

Cooperative Lakes Monitoring Program

The Self Help Legacy

Originally known as the Self-Help Program, the **Cooperative Lakes Monitoring Program** continues a long tradition of citizen volunteer monitoring on Michigan's inland lakes. Michigan has maintained a volunteer lake monitoring program since 1974 making it the second oldest in the United States.

Originally the program was designed for lake property owners to determine water quality by measuring water clarity. In 1992, the Michigan Department of Environment, Great Lakes, and Energy (EGLE) (then part of the Department of Natural Resources) and Michigan Lakes and Streams Association started a partnership and expanded the program.

An advanced program was initiated in 1993 and included a monitoring component for phosphorus. Several more monitoring parameters have been added since 1998 to further expand the program.

The Cooperative Lakes Monitoring Program, created to engage, encourage and assist volunteer inland lake water quality monitors, has since become an operational component of the Michigan Clean Water Corps (MiCorps). The MiCorps partnership was created in 2003 to assist EGLE in collecting and sharing water quality data for use in water resources management and protection programs.

Michigan Lakes and Streams Association is a non-profit, primarily volunteer organization dedicated to preserving, protecting and effectively managing Michigan's vast treasure of inland lakes and streams as well as advocating for the protection of riparian property rights. Our members include lake and stream associations, individuals, corporations and various non-profit advocacy groups that are concerned about the future of our freshwater heritage and associated natural resources.



MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY



Great Lakes Commission
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CLMP PROGRAM ADMINISTRATOR

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**Michigan's Inland Lakes,
Ours To Protect**

Cooperative

Lakes

Monitoring

Program



MiCorps
Monitoring Michigan's Water Quality

www.micorps.net

Program Overview

Michigan's unique geographical location provides its citizens with a wealth of freshwater resources including over 11,000 inland lakes. In addition to being valuable ecological resources, inland lakes provide tremendous aesthetic, recreational and economic opportunities.

As more and more people use inland lakes, the potential for pollution related problems and impairment dramatically increases. High quality information, including water quality data, levels of use and the degree of use impairment is essential for determining the health of an inland lake and for developing a management plan to protect it. As the beneficiaries of Michigan's inland lake resources, citizens must take an active role in obtaining vital information and managing their inland lakes.

Partnership to Benefit Michigan's Inland Lakes

The primary purpose of the **Cooperative Lakes Monitoring Program (CLMP)** is to develop sampling methods, conduct training workshops, provide technical assistance, ensure quality control and provide laboratory support to enable volunteer water quality monitors.

The CLMP is managed by the Michigan Department of Environment, Great Lakes, and Energy (EGLE) as a major component of the Michigan Clean Water Corps (MiCorps). MiCorps is a collaborative partnership involving EGLE, the Great Lakes Commission, the Huron River Watershed Council, Michigan State University and the Michigan Lakes and Streams Association.

Our Goals

- Provide baseline information and document trends in water quality for individual lakes.
- Educate lake residents, users and interested citizens in the collection of water quality data, lake ecology and lake management practices.
- Build a constituency of citizens to practice sound lake management at the local level and foster public support for lake quality protection.
- Provide a cost effective process for EGLE to increase baseline data for lakes state-wide.

CLMP Parameters

- **Secchi Disk (water transparency)**
- **Spring and Summer Total Phosphorus**
- **Chlorophyll *a***
- **Dissolved Oxygen and Temperature**
- **Aquatic Plant Mapping**
- **Exotic Aquatic Plant Watch**
- **Score the Shore: Lakeshore Habitat Assessment**

The Carlson Trophic State Index

Lake scientists have developed a variety of systems to express lake productivity on a continuous scale. One of these systems is the Carlson Trophic State Index (TSI) which incorporates water clarity, as measured by a Secchi disk; the algal plant pigment chlorophyll *a*; and total phosphorus as primary indicators of lake productivity. The data you collect as a volunteer monitor will allow MiCorps scientists to assess the overall productivity of your inland lake and develop a Trophic State index classification for your particular lake.

Why Monitor?

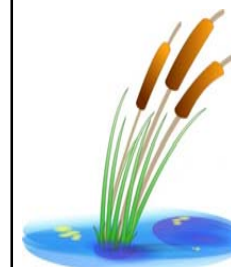
Lake water quality covers many aspects of lake chemistry and biology. The quality of water is influenced by natural and human factors such as your lake's geology, basin shape, depth, water sources as well as the degree of development on or near your lakes shoreline.

Problems most commonly cited by lake residents, such as excessive aquatic plant growth, algal blooms and mucky bottoms are caused by water quality factors that lead to increased lake productivity. Productivity refers to the amount of plant and animal life that can be produced within the lake. Excessive productivity can significantly shorten the life of inland lakes.

A gradual increase in productivity over time is a natural process referred to as eutrophication, or lake aging. Enrolling your inland lake in CLMP provides critical information regarding the level of productivity occurring in your lake.

Long term monitoring of parameters provides data needed to recognize changes or trends in productivity as well as overall water quality.

Enrollment in CLMP entitles you to attend a free one day training class where you will learn about inland lake ecology and water quality monitoring procedures.



To learn more about this unique program or to enroll in the CLMP, contact Ms. Jean Roth at 989.257.3715 or e-mail jroth@mlswa.org. You may also enroll at the MiCorps website at www.micorps.net.