

Agnes Macphail PS

Highland Creek Watershed, Ontario

Watershed Inquiry

At the beginning of the year, the grade 8 students at Agnes Macphail began a rich inquiry on water. The students visited a local river where they observed the salmon run and analyzed water quality. They measured chemical and physical parameters and examined benthic macroinvertebrates (small aquatic animals without a spine).

The students also learned about wetlands and their role in filtration and improving water quality. As a follow-up the class grew native plants from seeds in the classroom, which the students will transplant to help restore an urban wetland through the Toronto and Region Conservation Authority's Aquatic Plants Program.

The students continued their inquiry by exploring other local and global water issues. They learned about stormwater pollution and discussed the success of the school's participation in the Yellow Fish Road Program. The students built model water filtration systems with Engineers Without Borders and had rich discussions about equity and accessibility to fresh water. To share their learning, the students created public service announcements about a variety of water issues.

Grade: 8

Teacher: Farah Wadia

Dive A Little Deeper

Visit the links below for more information:

[Water Quality Monitoring Webinar](#)

Learn how to plan and implement a water quality monitoring investigation.

[EcoSpark's Monitoring with Benthic Macroinvertebrates Field Manual](#)

explains in detail how to collect and observe macroinvertebrates to study water quality.

[TRCA Aquatic Plants Program](#)

Learn more about opportunities for classes in the Toronto Region to grow aquatic plants



From left to right: Students examining macroinvertebrates; students collecting samples of macroinvertebrates from the stream to assess water quality.

More About Watersheds

Healthy watersheds are vital to sustaining all life on Earth—from wild plants to animals to people. They are the source of our drinking water, and they supply the water needed on farmer's fields to grow our food. Every watershed is different, shaped by variations in geology, weather, ecology and human activity. The more we understand about our watershed, the better chance we have of sustaining a clean and healthy water supply.



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Project