



Lake Monitoring



A CLMP volunteer sampling for total phosphorus

Monitoring Protects Your Lake

Monitoring your lake's water quality is part of what's needed to keep it clean for the enjoyment of you and yours for generations to come. By monitoring, you'll know if your lake continues to be ready for fun and recreation, or if it's starting to degrade over time. And if there is a water quality problem, only monitoring will give you the advance warning needed to take early action to protect your lake. Enroll in the CLMP to start monitoring, and protecting, your valued lake.



Why Join the CLMP?

The CLMP provides sampling methods, training workshops, technical support, quality control, and laboratory assistance for volunteers to monitor their lakes.

CLMP volunteers monitor for indicators of lake productivity, or the amount of plant and animal life that can be produced within the lake. The gradual increase of lake productivity over time is a natural process called eutrophication, or lake aging. Impaired water quality can often cause excessive lake productivity, leading to problems such as excessive plant growth, algal blooms, and mucky bottom sediments. A primary objective of most lake management plans is to slow down eutrophication by reducing the input of plant nutrients, such as phosphorus, and sediments to the lakes.

Lake scientists have developed a variety of numerical indexes based on water quality data to express lake productivity on a numerical scale. The widely used Carlson Trophic State Index (TSI) incorporates water clarity, or transparency, as measured by a Secchi disk; the algal plant pigment chlorophyll *a*; and total phosphorus as indicators of lake productivity. The CLMP was designed to provide data on these parameters. Volunteers may classify their lake according to its level of productivity, or trophic state, using Carlson's TSI. Long-term monitoring of these parameters on a consistent and regular basis provides the data needed to recognize changes or trends in lake productivity.

What Kinds of Monitoring Does the CLMP Offer?

Learn how each CLMP monitoring program can tell you something different about the health of your lake.

- [Secchi Disk Fact Sheet](#)
- [Total Phosphorus Fact Sheet](#)
- [Chlorophyll Fact Sheet](#)
- [Dissolved Oxygen and Temperature Fact Sheet](#)
- [Aquatic Plant Fact Sheet](#)
- [Exotic Aquatic Plant Fact Sheet](#)

You may also view past [CLMP Annual Reports](#) to learn more about what these types of monitoring and data can show.

CLMP Volunteer Training

Training for lake monitoring is typically provided each year in conjunction with the Michigan Lake and Stream Associations Annual Conference. However, this year's training is planned for May 1-3, 2014, in conjunction with the first ever Michigan Inland Lakes Convention at the Boyne Mountain Resort. Please contact [Paul Steen](#) or [Jean Roth](#) for more information on these training sessions or visit the [Michigan Inland Lakes Convention](#) website.

This annual training is offered free of charge to all CLMP enrollees; however, participants are responsible for all associated lodging, meals and travel expenses that may be incurred to attend.

The Michigan Inland Lakes Convention events are separate from the free CLMP training sessions, and require separate registration and associated fees to attend.

Visit the [CLMP Documents](#) page to view several additional training videos.

Ready to Sign Up?

To enroll your lake in the CLMP program, please visit the [Become a Volunteer](#) and [Program Enrollment](#) pages.