

Chagrin River Upstream of Wiley Creek
August 29, 2014
River Mile: 26.70
Collection Method: Longline Electrofishing
Drainage Area: 120 miles²
Collection Distance: 0.2 km

Code	Species	Number	Weight (kg)	Pollution Tolerance	#	DELT Anomalies Description
25-002	<i>Oncorhynchus mykiss</i> Rainbow trout	1	0.008	--	0	---
40-008	<i>Moxostoma anisurum</i> Silver Redhorse	2	0.004	Moderately Intolerant	0	---
40-015	<i>Hypentelium nigricans</i> Northern hog sucker	57	3.795	Moderately Intolerant	0	---
40-016	<i>Catostomus commersonii</i> Common white sucker	14	0.650	Highly Tolerant	0	---
43-005	<i>Nocomis micropogon</i> River Chub	58	0.792	Intolerant	0	---
43-013	<i>Semotilus atromaculatus</i> Creek chub	13	0.175	Highly Tolerant	0	---
43-022	<i>Notropis rubellus</i> Rosyface Shiner	11	0.040	Intolerant	0	---
43-026	<i>Notropis cornutus</i> Common shiner	48	0.225	--	0	---
43-032	<i>Cyprinella spiloptera</i> Spotfin shiner	20	0.095	--	0	---
43-034	<i>Notropis stramineus</i> Sand shiner	1	0.002	Moderately Intolerant	0	---
43-039	<i>Ericymba buccata</i> Silverjaw minnow	11	0.030	--	0	---
43-043	<i>Pimephales notatus</i> Bluntnose minnow	1	0.003	Highly Tolerant	0	---
43-044	<i>Campostoma anomalum</i> Central stoneroller minnow	50	0.260	--	0	---
47-004	<i>Ictalurus natalis</i> Yellow bullhead	2	0.195	Highly Tolerant	0	---
47-008	<i>Noturus flavus</i> Stonecat Madtom	7	0.170	Intolerant	0	---

Chagrin River Upstream of Wiley Creek

August 29, 2014

River Mile: **26.70**

77-003	<i>Ambloplites rupestris</i> Northern rockbass	17	0.750	--	0	---
77-004	<i>Micropterus dolomieu</i> Smallmouth bass	30	1.375	Moderately Intolerant	0	---
77-008	<i>Lepomis cyanellus</i> Green sunfish	3	0.065	Highly Tolerant	0	---
77-009	<i>Lepomis macrochirus</i> Northern bluegill sunfish	6	0.082	Moderately Tolerant	0	---
77-013	<i>Lepomis gibbosus</i> Pumpkinseed sunfish	1	0.020	Moderately Tolerant	0	---
80-015	<i>Etheostoma blenniodes</i> Greenside darter	32	0.130	Moderately Intolerant	0	---
80-022	<i>Etheostoma caeruleum</i> Rainbow darter	106	0.150	Moderately Intolerant	0	---
80-024	<i>Etheostoma flabellare</i> Barred Fantail darter	3	0.005	--	0	---
Totals		<u>494</u>	<u>9.021</u>		<u>0</u>	

*DELT anomalies were observed on	0.00	% of the fish collected.
Index of Biotic Integrity (IBI) =	50	(Exceptional)
Modified Index of Well-Being (MIwb) =	9.0	(Very Good)
Shannon Diversity Index, no.	2.519	
Shannon Diversity Index, wt.	2.02	
N	690	
B	11.89	

Chagrin River Downstream of Pepper-Luce Creek

August 29, 2014

River Mile: 22.60

Collection Method: Longline Electrofishing

Drainage Area: 153 miles²

Collection Distance: 0.2 km

Code	Species	Number	Weight (kg)	Pollution Tolerance	DELT Anomalies #	Description
40-010	<i>Moxostoma erythrurum</i> Golden redbhorse	3	1.574	Moderately Intolerant	0	---
40-015	<i>Hypentelium nigricans</i> Northern hog sucker	42	3.502	Moderately Intolerant	0	---
40-016	<i>Catostomus commersonii</i> Common white sucker	10	1.325	Highly Tolerant	0	---
43-005	<i>Nocomis micropogon</i> River Chub	2	0.020	Intolerant	0	---
43-022	<i>Notropis rubellus</i> Rosyface Shiner	6	0.022	Intolerant	0	---
43-026	<i>Notropis cornutus</i> Common shiner	7	0.020	--	0	---
43-032	<i>Cyprinella spiloptera</i> Spotfin shiner	4	0.030	--	0	---
43-034	<i>Notropis stramineus</i> Sand shiner	126	0.130	Moderately Intolerant	0	---
43-039	<i>Ericymba buccata</i> Silverjaw minnow	3	0.012	--	0	---
43-043	<i>Pimephales notatus</i> Bluntnose minnow	2	0.012	Highly Tolerant	0	---
43-044	<i>Campostoma anomalum</i> Central stoneroller minnow	106	0.380	--	0	---
47-008	<i>Noturus flavus</i> Stonecat Madtom	4	0.150	Intolerant	0	---
77-003	<i>Ambloplites rupestris</i> Northern rockbass	7	0.490	--	0	---
77-004	<i>Micropterus dolomieu</i> Smallmouth bass	15	0.090	Moderately Intolerant	0	---
77-013	<i>Lepomis gibbosus</i> Pumpkinseed sunfish	1	0.034	Moderately Tolerant	0	---

Chagrin River Downstream of Pepper-Luce Creek

August 29, 2014

River Mile: 22.60

80-014	<i>Etheostoma nigrum</i> Johnny darter	6	0.006	--	0	---
80-015	<i>Etheostoma blenniodes</i> Greenside darter	33	0.092	Moderately Intolerant	0	---
80-022	<i>Etheostoma caeruleum</i> Rainbow darter	94	0.106	Moderately Intolerant	0	---
	Totals	<u>471</u>	<u>7.995</u>		<u>0</u>	

*DELT anomalies were observed on	0.00	% of the fish collected.
Index of Biotic Integrity (IBI) =	46	(Very Good)
Modified Index of Well-Being (MIwb) =	8.2	(Good)
Shannon Diversity Index, no.	2.045	
Shannon Diversity Index, wt.	1.711	
N	688.5	
B	9.987	

Pepper-Luce Creek Downstream of Creekside WWTP

8/27/2014

River Mile: 3.30

Collection Method: Longline Electroshocking

Drainage Area: 7.1 miles²

Collection Distance: 0.15 km

Code	Species	Number	Pollution Tolerance	DELT Anomalies #	Description
40-016	<i>Catostomus commersonii</i> Common white sucker	94	Highly Tolerant	0	---
43-002	<i>Carassius auratus</i> Goldfish	2	Highly Tolerant	0	---
43-011	<i>Rhinichthys atratulus</i> Western blacknose dace	40	Highly Tolerant	0	---
43-013	<i>Semotilus atromaculatus</i> Creek chub	49	Highly Tolerant	0	---
43-042	<i>Pimephales promelas</i> Northern fathead minnow	54	Highly Tolerant	0	---
43-043	<i>Pimephales notatus</i> Bluntnose minnow	70	Highly Tolerant	0	---
43-044	<i>Campostoma anomalum</i> Central stoneroller minnow	365	--	0	---
47-004	<i>Ictalurus natalis</i> Yellow bullhead	10	Highly Tolerant	0	---
77-009	<i>Lepomis macrochirus</i> Northern bluegill sunfish	2	Moderately Tolerant	0	---
Totals		<u><u>686</u></u>		<u><u>0</u></u>	

*DELT anomalies were observed on 0.00 % of the fish collected.
Index of Biotic Integrity (IBI) = 30 (Fair)

Wiley Creek Downstream of Jackson Valley WWTP

8/27/2014

River Mile: 1.00

Collection Method: Longline Electroshocking

Drainage Area: 4.0 miles²

Collection Distance: 0.15 km

Code	Species	Number	Pollution Tolerance	DELT Anomalies #	Description
40-016	<i>Catostomus commersonii</i> Common white sucker	11	Highly Tolerant	0	---
43-011	<i>Rhinichthys atratulus</i> Western blacknose dace	66	Highly Tolerant	0	---
43-013	<i>Semotilus atromaculatus</i> Creek chub	89	Highly Tolerant	0	---
43-044	<i>Campostoma anomalum</i> Central stoneroller minnow	34	--	0	---
Totals		<u>200</u>		<u>0</u>	

*DELT anomalies were observed on 0.00 % of the fish collected.
Index of Biotic Integrity (IBI) = 24 (Poor)

Unnamed Tributary to Pepper-Luce Creek Downstream of Woodland Glen WWTP

8/26/2014

River Mile: 0.30

Collection Method: Longline Electroshocking

Drainage Area: 0.5 miles²

Collection Distance: 0.15 km

Code	Species	Number	Pollution Tolerance	DELT Anomalies #	Description
43-011	<i>Rhinichthys atratulus</i> Western blacknose dace	8	Highly Tolerant	0	---
43-013	<i>Semotilus atromaculatus</i> Creek chub	2	Highly Tolerant	0	---
Totals		<u>10</u>		<u>0</u>	

*DELT anomalies were observed on 0.00 % of the fish collected.
 Index of Biotic Integrity (IBI) = 16 (Very Poor)

Unnamed Tributary to Chagrin River Downstream of Quail Hollow WWTP
8/26/2014
River Mile: 0.10
Collection Method: Longline Electroshocking
Drainage Area: 0.8 miles²
Collection Distance: 0.15 km

Code	Species	Number	Pollution Tolerance	DELT Anomalies #	Description
43-011	<i>Rhinichthys atratulus</i> Western blacknose dace	31	Highly Tolerant	0	---
43-013	<i>Semotilus atromaculatus</i> Creek chub	67	Highly Tolerant	0	---
43-044	<i>Campostoma anomalum</i> Central stoneroller minnow	2	--	0	---
Totals		<u>100</u>		<u>0</u>	

*DELT anomalies were observed on 0.00 % of the fish collected.
 Index of Biotic Integrity (IBI) = 26 (Poor)