

2024 Rouge River Fish Survey Report

Friends of the Rouge for the Alliance of Rouge Communities

This project was funded by the Michigan Department of Environment, Great Lakes, and Energy and the United States Environmental Protection Agency's Great Lakes Restoration Initiative

Wednesday, December 11, 2024

Introduction

Friends of the Rouge (FOTR) was funded by the Michigan Department of Environment, Great Lakes and Energy (EGLE) and the United States Environmental Protection Agency's Great Lakes Restoration Initiative through the Alliance of Rouge Communities, to sample 21 sites on the Rouge River in 2024 for fish.

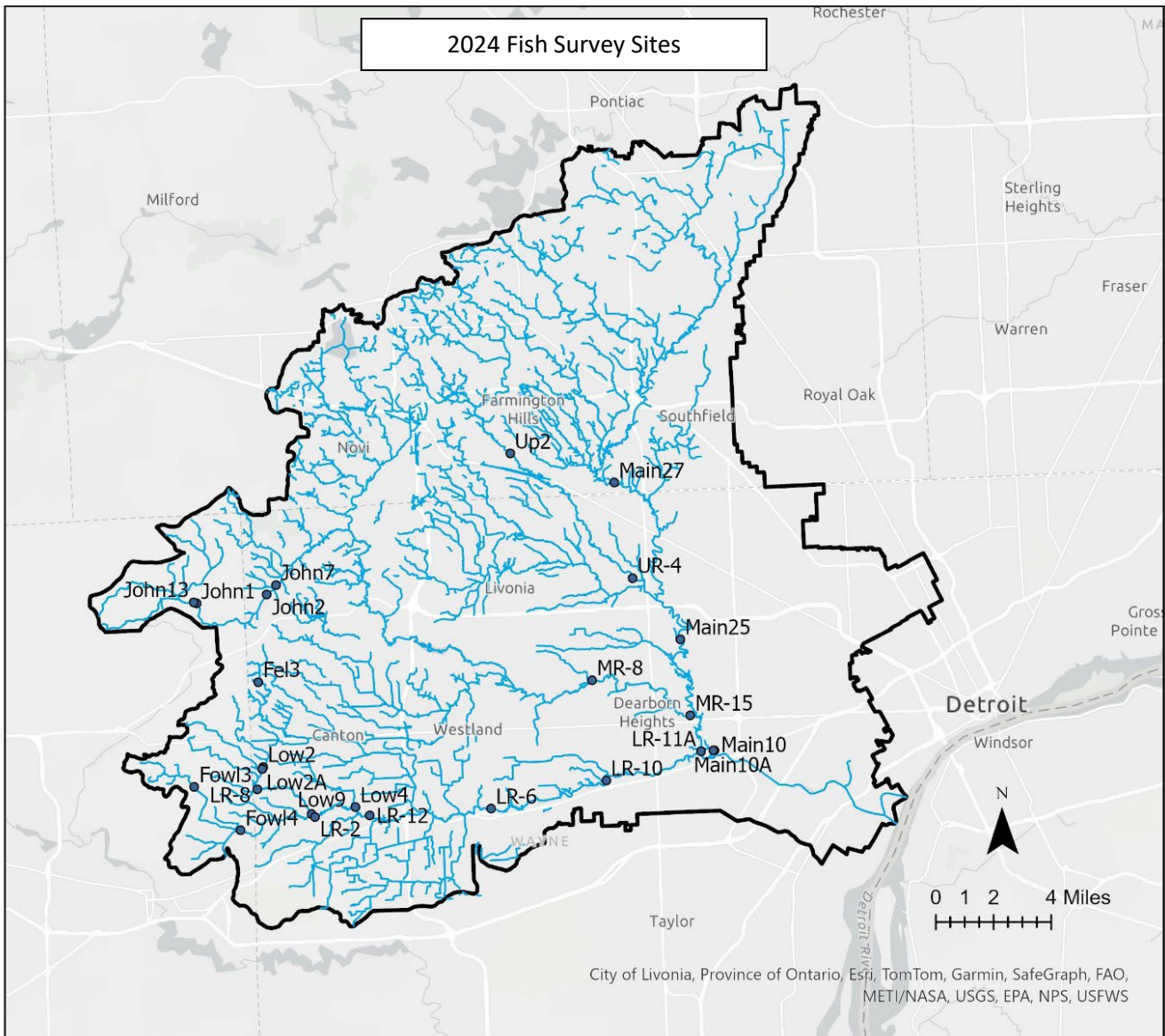
Materials and Methods

A Quality Assurance Project Plan for Fish Monitoring and Benthic Macroinvertebrate Monitoring was submitted to EGLE and approved in June 2022.

Seine and dip nets were used to sample an average of 455 feet of stream at each site. Water temperature was measured with a thermometer, and the length and width of the stream was measured with a range finder. All available habitats were sampled for approximately one hour and at least 20 seine hauls. All fish were identified to species, measured to the nearest half centimeter, and released back to the stream. Invasive species were disposed of. Fish with uncertain identification were collected live by Robert Muller and photographed. Water temperature, number of seine hauls, length of stream sampled, and fish sizes by species were recorded. A YSI meter was used to collect: Water Temperature, Conductivity, Dissolved Oxygen, and Nitrate (NO₃). Tests strips were used to collect chloride and pH levels. The site was visited separately to collect substrate composition, wetted width, and depth. Equipment was cleaned and dried at the end of each day and disinfected before moving to another tributary system. Within a given day, sites were sampled within the same tributary system or all equipment was disinfected with a bleach solution between sites. Following each sampling day, field data was entered into Excel spreadsheets. FOTR checked the raw data against the spreadsheets and entered all data into one database.

Twenty-five sites were selected based on delisting criteria, project sites, round goby migration and the endangered redbreasted dace. Nine sites were chosen from the [2008 Delisting Targets for Fish & Wildlife and Population Beneficial Use Impairments for the Rouge River Area of Concern](#). Four sites were at habitat restoration projects, ten sites were monitored to track the round goby migration up the Lower branch and five sites tracked the endangered redbreasted dace in Johnson Creek and the Upper branch.

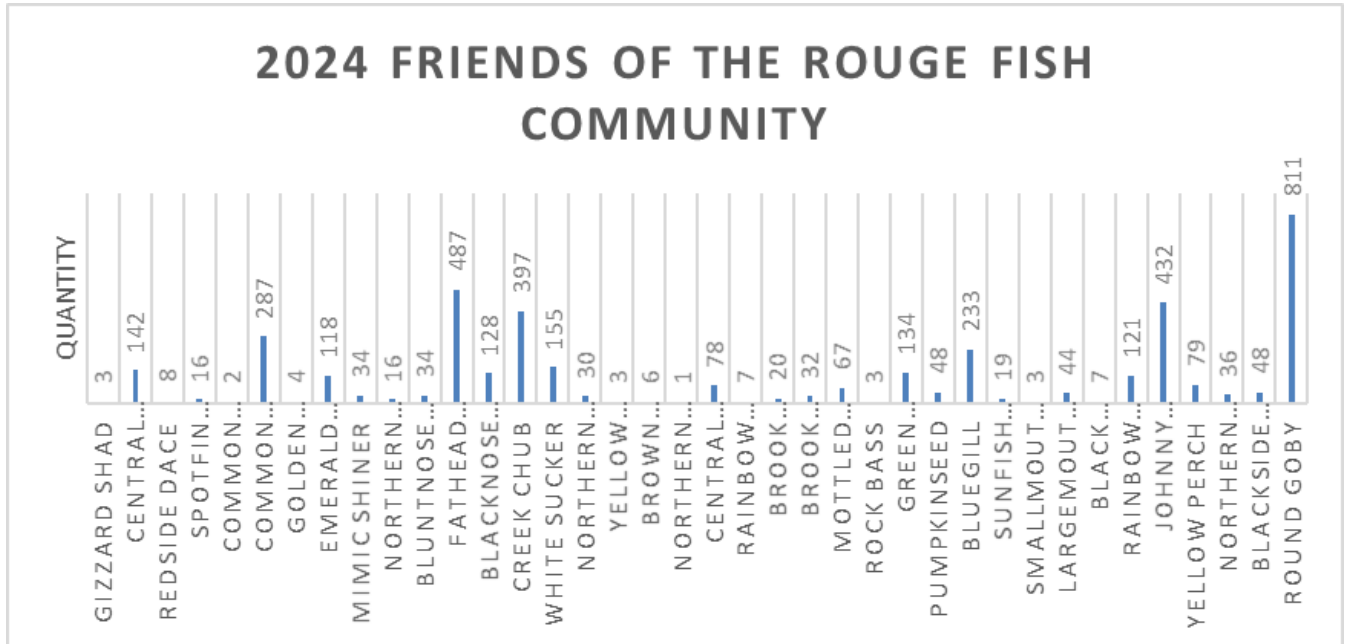
2024 Fish Sampling Sites				
FIELDID	Latitude	Longitude	Date	reason
Main10	42.31295	-83.2323	3/27/2024	Project: Fish Ladder
Main10A	42.31296	-83.233	3/27/2024	Project: Fish Ladder
Fel3	42.34985	-83.5406	6/26/2024	Goby Migration
John1	42.3897	-83.5819	6/26/2024	Redside dace
John13	42.3903	-83.5839	7/15/2024	Redside dace
John2	42.39382	-83.5342	7/15/2024	Redside dace/Johnson Creek Intercounty Drain Project
John7	42.39857	-83.528	7/15/2024	Redside dace/Fish Hatchery Park Project
Low9	42.28346	-83.5053	7/25/2024	Goby migration
LR-8	42.29598	-83.5418	7/25/2024	Goby migration
Fowl4	42.27556	-83.5538	7/26/2024	Goby migration
LR-2	42.28196	-83.503	7/26/2024	Goby migration
MR-15	42.3306	-83.2483	7/29/2024	Delisting site
MR-8	42.34893	-83.3146	7/29/2024	Delisting site
Fowl3	42.29744	-83.5845	7/30/2024	Goby migration
Low2	42.30724	-83.5379	7/30/2024	Goby migration
Low2A	42.3061	-83.5386	7/30/2024	Goby migration
Up2	42.46322	-83.3682	8/1/2024	Delisting site
UR-4	42.40001	-83.2862	8/1/2024	Delisting site
Low4	42.2866	-83.4757	8/13/2024	Delisting site
LR-12	42.28232	-83.4661	8/13/2024	Goby migration
LR-10	42.29851	-83.3058	8/14/2024	Goby migration
LR-11A	42.31257	-83.2415	8/14/2024	Delisting site
LR-6	42.285	-83.3839	8/14/2024	Delisting site
Main25	42.3689	-83.2544	9/11/2024	Delisting site
Main27	42.44796	-83.2979	9/11/2024	Delisting site



Results

Twenty-five sites were sampled between March to September 2024. Two sites were sampled in March to check for migrating fish in and downstream of the new Fishway at the Henry Ford Estate. Conditions at the Fishway (Main10 and Main10A) were too difficult to conduct a complete sampling as the water was too deep and fast moving. The twenty-three remaining sites were sampled between June and September and all were fully sampled.

A total of 4,903 fish were captured and identified over the course of the season. The most commonly captured fish were round goby (811), fathead minnow (487), and johnny darter (432); the least commonly captured fish were northern pike (1) and common carp (2). The site with the highest diversity was LR-2, which had 19 species; the site with the lowest diversity was Main27 with 6 species. The highest number of fish were found at Fowl3 (369) and the lowest at Low2 (22). Most of the sites were dominated by Tolerant species and only a few Intolerant species were found.



2024 Fish Found	
Common Name	Quantity
Gizzard shad	3
Central stoneroller	142
Redside dace	8
Spotfin shiner	16
Common carp	2
Common shiner	287
Golden shiner	4
Emerald shiner	118
Mimic shiner	34
Northern redbelly dace	16
Bluntnose minnow	34
Fathead minnow	487
Blacknose dace	128
Creek chub	397
White sucker	155
Northern hog sucker	30
Yellow bullhead	3
Brown bullhead	6
Northern pike	1
Central mudminnow	78
Rainbow trout	7
Brook silverside	20
Brook stickleback	32
Mottled sculpin	67
Rock bass	3
Green sunfish	134
Pumpkinseed	48
Bluegill	233
Sunfish hybrid	19
Smallmouth bass	3
Largemouth bass	44
Black crappie	7
Rainbow darter	121
Johnny darter	432
Yellow perch	79
Northern logperch	36
Blackside darter	48
Round goby	811
Total	4093

2024 Fish Species					
FIELDID	Date	species	fish	Intolerant Spp	% Tolerant
Main10	3/27/2024	4	112	0	
Main10A	3/27/2024	7	11	0	
John1	6/26/2024	13	304	3	33%
Fel3	6/26/2024	10	150	1	65%
John7	7/15/2024	9	52	2	75%
John2	7/15/2024	10	116	2	78%
John13	7/15/2024	16	187	3	79%
LR-8	7/25/2024	13	204	0	66%
Low9	7/25/2024	12	160	1	72%
LR-2	7/26/2024	19	126	3	49%
Fowl4	7/26/2024	12	144	0	74%
MR-8	7/29/2024	11	192	0	42%
MR-15	7/29/2024	12	148	3	84%
Low2A	7/30/2024	14	136	0	38%
Fowl3	7/30/2024	12	369	0	53%
Low2	7/30/2024	7	22	0	95%
Up2	8/1/2024	13	172	0	41%
UR-4	8/1/2024	12	164	0	84%
Low4	8/13/2024	16	123	1	66%
LR-12	8/13/2024	15	137	2	72%
LR-11A	8/14/2024	18	286	2	39%
LR-10	8/14/2024	13	252	2	82%
LR-6	8/14/2024	14	197	1	82%
Main27	9/11/2024	6	56	1	82%
Main25	9/11/2024	8	262	0	96%

Delisting Sites

All of the sites in the [2008 Delisting Criteria](#) were sampled with the exception of the Main site below Ford Dam as it is not wadeable. The Delisting Criteria specified certain example game species expected at each group of sites for the four branches. Only one of the example game species was found at any of the sites: one rock bass at LR-11A (Ford Field). The site below Ford Dam was sampled by the Department of Natural Resources in July 2022 and four example game species were found: northern pike (1), channel catfish (1), rock bass (1), small mouth bass (4). We have since learned that the Office of the Great Lakes Great Lakes Management Unit Michigan Department of Natural Resources created an [Addendum](#) in 2018 that was posted January 2021. It states that “Degradation of Fish and Wildlife Populations will be restored when: 1. A healthy fish population is determined by the relevant resource management agencies to exist within the AOC at selected sites (to be determined cooperatively by the RRAC, MDEQ, and MDNR) 2. Relevant inventories, sightings, and observations made at selected sites lead to the determination that a diverse wildlife population exists within the AOC and that species that should be at those sites actually are at those sites.” Replacing expected example game species with agency expertise is a more robust measure of the health of the fish community.

Project Sites

Fishway

In light of the opening of the fishway at the Ford Dam, we sought to sample in the fishway but it proved very difficult to sample due to the fast moving water over large rock. We collected a few species in the fishway (Main10A) as well as below (Main10) but neither was a full survey. We found emerald shiners in the fishway, a species that has yet to be found above the dam. Below the dam, we caught 69 yellow perch.

Above the dam, we sampled two sites about the Ford Dam on the Middle branch and found two northern logperch for the first time at MR-15 and one yellow perch at MR-8. Both of these species most likely moved up through the fishway!

Johnson Creek Projects

Two sites were sampled upstream and downstream of the area that is targeted for a habitat project called the Johnson Intercounty Drain Restoration. The two sites, John2 and John7, had a low number of species (10, 9) and fish (116, 52) and were dominated by tolerant species (78%, 75%). Both sites did have two intolerant species: mottled sculpin and rainbow darter.

Redside Dace

Upper branch

The Upper Rouge and its two tributaries as well as the Johnson Creek have been home to the state endangered redbase dace. No redbase were found in the Upper this year and have not been found in this branch since 2012.

Johnson Creek

The Johnson Creek is another story. After being last seen in 2012, we started finding redbase dace again in 2021 at John2. This year, we were surprised to find five young of the year at John1. Because the culvert at Five Mile is perched and blocked with logs, we also sampled upstream and found an additional three redbase dace at John13. It is exciting to have found more redbase dace than in past years and that these are young fish which verify that successful reproduction is taking place in the Johnson Creek.

Round Goby

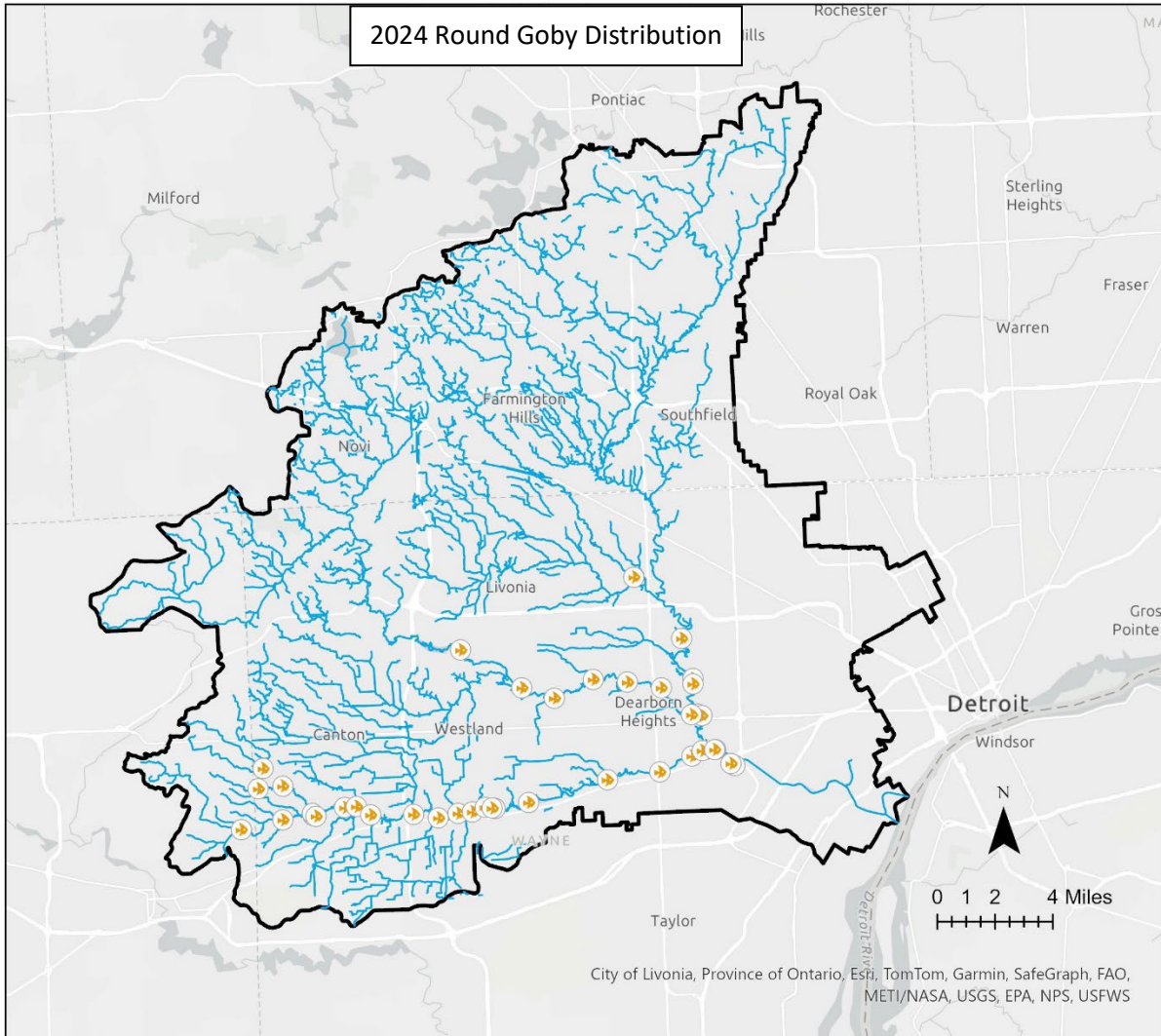
Lower Branch Round Goby migration

Since the Wayne Road Dam was removed in 2012, we have been tracking the migration of the invasive round goby on the Lower branch. This year, the invasive fish was found for the first time at Fowl4 as well as upstream on the Lower Branch at two new sites: LR-8 and LR-2A. This does not bode well for the sensitive fish in the headwaters of Fowler Creek and the Lower branch. The largest number of round goby were found at LR-10 where no johnny darter, a sensitive fish they are displacing, were found.

Two fish expanded their reach on the Lower branch this year. Northern hogsucker and northern logperch were found at six Lower branch sites. Northern hogsuckers are intolerant fish seldom seen in large numbers. They were found for the first time at LR-11A and in large numbers at LR-10 (12 fish). Northern logperch, a species found by FOTR for the first time in the Rouge in 2012, were found for the first time at LR-6 and Low4.

Round Goby Migration in the Upper Branch

The round goby migrated up the Rouge River from the Detroit River, however, they were not found in the Main, Middle and Upper branches until 2014. It was found in the Middle branch in 2014 at Elm Grove, most likely from bait bucket release as the fishway passage around the Ford Dam did not open until 2020. Gobies then moved downstream on the Middle branch to the confluence with the Main Branch, then upstream on the Main branch. They reached Rouge Park in 2016 but no further upstream, possibly stopped by the uncontrolled Combined Sewer Overflows (CSOs) along this stretch. While we still have not found them upstream of Rouge Park in the Main branch, this year we found them upstream on the Upper branch at Lola Valley. This is very concerning as the fish community upstream is home to the endangered redbreasted dace as well as sensitive fish like the northern hogsucker and rainbow darter.



Water Quality Data

University of Michigan graduate student Lian Anderson collected water quality data at most of the sites with a YSI meter and test strips. She collected temperature, conductivity, dissolved oxygen, nitrates, chloride and pH. Water temperatures ranged from 18.3 to 23.6 °C with all but four sites above 20 °C. This is concerning as trout cannot survive temperatures above 20 °C unless dissolved oxygen levels are high. Luckily, all the sites had dissolved oxygen levels above the 6 mg/L necessary for fish, ranging from 6.4 to 8.88 mg/L. Four sites had conductivity levels above 1000 µS/cm which can be stressful to fish. Six sites had high levels of chloride, also harmful to fish. Two sites had high turbidity levels. Six sites on the Lower branch had very high nitrate levels, ranging from 9.28-16.33 mg/L. All are located downstream of the Ypsilanti Wastewater Treatment Plant outfall. pH was stable with the exception of one Johnson creek site at 8.4. Values exceeding tolerance levels for fish are highlighted in yellow in the 2024 Water Quality Data Table.

2024 Water Quality Data							
FIELDID	YSI Temperature Reading ()	YSI Conductivity Reading (µS/cm)	YSI DO (mg/L)	YSI NO3 Reading (mg/L)	YSI Turbidity (FNU)	Chloride Quantab test strip (mg/L)	pH test strip
John2	22.3	595	6.4	0.25	12.1	50	7.6
Fowl3	19.8	654	6.9	1.31	110.7	43	7.6
John7	22.6	615	6.59	1.85	20.12	50	7.2
John13	21.5	575	7.04	1.64	19.3	43	7.6
Low2A	23.5	518	6.79	1.17	46.45	43	7.2
John1	20.2	798	7.37	2.32	23.6	66	8.4
MR-8	24.3	1085	6.88	2.11	6.66		7.2
Fel3	20.6	506	7.5	1.19	8.08	43	7.2
MR-15	23.6	1093	7.13	2.1	4.95	206	7.2
Main25	19.1	1390	7.9	1.89	14.2	260	7.6
UR-4	23.5	926	7.28	2.93	18.8	159	7.2
Main27	18.4	1208	8.29	2.32	18.9	224	7.2
Fowl4	18.3	622	8.31	0.99	21.99	43	7.6
LR-6	20.2	9.51	8.24	18.8	8.96	145	7.2
Low4	20.1	902	8.49	9.28	6.56	58	7.2
LR-8	20.2	566	8.5	0.85	22.56	43	7.6
Low9	21.4	536	8.32	1.12	23.8	37	7.6
LR-10	20.1	949	8.6	16.33	8.84	145	7.2
LR-12	20.5	905	8.72	12.57	18		6.8
LR-11A	20.6	973	8.88	15.6	8.53	159	6.8
Up2	22.8	998	8.51	3.7	5.72	190	7.2
LR-2	20.9	911	8.84	13.56	4.39	136	7.2

Discussion

The Rouge River fish community showed some significant improvements this year but water quality and invasive species remain a challenge to its recovery. The finding of eight young reddsides in the Johnson Creek is exciting after many years of none being found. It is concerning that no reddsides have been found in the Upper branch since 2012. The finding of yellow perch and northern logperch having made their way above the Ford Dam documents the success of the new fishway. The Lower branch is also experiencing some improvement with the increase in northern logperch and northern hogsuckers. Yet the invasive round goby continues to make its way upstream, outcompeting the native johnny darters as it established itself. Water quality continues to be a challenge with high temperatures, high conductivity, high chloride, high nitrates, and high turbidity continuing to limit the fish community. Additional habitat projects and water quality improvements are needed to continue the recovery of the Rouge River fish community.

Data

Main10A, Fish Way Ford Dam March 27, 2024 Main Rouge																				
Temp. 16 C.																			Total number of Fishes	
Species	Size in cm																		Total number of Fishes	
	≤3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	10.5	11	~	13	
Emerald Shiner										1										1
Bluntnose Minnow										1										1
Fathead Minnow					1															1
Blacknose Dace										1										1
white Sucker							1		1		1									3
Brook Stickleback				1	1		1													3
Round Goby						1														1
Total Fishes Sampled																			11	

Main 10 March 27, 2024 Main Rouge (just below fish way)																			
Temp. 16 C.																		Total number of Fishes	
Species	Size in cm																	Total number of Fishes	
	≤3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	10.5	11		
Emerald Shiner									10	8	5	4	5	2	2				36
Mimic Shiner		2	1	3															6
Yellow Perch							1	2	11	8	22	14	6	3	2				69
Round Goby					1														1
Total Fishes Sampled																		112	

Fe13 Joy Rd. June 26, 2024 Fellows Creek - Lower Rouge																										
Temp. 20 C.	22 Hauls																				Total number of Fishes					
Species	Size in cm																				Total number of Fishes					
	≤3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	10.5	11	11.5	~	12	13	14	15	19	20	
Fathead Minnow					1				2																	3
Blacknose Dace							3	11	3	7	1															25
Creek Chub			1			1	4	1	1	5	1	4	2	1			7	4		2	3	2	1	1		41
White Sucker																								1		1
Central Mudminnow									1		1		3		1											6
Mottled Sculpin									7	3	6	2	3	1		1										23
Green Sunfish											1		1	1	2		1									6
Pumpkinseed					1	1	1	1	1																	5
Bluegill						1																				1
Johnny Darter	151				1	2	13	10	12	1																39
Total Fishes Sampled																								150		

John1 5 Mile Rd. June 26, 2024 Johnson Creek Middle Rouge Rouge																																													
Temp. 20 C.	20 Hauls																									Total number of Fishes																			
Species	Size in cm																																												
	≤3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	10.5	11	~	12	13	14	15	18																						
Central Stoneroller			1		2	2	3	3	15	5	11	3	4	1						1					51																				
Redside Dace									3	1	1													5																					
Fathead Minnow							1																	1																					
Blacknose Dace						1	1		2	1	2													7																					
Creek Chub					1	3	8	7	13	8	10	3	5	1	8		5		3	3	2	1	1	82																					
White Sucker				1												2	1		1				1	6																					
Central Mudminnow							1	1			1													3																					
Mottled Sculpin	3				4	2	6	5	2	2	2		1		1		1							29																					
Green Sunfish						1	2	1		1					1					1				7																					
Pumpkinseed							1						1	1										3																					
Bluegill					1	1	1		1															4																					
Largemouth Bass		1	2	1	1						1				1	2		1		2				12																					
Rainbow Darter			19	33	28	7	7																	94																					
Total Fishes Sampled																																													304

John2 5 Mile Rd. RR Tracks July 15, 2024 Johnson Creek Middle Rouge Rouge																																													
Temp. 21.5 C.	22 Hauls																									Total number of Fishes																			
Species	Size in cm																																												
	≤3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	10.5	11	~	14	17																									
Fathead Minnow	6	4	40	5	4																			59																					
Blacknose Dace	2	1	1							1														5																					
Creek Chub										1		1		1		1						1		5																					
White Sucker			5																				1	6																					
Brook Stickleback	4	1																						5																					
Mottled Sculpin		1	1																					2																					
Bluegill	1																							1																					
Hybrid Sunfish														1										1																					
Rainbow Darter	6	3					2	1																12																					
Johnny Darter	2	2	12	4																				20																					
Total Fishes Sampled																																													116

John13 5 Mile Rd. July 15, 2024 Johnson Creek Middle Rouge																																													
Temp. 21.5 C.	22 Hauls																									Total number of Fishes																			
Species	Size in cm																																												
	≤3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	10.5	11	~	12	15	17	18	19	20	23	24	45																		
Central Stoneroller									1	1	4		1		1													9																	
Redside Dace									1		1		1															3																	
Golden Shiner													1															1																	
Bluntnose Minnow							1																					1																	
Fathead Minnow	13	11	13	7	9	1	1																					55																	
Blacknose Dace	1								1																			2																	
Creek Chub			1		3	1	6	6	4		3	1	6	2	1		5		3	3	1	3		2				51																	
White Sucker			2	2	1									4		6			2				1		1	1	1	21																	
Central Mudminnow									2		1																	3																	
Mottled Sculpin	1					1	1		1	1	1						1											7																	
Green Sunfish			1		1			2	1																			5																	
Pumpkinseed					3		2		2																			7																	
Bluegill			2	1	2																							5																	
Largemouth Bass	1		1																									2																	
Rainbow Darter	1		1		2																							4																	
Johnny Darter	3	2	2		2		2																					11																	
Total Fishes Sampled																																													187

John7 Ridge Rd. Rd. July 15, 2024 Johnson Creek Middle Rouge River																																													
Temp. 22 C.	20 Hauls																									Total number of																			
Species	Size in cm																																												
	≤3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	10.5	11	~	12	13	15	17	20	21																					
Fathead Minnow	4	4	7		1																							16																	
Blacknose Dace		2	3				1																					6																	
Creek Chub											1				1					1	1							4																	
White Sucker			3	1															1				1	1	1	1		9																	
Mottled Sculpin									1																			1																	
Bluegill		1																										1																	
Largemouth Bass			1		1		1																					3																	
Rainbow Darter		1			1																							2																	
Johnny Darter		4	5							1																		10																	
Total Fishes Sampled																																													52

LR8 Ridge Rd. July 25, 2024 Lower Rouge

Temp. 20.2 C.	20 Hauls																				Total number of Fishes							
Species	Size in cm																											
	<3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	11	11	12	~	12		13	14	15	16	18	20	
Central Stoneroller	1		1				4		2						2													10
Common Shiner											4	2	2	1			3			3	1	1	1					18
Fathead Minnow	5	2	7																									14
Blacknose Dace	7	3	2	1					5	1	2			1			3			3		1	1					30
Creek Chub	8		6	1							2			1	1	2		3	1	6	1	1			1	2		36
White Sucker															1													1
Yellow Bullhead																										1		1
Green Sunfish						1	4	1	1	1	2	1																11
Bluegill					1		2			1	1		1				1											7
Pumpkinseed											1																	1
Largemouth Bass					1										1							1						3
Johnny Darter	15	2	2	1	7	10	12	6	1																			56
Round Goby	5	5					1	4	1																			16
Total Fishes Sampled																									204			

Low9 Beck Rd. July 25, 2024 Lower Rouge

Temp. 21 C.	20 Hauls														Total number of Fishes													
Species	Size in cm																											
	<3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5		10	11	11	12	~	12	13	14					
Gizzard Shad							3																					3
Common Shiner					2																							2
Fathead Minnow	7	1	1	2	2		2																					15
Creek Chub																									1			1
White Sucker																									1	1		2
Green Sunfish					1			2	3		1		1		1													9
Bluegill	10	1	3	1	3	1	6	3	1	2		1														1		33
Smallmouth Bass					1																							1
Largemouth Bass	2						1			1																		4
Black Crappie			1	1																								2
Johnny Darter	1	1	4	5	2	1	2	2																				18
Round Goby	25	8	7	1		2	1	11	6	3	5	1																70
Total Fishes Sampled																									230			

LR-2 Beck Rd. July 26, 2024 - Lower Rouge

Temp. C.	20 Hauls																												Total number of Fishes	
	Size in cm																													
Species	≤3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	10.5	11	11.5	~	12	13	14	15	16	17	18	20	45	58	
Central Stoneroller									1																					1
Common Carp																												1		1
Common Shiner													2		1		1										1			5
Emerald Shiner				1		3	1					1																		6
Mimic Shiner					2	2	2																							6
Fathead Minnow				1																										1
Creek Chub													1		1															2
White Sucker						1																		1	2	2	2			8
Hogsucker																				1	7	1					1			10
Northern Pike																												1		1
Rainbow Trout					1				1						1															3
Green Sunfish					1		1		1	1								1												5
Bluegill	1			2	1	4	1	4	1	1																				15
Smallmouth Bass												1																		1
Largemouth Bass					2																									2
Johnny Darter					1		2		2																					5
Yellow Perch													1				1	1						3						6
Logperch														1	2		4				1									8
Round Goby					1		3	2	16	2	5	2	4	2	2		1													40
Total Fishes Sampled																												126		

Fowl 4 Ridge Rd. July 26, 2023 Fellows Creek - Lower Rouge

Temp. C.	20 Hauls																				Total number of Fishes								
	Size in cm																												
Species	≤3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	11	11	12	~	12	13	14	15	16	18	20			
Central Stoneroller																1													1
Common Shiner																1		1			3								4
Fathead Minnow			1	2	2		1																						6
Blacknose Dace				1						6																			7
Creek Chub	1									1	1	2		2		5		4	1		4	2	1	1			1	26	
White Sucker												1			1	2		1			1	2	1	2	1	2	1	1	15
Brook Stickleback						1																							1
Green Sunfish	1		2		3		3		4	1	1		1		1		1			1									19
Pumpkinseed							1				1																		2
Bluegill	5	1	3		1	2	4	3		1						2													22
Johnny Darter	2		2	1	3	8	14	9																					39
Round Goby									2																				2
Total Fishes Sampled																									144				

MR-8 Inkster Rd. July 29, 2024 Middle Rouge																								
Temp. 24.3 C.	22 Hauls																						Total number of Fishes	
Species	Size in cm																							
	<3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	10.5	11	11.5	~	12	13	18		
Spotfin Shiner									5	1		1	1										8	
Common Shiner	4	1	30	18	26	6				1			1		1		2	2			1	1	94	
Bluntnose Minnow					1				5	1	1	1											9	
Fathead Minnow					1																		1	
Creek Chub					1		1				1											1	4	
White Sucker							1														1	1	1	4
Hybrid Lepomis																		1					1	
Johnny Darter			1																				1	
Yellow Perch																					1		1	
Blackside Darter	1	1	3	1	2																		8	
Round Goby	20	4	3	2	1	6	5	6	6	1	3				3		1						61	
Total Fishes Sampled																						192		

MR-15 Outer Drive Rd. July 29, 2024 Middle Rouge																								
Temp. 23.6 C.	22 Hauls																						Total number of Fishes	
Species	Size in cm																							
	<3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	10.5	11	11.5	~	12	13	14	17	
Spotfin Shiner									2		1												3	
Common Shiner	1	2	3		1								1										8	
Bluntnose Minnow	3	2	1						1														7	
Fathead Minnow		1																					1	
Creek Chub			2	1									3		1		1			1	2	1	12	
White Sucker				1	3		2																6	
Bluegill		1						1															2	
Hybrid Lepomis																						1	1	
Johnny Darter	2	2	13	4																			21	
Blackside Darter		1	1	2	2				1		1												8	
Logperch											1				1								2	
Round Goby	36	14	16	2			2	5	2														77	
Total Fishes Sampled																						148		

Fowl3 Harris Rd. July 30, 2024 Fellows Creek - Lower Rouge																								
Temp. 19.8 C.	10 Hauls																					Total number of Fishes		
Species	Size in cm																							
	≤3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	10.5	11	11.5	~	12	13	14	17	
Stoneroller			13	8	10	6	2		1	1	1	3	3	2	2		1							
Northern Redbelly Dace			1		3	4	7	1																
Fathead Minnow			13	7	5		2	1	1															
Blacknose Dace							1	5	8	5	1	1												
Creek Chub			3	1	1		1	5	5	2	3		5	2	10	3	5	1			5	1	1	1
Central Mudminnow	4	1	4				3	6	29	8	10		1											
Brook Stickleback	8	2	3	1	5	3	1																	
Green Sunfish		1	3	1	4	2	1	2	1		1	2							1					
Bluegill	14	3	9	2	8	3	4																	
Hybrid Lepomis			1		3	4	7	1																
Largemouth Bass			1																					
Johnny Darter	1	2	5		2	3	7	4	3															
Total Fishes Sampled																						369		

Low2 (upstream) Cherry Hill - Lower Rouge																									
Temp. 23.5 C.	9 Hauls																					Total number of Fishes			
Species	Size in cm																								
	≤3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	10.5	11	11.5	~	12	13	14	15	19	20
Stoneroller													1												
Creek Chub					1																				
Brown Bullhead			1																						
Green Sunfish							1																		
Pumpkinseed												1													
Bluegill	4				1	1		1		1	1														
Johnny Darter	2	2	9	3	3																				
Total Fishes Sampled																						33			

Low2A Cherry Hill July 30, 2024 - Lower Rouge																											
Temp. 23.5 C.	11 Hauls																					Total number of Fishes					
Species	Size in cm																										
	≤3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	10.5	11	11.5	~	12	13	14	15	16	17	18	20
Stoneroller																				1							
Common Carp																									1		
Common Shiner									2	1			2				1			1	2						
Golden Shiner												1															
White Sucker												1					2	4		4		1	1		1	2	
Brown Bullhead															1						2		2				
Yellow Bullhead																						1				1	
Green Sunfish	1				2	1	5	3	2	1		1	2		2		3			1							
Pumpkinseed				1			2	1	2	3	1				1		2										
Bluegill	14	1	3	4	8	2	5	2	1	1	2	1															
Largemouth Bass	1	1		1	1		1										1					1	1				
Black Crappie																	1			2		1	1				
Johnny Darter	1		2		1	1																					
Round Goby	1										1																

Up2 Shiawassee Park, Aug 1, 2024 Upper Rouge River																												
Temp. 22.8 C.	20 Hauls																							Total number of Fishes				
Species	Size in cm																											
	≤3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	10.5	11	~	12	13	14	15	16	17	18	19	23	
Stoneroller	1			1		2			1								1		1									7
Common Shiner			1		3				2	1	7	1	13	3			9		4	3		2						49
fathead Minnow				13	5	3																						21
Blacknose Dace	2		7		3	1			1		4		1															19
Creek Chub			3	2	7	3		1	1	1			2		3		1		2	2					2			30
White Sucker					1								1		1		1		1							1	1	7
Hogsucker					1																1		1	1		1		5
Mottled Sculpin	2		1				1		1																			5
Green Sunfish						1		1	1	1			1				1											6
Bluegill						1		2	2				1															6
Rainbow Darter	1			1	1	3	1	2																				9
Johnny Darter			1		2		1	2	1																			7
Blackside Darter											1																	1
Total Fishes Sampled																							172					

UR-4 Lola Valley Park, Aug 1, 2024 Upper Rouge River																												
Temp. 23.5 C.	20 Hauls																							Total number of Fishes				
Species	Size in cm																											
	≤3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	10.5	11	~	12	13								
Stoneroller										1																		1
Common Shiner										2	4	3	1	1	2		3		1									17
Bluntnose Minnow								2		1	2																	5
Fathead Minnow			5		1	2	3	1																				12
Creek Chub							2		2	1	3	5	5				1		1									20
White Sucker						1	1								1		1								2			6
Green Sunfish			1				1	1	1																			4
Bluegill	3	1									1																	5
Largemouth Bass									1																			1
Johnny Darter	3	11	1	1	5	15	31	14	5																			86
Blackside Darter						1				2																		3
Round Goby			1				1	1	1																			4
Total Fishes Sampled																							164					

LR-12 Morton Taylor, Aug 13, 2024 Lower Rouge River																													
Temp. 20.5 C.	20 Hauls																											Total number of Fishes	
Species	Size in cm																												
	≤3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	10.5	11	~	12	13	14	15	16	17	18	20	23		25
Stoneroller											2																		2
Common Shiner											1	1	1	1	2					2	1	1							10
Fathead Minnow			1	5	5	3	3		3																				20
Blacknose Dace									1	1	2																		4
Creek Chub											1			1					1				2		1				6
White Sucker							1					1	1									1	1	1	2		1		8
Hogsucker				1		1		1											1	1	2		1					1	9
Rainbow Trout									1		2																1		4
Green Sunfish							1					1																	2
Pumpkinseed							1																						1
Bluegill	2		1				2																						5
Johnny Darter			2	1		1	3	1																					8
Logperch																				1									1
Blackside Darter											1		1																2
Round Goby	10	3	7	2		2	8	7	9		5	2																	55
Total Fishes Sampled																											135		

Low4 Sheldon Rd, Aug 13, 2024 Lower Rouge River																													
Temp. 20.1 C.	20 Hauls																											Total number of Fishes	
Species	Size in cm																												
	≤3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	10.5	11	~	12	13	14	15	16	20					
Stoneroller																					1								1
Golden Shiner									1		1																		2
Common Shiner			1			1	1						1							3		1		3				11	
Mimic Shiner						2	1																						3
Fathead Minnow					1																								1
Creek Chub															1						1	2				2		6	
White Sucker																				1		2	3	4	1			11	
Hogsucker								1																	1		1		3
Green Sunfish									1				1																2
Pumpkinseed										1					1	1						1							4
Bluegill	9	2	1	2		1																							15
Largemouth Bass									1		1																		2
Johnny Darter						1	1	1	1																				4
Logperch																1	1												2
Blackside Darter													1																1
Round Goby	1	1	2	1	2	4	2	4	24	6	5	1	2																55
Total Fishes Sampled																											123		

LR-10 Inkster Rd. Aug 14, 2024 Lower Rouge River																								
Temp. 20.1 C.	20 Hauls																				Total number of Fishes			
Species	Size in cm																							
	≤3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	10.5	11	~	12	13		15	16	18
Common Shiner				3	2	1	4		1								4		1	1				17
Mimic Shiner						1	1																	2
Fathead Minnow		1	3		3	2	2																	11
Creek Chub						2	3						1	2	2		1		2					13
White Sucker			1				2		2	1											1		1	8
Hogsucker									1															1
Rock Bass																						1		1
Green Sunfish		1					2	2												1				6
Pumpkinseed									1						1									2
Bluegill		1	1								1				1									4
Logperch									1	1	1	1	1		4		2		1					12
Blackside Darter							2				2		1		1									6
Round Goby	10	7	27	8	8	9	15	12	32	12	17		6	1	4		1							169
Total Fishes Sampled																						252		

LR-6 Wayne Rd. Aug 14, 2024 Lower Rouge River																								
Temp. 20.2 C.	20 Hauls																				Total number of Fishes			
Species	Size in cm																							
	≤3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	10.5	11	~	12	13		14	16	17
Common Shiner																	2		3	2	1			8
Fathead Shiner					2	1			2	1	1													7
Blacknose Dace									1															1
Creek Chub																	1			1				2
White Sucker									1											1			1	3
Hogsucker																						1		1
Green Sunfish					1		3		3				1											8
Pumpkinseed							2	1	4			1												8
Bluegill	2	1			1	3	1		1	1		1												8
Largemouth Bass					1				1	2														4
Yellow Perch																						1		1
Logperch																	1			1				2
Blackside Darter									1		1													2
Round Goby	37	8	22	7	3		17	7	15	9	4	7	5		1									142
Total Fishes Sampled																						197		

Main25 Spinoza Rd. Sept 11, 2024 Main Rouge																									
Temp. 18 C.	20 Hauls																				Total number of Fishes				
Species	Size in cm																								
	≤3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	10.5	11	11.5	~	12		13	14	16	
Central Stoneroller				1																				1	
Common Shiner									1														1		2
Bluntnose Minnow			1	1																					2
Fathead Minnow	51	34	45	24	29	1	5		1															190	
White Sucker							4		1												2	1		1	9
Johnny Darter				1	1	1	3																		6
Blackside Darter			1			2	3	1																	7
Round Goby	5	2	4	3	3	2	10	3	8	1	3	1													45
Total Fishes Sampled																							262		

LR-11A Brady St. Aug 14, 2024 Lower Rouge River																									
Temp. 20.6 C.	20 Hauls																				Total number of Fishes				
Species	Size in cm																								
	≤3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	10.5	11	~	12	13		14	18	20	25
Stoneroller					1		1		1																3
Spotfin shiner							1	1	1	1			1												5
Common Shiner	16	7	7	1		1	1																		33
Emerald Shiner	1	1	9	9	31	9	12	1	2																75
Mimic Shiner			2	1	3	7	4																		17
Bluntnose Minnow	2	1	1	2	2	1																			9
Fathead Shiner	1	3	2	3	8	4	1	1																	23
Hogsucker																					1				1
Brook Silverside					2	6	7	3	1		1														20
Rock Bass																						1			1
Bluegill	2																								2
Smallmouth Bass				1																					1
Largemouth Bass																							1	1	2
Johnny Darter			2	4	2	1																			9
Yellow Perch												1										1			2
Logperch					1	1	2	1					2		2										9
Blackside Darter				1			1	1																	3
Round Goby	14	8	11	7	11	1	7	1	3	3	3	2													71
Total Fishes Sampled																							286		

Main27 Beech Rd. Sept 11, 2024 Main Rouge																										
Temp. 27C.	23 Hauls																				Total number of Fishes					
Species	Size in cm																									
	≤3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	10.5	11	11.5	~	12		13	14	16	20	
White Sucker																					1	1	1		2	5
Rock Bass																								1		1
Pumpkinseed																					1					1
Bluegill			1																							1
Johnny Darter	3	5	10	3	1	11	5	2	1																41	
Blackside Darter					1		2	3								1									7	
Total Fishes Sampled																							56			



ROUGE RIVER

FISH SURVEY REPORT 2025

Prepared for the
Alliance of Rouge Communities by
Friends of the Rouge

Funded by:



MICHIGAN DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY



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Introduction

Friends of the Rouge (FOTR) was funded by the Michigan Department of Environment, Great Lakes and Energy (EGLE) and the United States Environmental Protection Agency's Great Lakes Restoration Initiative through the Alliance of Rouge Communities, to sample 20 sites on the Rouge River in 2025 for fish.

Materials and Methods

A Quality Assurance Project Plan for Fish Monitoring and Benthic Macroinvertebrate Monitoring was submitted to EGLE and approved in June 2022.

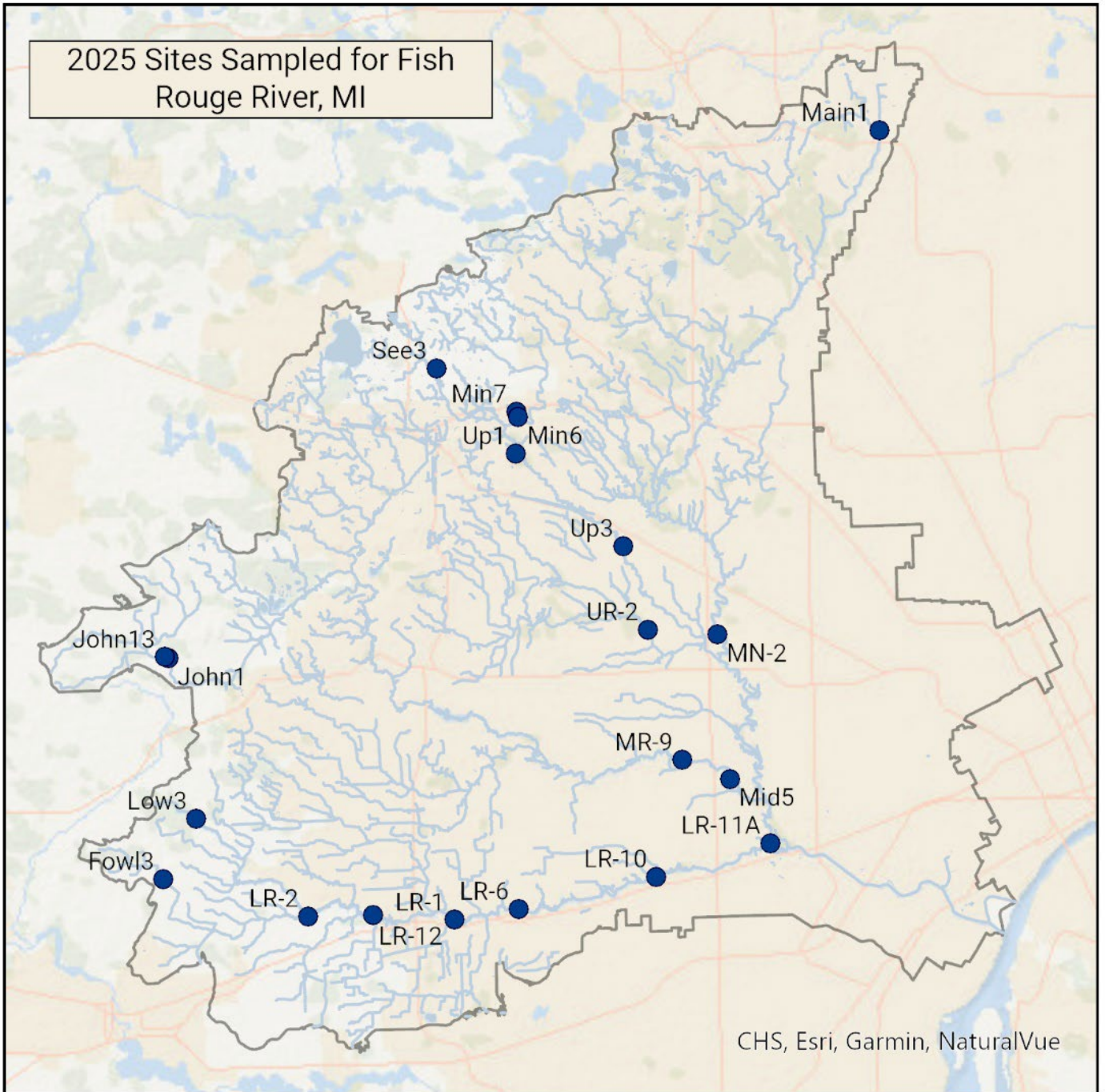
Seine and dip nets were used to sample an average of 455 feet of stream at each site. Water temperature was measured with a thermometer, and the length and width of the stream was measured with a range finder. All available habitats were sampled for approximately one hour and at least 20 seine hauls. All fish were identified to species, measured to the nearest half centimeter, and released back to the stream. Invasive species were disposed of. Fish with uncertain identification were collected live by Robert Muller and photographed. Water temperature, number of seine hauls, length of stream sampled, and fish sizes by species were recorded. Equipment was cleaned and dried at the end of each day and disinfected before moving to another tributary system. Within a given day, sites were sampled within the same tributary system or all equipment was disinfected with a bleach solution between sites. Following each sampling day, field data was entered into Excel spreadsheets. FOTR checked the raw data against the spreadsheets and entered all data into one database. This year our team put forth an effort to ensure the long-term viability of the program, and to enhance the team's knowledge and capabilities. Our fish expert, Bob Muller, developed a Rouge River fish identification course and guide key in order for staff to learn and practice. In the field, staff rotated responsibilities, learning from our fish experts how to identify the fish caught as well as the habitats to sample so that our data collection is consistent and reliable.

Twenty sites were selected based on delisting criteria, project sites, round goby migration and the endangered redbside dace. The sites chosen often covered multiple of the aforementioned categories. Ten sites were chosen from the [2008 Delisting Targets for Fish & Wildlife and Population Beneficial Use Impairments for the Rouge River Area of Concern](#). Five sites were at habitat restoration projects, ten sites were monitored to track the round goby migration up the Lower branch and six sites tracked the endangered redbside dace in Johnson Creek and the Upper branch.

Table 1: 2025 Fish Sampling Sites

Site ID	Latitude	Longitude	Date	Reason for Sampling
Main1	42.60991	-83.17984	6/13/2025	Firefighter's Park Project Site
MN-2	42.39972	-83.27139	6/13/2025	Delisting Site, Goby migration
MR-9	42.34732	-83.29135	6/18/2025	Delisting Site, Henry Ford Fishway Project Site
Mid5	42.33936	-83.26442	6/18/2025	Delisting Site, Henry Ford Fishway Project Site
John1	42.38970	-83.58194	6/23/2025	Redside dace
John13	42.39030	-83.58390	6/23/2025	Redside dace
Up3	42.43659	-83.32475	6/25/2025	Delisting Site, Goby migration, Redside Dace
UR-2	42.40180	-83.31076	6/25/2025	Delisting site
Min7	42.49276	-83.38520	6/30/2025	Redside dace
Min6	42.49048	-83.38410	6/30/2025	Redside dace
See3	42.51073	-83.43040	7/8/2025	Redside dace, Seeley Creek habitat project
Up1	42.47526	-83.38545	7/8/2025	Redside dace
Fowl3	42.29744	-83.58455	8/6/2025	Goby migration
Low3	42.32270	-83.56597	8/6/2025	Goby migration
LR-2	42.28196	-83.50301	8/7/2025	Goby migration
LR-12	42.28232	-83.46610	8/7/2025	Delisting Site, Goby migration
LR-1	42.28043	-83.42027	8/18/2025	Delisting Site, Goby migration
LR-6	42.28500	-83.38389	8/18/2025	Delisting Site, Goby Migration, Wayne Rd Dam Removal Site
LR-10	42.29851	-83.30584	8/21/2025	Delisting Site, Goby Migration, Inkster Park Project Site
LR-11A	42.31257	-83.24152	8/21/2025	Delisting Site, Goby Migration

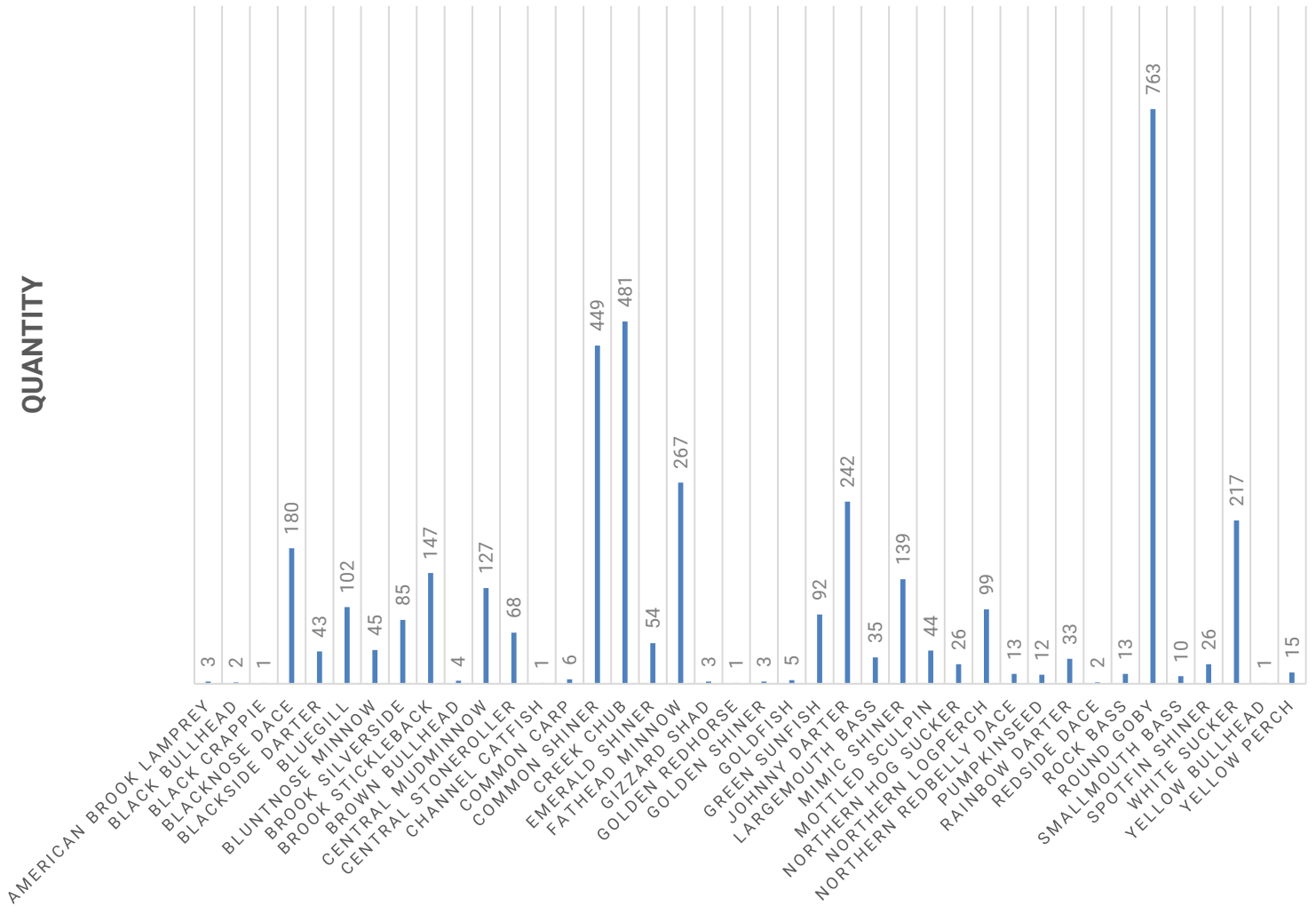
2025 Sites Sampled for Fish
Rouge River, MI



Results

Twenty sites were sampled from June to August 2025. A total of 3,859 fish were captured and identified over the course of the season. The most commonly captured fish were round goby (763), creek chub (481), and common shiner (449); the least commonly captured fish were black crappie, channel catfish, golden redhorse, and yellow bullhead. The site with the highest diversity was LR-11A, which had 19 species; the site with the lowest diversity was Min7 with 4 species. However, Min7 was a small tributary site with very low water levels. The site with the next lowest diversity was UR-2 with 7 species. The highest number of fish were found at See3 (461) and the lowest at Low3 (27). Most of the sites were dominated by Tolerant species and only a few Intolerant species were found.

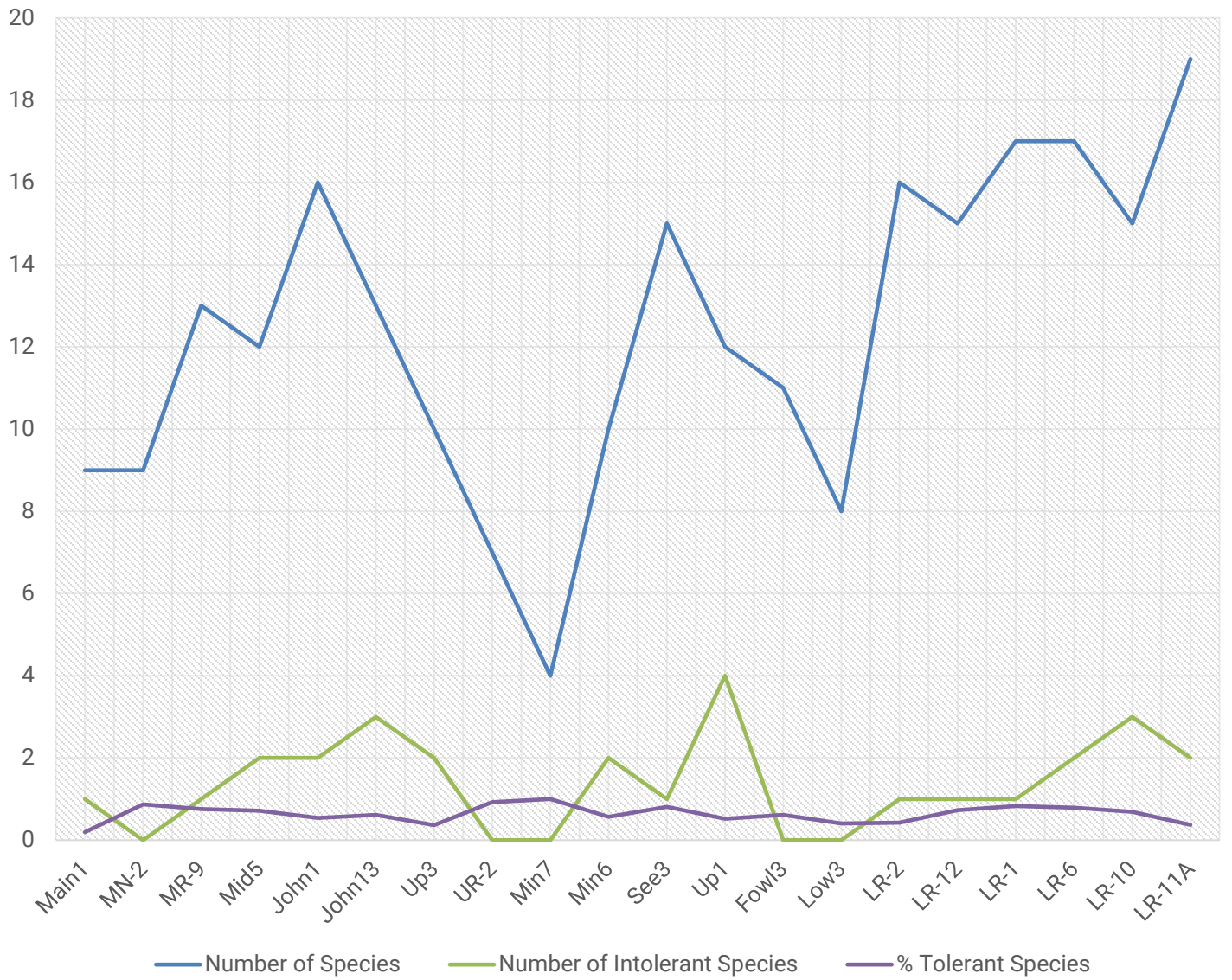
2025 FRIENDS OF THE ROUGE FISH COMMUNITY SAMPLING



2025 Fish Found				
Common Name	Quantity		Common Name	Quantity
American brook lamprey	3		Goldfish	5
Black bullhead	2		Green sunfish	92
Black crappie	1		Johnny darter	242
Blacknose dace	180		Largemouth bass	35
Blackside darter	43		Mimic shiner	139
Bluegill	102		Mottled sculpin	44
Bluntnose minnow	45		Northern hog sucker	26
Brook silverside	85		Northern logperch	99
Brook stickleback	147		Northern redbelly dace	13
Brown bullhead	4		Pumpkinseed	12
Central mudminnow	127		Rainbow darter	33
Central stoneroller	68		Redside dace	2
Channel catfish	1		Rock bass	13
Common carp	6		Round goby	763
Common shiner	449		Smallmouth bass	10
Creek chub	481		Spotfin shiner	26
Emerald shiner	54		White sucker	217
Fathead minnow	267		Yellow bullhead	1
Gizzard shad	3		Yellow perch	15
Golden redhorse	1			
Golden shiner	3			

2025 Fish Summary					
Site ID	Date	Number of Species	Total Number of Fish	Number of Intolerant Species	% Tolerant Species
Main1	6/13/2025	9	107	1	20%
MN-2	6/13/2025	9	83	0	87%
MR-9	6/18/2025	13	250	1	76%
Mid5	6/18/2025	12	112	2	71%
John1	6/23/2025	16	175	2	54%
John13	6/23/2025	13	134	3	61%
Up3	6/25/2025	10	166	2	37%
UR-2	6/25/2025	7	156	0	92%
Min7	6/30/2025	4	50	0	100%
Min6	6/30/2025	10	242	2	57%
See3	7/8/2025	15	461	1	81%
Up1	7/8/2025	12	177	4	52%
Fowl3	8/6/2025	11	315	0	62%
Low3	8/6/2025	8	27	0	41%
LR-2	8/7/2025	16	239	1	43%
LR-12	8/7/2025	15	117	1	73%
LR-1	8/18/2025	17	169	1	83%
LR-6	8/18/2025	17	197	2	79%
LR-10	8/21/2025	15	282	3	69%
LR-11A	8/21/2025	19	400	2	37%

2025 Fish Summary



Delisting Sites

All of the sites in the [2008 Delisting Criteria](#) were sampled with the exception of the Main site below Ford Dam as it is not wadeable. The Delisting Criteria specified certain example game species expected at each group of sites for the four branches. Example game species were found at three sites in the Lower Branch, and two sites in the Middle Branch this year. No example game species were found in the Main nor Upper Branches this year.

Lower Branch: one smallmouth bass at LR-6 (Wayne Rd), one rock bass and two smallmouth bass at LR-10 (Inkster Rd), one rock bass and four smallmouth bass at LR-11a (Ford Field Park in Dearborn).

Middle Branch: two smallmouth bass at MR-9 (Beech Daly Rd), one rock bass and one smallmouth bass at Mid5 (Helms Haven).

The site below Ford Dam was sampled by the Department of Natural Resources in July 2022 and four example game species were found: northern pike (1), channel catfish (1), rock bass (1), small mouth bass (4). We have since learned that the Office of the Great Lakes Great Lakes Management Unit Michigan Department of Natural Resources created an [Addendum](#) in 2018 that was posted January 2021. It states that “Degradation of Fish and Wildlife Populations will be restored when: 1. A healthy fish population is determined by the relevant resource management agencies to exist within the AOC at selected sites (to be determined cooperatively by the RRAC, MDEQ, and MDNR) 2. Relevant inventories, sightings, and observations made at selected sites lead to the determination that a diverse wildlife population exists within the AOC and that species that should be at those sites actually are at those sites.” Replacing expected example game species with agency expertise is a more robust measure of the health of the fish community. A review and revision of the delisting criteria to more specifically define what a “diverse wildlife population” is would assist in the work to assess and move forward the delisting of this Beneficial Use Impairment.

Project Sites

Firefighter’s Park

One site was sampled within the park, where construction on the habitat restoration project began this summer. This site had a low number of species (9) and fish (107), with 1 intolerant species: rock bass. We hope to see improvements in the fish community given project outcomes include the following: providing additional habitat by stabilizing the streambank, creating additional riffle structures and pools, among other goals. These habitat enhancements should improve the fish community.

Fishway

In light of the opening of the fishway at the Ford Dam, we sampled upstream at two sites: MR-9 and Mid5. We found one northern logperch at both MR-9 and Mid5 which means this species is making its way upstream! We caught this species for the first time above the fishway at MR-15 last year, which is downstream from the MR-9 and Mid5 sites we visited this year.

Colonial Park and Inkster Park

One site was sampled within Inkster Park, which is just downstream of Colonial Park. Both of these habitat restoration projects should improve the fish community. The Colonial Park wetland and reforestation is complete, and the Inkster Park Project is slated for the coming years. The site we sampled, LR-10, has a good number of fish species (10), and number of fish (282). Three intolerant species were found: northern hog sucker, smallmouth bass and rock bass. This site was dominated by tolerant fish species: 69% of the fish captured at this site were tolerant species.

Redside Dace

Upper branch

The Upper Rouge and its two tributaries as well as the Johnson Creek have been home to the state endangered redbase dace. No redbase were found in the Upper this year and have not been found in this branch since 2012. However, while snorkeling in the Rouge, a diver captured redbase dace on camera at Woodland Hills (Minnow Pond), and Heritage Park in Farmington. Despite our best efforts we did not capture redbase dace at either of these locations.

Johnson Creek

The Johnson Creek is another story. After being last seen in 2012, we started finding redbase dace again in 2021 at John2. This year, we did not find any at John1 despite finding them there last year. Because the culvert at Five Mile is perched and blocked with logs, we also sampled upstream and found two redbase dace at John13.

Round Goby

Lower Branch Round Goby migration

Since the Wayne Road Dam was removed in 2012, we have been tracking the migration of the invasive round goby on the Lower branch. This year, the invasive fish was not found at any new locations. The largest number of round goby were found at LR-10 where no johnny darter, a sensitive fish they are displacing, were found.

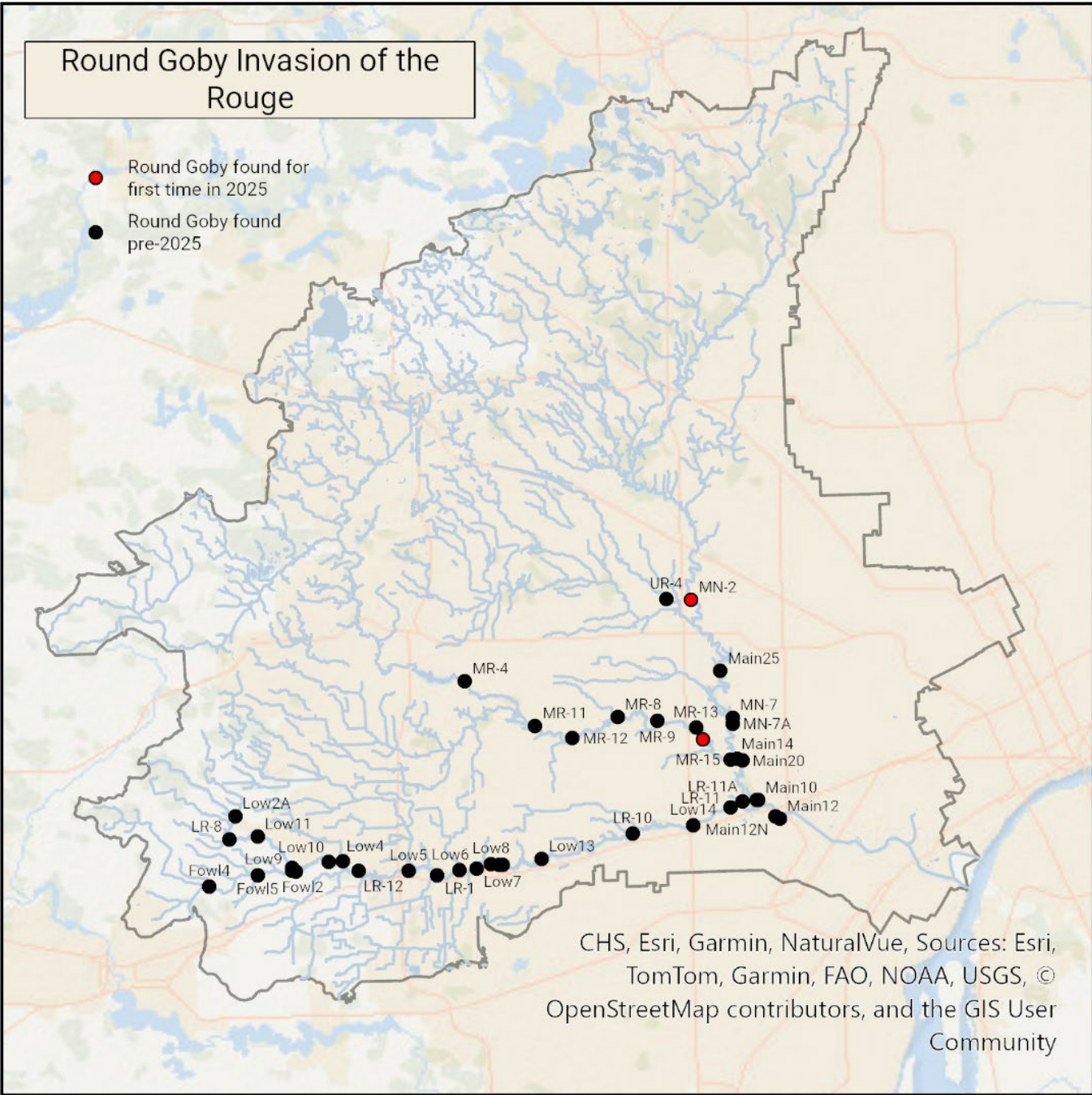
Round Goby Migration in the Upper and Main Branches

The round goby migrated up the Rouge River from the Detroit River, however, they were not found in the Main, Middle and Upper branches until 2014. It was found in the Middle branch in 2014 at Elm Grove, most likely from bait bucket release as the fishway passage around the Ford Dam did not open until 2020. Gobies then moved downstream on the Middle branch to the confluence with the Main Branch, then upstream on the Main branch. They reached Rouge Park in 2016 but we did not capture them upstream until this year. We found them upstream at MN-2 our site at Eliza Howell Park in Detroit. We expected to find them at Eliza Howell Park as we found them on the Upper Branch for the first time last year at UR-4 and the fish would have had to travel into the park on the Main Branch through the confluence of the Upper and Main Branches.

The Upper and Main Branches of the Rouge are home to several sensitive species not found in the Lower Branch and these, along with the johnny darter, may be negatively impacted as the round goby migrate upstream. Other benthic fish including darters (Iowa darter, least darter, and blackside darter) as well as mottled sculpin have been found to decline when round goby move in. FOTR has documented the adverse impact that the round goby have had on the johnny darters in the Lower Branch for many years. As they move into a site, the johnny darter population quickly declines. The Main, Middle and Upper branches are home to additional darter species including rainbow, Iowa and least darters. It is likely that the round goby will outcompete these darters as they have done with the johnny darters. Mottled sculpin are a very sensitive fish found in the Upper branch and in the headwaters of the Lower and Middle Rouge. As the round goby make their way into these tributaries, mottled sculpin may decline. The headwaters of the Middle and Lower Rouge contain some of the most sensitive species in the watershed. Currently, several dams prevent fish from moving upstream on the Middle Branch, providing some protection for fish upstream of Nankin, Newburgh, Wilcox and Phoenix Lakes.

Round Goby Invasion of the Rouge

- Round Goby found for first time in 2025
- Round Goby found pre-2025



CHS, Esri, Garmin, NaturalVue, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

Discussion

The Rouge River fish community showed some significant improvements this year but water quality and invasive species remain a challenge to its recovery. Finding example game species at three sites in the Lower Branch, and two sites in the Middle Branch this year are good signs in the progress toward delisting. The finding of redbreasted dace in the Upper branch by the diver was very encouraging, despite the fact that we did not capture any while sampling. We did catch three American brook lamprey at the Heritage Park site (Up1) which is the only location in the Rouge where we have found them.

Finding northern logperch further upstream of the Ford Dam documents the success of the new fishway. Yet the invasive round goby continues to make its way upstream, outcompeting the native johnny darters as it established itself. This is particularly concerning in the Main branch as we found them upstream of Rouge Park for the first time. Additional habitat projects and water quality improvements are needed to continue the recovery of the Rouge River fish community.

Data

Main1 Fire Fighters Park June 13, 2025 Main Rouge																							Total Number of Fish		
Temp. 18 C.	Siene Hauls - 20																								
Species	Size Class cm																								
	≤ 3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	10.5	11	12	13	14	16	18	20		
Common Shiner						1		1	1		8	3	8		11	1.0	16								50
Creek Chub									2		4		1		1			1							9
White Sucker													2												2
Yellow Bullhead																							1		1
Rock Bass												1					3		1		1	3			9
Green Sunfish																			1						1
Bluegill				1	1					1	1		5	3	4	1	3	1	1	1					23
Largemouth Bass	1											1					2								4
Johnny Darter				3		3	1			1															8
Total Fishes Sampled																							107		

MN-2 Eliza Howell June 13, 2025 Main Rouge																							Total Number of Fish					
Temp. 18.5° C.	Siene Hauls - 20																											
Species	Size Class cm																											
	≤ 3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	10.5	11	11.5	12	13	14	15	16	18	19	20	25	
Common Shiner						1									1	1.0			1								4	
Fathead Minnow			2	4	5	1	2	1																			15	
Creek Chub										1	1				1												3	
White Sucker	3														3		5		3	4	4	2	2	2	1	4	1	34
Bluegill				1					1								1										3	
Blackside Darter									2	1																	3	
Yellow Perch															1												1	
Johnny Darter					2		2	1																			5	
Round Goby			2	4	5	1	2	1																			15	
Total Fishes Sampled																							83					

MR-9 Beech-Daly Rd. June 18, 2025 Middle Rouge

Temp. 24.3 C.	22 Hauls																									Total number of Fishes	
Species	Size in cm																										
	<3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	11	11.5	12	12.5	13	14	15	16	22	35		
Spotfin Shiner						1			1		1		1														4
Common Shiner	1								9	5	6		7		6	1	4		1	2							42
Bluntnose Minnow	3				2	1	4	1	2		4	1	1		1												20
Fathead Minnow					1		1																				2
Creek Chub											1											1					2
White Sucker										1							2			1	1	1	2	1	1		10
Green Sunfish									1																		1
Bluegill					2		3		3				1														9
Smallmouth Bass																						1		1			2
Johnny Darter				3	5		1																				9
Logperch																		1									1
Blackside Darter							1				1	1															3
Round Goby			1	4	33	29	43	9	8	5	11	1	1														145
Total Fishes Sampled																									250		

Mid5 Helms Haven/Outer Drive Rd. June 18, 2025 Middle Rouge

Temp. 22 C.	15 Hauls																									Total number of Fishes			
Species	Size in cm																												
	<3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	10.5	11	11.5	12	13	14	15	16	17	18	19	20	35	
Common Shiner			1	1			1		4	1	6		5		2		1		1									23	
Mimic Shiner					1																							1	
Bluntnose Minnow	1	1	2						1		2																	7	
Fathead Minnow								1																				1	
Creek Chub											1										1							2	
White Sucker		1	4						1						1					1	1	1	2	5	3	2	2	1	25
Rock Bass																							1					1	
Smallmouth Bass																							1					1	
Johnny Darter					3	2	3																					8	
Logperch																			1									1	
Blackside Darter							3			1	1																	5	
Round Goby			3	3	11	3	8	3	6																			37	
Total Fishes Sampled																									112				

John1 5 Mile Rd. June 23, 2025 Johnson Creek, Middle Rouge

Temp. 23 C.	21 Hauls																	Total number of Fishes
Species	Size in cm																	
	< 3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	11	11.5	
Central Stoneroller															1			1
Northern Redbelly Dace					1	1												2
Fathead Minnow					2		2	1	1									6
Blacknose Dace					1	1												2
Creek Chub	1			1	1		10	1	1				2		4			21
White Sucker			1									1						2
Black Bullhead										1	1							2
Central Mudminnow	35	1	7	1	2	3	4		1									54
Brook Stickleback	15	3	4		8		1											31
Mottled Sculpin												2						2
Green Sunfish									1		1							2
Pumpkinseed								1		1			1		1			4
Bluegill			1		1	2	6		4	1	1		3				1	20
Largemouth Bass			1	1														2
Rainbow Darter			1	2	8	5												16
Johnny Darter	7								1									8
Total Fishes Sampled																	175	

John 13 5 Mile Rd. June 23, 2025 Johnson Creek, Middle Rouge

Temp. 23 C.	20 Hauls																		Total number of Fishes	
Species	Size in cm																			
	< 3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	11	14	19		20
Central Stoneroller	1					1		1	1		3			2	1					10
Redside Dace												1	1							2
Bluntnose Minnow								1												1
Blacknose Dace				1	1	1			1	1	1									6
Creek Chub				5	5	9	9	5	7		2	1	5	2	1		1	1		51
White Sucker	1											1		2			1		1	4
Central Mudminnow	6				1	1		2				1								11
Brook Stickleback	25	2	1	1																29
Mottled Sculpin							1		1		1		1		1					5
Green Sunfish						1		1	1				1							4
Bluegill				1																1
Rainbow Darter					2	1	1		1											5
Johnny Darter							3	1	1											5
Total Fishes Sampled																		134		

UP3 Botsford Park June 25, 2025 Upper Rouge

Temp. 24 C.	20 Hauls 427 feet of stream																				Total number of Fishes				
Species	Size in cm																								
	≤3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	11	11.5	12	12.5	13	14	15	16	17	
Common Shiner					1			2	6	5	16	11	19	10	7	1	9	1	4	3	3	2			100
Fathead Minnow					2			2	1																5
Blacknose Dace							1		2	3															6
Creek Chub						1			2		1	1	2					2		2	3	2	1		17
White Sucker																					4		1	1	6
Mottled Sculpin													1												1
Bluegill											1														1
Black Crappie																			1						1
Johnny Darter				2	8		12		4	1															27
Rainbow Darter						1	1																		2
Total Fishes Sampled																							166		

UR2 Bell Creek Park June 25, 2025 Bell Creek

Temp. 23.5 C.	20 Hauls																				Total number of Fishes			
Species	Size in cm																							
	≤3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	11	11.5	12	13	14				
Common Shiner							2		1		2		3		1			2						11
Fathead Minnow	1		1		1	1	1		2															7
Blacknose Dace					2	1	2	1	4	1	2													13
Creek Chub				1	5	3	6	3	10	5	7	1	6		3			1						51
White Sucker	2		3	1							2	1	3		5		2	2	1	1				23
Bluegill																1								1
Johnny Darter	21			5	13	5	5	1																50
Total Fishes Sampled																							156	

Min7 June 30, 2025 Woodland Hills, Trib. of Minnow Pond Ck. - Upper Rouge																				
Temp 23° C.	15 Hauls																			Total number of Fishes
Species	Size in cm																			
	<3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	10.5	11	11.5	12	
Fathead Minnow			2	6	7	6	2													23
Blacknose Dace			1		1	2	2	2	6		2									16
Creek Chub							2				2		1		1			1		8
Green Sunfish						1					1	1								3
	Total Fishes Sampled																			50

Min6 June 30, 2025 Woodland Hills, Minnow Pond Ck. - Upper Rouge																								
Temp 23° C.	20 Hauls																					Total number of Fishes		
Species	Size in cm																							
	<3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	11	11	11.5	12	13	14	15	17	
Central Stoneroller		1	1						1		3													6
Common Shiner							3	6	17	5	14	7	8				7		7	2				76
Fathead Minnow	1	1	12		4	1	1		1															21
Blacknose Dace	3	3	5	3	2		8	9	4	7	7	1	3											55
Creek Chub			4		2		2		9		12	1	4		2		1		2		2	1	1	43
White Sucker			1									1		1	2				1		1			7
Mottled Sculpin	4			1	1	3	3	3		1	3													19
Green Sunfish					1				2				1											4
Rainbow Drter							1	2																3
Johnny Darter					2	2	2	1	1															8
	Total Fishes Sampled																					242		

See3 Kennedy Ct. July 8, 2025 Seeley Creek, Upper Rouge

Temp. 18 C.	23 Hauls																		Total number of Fishes						
Species	Size in cm																								
	<3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	10.5	11	11.5	12	13	14	15	16	18	
Central Stoneroller					1				1		4		3	1	2		2		3	1	1				19
Goldfish							1	1		1	2														5
Common Carp					1	1		2	1																5
Common Shiner			2			1	1		5	3	15	3	10		1		1		4	2	3	1			52
Fathead Minnow	2	20	19	12	16	4	3	1	2				1												80
Blacknose Dace							12	5	11	2	9		3												42
Creek Chub	5	12	41	8	17	8	4	1	8	3	10	4	5	5			2						1	1	135
White Sucker	1		9	3	4												6		1	1				3	28
Brown Bullhead							1		1				1		1										4
Mottled Sculpin									3		3		1												7
Brook Stickleback	1	1																							2
Green Sunfish					4		2		3		2														11
Pumpkinseed											2														2
Bluegill					1																				1
Johnny Darter	3	3	2			8	47		3	1			1												68
Total Fishes Sampled																								461	

UP1 Heritage Park July 8, 2025 Upper Rouge

Temp. 20 C.	20 Hauls 596 feet of stream																							Total number of Fishes					
Species	Size in cm																												
	<3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	10.5	11	11.5	12	13	14	15	16	17	19	20	21	23	
Am. Brook Lamprey							1													2								3	
Central Stoneroller							1		1		1	1			1													5	
Common Shiner							1		1			2	16	2	10		6			5	2					3		48	
Fathead Minnow	2	5	1	1	2																							11	
Blacknose Dace	2	1	1		7		3		5		1																	20	
Creek Chub	6	3	3	3		1	1		5		6		8		2				3	1						1	43		
White Sucker			1		1								1		3		2		2			3	1		1		1	16	
Hog Sucker	1														1		1		2	1	1			1		1	1	10	
Mottled Sculpin			1		1	2		1	1		2		1		1													10	
Bluegill			1							1																		2	
Johnny Darter	1		1																									2	
Rainbow Darter	3	1					1	1	1																			7	
Total Fishes Sampled																										177			

Fowl3 Harris Rd. August 6, 2025 Fowler Creek Lower Rouge

Temp. 20 C.	15 Hauls 301 feet																				Total number of Fishes			
Species	Size in cm																							
	≤ 3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	10.5	11	11.5	12	13		14	16	
Central Stoneroller								6	8	3	1		1		2		2							23
Common Shiner				1	1																			2
Northern Redbelly Dace							4	4	3															11
Fathead Minnow			10	10	25	3	3				1	1												53
Blacknose Dace													1											1
Creek Chub	2	1	6	6	4		7	8	7	2	8	2		1	3			1	2	1	1	1		63
Central Mudminnow	7	5	8	4		1	8	1	14	4	4	1	2	1										60
Brook Stickleback	53	21	6																					80
Green Sunfish				2	1	4			1	1														9
Bluegill				2	2	1																		5
Johnny Darter			3	2	1	1	1																	8
Total Fishes Sampled																						315		

Low3 Gotfredson Rd. August 6, 2025 Lower Rouge

Temp. 20 C.	10 Hauls																	Total number of Fishes						
Species	Size in cm																							
	≤ 3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	10.5	11							
Blacknose Dace									1		2													3
Creek Chub			1											1				1						3
Central Mudminnow										1				1										2
Brook Stickleback	1	1	3																					5
Green Sunfish									1															1
Bluegill												1												1
Largemouth Bass	1		4		2		2		1															10
Johnny Darter	1		1																					2
Total Fishes Sampled																	27							

LR2 August 7, 2025 Outflow, Lower Rouge

Temp. 22 C.	20 Hauls																						Total number of Fishes		
	Size in cm																								
Species	<3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	10.5	11	11.5	12	15	18	20	23		
Central Stoneroller					1																				1
Golden Shiner											1		2												3
Mimic Shinner					29	23	2																		54
Fathead Minnow					1	1	1																		3
Blacknose Dace										1															1
Hogsucker									1											1	1	1	1		5
White Sucker								1	3		1														5
Green Sunfish						3	2		2																7
Pumpkinseed										1															1
Bluegill	1		1	2		2	1	2	1	1	1	1						1							14
Largemouth Bass					2	2	1		3	1		2						1							12
Johnny Darter			1	2	1	2	1		2																9
Yellow Perch								1		1	1		1		2	1				2					9
Blackside Darter											1		1												2
Logperch					1	7	9	3	3	1					2	5	2	2	2	2					39
Round Goby	4	4	6	4	5		3	4	11	8	11	3	3	2	3			2		1					74
Total Fishes Sampled																							239		

LR12 August 7, 2025 Morton-Taylor, Lower Rouge

Temp. 22 C.	20 Hauls																				Total number of Fishes				
	Size in cm																								
Species	<3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	10.5	11	11.5	12	14	15	19	20		
Central Stoneroller															1										1
Common Shiner								1											1	1					3
Mimic Shinner				1	2	1	4		1																9
Fathead Minnow			1	1			4	1	1																8
Creek Chub						1												1							2
Hogsucker																					3	1	2		6
White Sucker							1	1	3	1	4									1					11
Green Sunfish							1	1	1		1							1							5
Bluegill						1	2																		3
Largemouth Bass					1					2															3
Johnny Darter			1		1		1		2																5
Yellow Perch						1																			1
Blackside Darter									1		1		1												3
Logperch		1							2																3
Round Goby	9		1	2	4	1	11	4	11		6	1	4												54
Total Fishes Sampled																							117		

LR-1 August 18, 2025 Commerce Ct, Lower Rouge

Temp. 22 C.	21 Hauls																									Total number of Fishes		
Species	Size in cm																											
	≤3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	10.5	11	11.5	12	13	14	15	18	19	20	56		
Common Carp																											1	1
Common Shiner																				1		1	1					3
Mimic Shinner					1	2																						3
Fathead Minnow						4	1	2																				7
Blacknose Dace				1			1																					2
Creek Chub						1					1	1	1				2		2	1								9
White Sucker					1		2	3	2	4	1												1		1			15
Hogsucker													1															1
Golden Redhorse							1																					1
Green Sunfish		2	1		4	2	5	3	2	1				1														21
Pumpkinseed								1			1					1												3
Bluegill	5	2			1					1																		9
Largemouth Bass					1	1					1														1			4
Yellow Perch								1																				1
Blackside Darter							1					1																2
Logperch									1					1														2
Round Goby	14	1	19	5	6	2	7	2	13	4	4	3	3	2														85
Total Fishes Sampled																									169			

LR-6 August 18, 2025 Wayne Rd., Lower Rouge

Temp. 22 C.	20 Hauls 456 feet																				Total number of Fishes						
Species	Size in cm																										
	≤3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	10.5	11	11.5	12	13	14	17	18	19			
Gizzard Shad										1			1														2
Central Stoneroller										1	1																2
Common Shiner																					2	3					5
Mimic Shinner					4	3	3																				10
Fathead Minnow					3	4	1		3																		11
Creek Chub																1							1				2
White Sucker							1		1	3	1				2						1				1		10
Hogsucker							1																	1			2
Green Sunfish	1				2	3	1		4	4	2	1						1									19
Pumpkinseed									1																		1
Bluegill	2			2																	1						5
Smallmouth Bass												1															1
Johnny Darter				1																							1
Yellow Perch																					1		1				2
Blackside Darter						1		1	1																		3
Logperch							5			3					1												9
Round Goby	11	6	4	4	5	1	18	19	24	5	5	6	3		1												112
Total Fishes Sampled																									197		

LR-10 August 21, 2025 Inkster Rd., Lower Rouge

Temp. 21 C.	20 Hauls 450 feet																				Total number of Fishes				
Species	Size in cm																								
	≤3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	11	11	11.5	12	13	14	16	18	25	
Common Shiner					3	2	7	1			1		1				4		2		1	1			23
Mimic Shiner			1		2		2																		5
Fathead Minnow					1	2	2		3																8
Blacknose Dace						1	1		4	3	4														13
Creek Chub						2	2	1	1						2	1	3	1	1	2					16
White Sucker							1		1	1	2				1						1		1		8
Hogsucker							1				1														2
Rock Bass											1													1	2
Green Sunfish						1					2			1											4
Pumpkinseed											1														1
Bluegill																							1		1
Smallmouth Bass					1								1												2
Blackside Darter						1	1		4	3	4														13
Logperch							7	5	7	1	1	1			4	1	11								38
Round Goby	9	3	5	2	6	11	34	18	22	6	15	5	5		4	1									146
Total Fishes Sampled																							282		

LR-11a August 21, 2025 Brady St., Lower Rouge

Temp. 21 C.	20 Hauls 450 feet																				Total number of Fishes			
Species	Size in cm																							
	≤3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10	10.5	11	11.5	16	23	56			
Gizzard Shad											1													1
Spotfin Shiner					1	5	10	4		1		1												22
Common Shiner						2		2	1			1	1											7
Emerald Shiner			1	1	5	30	9	3	1	2	1			1										54
Mimic Shiner			4	9	19	21	4																	57
Bluntnose Minnow					1	2	2	2	1	6	1	1	1											17
Fathead Minnow			1		2	2	1																	6
Creek Chub							1																	1
White Sucker								3	1	4		1						1				1		11
Channel Catfish																							1	1
Brook Silverside			1	4	19	19	31	8	3															85
Rock Bass																				1				1
Bluegill				1				1	1															3
Smallmouth Bass								1		1	1					1								4
Johnny Darter				4	6	7	2																	19
Yellow Perch																					1			1
Blackside Darter			1	3	1	4																		9
Logperch						1	1		2													2		6
Round Goby	2	2	15	8	3	6	14	14	18	4	2	1	1	2	1									95
Total Fishes Sampled																							400	