoense</i>	+
04968	<i>Erpobdella tetragon</i>	+	84540	<i>Polypedilum (Tripodura) scalaenum</i> group	30 +
11120	<i>Baetis flavistriga</i>	6 +	85625	<i>Rheotanytarsus sp</i>	+
11130	<i>Baetis intercalaris</i>	24 +	85800	<i>Tanytarsus sp</i>	+
11200	<i>Callibaetis sp</i>	+	85821	<i>Tanytarsus glabrescens</i> group sp 7	60 +
11670	<i>Procloeon viridoculare</i>	+	87540	<i>Hemerodromia sp</i>	2
13521	<i>Stenonema femoratum</i>	4 +	93900	<i>Elimia sp</i>	+
16700	<i>Tricorythodes sp</i>	274 +	95100	<i>Physella sp</i>	14 +
17200	<i>Caenis sp</i>	1 +	96900	<i>Ferrissia sp</i>	63 +
21200	<i>Calopteryx sp</i>	+	97601	<i>Corbicula fluminea</i>	+
22001	<i>Coenagrionidae</i>	+			
22300	<i>Argia sp</i>	24 +	No. Quantitative Taxa: 34		Total Taxa: 58
28500	<i>Libellula sp</i>	+	No. Qualitative Taxa: 49		ICI: 26
50315	<i>Chimarra obscura</i>	1	Number of Organisms: 2546		Qual EPT: 9
52200	<i>Cheumatopsyche sp</i>	110 +			
52430	<i>Ceratopsyche morosa</i> group	68 +			
65800	<i>Berosus sp</i>	+			
67500	<i>Laccobius sp</i>	+			
68075	<i>Psephenus herricki</i>	+			
68601	<i>Ancyronyx variegata</i>	32 +			
68901	<i>Macronychus glabratus</i>	1 +			
69400	<i>Stenelmis sp</i>	208 +			
71900	<i>Tipula sp</i>	+			
72700	<i>Anopheles sp</i>	+			
77100	<i>Ablabesmyia sp</i>	10			
77120	<i>Ablabesmyia mallochi</i>	+			
77500	<i>Conchapelopia sp</i>	80 +			
77750	<i>Hayesomyia senata</i> or <i>Thienemannimyia norena</i>	40 +			
77800	<i>Helopelopia sp</i>	50 +			
78450	<i>Nilotanypus fimbriatus</i>	90			
78655	<i>Procladius (Holotanypus) sp</i>	+			
80351	<i>Corynoneura caudicula</i>	8			
80360	<i>Corynoneura floridaensis</i>	16			
80370	<i>Corynoneura lobata</i>	8			
81825	<i>Rheocricotopus (Psilocricotopus) robacki</i>	60 +			
82101	<i>Thienemanniella taurocapita</i>	+			
82141	<i>Thienemanniella xena</i>	24			
82730	<i>Chironomus (C.) decorus</i> group	+			
82820	<i>Cryptochironomus sp</i>	20 +			
82885	<i>Cryptotendipes pseudotener</i>	+			

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: Blacklick Creek

Collection Date: 09/11/2012 River Code: 02-130 RM: 4.10

dst. bike path bridge

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01801	<i>Turbellaria</i>	28 +	83300	<i>Glyptotendipes (G.) sp</i>	+
03600	<i>Oligochaeta</i>	168 +	84155	<i>Paralauterborniella nigrohalteralis</i>	+
04664	<i>Helobdella stagnalis</i>	1 +	84210	<i>Paratendipes albimanus</i> or <i>P. duplicatus</i>	+
08250	<i>Orconectes (Procericambarus) rusticus</i>	+	84300	<i>Phaenopsectra obediens</i> group	+
08601	<i>Hydrachnidia</i>	1 +	84450	<i>Polypedilum (Uresipedilum) flavum</i>	49 +
11120	<i>Baetis flavistriga</i>	+	84470	<i>Polypedilum (P.) illinoense</i>	+
11130	<i>Baetis intercalaris</i>	+	84540	<i>Polypedilum (Tripodura) scalaenum</i> group	12
11200	<i>Callibaetis</i> sp	+	85500	<i>Paratanytarsus</i> sp	24
11650	<i>Procloeon</i> sp (w/ hindwing pads)	+	85625	<i>Rheotanytarsus</i> sp	61
11670	<i>Procloeon viridoculare</i>	+	85821	<i>Tanytarsus glabrescens</i> group sp 7	244
13400	<i>Stenacron</i> sp	2	95100	<i>Physella</i> sp	96 +
13521	<i>Stenonema femoratum</i>	189 +	96900	<i>Ferrissia</i> sp	31
16700	<i>Tricorythodes</i> sp	19 +	97601	<i>Corbicula fluminea</i>	+
17200	<i>Caenis</i> sp	27 +	98600	<i>Sphaerium</i> sp	+
22001	<i>Coenagrionidae</i>	2 +			
22300	<i>Argia</i> sp	13 +	No. Quantitative Taxa: 30		Total Taxa: 58
52200	<i>Cheumatopsyche</i> sp	7	No. Qualitative Taxa: 45		ICI: 26
53501	<i>Hydroptilidae</i>	+	Number of Organisms: 1799		Qual EPT: 9
53800	<i>Hydroptila</i> sp	12			
60900	<i>Peltodytes</i> sp	+			
65800	<i>Berosus</i> sp	3 +			
66500	<i>Enochrus</i> sp	+			
68075	<i>Psephenus herricki</i>	+			
68601	<i>Ancyronyx variegata</i>	11 +			
68901	<i>Macronychus glabratus</i>	2 +			
69400	<i>Stenelmis</i> sp	+			
71100	<i>Hexatoma</i> sp	+			
71300	<i>Limonia</i> sp	+			
71900	<i>Tipula</i> sp	+			
72700	<i>Anopheles</i> sp	+			
74501	<i>Ceratopogonidae</i>	+			
77120	<i>Ablabesmyia mallochi</i>	12 +			
77750	<i>Hayesomyia senata</i> or <i>Thienemannimyia norena</i>	12			
78655	<i>Procladius (Holotanypus) sp</i>	+			
80370	<i>Corynoneura lobata</i>	80			
81825	<i>Rheocricotopus (Psilocricotopus) robacki</i>	61 +			
82101	<i>Thienemanniella taurocapita</i>	31			
82121	<i>Thienemanniella lobapodema</i>	8			
82141	<i>Thienemanniella xena</i>	8			
82730	<i>Chironomus (C.) decorus</i> group	+			
82820	<i>Cryptochironomus</i> sp	+			
82885	<i>Cryptotendipes pseudotener</i>	+			
83002	<i>Dicrotendipes modestus</i>	+			
83040	<i>Dicrotendipes neomodestus</i>	585 +			

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: Blacklick Creek

Collection Date: 09/11/2012 River Code: 02-130 RM: 2.40

behind Ohio EPA Groveport Field Office

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01320	<i>Hydra sp</i>	2	84155	<i>Paralauterborniella nigrohalteralis</i>	25
01801	<i>Turbellaria</i>	+	84450	<i>Polypedilum (Uresipedilum) flavum</i>	76 +
03040	<i>Fredericella sp</i>	+	84470	<i>Polypedilum (P.) illinoense</i>	482 +
03360	<i>Plumatella sp</i>	1	84540	<i>Polypedilum (Tripodura) scalaenum group</i>	+
03451	<i>Urnatella gracilis</i>	+	84790	<i>Tribelos fuscicorne</i>	51
03600	<i>Oligochaeta</i>	528 +	85500	<i>Paratanytarsus sp</i>	51
04664	<i>Helobdella stagnalis</i>	+	85625	<i>Rheotanytarsus sp</i>	51 +
04666	<i>Helobdella papillata</i>	17 +	85800	<i>Tanytarsus sp</i>	76
04968	<i>Erpobdella tetragon</i>	+	85821	<i>Tanytarsus glabrescens group sp 7</i>	76 +
06700	<i>Crangonyx sp</i>	+	85840	<i>Tanytarsus sepp</i>	51 +
08601	<i>Hydrachnidia</i>	8	94400	<i>Fossaria sp</i>	+
11130	<i>Baetis intercalaris</i>	+	95100	<i>Physella sp</i>	49 +
13521	<i>Stenonema femoratum</i>	2 +	96120	<i>Menetus (Micromenetus) dilatatus</i>	2
16700	<i>Tricorythodes sp</i>	34 +	96900	<i>Ferrissia sp</i>	182 +
17200	<i>Caenis sp</i>	70 +	97601	<i>Corbicula fluminea</i>	25 +
22300	<i>Argia sp</i>	77 +			
44501	<i>Corixidae</i>	+	No. Quantitative Taxa: 39		Total Taxa: 59
50315	<i>Chimarra obscura</i>	+	No. Qualitative Taxa: 41		ICI: 26
51206	<i>Cyrnellus fraternus</i>	129	Number of Organisms: 3413		Qual EPT: 10
51300	<i>Neureclipsis sp</i>	5 +			
52200	<i>Cheumatopsyche sp</i>	32 +			
52430	<i>Ceratopsyche morosa group</i>	+			
52530	<i>Hydropsyche depravata group</i>	+			
54160	<i>Ochrotrichia sp</i>	+			
65800	<i>Berosus sp</i>	2			
67500	<i>Laccobius sp</i>	+			
68075	<i>Psephenus herricki</i>	+			
68601	<i>Ancyronyx variegata</i>	5 +			
68700	<i>Dubiraphia sp</i>	+			
68901	<i>Macronychus glabratus</i>	2 +			
69400	<i>Stenelmis sp</i>	1 +			
77120	<i>Ablabesmyia mallochi</i>	+			
77130	<i>Ablabesmyia rhamphe group</i>	51 +			
77750	<i>Hayesomyia senata or Thienemannimyia norena</i>	330 +			
78450	<i>Nilotanypus fimbriatus</i>	25			
78655	<i>Procladius (Holotanypus) sp</i>	+			
80370	<i>Corynoneura lobata</i>	8			
81825	<i>Rheocricotopus (Psilocricotopus) robacki</i>	25			
82141	<i>Thienemanniella xena</i>	25			
82820	<i>Cryptochironomus sp</i>	+			
82885	<i>Cryptotendipes pseudotener</i>	25			
83040	<i>Dicrotendipes neomodestus</i>	228			
83051	<i>Dicrotendipes simpsoni</i>	102			
83300	<i>Glyptotendipes (G.) sp</i>	482			

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: Powderlick Run
dst. Day Lay #1

Collection Date: 08/07/2012 River Code: 02-144 RM: 2.60

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01801	<i>Turbellaria</i>	+			
03360	<i>Plumatella sp</i>	+			
03600	<i>Oligochaeta</i>	+			
04935	<i>Erpobdella punctata punctata</i>	+			
11200	<i>Callibaetis sp</i>	+			
22001	<i>Coenagrionidae</i>	+			
28208	<i>Erythemis simplicicollis</i>	+			
28500	<i>Libellula sp</i>	+			
45900	<i>Notonecta sp</i>	+			
60900	<i>Peltodytes sp</i>	+			
65800	<i>Berosus sp</i>	+			
66500	<i>Enochrus sp</i>	+			
67700	<i>Paracymus sp</i>	+			
67800	<i>Tropisternus sp</i>	+			
71900	<i>Tipula sp</i>	+			
72700	<i>Anopheles sp</i>	+			
78200	<i>Larsia sp</i>	+			
78702	<i>Psectrotanypus dyari</i>	+			
83051	<i>Dicrotendipes simpsoni</i>	+			
86200	<i>Tabanus sp</i>	+			
98200	<i>Pisidium sp</i>	+			

No. Quantitative Taxa: 0	Total Taxa: 21
No. Qualitative Taxa: 21	ICI:
Number of Organisms: 0	Qual EPT: 1

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: Powderlick Run

Collection Date: 08/12/2012 River Code: 02-144 RM: 2.15

Powder Lick Rd. (3rd crossing)

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01801	<i>Turbellaria</i>	+			
03360	<i>Plumatella sp</i>	+			
03600	<i>Oligochaeta</i>	+			
04666	<i>Helobdella papillata</i>	+			
11200	<i>Callibaetis sp</i>	+			
22001	<i>Coenagrionidae</i>	+			
23600	<i>Aeshna sp</i>	+			
28208	<i>Erythemis simplicicollis</i>	+			
28500	<i>Libellula sp</i>	+			
42700	<i>Belostoma sp</i>	+			
45300	<i>Sigara sp</i>	+			
60900	<i>Peltodytes sp</i>	+			
67000	<i>Helophorus sp</i>	+			
67700	<i>Paracymus sp</i>	+			
72700	<i>Anopheles sp</i>	+			
74501	<i>Ceratopogonidae</i>	+			
78200	<i>Larsia sp</i>	+			
82730	<i>Chironomus (C.) decorus group</i>	+			
83002	<i>Dicrotendipes modestus</i>	+			
84000	<i>Parachironomus sp</i>	+			
87200	<i>Odontomyia (O.) sp or Hedriodiscus sp</i>	+			
95100	<i>Physella sp</i>	+			
95907	<i>Gyraulus (Torquis) parvus</i>	+			
96264	<i>Planorbella (Pierosoma) pilsbryi</i>	+			
98200	<i>Pisidium sp</i>	+			

No. Quantitative Taxa: 0	Total Taxa: 25
No. Qualitative Taxa: 25	ICI:
Number of Organisms: 0	Qual EPT: 1

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: Powderlick Run

Collection Date: 08/07/2012 River Code: 02-144 RM: 1.60

Powder Lick Rd. (2nd crossing upst. mouth)

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01801	<i>Turbellaria</i>	+			
22001	<i>Coenagrionidae</i>	+			
22300	<i>Argia sp</i>	+			
23704	<i>Anax junius</i>	+			
28500	<i>Libellula sp</i>	+			
28705	<i>Pachydiplax longipennis</i>	+			
60900	<i>Peltodytes sp</i>	+			
63400	<i>Hydrovatus sp</i>	+			
65800	<i>Berosus sp</i>	+			
66500	<i>Enochrus sp</i>	+			
67800	<i>Tropisternus sp</i>	+			
72900	<i>Culex sp</i>	+			
78200	<i>Larsia sp</i>	+			
82730	<i>Chironomus (C.) decorus group</i>	+			
96264	<i>Planorbella (Pierosoma) pilsbryi</i>	+			

No. Quantitative Taxa: 0

Total Taxa: 15

No. Qualitative Taxa: 15

ICI:

Number of Organisms: 0

Qual EPT: 0

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: Powderlick Run
dst Powder Lick Rd.

Collection Date: 08/08/2012 River Code: 02-144 RM: 1.20

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01801	<i>Turbellaria</i>	+			
03600	<i>Oligochaeta</i>	+			
04664	<i>Helobdella stagnalis</i>	+			
04666	<i>Helobdella papillata</i>	+			
04935	<i>Erpobdella punctata punctata</i>	+			
04964	<i>Erpobdella microstoma</i>	+			
08601	<i>Hydrachnidia</i>	+			
11200	<i>Callibaetis sp</i>	+			
17200	<i>Caenis sp</i>	+			
22001	<i>Coenagrionidae</i>	+			
28208	<i>Erythemis simplicicollis</i>	+			
28500	<i>Libellula sp</i>	+			
28955	<i>Plathemis lydia</i>	+			
60900	<i>Peltodytes sp</i>	+			
65800	<i>Berosus sp</i>	+			
66500	<i>Enochrus sp</i>	+			
74501	<i>Ceratopogonidae</i>	+			
77355	<i>Clinotanypus pinguis</i>	+			
78200	<i>Larsia sp</i>	+			
82800	<i>Cladopelma sp</i>	+			
95100	<i>Physella sp</i>	+			
96002	<i>Helisoma anceps anceps</i>	+			

No. Quantitative Taxa: 0	Total Taxa: 22
No. Qualitative Taxa: 22	ICI:
Number of Organisms: 0	Qual EPT: 2

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: Big Darby Creek

Collection Date: 08/31/2012 River Code: 02-200 RM: 83.20

private residence, headwaters

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
03600	<i>Oligochaeta</i>	+	85625	<i>Rheotanytarsus sp</i>	+
07800	<i>Cambarus sp</i>	+	85711	<i>Stempellinella leptocelloides</i>	+
08250	<i>Orconectes (Procericambarus) rusticus</i>	+	85800	<i>Tanytarsus sp</i>	+
08601	<i>Hydrachnidia</i>	+	86100	<i>Chrysops sp</i>	+
11120	<i>Baetis flavistriga</i>	+	86401	<i>Atherix lantha</i>	+
11245	<i>Centroptilum sp</i>	+	87501	<i>Empididae</i>	+
11430	<i>Diphetor hageni</i>	+	95100	<i>Physella sp</i>	+
13400	<i>Stenacron sp</i>	+	96002	<i>Helisoma anceps anceps</i>	+
13521	<i>Stenonema femoratum</i>	+	96900	<i>Ferrissia sp</i>	+
13590	<i>Maccaffertium vicarium</i>	+			
14950	<i>Leptophlebia sp or Paraleptophlebia sp</i>	+	No. Quantitative Taxa: 0		Total Taxa: 53
16200	<i>Eurylophella sp</i>	+	No. Qualitative Taxa: 53		ICI:
17200	<i>Caenis sp</i>	+	Number of Organisms: 0		Qual EPT: 15
21200	<i>Calopteryx sp</i>	+			
23909	<i>Boyeria vinosa</i>	+			
45900	<i>Notonecta sp</i>	+			
47600	<i>Sialis sp</i>	+			
50301	<i>Chimarra aterrima</i>	+			
51400	<i>Nyctiophylax sp</i>	+			
51600	<i>Polycentropus sp</i>	+			
52200	<i>Cheumatopsyche sp</i>	+			
52530	<i>Hydropsyche depravata group</i>	+			
55300	<i>Ptilostomis sp</i>	+			
60900	<i>Peltodytes sp</i>	+			
63300	<i>Hydroporini</i>	+			
66200	<i>Cymbiodyta sp</i>	+			
68025	<i>Ectopria sp</i>	+			
69400	<i>Stenelmis sp</i>	+			
71100	<i>Hexatoma sp</i>	+			
71300	<i>Limonia sp</i>	+			
72340	<i>Dixella sp</i>	+			
77120	<i>Ablabesmyia mallochi</i>	+			
77500	<i>Conchapelopia sp</i>	+			
77800	<i>Helopelopia sp</i>	+			
79400	<i>Zavreliomyia sp</i>	+			
81530	<i>Orthocladius (Symposiocladius) lignicola</i>	+			
82730	<i>Chironomus (C.) decorus group</i>	+			
82885	<i>Cryptotendipes pseudotener</i>	+			
83840	<i>Microtendipes pedellus group</i>	+			
84210	<i>Paratendipes albimanus or P. duplicatus</i>	+			
84450	<i>Polypedilum (Uresipedilum) flavum</i>	+			
84480	<i>Polypedilum (P.) laetum group</i>	+			
84750	<i>Stictochironomus sp</i>	+			
85500	<i>Paratanytarsus sp</i>	+			

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: Big Darby Creek
upst. Co. Rd. 152

Collection Date: 08/14/2012 River Code: 02-200 RM: 82.70

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01801	<i>Turbellaria</i>	+			
03600	<i>Oligochaeta</i>	+			
07875	<i>Cambarus (Tubericambarus) polychromatus</i>	+			
08250	<i>Orconectes (Procericambarus) rusticus</i>	+			
11018	<i>Acerpenna macdunnoughi</i>	+			
11120	<i>Baetis flavistriga</i>	+			
11250	<i>Centroptilum sp (w/o hindwing pads)</i>	+			
11430	<i>Dipheter hageni</i>	+			
11645	<i>Procloeon sp</i>	+			
13400	<i>Stenacron sp</i>	+			
13521	<i>Stenonema femoratum</i>	+			
13590	<i>Maccaffertium vicarium</i>	+			
14950	<i>Leptophlebia sp or Paraleptophlebia sp</i>	+			
17200	<i>Caenis sp</i>	+			
21200	<i>Calopteryx sp</i>	+			
22001	<i>Coenagrionidae</i>	+			
22300	<i>Argia sp</i>	+			
23909	<i>Boyeria vinosa</i>	+			
24900	<i>Gomphus sp</i>	+			
52200	<i>Cheumatopsyche sp</i>	+			
52530	<i>Hydropsyche depravata group</i>	+			
57900	<i>Pycnopsyche sp</i>	+			
58505	<i>Helicopsyche borealis</i>	+			
68130	<i>Helichus sp</i>	+			
68708	<i>Dubiraphia vittata group</i>	+			
69225	<i>Optioservus fastiditus</i>	+			
69400	<i>Stenelmis sp</i>	+			
74501	<i>Ceratopogonidae</i>	+			
79400	<i>Zavrelimyia sp</i>	+			
82820	<i>Cryptochironomus sp</i>	+			
83840	<i>Microtendipes pedellus group</i>	+			
84210	<i>Paratendipes albimanus or P. duplicatus</i>	+			
84480	<i>Polypedilum (P.) laetum group</i>	+			
86100	<i>Chrysops sp</i>	+			
95100	<i>Physella sp</i>	+			
96900	<i>Ferrissia sp</i>	+			

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

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: Big Darby Creek

Collection Date: 08/15/2012 River Code: 02-200 RM: 81.60

dst. from old bridge on Showe property

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
03600	<i>Oligochaeta</i>	+	86200	<i>Tabanus sp</i>	+
04666	<i>Helobdella papillata</i>	+	95100	<i>Physella sp</i>	+
04960	<i>Erpobdella sp</i> (= <i>Mooreobdella</i>)	+	96002	<i>Helisoma anceps anceps</i>	+
08250	<i>Orconectes (Procericambarus) rusticus</i>	+	98600	<i>Sphaerium sp</i>	+
08601	<i>Hydrachnidia</i>	+			
11120	<i>Baetis flavistriga</i>	+	No. Quantitative Taxa: 0		Total Taxa: 48
11130	<i>Baetis intercalaris</i>	+	No. Qualitative Taxa: 48		ICI:
11200	<i>Callibaetis sp</i>	+	Number of Organisms: 0		Qual EPT: 14
11245	<i>Centroptilum sp</i>	+			
11650	<i>Proclonia sp</i> (w/ hindwing pads)	+			
13400	<i>Stenacron sp</i>	+			
13521	<i>Stenonema femoratum</i>	+			
13590	<i>Maccaffertium vicarium</i>	+			
17200	<i>Caenis sp</i>	+			
22001	<i>Coenagrionidae</i>	+			
22300	<i>Argia sp</i>	+			
23704	<i>Anax junius</i>	+			
24900	<i>Gomphus sp</i>	+			
27500	<i>Somatochlora sp</i>	+			
52200	<i>Cheumatopsyche sp</i>	+			
52530	<i>Hydropsyche depravata group</i>	+			
53800	<i>Hydroptila sp</i>	+			
57900	<i>Pycnopsyche sp</i>	+			
58505	<i>Helicopsyche borealis</i>	+			
60900	<i>Peltodytes sp</i>	+			
63900	<i>Laccophilus sp</i>	+			
65800	<i>Berosus sp</i>	+			
67800	<i>Tropisternus sp</i>	+			
69225	<i>Optioservus fastiditus</i>	+			
69400	<i>Stenelmis sp</i>	+			
72700	<i>Anopheles sp</i>	+			
74501	<i>Ceratopogonidae</i>	+			
77355	<i>Clinotanypus pinguis</i>	+			
77800	<i>Helopelopia sp</i>	+			
78655	<i>Procladius (Holotanypus) sp</i>	+			
79400	<i>Zavrelimyia sp</i>	+			
80420	<i>Cricotopus (C.) bicinctus</i>	+			
82820	<i>Cryptochironomus sp</i>	+			
83040	<i>Dicrotendipes neomodestus</i>	+			
83820	<i>Microtendipes "caelum" (sensu Simpson & Bode, 1980)</i>	+			
83840	<i>Microtendipes pedellus group</i>	+			
84450	<i>Polypedilum (Uresipedilum) flavum</i>	+			
84520	<i>Polypedilum (Tripodura) halterale group</i>	+			
84750	<i>Stictochironomus sp</i>	+			

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: Big Darby Creek

Collection Date: 08/16/2012 River Code: 02-200 RM: 80.90

upst. St. Rt. 287

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01801	<i>Turbellaria</i>	+	72700	<i>Anopheles sp</i>	+
03600	<i>Oligochaeta</i>	+	74100	<i>Simulium sp</i>	+
04666	<i>Helobdella papillata</i>	+	77355	<i>Clinotanypus pinguis</i>	+
04964	<i>Erpobdella microstoma</i>	+	77500	<i>Conchapelopia sp</i>	+
06201	<i>Hyaella azteca</i>	+	77800	<i>Helopelopia sp</i>	+
08250	<i>Orconectes (Procericambarus) rusticus</i>	+	80420	<i>Cricotopus (C.) bicinctus</i>	+
08601	<i>Hydrachnidia</i>	+	82820	<i>Cryptochironomus sp</i>	+
11020	<i>Acerpenna pygmaea</i>	+	83820	<i>Microtendipes "caelum" (sensu Simpson & Bode, 1980)</i>	+
11120	<i>Baetis flavistriga</i>	+	84450	<i>Polypedilum (Uresipedilum) flavum</i>	+
11130	<i>Baetis intercalaris</i>	+	84470	<i>Polypedilum (P.) illinoense</i>	+
11200	<i>Callibaetis sp</i>	+	84490	<i>Polypedilum (Cerobregma) ontario</i>	+
11245	<i>Centroptilum sp</i>	+	85615	<i>Rheotanytarsus pellucidus</i>	+
13400	<i>Stenacron sp</i>	+	86100	<i>Chrysops sp</i>	+
13521	<i>Stenonema femoratum</i>	+	86200	<i>Tabanus sp</i>	+
15000	<i>Paraleptophlebia sp</i>	+	93900	<i>Elimia sp</i>	+
17200	<i>Caenis sp</i>	+	96002	<i>Helisoma anceps anceps</i>	+
21200	<i>Calopteryx sp</i>	+	98600	<i>Sphaerium sp</i>	+
22001	<i>Coenagrionidae</i>	+			
22300	<i>Argia sp</i>	+			
23700	<i>Anax sp</i>	+	No. Quantitative Taxa: 0		Total Taxa: 61
23909	<i>Boyeria vinosa</i>	+	No. Qualitative Taxa: 61		ICI:
24900	<i>Gomphus sp</i>	+	Number of Organisms: 0		Qual EPT: 19
28500	<i>Libellula sp</i>	+			
42700	<i>Belostoma sp</i>	+			
47600	<i>Sialis sp</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>	+			
53800	<i>Hydroptila sp</i>	+			
54300	<i>Oxyethira sp</i>	+			
57900	<i>Pycnopsyche sp</i>	+			
58505	<i>Helicopsyche borealis</i>	+			
59700	<i>Triaenodes sp</i>	+			
60800	<i>Haliphus sp</i>	+			
60900	<i>Peltodytes sp</i>	+			
63900	<i>Laccophilus sp</i>	+			
65800	<i>Berosus sp</i>	+			
67800	<i>Tropisternus sp</i>	+			
68075	<i>Psephenus herricki</i>	+			
69225	<i>Optioservus fastiditus</i>	+			
69400	<i>Stenelmis sp</i>	+			
71900	<i>Tipula sp</i>	+			

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: Big Darby Creek

Collection Date: 08/17/2012 River Code: 02-200 RM: 80.75

St. Rt. 287

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01801	<i>Turbellaria</i>	+	68708	<i>Dubiraphia vittata group</i>	+
03600	<i>Oligochaeta</i>	+	68901	<i>Macronychus glabratus</i>	+
04666	<i>Helobdella papillata</i>	+	69225	<i>Optioservus fastiditus</i>	+
04964	<i>Erpobdella microstoma</i>	+	69400	<i>Stenelmis sp</i>	+
06201	<i>Hyalella azteca</i>	+	72700	<i>Anopheles sp</i>	+
08250	<i>Orconectes (Procericambarus) rusticus</i>	+	74100	<i>Simulium sp</i>	+
08601	<i>Hydrachnidia</i>	+	77120	<i>Ablabesmyia mallochi</i>	+
11020	<i>Acerpenna pygmaea</i>	+	77800	<i>Helopelopia sp</i>	+
11120	<i>Baetis flavistriga</i>	+	78655	<i>Procladius (Holotanypus) sp</i>	+
11130	<i>Baetis intercalaris</i>	+	82885	<i>Cryptotendipes pseudotener</i>	+
11200	<i>Callibaetis sp</i>	+	83820	<i>Microtendipes "caelum" (sensu Simpson & Bode, 1980)</i>	+
12200	<i>Isonychia sp</i>	+	84450	<i>Polypedilum (Uresipedilum) flavum</i>	+
13400	<i>Stenacron sp</i>	+	84700	<i>Stenochironomus sp</i>	+
13521	<i>Stenonema femoratum</i>	+	84750	<i>Stictochironomus sp</i>	+
13590	<i>Maccaffertium vicarium</i>	+	85615	<i>Rheotanytarsus pellucidus</i>	+
14700	<i>Habrophlebiodes sp</i>	+	85800	<i>Tanytarsus sp</i>	+
14950	<i>Leptophlebia sp or Paraleptophlebia sp</i>	+	86100	<i>Chrysops sp</i>	+
17200	<i>Caenis sp</i>	+	93900	<i>Elimia sp</i>	+
21200	<i>Calopteryx sp</i>	+	96002	<i>Helisoma anceps anceps</i>	+
22001	<i>Coenagrionidae</i>	+	98600	<i>Sphaerium sp</i>	+
22300	<i>Argia sp</i>	+			
23700	<i>Anax sp</i>	+			
23804	<i>Basiaeschna janata</i>	+	No. Quantitative Taxa: 0		Total Taxa: 64
23909	<i>Boyeria vinosa</i>	+	No. Qualitative Taxa: 64		ICI:
24900	<i>Gomphus sp</i>	+	Number of Organisms: 0		Qual EPT: 20
28500	<i>Libellula sp</i>	+			
42700	<i>Belostoma sp</i>	+			
45100	<i>Palmacorixa sp</i>	+			
45300	<i>Sigara sp</i>	+			
47600	<i>Sialis sp</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>	+			
52530	<i>Hydropsyche depravata group</i>	+			
57900	<i>Pycnopsyche sp</i>	+			
58505	<i>Helicopsyche borealis</i>	+			
59300	<i>Mystacides sp</i>	+			
60900	<i>Peltodytes sp</i>	+			
63300	<i>Hydroporini</i>	+			
67800	<i>Tropisternus sp</i>	+			
68025	<i>Ectopria sp</i>	+			
68130	<i>Helichus sp</i>	+			

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: Big Darby Creek

Collection Date: 09/24/2008 River Code: 02-200 RM: 81.90

near north border of Showe property

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
03600	<i>Oligochaeta</i>	+	85821	<i>Tanytarsus glabrescens group sp 7</i>	2
06201	<i>Hyalella azteca</i>	2 +	86100	<i>Chrysops sp</i>	+
08250	<i>Orconectes (Procericambarus) rusticus</i>	+	95100	<i>Physella sp</i>	1 +
11200	<i>Callibaetis sp</i>	1 +	96900	<i>Ferrissia sp</i>	1
11250	<i>Centropilum sp (w/o hindwing pads)</i>	1 +	98600	<i>Sphaerium sp</i>	+
13400	<i>Stenacron sp</i>	+			
13521	<i>Stenonema femoratum</i>	2 +	No. Quantitative Taxa: 21		Total Taxa: 49
13590	<i>Maccaffertium vicarium</i>	+	No. Qualitative Taxa: 39		ICI: 22
14950	<i>Leptophlebia sp or Paraleptophlebia sp</i>	+	Number of Organisms: 145		Qual EPT: 9
17200	<i>Caenis sp</i>	+			
21200	<i>Calopteryx sp</i>	+			
22001	<i>Coenagrionidae</i>	+			
45400	<i>Trichocorixa sp</i>	+			
52200	<i>Cheumatopsyche sp</i>	+			
58505	<i>Helicopsyche borealis</i>	+			
63300	<i>Hydropsorini</i>	+			
67700	<i>Paracymus sp</i>	+			
67800	<i>Tropisternus sp</i>	+			
68130	<i>Helichus sp</i>	+			
68700	<i>Dubiraphia sp</i>	1 +			
69400	<i>Stenelmis sp</i>	+			
71100	<i>Hexatoma sp</i>	+			
71900	<i>Tipula sp</i>	+			
72340	<i>Dixella sp</i>	+			
72700	<i>Anopheles sp</i>	+			
77120	<i>Ablabesmyia mallochi</i>	7 +			
77500	<i>Conchapelopia sp</i>	4			
78500	<i>Paramerina fragilis</i>	+			
81650	<i>Parametriocnemus sp</i>	+			
82730	<i>Chironomus (C.) decorus group</i>	6			
83040	<i>Dicrotendipes neomodestus</i>	28			
83840	<i>Microtendipes pedellus group</i>	32 +			
83900	<i>Nilothauma sp</i>	2			
84210	<i>Paratendipes albimanus or P. duplicatus</i>	17 +			
84300	<i>Phaenopsectra obediens group</i>	4			
84315	<i>Phaenopsectra flavipes</i>	2 +			
84440	<i>Polypedilum (Uresipedilum) aviceps</i>	+			
84460	<i>Polypedilum (P.) fallax group</i>	11			
84470	<i>Polypedilum (P.) illinoense</i>	+			
84750	<i>Stictochironomus sp</i>	2			
85500	<i>Paratanytarsus sp</i>	6 +			
85625	<i>Rheotanytarsus sp</i>	+			
85720	<i>Stempellinella fimbriata</i>	+			
85800	<i>Tanytarsus sp</i>	13			

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: Big Darby Creek

Collection Date: 09/24/2008 River Code: 02-200 RM: 81.40

old farm bridge, 0.3 mi. upst. St. Rt. 287

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01320	<i>Hydra sp</i>	8	96002	<i>Helisoma anceps anceps</i>	+
03600	<i>Oligochaeta</i>	68	96900	<i>Ferrissia sp</i>	9 +
04686	<i>Placobdella papillifera</i>	+	98600	<i>Sphaerium sp</i>	+
06201	<i>Hyalella azteca</i>	1 +			
08250	<i>Orconectes (Procericambarus) rusticus</i>	+	No. Quantitative Taxa: 32		Total Taxa: 47
08601	<i>Hydrachnidia</i>	4	No. Qualitative Taxa: 28		ICI: 36
11200	<i>Callibaetis sp</i>	15 +	Number of Organisms: 1144		Qual EPT: 8
11250	<i>Centroptilum sp (w/o hindwing pads)</i>	14 +			
13400	<i>Stenacron sp</i>	+			
13521	<i>Stenonema femoratum</i>	5 +			
13590	<i>Maccaffertium vicarium</i>	2			
14950	<i>Leptophlebia sp or Paraleptophlebia sp</i>	+			
17200	<i>Caenis sp</i>	316 +			
18700	<i>Hexagenia sp</i>	+			
22001	<i>Coenagrionidae</i>	+			
22300	<i>Argia sp</i>	+			
23909	<i>Boyeria vinosa</i>	1 +			
24501	<i>Gomphidae</i>	+			
52530	<i>Hydropsyche depravata group</i>	+			
68130	<i>Helichus sp</i>	1			
68707	<i>Dubiraphia quadrinotata</i>	+			
69200	<i>Optioservus sp</i>	13			
69400	<i>Stenelmis sp</i>	13 +			
72700	<i>Anopheles sp</i>	1 +			
77120	<i>Ablabesmyia mallochi</i>	8			
77500	<i>Conchapelopia sp</i>	15			
78500	<i>Paramerina fragilis</i>	8 +			
78655	<i>Procladius (Holotanypus) sp</i>	+			
79400	<i>Zavrelimyia sp</i>	8			
81632	<i>Parakiefferiella n.sp 2</i>	31			
82730	<i>Chironomus (C.) decorus group</i>	38 +			
82820	<i>Cryptochironomus sp</i>	+			
83040	<i>Dicrotendipes neomodestus</i>	31			
83300	<i>Glyptotendipes (G.) sp</i>	15			
83840	<i>Microtendipes pedellus group</i>	145 +			
84210	<i>Paratendipes albimanus or P. duplicatus</i>	77			
84315	<i>Phaenopsectra flavipes</i>	+			
84460	<i>Polypedilum (P.) fallax group</i>	8			
84750	<i>Stictochironomus sp</i>	8 +			
85500	<i>Paratanytarsus sp</i>	15			
85720	<i>Stempellinella fimbriata</i>	8			
85800	<i>Tanytarsus sp</i>	107			
85821	<i>Tanytarsus glabrescens group sp 7</i>	127			
95100	<i>Physella sp</i>	24			

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: Big Darby Creek

Collection Date: 09/24/2008 River Code: 02-200 RM: 81.10

old farm bridge, 0.3 mi. upst. St. Rt. 287

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01320	<i>Hydra sp</i>	36	84750	<i>Stictochironomus sp</i>	6 +
03600	<i>Oligochaeta</i>	12 +	85500	<i>Paratanytarsus sp</i>	19 +
06201	<i>Hyalella azteca</i>	1 +	85800	<i>Tanytarsus sp</i>	13 +
11001	<i>Baetidae</i>	1 +	85821	<i>Tanytarsus glabrescens group sp 7</i>	32
13400	<i>Stenacron sp</i>	8 +	93900	<i>Elimia sp</i>	+
13521	<i>Stenonema femoratum</i>	5 +	95100	<i>Physella sp</i>	22
13590	<i>Maccaffertium vicarium</i>	+	96900	<i>Ferrissia sp</i>	87 +
14950	<i>Leptophlebia sp or Paraleptophlebia sp</i>	1 +	98600	<i>Sphaerium sp</i>	+
17200	<i>Caenis sp</i>	14 +			
21200	<i>Calopteryx sp</i>	+	No. Quantitative Taxa: 25		Total Taxa: 52
22300	<i>Argia sp</i>	+	No. Qualitative Taxa: 44		ICI: 20
23909	<i>Boyeria vinosa</i>	+	Number of Organisms: 751		Qual EPT: 9
51206	<i>Cyrnellus fraternus</i>	+			
52200	<i>Cheumatopsyche sp</i>	+			
58505	<i>Helicopsyche borealis</i>	+			
68130	<i>Helichus sp</i>	+			
68708	<i>Dubiraphia vittata group</i>	1 +			
68901	<i>Macronychus glabratus</i>	2			
69210	<i>Optioservus ampliatus</i>	+			
69400	<i>Stenelmis sp</i>	8 +			
71100	<i>Hexatoma sp</i>	+			
71900	<i>Tipula sp</i>	+			
72340	<i>Dixella sp</i>	+			
72700	<i>Anopheles sp</i>	+			
77120	<i>Ablabesmyia mallochi</i>	6 +			
77500	<i>Conchapelopia sp</i>	19			
78200	<i>Larsia sp</i>	+			
78350	<i>Meropelopia sp</i>	+			
78500	<i>Paramerina fragilis</i>	+			
78655	<i>Procladius (Holotanypus) sp</i>	+			
79400	<i>Zavreliomyia sp</i>	+			
81231	<i>Nanocladius (N.) crassicornus or N. (N.) "rectinervis"</i>	+			
81632	<i>Parakiefferiella n.sp 2</i>	+			
81650	<i>Parametriocnemus sp</i>	+			
81825	<i>Rheocricotopus (Psilocricotopus) robacki</i>	+			
82730	<i>Chironomus (C.) decorus group</i>	38 +			
83002	<i>Dicrotendipes modestus</i>	+			
83040	<i>Dicrotendipes neomodestus</i>	26 +			
83300	<i>Glyptotendipes (G.) sp</i>	6			
83840	<i>Microtendipes pedellus group</i>	325			
84210	<i>Paratendipes albimanus or P. duplicatus</i>	57 +			
84440	<i>Polypedilum (Uresipedilum) aviceps</i>	+			
84450	<i>Polypedilum (Uresipedilum) flavum</i>	+			
84460	<i>Polypedilum (P.) fallax group</i>	6			

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: Big Darby Creek
St. Rt. 287

Collection Date: 09/24/2008 River Code: 02-200 RM: 80.80

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01320	<i>Hydra sp</i>	41	78200	<i>Larsia sp</i>	26
01801	<i>Turbellaria</i>	2 +	78350	<i>Meropelopia sp</i>	+
03600	<i>Oligochaeta</i>	17 +	79400	<i>Zavrelimyia sp</i>	+
04686	<i>Placobdella papillifera</i>	1	80204	<i>Brillia flavifrons group</i>	26
06201	<i>Hyaella azteca</i>	+	80351	<i>Corynoneura caudicula</i>	8 +
08250	<i>Orconectes (Procericambarus) rusticus</i>	+	80370	<i>Corynoneura lobata</i>	24
11120	<i>Baetis flavistriga</i>	10 +	80420	<i>Cricotopus (C.) bicinctus</i>	26 +
11130	<i>Baetis intercalaris</i>	+	81650	<i>Parametriocnemus sp</i>	26 +
11250	<i>Centropilum sp (w/o hindwing pads)</i>	+	81690	<i>Paratrichocladius sp</i>	26
11430	<i>Diphetor hageni</i>	+	81825	<i>Rheocricotopus (Psilocricotopus) robacki</i>	+
13400	<i>Stenacron sp</i>	70	82121	<i>Thienemanniella lobapodema</i>	40 +
13521	<i>Stenonema femoratum</i>	4	82200	<i>Tvetenia bavarica group</i>	+
13590	<i>Maccaffertium vicarium</i>	8 +	82220	<i>Tvetenia discoloripes group</i>	26
14950	<i>Leptophlebia sp or Paraleptophlebia sp</i>	31 +	82730	<i>Chironomus (C.) decorus group</i>	+
15501	<i>Ephemerellidae</i>	2 +	82820	<i>Cryptochironomus sp</i>	+
17200	<i>Caenis sp</i>	51 +	83840	<i>Microtendipes pedellus group</i>	732 +
21200	<i>Calopteryx sp</i>	3 +	84210	<i>Paratendipes albimanus or P. duplicatus</i>	78 +
22001	<i>Coenagrionidae</i>	+	84300	<i>Phaenopsectra obediens group</i>	26
22300	<i>Argia sp</i>	9 +	84315	<i>Phaenopsectra flavipes</i>	+
23909	<i>Boyeria vinosa</i>	1 +	84440	<i>Polypedilum (Uresipedilum) aviceps</i>	+
42700	<i>Belostoma sp</i>	+	84460	<i>Polypedilum (P.) fallax group</i>	26 +
44501	<i>Corixidae</i>	+	84470	<i>Polypedilum (P.) illinoense</i>	+
50301	<i>Chimarra aterrima</i>	+	84475	<i>Polypedilum (P.) ophioides</i>	+
51600	<i>Polycentropus sp</i>	9	84700	<i>Stenochironomus sp</i>	+
52200	<i>Cheumatopsyche sp</i>	9 +	84750	<i>Stictochironomus sp</i>	+
52430	<i>Ceratopsyche morosa group</i>	+	85500	<i>Paratanytarsus sp</i>	340 +
52530	<i>Hydropsyche depravata group</i>	+	85501	<i>Paratanytarsus longistilus</i>	261
56001	<i>Limnephilidae</i>	8	85625	<i>Rheotanytarsus sp</i>	209 +
63300	<i>Hydroporini</i>	+	85800	<i>Tanytarsus sp</i>	131 +
67700	<i>Paracymus sp</i>	+	85821	<i>Tanytarsus glabrescens group sp 7</i>	183 +
68130	<i>Helichus sp</i>	1 +	86100	<i>Chrysops sp</i>	3
68700	<i>Dubiraphia sp</i>	2	93900	<i>Elimia sp</i>	2 +
68901	<i>Macronychus glabratus</i>	+	94400	<i>Fossaria sp</i>	8
69225	<i>Optioservus fastiditus</i>	+	95100	<i>Physella sp</i>	50 +
69400	<i>Stenelmis sp</i>	1 +	96900	<i>Ferrissia sp</i>	11
70700	<i>Dicranota sp</i>	+	98600	<i>Sphaerium sp</i>	1 +
71100	<i>Hexatoma sp</i>	+			
71900	<i>Tipula sp</i>	2 +	No. Quantitative Taxa: 47		Total Taxa: 80
72700	<i>Anopheles sp</i>	+	No. Qualitative Taxa: 63		ICI: 50
74100	<i>Simulium sp</i>	1 +	Number of Organisms: 2886		Qual EPT: 12
77120	<i>Ablabesmyia mallochi</i>	+			
77500	<i>Conchapelopia sp</i>	314 +			
77750	<i>Hayesomyia senata or Thienemannimyia norena</i>	+			
77800	<i>Helopelopia sp</i>	+			

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: Rose Run
dst. U.S. Rt. 62

Collection Date: 07/25/2012 River Code: 02-252 RM: 1.90

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
00556	<i>Ephydatia fluviatilis</i>	+			
01801	<i>Turbellaria</i>	+			
03600	<i>Oligochaeta</i>	+			
04664	<i>Helobdella stagnalis</i>	+			
04935	<i>Erpobdella punctata punctata</i>	+			
04960	<i>Erpobdella sp (= Mooreobdella)</i>	+			
06700	<i>Crangonyx sp</i>	+			
08250	<i>Orconectes (Procericambarus) rusticus</i>	+			
13400	<i>Stenacron sp</i>	+			
22001	<i>Coenagrionidae</i>	+			
22300	<i>Argia sp</i>	+			
59300	<i>Mystacides sp</i>	+			
60900	<i>Peltodytes sp</i>	+			
67700	<i>Paracymus sp</i>	+			
68708	<i>Dubiraphia vittata group</i>	+			
69400	<i>Stenelmis sp</i>	+			
71900	<i>Tipula sp</i>	+			
71910	<i>Tipula abdominalis</i>	+			
78140	<i>Labrundinia pilosella</i>	+			
78350	<i>Meropelopia sp</i>	+			
78655	<i>Procladius (Holotanypus) sp</i>	+			
79400	<i>Zavreliomyia sp</i>	+			
80350	<i>Corynoneura sp</i>	+			
84210	<i>Paratendipes albimanus or P. duplicatus</i>	+			
93900	<i>Elimia sp</i>	+			

No. Quantitative Taxa: 0	Total Taxa: 25
No. Qualitative Taxa: 25	ICI:
Number of Organisms: 0	Qual EPT: 2

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: Rose Run
Fodor Rd.

Collection Date: 07/25/2012 River Code: 02-252 RM: 1.70

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01801	<i>Turbellaria</i>	+			
03600	<i>Oligochaeta</i>	+			
04664	<i>Helobdella stagnalis</i>	+			
04935	<i>Erpobdella punctata punctata</i>	+			
04960	<i>Erpobdella sp (= Mooreobdella)</i>	+			
08250	<i>Orconectes (Procericambarus) rusticus</i>	+			
11120	<i>Baetis flavistriga</i>	+			
13400	<i>Stenacron sp</i>	+			
13521	<i>Stenonema femoratum</i>	+			
21200	<i>Calopteryx sp</i>	+			
22001	<i>Coenagrionidae</i>	+			
22300	<i>Argia sp</i>	+			
28001	<i>Libellulidae</i>	+			
51600	<i>Polycentropus sp</i>	+			
52200	<i>Cheumatopsyche sp</i>	+			
52530	<i>Hydropsyche depravata group</i>	+			
68025	<i>Ectopria sp</i>	+			
68075	<i>Psephenus herricki</i>	+			
68707	<i>Dubiraphia quadrinotata</i>	+			
68708	<i>Dubiraphia vittata group</i>	+			
69400	<i>Stenelmis sp</i>	+			
71900	<i>Tipula sp</i>	+			
77800	<i>Helopelopia sp</i>	+			
78655	<i>Procladius (Holotanypus) sp</i>	+			
80430	<i>Cricotopus (C.) tremulus group</i>	+			
81650	<i>Parametriocnemus sp</i>	+			
82820	<i>Cryptochironomus sp</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>	+			
84470	<i>Polypedilum (P.) illinoense</i>	+			
84520	<i>Polypedilum (Tripodura) halterale group</i>	+			
84750	<i>Stictochironomus sp</i>	+			
85800	<i>Tanytarsus sp</i>	+			
93900	<i>Elimia sp</i>	+			
95100	<i>Physella 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: 6

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: Rose Run

Collection Date: 07/25/2012 River Code: 02-252 RM: 0.50

Harlem Rd.

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01801	<i>Turbellaria</i>	+			
03600	<i>Oligochaeta</i>	+			
04664	<i>Helobdella stagnalis</i>	+			
04666	<i>Helobdella papillata</i>	+			
04901	<i>Erpobdellidae</i>	+			
08250	<i>Orconectes (Procericambarus) rusticus</i>	+			
11120	<i>Baetis flavistriga</i>	+			
11130	<i>Baetis intercalaris</i>	+			
13521	<i>Stenonema femoratum</i>	+			
21200	<i>Calopteryx sp</i>	+			
22001	<i>Coenagrionidae</i>	+			
22300	<i>Argia sp</i>	+			
23909	<i>Boyeria vinosa</i>	+			
52200	<i>Cheumatopsyche sp</i>	+			
52530	<i>Hydropsyche depravata group</i>	+			
53800	<i>Hydroptila sp</i>	+			
59300	<i>Mystacides sp</i>	+			
59970	<i>Petrophila sp</i>	+			
60900	<i>Peltodytes sp</i>	+			
68075	<i>Psephenus herricki</i>	+			
69400	<i>Stenelmis sp</i>	+			
71900	<i>Tipula sp</i>	+			
74100	<i>Simulium sp</i>	+			
74501	<i>Ceratopogonidae</i>	+			
74673	<i>Atrichopogon websteri</i>	+			
77500	<i>Conchapelopia sp</i>	+			
77800	<i>Helopelopia sp</i>	+			
80410	<i>Cricotopus (C.) sp</i>	+			
83003	<i>Dicrotendipes fumidus</i>	+			
83840	<i>Microtendipes pedellus group</i>	+			
84210	<i>Paratendipes albimanus</i> or <i>P. duplicatus</i>	+			
84315	<i>Phaenopsectra flavipes</i>	+			
84470	<i>Polypedilum (P.) illinoense</i>	+			
84750	<i>Stictochironomus sp</i>	+			
85500	<i>Paratanytarsus sp</i>	+			
85615	<i>Rheotanytarsus pellucidus</i>	+			
85625	<i>Rheotanytarsus sp</i>	+			
85800	<i>Tanytarsus sp</i>	+			
85802	<i>Tanytarsus n. sp nr. curticornis</i>	+			
93900	<i>Elimia sp</i>	+			
95100	<i>Physella sp</i>	+			
96002	<i>Helisoma anceps anceps</i>	+			
96900	<i>Ferrissia sp</i>	+			
98600	<i>Sphaerium sp</i>	+			

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Collection Date: 07/25/2012 River Code: 02-397 RM: 0.80

Site: Trib. to Rocky Fork (RM 5.40)
upst. U.S. Rt. 62/Harlem Rd.

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01801	<i>Turbellaria</i>	+			
03600	<i>Oligochaeta</i>	+			
04664	<i>Helobdella stagnalis</i>	+			
04935	<i>Erpobdella punctata punctata</i>	+			
04960	<i>Erpobdella sp</i> (= <i>Mooreobdella</i>)	+			
08255	<i>Orconectes rusticus x sanbornii</i>	+			
22001	<i>Coenagrionidae</i>	+			
22300	<i>Argia sp</i>	+			
52200	<i>Cheumatopsyche sp</i>	+			
52530	<i>Hydropsyche depravata group</i>	+			
68708	<i>Dubiraphia vittata group</i>	+			
69400	<i>Stenelmis sp</i>	+			
78655	<i>Procladius (Holotanypus) sp</i>	+			
84210	<i>Paratendipes albimanus</i> or <i>P. duplicatus</i>	+			
84540	<i>Polypedilum (Tripodura) scalaenum group</i>	+			
98600	<i>Sphaerium sp</i>	+			

No. Quantitative Taxa: 0	Total Taxa: 16
No. Qualitative Taxa: 16	ICI:
Number of Organisms: 0	Qual EPT: 2

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: Trib. to Rocky Fork (RM 5.40)
 U.S. Rt. 62/Harlem Rd.

Collection Date: 07/26/2012 River Code: 02-397 RM: 0.70

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01801	<i>Turbellaria</i>	+			
03600	<i>Oligochaeta</i>	+			
06700	<i>Crangonyx sp</i>	+			
08255	<i>Orconectes rusticus x sanbornii</i>	+			
21200	<i>Calopteryx sp</i>	+			
22001	<i>Coenagrionidae</i>	+			
22300	<i>Argia sp</i>	+			
60900	<i>Peltodytes sp</i>	+			
63300	<i>Hydroporini</i>	+			
67800	<i>Tropisternus sp</i>	+			
68707	<i>Dubiraphia quadrinotata</i>	+			
69400	<i>Stenelmis sp</i>	+			
74501	<i>Ceratopogonidae</i>	+			
78350	<i>Meropelopia sp</i>	+			
84210	<i>Paratendipes albimanus</i> or <i>P. duplicatus</i>	+			
84450	<i>Polypedilum (Uresipedilum) flavum</i>	+			
85625	<i>Rheotanytarsus sp</i>	+			
93900	<i>Elimia sp</i>	+			
96264	<i>Planorbella (Pierosoma) pilsbryi</i>	+			

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

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: Trib. to Rocky Fork (RM 5.40)
upst. U.S. Rt. 62/Harlem Rd.

Collection Date: 08/13/2009 River Code: 02-397 RM: 0.80

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01801	<i>Turbellaria</i>	+			
03600	<i>Oligochaeta</i>	+			
04664	<i>Helobdella stagnalis</i>	+			
04666	<i>Helobdella papillata</i>	+			
04960	<i>Erpobdella sp (= Mooreobdella)</i>	+			
06700	<i>Crangonyx sp</i>	+			
07800	<i>Cambarus sp</i>	+			
22001	<i>Coenagrionidae</i>	+			
23600	<i>Aeshna sp</i>	+			
23700	<i>Anax sp</i>	+			
52200	<i>Cheumatopsyche sp</i>	+			
53501	<i>Hydroptilidae</i>	+			
60900	<i>Peltodytes sp</i>	+			
68707	<i>Dubiraphia quadrinotata</i>	+			
68708	<i>Dubiraphia vittata group</i>	+			
69400	<i>Stenelmis sp</i>	+			
71300	<i>Limonia sp</i>	+			
71900	<i>Tipula sp</i>	+			
74100	<i>Simulium sp</i>	+			
82820	<i>Cryptochironomus sp</i>	+			
82880	<i>Cryptotendipes sp</i>	+			
83002	<i>Dicrotendipes modestus</i>	+			
83040	<i>Dicrotendipes neomodestus</i>	+			
84210	<i>Paratendipes albimanus</i> or <i>P. duplicatus</i>	+			
84315	<i>Phaenopsectra flavipes</i>	+			
84450	<i>Polypedilum (Uresipedilum) flavum</i>	+			
84470	<i>Polypedilum (P.) illinoense</i>	+			
85500	<i>Paratanytarsus sp</i>	+			
85625	<i>Rheotanytarsus sp</i>	+			
93200	<i>Hydrobiidae</i>	+			
96002	<i>Helisoma anceps anceps</i>	+			
98200	<i>Pisidium sp</i>	+			
98600	<i>Sphaerium sp</i>	+			

No. Quantitative Taxa: 0	Total Taxa: 33
No. Qualitative Taxa: 33	ICI:
Number of Organisms: 0	Qual EPT: 2

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: Trib. to Rocky Fork (RM 5.40)
U.S. Rt. 62/Harlem Rd.

Collection Date: 08/13/2009 River Code: 02-397 RM: 0.70

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01801	<i>Turbellaria</i>	+			
03360	<i>Plumatella</i> sp	+			
03600	<i>Oligochaeta</i>	+			
04960	<i>Erpobdella</i> sp (= <i>Mooreobdella</i>)	+			
07820	<i>Cambarus</i> (<i>Cambarus</i>) sp A	+			
22001	<i>Coenagrionidae</i>	+			
23600	<i>Aeshna</i> sp	+			
52200	<i>Cheumatopsyche</i> sp	+			
53800	<i>Hydroptila</i> sp	+			
60900	<i>Peltodytes</i> sp	+			
68707	<i>Dubiraphia quadrinotata</i>	+			
68708	<i>Dubiraphia vittata</i> group	+			
71300	<i>Limonia</i> sp	+			
71900	<i>Tipula</i> sp	+			
74100	<i>Simulium</i> sp	+			
74501	<i>Ceratopogonidae</i>	+			
77500	<i>Conchapelopia</i> sp	+			
80420	<i>Cricotopus</i> (C.) <i>bicinctus</i>	+			
83002	<i>Dicrotendipes modestus</i>	+			
83040	<i>Dicrotendipes neomodestus</i>	+			
84210	<i>Paratendipes albimanus</i> or <i>P. duplicatus</i>	+			
84450	<i>Polypedilum</i> (<i>Uresipedilum</i>) <i>flavum</i>	+			
84470	<i>Polypedilum</i> (P.) <i>illinoense</i>	+			
85625	<i>Rheotanytarsus</i> sp	+			
85821	<i>Tanytarsus glabrescens</i> group sp 7	+			
86501	<i>Stratiomyidae</i>	+			
93900	<i>Elimia</i> sp	+			
95100	<i>Physella</i> sp	+			
96100	<i>Menetus</i> (<i>Micromenetus</i>) sp	+			

No. Quantitative Taxa: 0	Total Taxa: 29
No. Qualitative Taxa: 29	ICI:
Number of Organisms: 0	Qual EPT: 2

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Collection Date: 07/23/2012 River Code: 02-485 RM: 1.40

Site: Waterman Ditch
upst. Kenny Rd.

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01801	<i>Turbellaria</i>	+			
03600	<i>Oligochaeta</i>	+			
13521	<i>Stenonema femoratum</i>	+			
21604	<i>Archilestes grandis</i>	+			
22001	<i>Coenagrionidae</i>	+			
22300	<i>Argia sp</i>	+			
60900	<i>Peltodytes sp</i>	+			
65700	<i>Anacaena sp</i>	+			
66200	<i>Cymbiodyta sp</i>	+			
67700	<i>Paracymus sp</i>	+			
78350	<i>Meropelopia sp</i>	+			
80420	<i>Cricotopus (C.) bicinctus</i>	+			
84210	<i>Paratendipes albimanus</i> or <i>P. duplicatus</i>	+			
87400	<i>Stratiomys sp</i>	+			
87540	<i>Hemerodromia sp</i>	+			
94400	<i>Fossaria sp</i>	+			
96120	<i>Menetus (Micromenetus) dilatatus</i>	+			

No. Quantitative Taxa: 0	Total Taxa: 17
No. Qualitative Taxa: 17	ICI:
Number of Organisms: 0	Qual EPT: 1

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Collection Date: 07/23/2012 River Code: 02-485 RM: 1.30

Site: Waterman Ditch
dst. Kenny Rd.

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01801	<i>Turbellaria</i>	+			
03600	<i>Oligochaeta</i>	+			
22001	<i>Coenagrionidae</i>	+			
22300	<i>Argia sp</i>	+			
96120	<i>Menetus (Micromenetus) dilatatus</i>	+			

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

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Collection Date: 06/23/2010 River Code: 02-485 RM: 1.40

Site: Waterman Ditch
upst. Kenny Rd.

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01801	<i>Turbellaria</i>	+			
03360	<i>Plumatella sp</i>	+			
03600	<i>Oligochaeta</i>	+			
07800	<i>Cambarus sp</i>	+			
17200	<i>Caenis sp</i>	+			
21604	<i>Archilestes grandis</i>	+			
22001	<i>Coenagrionidae</i>	+			
23600	<i>Aeshna sp</i>	+			
61400	<i>Agabus sp</i>	+			
63300	<i>Hydroporini</i>	+			
66200	<i>Cymbiodyta sp</i>	+			
72700	<i>Anopheles sp</i>	+			
74100	<i>Simulium sp</i>	+			
77250	<i>Alotanypus venustus</i>	+			
77500	<i>Conchapelopia sp</i>	+			
80370	<i>Corynoneura lobata</i>	+			
80420	<i>Cricotopus (C.) bicinctus</i>	+			
80510	<i>Cricotopus (Isocladius) sylvestris group</i>	+			
84470	<i>Polypedilum (P.) illinoense</i>	+			
85625	<i>Rheotanytarsus sp</i>	+			
85800	<i>Tanytarsus sp</i>	+			
85821	<i>Tanytarsus glabrescens group sp 7</i>	+			
95100	<i>Physella sp</i>	+			
96264	<i>Planorbella (Pierosoma) pilsbryi</i>	+			

No. Quantitative Taxa: 0	Total Taxa: 24
No. Qualitative Taxa: 24	ICI:
Number of Organisms: 0	Qual EPT: 1

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Collection Date: 06/23/2010 River Code: 02-485 RM: 1.30

Site: Waterman Ditch
dst. Kenny Rd.

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01801	<i>Turbellaria</i>	+			
03600	<i>Oligochaeta</i>	+			
07820	<i>Cambarus (Cambarus) sp A</i>	+			
21604	<i>Archilestes grandis</i>	+			
23600	<i>Aeshna sp</i>	+			
45300	<i>Sigara sp</i>	+			
61400	<i>Agabus sp</i>	+			
63300	<i>Hydroporini</i>	+			
66200	<i>Cymbiodyta sp</i>	+			
77250	<i>Alotanypus venustus</i>	+			
78401	<i>Natarsia species A (sensu Roback, 1978)</i>	+			
82730	<i>Chironomus (C.) decorus group</i>	+			
84210	<i>Paratendipes albimanus or P. duplicatus</i>	+			
84315	<i>Phaenopsectra flavipes</i>	+			
84470	<i>Polypedilum (P.) illinoense</i>	+			
85800	<i>Tanytarsus sp</i>	+			
85821	<i>Tanytarsus glabrescens group sp 7</i>	+			
95100	<i>Physella sp</i>	+			
98200	<i>Pisidium sp</i>	+			

No. Quantitative Taxa: 0 Total Taxa: 19

No. Qualitative Taxa: 19 ICI:

Number of Organisms: 0 Qual EPT: 0

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: Salt Lick Creek

Collection Date: 08/27/2012 River Code: 02-610 RM: 23.70

upst. Harding St. in Eddie Jones Park

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01320	<i>Hydra sp</i>	2			
01801	<i>Turbellaria</i>	544 +			
03600	<i>Oligochaeta</i>	408 +			
06201	<i>Hyalella azteca</i>	1 +			
22001	<i>Coenagrionidae</i>	18 +			
22300	<i>Argia sp</i>	9			
27500	<i>Somatochlora sp</i>	+			
28705	<i>Pachydiplax longipennis</i>	8			
45100	<i>Palmacorixa sp</i>	+			
45900	<i>Notonecta sp</i>	+			
60900	<i>Peltodytes sp</i>	+			
65800	<i>Berosus sp</i>	1			
68700	<i>Dubiraphia sp</i>	1			
69400	<i>Stenelmis sp</i>	1			
74501	<i>Ceratopogonidae</i>	+			
77750	<i>Hayesomyia senata</i> or <i>Thienemannimyia norena</i>	16			
78655	<i>Procladius (Holotanypus) sp</i>	+			
79020	<i>Tanypus neopunctipennis</i>	+			
82730	<i>Chironomus (C.) decorus</i> group	16			
82800	<i>Cladopelma sp</i>	+			
82820	<i>Cryptochironomus sp</i>	+			
83002	<i>Dicrotendipes modestus</i>	81			
83040	<i>Dicrotendipes neomodestus</i>	207			
83050	<i>Dicrotendipes lucifer</i>	16			
83051	<i>Dicrotendipes simpsoni</i>	652			
83300	<i>Glyptotendipes (G.) sp</i>	48			
84520	<i>Polypedilum (Tripodura) halterale</i> group	+			
84790	<i>Tribelos fuscicorne</i>	398			
85800	<i>Tanytarsus sp</i>	16			
85821	<i>Tanytarsus glabrescens</i> group sp 7	16			
86200	<i>Tabanus sp</i>	+			
96120	<i>Menetus (Micromenetus) dilatatus</i>	1			
97601	<i>Corbicula fluminea</i>	2			

No. Quantitative Taxa: 22 Total Taxa: 33

No. Qualitative Taxa: 15 ICI: 6

Number of Organisms: 2462 Qual EPT: 0

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: Swan Creek

Collection Date: 08/28/2012 River Code: 04-003 RM: 27.10

Wilkins Rd.

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01320	<i>Hydra sp</i>	80	83051	<i>Dicrotendipes simpsoni</i>	7
01801	<i>Turbellaria</i>	78	83300	<i>Glyptotendipes (G.) sp</i>	65 +
03121	<i>Paludicella articulata</i>	+	83820	<i>Microtendipes "caelum" (sensu Simpson & Bode, 1980)</i>	+
03360	<i>Plumatella sp</i>	1	83840	<i>Microtendipes pedellus group</i>	150
03451	<i>Urnatella gracilis</i>	4	84020	<i>Parachironomus carinatus</i>	+
03600	<i>Oligochaeta</i>	54 +	84210	<i>Paratendipes albimanus or P. duplicatus</i>	33
04964	<i>Erpobdella microstoma</i>	+	84450	<i>Polypedilum (Uresipedilum) flavum</i>	26 +
05900	<i>Lirceus sp</i>	65 +	84460	<i>Polypedilum (P.) fallax group</i>	33
06201	<i>Hyaella azteca</i>	+	84540	<i>Polypedilum (Tripodura) scalaenum group</i>	104
06700	<i>Crangonyx sp</i>	5 +	84790	<i>Tribelos fuscicorne</i>	7
08250	<i>Orconectes (Procericambarus) rusticus</i>	+	84800	<i>Tribelos jucundum</i>	+
08601	<i>Hydrachnidia</i>	4	85230	<i>Cladotanytarsus mancus group</i>	+
11130	<i>Baetis intercalaris</i>	+	85264	<i>Cladotanytarsus vanderwulpi group sp 4</i>	7
11650	<i>Procloeon sp (w/ hindwing pads)</i>	+	85625	<i>Rheotanytarsus sp</i>	20 +
11651	<i>Procloeon sp (w/o hindwing pads)</i>	+	85821	<i>Tanytarsus glabrescens group sp 7</i>	26
11670	<i>Procloeon viridoculare</i>	+	85840	<i>Tanytarsus sepp</i>	39
13400	<i>Stenacron sp</i>	92 +	86900	<i>Myxosargus sp</i>	+
18700	<i>Hexagenia sp</i>	+	95100	<i>Physella sp</i>	+
21200	<i>Calopteryx sp</i>	+	98200	<i>Pisidium sp</i>	5
22001	<i>Coenagrionidae</i>	+	98600	<i>Sphaerium sp</i>	4
22300	<i>Argia sp</i>	47 +	99100	<i>Pyganodon grandis</i>	+
24107	<i>Nasiaeschna pentacantha</i>	+	99240	<i>Lasmigona complanata</i>	+
24900	<i>Gomphus sp</i>	+			
43300	<i>Ranatra sp</i>	+			
45400	<i>Trichocorixa sp</i>	+	No. Quantitative Taxa: 34		Total Taxa: 66
45900	<i>Notonecta sp</i>	+	No. Qualitative Taxa: 47		ICI: 26
52200	<i>Cheumatopsyche sp</i>	184 +	Number of Organisms: 1466		Qual EPT: 8
59300	<i>Mystacides sp</i>	+			
60400	<i>Gyrinus sp</i>	+			
63300	<i>Hydroporini</i>	+			
68601	<i>Ancyronyx variegata</i>	+			
68708	<i>Dubiraphia vittata group</i>	1 +			
68901	<i>Macronychus glabratus</i>	136 +			
69400	<i>Stenelmis sp</i>	18			
72700	<i>Anopheles sp</i>	+			
77750	<i>Hayesomyia senata or Thienemannimyia norena</i>	59 +			
77800	<i>Helopelopia sp</i>	39			
78655	<i>Procladius (Holotanypus) sp</i>	+			
80370	<i>Corynoneura lobata</i>	20			
80420	<i>Cricotopus (C.) bicinctus</i>	+			
82141	<i>Thienemanniella xena</i>	+			
82730	<i>Chironomus (C.) decorus group</i>	7 +			
82820	<i>Cryptochironomus sp</i>	7 +			
83040	<i>Dicrotendipes neomodestus</i>	39 +			

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: Swan Creek

Collection Date: 08/28/2012 River Code: 04-003 RM: 25.60

dst. St. Rt. 295, S of Obee Rd.

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01320	<i>Hydra sp</i>	1	83840	<i>Microtendipes pedellus group</i>	21
01801	<i>Turbellaria</i>	5	84210	<i>Paratendipes albimanus</i> or <i>P. duplicatus</i>	+
03600	<i>Oligochaeta</i>	9 +	84450	<i>Polypedilum (Uresipedilum) flavum</i>	58 +
04964	<i>Erpobdella microstoma</i>	+	84460	<i>Polypedilum (P.) fallax group</i>	10 +
05900	<i>Lirceus sp</i>	1 +	84470	<i>Polypedilum (P.) illinoense</i>	+
06700	<i>Crangonyx sp</i>	2 +	84540	<i>Polypedilum (Tripodura) scalaenum group</i>	3
08250	<i>Orconectes (Procericambarus) rusticus</i>	+	84700	<i>Stenochironomus sp</i>	+
11130	<i>Baetis intercalaris</i>	+	84750	<i>Stictochironomus sp</i>	+
11650	<i>Procloeon sp (w/ hindwing pads)</i>	+	85500	<i>Paratanytarsus sp</i>	2
13400	<i>Stenacron sp</i>	164 +	85625	<i>Rheotanytarsus sp</i>	8 +
17200	<i>Caenis sp</i>	2	85800	<i>Tanytarsus sp</i>	+
21200	<i>Calopteryx sp</i>	+	85821	<i>Tanytarsus glabrescens group sp 7</i>	2
22001	<i>Coenagrionidae</i>	+	85840	<i>Tanytarsus sepp</i>	7 +
22300	<i>Argia sp</i>	7 +	86100	<i>Chrysops sp</i>	+
24900	<i>Gomphus sp</i>	+	89501	<i>Ephydriidae</i>	+
45100	<i>Palmacorixa sp</i>	+	93900	<i>Elimia sp</i>	20 +
45400	<i>Trichocorixa sp</i>	+	95100	<i>Physella sp</i>	+
50315	<i>Chimarra obscura</i>	1	96900	<i>Ferrissia sp</i>	3
52200	<i>Cheumatopsyche sp</i>	105 +	98600	<i>Sphaerium sp</i>	+
60900	<i>Peltodytes sp</i>	+	99100	<i>Pyganodon grandis</i>	+
61100	<i>Acilius sp</i>	+	99240	<i>Lasmigona complanata</i>	+
67500	<i>Laccobius sp</i>	+	99680	<i>Leptodea fragilis</i>	+
68708	<i>Dubiraphia vittata group</i>	1 +	99860	<i>Lampsilis radiata luteola</i>	+
68901	<i>Macronychus glabratus</i>	12 +			
69400	<i>Stenelmis sp</i>	2	No. Quantitative Taxa: 32		Total Taxa: 66
71900	<i>Tipula sp</i>	+	No. Qualitative Taxa: 50		ICI: 36
71910	<i>Tipula abdominalis</i>	+	Number of Organisms: 469		Qual EPT: 4
72160	<i>Psychoda sp</i>	+			
77750	<i>Hayesomyia senata</i> or <i>Thienemannimyia norena</i>	7			
77800	<i>Helopelopia sp</i>	2			
78450	<i>Nilotanytus fimbriatus</i>	2			
78655	<i>Procladius (Holotanytus) sp</i>	+			
80370	<i>Corynoneura lobata</i>	1			
80420	<i>Cricotopus (C.) bicinctus</i>	+			
81231	<i>Nanocladius (N.) crassicornus</i> or <i>N. (N.) "rectinervis"</i>	2			
81631	<i>Parakiefferiella n.sp 1</i>	+			
82141	<i>Thienemanniella xena</i>	1 +			
82730	<i>Chironomus (C.) decorus group</i>	+			
82820	<i>Cryptochironomus sp</i>	+			
82885	<i>Cryptotendipes pseudotener</i>	+			
83040	<i>Dicrotendipes neomodestus</i>	3 +			
83051	<i>Dicrotendipes simpsoni</i>	2			
83300	<i>Glyptotendipes (G.) sp</i>	3 +			

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: Swan Creek
Spencer Rd.

Collection Date: 09/27/2012 River Code: 04-003 RM: 24.70

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
00401	<i>Spongillidae</i>	+	85800	<i>Tanytarsus sp</i>	61 +
01320	<i>Hydra sp</i>	26	85821	<i>Tanytarsus glabrescens group sp 7</i>	61
01801	<i>Turbellaria</i>	45	85840	<i>Tanytarsus sepp</i>	+
03040	<i>Fredericella sp</i>	1	86100	<i>Chrysops sp</i>	+
03600	<i>Oligochaeta</i>	432 +	93900	<i>Elimia sp</i>	8 +
05900	<i>Lirceus sp</i>	20 +	95100	<i>Physella sp</i>	11 +
06201	<i>Hyalella azteca</i>	+	96900	<i>Ferrissia sp</i>	4
06700	<i>Crangonyx sp</i>	2 +	98600	<i>Sphaerium sp</i>	+
11130	<i>Baetis intercalaris</i>	+	99100	<i>Pyganodon grandis</i>	+
13400	<i>Stenacron sp</i>	55 +	99240	<i>Lasmigona complanata</i>	+
21200	<i>Calopteryx sp</i>	3			
22300	<i>Argia sp</i>	76 +	No. Quantitative Taxa: 33		Total Taxa: 54
43570	<i>Neoplea sp</i>	+	No. Qualitative Taxa: 37		ICI: 18
45400	<i>Trichocorixa sp</i>	+	Number of Organisms: 3782		Qual EPT: 2
53800	<i>Hydroptila sp</i>	2			
68601	<i>Ancyronyx variegata</i>	2 +			
68708	<i>Dubiraphia vittata group</i>	6 +			
68901	<i>Macronychus glabratus</i>	116 +			
72700	<i>Anopheles sp</i>	+			
74501	<i>Ceratopogonidae</i>	+			
74650	<i>Atrichopogon sp</i>	1			
77120	<i>Ablabesmyia mallochi</i>	31			
77750	<i>Hayesomyia senata or Thienemannimyia norena</i>	31			
77800	<i>Helopelopia sp</i>	61			
78655	<i>Procladius (Holtanypus) sp</i>	+			
80370	<i>Corynoneura lobata</i>	40			
80410	<i>Cricotopus (C.) sp</i>	61			
81631	<i>Parakiefferiella n.sp 1</i>	671 +			
82730	<i>Chironomus (C.) decorus group</i>	+			
82820	<i>Cryptochironomus sp</i>	+			
83040	<i>Dicrotendipes neomodestus</i>	336			
83051	<i>Dicrotendipes simpsoni</i>	31			
83300	<i>Glyptotendipes (G.) sp</i>	275 +			
83840	<i>Microtendipes pedellus group</i>	915 +			
84210	<i>Paratendipes albimanus or P. duplicatus</i>	61 +			
84450	<i>Polypedilum (Uresipedilum) flavum</i>	31			
84460	<i>Polypedilum (P.) fallax group</i>	+			
84470	<i>Polypedilum (P.) illinoense</i>	+			
84520	<i>Polypedilum (Tripodura) halterale group</i>	+			
84540	<i>Polypedilum (Tripodura) scalaenum group</i>	+			
84700	<i>Stenochironomus sp</i>	+			
84790	<i>Tribelos fuscicorne</i>	92			
84800	<i>Tribelos jucundum</i>	214 +			
85500	<i>Paratanytarsus sp</i>	+			

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Collection Date: 07/27/2012 River Code: 09-575 RM: 5.70

Site: West Branch Raccoon Creek
Ilesboro-Cedar Falls Rd.

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
07820	<i>Cambarus (Cambarus) sp A</i>	+			
13521	<i>Stenonema femoratum</i>	+			
21200	<i>Calopteryx sp</i>	+			
23600	<i>Aeshna sp</i>	+			
24900	<i>Gomphus sp</i>	+			
27500	<i>Somatochlora sp</i>	+			
47600	<i>Sialis sp</i>	+			
63300	<i>Hydroporini</i>	+			
78655	<i>Procladius (Holotanypus) sp</i>	+			
82730	<i>Chironomus (C.) decorus group</i>	+			
84800	<i>Tribelos jucundum</i>	+			

No. Quantitative Taxa: 0	Total Taxa: 11
No. Qualitative Taxa: 11	ICI:
Number of Organisms: 0	Qual EPT: 1

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: West Branch Raccoon Creek
 St. Rt. 93

Collection Date: 07/27/2012 River Code: 09-575 RM: 4.10

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
08260	<i>Orconectes (Crockerinus) sanbornii sanbornii</i>	+			
11245	<i>Centroptilum sp</i>	+			
11645	<i>Proclonon sp</i>	+			
13521	<i>Stenonema femoratum</i>	+			
15501	<i>Ephemerellidae</i>	+			
17200	<i>Caenis sp</i>	+			
21200	<i>Calopteryx sp</i>	+			
23909	<i>Boyeria vinosa</i>	+			
24900	<i>Gomphus sp</i>	+			
27500	<i>Somatochlora sp</i>	+			
45300	<i>Sigara sp</i>	+			
47600	<i>Sialis sp</i>	+			
48620	<i>Nigronia serricornis</i>	+			
52200	<i>Cheumatopsyche sp</i>	+			
52315	<i>Diplectrona modesta</i>	+			
55107	<i>Oligostomis pardalis</i>	+			
57900	<i>Pycnopsyche sp</i>	+			
68130	<i>Helichus sp</i>	+			
71700	<i>Pilaria sp</i>	+			
71900	<i>Tipula sp</i>	+			
72340	<i>Dixella sp</i>	+			
72700	<i>Anopheles sp</i>	+			
74501	<i>Ceratopogonidae</i>	+			
77120	<i>Ablabesmyia mallochii</i>	+			
79400	<i>Zavrelimyia sp</i>	+			
82730	<i>Chironomus (C.) decorus group</i>	+			
83158	<i>Endochironomus nigricans</i>	+			
84470	<i>Polypedilum (P.) illinoense</i>	+			
84700	<i>Stenochironomus sp</i>	+			
84800	<i>Tribelos jucundum</i>	+			

No. Quantitative Taxa: 0	Total Taxa: 30
No. Qualitative Taxa: 30	ICI:
Number of Organisms: 0	Qual EPT: 9

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: West Branch Raccoon Creek
 North Fairview Rd.

Collection Date: 07/27/2012 River Code: 09-575 RM: 3.00

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
07820	<i>Cambarus (Cambarus) sp A</i>	+			
08260	<i>Orconectes (Crockerinus) sanbornii sanbornii</i>	+			
11250	<i>Centroptilum sp (w/o hindwing pads)</i>	+			
13400	<i>Stenacron sp</i>	+			
13521	<i>Stenonema femoratum</i>	+			
21200	<i>Calopteryx sp</i>	+			
22001	<i>Coenagrionidae</i>	+			
23600	<i>Aeshna sp</i>	+			
24900	<i>Gomphus sp</i>	+			
27400	<i>Neurocordulia sp</i>	+			
27500	<i>Somatochlora sp</i>	+			
47600	<i>Sialis sp</i>	+			
52200	<i>Cheumatopsyche sp</i>	+			
52530	<i>Hydropsyche depravata group</i>	+			
55107	<i>Oligostomis pardalis</i>	+			
55300	<i>Ptilostomis sp</i>	+			
57900	<i>Pycnopsyche sp</i>	+			
68130	<i>Helichus sp</i>	+			
71100	<i>Hexatoma sp</i>	+			
74501	<i>Ceratopogonidae</i>	+			
77120	<i>Ablabesmyia mallochi</i>	+			
79400	<i>Zavreliomyia sp</i>	+			
82730	<i>Chironomus (C.) decorus group</i>	+			
84300	<i>Phaenopsectra obediens group</i>	+			
84800	<i>Tribelos jucundum</i>	+			

No. Quantitative Taxa: 0	Total Taxa: 25
No. Qualitative Taxa: 25	ICI:
Number of Organisms: 0	Qual EPT: 8

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: West Branch Raccoon Creek
 Ilesboro-Cedar Falls Rd.

Collection Date: 09/29/2010 River Code: 09-575 RM: 5.70

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01320	<i>Hydra sp</i>	+			
08200	<i>Orconectes sp</i>	+			
11001	<i>Baetidae</i>	+			
13400	<i>Stenacron sp</i>	+			
13521	<i>Stenonema femoratum</i>	+			
14950	<i>Leptophlebia sp or Paraleptophlebia sp</i>	+			
17200	<i>Caenis sp</i>	+			
18600	<i>Ephemera sp</i>	+			
27500	<i>Somatochlora sp</i>	+			
47600	<i>Sialis sp</i>	+			
63300	<i>Hydroporini</i>	+			
68201	<i>Scirtidae</i>	+			
68708	<i>Dubiraphia vittata group</i>	+			
71900	<i>Tipula sp</i>	+			
72340	<i>Dixella sp</i>	+			
72900	<i>Culex sp</i>	+			
77120	<i>Ablabesmyia mallochi</i>	+			
82730	<i>Chironomus (C.) decorus group</i>	+			
83003	<i>Dicrotendipes fumidus</i>	+			
83840	<i>Microtendipes pedellus group</i>	+			
84800	<i>Tribelos jucundum</i>	+			
85500	<i>Paratanytarsus sp</i>	+			
85800	<i>Tanytarsus sp</i>	+			
85821	<i>Tanytarsus glabrescens group sp 7</i>	+			
96900	<i>Ferrissia sp</i>	+			

No. Quantitative Taxa: 0	Total Taxa: 25
No. Qualitative Taxa: 25	ICI:
Number of Organisms: 0	Qual EPT: 6

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: West Branch Raccoon Creek
 St. Rt. 93

Collection Date: 09/29/2010 River Code: 09-575 RM: 4.10

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
03600	<i>Oligochaeta</i>	+			
07800	<i>Cambarus sp</i>	+			
11250	<i>Centroptilum sp (w/o hindwing pads)</i>	+			
13521	<i>Stenonema femoratum</i>	+			
14950	<i>Leptophlebia sp or Paraleptophlebia sp</i>	+			
17200	<i>Caenis sp</i>	+			
21200	<i>Calopteryx sp</i>	+			
22001	<i>Coenagrionidae</i>	+			
22300	<i>Argia sp</i>	+			
23600	<i>Aeshna sp</i>	+			
24501	<i>Gomphidae</i>	+			
27500	<i>Somatochlora sp</i>	+			
52500	<i>Hydropsyche sp</i>	+			
67700	<i>Paracymus sp</i>	+			
72340	<i>Dixella sp</i>	+			
72700	<i>Anopheles sp</i>	+			
77120	<i>Ablabesmyia mallochi</i>	+			
77500	<i>Conchapelopia sp</i>	+			
78200	<i>Larsia sp</i>	+			
83003	<i>Dicrotendipes fumidus</i>	+			
84470	<i>Polypedilum (P.) illinoense</i>	+			
85821	<i>Tanytarsus glabrescens group sp 7</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: West Branch Raccoon Creek
North Fairview Rd.

Collection Date: 09/29/2010 River Code: 09-575 RM: 3.00

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
08200	<i>Orconectes sp</i>	+			
11250	<i>Centroptilum sp (w/o hindwing pads)</i>	+			
13521	<i>Stenonema femoratum</i>	+			
21200	<i>Calopteryx sp</i>	+			
22001	<i>Coenagrionidae</i>	+			
22300	<i>Argia sp</i>	+			
23600	<i>Aeshna sp</i>	+			
24501	<i>Gomphidae</i>	+			
27500	<i>Somatochlora sp</i>	+			
42700	<i>Belostoma sp</i>	+			
47600	<i>Sialis sp</i>	+			
63300	<i>Hydroporini</i>	+			
66500	<i>Enochrus sp</i>	+			
68130	<i>Helichus sp</i>	+			
72340	<i>Dixella sp</i>	+			
72700	<i>Anopheles sp</i>	+			
72900	<i>Culex sp</i>	+			
74501	<i>Ceratopogonidae</i>	+			
77120	<i>Ablabesmyia mallochi</i>	+			
81700	<i>Psectrocladius sp</i>	+			
82820	<i>Cryptochironomus sp</i>	+			
84800	<i>Tribelos jucundum</i>	+			

No. Quantitative Taxa: 0	Total Taxa: 22
No. Qualitative Taxa: 22	ICI:
Number of Organisms: 0	Qual EPT: 2

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: East Branch Chagrin River

Collection Date: 08/30/2012 River Code: 15-002 RM: 12.15

Kirtland Rd.

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01801	<i>Turbellaria</i>	4 +	68901	<i>Macronychus glabratus</i>	+
03600	<i>Oligochaeta</i>	108 +	69400	<i>Stenelmis sp</i>	34 +
06700	<i>Crangonyx sp</i>	+	70600	<i>Antocha sp</i>	8
08240	<i>Orconectes (Crokerinus) propinquus</i>	+	72700	<i>Anopheles sp</i>	+
11020	<i>Acerpenna pygmaea</i>	2	74501	<i>Ceratopogonidae</i>	+
11119	<i>Plauditus dubius</i> or <i>P. virilis</i>	12 +	77500	<i>Conchapelopia sp</i>	65
11120	<i>Baetis flavistriga</i>	1	77740	<i>Hayesomyia senata</i>	+
11130	<i>Baetis intercalaris</i>	2 +	77800	<i>Helopelopia sp</i>	140 +
11150	<i>Labiobaetis propinquus</i>	+	78655	<i>Procladius (Holotanypus) sp</i>	+
11250	<i>Centroptilum sp (w/o hindwing pads)</i>	+	79720	<i>Diamesa sp</i>	+
11651	<i>Procloeon sp (w/o hindwing pads)</i>	+	80370	<i>Corynoneura lobata</i>	16
12200	<i>Isonychia sp</i>	61 +	80420	<i>Cricotopus (C.) bicinctus</i>	16
13000	<i>Leucrocuta sp</i>	2 +	80430	<i>Cricotopus (C.) tremulus group</i>	49
13400	<i>Stenacron sp</i>	3 +	81250	<i>Nanocladius (N.) minimus</i>	16
13521	<i>Stenonema femoratum</i>	+	81465	<i>Orthocladius (O.) carlatus</i>	16
13561	<i>Maccaffertium pulchellum</i>	1 +	81650	<i>Parametriocnemus sp</i>	130
13590	<i>Maccaffertium vicarium</i>	11 +	82824	<i>Cryptochironomus ponderosus</i>	+
16700	<i>Tricorythodes sp</i>	3 +	83040	<i>Dicrotendipes neomodestus</i>	16 +
17200	<i>Caenis sp</i>	4 +	83820	<i>Microtendipes "caelum" (sensu Simpson & Bode, 1980)</i>	16
18600	<i>Ephemera sp</i>	+	84155	<i>Paralauterborniella nigrohalteralis</i>	+
21200	<i>Calopteryx sp</i>	+	84210	<i>Paratendipes albimanus</i> or <i>P. duplicatus</i>	+
22001	<i>Coenagrionidae</i>	+	84440	<i>Polypedilum (Uresipedilum) aviceps</i>	+
22300	<i>Argia sp</i>	+	84450	<i>Polypedilum (Uresipedilum) flavum</i>	32
23909	<i>Boyeria vinosa</i>	+	84460	<i>Polypedilum (P.) fallax group</i>	16
25510	<i>Stylogomphus albistylus</i>	+	84540	<i>Polypedilum (Tripodura) scalaenum group</i>	16 +
34120	<i>Acroneuria carolinensis</i>	1	84750	<i>Stictochironomus sp</i>	+
34710	<i>Agnetina capitata</i>	1	85201	<i>Cladotanytarsus species group A</i>	+
47600	<i>Sialis sp</i>	+	85261	<i>Cladotanytarsus vanderwulpi</i>	49
48620	<i>Nigronia serricornis</i>	+	85400	<i>Micropsectra sp</i>	16
50301	<i>Chimarra aterrima</i>	+	85500	<i>Paratanytarsus sp</i>	16
50315	<i>Chimarra obscura</i>	12 +	85615	<i>Rheotanytarsus pellucidus</i>	49
52200	<i>Cheumatopsyche sp</i>	111 +	85625	<i>Rheotanytarsus sp</i>	585 +
52430	<i>Ceratopsyche morosa group</i>	10 +	85752	<i>Sublettea coffmani</i>	16
52431	<i>Ceratopsyche morosa</i>	5 +	85800	<i>Tanytarsus sp</i>	49
52440	<i>Ceratopsyche slossonae</i>	+	85802	<i>Tanytarsus n. sp nr. curticornis</i>	65
52530	<i>Hydropsyche depravata group</i>	+	85821	<i>Tanytarsus glabrescens group sp 7</i>	65
52540	<i>Hydropsyche dicantha</i>	+	85840	<i>Tanytarsus sepp</i>	195 +
53800	<i>Hydroptila sp</i>	30	86401	<i>Atherix lantha</i>	2 +
60400	<i>Gyrinus sp</i>	+	87400	<i>Stratiomys sp</i>	+
63300	<i>Hydroporini</i>	+	87540	<i>Hemerodromia sp</i>	4
67500	<i>Laccobius sp</i>	+	95100	<i>Physella sp</i>	+
68075	<i>Psephenus herricki</i>	+	96900	<i>Ferrissia sp</i>	22 +
68601	<i>Ancyronyx variegata</i>	+			
68708	<i>Dubiraphia vittata group</i>	+			

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: East Branch Chagrin River
Kirtland Rd.

Collection Date: 08/30/2012 River Code: 15-002 RM: 12.15

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
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No. Quantitative Taxa: 48	Total Taxa: 86
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No. Qualitative Taxa: 61	ICI: 54
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Number of Organisms: 2103	Qual EPT: 22
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Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: East Branch Chagrin River

Collection Date: 08/30/2012 River Code: 15-002 RM: 11.75

adj. Wisner Rd. at Riverwood Farm

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01900	<i>Nemertea</i>	8	71900	<i>Tipula sp</i>	+
03600	<i>Oligochaeta</i>	8 +	72700	<i>Anopheles sp</i>	+
05800	<i>Caecidotea sp</i>	+	74501	<i>Ceratopogonidae</i>	+
06700	<i>Crangonyx sp</i>	+	77120	<i>Ablabesmyia mallochi</i>	+
08240	<i>Orconectes (Crokerinus) propinquus</i>	+	77500	<i>Conchapelopia sp</i>	34 +
11020	<i>Acerpenna pygmaea</i>	1	77750	<i>Hayesomyia senata or Thienemannimyia norena</i>	17 +
11119	<i>Plauditus dubius or P. virilis</i>	38 +	77800	<i>Helopelopia sp</i>	18 +
11120	<i>Baetis flavistriga</i>	+	78450	<i>Nilotanypus fimbriatus</i>	4
11130	<i>Baetis intercalaris</i>	5 +	80370	<i>Corynoneura lobata</i>	37
11150	<i>Labiobaetis propinquus</i>	+	80420	<i>Cricotopus (C.) bicinctus</i>	17
11250	<i>Centroptilum sp (w/o hindwing pads)</i>	+	80430	<i>Cricotopus (C.) tremulus group</i>	43
11430	<i>Diphetor hageni</i>	9 +	81650	<i>Parametriocnemus sp</i>	26 +
11650	<i>Procloeon sp (w/ hindwing pads)</i>	+	82141	<i>Thienemanniella xena</i>	8
12200	<i>Isonychia sp</i>	57 +	82730	<i>Chironomus (C.) decorus group</i>	+
13000	<i>Leucrocota sp</i>	7 +	82820	<i>Cryptochironomus sp</i>	+
13100	<i>Nixe sp</i>	+	83900	<i>Nilothauma sp</i>	9
13400	<i>Stenacron sp</i>	+	84300	<i>Phaenopsectra obediens group</i>	+
13521	<i>Stenonema femoratum</i>	+	84440	<i>Polypedilum (Uresipedilum) aviceps</i>	9
13570	<i>Maccaffertium terminatum</i>	2	84750	<i>Stictochironomus sp</i>	+
13590	<i>Maccaffertium vicarium</i>	31 +	85201	<i>Cladotanytarsus species group A</i>	9 +
16700	<i>Tricorythodes sp</i>	17 +	85500	<i>Paratanytarsus sp</i>	9
17200	<i>Caenis sp</i>	+	85615	<i>Rheotanytarsus pellucidus</i>	26
21200	<i>Calopteryx sp</i>	+	85625	<i>Rheotanytarsus sp</i>	572 +
23909	<i>Boyeria vinosa</i>	1 +	85752	<i>Sublettea coffmani</i>	68
24900	<i>Gomphus sp</i>	+	85800	<i>Tanytarsus sp</i>	26 +
25510	<i>Stylogomphus albistylus</i>	+	85821	<i>Tanytarsus glabrescens group sp 7</i>	94
34710	<i>Agnetina capitata</i>	1 +	85840	<i>Tanytarsus sepp</i>	17 +
47600	<i>Sialis sp</i>	+	86401	<i>Atherix lantha</i>	+
50301	<i>Chimarra aterrima</i>	+	87540	<i>Hemerodromia sp</i>	53 +
50315	<i>Chimarra obscura</i>	+	95100	<i>Physella sp</i>	+
52200	<i>Cheumatopsyche sp</i>	26 +			
52430	<i>Ceratopsyche morosa group</i>	33 +			
52431	<i>Ceratopsyche morosa</i>	84 +			
52440	<i>Ceratopsyche slossonae</i>	2 +			
53800	<i>Hydroptila sp</i>	18			
60900	<i>Peltodytes sp</i>	+			
67500	<i>Laccobius sp</i>	+			
68075	<i>Psephenus herricki</i>	+			
68601	<i>Ancyronyx variegata</i>	+			
68708	<i>Dubiraphia vittata group</i>	+			
68901	<i>Macronychus glabratus</i>	2 +			
69400	<i>Stenelmis sp</i>	1 +			
70600	<i>Antocha sp</i>	4			
71100	<i>Hexatoma sp</i>	+			

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: East Branch Chagrin River
dst. Wisner Rd.

Collection Date: 08/30/2012 River Code: 15-002 RM: 11.20

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
03600	<i>Oligochaeta</i>	8 +	80420	<i>Cricotopus (C.) bicinctus</i>	12
08240	<i>Orconectes (Crockerinus) propinquus</i>	+	80430	<i>Cricotopus (C.) tremulus group</i>	12
11014	<i>Acentrella turbida</i>	+	81650	<i>Parametriocnemus sp</i>	24
11119	<i>Plauditus dubius</i> or <i>P. virilis</i>	+	82730	<i>Chironomus (C.) decorus group</i>	+
11120	<i>Baetis flavistriga</i>	+	82880	<i>Cryptotendipes sp</i>	12
11130	<i>Baetis intercalaris</i>	+	83040	<i>Dicrotendipes neomodestus</i>	+
11250	<i>Centroptilum sp (w/o hindwing pads)</i>	4 +	83840	<i>Microtendipes pedellus group</i>	12 +
11651	<i>Procloeon sp (w/o hindwing pads)</i>	+	84116	<i>Paracladopelma nereis</i>	+
11670	<i>Procloeon viridoculare</i>	+	84155	<i>Paralauterborniella nigrohalteralis</i>	+
12200	<i>Isonychia sp</i>	+	84210	<i>Paratendipes albimanus</i> or <i>P. duplicatus</i>	+
13000	<i>Leucrocota sp</i>	1 +	84540	<i>Polypedilum (Tripodura) scalaenum group</i>	+
13400	<i>Stenacron sp</i>	1 +	84750	<i>Stictochironomus sp</i>	+
13521	<i>Stenonema femoratum</i>	1 +	85201	<i>Cladotanytarsus species group A</i>	180 +
13590	<i>Maccaffertium vicarium</i>	20 +	85615	<i>Rheotanytarsus pellucidus</i>	12
15000	<i>Paraleptophlebia sp</i>	+	85625	<i>Rheotanytarsus sp</i>	132 +
16700	<i>Tricorythodes sp</i>	2 +	85752	<i>Sublettea coffmani</i>	24
17600	<i>Baetisca sp</i>	+	85800	<i>Tanytarsus sp</i>	72 +
18600	<i>Ephemera sp</i>	+	85821	<i>Tanytarsus glabrescens group sp 7</i>	36
21200	<i>Calopteryx sp</i>	1 +	85840	<i>Tanytarsus sepp</i>	359 +
23905	<i>Boyeria grafiana</i>	+	86401	<i>Atherix lantha</i>	+
24900	<i>Gomphus sp</i>	+	96900	<i>Ferrissia sp</i>	1 +
25510	<i>Stylogomphus albistylus</i>	+			
47600	<i>Sialis sp</i>	+	No. Quantitative Taxa: 31		Total Taxa: 65
50301	<i>Chimarra aterrima</i>	+	No. Qualitative Taxa: 54		ICI: 46
50315	<i>Chimarra obscura</i>	+	Number of Organisms: 1207		Qual EPT: 22
52200	<i>Cheumatopsyche sp</i>	2 +			
52430	<i>Ceratopsyche morosa group</i>	1 +			
52431	<i>Ceratopsyche morosa</i>	3 +			
52530	<i>Hydropsyche depravata group</i>	+			
53800	<i>Hydroptila sp</i>	4			
60300	<i>Dineutus sp</i>	+			
67500	<i>Laccobius sp</i>	+			
68075	<i>Psephenus herricki</i>	+			
68901	<i>Macronychus glabratus</i>	3			
69400	<i>Stenelmis sp</i>	1 +			
70700	<i>Dicranota sp</i>	+			
77120	<i>Ablabesmyia mallochi</i>	+			
77500	<i>Conchapelopia sp</i>	43 +			
77750	<i>Hayesomyia senata</i> or <i>Thienemannimyia norena</i>	+			
77800	<i>Helopelopia sp</i>	149 +			
78450	<i>Nilotanypus fimbriatus</i>	34			
78655	<i>Procladius (Holotanypus) sp</i>	+			
80370	<i>Corynoneura lobata</i>	41			
80410	<i>Cricotopus (C.) sp</i>	+			

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: Trib. to Linton Creek (RM 1.36)

Collection Date: 08/01/2012 River Code: 15-053 RM: 0.60

former Kenston Lake area

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01801	<i>Turbellaria</i>	+			
03600	<i>Oligochaeta</i>	+			
05800	<i>Caecidotea sp</i>	+			
08601	<i>Hydrachnidia</i>	+			
11120	<i>Baetis flavistriga</i>	+			
11295	<i>Cloeon dipterum</i>	+			
21200	<i>Calopteryx sp</i>	+			
22001	<i>Coenagrionidae</i>	+			
28500	<i>Libellula sp</i>	+			
28955	<i>Plathemis lydia</i>	+			
45300	<i>Sigara sp</i>	+			
45900	<i>Notonecta sp</i>	+			
50301	<i>Chimarra aterrima</i>	+			
52530	<i>Hydropsyche depravata group</i>	+			
53501	<i>Hydroptilidae</i>	+			
60900	<i>Peltodytes sp</i>	+			
63900	<i>Laccophilus sp</i>	+			
65800	<i>Berosus sp</i>	+			
67700	<i>Paracymus sp</i>	+			
67800	<i>Tropisternus sp</i>	+			
77500	<i>Conchapelopia sp</i>	+			
77750	<i>Hayesomyia senata</i> or <i>Thienemannimyia norena</i>	+			
78401	<i>Natarsia species A (sensu Roback, 1978)</i>	+			
78655	<i>Procladius (Holotanypus) sp</i>	+			
80420	<i>Cricotopus (C.) bicinctus</i>	+			
83003	<i>Dicrotendipes fumidus</i>	+			
84210	<i>Paratendipes albimanus</i> or <i>P. duplicatus</i>	+			
84450	<i>Polypedilum (Uresipedilum) flavum</i>	+			
84750	<i>Stictochironomus sp</i>	+			
85814	<i>Tanytarsus glabrescens group</i>	+			
87400	<i>Stratiomys sp</i>	+			
95100	<i>Physella sp</i>	+			

No. Quantitative Taxa: 0 Total Taxa: 32

No. Qualitative Taxa: 32 ICI:

Number of Organisms: 0 Qual EPT: 5

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: Trib. to Linton Creek (RM 1.36)

Collection Date: 08/01/2012 River Code: 15-053 RM: 0.40

dst. Kenston Lake

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01801	<i>Turbellaria</i>	+			
03600	<i>Oligochaeta</i>	+			
05800	<i>Caecidotea sp</i>	+			
06700	<i>Crangonyx sp</i>	+			
11120	<i>Baetis flavistriga</i>	+			
11200	<i>Callibaetis sp</i>	+			
13521	<i>Stenonema femoratum</i>	+			
21200	<i>Calopteryx sp</i>	+			
22001	<i>Coenagrionidae</i>	+			
23905	<i>Boyeria grafiana</i>	+			
26100	<i>Cordulegaster sp</i>	+			
28500	<i>Libellula sp</i>	+			
28955	<i>Plathemis lydia</i>	+			
47600	<i>Sialis sp</i>	+			
50301	<i>Chimarra aterrima</i>	+			
52200	<i>Cheumatopsyche sp</i>	+			
52530	<i>Hydropsyche depravata group</i>	+			
60800	<i>Haliphus sp</i>	+			
63300	<i>Hydroporini</i>	+			
65800	<i>Berosus sp</i>	+			
66200	<i>Cymbiodyta sp</i>	+			
67800	<i>Tropisternus sp</i>	+			
69400	<i>Stenelmis sp</i>	+			
71900	<i>Tipula sp</i>	+			
77120	<i>Ablabesmyia mallochi</i>	+			
77500	<i>Conchapelopia sp</i>	+			
77800	<i>Helopelopia sp</i>	+			
78350	<i>Meropelopia sp</i>	+			
78401	<i>Natarsia species A (sensu Roback, 1978)</i>	+			
78655	<i>Procladius (Holotanypus) sp</i>	+			
79400	<i>Zavreliomyia sp</i>	+			
79720	<i>Diamesa sp</i>	+			
83840	<i>Microtendipes pedellus group</i>	+			
84450	<i>Polypedilum (Uresipedilum) flavum</i>	+			
84750	<i>Stictochironomus sp</i>	+			
85500	<i>Paratanytarsus sp</i>	+			
85625	<i>Rheotanytarsus sp</i>	+			
85800	<i>Tanytarsus sp</i>	+			
87400	<i>Stratiomys sp</i>	+			
87540	<i>Hemerodromia sp</i>	+			

No. Quantitative Taxa: 0 Total Taxa: 40

No. Qualitative Taxa: 40 ICI:

Number of Organisms: 0 Qual EPT: 6

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: Trib. to Linton Creek (RM 1.36)

Collection Date: 09/23/2008 River Code: 15-053 RM: 0.60

former Kenston Lake area

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
03360	<i>Plumatella sp</i>	+			
03600	<i>Oligochaeta</i>	+			
17200	<i>Caenis sp</i>	+			
22001	<i>Coenagrionidae</i>	+			
27307	<i>Epitheca (Epicordulia) princeps</i>	+			
28208	<i>Erythemis simplicicollis</i>	+			
28500	<i>Libellula sp</i>	+			
28908	<i>Perithemis tenera</i>	+			
43570	<i>Neoplea sp</i>	+			
44300	<i>Pelocoris sp</i>	+			
59500	<i>Oecetis sp</i>	+			
60900	<i>Peltodytes sp</i>	+			
64050	<i>Liodessus sp</i>	+			
67800	<i>Tropisternus sp</i>	+			
74501	<i>Ceratopogonidae</i>	+			
77355	<i>Clinotanytus pinguis</i>	+			
80510	<i>Cricotopus (Isocladius) sylvestris group</i>	+			
81231	<i>Nanocladius (N.) crassicornus</i> or <i>N. (N.) "rectinervis"</i>	+			
83158	<i>Endochironomus nigricans</i>	+			
83300	<i>Glyptotendipes (G.) sp</i>	+			
84000	<i>Parachironomus sp</i>	+			
84155	<i>Paralauterborniella nigrohalteralis</i>	+			
85800	<i>Tanytarsus sp</i>	+			
92330	<i>Valvata tricarinata tricarinata</i>	+			
95100	<i>Physella sp</i>	+			
95900	<i>Gyraulus sp</i>	+			
96264	<i>Planorbella (Pierosoma) pilsbryi</i>	+			

No. Quantitative Taxa: 0 Total Taxa: 27

No. Qualitative Taxa: 27 ICI:

Number of Organisms: 0 Qual EPT: 2

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: Trib. to Linton Creek (RM 1.36)
dst. Kenston Lake

Collection Date: 08/13/2008 River Code: 15-053 RM: 0.40

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01801	<i>Turbellaria</i>	+			
01900	<i>Nemertea</i>	+			
03360	<i>Plumatella sp</i>	+			
03600	<i>Oligochaeta</i>	+			
05800	<i>Caecidotea sp</i>	+			
06700	<i>Crangonyx sp</i>	+			
21200	<i>Calopteryx sp</i>	+			
25510	<i>Stylogomphus albistylus</i>	+			
48600	<i>Nigronia sp</i>	+			
50301	<i>Chimarra aterrima</i>	+			
51600	<i>Polycentropus sp</i>	+			
52200	<i>Cheumatopsyche sp</i>	+			
52530	<i>Hydropsyche depravata group</i>	+			
57400	<i>Neophylax sp</i>	+			
68025	<i>Ectopria sp</i>	+			
69400	<i>Stenelmis sp</i>	+			
71900	<i>Tipula sp</i>	+			
77500	<i>Conchapelopia sp</i>	+			
78401	<i>Natarsia species A (sensu Roback, 1978)</i>	+			
78655	<i>Procladius (Holotanypus) sp</i>	+			
84750	<i>Stictochironomus sp</i>	+			
85625	<i>Rheotanytarsus sp</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: Huff Run

Collection Date: 09/25/2012 River Code: 17-101 RM: 7.85

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01900	<i>Nemertea</i>	+			
03600	<i>Oligochaeta</i>	+			
06201	<i>Hyalella azteca</i>	+			
07860	<i>Cambarus (Puncticambarus) robustus</i>	+			
08260	<i>Orconectes (Crockerinus) sanbornii sanbornii</i>	+			
13400	<i>Stenacron sp</i>	+			
16200	<i>Eurylophella sp</i>	+			
17200	<i>Caenis sp</i>	+			
18600	<i>Ephemera sp</i>	+			
21200	<i>Calopteryx sp</i>	+			
22300	<i>Argia sp</i>	+			
23905	<i>Boyeria grafiana</i>	+			
23909	<i>Boyeria vinosa</i>	+			
24900	<i>Gomphus sp</i>	+			
26100	<i>Cordulegaster sp</i>	+			
45300	<i>Sigara sp</i>	+			
47600	<i>Sialis sp</i>	+			
50301	<i>Chimarra aterrima</i>	+			
52200	<i>Cheumatopsyche sp</i>	+			
52530	<i>Hydropsyche depravata group</i>	+			
56902	<i>Hydatophylax argus</i>	+			
68130	<i>Helichus sp</i>	+			
68700	<i>Dubiraphia sp</i>	+			
69400	<i>Stenelmis sp</i>	+			
70501	<i>Tipulidae</i>	+			
71100	<i>Hexatoma sp</i>	+			
71900	<i>Tipula sp</i>	+			
72700	<i>Anopheles sp</i>	+			
74501	<i>Ceratopogonidae</i>	+			
80350	<i>Corynoneura sp</i>	+			
81460	<i>Orthocladius (O.) sp</i>	+			
82820	<i>Cryptochironomus sp</i>	+			
83820	<i>Microtendipes "caelum" (sensu Simpson & Bode, 1980)</i>	+			
84210	<i>Paratendipes albimanus or P. duplicatus</i>	+			
84315	<i>Phaenopsectra flavipes</i>	+			
85500	<i>Paratanytarsus sp</i>	+			
85800	<i>Tanytarsus sp</i>	+			
86100	<i>Chrysops sp</i>	+			
86401	<i>Atherix lantha</i>	+			
95100	<i>Physella sp</i>	+			
96002	<i>Helisoma anceps anceps</i>	+			
96900	<i>Ferrissia sp</i>	+			

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: Huff Run

Collection Date: 09/25/2012 River Code: 17-101 RM: 4.20

gravel road, dst. Thomas project

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
08260	<i>Orconectes (Crockerinus) sanbornii sanbornii</i>	+			
08601	<i>Hydrachnidia</i>	+			
21200	<i>Calopteryx sp</i>	+			
22300	<i>Argia sp</i>	+			
23804	<i>Basiaeschna janata</i>	+			
24900	<i>Gomphus sp</i>	+			
47600	<i>Sialis sp</i>	+			
51600	<i>Polycentropus sp</i>	+			
55300	<i>Ptilostomis sp</i>	+			
59001	<i>Leptoceridae</i>	+			
60900	<i>Peltodytes sp</i>	+			
68700	<i>Dubiraphia sp</i>	+			
71100	<i>Hexatoma sp</i>	+			
71900	<i>Tipula sp</i>	+			
82501	<i>Chironomini</i>	+			
96002	<i>Helisoma anceps anceps</i>	+			

No. Quantitative Taxa: 0

Total Taxa: 16

No. Qualitative Taxa: 16

ICI:

Number of Organisms: 0

Qual EPT: 3

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: Huff Run

Hilltop Energy

Collection Date: 09/25/2012 River Code: 17-101 RM: 3.80

Taxa Code	Taxa	Quant/Qual
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22001	<i>Coenagrionidae</i>	+
84315	<i>Phaenopsectra flavipes</i>	+

Taxa Code	Taxa	Quant/Qual
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No. Quantitative Taxa: 0 Total Taxa: 2

No. Qualitative Taxa: 2 ICI:

Number of Organisms: 0 Qual EPT: 0

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: Huff Run

Collection Date: 09/25/2012 River Code: 17-101 RM: 2.83

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
22001	<i>Coenagrionidae</i>	+			
24900	<i>Gomphus sp</i>	+			
82710	<i>Chironomus (C.) sp</i>	+			
83600	<i>Kiefferulus (K.) dux</i>	+			
84315	<i>Phaenopsectra flavipes</i>	+			
84470	<i>Polypedilum (P.) illinoense</i>	+			
84700	<i>Stenochironomus sp</i>	+			
95100	<i>Physella sp</i>	+			
96002	<i>Helisoma anceps anceps</i>	+			

No. Quantitative Taxa: 0 Total Taxa: 9

No. Qualitative Taxa: 9 ICI:

Number of Organisms: 0 Qual EPT: 0

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: Huff Run

Collection Date: 09/26/2012 River Code: 17-101 RM: 0.30

Salters Bottom Rd.

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01900	<i>Nemertea</i>	+			
06810	<i>Gammarus fasciatus</i>	+			
08250	<i>Orconectes (Procericambarus) rusticus</i>	+			
08601	<i>Hydrachnidia</i>	+			
21200	<i>Calopteryx sp</i>	+			
22001	<i>Coenagrionidae</i>	+			
23909	<i>Boyeria vinosa</i>	+			
24900	<i>Gomphus sp</i>	+			
27500	<i>Somatochlora sp</i>	+			
52200	<i>Cheumatopsyche sp</i>	+			
55300	<i>Ptilostomis sp</i>	+			
71910	<i>Tipula abdominalis</i>	+			
74100	<i>Simulium sp</i>	+			
74501	<i>Ceratopogonidae</i>	+			
77750	<i>Hayesomyia senata</i> or <i>Thienemannimyia norena</i>	+			
78655	<i>Procladius (Holotanypus) sp</i>	+			
81650	<i>Parametriocnemus sp</i>	+			
81825	<i>Rheocricotopus (Psilocricotopus) robacki</i>	+			
84700	<i>Stenochironomus sp</i>	+			
85500	<i>Paratanytarsus sp</i>	+			
85821	<i>Tanytarsus glabrescens</i> group sp 7	+			
95100	<i>Physella sp</i>	+			

No. Quantitative Taxa: 0 Total Taxa: 22

No. Qualitative Taxa: 22 ICI:

Number of Organisms: 0 Qual EPT: 2

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Collection Date: 08/14/2008 River Code: 17-101 RM: 4.80

Site: Huff Run
Hope Rd.

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
03600	<i>Oligochaeta</i>	+			
08200	<i>Orconectes sp</i>	+			
17200	<i>Caenis sp</i>	+			
21200	<i>Calopteryx sp</i>	+			
22001	<i>Coenagrionidae</i>	+			
23600	<i>Aeshna sp</i>	+			
24900	<i>Gomphus sp</i>	+			
47600	<i>Sialis sp</i>	+			
60900	<i>Peltodytes sp</i>	+			
63300	<i>Hydroporini</i>	+			
63900	<i>Laccophilus sp</i>	+			
68901	<i>Macronychus glabratus</i>	+			
71900	<i>Tipula sp</i>	+			
77750	<i>Hayesomyia senata or Thienemannimyia norena</i>	+			
94400	<i>Fossaria sp</i>	+			
96002	<i>Helisoma anceps anceps</i>	+			

No. Quantitative Taxa: 0	Total Taxa: 16
No. Qualitative Taxa: 16	ICI:
Number of Organisms: 0	Qual EPT: 1

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: Huff Run

Collection Date: 08/14/2008 River Code: 17-101 RM: 4.20

gravel road, dst. Thomas project

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
06201	<i>Hyalella azteca</i>	+			
08200	<i>Orconectes sp</i>	+			
21200	<i>Calopteryx sp</i>	+			
22001	<i>Coenagrionidae</i>	+			
23600	<i>Aeshna sp</i>	+			
23909	<i>Boyeria vinosa</i>	+			
47600	<i>Sialis sp</i>	+			
51600	<i>Polycentropus sp</i>	+			
52200	<i>Cheumatopsyche sp</i>	+			
52430	<i>Ceratopsyche morosa group</i>	+			
56001	<i>Limnephilidae</i>	+			
62200	<i>Copelatus sp</i>	+			
68708	<i>Dubiraphia vittata group</i>	+			
71900	<i>Tipula sp</i>	+			
77120	<i>Ablabesmyia mallochi</i>	+			
78350	<i>Meropelopia sp</i>	+			
78655	<i>Procladius (Holotanypus) sp</i>	+			
80420	<i>Cricotopus (C.) bicinctus</i>	+			
84470	<i>Polypedilum (P.) illinoense</i>	+			
86100	<i>Chrysops sp</i>	+			

No. Quantitative Taxa: 0	Total Taxa: 20
No. Qualitative Taxa: 20	ICI:
Number of Organisms: 0	Qual EPT: 4

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: Pond Brook
 Tradewind Cove Rd.

Collection Date: 08/01/2012 River Code: 19-008 RM: 3.70

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
03600	<i>Oligochaeta</i>	+			
13521	<i>Stenonema femoratum</i>	+			
22001	<i>Coenagrionidae</i>	+			
45100	<i>Palmarixia sp</i>	+			
53501	<i>Hydroptilidae</i>	+			
60900	<i>Peltodytes sp</i>	+			
65800	<i>Berosus sp</i>	+			
68702	<i>Dubiraphia bivittata</i>	+			
68708	<i>Dubiraphia vittata group</i>	+			
77120	<i>Ablabesmyia mallochi</i>	+			
77355	<i>Clinotanypus pinguis</i>	+			
78401	<i>Natarsia species A (sensu Roback, 1978)</i>	+			
78655	<i>Procladius (Holotanypus) sp</i>	+			
82730	<i>Chironomus (C.) decorus group</i>	+			
82824	<i>Cryptochironomus ponderosus</i>	+			
82885	<i>Cryptotendipes pseudotener</i>	+			
83002	<i>Dicrotendipes modestus</i>	+			
83003	<i>Dicrotendipes fumidus</i>	+			
84210	<i>Paratendipes albimanus or P. duplicatus</i>	+			
84315	<i>Phaenopsectra flavipes</i>	+			
84470	<i>Polypedilum (P.) illinoense</i>	+			
84800	<i>Tribelos jucundum</i>	+			
85500	<i>Paratanytarsus sp</i>	+			
86100	<i>Chrysops sp</i>	+			
92613	<i>Cipangopaludina chinensis malleata</i>	+			
95100	<i>Physella sp</i>	+			

No. Quantitative Taxa: 0	Total Taxa: 26
No. Qualitative Taxa: 26	ICI:
Number of Organisms: 0	Qual EPT: 2

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: Pond Brook
upst. from tributary

Collection Date: 08/01/2012 River Code: 19-008 RM: 2.90

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01320	<i>Hydra sp</i>	+			
03600	<i>Oligochaeta</i>	+			
04666	<i>Helobdella papillata</i>	+			
04685	<i>Placobdella ornata</i>	+			
06700	<i>Crangonyx sp</i>	+			
08601	<i>Hydrachnidia</i>	+			
11200	<i>Callibaetis sp</i>	+			
17200	<i>Caenis sp</i>	+			
22001	<i>Coenagrionidae</i>	+			
27400	<i>Neurocordulia sp</i>	+			
28955	<i>Plathemis lydia</i>	+			
43300	<i>Ranatra sp</i>	+			
45100	<i>Palmacorixa sp</i>	+			
60900	<i>Peltodytes sp</i>	+			
64800	<i>Uvarus sp</i>	+			
65800	<i>Berosus sp</i>	+			
66500	<i>Enochrus sp</i>	+			
67700	<i>Paracymus sp</i>	+			
68702	<i>Dubiraphia bivittata</i>	+			
77355	<i>Clinotanytus pinguis</i>	+			
78655	<i>Procladius (Holotanytus) sp</i>	+			
84470	<i>Polypedilum (P.) illinoense</i>	+			
87400	<i>Stratiomys sp</i>	+			
92613	<i>Cipangopaludina chinensis malleata</i>	+			
95100	<i>Physella sp</i>	+			

No. Quantitative Taxa: 0	Total Taxa: 25
No. Qualitative Taxa: 25	ICI:
Number of Organisms: 0	Qual EPT: 2

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: Pond Brook

Collection Date: 08/01/2012 River Code: 19-008 RM: 2.00

dst. restoration area

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01801	<i>Turbellaria</i>	+			
03600	<i>Oligochaeta</i>	+			
06201	<i>Hyalella azteca</i>	+			
11120	<i>Baetis flavistriga</i>	+			
11200	<i>Callibaetis sp</i>	+			
17200	<i>Caenis sp</i>	+			
22001	<i>Coenagrionidae</i>	+			
23600	<i>Aeshna sp</i>	+			
23704	<i>Anax junius</i>	+			
28955	<i>Plathemis lydia</i>	+			
42700	<i>Belostoma sp</i>	+			
43570	<i>Neoplea sp</i>	+			
44300	<i>Pelocoris sp</i>	+			
45400	<i>Trichocorixa sp</i>	+			
52200	<i>Cheumatopsyche sp</i>	+			
52530	<i>Hydropsyche depravata group</i>	+			
53800	<i>Hydroptila sp</i>	+			
55300	<i>Ptilostomis sp</i>	+			
59570	<i>Oecetis nocturna</i>	+			
63900	<i>Laccophilus sp</i>	+			
65800	<i>Berosus sp</i>	+			
68702	<i>Dubiraphia bivittata</i>	+			
68708	<i>Dubiraphia vittata group</i>	+			
74501	<i>Ceratopogonidae</i>	+			
77355	<i>Clinotanypus pinguis</i>	+			
77500	<i>Conchapelopia sp</i>	+			
77800	<i>Helopelopia sp</i>	+			
78655	<i>Procladius (Holotanypus) sp</i>	+			
80420	<i>Cricotopus (C.) bicinctus</i>	+			
82820	<i>Cryptochironomus sp</i>	+			
83040	<i>Dicrotendipes neomodestus</i>	+			
83820	<i>Microtendipes "caelum" (sensu Simpson & Bode, 1980)</i>	+			
84450	<i>Polypedilum (Uresipedilum) flavum</i>	+			
84470	<i>Polypedilum (P.) illinoense</i>	+			
84540	<i>Polypedilum (Tripodura) scalaenum group</i>	+			
85500	<i>Paratanytarsus sp</i>	+			
85615	<i>Rheotanytarsus pellucidus</i>	+			
85625	<i>Rheotanytarsus sp</i>	+			
85800	<i>Tanytarsus sp</i>	+			
85840	<i>Tanytarsus sepp</i>	+			
92613	<i>Cipangopaludina chinensis malleata</i>	+			
95100	<i>Physella sp</i>	+			
98200	<i>Pisidium sp</i>	+			
98600	<i>Sphaerium sp</i>	+			

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: Pond Brook
 St. Rt. 82

Collection Date: 08/01/2012 River Code: 19-008 RM: 1.41

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01801	<i>Turbellaria</i>	+			
03600	<i>Oligochaeta</i>	+			
04666	<i>Helobdella papillata</i>	+			
05800	<i>Caecidotea sp</i>	+			
06201	<i>Hyalella azteca</i>	+			
11130	<i>Baetis intercalaris</i>	+			
11200	<i>Callibaetis sp</i>	+			
17200	<i>Caenis sp</i>	+			
22001	<i>Coenagrionidae</i>	+			
25010	<i>Hagenius brevistylus</i>	+			
27307	<i>Epiptera (Epicordulia) princeps</i>	+			
45400	<i>Trichocorixa sp</i>	+			
45900	<i>Notonecta sp</i>	+			
52200	<i>Cheumatopsyche sp</i>	+			
52530	<i>Hydropsyche depravata group</i>	+			
53800	<i>Hydroptila sp</i>	+			
59570	<i>Oecetis nocturna</i>	+			
65800	<i>Berosus sp</i>	+			
68708	<i>Dubiraphia vittata group</i>	+			
80420	<i>Cricotopus (C.) bicinctus</i>	+			
83040	<i>Dicrotendipes neomodestus</i>	+			
84450	<i>Polypedilum (Uresipedilum) flavum</i>	+			
85821	<i>Tanytarsus glabrescens group sp 7</i>	+			

No. Quantitative Taxa: 0	Total Taxa: 23
No. Qualitative Taxa: 23	ICI:
Number of Organisms: 0	Qual EPT: 7

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: Furnace Run
dst. Rock Creek

Collection Date: 07/31/2012 River Code: 19-020 RM: 7.25

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01801	<i>Turbellaria</i>	+	95100	<i>Physella sp</i>	+
05800	<i>Caecidotea sp</i>	+	96120	<i>Menetus (Micromenetus) dilatatus</i>	+
06700	<i>Crangonyx sp</i>	+			
08260	<i>Orconectes (Crokerinus) sanbornii sanbornii</i>	+	No. Quantitative Taxa: 0		Total Taxa: 46
11120	<i>Baetis flavistriga</i>	+	No. Qualitative Taxa: 46		ICI:
11130	<i>Baetis intercalaris</i>	+	Number of Organisms: 0		Qual EPT: 9
11200	<i>Callibaetis sp</i>	+			
13521	<i>Stenonema femoratum</i>	+			
21200	<i>Calopteryx sp</i>	+			
22001	<i>Coenagrionidae</i>	+			
22300	<i>Argia sp</i>	+			
23909	<i>Boyeria vinosa</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>	+			
52530	<i>Hydropsyche depravata group</i>	+			
60400	<i>Gyrinus sp</i>	+			
68601	<i>Ancyronyx variegata</i>	+			
68708	<i>Dubiraphia vittata group</i>	+			
69400	<i>Stenelmis sp</i>	+			
71900	<i>Tipula sp</i>	+			
72700	<i>Anopheles sp</i>	+			
74100	<i>Simulium sp</i>	+			
77120	<i>Ablabesmyia mallochi</i>	+			
77500	<i>Conchapelopia sp</i>	+			
77800	<i>Helopelopia sp</i>	+			
78401	<i>Natarsia species A (sensu Roback, 1978)</i>	+			
78601	<i>Pentaneura inyoensis</i>	+			
79400	<i>Zavrelimyia sp</i>	+			
79720	<i>Diamesa sp</i>	+			
80350	<i>Corynoneura sp</i>	+			
81825	<i>Rheocricotopus (Psilocricotopus) robacki</i>	+			
82141	<i>Thienemanniella xena</i>	+			
82710	<i>Chironomus (C.) sp</i>	+			
83003	<i>Dicrotendipes fumidus</i>	+			
83040	<i>Dicrotendipes neomodestus</i>	+			
83820	<i>Microtendipes "caelum" (sensu Simpson & Bode, 1980)</i>	+			
84210	<i>Paratendipes albimanus</i> or <i>P. duplicatus</i>	+			
84540	<i>Polypedilum (Tripodura) scalaenum group</i>	+			
85260	<i>Cladotanytarsus vanderwulpi group</i>	+			
85500	<i>Paratanytarsus sp</i>	+			
85800	<i>Tanytarsus sp</i>	+			

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: Furnace Run

Collection Date: 07/31/2012 River Code: 19-020 RM: 6.95

St. Rt. 21

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01801	<i>Turbellaria</i>	+			
03600	<i>Oligochaeta</i>	+			
05800	<i>Caecidotea sp</i>	+			
06700	<i>Crangonyx sp</i>	+			
08260	<i>Orconectes (Crokerinus) sanbornii sanbornii</i>	+			
11120	<i>Baetis flavistriga</i>	+			
11130	<i>Baetis intercalaris</i>	+			
11645	<i>Procloeon sp</i>	+			
11670	<i>Procloeon viridoculare</i>	+			
21200	<i>Calopteryx sp</i>	+			
22001	<i>Coenagrionidae</i>	+			
23909	<i>Boyeria vinosa</i>	+			
50301	<i>Chimarra aterrima</i>	+			
52200	<i>Cheumatopsyche sp</i>	+			
52430	<i>Ceratopsyche morosa group</i>	+			
52440	<i>Ceratopsyche slossonae</i>	+			
52530	<i>Hydropsyche depravata group</i>	+			
59300	<i>Mystacides sp</i>	+			
68075	<i>Psephenus herricki</i>	+			
68130	<i>Helichus sp</i>	+			
69400	<i>Stenelmis sp</i>	+			
71900	<i>Tipula sp</i>	+			
72700	<i>Anopheles sp</i>	+			
77500	<i>Conchapelopia sp</i>	+			
77800	<i>Helopelopia sp</i>	+			
78402	<i>Natarsia baltimoreus</i>	+			
78655	<i>Procladius (Holotanypus) sp</i>	+			
80420	<i>Cricotopus (C.) bicinctus</i>	+			
82710	<i>Chironomus (C.) sp</i>	+			
83820	<i>Microtendipes "caelum" (sensu Simpson & Bode, 1980)</i>	+			
84300	<i>Phaenopsectra obediens group</i>	+			
84430	<i>Polypedilum (P.) albicorne</i>	+			
84540	<i>Polypedilum (Tripodura) scalaenum group</i>	+			
84601	<i>Saetheria species 1 (sensu Jackson, 1977)</i>	+			
85500	<i>Paratanytarsus sp</i>	+			
95100	<i>Physella sp</i>	+			

No. Quantitative Taxa: 0 Total Taxa: 36

No. Qualitative Taxa: 36 ICI:

Number of Organisms: 0 Qual EPT: 10

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: Furnace Run

Collection Date: 07/31/2012 River Code: 19-020 RM: 6.50

Brush Rd.

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01801	<i>Turbellaria</i>	+	84210	<i>Paratendipes albimanus</i> or <i>P. duplicatus</i>	+
03040	<i>Fredericella</i> sp	+	84470	<i>Polypedilum (P.) illinoense</i>	+
03360	<i>Plumatella</i> sp	+	84520	<i>Polypedilum (Tripodura) halterale</i> group	+
03600	<i>Oligochaeta</i>	+	84540	<i>Polypedilum (Tripodura) scalaenum</i> group	+
05900	<i>Lirceus</i> sp	+	84750	<i>Stictochironomus</i> sp	+
06700	<i>Crangonyx</i> sp	+	85500	<i>Paratanytarsus</i> sp	+
11130	<i>Baetis intercalaris</i>	+	85821	<i>Tanytarsus glabrescens</i> group sp 7	+
11200	<i>Callibaetis</i> sp	+	95100	<i>Physella</i> sp	+
11250	<i>Centroptilum</i> sp (w/o hindwing pads)	+			
11645	<i>Procladius</i> sp	+	No. Quantitative Taxa: 0		Total Taxa: 52
13521	<i>Stenonema femoratum</i>	+	No. Qualitative Taxa: 52		ICI:
17200	<i>Caenis</i> sp	+	Number of Organisms: 0		Qual EPT: 15
21200	<i>Calopteryx</i> sp	+			
22001	<i>Coenagrionidae</i>	+			
33100	<i>Leuctra</i> sp	+			
43300	<i>Ranatra</i> sp	+			
50301	<i>Chimarra aterrima</i>	+			
51400	<i>Nyctiophylax</i> sp	+			
51600	<i>Polycentropus</i> sp	+			
52200	<i>Cheumatopsyche</i> sp	+			
52430	<i>Ceratopsyche morosa</i> group	+			
52440	<i>Ceratopsyche slossonae</i>	+			
52530	<i>Hydropsyche depravata</i> group	+			
53800	<i>Hydroptila</i> sp	+			
60900	<i>Peltodytes</i> sp	+			
68075	<i>Psephenus herricki</i>	+			
68707	<i>Dubiraphia quadrinotata</i>	+			
68708	<i>Dubiraphia vittata</i> group	+			
69400	<i>Stenelmis</i> sp	+			
71100	<i>Hexatoma</i> sp	+			
71900	<i>Tipula</i> sp	+			
72700	<i>Anopheles</i> sp	+			
74100	<i>Simulium</i> sp	+			
74501	<i>Ceratopogonidae</i>	+			
77120	<i>Ablabesmyia mallochi</i>	+			
77800	<i>Helopelopia</i> sp	+			
78655	<i>Procladius (Holotanytus)</i> sp	+			
79400	<i>Zavrelimyia</i> sp	+			
79720	<i>Diamesa</i> sp	+			
80420	<i>Cricotopus (C.) bicinctus</i>	+			
81650	<i>Parametriocnemus</i> sp	+			
82820	<i>Cryptochironomus</i> sp	+			
83040	<i>Dicrotendipes neomodestus</i>	+			
83820	<i>Microtendipes "caelum"</i> (sensu Simpson & Bode, 1980)	+			

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: Furnace Run
upst. Covered Bridge

Collection Date: 07/31/2012 River Code: 19-020 RM: 1.10

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
11120	<i>Baetis flavistriga</i>	+			
11130	<i>Baetis intercalaris</i>	+			
11670	<i>Procloeon viridoculare</i>	+			
13521	<i>Stenonema femoratum</i>	+			
17200	<i>Caenis sp</i>	+			
23905	<i>Boyeria grafiana</i>	+			
33100	<i>Leuctra sp</i>	+			
34500	<i>Perlesta placida complex</i>	+			
47600	<i>Sialis sp</i>	+			
50301	<i>Chimarra aterrima</i>	+			
50315	<i>Chimarra obscura</i>	+			
51600	<i>Polycentropus sp</i>	+			
52200	<i>Cheumatopsyche sp</i>	+			
52430	<i>Ceratopsyche morosa group</i>	+			
52450	<i>Ceratopsyche sparna</i>	+			
52530	<i>Hydropsyche depravata group</i>	+			
59300	<i>Mystacides sp</i>	+			
68075	<i>Psephenus herricki</i>	+			
69400	<i>Stenelmis sp</i>	+			
71700	<i>Pilaria sp</i>	+			
71900	<i>Tipula sp</i>	+			
74501	<i>Ceratopogonidae</i>	+			
77120	<i>Ablabesmyia mallochi</i>	+			
77800	<i>Helopelopia sp</i>	+			
78655	<i>Procladius (Holotanypus) sp</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>	+			
84480	<i>Polypedilum (P.) laetum group</i>	+			
84540	<i>Polypedilum (Tripodura) scalaenum group</i>	+			
84612	<i>Saetheria tylus</i>	+			
85625	<i>Rheotanytarsus sp</i>	+			
85840	<i>Tanytarsus sepp</i>	+			
95100	<i>Physella sp</i>	+			

No. Quantitative Taxa: 0	Total Taxa: 35
No. Qualitative Taxa: 35	ICI:
Number of Organisms: 0	Qual EPT: 15

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: Furnace Run
upst. RR bridge

Collection Date: 08/02/2012 River Code: 19-020 RM: 0.40

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
03600	<i>Oligochaeta</i>	+	85840	<i>Tanytarsus sepp</i>	+
05800	<i>Caecidotea sp</i>	+	86100	<i>Chrysops sp</i>	+
11120	<i>Baetis flavistriga</i>	+	95100	<i>Physella sp</i>	+
11130	<i>Baetis intercalaris</i>	+			
13521	<i>Stenonema femoratum</i>	+	No. Quantitative Taxa: 0		Total Taxa: 46
17200	<i>Caenis sp</i>	+	No. Qualitative Taxa: 46		ICI:
21200	<i>Calopteryx sp</i>	+	Number of Organisms: 0		Qual EPT: 12
22001	<i>Coenagrionidae</i>	+			
22300	<i>Argia sp</i>	+			
23909	<i>Boyeria vinosa</i>	+			
24900	<i>Gomphus sp</i>	+			
26700	<i>Macromia sp</i>	+			
33100	<i>Leuctra sp</i>	+			
50301	<i>Chimarra aterrima</i>	+			
50315	<i>Chimarra obscura</i>	+			
52200	<i>Cheumatopsyche sp</i>	+			
52430	<i>Ceratopsyche morosa group</i>	+			
52450	<i>Ceratopsyche sparna</i>	+			
52530	<i>Hydropsyche depravata group</i>	+			
53800	<i>Hydroptila sp</i>	+			
66500	<i>Enochrus sp</i>	+			
67500	<i>Laccobius sp</i>	+			
68601	<i>Ancyronyx variegata</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>	+			
77120	<i>Ablabesmyia mallochi</i>	+			
77500	<i>Conchapelopia sp</i>	+			
77750	<i>Hayesomyia senata</i> or <i>Thienemannimyia norena</i>	+			
77800	<i>Helopelopia sp</i>	+			
78600	<i>Pentaneura inconspicua</i>	+			
78655	<i>Procladius (Holotanypus) sp</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>	+			
84612	<i>Saetheria tylus</i>	+			
85615	<i>Rheotanytarsus pellucidus</i>	+			
85625	<i>Rheotanytarsus sp</i>	+			
85800	<i>Tanytarsus sp</i>	+			
85814	<i>Tanytarsus glabrescens group</i>	+			

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: Furnace Run
dst. Rock Creek

Collection Date: 09/16/2009 River Code: 19-020 RM: 7.20

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01320	<i>Hydra sp</i>	+			
01801	<i>Turbellaria</i>	+			
03600	<i>Oligochaeta</i>	+			
05800	<i>Caecidotea sp</i>	+			
06700	<i>Crangonyx sp</i>	+			
11120	<i>Baetis flavistriga</i>	+			
21200	<i>Calopteryx sp</i>	+			
22001	<i>Coenagrionidae</i>	+			
22300	<i>Argia sp</i>	+			
23905	<i>Boyeria grafiana</i>	+			
23909	<i>Boyeria vinosa</i>	+			
50301	<i>Chimarra aterrima</i>	+			
51400	<i>Nyctiophylax sp</i>	+			
52430	<i>Ceratopsyche morosa group</i>	+			
52530	<i>Hydropsyche depravata group</i>	+			
63300	<i>Hydroporini</i>	+			
69400	<i>Stenelmis sp</i>	+			
71900	<i>Tipula sp</i>	+			
72700	<i>Anopheles sp</i>	+			
74100	<i>Simulium sp</i>	+			
78655	<i>Procladius (Holotanypus) sp</i>	+			
81650	<i>Parametriocnemus sp</i>	+			
82200	<i>Tvetenia bavarica group</i>	+			
83820	<i>Microtendipes "caelum" (sensu Simpson & Bode, 1980)</i>	+			
84750	<i>Stictochironomus sp</i>	+			
85500	<i>Paratanytarsus sp</i>	+			
85821	<i>Tanytarsus glabrescens group sp 7</i>	+			
96264	<i>Planorbella (Pierosoma) pilsbryi</i>	+			

No. Quantitative Taxa: 0	Total Taxa: 28
No. Qualitative Taxa: 28	ICI:
Number of Organisms: 0	Qual EPT: 5

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: Furnace Run

Collection Date: 09/16/2009 River Code: 19-020 RM: 6.90

St. Rt. 21

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01801	<i>Turbellaria</i>	+	85800	<i>Tanytarsus sp</i>	+
01900	<i>Nemertea</i>	+	95100	<i>Physella sp</i>	+
03600	<i>Oligochaeta</i>	+	96002	<i>Helisoma anceps anceps</i>	+
05800	<i>Caecidotea sp</i>	+	96900	<i>Ferrissia sp</i>	+
06700	<i>Crangonyx sp</i>	+			
11120	<i>Baetis flavistriga</i>	+	No. Quantitative Taxa: 0		Total Taxa: 47
11130	<i>Baetis intercalaris</i>	+	No. Qualitative Taxa: 47		ICI:
11651	<i>Procladius sp (w/o hindwing pads)</i>	+	Number of Organisms: 0		Qual EPT: 11
13400	<i>Stenacron sp</i>	+			
13521	<i>Stenonema femoratum</i>	+			
21200	<i>Calopteryx sp</i>	+			
22001	<i>Coenagrionidae</i>	+			
23600	<i>Aeshna sp</i>	+			
23909	<i>Boyeria vinosa</i>	+			
47600	<i>Sialis sp</i>	+			
50301	<i>Chimarra aterrima</i>	+			
51400	<i>Nyctiophylax sp</i>	+			
52430	<i>Ceratopsyche morosa group</i>	+			
52440	<i>Ceratopsyche slosonae</i>	+			
52450	<i>Ceratopsyche sparna</i>	+			
52530	<i>Hydropsyche depravata group</i>	+			
68075	<i>Psephenus herricki</i>	+			
68601	<i>Ancyronyx variegata</i>	+			
68901	<i>Macronychus glabratus</i>	+			
69400	<i>Stenelmis sp</i>	+			
71100	<i>Hexatoma sp</i>	+			
72700	<i>Anopheles sp</i>	+			
74100	<i>Simulium sp</i>	+			
77120	<i>Ablabesmyia mallochi</i>	+			
77750	<i>Hayesomyia senata or Thienemannimyia norena</i>	+			
77800	<i>Helopelopia sp</i>	+			
78655	<i>Procladius (Holotanytus) sp</i>	+			
80750	<i>Eukiefferiella devonica group</i>	+			
81825	<i>Rheocricotopus (Psilocricotopus) robacki</i>	+			
82220	<i>Tvetenia discoloripes group</i>	+			
82300	<i>Xylotopus par</i>	+			
82820	<i>Cryptochironomus sp</i>	+			
83820	<i>Microtendipes "caelum" (sensu Simpson & Bode, 1980)</i>	+			
84100	<i>Paracladopelma sp</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>	+			

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: Furnace Run

Collection Date: 09/16/2009 River Code: 19-020 RM: 6.50

Brush Rd.

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01801	<i>Turbellaria</i>	+			
01900	<i>Nemertea</i>	+			
05800	<i>Caecidotea sp</i>	+			
05900	<i>Lirceus sp</i>	+			
07701	<i>Cambaridae</i>	+			
11120	<i>Baetis flavistriga</i>	+			
11130	<i>Baetis intercalaris</i>	+			
13521	<i>Stenonema femoratum</i>	+			
17200	<i>Caenis sp</i>	+			
21200	<i>Calopteryx sp</i>	+			
22001	<i>Coenagrionidae</i>	+			
23600	<i>Aeshna sp</i>	+			
23909	<i>Boyeria vinosa</i>	+			
48620	<i>Nigronia serricornis</i>	+			
50301	<i>Chimarra aterrima</i>	+			
50315	<i>Chimarra obscura</i>	+			
51400	<i>Nyctiophylax sp</i>	+			
52430	<i>Ceratopsyche morosa group</i>	+			
52440	<i>Ceratopsyche slossonae</i>	+			
52530	<i>Hydropsyche depravata group</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>	+			
70600	<i>Antocha sp</i>	+			
71100	<i>Hexatoma sp</i>	+			
72700	<i>Anopheles sp</i>	+			
74501	<i>Ceratopogonidae</i>	+			
77120	<i>Ablabesmyia mallochi</i>	+			
78140	<i>Labrundinia pilosella</i>	+			
78350	<i>Meropelopia sp</i>	+			
78402	<i>Natarsia baltimoreus</i>	+			
81825	<i>Rheocricotopus (Psilocricotopus) robacki</i>	+			
82200	<i>Tvetenia bavarica group</i>	+			
82820	<i>Cryptochironomus sp</i>	+			
84100	<i>Paracladopelma sp</i>	+			
84210	<i>Paratendipes albimanus or P. duplicatus</i>	+			
84540	<i>Polypedilum (Tripodura) scalaenum group</i>	+			
84750	<i>Stictochironomus sp</i>	+			
85261	<i>Cladotanytarsus vanderwulpi</i>	+			
87400	<i>Stratiomys sp</i>	+			

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: Furnace Run

Collection Date: 09/16/2009 River Code: 19-020 RM: 1.10

upst. Covered Bridge

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
03600	<i>Oligochaeta</i>	28 +	81650	<i>Parametriocnemus sp</i>	19 +
05800	<i>Caecidotea sp</i>	+	81825	<i>Rheocricotopus (Psilocricotopus) robacki</i>	10
06700	<i>Crangonyx sp</i>	+	82100	<i>Thienemanniella sp</i>	+
08200	<i>Orconectes sp</i>	+	82141	<i>Thienemanniella xena</i>	4
11120	<i>Baetis flavistriga</i>	6 +	82820	<i>Cryptochironomus sp</i>	+
11130	<i>Baetis intercalaris</i>	2 +	83820	<i>Microtendipes "caelum" (sensu Simpson & Bode, 1980)</i>	10 +
13521	<i>Stenonema femoratum</i>	18 +			
21200	<i>Calopteryx sp</i>	6 +	84100	<i>Paracladopelma sp</i>	+
22001	<i>Coenagrionidae</i>	+	84210	<i>Paratendipes albimanus or P. duplicatus</i>	19 +
22300	<i>Argia sp</i>	+	84300	<i>Phaenopsectra obediens group</i>	10
23909	<i>Boyeria vinosa</i>	1 +	84450	<i>Polypedilum (Uresipedilum) flavum</i>	10
42700	<i>Belostoma sp</i>	+	84460	<i>Polypedilum (P.) fallax group</i>	48
50301	<i>Chimarra aterrima</i>	+	84470	<i>Polypedilum (P.) illinoense</i>	+
50315	<i>Chimarra obscura</i>	+	85261	<i>Cladotanytarsus vanderwulpi</i>	10
51400	<i>Nyctiophylax sp</i>	1 +	85500	<i>Paratanytarsus sp</i>	77
51600	<i>Polycentropus sp</i>	+	85625	<i>Rheotanytarsus sp</i>	183 +
52200	<i>Cheumatopsyche sp</i>	+	85752	<i>Sublettea coffmani</i>	10
52430	<i>Ceratopsyche morosa group</i>	4 +	85800	<i>Tanytarsus sp</i>	29
52450	<i>Ceratopsyche sparna</i>	+	85821	<i>Tanytarsus glabrescens group sp 7</i>	203
52530	<i>Hydropsyche depravata group</i>	+	86501	<i>Stratiomyidae</i>	+
53800	<i>Hydroptila sp</i>	+	87400	<i>Stratiomys sp</i>	+
59310	<i>Mystacides sepulchralis</i>	+	87540	<i>Hemerodromia sp</i>	41
59720	<i>Triaenodes ignitus</i>	+	94400	<i>Fossaria sp</i>	+
60900	<i>Peltodytes sp</i>	+	95100	<i>Physella sp</i>	3 +
63300	<i>Hydroporini</i>	+	96900	<i>Ferrissia sp</i>	17 +
67100	<i>Hydrobius sp</i>	+	98001	<i>Pisidiidae</i>	+
67700	<i>Paracymus sp</i>	+			
68075	<i>Psephenus herricki</i>	+	No. Quantitative Taxa: 34		Total Taxa: 69
68707	<i>Dubiraphia quadrinotata</i>	+	No. Qualitative Taxa: 53		ICI: 38
68708	<i>Dubiraphia vittata group</i>	4 +	Number of Organisms: 1112		Qual EPT: 14
68901	<i>Macronychus glabratus</i>	+			
69400	<i>Stenelmis sp</i>	5 +			
70600	<i>Antocha sp</i>	2			
71100	<i>Hexatoma sp</i>	+			
71900	<i>Tipula sp</i>	+			
72700	<i>Anopheles sp</i>	+			
74100	<i>Simulium sp</i>	+			
74501	<i>Ceratopogonidae</i>	1 +			
77120	<i>Ablabesmyia mallochi</i>	+			
77500	<i>Conchapelopia sp</i>	48 +			
77800	<i>Helopelopia sp</i>	174			
80360	<i>Corynoneura floridaensis</i>	4			
80370	<i>Corynoneura lobata</i>	76			
80410	<i>Cricotopus (C.) sp</i>	29			

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: Furnace Run
in restoration area

Collection Date: 09/16/2009 River Code: 19-020 RM: 0.80

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01801	<i>Turbellaria</i>	+	82730	<i>Chironomus (C.) decorus group</i>	+
03600	<i>Oligochaeta</i>	+	82820	<i>Cryptochironomus sp</i>	+
05800	<i>Caecidotea sp</i>	+	83003	<i>Dicrotendipes fumidus</i>	+
06700	<i>Crangonyx sp</i>	+	83820	<i>Microtendipes "caelum" (sensu Simpson & Bode, 1980)</i>	+
11120	<i>Baetis flavistriga</i>	+	84210	<i>Paratendipes albimanus</i> or <i>P. duplicatus</i>	+
11130	<i>Baetis intercalaris</i>	+	84440	<i>Polypedilum (Uresipedilum) aviceps</i>	+
11250	<i>Centroptilum sp (w/o hindwing pads)</i>	+	84450	<i>Polypedilum (Uresipedilum) flavum</i>	+
13521	<i>Stenonema femoratum</i>	+	84700	<i>Stenochironomus sp</i>	+
17200	<i>Caenis sp</i>	+	84750	<i>Stictochironomus sp</i>	+
21200	<i>Calopteryx sp</i>	+	85260	<i>Cladotanytarsus vanderwulpi group</i>	+
22001	<i>Coenagrionidae</i>	+	85625	<i>Rheotanytarsus sp</i>	+
22300	<i>Argia sp</i>	+	85800	<i>Tanytarsus sp</i>	+
23905	<i>Boyeria grafiana</i>	+	86100	<i>Chrysops sp</i>	+
23909	<i>Boyeria vinosa</i>	+	87540	<i>Hemerodromia sp</i>	+
25510	<i>Stylogomphus albistylus</i>	+	95100	<i>Physella sp</i>	+
27500	<i>Somatochlora sp</i>	+	96900	<i>Ferrissia sp</i>	+
36100	<i>Alloperla sp</i>	+			
44501	<i>Corixidae</i>	+			
47600	<i>Sialis sp</i>	+	No. Quantitative Taxa: 0		Total Taxa: 60
48600	<i>Nigronia sp</i>	+	No. Qualitative Taxa: 60		ICI:
50301	<i>Chimarra aterrima</i>	+	Number of Organisms: 0		Qual EPT: 13
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>	+			
59310	<i>Mystacides sepulchralis</i>	+			
63300	<i>Hydroporini</i>	+			
68075	<i>Psephenus herricki</i>	+			
68130	<i>Helichus sp</i>	+			
68707	<i>Dubiraphia quadrinotata</i>	+			
68708	<i>Dubiraphia vittata group</i>	+			
69400	<i>Stenelmis sp</i>	+			
71100	<i>Hexatoma sp</i>	+			
71700	<i>Pilaria sp</i>	+			
71900	<i>Tipula sp</i>	+			
72700	<i>Anopheles sp</i>	+			
74100	<i>Simulium sp</i>	+			
74501	<i>Ceratopogonidae</i>	+			
77120	<i>Ablabesmyia mallochi</i>	+			
77800	<i>Helopelopia sp</i>	+			
78350	<i>Meropelopia sp</i>	+			
81650	<i>Parametriocnemus sp</i>	+			
82220	<i>Tvetenia discoloripes group</i>	+			

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Collection Date: 09/16/2009 River Code: 19-020 RM: 0.40 Site: Furnace Run
upst. RR bridge

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01801	<i>Turbellaria</i>	3 +	80370	<i>Corynoneura lobata</i>	16
01900	<i>Nemertea</i>	8	80410	<i>Cricotopus (C.) sp</i>	58
03600	<i>Oligochaeta</i>	64 +	80430	<i>Cricotopus (C.) tremulus group</i>	29
05800	<i>Caecidotea sp</i>	17 +	81465	<i>Orthocladius (O.) carlatus</i>	14
06700	<i>Crangonyx sp</i>	+	82130	<i>Thienemanniella similis</i>	+
11120	<i>Baetis flavistriga</i>	+	82730	<i>Chironomus (C.) decorus group</i>	+
11130	<i>Baetis intercalaris</i>	1 +	82820	<i>Cryptochironomus sp</i>	+
11250	<i>Centroptilum sp (w/o hindwing pads)</i>	+	83003	<i>Dicrotendipes fumidus</i>	+
13400	<i>Stenacron sp</i>	+	83040	<i>Dicrotendipes neomodestus</i>	+
13521	<i>Stenonema femoratum</i>	2 +	83820	<i>Microtendipes "caelum" (sensu Simpson & Bode, 1980)</i>	44
13570	<i>Maccaffertium terminatum</i>	12	84210	<i>Paratendipes albimanus or P. duplicatus</i>	+
16200	<i>Eurylophella sp</i>	1	84300	<i>Phaenopsectra obediens group</i>	44 +
17200	<i>Caenis sp</i>	+	84450	<i>Polypedilum (Uresipedilum) flavum</i>	14 +
21200	<i>Calopteryx sp</i>	+	84460	<i>Polypedilum (P.) fallax group</i>	102
22001	<i>Coenagrionidae</i>	+	84470	<i>Polypedilum (P.) illinoense</i>	+
22300	<i>Argia sp</i>	+	84540	<i>Polypedilum (Tripodura) scalaenum group</i>	44 +
23909	<i>Boyeria vinosa</i>	+	85200	<i>Cladotanytarsus sp</i>	+
45400	<i>Trichocorixa sp</i>	+	85500	<i>Paratanytarsus sp</i>	131 +
50301	<i>Chimarra aterrima</i>	+	85625	<i>Rheotanytarsus sp</i>	232 +
50315	<i>Chimarra obscura</i>	4 +	85752	<i>Sublettea coffmani</i>	14
51400	<i>Nyctiophylax sp</i>	+	85800	<i>Tanytarsus sp</i>	29 +
52200	<i>Cheumatopsyche sp</i>	1 +	85821	<i>Tanytarsus glabrescens group sp 7</i>	276 +
52430	<i>Ceratopsyche morosa group</i>	46 +	87540	<i>Hemerodromia sp</i>	35
52450	<i>Ceratopsyche sparna</i>	+	94400	<i>Fossaria sp</i>	+
52530	<i>Hydropsyche depravata group</i>	+	95100	<i>Physella sp</i>	+
53800	<i>Hydroptila sp</i>	4	96900	<i>Ferrissia sp</i>	9 +
59720	<i>Trienodes ignitus</i>	+			
60900	<i>Peltodytes sp</i>	+			
67500	<i>Laccobius sp</i>	+	No. Quantitative Taxa: 32		Total Taxa: 70
68075	<i>Psephenus herricki</i>	+	No. Qualitative Taxa: 55		ICI: 40
68130	<i>Helichus sp</i>	+	Number of Organisms: 1516		Qual EPT: 14
68708	<i>Dubiraphia vittata group</i>	+			
69400	<i>Stenelmis sp</i>	+			
70600	<i>Antocha sp</i>	45			
71100	<i>Hexatoma sp</i>	+			
71900	<i>Tipula sp</i>	+			
72700	<i>Anopheles sp</i>	+			
74501	<i>Ceratopogonidae</i>	+			
77120	<i>Ablabesmyia mallochi</i>	+			
77500	<i>Conchapelopia sp</i>	+			
77800	<i>Helopelopia sp</i>	189 +			
78140	<i>Labrundinia pilosella</i>	14			
78450	<i>Nilotanypus fimbriatus</i>	14			
80310	<i>Cardiocladius obscurus</i>	+			

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: Black River

Collection Date: 08/29/2012 River Code: 20-001 RM: 14.95

Cascade Park, Elyria

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
00401	<i>Spongillidae</i>	+	81240	<i>Nanocladius (N.) distinctus</i>	186
01320	<i>Hydra sp</i>	16	82121	<i>Thienemanniella lobapodema</i>	+
01801	<i>Turbellaria</i>	204 +	82130	<i>Thienemanniella similis</i>	80
03360	<i>Plumatella sp</i>	13 +	82141	<i>Thienemanniella xena</i>	96
03600	<i>Oligochaeta</i>	+	82820	<i>Cryptochironomus sp</i>	+
04964	<i>Erpobdella microstoma</i>	+	83820	<i>Microtendipes "caelum" (sensu Simpson & Bode, 1980)</i>	47
05800	<i>Caecidotea sp</i>	+	84210	<i>Paratendipes albimanus</i> or <i>P. duplicatus</i>	+
06201	<i>Hyalella azteca</i>	+	84450	<i>Polypedilum (Uresipedilum) flavum</i>	2143 +
06700	<i>Crangonyx sp</i>	+	84490	<i>Polypedilum (Cerobregma) ontario</i>	47
08250	<i>Orconectes (Procericambarus) rusticus</i>	+	84540	<i>Polypedilum (Tripodura) scalaenum group</i>	140 +
11120	<i>Baetis flavistriga</i>	10 +	85230	<i>Cladotanytarsus mancus group</i>	+
11130	<i>Baetis intercalaris</i>	474 +	85625	<i>Rheotanytarsus sp</i>	233 +
11651	<i>Procladius sp (w/o hindwing pads)</i>	+	85821	<i>Tanytarsus glabrescens group sp 7</i>	280 +
13000	<i>Leucrocuta sp</i>	+	85840	<i>Tanytarsus sepp</i>	+
13400	<i>Stenacron sp</i>	+	87540	<i>Hemerodromia sp</i>	16
13521	<i>Stenonema femoratum</i>	+	96900	<i>Ferrissia sp</i>	+
13561	<i>Maccaffertium pulchellum</i>	23 +	98200	<i>Pisidium sp</i>	1
17200	<i>Caenis sp</i>	+	98600	<i>Sphaerium sp</i>	17 +
22300	<i>Argia sp</i>	4 +	99700	<i>Potamilus alatus</i>	+
45400	<i>Trichocorixa sp</i>	+			
50315	<i>Chimarra obscura</i>	295 +			
51600	<i>Polycentropus sp</i>	+	No. Quantitative Taxa: 32		Total Taxa: 62
52200	<i>Cheumatopsyche sp</i>	978 +	No. Qualitative Taxa: 47		ICI: 36
52430	<i>Ceratopsyche morosa group</i>	794 +	Number of Organisms: 6762		Qual EPT: 15
52530	<i>Hydropsyche depravata group</i>	49			
52540	<i>Hydropsyche dicantha</i>	140			
53800	<i>Hydroptila sp</i>	35 +			
58505	<i>Helicopsyche borealis</i>	+			
59140	<i>Ceraclea maculata</i>	9			
59300	<i>Mystacides sp</i>	+			
59970	<i>Petrophila sp</i>	1 +			
68075	<i>Psephenus herricki</i>	+			
68130	<i>Helichus sp</i>	+			
68901	<i>Macronychus glabratus</i>	33			
69400	<i>Stenelmis sp</i>	+			
77120	<i>Ablabesmyia mallochi</i>	+			
77500	<i>Conchapelopia sp</i>	47			
77750	<i>Hayesomyia senata</i> or <i>Thienemannimyia norena</i>	47 +			
77800	<i>Helopelopia sp</i>	+			
78450	<i>Nilotanypus fimbriatus</i>	224			
78655	<i>Procladius (Holotanypus) sp</i>	+			
80370	<i>Corynoneura lobata</i>	80			
81231	<i>Nanocladius (N.) crassicornus</i> or <i>N. (N.) "rectinervis"</i>	+			

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: Black River

Collection Date: 08/29/2012 River Code: 20-001 RM: 11.50

dst. Elyria at Spring Valley Golf Club

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
01801	<i>Turbellaria</i>	91 +	82820	<i>Cryptochironomus sp</i>	+
03121	<i>Paludicella articulata</i>	+	83040	<i>Dicrotendipes neomodestus</i>	8
03360	<i>Plumatella sp</i>	1 +	83300	<i>Glyptotendipes (G.) sp</i>	8 +
03600	<i>Oligochaeta</i>	+	84450	<i>Polypedilum (Uresipedilum) flavum</i>	946 +
04964	<i>Erpobdella microstoma</i>	+	84540	<i>Polypedilum (Tripodura) scalaenum group</i>	+
06810	<i>Gammarus fasciatus</i>	+	85625	<i>Rheotanytarsus sp</i>	39
08250	<i>Orconectes (Procericambarus) rusticus</i>	+	85840	<i>Tanytarsus sepp</i>	+
11120	<i>Baetis flavistriga</i>	83	96900	<i>Ferrissia sp</i>	+
11130	<i>Baetis intercalaris</i>	348 +	97601	<i>Corbicula fluminea</i>	+
11650	<i>Procloeon sp (w/ hindwing pads)</i>	+	98200	<i>Pisidium sp</i>	+
11651	<i>Procloeon sp (w/o hindwing pads)</i>	+	98600	<i>Sphaerium sp</i>	+
11670	<i>Procloeon viridoculare</i>	+			
13000	<i>Leucrocuta sp</i>	4 +	No. Quantitative Taxa: 22		Total Taxa: 55
13400	<i>Stenacron sp</i>	203 +	No. Qualitative Taxa: 47		ICI: 36
13510	<i>Maccaffertium exiguum</i>	1	Number of Organisms: 3050		Qual EPT: 15
13521	<i>Stenonema femoratum</i>	1 +			
13561	<i>Maccaffertium pulchellum</i>	202 +			
17200	<i>Caenis sp</i>	+			
18600	<i>Ephemera sp</i>	+			
21200	<i>Calopteryx sp</i>	+			
22001	<i>Coenagrionidae</i>	+			
22300	<i>Argia sp</i>	+			
43300	<i>Ranatra sp</i>	+			
45400	<i>Trichocorixa sp</i>	+			
50315	<i>Chimarra obscura</i>	884 +			
51600	<i>Polycentropus sp</i>	+			
52200	<i>Cheumatopsyche sp</i>	96 +			
52430	<i>Ceratopsyche morosa group</i>	48 +			
52530	<i>Hydropsyche depravata group</i>	+			
59970	<i>Petrophila sp</i>	+			
65800	<i>Berosus sp</i>	+			
68075	<i>Psephenus herricki</i>	+			
68708	<i>Dubiraphia vittata group</i>	+			
68901	<i>Macronychus glabratus</i>	1 +			
69400	<i>Stenelmis sp</i>	2 +			
77120	<i>Ablabesmyia mallochi</i>	+			
77500	<i>Conchapelopia sp</i>	8			
77750	<i>Hayesomyia senata or Thienemannimyia norena</i>	+			
77800	<i>Helopelopia sp</i>	+			
78450	<i>Nilotanypus fimbriatus</i>	20			
78601	<i>Pentaneura inyoensis</i>	+			
78655	<i>Procladius (Holotanypus) sp</i>	+			
80370	<i>Corynoneura lobata</i>	40			
82130	<i>Thienemanniella similis</i>	16			

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: East Branch Black River
 Washington St.

Collection Date: 08/22/2012 River Code: 20-010 RM: 0.36

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
00700	<i>Radiospongilla crateriformis</i>	+			
01320	<i>Hydra sp</i>	273			
01801	<i>Turbellaria</i>	615			+
03337	<i>Hyalinella punctata</i>	1			
03600	<i>Oligochaeta</i>	2130			+
04666	<i>Helobdella papillata</i>				+
04964	<i>Erpobdella microstoma</i>				+
06810	<i>Gammarus fasciatus</i>	13			+
08601	<i>Hydrachnidia</i>				+
11200	<i>Callibaetis sp</i>				+
13400	<i>Stenacron sp</i>	1			
13521	<i>Stenonema femoratum</i>	1			
17200	<i>Caenis sp</i>				+
22001	<i>Coenagrionidae</i>				+
22300	<i>Argia sp</i>	29			
23909	<i>Boyeria vinosa</i>				+
27500	<i>Somatochlora sp</i>				+
49200	<i>Climacia sp</i>				+
51206	<i>Cyrnellus fraternus</i>	1			
53800	<i>Hydroptila sp</i>	17			
60900	<i>Peltodytes sp</i>				+
65800	<i>Berosus sp</i>	1			+
68130	<i>Helichus sp</i>				+
68601	<i>Ancyronyx variegata</i>	1			
69400	<i>Stenelmis sp</i>				+
77120	<i>Ablabesmyia mallochi</i>	42			
77130	<i>Ablabesmyia rhamphe group</i>	85			+
78655	<i>Procladius (Holotanypus) sp</i>				+
82820	<i>Cryptochironomus sp</i>				+
83051	<i>Dicrotendipes simpsoni</i>	1440			+
83300	<i>Glyptotendipes (G.) sp</i>	2584			+
84470	<i>Polypedilum (P.) illinoense</i>				+
84520	<i>Polypedilum (Tripodura) halterale group</i>				+
84888	<i>Xenochironomus xenolabis</i>				+
85230	<i>Cladotanytarsus mancus group</i>				+
95100	<i>Physella sp</i>	3			+
96120	<i>Menetus (Micromenetus) dilatatus</i>	1			
96900	<i>Ferrissia sp</i>	1			+

No. Quantitative Taxa: 19 Total Taxa: 38

No. Qualitative Taxa: 28 ICI: 8

Number of Organisms: 7239 Qual EPT: 2

Ohio EPA/DSW Ecological Assessment Section
Macroinvertebrate Collection

Site: West Branch Black River
upst. Third St.

Collection Date: 08/30/2012 River Code: 20-020 RM: 1.20

Taxa Code	Taxa	Quant/Qual	Taxa Code	Taxa	Quant/Qual
00401	<i>Spongillidae</i>	+	68901	<i>Macronychus glabratus</i>	27 +
01200	<i>Cordylophora lacustris</i>	1	69400	<i>Stenelmis sp</i>	50 +
01320	<i>Hydra sp</i>	224	74100	<i>Simulium sp</i>	+
01801	<i>Turbellaria</i>	347 +	77355	<i>Clinotanypus pinguis</i>	+
03073	<i>Lophopodella carteri</i>	1	77500	<i>Conchapelopia sp</i>	+
03121	<i>Paludicella articulata</i>	+	77750	<i>Hayesomyia senata or Thienemannimyia norena</i>	140 +
03360	<i>Plumatella sp</i>	80 +	77800	<i>Helopelopia sp</i>	+
03451	<i>Urnatella gracilis</i>	1 +	78401	<i>Natarsia species A (sensu Roback, 1978)</i>	+
03600	<i>Oligochaeta</i>	48 +	78655	<i>Procladius (Holotanypus) sp</i>	+
04935	<i>Erpobdella punctata punctata</i>	+	79020	<i>Tanypus neopunctipennis</i>	+
04964	<i>Erpobdella microstoma</i>	+	81240	<i>Nanocladius (N.) distinctus</i>	70
05800	<i>Caecidotea sp</i>	+	82121	<i>Thienemanniella lobapodema</i>	32
06700	<i>Crangonyx sp</i>	16 +	82220	<i>Tvetenia discoloripes group</i>	+
08601	<i>Hydrachnidia</i>	64	82820	<i>Cryptochironomus sp</i>	+
11020	<i>Acerpenna pygmaea</i>	8	83300	<i>Glyptotendipes (G.) sp</i>	70 +
11120	<i>Baetis flavistriga</i>	1 +	83310	<i>Glyptotendipes (Heynotendipes) chelonina</i>	419
11130	<i>Baetis intercalaris</i>	93 +	84210	<i>Paratendipes albimanus or P. duplicatus</i>	+
11670	<i>Proclaeon viridoculare</i>	+	84450	<i>Polypedilum (Uresipedilum) flavum</i>	419 +
13400	<i>Stenacron sp</i>	48 +	84470	<i>Polypedilum (P.) illinoense</i>	+
13521	<i>Stenonema femoratum</i>	+	84540	<i>Polypedilum (Tripodura) scalaenum group</i>	+
13561	<i>Maccaffertium pulchellum</i>	48	85230	<i>Cladotanytarsus mancus group</i>	+
16700	<i>Tricorythodes sp</i>	231 +	85625	<i>Rheotanytarsus sp</i>	5240 +
17200	<i>Caenis sp</i>	40 +	85821	<i>Tanytarsus glabrescens group sp 7</i>	1258 +
21200	<i>Calopteryx sp</i>	+	85840	<i>Tanytarsus sepp</i>	+
22001	<i>Coenagrionidae</i>	+	87540	<i>Hemerodromia sp</i>	42
22300	<i>Argia sp</i>	4 +	96120	<i>Menetus (Micromenetus) dilatatus</i>	32
45100	<i>Palmacorixa sp</i>	+	96900	<i>Ferrissia sp</i>	8 +
45300	<i>Sigara sp</i>	+	98200	<i>Pisidium sp</i>	+
50315	<i>Chimarra obscura</i>	42 +	98600	<i>Sphaerium sp</i>	+
51600	<i>Polycentropus sp</i>	+	99090	<i>Anodontinae</i>	+
52200	<i>Cheumatopsyche sp</i>	147 +			
52430	<i>Ceratopsyche morosa group</i>	8			
52530	<i>Hydropsyche depravata group</i>	1 +	No. Quantitative Taxa: 39		Total Taxa: 74
52540	<i>Hydropsyche dicantha</i>	+	No. Qualitative Taxa: 62		ICI: 46
53800	<i>Hydroptila sp</i>	327 +	Number of Organisms: 9660		Qual EPT: 16
59110	<i>Ceraclea ancylus</i>	+			
59160	<i>Ceraclea spongillovorax</i>	29 +			
59310	<i>Mystacides sepulchralis</i>	1 +			
59970	<i>Petrophila sp</i>	29 +			
60900	<i>Peltodytes sp</i>	+			
65800	<i>Berosus sp</i>	14 +			
68025	<i>Ectopria sp</i>	+			
68601	<i>Ancyronyx variegata</i>	+			
68708	<i>Dubiraphia vittata group</i>	+			