



# LEAF

Learning at IISD-ELA About Freshwater



# NORTHWESTERN ONTARIO HIGH SCHOOL FRESHWATER EXPERIENCE

Engaging students in emerging science to inspire, influence, and develop something new!



IISD Experimental Lakes Area (ELA) is the world's freshwater laboratory. A series of 58 lakes and their watersheds in Northwestern Ontario, Canada, IISD-ELA is the only place in the world where scientists can research on and manipulate real lakes to build a more accurate and complete picture of what human activity is doing to freshwater lakes.

The findings from over 50 years of ground-breaking research have rewritten environmental policy around the world—from mitigating algal blooms to reducing how much mercury gets into our waterways—and aim to keep fresh water clean around the world for generations to come.





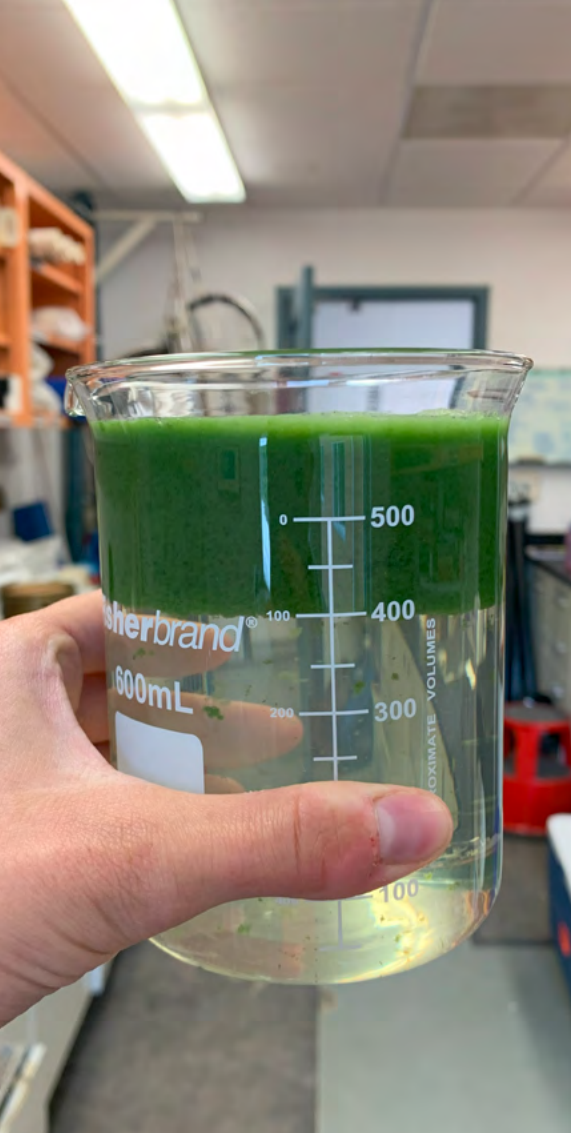
## The Power to Inspire...

At IISD-ELA we believe in the power of engaging students directly in hands-on science to inspire an interest and motivate young people to examine the world around them, kickstarting the process of lifelong learning. LEAF is a Kenora-based program for youth with an interest in the natural sciences. These students will be engaged in scientific inquiry, collaboration, and innovation during the program.

## About the Program

Five Grade 11 and 12 students from various high schools in Northwestern Ontario will come together with IISD-ELA staff and scientists monthly for 8 months of the academic year to participate in the LEAF program. Students will visit the Experimental Lakes Area once a month, learning about freshwater science, whole ecosystem research, and other ecological topics. Students will experience both field and lab work, learning how to collect and process samples and then manage/interpret the data. Collecting water samples in various seasons and seeing firsthand what winter freshwater fieldwork looks like. Lab work is a vital part of freshwater research at IISD-ELA, and students will have the opportunity to process and analyze samples and test for various parameters such as pH, conductivity, silica, and dissolved inorganic carbon. The other major component of this program will be exposure to Indigenous perspectives and knowledge as well as learning about various career paths and opportunities. Throughout the LEAF program, students will collaborate on a group project. Students will conduct their own project, analyze and interpret results, and create and present a scientific poster to local community members, IISD-ELA scientists, and educators.






## What Do Students Take Away From the Program?

- Meaningful hands-on field and lab experience
- Ability to apply knowledge into practice
- Practice in public speaking and presentation skills
- Different perspectives related to science work and knowledge
- New skills and an expanded range of science-related knowledge
- Information about university and potential careers in the environmental and science sectors
- Opportunities to work collaboratively and individually
- New friends, memories, and mentors

## APPLICATION PROCESS

[iisd.org/ela](https://iisd.org/ela)

  @IISD\_ELTA

  @ExperimentalLakes

If you are interested in participating in the LEAF program:

### VISIT

[iisd.org/ela/educators-and-students/courses/](https://iisd.org/ela/educators-and-students/courses/)

### REACH OUT

[education@iisd-ela.org](mailto:education@iisd-ela.org)