# The Lake Partner Program

Monitoring Ontario's inland lakes through citizen science



## What is the Lake Partner Program?

- The Lake Partner Program (LPP) is a water quality monitoring program run through the Ontario Ministry of the Environment, Conservation, and Parks (MECP), and the Federation of Ontario Cottagers' Associations (FOCA).
- Water samples are taken entirely by volunteers, from hundreds of lakes.
- This samples are sent to the Dorset Environmental Science Centre (DESC), where it is analyzed on site.

More than 600 volunteers registered

Over 500 lakes being sampled

More than 800 active sampling sites

# **How Does the Lake Partner Program Work?**

The LPP team sends out hundreds of sampling kits to our volunteers between February-April.



Volunteers use the materials in the kits to take water samples and Secchi disc readings in their lake.



The samples are mailed back to the LPP team using the prepaid return postage included in the kits.



Water samples are unpacked, processed, and analyzed by the lab team at DESC. Analysis happens through the summer, and into the fall.





Lakes on the Canadian

Sheild are sampled

once

in the spring.

Lakes off the Canadian

Shield are sampled

monthly

from May-October.

All volunteers take

monthly

Secchi disc readings.

The Lake Partner

**Program received** 

over 4,400

phosphorous samples in 2017

The Lake Partner Program has been collecting data since 2002, rising out of citizens' interest in water quality on their lakes

The data is quality checked over the winter and released to the public in the spring.





The Lake Partner Program has lakes sampled all across Ontario!

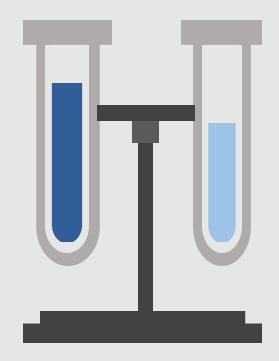
## What Parameters are Sampled by the LPP?

<u>Phosphorus</u> – an essential element for plant life; however when there is too much of it in the water, it can lead to eutrophication and algal blooms

<u>Calcium</u> – calcium is needed by many aquatic organisms to live and grow. A shortage can impact many different species in a lake, from zooplankton to fish.

<u>Chloride</u> – chloride is a concern as road salt makes its way into our freshwater systems. Too much chloride can negatively impact aquatic life.

In addition, volunteers take <u>Secchi</u> <u>disc readings</u>. These readings indicate water clarity, an important indicator of water quality.



# What is the Lake Partner Program Data Used For?

#### **Lake Associations**

- Working to better their community
  - Monitoring their lake for environmental issues and trends
  - Educating members about their lake



## Researchers

- Understanding algal blooms
  - Studying calcium decline and its effect on ecosystems
  - Investigating the effects of road salt



## **Government**

- Informing on lakeshore capacity assessment
- Aiding in district lake health knowledge
  - Monitoring trends throughout Ontario aquatic systems



## Why Should You Join the LPP?

Virtually no cost for our volunteers for high quality water sample analysis

Gain a long-term dataset on your lake which can be essential when environmental issues arise

"The more we know about the condition of our lakes, the more we can do to protect them." – LPP volunteer

Aid in data collection that contributes to environmental research and policy decisions Become engaged in the natural sciences, while learning more about one of Ontario's most valuable resources

## **Access the LPP Data at:**

- https://desc.ca/programs/lpp
- https://foca.on.ca/lake-partner-program-sampling-assistance/
- https://www.ontario.ca/environment-and-energy/map-lake-partner

Interested in signing up with the LPP? Call 1-800-470-8322 toll free, or email lakepartner@ontario.ca to get registered!





