

Rocky River East Branch Upstream of Ridge Road

September 12, 2019

River Mile: 17.50

Station ID: T01W38

Collection Method: Longline Electrofishing

Drainage Area: 34.4 miles²

Collection Distance: 0.2 km

Code	Species	Number	Weight (kg)	Pollution Tolerance	DELT #	Anomalies Description
40-010	<i>Moxostoma erythrurum</i> Golden redbhorse	53	2.93	Moderately Intolerant	0	---
40-015	<i>Hypentelium nigricans</i> Northern hog sucker	121	1.84	Moderately Intolerant	0	---
40-016	<i>Catostomus commersonii</i> Common white sucker	66	2.41	Highly Tolerant	2	Multiple
43-005	<i>Nocomis micropogon</i> River Chub	6	0.06	Intolerant	0	---
43-013	<i>Semotilus atromaculatus</i> Creek chub	64	0.748	Highly Tolerant	0	---
43-026	<i>Notropis cornutus</i> Common shiner	179	1.058	--	0	---
43-025	<i>Notropis chrysocephalus</i> Striped shiner	2	0.02	--	0	---
43-032	<i>Cyprinella spiloptera</i> Spotfin shiner	28	0.079	--	0	---
43-034	<i>Notropis stramineus</i> Sand shiner	4	0.022	Moderately Intolerant	0	---
43-039	<i>Ericymba buccata</i> Silverjaw minnow	15	0.042	--	0	---
43-043	<i>Pimephales notatus</i> Bluntnose minnow	222	0.556	Highly Tolerant	0	---
43-044	<i>Campostoma anomalum</i> Central stoneroller minnow	71	0.335	--	0	---
47-004	<i>Ictalurus natalis</i> Yellow bullhead	3	0.12	Highly Tolerant	0	---
77-003	<i>Ambloplites rupestris</i> Northern rockbass	4	0.295	--	0	---

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77-006	<i>Micropterus salmoides</i> Largemouth bass	2	0.015	--	0	---
77-008	<i>Lepomis cyanellus</i> Green sunfish	10	0.13	Highly Tolerant	0	---
77-009	<i>Lepomis macrochirus</i> Northern bluegill sunfish	2	0.03	Moderately Tolerant	0	---
80-005	<i>Etheostoma maculata</i> Blackside darter	5	0.01	--	0	---
80-014	<i>Etheostoma nigrum</i> Johnny darter	52	0.052	--	0	---
80-015	<i>Etheostoma blenniodes</i> Greenside darter	5	0.02	Moderately Intolerant	0	---
80-022	<i>Etheostoma caeruleum</i> Rainbow darter	26	0.036	Moderately Intolerant	0	---
80-024	<i>Etheostoma flabellare</i> Barred Fantail darter	6	0.01	--	0	---
87-001	<i>Neogobius melanostomus</i> Round goby	17	0.022	--	0	---
Totals		<u>963</u>	<u>10.840</u>		<u>2</u>	

*DELTA anomalies were observed on	0.21 % of the fish collected.
Index of Biotic Integrity (IBI) =	40 (Good)
Modified Index of Well-Being (MIwb) =	9.0 (Very Good)
Shannon Diversity Index, no.	2.389
Shannon Diversity Index, wt.	2.079
N	871.5
B	10.28

Rocky River East Branch Upstream of Ridge Road

October 11, 2019

River Mile: 17.50

Station Road: T01W38

Collection Method: Longline Electrofishing

Drainage Area: 34.4 miles²

Collection Distance: 0.2 km

Code	Species	Number	Weight (kg)	Pollution Tolerance	#	DELT Anomalies Description
40-010	<i>Moxostoma erythrurum</i> Golden redbhorse	47	2.87	Moderately Intolerant	0	---
40-015	<i>Hypentelium nigricans</i> Northern hog sucker	87	1.837	Moderately Intolerant	0	---
40-016	<i>Catostomus commersonii</i> Common white sucker	79	2.627	Highly Tolerant	0	---
43-005	<i>Nocomis micropogon</i> River Chub	19	0.168	Intolerant	0	---
43-013	<i>Semotilus atromaculatus</i> Creek chub	148	0.778	Highly Tolerant	0	---
43-026	<i>Notropis cornutus</i> Common shiner	320	1.666	--	0	---
43-032	<i>Cyprinella spiloptera</i> Spotfin shiner	99	0.211	--	0	---
43-034	<i>Notropis stramineus</i> Sand shiner	25	0.059	Moderately Intolerant	0	---
43-039	<i>Ericymba buccata</i> Silverjaw minnow	53	0.129	--	0	---
43-043	<i>Pimephales notatus</i> Bluntnose minnow	522	1.299	Highly Tolerant	0	---
43-044	<i>Campostoma anomalum</i> Central stoneroller minnow	116	0.646	--	0	---
47-004	<i>Ictalurus natalis</i> Yellow bullhead	4	0.24	Highly Tolerant	0	---
77-003	<i>Ambloplites rupestris</i> Northern rockbass	9	0.413	--	0	---
77-006	<i>Micropterus salmoides</i> Largemouth bass	2	0.02	--	0	---

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77-008	<i>Lepomis cyanellus</i> Green sunfish	9	0.08	Highly Tolerant	0	---
77-009	<i>Lepomis macrochirus</i> Northern bluegill sunfish	8	0.054	Moderately Tolerant	0	---
80-005	<i>Etheostoma maculata</i> Blackside darter	2	0.01	--	0	---
80-014	<i>Etheostoma nigrum</i> Johnny darter	12	0.033	--	0	---
80-015	<i>Etheostoma blenniodes</i> Greenside darter	7	0.04	Moderately Intolerant	0	---
80-022	<i>Etheostoma caeruleum</i> Rainbow darter	12	0.032	Moderately Intolerant	0	---
80-024	<i>Etheostoma flabellare</i> Barred Fantail darter	14	0.04	--	0	---
87-001	<i>Neogobius melanostomus</i> Round goby	53	0.115	--	0	---
	Totals	<u>1647</u>	<u>13.367</u>		<u>0</u>	

*DELT anomalies were observed on 0.00 % of the fish collected.
 Index of Biotic Integrity (IBI) = 38 (Good)
 Modified Index of Well-Being (MIwb) = 9.3 (Very Good)
 Shannon Diversity Index, no. 2.243
 Shannon Diversity Index, wt. 2.263
 N 1248
 B 12.34

Rocky River East Branch Upstream of Bonnie Park

August 1, 2019

River Mile: 9.00

Station ID: T01W29

Collection Method: Longline Electrofishing

Drainage Area: 56.6 miles²

Collection Distance: 0.2 km

Code	Species	Number	Weight (kg)	Pollution Tolerance	#	DELT Anomalies Description
40-010	<i>Moxostoma erythrurum</i> Golden redbhorse	4	0.52	Moderately Intolerant	0	---
40-015	<i>Hypentelium nigricans</i> Northern hog sucker	16	0.84	Moderately Intolerant	0	---
40-016	<i>Catostomus commersonii</i> Common white sucker	5	0.313	Highly Tolerant	0	---
43-013	<i>Semotilus atromaculatus</i> Creek chub	9	0.13	Highly Tolerant	0	---
43-026	<i>Notropis cornutus</i> Common shiner	13	0.285	--	0	---
43-032	<i>Cyprinella spiloptera</i> Spotfin shiner	6	0.04	--	0	---
43-043	<i>Pimephales notatus</i> Bluntnose minnow	33	0.15	Highly Tolerant	0	---
43-044	<i>Campostoma anomalum</i> Central stoneroller minnow	1	0.005	--	0	---
47-004	<i>Ictalurus natalis</i> Yellow bullhead	2	0.048	Highly Tolerant	0	---
77-003	<i>Ambloplites rupestris</i> Northern rockbass	1	0.03	--	0	---
77-006	<i>Micropterus salmoides</i> Largemouth bass	12	0.04	--	0	---
77-008	<i>Lepomis cyanellus</i> Green sunfish	72	0.705	Highly Tolerant	0	---
77-009	<i>Lepomis macrochirus</i> Northern bluegill sunfish	30	0.28	Moderately Tolerant	0	---
77-013	<i>Lepomis gibbosus</i> Pumpkinseed sunfish	4	0.072	Moderately Tolerant	0	---

Rocky River East Branch Upstream of Bonnie Park

August 1, 2019

River Mile: 9.00

Station ID: T01W29

80-014	<i>Etheostoma nigrum</i> Johnny darter	26	0.019	--	0	---
87-001	<i>Neogobius melanostomus</i> Round goby	22	0.06	--	0	---
34-001	<i>Umbra limi</i> Central Mudminnow	1	0.004	Tolerant	0	---
	Totals	<u><u>257</u></u>	<u><u>3.541</u></u>		<u><u>0</u></u>	

*DELT anomalies were observed on	0.00	% of the fish collected.
Index of Biotic Integrity (IBI) =	38	(Good)
Modified Index of Well-Being (MIwb) =	7.7	(Marginally Good)
Shannon Diversity Index, no.	2.294	
Shannon Diversity Index, wt.	2.211	
N	169.5	
B	3.197	

Rocky River East Branch Upstream of Bonnie Park

September 27, 2019

River Mile: 9.00

Station ID: T01W29

Collection Method: Longline Electrofishing

Drainage Area: 56.6 miles²

Collection Distance: 0.2 km

Code	Species	Number	Weight (kg)	Pollution Tolerance	DELTA #	Anomalies Description
40-010	<i>Moxostoma erythrurum</i> Golden redbreast	16	2.76	Moderately Intolerant	0	---
40-015	<i>Hypentelium nigricans</i> Northern hog sucker	28	0.15	Moderately Intolerant	0	---
40-016	<i>Catostomus commersonii</i> Common white sucker	94	9.25	Highly Tolerant	0	---
43-013	<i>Semotilus atromaculatus</i> Creek chub	8	0.15	Highly Tolerant	0	---
43-026	<i>Notropis cornutus</i> Common shiner	50	0.6	--	0	---
43-032	<i>Cyprinella spiloptera</i> Spotfin shiner	10	0.055	--	0	---
43-034	<i>Notropis stramineus</i> Sand shiner	2	0.002	Moderately Intolerant	0	---
43-043	<i>Pimephales notatus</i> Bluntnose minnow	5	0.03	Highly Tolerant	0	---
43-044	<i>Campostoma anomalum</i> Central stoneroller minnow	9	0.255	--	0	---
70-001	<i>Labidesthes sicculus</i> Brook silverside	4	0.004	Moderately Intolerant	0	---
77-006	<i>Micropterus salmoides</i> Largemouth bass	14	0.21	--	0	---
77-008	<i>Lepomis cyanellus</i> Green sunfish	16	0.35	Highly Tolerant	0	---
77-009	<i>Lepomis macrochirus</i> Northern bluegill sunfish	20	0.75	Moderately Tolerant	0	---
80-014	<i>Etheostoma nigrum</i> Johnny darter	11	0.022	--	0	---

Rocky River East Branch Upstream of Bonnie Park

September 27, 2019

River Mile: 9.00

Station ID: T01W29

87-001	<i>Neogobius melanostomus</i> Round goby	8	0.045	--	0	---
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Totals	<u>295</u>	<u>14.633</u>			<u>0</u>	
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*DELTA anomalies were observed on	0.00	% of the fish collected.
Index of Biotic Integrity (IBI) =	36	(Marginally Good)
Modified Index of Well-Being (MIwb) =	7.2	(Fair)
Shannon Diversity Index, no.	2.233	
Shannon Diversity Index, wt.	1.267	
N	246	
B	7.212	

Rocky River East Branch Downstream of Valley Parkway

August 1, 2019

River Mile: 6.25

Station ID: T01W59

Collection Method: Longline Electrofishing

Drainage Area: 63.3 miles²

Collection Distance: 0.2 km

Code	Species	Number	Weight (kg)	Pollution Tolerance	#	DELT Anomalies Description
40-010	<i>Moxostoma erythrurum</i> Golden redbhorse	2	0.205	Moderately Intolerant	0	---
40-015	<i>Hypentelium nigricans</i> Northern hog sucker	31	0.696	Moderately Intolerant	0	---
40-016	<i>Catostomus commersonii</i> Common white sucker	63	0.54	Highly Tolerant	0	---
43-001	<i>Cyprinus carpio</i> Common carp	1	0.16	Highly Tolerant	0	---
43-003	<i>Notemigonus crysoleucas</i> Golden shiner	1	0.005	Highly Tolerant	0	---
43-011	<i>Rhinichthys atratulus</i> Blacknose dace	2	0.003	Highly Tolerant	0	---
43-013	<i>Semotilus atromaculatus</i> Creek chub	46	0.08	Highly Tolerant	0	---
43-026	<i>Notropis cornutus</i> Common shiner	44	0.088	--	0	---
43-032	<i>Cyprinella spiloptera</i> Spotfin shiner	17	0.055	--	0	---
43-033	<i>Notropis dorsalis</i> Bigmouth Shiner	29	0.051	--	0	---
43-034	<i>Notropis stramineus</i> Sand shiner	49	0.107	Moderately Intolerant	0	---
43-039	<i>Ericymba buccata</i> Silverjaw minnow	19	0.04	--	0	---
43-043	<i>Pimephales notatus</i> Bluntnose minnow	1001	1.896	Highly Tolerant	0	---
43-044	<i>Campostoma anomalum</i> Central stoneroller minnow	279	0.741	--	0	---

Rocky River East Branch Downstream of Valley Parkway

August 1, 2019

River Mile: 6.25

Station ID: T01W59

47-004	<i>Ictalurus natalis</i> Yellow bullhead	4	0.3	Highly Tolerant	0	---
77-003	<i>Ambloplites rupestris</i> Northern rockbass	7	0.445	--	0	---
77-006	<i>Micropterus salmoides</i> Largemouth bass	8	0.052	--	0	---
77-008	<i>Lepomis cyanellus</i> Green sunfish	20	0.158	Highly Tolerant	0	---
77-009	<i>Lepomis macrochirus</i> Northern bluegill sunfish	9	0.11	Moderately Tolerant	0	---
77-013	<i>Lepomis gibbosus</i> Pumpkinseed sunfish	2	0.015	Moderately Tolerant	0	---
77-016	<i>HYBRID</i> Green SF X Pumpkinseed	1	0.04	--	0	---
80-005	<i>Etheostoma maculata</i> Blackside darter	1	0.002	--	0	---
80-014	<i>Etheostoma nigrum</i> Johnny darter	193	0.14	--	0	---
80-015	<i>Etheostoma blenniodes</i> Greenside darter	40	0.092	Moderately Intolerant	0	---
80-022	<i>Etheostoma caeruleum</i> Rainbow darter	67	0.055	Moderately Intolerant	0	---
87-001	<i>Neogobius melanostomus</i> Round goby	96	0.352	--	0	---
34-001	<i>Umbra limi</i> Central Mudminnow	4	0.025	Tolerant	0	---
	Totals	<u>2036</u>	<u>6.453</u>		<u>0</u>	

*DELTA anomalies were observed on	0.00 % of the fish collected.
Index of Biotic Integrity (IBI) =	32 (Fair)
Modified Index of Well-Being (MIwb) =	8.7 (Good)
Shannon Diversity Index, no.	1.922
Shannon Diversity Index, wt.	2.497
N	1196
B	4.341

Rocky River East Branch Downstream of Valley Parkway

September 27, 2019

River Mile: 6.25

Station ID: T01W59

Collection Method: Longline Electrofishing

Drainage Area: 63.3 miles²

Collection Distance: 0.2 km

Code	Species	Number	Weight (kg)	Pollution Tolerance	DELT #	Anomalies Description
40-010	<i>Moxostoma erythrurum</i> Golden redbhorse	2	0.008	Moderately Intolerant	0	---
40-015	<i>Hypentelium nigricans</i> Northern hog sucker	43	1.42	Moderately Intolerant	0	---
40-016	<i>Catostomus commersonii</i> Common white sucker	65	3.14	Highly Tolerant	0	---
43-001	<i>Cyprinus carpio</i> Common carp	3	0.44	Highly Tolerant	0	---
43-013	<i>Semotilus atromaculatus</i> Creek chub	19	0.102	Highly Tolerant	0	---
43-026	<i>Notropis cornutus</i> Common shiner	27	0.18	--	0	---
43-032	<i>Cyprinella spiloptera</i> Spotfin shiner	28	0.095	--	0	---
43-033	<i>Notropis dorsalis</i> Bigmouth Shiner	8	0.03	--	0	---
43-034	<i>Notropis stramineus</i> Sand shiner	150	0.24	Moderately Intolerant	0	---
43-035	<i>Notropis volucellus</i> Mimic Shiner	17	0.035	Common Intolerant	0	---
43-039	<i>Ericymba buccata</i> Silverjaw minnow	51	0.111	--	0	---
43-043	<i>Pimephales notatus</i> Bluntnose minnow	1498	3.568	Highly Tolerant	0	---
43-044	<i>Campostoma anomalum</i> Central stoneroller minnow	481	1.89	--	0	---
47-004	<i>Ictalurus natalis</i> Yellow bullhead	1	0.055	Highly Tolerant	0	---

Rocky River East Branch Downstream of Valley Parkway

September 27, 2019

River Mile: 6.25

Station ID: T01W59

77-003	<i>Ambloplites rupestris</i> Northern rockbass	6	0.34	--	0	---
77-006	<i>Micropterus salmoides</i> Largemouth bass	13	0.552	--	0	---
77-008	<i>Lepomis cyanellus</i> Green sunfish	19	0.407	Highly Tolerant	0	---
77-009	<i>Lepomis macrochirus</i> Northern bluegill sunfish	6	0.067	Moderately Tolerant	0	---
80-005	<i>Etheostoma maculata</i> Blackside darter	1	0.002	--	0	---
80-014	<i>Etheostoma nigrum</i> Johnny darter	42	0.05	--	0	---
80-015	<i>Etheostoma blenniodes</i> Greenside darter	191	0.36	Moderately Intolerant	0	---
80-022	<i>Etheostoma caeruleum</i> Rainbow darter	40	0.05	Moderately Intolerant	0	---
87-001	<i>Neogobius melanostomus</i> Round goby	202	0.36	--	0	---
Totals		<u>2913</u>	<u>13.502</u>		<u>0</u>	

*DELTA anomalies were observed on 0.00 % of the fish collected.
 Index of Biotic Integrity (IBI) = 30 (Fair)
 Modified Index of Well-Being (MIwb) = 8.7 (Good)
 Shannon Diversity Index, no. 1.761
 Shannon Diversity Index, wt. 2.202
 N 1659
 B 8.145

Rocky River East Branch Upstream of Metroparks Valley Parkway

July 29, 2019

River Mile: 0.15

Station ID: T01P31

Collection Method: Longline Electrofishing

Drainage Area: 76.8 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	3	0.013	Highly Tolerant	0	---
43-013	<i>Semotilus atromaculatus</i> Creek chub	15	0.085	Highly Tolerant	0	---
43-022	<i>Notropis rubellus</i> Rosyface Shiner	22	0.08	Intolerant	0	---
43-026	<i>Notropis cornutus</i> Common shiner	1	0.1	--	0	---
43-025	<i>Notropis chrysocephalus</i> Striped shiner	17	0.19	--	0	---
43-032	<i>Cyprinella spiloptera</i> Spotfin shiner	16	0.115	--	0	---
43-034	<i>Notropis stramineus</i> Sand shiner	88	0.26	Moderately Intolerant	0	---
43-043	<i>Pimephales notatus</i> Bluntnose minnow	14	0.08	Highly Tolerant	0	---
43-044	<i>Campostoma anomalum</i> Central stoneroller minnow	15	0.115	--	0	---
47-004	<i>Ictalurus natalis</i> Yellow bullhead	22	0.1	Highly Tolerant	0	---
47-008	<i>Noturus flavus</i> Stonecat Madtom	43	1.025	Intolerant	0	---
77-006	<i>Micropterus salmoides</i> Largemouth bass	5	0.025	--	0	---
77-008	<i>Lepomis cyanellus</i> Green sunfish	11	0.111	Highly Tolerant	0	---
80-015	<i>Etheostoma blenniodes</i> Greenside darter	14	0.1	Moderately Intolerant	0	---

Rocky River East Branch Upstream of Metroparks Valley Parkway

July 29, 2019

River Mile: 0.15

Station ID: T01P31

87-001	<i>Neogobius melanostomus</i> Round goby	19	0.14	--	0	---
	Totals	<u>305</u>	<u>2.539</u>		<u>0</u>	

*DELTA anomalies were observed on	0.00	% of the fish collected.
Index of Biotic Integrity (IBI) =	36	(Marginally Good)
Modified Index of Well-Being (MIwb) =	7.9	(Good)
Shannon Diversity Index, no.	2.333	
Shannon Diversity Index, wt.	2.157	
N	331.5	
B	3.015	

Rocky River East Branch Upstream of Metroparks Valley Parkway

September 26, 2019

River Mile: 0.15

Station ID: T01P31

Collection Method: Longline Electrofishing

Drainage Area: 76.8 miles²

Collection Distance: 0.2 km

Code	Species	Number	Weight (kg)	Pollution Tolerance	#	DELT Anomalies Description
40-015	<i>Hypentelium nigricans</i> Northern hog sucker	1	0.03	Moderately Intolerant	0	---
43-013	<i>Semotilus atromaculatus</i> Creek chub	3	0.04	Highly Tolerant	0	---
43-022	<i>Notropis rubellus</i> Rosyface Shiner	38	0.064	Intolerant	0	---
43-025	<i>Notropis chrysocephalus</i> Striped shiner	2	0.01	--	0	---
43-032	<i>Cyprinella spiloptera</i> Spotfin shiner	152	0.25	--	0	---
43-034	<i>Notropis stramineus</i> Sand shiner	187	0.29	Moderately Intolerant	0	---
43-039	<i>Ericymba buccata</i> Silverjaw minnow	1	0.005	--	0	---
43-043	<i>Pimephales notatus</i> Bluntnose minnow	59	0.11	Highly Tolerant	0	---
43-044	<i>Campostoma anomalum</i> Central stoneroller minnow	6	0.045	--	0	---
47-002	<i>Ictalurus punctatus</i> Channel catfish	2	0.03	--	0	---
47-008	<i>Noturus flavus</i> Stonecat Madtom	32	0.5	Intolerant	0	---
77-008	<i>Lepomis cyanellus</i> Green sunfish	5	0.095	Highly Tolerant	0	---
80-015	<i>Etheostoma blenniodes</i> Greenside darter	3	0.035	Moderately Intolerant	0	---
87-001	<i>Neogobius melanostomus</i> Round goby	21	0.07	--	0	---

**Rocky River East Branch Upstream of Metroparks Valley Parkway
September 26, 2019**

River Mile: 0.15

Station ID: T01P31

Totals	512	1.574	0
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*DELT anomalies were observed on	0.00	% of the fish collected.
Index of Biotic Integrity (IBI) =	32	(Fair)
Modified Index of Well-Being (MIwb) =	7.3	(Fair)
Shannon Diversity Index, no.	1.7	
Shannon Diversity Index, wt.	2.073	
N	636	
B	1.889	