

**Chagrin River Upstream of Wiley Creek**  
**August 16, 2012**  
**River Mile: 26.70**  
**Collection Method: Longline Electrofishing**  
**Drainage Area: 120 miles<sup>2</sup>**  
**Collection Distance: 0.2 km**

<b>Species</b>	<b>Number</b>	<b>Weight (kg)</b>	<b>Pollution Tolerance</b>	<b>#</b>	<b>DELT Anomalies Description</b>
Oncorhynchus mykiss Rainbow trout	2	0.020	--	0	---
Moxostoma erythrurum Golden redhorse	2	0.008	Moderately Intolerant	0	---
Hypentelium nigricans Northern hog sucker	158	9.859	Moderately Intolerant	0	---
Catostomus commersonii Common white sucker	137	4.075	Highly Tolerant	0	---
Cyprinus carpio Common carp	3	5.972	Highly Tolerant	0	---
Nocomis micropogon River Chub	104	2.350	Intolerant	0	---
Semotilus atromaculatus Creek chub	14	0.040	Highly Tolerant	0	---
Notropis rubellus Rosyface Shiner	27	0.040	Intolerant	0	---
Notropis cornutus Common shiner	59	0.702	--	0	---
Notropis stramineus Sand shiner	8	0.010	Moderately Intolerant	0	---
Ericymba buccata Silverjaw minnow	1	0.004	--	0	---
Pimephales notatus Bluntnose minnow	47	0.142	Highly Tolerant	0	---
Campostoma anomalum Central stoneroller minnow	178	0.762	--	0	---
Ictalurus natalis Yellow bullhead	1	0.172	Highly Tolerant	1	Lesion
Noturus flavus Stonecat Madtom	22	0.570	Intolerant	0	---

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Ambloplites rupestris Northern rockbass	8	0.983	--	0	---
Micropterus dolomieu Smallmouth bass	108	3.572	Moderately Intolerant	3	Lesion
Micropterus salmoides Largemouth bass	3	0.016	--	0	---
Lepomis cyanellus Green sunfish	11	0.242	Highly Tolerant	0	---
Lepomis macrochirus Northern bluegill sunfish	7	0.198	Moderately Tolerant	0	---
Lepomis gibbosus Pumpkinseed sunfish	9	0.252	Moderately Tolerant	0	---
Etheostoma blenniodes Greenside darter	31	0.076	Moderately Intolerant	0	---
Etheostoma caeruleum Rainbow darter	72	0.102	Moderately Intolerant	0	---
Etheostoma nigrum Johnny darter	13	0.030	--	0	---
<b>Totals</b>	<u><u>1025</u></u>	<u><u>30.197</u></u>		<u><u>4</u></u>	

*DELT anomalies were observed on	0.39	% of the fish collected.
Index of Biotic Integrity (IBI) =	48	(Very Good)
Modified Index of Well-Being (MIwb) =	9.7	(Exceptional)
Shannon Diversity Index, no.	2.493	
Shannon Diversity Index, wt.	2.014	
N	1215	
B	29.3	

**Chagrin River Downstream of Pepper-Luce Creek**

**August 16, 2012**

**River Mile: 22.60**

**Collection Method: Longline Electrofishing**

**Drainage Area: 153 miles<sup>2</sup>**

**Collection Distance: 0.2 km**

<b>Species</b>	<b>Number</b>	<b>Weight (kg)</b>	<b>Pollution Tolerance</b>	<b>DELT # Anomalies</b>	<b>Description</b>
Cariodes cyprinus Central quillback carpsucker	22	0.377	--	0	---
Moxostoma duquesnei Black redhorse	2	0.610	Common Intolerant	0	---
Moxostoma erythrurum Golden redhorse	7	2.750	Moderately Intolerant	0	---
Hypentelium nigricans Northern hog sucker	124	9.654	Moderately Intolerant	0	---
Catostomus commersonii Common white sucker	176	6.062	Highly Tolerant	0	---
Cyprinus carpio Common carp	6	3.332	Highly Tolerant	1	Lesion
Nocomis micropogon River Chub	14	0.450	Intolerant	0	---
Semotilus atromaculatus Creek chub	3	0.012	Highly Tolerant	0	---
Notropis atherinoides Common Emerald shiner	1	0.020	--	0	---
Notropis rubellus Rosyface Shiner	12	0.030	Intolerant	0	---
Notropis cornutus Common shiner	75	0.750	--	0	---
Notropis chrysocephalus Striped shiner	3	0.040	--	0	---
Cyprinella spiloptera Spotfin shiner	8	0.070	--	0	---
Notropis stramineus Sand shiner	269	0.351	Moderately Intolerant	0	---
Ericymba buccata Silverjaw minnow	15	0.051	--	0	---

**Chagrin River Downstream of Pepper-Luce Creek  
August 16, 2012**

**River Mile: 22.60**

Pimephales notatus Bluntnose minnow	107	0.356	Highly Tolerant	0	---
Campostoma anomalum Central stoneroller minnow	278	1.080	--	0	---
Ictalurus natalis Yellow bullhead	4	0.030	Highly Tolerant	0	---
Noturus flavus Stonecat Madtom	6	0.100	Intolerant	0	---
Ambloplites rupestris Northern rockbass	37	0.366	--	0	---
Micropterus dolomieu Smallmouth bass	81	2.716	Moderately Intolerant	0	---
Micropterus salmoides Largemouth bass	1	0.010	--	0	---
Lepomis cyanellus Green sunfish	3	0.080	Highly Tolerant	0	---
Lepomis macrochirus Northern bluegill sunfish	3	0.062	Moderately Tolerant	0	---
Lepomis gibbosus Pumpkinseed sunfish	3	0.077	Moderately Tolerant	0	---
Etheostoma blenniodes Greenside darter	141	0.280	Moderately Intolerant	0	---
Etheostoma caeruleum Rainbow darter	269	0.240	Moderately Intolerant	0	---
Etheostoma nigrum Johnny darter	5	0.004	--	0	---
Etheostoma maculata Blackside darter	1	0.010	--	0	---
Totals	<u>1676</u>	<u>29.970</u>		<u>1</u>	

*DELT anomalies were observed on	0.06	% of the fish collected.
Index of Biotic Integrity (IBI) =	56	(Exceptional)
Modified Index of Well-Being (MIwb) =	10.1	(Exceptional)
Shannon Diversity Index, no.	2.441	
Shannon Diversity Index, wt.	2.145	
N	2066	

**Chagrin River Downstream of Pepper-Luce Creek**  
**August 16, 2012**  
**River Mile: 22.60**

B

30.15

**Wiley Creek**  
**8/20/2012**  
**River Mile: 1.00**  
**Collection Method: Longline Electroshocking**  
**Drainage Area: 4.0 miles<sup>2</sup>**  
**Collection Distance: 0.15 km**

<b>Species</b>	<b>Number</b>	<b>Pollution Tolerance</b>	<b>DELT Anomalies #</b>	<b>Description</b>
Catostomus commersonii Common white sucker	47	Highly Tolerant	0	---
Rhinichthys atratulus Western blacknose dace	180	Highly Tolerant	0	---
Semotilus atromaculatus Creek chub	247	Highly Tolerant	0	---
Campostoma anomalum Central stoneroller minnow	610	--	0	---
Totals	<u>1084</u>		<u>0</u>	

\*DELT anomalies were observed on 0.0 % of the fish collected.  
 Index of Biotic Integrity (IBI) = 32 (Fair)

**Unnamed Tributary to Pepper-Luce Creek**  
**8/20/2012**  
**River Mile: 0.30**  
**Collection Method: Longline Electroshocking**  
**Drainage Area: 0.5 miles<sup>2</sup>**  
**Collection Distance: 0.15 km**

<b>Species</b>	<b>Number</b>	<b>Pollution Tolerance</b>	<b>DELTA Anomalies #</b>	<b>Description</b>
Rhinichthys atratulus Western blacknose dace	64	Highly Tolerant	0	---
Semotilus atromaculatus Creek chub	67	Highly Tolerant	0	---
Micropterus salmoides Largemouth bass	15	--	0	---
<b>Totals</b>	<u><u>146</u></u>		<u><u>0</u></u>	

\*DELTA anomalies were observed on 0.0 % of the fish collected.  
 Index of Biotic Integrity (IBI) = 32 (Fair)

**Pepper-Luce Creek Downstream of Creekside WWTP**

**8/20/2012**

**River Mile: 3.30**

**Collection Method: Longline Electroshocking**

**Drainage Area: 7.1 miles<sup>2</sup>**

**Collection Distance: 0.15 km**

<b>Species</b>	<b>Number</b>	<b>Pollution Tolerance</b>	<b>DELTA Anomalies #</b>	<b>Description</b>
Catostomus commersonii Common white sucker	340	Highly Tolerant	0	---
Rhinichthys atratulus Western blacknose dace	124	Highly Tolerant	0	---
Semotilus atromaculatus Creek chub	348	Highly Tolerant	0	---
Pimephales notatus Bluntnose minnow	182	Highly Tolerant	0	---
Campostoma anomalum Central stoneroller minnow	1703	--	0	---
Ictalurus natalis Yellow bullhead	3	Highly Tolerant	0	---
Micropterus salmoides Largemouth bass	6	--	0	---
Lepomis macrochirus Northern bluegill sunfish	2	Moderately Tolerant	0	---
<b>Totals</b>	<b><u>2708</u></b>		<b><u>0</u></b>	

\*DELTA anomalies were observed on 0.0 % of the fish collected.  
Index of Biotic Integrity (IBI) = 32 (Fair)



**Unnamed Tributary to Chagrin River Downstream of Quail Hollow WWTP**

**8/20/2012**

**River Mile: 0.20**

**Collection Method: Longline Electroshocking**

**Drainage Area: 0.8 miles<sup>2</sup>**

**Collection Distance: 0.15 km**

<b>Species</b>	<b>Number</b>	<b>Pollution Tolerance</b>	<b>DELTA Anomalies</b>	
			<b>#</b>	<b>Description</b>
Rhinichthys atratulus	133	Highly	0	---
Western blacknose dace		Tolerant		
Semotilus atromaculatus	118	Highly	0	---
Creek chub		Tolerant		
<b>Totals</b>	<u><u>251</u></u>		<u><u>0</u></u>	

\*DELTA anomalies were observed on 0.0 % of the fish collected.  
 Index of Biotic Integrity (IBI) = 26 (Poor)