

2023 IMPACT REPORT

Thanks to you, close to 1,000 students from 12 Metro-Detroit schools experienced hands-on science in the Rouge River!







Mercedes-Benz **Financial Services**









BACK-TO-SCHOOL CHALLENGE SUPPORTERS Matching challenger Laraine Deutsch

Ann & Alan Frank Cindy Muñoz

Carol Lynne Bell-Verkennis Mark Bonekowski Suzanne Cassady Christopher Dark Patricia Dobosenski Lara Edwards

Kurt Faerber Judy Lessin Lillian Mahaney Joanne Marsh Cristina Sunstrum **Paula Trilety**

Laura Trudeau Kali Twork Mike Vandenberg Joe VanHollebeke Joan Witte and Anonymous Donors



What is the REP?

A place-based environmental education program centered around water quality monitoring of the Rouge River, whose watershed is the most urbanized in Michigan.

The Rouge Education Project trains teachers in the way of volunteer water quality monitoring and provides resources and equipment, and they, in turn, take the information they've learned back to their classrooms. Students see the root cause of environmental issues in their local waterway, and begin to think about bigger picture/Great Lakes issues and implications. They are then encouraged to think about and take action to benefit the river.

Mission: To promote awareness and stewardship of the Rouge River watershed through school-based water quality monitoring, investigation, and problem solving.

2023 SPRING MONITORING

8 schools 536 students
18 teachers 8 sampling sites

RIGHT (top): A student from Hamtramck High School releases salmon into the river as part of a MDNR Salmon in the Classroom program and Rouge testing day at Rouge Park in Detroit

RIGHT (below): A Detroit County Day Middle School student peeks into a net used to search for bugs in the river on their school grounds

2023 marked the 36th year of the REP.

2023 SPRING MONITORING SCHOOLS

Coolidge Elementary School, Livonia
Crestwood High School, Dearborn Heights
Dearborn High School, Dearborn
Detroit Country Day Middle School, Beverly Hills
Hamtramck High School, Hamtramck
Inter-City Baptist School, Allen Park
Roosevelt High School, Wyandotte
Steppingstone School, Plymouth





LEFT: Map of the 2023 spring monitoring event noting school locations (red) and sampling sites (green). Shaded areas of color outline Rouge River subwatersheds.



2023 FALL MONITORING

8 schools 430 students
12 teachers 8 sampling sites



Troy High School students run the dissolved oxygen test

2023 REP Fall Schools and Sampling Locations Stelling Heights. An Owner of Gross Point Park South Lyon Window Gross Point Point Window Legend Rouge River & Triolutaries Schools Freserve of Grass Srv HEE, Carmen, SaleGraph, FQD METINASA USGS (PA NOS

Map of the 2023 fall monitoring schools (red) and sampling sites (green). Shaded areas of color outline Rouge River subwatersheds.

The 2023 numbers...

- Worked with 12 schools, 26 teachers, and 966 students
- Seven trained volunteers helped with the project, including a mix of former teachers, community partners, and other interested individuals ("REP Assistants")

The results...

- Visit www.therouge.org -> Our Work -> Rouge Education Project
- 2023 Spring Data Summary Report
- 2022-2023 Student Survey Report
- 2023 Fall Data Summary Report

2023 FALL MONITORING SCHOOLS

Clippert Multicultural Honors Academy, Detroit Coolidge Elementary School, Livonia Crestwood High School, Dearborn Heights Farmington STEAM Academy, Farmington Hills Hamtramck High School, Detroit Hope Christian Academy, Westland Steppingstone School, Plymouth Troy High School, Troy



A student from Crestwood High School proudly displays a crayfish found during sampling

- Participation inspired students from Steppingstone School to write a letter to Friends of the Rouge suggesting all schools clean-up litter during their field trips to the Rouge
- Farmington STEAM Academy hosted an event where students presented land-use planning recommendations regarding water movement in a community to groups of professionals for feedback
- Students from Crestwood High School continue to conduct independent research on the Rouge and present their work at various regional symposia



2023 Events						
Title	Date	Location	# participants			
Environmental Health Research-to-Action Community-led Science Day	7/13	Ford Field Park, Dearborn	26			
New Teacher Orientation*	08/07	Online	1			
Advanced Chemical Training*	08/08	Plymouth Twp Park, Plymouth	5			
Bug Identification & Sampling Techniques*	08/09	Plymouth Twp Park, Plymouth	5			
Youth Paddling Class	08/05	Ford Field Park, Dearborn	16			
University of Michigan-Dearborn Environmental Education Class	09/18	University of Michigan, Dearborn	10			

^{*}each workshop had an online component hosted on the WeSpire platform that was required prior to each in-person session

Environmental Health Research-to-Action

In July, teachers, volunteers, and students from University of Michigan - Dearborn's community-academic partnership surrounding environmental health, community science, and policy advocacy joined FOTR and David Bydlowski (NASA -AREN) to learn about water quality monitoring in the Rouge for the second year in a row. Teachers and students from a EHRA summer academy learned how to take water samples, run chemical tests, and analyze data to understand contributing pollutants to water sources and how they may affect ecosystems and communities in the surrounding areas. This inspired students to focus their research on the high nitrate and phosphate values found in the river, and take action in their community via new efforts to organize volunteer clean-up events for high school students.

Paddling Trips for Students!

For the first year EVER, a group youth paddling class happened on the Rouge River. 15 students from Detroit's Clippert Multicultural Honors Academy, along with their teacher Tracy Ortiz, embarked on a paddling lesson in the pond at Ford Field Park in Dearborn. After demonstrating the appropriate level of skill, they paddled upstream and back along the Lower branch of the river.

Environmental Education Class Presentation

Every other year, the University of Michigan-Dearborn is able to offer an Environmental Education class to its undergrad and graduate students. This year, Education Manager Erin Cassady along with friend of the REP David Bydlowski from NASA's Aerokats & Rover Education Network met with future professionals to discuss how projects like the REP can provide meaningful hands-on experiences for students in addition to following required state standards.



ABOVE: Students from Clippert Multicultural Honors Academy at the first ever paddling class as part of the REP

BELOW: Youth paddling the Rouge!





THANK YOU... LEAD TEACHERS

William Albrecht Diana Johns
Jane Culp Reef Morse
Jennifer Gabrys Tracy Ortiz
Steven Grosinske Kellie Stark
Joan Henkel Tina Weller
Josh Hubbard Robert Zynda

REP ASSISTANTS

Mark Bonekowski Audrey Edwards
David Bydlowski Mike Edwards
Miriam Cabrera-Avalos Chester Marvin
Gwendolyn Drake

SUPPORTERS

National Oceanic and Atmospheric Administration Bay Watershed & Education Training Program
(NOAA Great Lakes B-WET)
Bosch Community Fund
KLA Foundation
Mercedes-Benz Financial Services
Consumers Energy Foundation

Heroux Devtek
Environmental Health Research-to-Action

Laraine Deutsch & the REP Back-to-School Fundraiser Supporters
Ann & Alan Frank
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Carol Lynne Bell-Verkennis Joanne Marsh Mark Bonekowski Cristina Sunstrum Suzanne Cassady Paula Trilety **Christopher Dark** Laura Trudeau Patricia Dobosenski Kali Twork Lara Edwards Mike Vandenberg **Kurt Faerber** Joe VanHollebeke Judy Lessin Joan Witte Lillian Mahaney and Anonymous Donors

PARTNERS

Aerokats & Rover Education Network (AREN)

Earth Force
Environmental Health Research-to-Action
Global Leaning & Observations to Benefit the Environment (GLOBE)
Wayne County Regional Educational Service Agency (Wayne RESA)