

Unnamed Tributary to Euclid Creek Main Branch Upstream of Richmond Road

7/12/2013

River Mile: 1.50

Collection Method: Backpack Electroshocking

Drainage Area: 1.2 miles²

Collection Distance: 0.15 km

Species	Number	Pollution Tolerance	DELT Anomalies #	Description
Semotilus atromaculatus Creek chub	172	Highly Tolerant	0	---
Pimephales promelas Northern fathead minnow	1	Highly Tolerant	0	---
Totals	<u><u>173</u></u>		<u><u>0</u></u>	

*DELT anomalies were observed on 0.0 % of the fish collected.
 Index of Biotic Integrity (IBI) = 22 (Poor)

Euclid Creek East Branch Downstream of Richmond Road

7/12/2013

River Mile: 2.80

Collection Method: Backpack Electroshocking

Drainage Area: 7.1 miles²

Collection Distance: 0.15 km

Species	Number	Pollution Tolerance	DELTA Anomalies #	Description
Catostomus commersonii Common white sucker	1	Highly Tolerant	0	---
Rhinichthys atratulus Western blacknose dace	1	Highly Tolerant	0	---
Semotilus atromaculatus Creek chub	15	Highly Tolerant	0	---
Pimephales notatus Bluntnose minnow	3	Highly Tolerant	0	---
Camptostoma anomalum Central stoneroller minnow	6	--	0	---
Lepomis cyanellus Green sunfish	2	Highly Tolerant	0	---
Lepomis macrochirus Northern bluegill sunfish	2	Moderately Tolerant	0	---
Lepomis gibbosus Pumpkinseed sunfish	2	Moderately Tolerant	0	---
Totals	<u><u>32</u></u>		<u><u>0</u></u>	

*DELTA anomalies were observed on 0.0 % of the fish collected.
 Index of Biotic Integrity (IBI) = 24 (Poor)

Euclid Creek East Branch Upstream of Highland Road

7/18/2013

River Mile: 0.25

Collection Method: Backpack Electroshocking

Drainage Area: 12.5 miles²

Collection Distance: 0.15 km

Species	Number	Pollution Tolerance	DELT Anomalies #	Description
Catostomus commersonii Common white sucker	34	Highly Tolerant	0	---
Rhinichthys atratulus Western blacknose dace	56	Highly Tolerant	0	---
Semotilus atromaculatus Creek chub	53	Highly Tolerant	0	---
Pimephales notatus Bluntnose minnow	5	Highly Tolerant	0	---
Camptostoma anomalum Central stoneroller minnow	74	--	0	---
Micropterus salmoides Largemouth bass	1	--	0	---
Lepomis cyanellus Green sunfish	2	Highly Tolerant	0	---
Lepomis macrochirus Northern bluegill sunfish	6	Moderately Tolerant	0	---
Lepomis gibbosus Pumpkinseed sunfish	7	Moderately Tolerant	0	---
Totals	<u>238</u>		<u>0</u>	

*DELT anomalies were observed on 0.0 % of the fish collected.
 Index of Biotic Integrity (IBI) = 28 (Fair)

Euclid Creek Downstream of Mayfield Road
7/12/2013
River Mile: 6.90
Collection Method: Backpack Electroshocking
Drainage Area: 3.9 miles²
Collection Distance: 0.15 km

Species	Number	Pollution Tolerance	DELT Anomalies #	Description
Rhinichthys atratulus Western blacknose dace	7	Highly Tolerant	0	---
Semotilus atromaculatus Creek chub	111	Highly Tolerant	0	---
Pimephales promelas Northern fathead minnow	1	Highly Tolerant	0	---
Campostoma anomalum Central stoneroller minnow	3	--	0	---
Lepomis macrochirus Northern bluegill sunfish	1	Moderately Tolerant	0	---
Totals	<u>123</u>		<u>0</u>	

*DELT anomalies were observed on 0.0 % of the fish collected.
 Index of Biotic Integrity (IBI) = 22 (Poor)

Euclid Creek Upstream of Confluence with East Branch

7/17/2013

River Mile: 3.30

Collection Method: Longline Electroshocking

Drainage Area: 9.1 miles²

Collection Distance: 0.15 km

Species	Number	Pollution Tolerance	DELT Anomalies #	Description
Oncorhynchus mykiss Rainbow trout	2	--	0	---
Catostomus commersonii Common white sucker	48	Highly Tolerant	0	---
Rhinichthys atratulus Western blacknose dace	140	Highly Tolerant	0	---
Semotilus atromaculatus Creek chub	106	Highly Tolerant	0	---
Pimephales promelas Northern fathead minnow	4	Highly Tolerant	0	---
Pimephales notatus Bluntnose minnow	1	Highly Tolerant	0	---
Campostoma anomalum Central stoneroller minnow	91	--	0	---
Lepomis macrochirus Northern bluegill sunfish	4	Moderately Tolerant	0	---
Lepomis gibbosus Pumpkinseed sunfish	5	Moderately Tolerant	0	---
Totals	<u><u>401</u></u>		<u><u>0</u></u>	

*DELT anomalies were observed on 0.0 % of the fish collected.
Index of Biotic Integrity (IBI) = 30 (Fair)

Euclid Creek Upstream of Highland Road

July 17, 2013

River Mile: 2.70

Collection Method: Longline Electrofishing

Drainage Area: 21 miles²

Collection Distance: 0.2 km

Species	Number	Weight (kg)	Pollution Tolerance	DELT Anomalies #	Description
Catostomus commersonii Common white sucker	83	1.200	Highly Tolerant	0	---
Rhinichthys atratulus Western blacknose dace	306	0.660	Highly Tolerant	0	---
Semotilus atromaculatus Creek chub	203	1.375	Highly Tolerant	0	---
Pimephales promelas Northern fathead minnow	1	0.004	Highly Tolerant	0	---
Pimephales notatus Bluntnose minnow	33	0.102	Highly Tolerant	0	---
Campostoma anomalum Central stoneroller minnow	191	1.131	--	0	---
Ictalurus natalis Yellow bullhead	1	0.050	Highly Tolerant	0	---
Lepomis gibbosus Pumpkinseed sunfish	7	0.042	Moderately Tolerant	0	---
Totals	<u><u>825</u></u>	<u><u>4.564</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) =	6.1	(Fair)
Shannon Diversity Index, no.	1.468	
Shannon Diversity Index, wt.	1.522	
N	297	
B	1.76	

Euclid Creek Upstream of St. Clair Avenue

July 17, 2013

River Mile: 1.65

Collection Method: Longline Electrofishing

Drainage Area: 22 miles²

Collection Distance: 0.2 km

Species	Number	Weight (kg)	Pollution Tolerance	DELT Anomalies #	DELT Anomalies Description
Catostomus commersonii Common white sucker	27	0.762	Highly Tolerant	0	---
Rhinichthys atratulus Western blacknose dace	192	0.570	Highly Tolerant	0	---
Semotilus atromaculatus Creek chub	151	1.580	Highly Tolerant	0	---
Pimephales promelas Northern fathead minnow	3	0.018	Highly Tolerant	0	---
Pimephales notatus Bluntnose minnow	2	0.008	Highly Tolerant	0	---
Campostoma anomalum Central stoneroller minnow	139	1.040	--	0	---
Lepomis macrochirus Northern bluegill sunfish	1	0.006	Moderately Tolerant	0	---
Lepomis gibbosus Pumpkinseed sunfish	3	0.016	Moderately Tolerant	0	---
Totals	<u>518</u>	<u>4.000</u>		<u>0</u>	

*DELT anomalies were observed on	0.00	% of the fish collected.
Index of Biotic Integrity (IBI) =	28	(Fair)
Modified Index of Well-Being (MIwb) =	5.6	(Poor)
Shannon Diversity Index, no.	1.327	
Shannon Diversity Index, wt.	1.379	
N	214.5	
B	1.593	

Euclid Creek Upstream of Lakeshore Boulevard

July 16, 2013

River Mile: 1.00

Collection Method: Longline Electrofishing

Drainage Area: 23 miles²

Collection Distance: 0.2 km

Species	Number	Weight (kg)	Pollution Tolerance	#	DELT Anomalies Description
Oncorhynchus mykiss Rainbow trout	1	0.012	--	0	---
Catostomus commersonii Common white sucker	115	0.874	Highly Tolerant	0	---
Cyprinus carpio Common carp	1	0.010	Highly Tolerant	0	---
Rhinichthys atratulus Western blacknose dace	75	0.240	Highly Tolerant	0	---
Semotilus atromaculatus Creek chub	248	1.738	Highly Tolerant	0	---
Notropis atherinoides Common Emerald shiner	4	0.008	--	0	---
Cyprinella spiloptera Spotfin shiner	1	0.002	--	0	---
Pimephales promelas Northern fathead minnow	11	0.024	Highly Tolerant	0	---
Pimephales notatus Bluntnose minnow	277	0.554	Highly Tolerant	0	---
Campostoma anomalum Central stoneroller minnow	218	1.404	--	0	---
Ictalurus natalis Yellow bullhead	23	0.974	Highly Tolerant	0	---
Ictalurus nebulosus Brown bullhead	3	0.332	Highly Tolerant	0	---
Micropterus dolomieu Smallmouth bass	1	0.094	Moderately Intolerant	0	---
Micropterus salmoides Largemouth bass	1	0.032	--	0	---
Lepomis cyanellus Green sunfish	2	0.040	Highly Tolerant	0	---

Euclid Creek Upstream of Lakeshore Boulevard

July 16, 2013

River Mile: 1.00

Lepomis macrochirus Northern bluegill sunfish	12	0.060	Moderately Tolerant	0	---
Lepomis gibbosus Pumpkinseed sunfish	21	0.150	Moderately Tolerant	0	---
Totals	<u>1014</u>	<u>6.548</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) =	7.3	(Fair)
Shannon Diversity Index, no.	1.822	
Shannon Diversity Index, wt.	2.016	
N	387	
B	2.625	

Euclid Creek Downstream of Lakeshore Boulevard

July 16, 2013

River Mile: 0.55

Collection Method: Longline Electrofishing

Drainage Area: 23 miles²

Collection Distance: 0.2 km

Species	Number	Weight (kg)	Pollution Tolerance	DELT #	Anomalies Description
Hypentelium nigricans Northern hog sucker	1	0.048	Moderately Intolerant	0	---
Catostomus commersonii Common white sucker	80	1.008	Highly Tolerant	1	Lesion
Cyprinus carpio Common carp	1	0.180	Highly Tolerant	0	---
Rhinichthys atratulus Western blacknose dace	3	0.004	Highly Tolerant	0	---
Semotilus atromaculatus Creek chub	238	1.597	Highly Tolerant	0	---
Notropis atherinoides Common Emerald shiner	3	0.004	--	0	---
Cyprinella spiloptera Spotfin shiner	2	0.010	--	0	---
Notropis stramineus Sand shiner	11	0.026	Moderately Intolerant	0	---
Notropis volucellus Mimic Shiner	17	0.020	Common Intolerant	0	---
Ericymba buccata Silverjaw minnow	7	0.034	--	0	---
Pimephales promelas Northern fathead minnow	1	0.002	Highly Tolerant	0	---
Pimephales notatus Bluntnose minnow	42	0.120	Highly Tolerant	0	---
Campostoma anomalum Central stoneroller minnow	72	0.354	--	0	---
Ictalurus natalis Yellow bullhead	39	2.256	Highly Tolerant	1	Lesion
Ictalurus nebulosus Brown bullhead	3	0.586	Highly Tolerant	0	---

Euclid Creek Downstream of Lakeshore Boulevard

July 16, 2013

River Mile: 0.55

Morone americana White perch	1	0.012	--	0	---
Ambloplites rupestris Northern rockbass	5	0.120	--	0	---
Micropterus salmoides Largemouth bass	5	0.012	--	0	---
Lepomis cyanellus Green sunfish	5	0.042	Highly Tolerant	0	---
Lepomis macrochirus Northern bluegill sunfish	27	0.142	Moderately Tolerant	0	---
Lepomis gibbosus Pumpkinseed sunfish	46	0.360	Moderately Tolerant	0	---
HYBRID Green SF X Bluegill SF	1	0.100	--	0	---
Neogobius melanostomus Round goby	15	0.126	--	0	---
Totals	<u>625</u>	<u>7.163</u>		<u>2</u>	

*DELT anomalies were observed on	0.32	% of the fish collected.
Index of Biotic Integrity (IBI) =	32	(Fair)
Modified Index of Well-Being (MIwb) =	7.3	(Fair)
Shannon Diversity Index, no.	2.134	
Shannon Diversity Index, wt.	2.083	
N	294	
B	1.695	

Euclid Creek Upstream of Villa Angela Drive Bridge

July 16, 2013

River Mile: 0.40

Collection Method: Longline Electrofishing

Drainage Area: 23 miles²

Collection Distance: 0.2 km

Species	Number	Weight (kg)	Pollution Tolerance	DELT Anomalies #	Description
Catostomus commersonii Common white sucker	1	0.040	Highly Tolerant	0	---
Semotilus atromaculatus Creek chub	4	0.010	Highly Tolerant	0	---
Pimephales notatus Bluntnose minnow	3	0.014	Highly Tolerant	0	---
Campostoma anomalum Central stoneroller minnow	5	0.008	--	0	---
Ictalurus natalis Yellow bullhead	2	0.098	Highly Tolerant	0	---
Ictalurus nebulosus Brown bullhead	2	0.582	Highly Tolerant	0	---
Ambloplites rupestris Northern rockbass	2	0.034	--	0	---
Micropterus salmoides Largemouth bass	2	0.012	--	0	---
Lepomis cyanellus Green sunfish	1	0.040	Highly Tolerant	0	---
Lepomis macrochirus Northern bluegill sunfish	8	0.303	Moderately Tolerant	0	---
Lepomis gibbosus Pumpkinseed sunfish	21	0.292	Moderately Tolerant	0	---
HYBRID Green SF X Pumpkinseed	1	0.032	--	0	---
Neogobius melanostomus Round goby	5	0.048	--	0	---
Totals	<u>57</u>	<u>1.513</u>		<u>0</u>	

*DELT anomalies were observed on 0.00 % of the fish collected.
Index of Biotic Integrity (IBI) = 38 (Good)

Euclid Creek Upstream of Villa Angela Drive Bridge

July 16, 2013

River Mile: 0.40

Modified Index of Well-Being (Mlwb) =	5.9	(Poor)
Shannon Diversity Index, no.	2.095	
Shannon Diversity Index, wt.	1.795	
N	57	
B	0.974	