

Euclid Creek Upstream of St. Clair Avenue
June 23, 2016
River Mile: 1.65
Collection Method: Longline Electrofishing
Drainage Area: 21.8 miles²
Collection Distance: 0.2 km

Code	Species	Number	Weight (kg)	Pollution Tolerance	DELT Anomalies #	Description
40-016	<i>Catostomus commersonii</i> Common white sucker	6	0.226	Highly Tolerant	0	---
43-011	<i>Rhinichthys atratulus</i> Blacknose dace	421	0.872	Highly Tolerant	0	---
43-013	<i>Semotilus atromaculatus</i> Creek chub	29	0.558	Highly Tolerant	0	---
43-043	<i>Pimephales notatus</i> Bluntnose minnow	1	0.004	Highly Tolerant	0	---
43-044	<i>Campostoma anomalum</i> Central stoneroller minnow	76	0.46	--	0	---
77-009	<i>Lepomis macrochirus</i> Northern bluegill sunfish	8	0.06	Moderately Tolerant	0	---
77-013	<i>Lepomis gibbosus</i> Pumpkinseed sunfish	2	0.03	Moderately Tolerant	0	---
Totals		<u><u>543</u></u>	<u><u>2.210</u></u>		<u><u>0</u></u>	

*DELT anomalies were observed on 0.00 % of the fish collected.
 Index of Biotic Integrity (IBI) = 26 (Poor)
 Modified Index of Well-Being (MIwb) = 4.5 (Poor)
 Shannon Diversity Index, no. 0.773
 Shannon Diversity Index, wt. 1.442
 N 129
 B 0.825

Euclid Creek Upstream of St. Clair Avenue
August 19, 2016
River Mile: 1.65
Collection Method: Longline Electrofishing
Drainage Area: 21.8 miles²
Collection Distance: 0.2 km

Code	Species	Number	Weight (kg)	Pollution Tolerance	DELT Anomalies #	Description
40-016	<i>Catostomus commersonii</i> Common white sucker	11	0.4	Highly Tolerant	0	---
43-011	<i>Rhinichthys atratulus</i> Blacknose dace	403	1.002	Highly Tolerant	0	---
43-013	<i>Semotilus atromaculatus</i> Creek chub	103	0.551	Highly Tolerant	0	---
43-042	<i>Pimephales promelas</i> Northern fathead minnow	2	0.006	Highly Tolerant	0	---
43-043	<i>Pimephales notatus</i> Bluntnose minnow	13	0.012	Highly Tolerant	0	---
43-044	<i>Campostoma anomalum</i> Central stoneroller minnow	114	0.584	--	0	---
47-004	<i>Ictalurus natalis</i> Yellow bullhead	1	0.005	Highly Tolerant	0	---
77-009	<i>Lepomis macrochirus</i> Northern bluegill sunfish	8	0.115	Moderately Tolerant	0	---
Totals		<u>655</u>	<u>2.675</u>		<u>0</u>	

*DELT anomalies were observed on 0.00 % of the fish collected.
 Index of Biotic Integrity (IBI) = 24 (Poor)
 Modified Index of Well-Being (MIwb) = 5.2 (Poor)
 Shannon Diversity Index, no. 1.122
 Shannon Diversity Index, wt. 1.495
 N 183
 B 1.049

Euclid Creek Downstream of Lakeshore Boulevard

June 23, 2016

River Mile: 0.55

Collection Method: Longline Electrofishing

Drainage Area: 23 miles²

Collection Distance: 0.2 km

Code	Species	Number	Weight (kg)	Pollution Tolerance	DELT #	Anomalies Description
20-003	<i>Dorosoma cepedianum</i> Eastern gizzard shad	1	0.061	--	0	---
40-005	<i>Carpionodes cyprinus</i> Central quillback carpsucker	1	0.002	--	0	---
40-010	<i>Moxostoma erythrurum</i> Golden redhorse	1	0.037	Moderately Intolerant	0	---
40-016	<i>Catostomus commersonii</i> Common white sucker	153	2.75	Highly Tolerant	0	---
43-011	<i>Rhinichthys atratulus</i> Blacknose dace	31	0.052	Highly Tolerant	0	---
43-013	<i>Semotilus atromaculatus</i> Creek chub	80	1.12	Highly Tolerant	0	---
43-020	<i>Notropis atherinoides</i> Common Emerald shiner	15	0.053	--	0	---
43-032	<i>Cyprinella spiloptera</i> Spotfin shiner	22	0.062	--	0	---
43-034	<i>Notropis stramineus</i> Sand shiner	3	0.006	Moderately Intolerant	0	---
43-035	<i>Notropis volucellus</i> Mimic Shiner	18	0.027	Common Intolerant	0	---
43-039	<i>Ericymba buccata</i> Silverjaw minnow	1	0.01	--	0	---
43-042	<i>Pimephales promelas</i> Northern fathead minnow	1	0.001	Highly Tolerant	0	---
43-043	<i>Pimephales notatus</i> Bluntnose minnow	34	0.07	Highly Tolerant	0	---
43-044	<i>Campostoma anomalum</i> Central stoneroller minnow	68	0.17	--	0	---
47-004	<i>Ictalurus natalis</i> Yellow bullhead	19	0.862	Highly Tolerant	0	---

Euclid Creek Downstream of Lakeshore Boulevard

June 23, 2016

River Mile: 0.55

47-005	<i>Ictalurus nebulosus</i> Brown bullhead	7	2.1	Highly Tolerant	1	Tumor
47-006	<i>Ictalurus melas</i> Black bullhead	1	0.235	Moderately Tolerant	0	---
77-003	<i>Ambloplites rupestris</i> Northern rockbass	3	0.31	--	0	---
77-004	<i>Micropterus dolomieu</i> Smallmouth bass	1	0.67	Moderately Intolerant	0	---
77-006	<i>Micropterus salmoides</i> Largemouth bass	1	0.03	--	0	---
77-008	<i>Lepomis cyanellus</i> Green sunfish	4	0.105	Highly Tolerant	0	---
77-009	<i>Lepomis macrochirus</i> Northern bluegill sunfish	129	0.88	Moderately Tolerant	0	---
80-011	<i>Percina caprodes</i> Northern logperch darter	1	0.019	Moderately Intolerant	0	---
87-001	<i>Neogobius melanostomus</i> Round goby	106	0.556	--	0	---
	Totals	<u>701</u>	<u>10.188</u>		<u>1</u>	

*DELT anomalies were observed on	0.14	% of the fish collected.
Index of Biotic Integrity (IBI) =	36	(Marginally Good)
Modified Index of Well-Being (MIwb) =	8.2	(Good)
Shannon Diversity Index, no.	2.277	
Shannon Diversity Index, wt.	2.218	
N	399	
B	3.858	

Euclid Creek Downstream of Lakeshore Boulevard

August 19, 2016

River Mile: 0.55

Collection Method: Longline Electrofishing

Drainage Area: 23 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	1.814	--	0	---
40-005	<i>Carpodes cyprinus</i> Central quillback carpsucker	3	0.035	--	0	---
40-008	<i>Moxostoma anisurum</i> Silver Redhorse	1	2.268	Moderately Intolerant	0	---
40-016	<i>Catostomus commersonii</i> Common white sucker	204	4.745	Highly Tolerant	0	---
43-002	<i>Carassius auratus</i> Goldfish	1	0.05	Highly Tolerant	0	---
43-011	<i>Rhinichthys atratulus</i> Blacknose dace	8	0.044	Highly Tolerant	0	---
43-013	<i>Semotilus atromaculatus</i> Creek chub	116	2.39	Highly Tolerant	0	---
43-020	<i>Notropis atherinoides</i> Common Emerald shiner	5	0.028	--	0	---
43-032	<i>Cyprinella spiloptera</i> Spotfin shiner	6	0.032	--	0	---
43-034	<i>Notropis stramineus</i> Sand shiner	2	0.008	Moderately Intolerant	0	---
43-035	<i>Notropis volucellus</i> Mimic Shiner	2	0.008	Common Intolerant	0	---
43-042	<i>Pimephales promelas</i> Northern fathead minnow	1	0.01	Highly Tolerant	0	---
43-043	<i>Pimephales notatus</i> Bluntnose minnow	19	0.072	Highly Tolerant	0	---
43-044	<i>Campostoma anomalum</i> Central stoneroller minnow	87	0.34	--	0	---
47-004	<i>Ictalurus natalis</i> Yellow bullhead	8	0.22	Highly Tolerant	0	---

Euclid Creek Downstream of Lakeshore Boulevard

August 19, 2016

River Mile: 0.55

47-005	<i>Ictalurus nebulosus</i> Brown bullhead	6	0.55	Highly Tolerant	0	---
74-003	<i>Morone americana</i> White perch	2	0.014	--	0	---
77-003	<i>Ambloplites rupestris</i> Northern rockbass	2	0.074	--	0	---
77-004	<i>Micropterus dolomieu</i> Smallmouth bass	18	0.15	Moderately Intolerant	0	---
77-006	<i>Micropterus salmoides</i> Largemouth bass	6	0.05	--	0	---
77-009	<i>Lepomis macrochirus</i> Northern bluegill sunfish	64	0.71	Moderately Tolerant	0	---
77-013	<i>Lepomis gibbosus</i> Pumpkinseed sunfish	10	0.24	Moderately Tolerant	0	---
80-003	<i>Perca flavescens</i> Yellow perch	1	0.035	--	0	---
87-001	<i>Neogobius melanostomus</i> Round goby	16	0.031	--	0	---
	Totals	<u>589</u>	<u>13.918</u>		<u>0</u>	

*DELT anomalies were observed on	0.00	% of the fish collected.
Index of Biotic Integrity (IBI) =	34	(Marginally Good)
Modified Index of Well-Being (MIwb) =	7.8	(Marginally Good)
Shannon Diversity Index, no.	2.051	
Shannon Diversity Index, wt.	1.99	
N	310.5	
B	5.967	

Euclid Creek Upstream of Wildwood Drive Bridge

June 30, 2016

River Mile: 0.40

Collection Method: Boat Electrofishing

Drainage Area: 23.2 miles²

Collection Distance: 0.5 km

Code	Species	Number	Weight (kg)	Pollution Tolerance	#	DELT Anomalies Description
20-003	<i>Dorosoma cepedianum</i> Eastern gizzard shad	18	0.475	--	0	---
40-016	<i>Catostomus commersonii</i> Common white sucker	130	4.192	Highly Tolerant	0	---
43-001	<i>Cyprinus carpio</i> Common carp	29	75.065	Highly Tolerant	0	---
43-002	<i>Carassius auratus</i> Goldfish	8	1.842	Highly Tolerant	3	Deformity, Lesior
43-003	<i>Notemigonus crysoleucas</i> Golden shiner	1	0.003	Highly Tolerant	0	---
43-013	<i>Semotilus atromaculatus</i> Creek chub	3	0.03	Highly Tolerant	0	---
43-020	<i>Notropis atherinoides</i> Common Emerald shiner	14	0.03	--	0	---
43-032	<i>Cyprinella spiloptera</i> Spotfin shiner	1	0.002	--	0	---
43-034	<i>Notropis stramineus</i> Sand shiner	1	0.002	Moderately Intolerant	0	---
43-043	<i>Pimephales notatus</i> Bluntnose minnow	4	0.01	Highly Tolerant	0	---
43-044	<i>Campostoma anomalum</i> Central stoneroller minnow	9	0.115	--	0	---
47-002	<i>Ictalurus punctatus</i> Channel catfish	1	0.535	--	0	---
47-004	<i>Ictalurus natalis</i> Yellow bullhead	12	2.06	Highly Tolerant	1	Lesion
47-005	<i>Ictalurus nebulosus</i> Brown bullhead	15	7.97	Highly Tolerant	1	Lesion
74-003	<i>Morone americana</i> White perch	7	0.09	--	0	---

Euclid Creek Upstream of Wildwood Drive Bridge

June 30, 2016

River Mile: 0.40

77-003	<i>Ambloplites rupestris</i> Northern rockbass	9	1.28	--	0	---
77-004	<i>Micropterus dolomieu</i> Smallmouth bass	2	0.68	Moderately Intolerant	0	---
77-006	<i>Micropterus salmoides</i> Largemouth bass	2	1.496	--	0	---
77-008	<i>Lepomis cyanellus</i> Green sunfish	3	0.15	Highly Tolerant	0	---
77-009	<i>Lepomis macrochirus</i> Northern bluegill sunfish	35	0.35	Moderately Tolerant	0	---
77-013	<i>Lepomis gibbosus</i> Pumpkinseed sunfish	95	1.55	Moderately Tolerant	0	---
80-003	<i>Perca flavescens</i> Yellow perch	3	0.038	--	0	---
85-001	<i>Aplodinotus grunniens</i> Freshwater drum	1	2.494	Moderately Tolerant	0	---
87-001	<i>Neogobius melanostomus</i> Round goby	1	0.012	--	0	---
	Totals	<u>404</u>	<u>100.471</u>		<u>5</u>	

*DELT anomalies were observed on	1.24	% of the fish collected.
Index of Biotic Integrity (IBI) =	26	(Fair)
Modified Index of Well-Being (MIwb) =	7.7	(Fair)
Shannon Diversity Index, no.	2.202	
Shannon Diversity Index, wt.	1.12	
N	382	
B	18.09	

Euclid Creek Upstream of Wildwood Drive

August 26, 2016

River Mile: 0.40

Collection Method: Boat Electrofishing

Drainage Area: 23.2 miles²

Collection Distance: 0.5 km

Code	Species	Number	Weight (kg)	Pollution Tolerance	#	DELT Anomalies Description
20-003	<i>Dorosoma cepedianum</i> Eastern gizzard shad	1	0.01	--	0	---
25-002	<i>Oncorhynchus mykiss</i> Rainbow trout	2	0.8	--	0	---
40-016	<i>Catostomus commersonii</i> Common white sucker	101	3.65	Highly Tolerant	0	---
43-001	<i>Cyprinus carpio</i> Common carp	11	0.375	Highly Tolerant	7	Lesion
43-002	<i>Carassius auratus</i> Goldfish	24	1.89	Highly Tolerant	0	---
43-003	<i>Notemigonus crysoleucas</i> Golden shiner	3	0.049	Highly Tolerant	0	---
43-020	<i>Notropis atherinoides</i> Common Emerald shiner	6	0.03	--	0	---
43-043	<i>Pimephales notatus</i> Bluntnose minnow	1	0.008	Highly Tolerant	0	---
43-044	<i>Campostoma anomalum</i> Central stoneroller minnow	6	0.085	--	0	---
47-004	<i>Ictalurus natalis</i> Yellow bullhead	2	0.24	Highly Tolerant	0	---
47-005	<i>Ictalurus nebulosus</i> Brown bullhead	23	1.777	Highly Tolerant	0	---
74-003	<i>Morone americana</i> White perch	1	0.005	--	0	---
77-004	<i>Micropterus dolomieu</i> Smallmouth bass	1	0.01	Moderately Intolerant	0	---
77-006	<i>Micropterus salmoides</i> Largemouth bass	10	0.21	--	0	---
77-009	<i>Lepomis macrochirus</i> Northern bluegill sunfish	66	0.875	Moderately Tolerant	0	---

Euclid Creek Upstream of Wildwood Drive

August 26, 2016

River Mile: 0.40

77-013	<i>Lepomis gibbosus</i> Pumpkinseed sunfish	22	0.575	Moderately Tolerant	3	Lesion
80-002	<i>Sander vitreus</i> Walleye	1	0.05	--	0	---
80-003	<i>Perca flavescens</i> Yellow perch	8	0.276	--	0	---
80-011	<i>Percina caprodes</i> Northern logperch darter	1	0.004	Moderately Intolerant	0	---
	Totals	<u>290</u>	<u>10.919</u>		<u>10</u>	

*DELT anomalies were observed on 3.45 % of the fish collected.

Index of Biotic Integrity (IBI) = 22 (Poor)

Modified Index of Well-Being (MIwb) = 7.5 (Fair)

Shannon Diversity Index, no. 2.04

Shannon Diversity Index, wt. 2.01

N 244

B 4.25