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.

6 schools	**605 students**
14 teachers	**6 sampling sites**

2022 marked the 35th year of the REP.

2022 SPRING MONITORING

Clippert Academy, Detroit
Crestwood High School, Dearborn Heights
Detroit Country Day Middle School, Beverly Hills
Huron Valley Lutheran High School, Westland
Roosevelt High School, Wyandotte
Steppingstone School, Plymouth

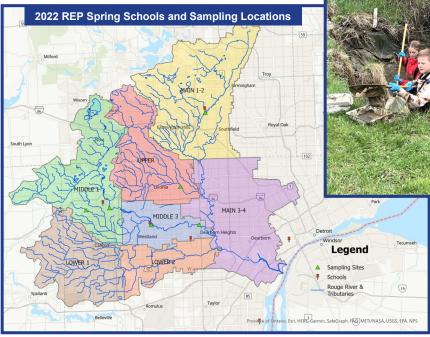*RIGHT (top): A student from Roosevelt High School looks at the results from the turbidity test*
RIGHT (below): Detroit County Day Middle School students use nets and waders to search for bugs in the river on their school grounds

2022 REP Spring Schools and Sampling Locations

LEFT: Map of the 2022 spring monitoring event noting school locations (red) and sampling sites (green). Shaded areas of color outline Rouge River subwatersheds.
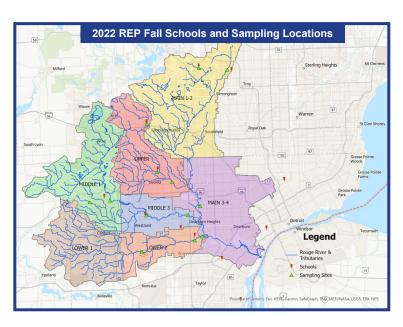
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12 schools   **657 students**
28 teachers   **13 sampling sites**

Troy High School students use waders and nets to sample for aquatic bugs to identify

2022 FALL MONITORING SCHOOLS

Clippert Academy, Detroit
Coolidge Elementary School, Livonia
Crestwood High School, Dearborn Heights
Dearborn High School, Dearborn
Farmington STEAM Academy, Farmington Hills
Hamtramck High School, Detroit
Huron Valley Lutheran High School, Westland
Inter-City Baptist School, Allen Park
Roeper School, Bloomfield Hills
Roosevelt High School, Wyandotte
Steppingstone School, Plymouth
Troy High School, Troy

2022 REP Fall Schools and Sampling Locations

Students from Coolidge Elementary and REP partner Dave Bydlowski (AREN Project) picking river bug samples

Map of the 2022 fall monitoring schools (red) and sampling sites (green). Shaded areas of color outline Rouge River subwatersheds.

The 2022 numbers…

- Worked with 13 schools and 1,262 students
- Four volunteers helped with the project, including a mix of parents, former teachers, community partners, and other trained volunteers ("REP Assistants")

The results…

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

2022 Events

Workshop	Date	Location	# participants
Environmental Health Research-to-Action Prep Day	6/14	Ford Field Park	4
New Teacher Orientation*	08/01	Online	5
Advanced Chemical Training*	08/02	Plymouth	5
Bug Identification & Sampling Techniques*	08/03	Plymouth	5
Aerokats & Rover Education Network Introductory Training	08/05	Farmington Hills	5
Aerokats & Rover Education Network Vernier Probeware Training	09/24	Farmington Hills	9
Student Symposium	Postponed until Spring 2023	TBD	

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

Welcome Sam!
In March 2022, FOTR and the REP welcomed Sam Davis as FOTR's Education & Monitoring Assistant, a position that is new to the organization and is designed to support programs in biological monitoring of the Rouge and the education of the watershed's communities. Welcome to the team and we are so excited to have you!

A New EHRA for Environmental Health Research-to-Action
In June, 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. 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.

Students at EHRA water Quality Monitoring Day

Aerokats and Rovers for our Teachers
David Bydlowski from NASA's Aerokats & Rover Education Network met with FOTR and REP teachers twice in 2022 to train teachers to collect data using water and atmospheric probes. A total of 13 teachers and 1 volunteer gained experience and knowledge in utilizing this equipment while giving teachers the opportunity to expand the data collection tools available to their students.

RIGHT: Teachers at AREN Probeware Training

THANK YOU...
LEAD TEACHERS

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

REP ASSISTANTS

David Bydlowski
Miriam Cabrera-Avalos
Casey Jezewski
Chester Marvin

SUPPORTERS

National Oceanic and Atmospheric Administration Bay Watershed & Education Training Program
(NOAA Great Lakes B-WET)
Mercedes-Benz Financial Services
Laraine Deutsch & the REP Challenge Fundraiser Supporters
Laraine Deutsch & the REP Back-to-School Fundraiser Supporters
Michigan Association of Environmental Professionals

PARTNERS

Aerokats & Rover Education Network (AREN)
Earth Force
Environmental Health Research-to-Action
Global Leaning & Observations to Benefit the Environment (GLOBE)
National Oceanic and Atmospheric Administration (NOAA)
Wayne County Regional Educational Service Agency (Wayne RESA)

Students from Crestwood High School, teacher Diana Johns, and volunteer Chester Marvin

Students from Clippert Academy sampling for "river bugs" near Bell Creek Park