

Learning in the water - Lockport Union-Sun & Journal: Local News

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JOED VIERA/STAFF PHOTOGRAPHER A sample of sediment lifted from Eighteenmile Creek is sorted through. The students and teachers looked for macro-organisms in the creek to help indicate water quality conditions.

Instead of spending Thursday in a classroom, some Newfane High School students put on wading boots and stepped into Eighteenmile Creek.

Students taking environmental science classes at the high school collected water samples from Olcott Beach, Fisherman's Dam in Burt and the area of Eighteenmile Creek where Ide Road and Route 78 meet.

The trip was both scientific and environmentally conscious in nature, as students looked for aspects of water quality affected by pollution.

The students were looking for 12 parameters determining water quality, including dissolved oxygen content, nitrates and phosphates, temperature, and turbidity (cloudiness), environmental science teacher Rich Meyers said.

"This event is designed to get students out of the classroom and out into the environment," Meyers said. "They'll come back with information for all the parameters that we're looking for. If there's something off about the water in any of the water sources, we'll talk about what we can do better in the community to fix it, maybe reach out to groups in the community to make them more aware of the water quality or encourage them to minimize the output of pollution that affects our water."

The trip is coordinated through GM's GREEN program (Global Rivers Environment Education Network), who have partnered with Earth Force, a non-profit environmental group. The program focuses on helping students and employees collect, test and analyze samples and channel their findings into developing sustainable action plans to improve their community's watersheds.

Several GM mentors helped students collect water at all of the sites.

Also present for the trip was Kim Romeo of the Lake Ontario division of Lakewide Management Plan (LAMP), a binational organization which focuses on water quality issues in lakes, near-shore waters, and tributaries that connect the waters.

Romeo, whose LAMP territory runs from the Buffalo-Niagara River region through Lake Ontario on the American side and the St. Lawrence River, often makes appearances at school field trips involving water sampling.

"Whenever there's an opportunity to get out on the ground, that's important," Romeo said. "We're blending science and civics here."

Romeo noted that the town of Newfane, the Newfane school district, local companies and the Niagara County Soil and Water Conservation District all are impacted by the study and its findings.

“We have a lot of amazing stakeholders invested in this,” Romeo said. “It’s a really nice medley of people working together.”

At the Ide Road site, students climbed into the creek in protective gear to sift samples of water and sediment from the creek bed.

“They’re looking for macro-organisms. That’s any invertebrate large enough to see without a microscope, like snails, crayfish, insect larvae,” Meyers said. “We’ll be able to determine the level of pollution is in the water by what type of organisms we find.”

Certain types of invertebrae are more tolerant of pollution than others, Meyer said.

“If we find a majority of organisms that are tolerant, it will give us an idea of the water quality,” Meyers said.

Mitchell Dockery, a junior environmental science student, made the trek into the water to search for organisms.

“Based off the kind of life you find, you can get a count of how good the water is,” Dockery said.

The environmental science students already had a good grasp of the environmental impact of Eighteenmile Creek and other tributaries on the larger watershed, Romeo said.

“These young people already understand that that creek is eventually making its way to Lake Ontario. What happens in this little microcosm is connected to a real global initiative,” Romeo said. “They already knew that so they’ve obviously been very well educated, it was a cool beginning.”