

SCHOOL STREAM MONITORING PROGRAM 2021

In May of this year, water quality demonstrations were given to students in the courtyard at Cleveland's Rhodes School of Environmental Studies. As concerns about COVID and its spread lessened, students were able to return to the field to resume hands-on study of local streams. In its eighth year, the Big Creek Stream Monitoring Program, funded annually by a General Motors Community Impact Grant, held two on-site stream monitoring events.

In June, Brooklyn School's 4th grade students visited Brooklyn's Veterans Memorial Park to monitor the water quality of Stickney Creek, a tributary to Big Creek, during a half-day program. The creek is the site of recent restoration work to its streambanks with the creation of floodplain habitat where the students were able to assist with plantings. (See related article) With guidance from the GM Parma Plant's environmental "E-team" and Northeast Ohio Regional Sewer District (NEORS) staff, the students also collected, sorted, and studied water samples for their physical, chemical, and biological properties.

In early October, program partners worked with students from Maple Heights High School students during a full-day program. The program was held in Big Creek Reservation's Memphis Picnic Area where

the East and West Branches of Big Creek converge. Samples of the two branches of the creek were collected, analyzed, and compared for their various properties. The students were guided in their study by GM's "E-Team", and NEORS and Cuyahoga Soil & Water Conservation District staff. The students were also taken on tours within the reservation by Cleveland Metroparks and Cleveland Museum of Natural History staff to learn about natural vs man-made environments and watershed stewardship.

This is the first year the program included a school outside of the Big Creek watershed. Maple Heights High School lies within the Mill Creek watershed. Like Big Creek, Mill Creek is an urbanized tributary to the Cuyahoga River, with similar land uses. Program partners enjoyed working with the students, with GM Parma Metal Center Senior Environmental Project Engineer Diane Palmer stating that "...in the many years [we] have participated in this activity...this was probably one of the best groups of kids we have worked with..."

Thanks to the GM Foundation, we look forward to continuing this program each spring and fall with Cleveland, Brooklyn, Maple Heights, and other schools that may be interested in the program.



Maple Heights students sorting and classifying macro-invertebrates (water bugs) during October 2021 stream monitoring event



Maple Heights students on Big Creek Reservation site tour October 2021



Brooklyn students assist with plantings for the Stickney Creek Restoration Project in June 2021