



Michigan Clean
Water Corps



Cooperative Lakes Monitoring Program

2024 Summer Check-In



Erick

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Summer Monitoring Schedule

- **Secchi:** Minimum every other week throughout summer
- **Summer Phosphorus:** Once during August or September
- **Chlorophyll:** Once per month (UP lakes a little different)
- **DO/ Temp:** Every other week throughout summer
- **EAPW:** Anytime during the summer
- **Score the Shore:** Anytime during the summer
- **Aquatic Plant Mapping:** Anytime during summer

Summer Sampling Schedule

- Summer sampling dates for total **phosphorus** and the final **chlorophyll** sample are different depending on your county
- Check out the Summer schedules on the MiCorps.net



SUMMER PHOSPHORUS 2024 Sample Collection and Turn-in Schedule



Summer Phosphorus samples must be collected within your 5-day sampling window and turned in (frozen) between **8 am – Noon** on the date and location listed for your county in the table below. Call the appropriate phone number below if other arrangements must be made.

COUNTY	TURN-IN ADDRESS (EGLE unless noted otherwise)	SAMPLING DATES	TURN-IN DATES
Allegan, Kalamazoo, Barry, Van Buren, Berrien, Cass, St. Joseph	EGLE Kalamazoo District Office 7953 Adobe Road Kalamazoo, MI 48909 Deana Mercs: 269-330-8571	Sept 19-23	8 am-Noon September 24
Calhoun, Jackson, Washtenaw, Branch, Hillsdale, Lenawee	EGLE Jackson District Office 301 E. Louis B. Glick Hwy. Jackson, MI 49201 Brittany Santure 517-740-6504	Sept 19-23	8 am-Noon September 24
St. Clair, Macomb, Oakland, Wayne, Monroe	EGLE Warren District Office 27700 Donald Court Warren, MI 48092 Jack Cotrone: 248-763-1994	Sept 19-23	8 am-Noon September 24



CHLOROPHYLL 2024 Sample Collection and Turn-in Schedule



COUNTY	TURN-IN ADDRESS (EGLE unless noted otherwise)	SAMPLING DATES	TURN-IN DATES
Allegan, Kalamazoo, Barry, Van Buren, Berrien, Cass, St. Joseph	EGLE Kalamazoo District Office 7953 Adobe Road Kalamazoo, MI 48909 Deana Mercs: 269-330-8571	Sample #1 May 10-20 Sample #2 June 10-20 Sample #3 July 10-20 Sample #4 Aug 10-20 Sample #5 Sept 19-23	8 am-Noon June 25 8 am-Noon September 24
Calhoun, Jackson, Washtenaw, Branch, Hillsdale, Lenawee	EGLE Jackson District Office 301 E. Louis B. Glick Hwy. Jackson, MI 49201 Brittany Santure 517-740-6504	Sample #1 May 10-20 Sample #2 June 10-20 Sample #3 July 10-20 Sample #4 Aug 10-20 Sample #5 Sept 19-23	8 am-Noon June 25 8 am-Noon September 24
St. Clair, Macomb, Oakland, Wayne, Monroe	EGLE Warren District Office 27700 Donald Court Warren, MI 48092 Lindsey Eveleth 586-292-2971 (June) Jack Cotrone: 248-763-1994 (Sept)	Sample #1 May 10-20 Sample #2 June 10-20 Sample #3 July 10-20 Sample #4 Aug 10-20 Sample #5 Sept 19-23	8 am-Noon June 25 8 am-Noon September 24

Summer Sampling Schedule

Michigan Clean Water Corps

About Lakes Streams Data Exchange Resources

Read about previously funded Volunteer Stream Monitoring Program projects

Become a Volunteer
CLMP Documents
Annual Summary Reports
Individual Lake Reports
2021 Lake Training

The Michigan Clean Water Corps (MiCorps) is a network of volunteer water quality monitoring programs in Michigan. It was created through Michigan Executive Order #2003-15 to assist the Department of Environment, Great Lakes, and Energy (EGLE) in collecting and sharing water quality data for use in water resources management and protection programs. About MiCorps.

Have questions? Ask MiCorps Staff!

News and Blog

Register for our Virtual CLMP Midsummer Check-in Today!
You are invited to our virtual midsummer check-in. The purpose of this Zoom event is to provide

Connect With Us

We're interested in learning about new volunteer efforts, resources, and events

Michigan Clean Water Corps

About Lakes Streams Data Exchange Resources

CLMP Documents

This page includes all of the documentation and forms that volunteers in the Cooperative Lakes Monitoring Program (CLMP) need to complete their sampling, including sampling procedures, sample turn-in schedules and locations, good sampling reminders, and data forms.

2024 Program Documents

- CLMP Manual- Contains background information and all parameter procedures.
- CLMP Lake Sampling Site (Field ID) Number List (last updated March 2024)
- 2024 Spring Phosphorus turn-in schedule
- 2024 Summer Phosphorus sampling and turn-in schedule
- 2024 Chlorophyll sampling and turn-in schedule
- CLMP Refund Policy
- Annual CLMP Summary Reports
- Individual Lake Data Reports

Inside this section:

- Become a Volunteer
- CLMP Documents
- Lake Training

Featured content

- Lake Data Reports
- Individual Lake Reports

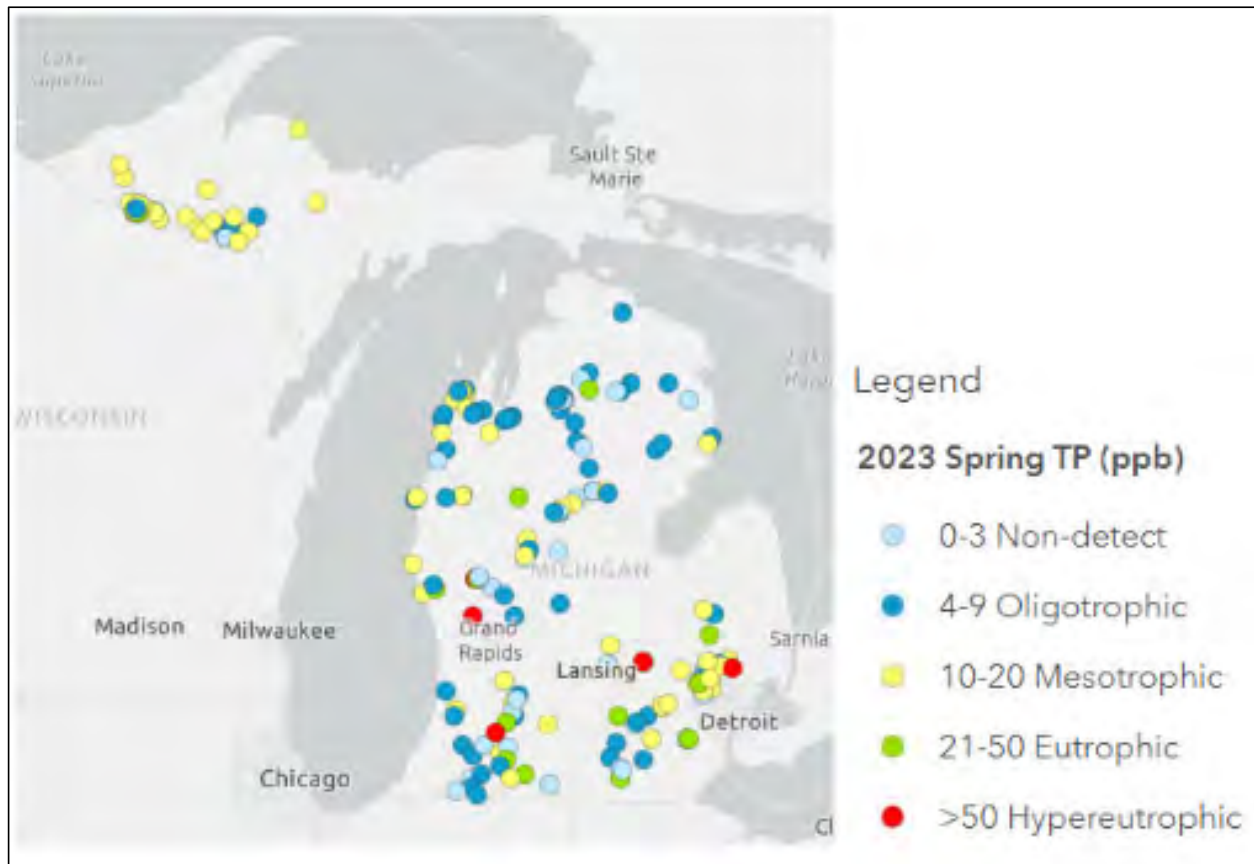
Of related interest

- New Starry Stonewort

Sample Drop off between 8-Noon

- If the date and time does not work for you:
 - Reach out to your drop off location to see if you can drop them off early
- Feel free to coordinate with neighbor lakes for drop off
- You can always contact the CLMP Team to help with logistics

Spring Phosphorus results will be available later in summer



Enroll all summer in EAPW and Score the Shore



Hydrilla detected in Berrien County MI



State of Michigan (.gov)

[First Michigan detection of invasive hydrilla triggers response](#)

Hydrilla, considered one of the world's most invasive aquatic plants, has been detected for the first time in Michigan.

Oct 2, 2023



Michigan State University

[Invasive hydrilla, a "monster aquatic weed," discovered for the first time in Michigan waters](#)

The Michigan Invasive Species Program (MISP) announced Monday that hydrilla (*Hydrilla verticillata*), a highly invasive aquatic plant, has been...

Oct 3, 2023



FOX 2 Detroit

[Invasive hydrilla in Michigan a major threat to state's water bodies and economy](#)

It's considered one of the world's most invasive plants and officials are so worried about its arrival they are digging up the ponds where...

May 27, 2024



The Detroit News

[Invasive aquatic plant discovered in Michigan](#)

Hydrilla, one of the world's most invasive aquatic plants, was discovered for the first time in Michigan, state environmental officials said...

Oct 2, 2023



MLive.com

[Hydrilla found in Michigan: 'The aquatic plant we didn't want here'](#)

Hydrilla, which state experts call one of the "world's most invasive aquatic plants," was found in two residential ponds last month in Berrien...



EAPW Watch List Species

Hydrilla (*Hydrilla verticillata*)

- **Whorls of 4-8 leaves** around the stem
- **Serrated** leaf edge
- **Teeth are also produced underneath the leaf**, along the midvein

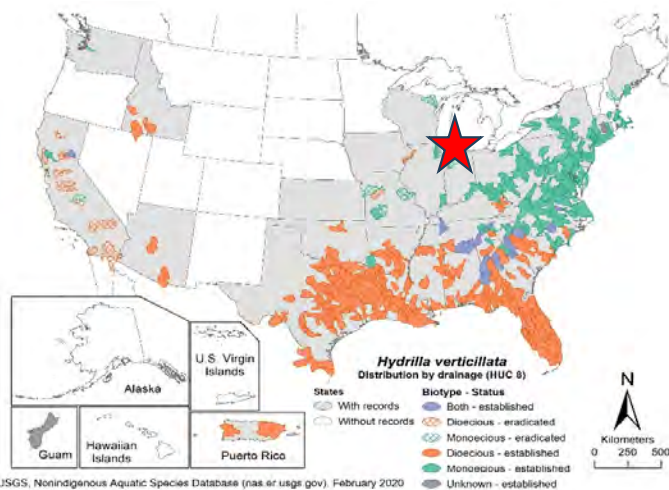


Illustration by Bruce Kerr

IS THIS
HYDRILLA



Plant Identification Photography

- **Required Photographs:**

- At minimum, **one** representative photo of each invasive species found in your lake
- Label photos
- Make sure the photos are clear
 - ***Need to show identifying characters***
- Great for ID verification and documentation



Portage Lake,
Livingston Co.

1938



2022



Enroll in
Score the
Shore
today!

Include *Assisting Volunteers* in communications and make sure everyone is trained

Secchi Disk Transparency

- Recorded presentation
- Copy of presentation – PDF



Total Phosphorus – Spring and Summer

- Recorded presentation
- Copy of presentation – PDF

Chlorophyll (algae)

- Recorded presentation
- Copy of presentation – PDF

Assisting Volunteers: Make sure add your lake to your account

Step 1: Sign into your account

Step 2: Add your lake to your account



The screenshot displays the Michigan Clean Water Corps website interface. At the top, there is a navigation bar with the logo and menu items: About, Lake Monitoring, Stream Monitoring, Data Exchange, and Resources. A search bar is located in the top right corner.

The main content area is titled "Sign in to your MiCorps account". It features a login form with fields for "Username" and "Password", and a "Submit" button. Below the form are two links: "Don't have an account? Register Here" and "Forgot your username or password?".

A light blue banner below the login form contains the text: "If you have an old data entry password for data entry into the MiCorps Data Exchange, it will not work here. Please Register Here."

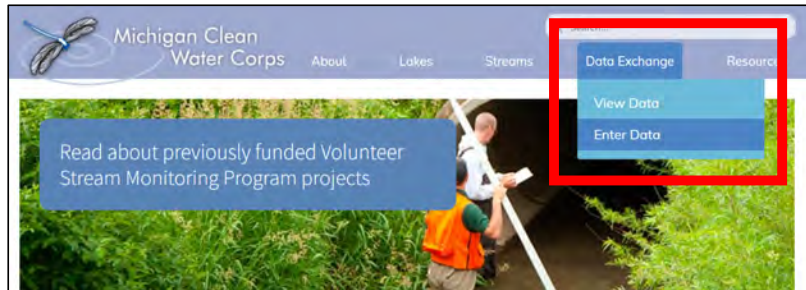
The second screenshot shows the "CLMP Lake Enrollment & Payment" page. The navigation bar is identical. The page title is "CLMP Lake Enrollment & Payment" with user options: Profile, Reports, and Logout. The main text reads: "On this page, you can add the lake(s) you are helping to monitor to your account. The Lead Volunteer(s) will be notified that you have joined the monitoring team for your lake."

The "Add Your Lake(s) to Your Account" section includes the text "Here you can select the lake(s) you will monitor." and a "Start Here" button. Below this is the "Your 2023 Lake Enrollment" section with the text "Here Lead Volunteers can enroll and pay for selected parameters for each lake in their account." and a "View Your Lakes" button.

How to *enter* your data

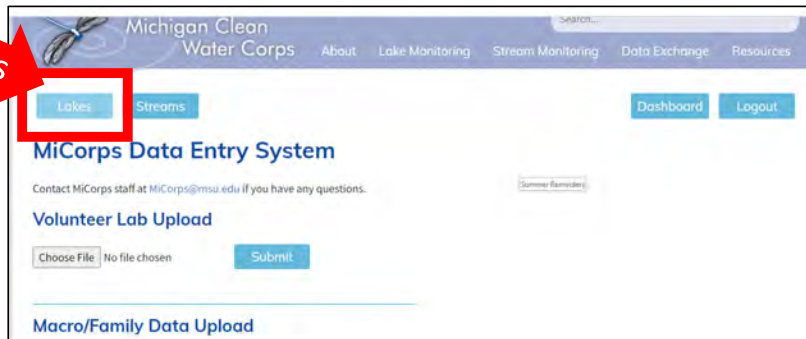
Enter data by October 31st

Step 1



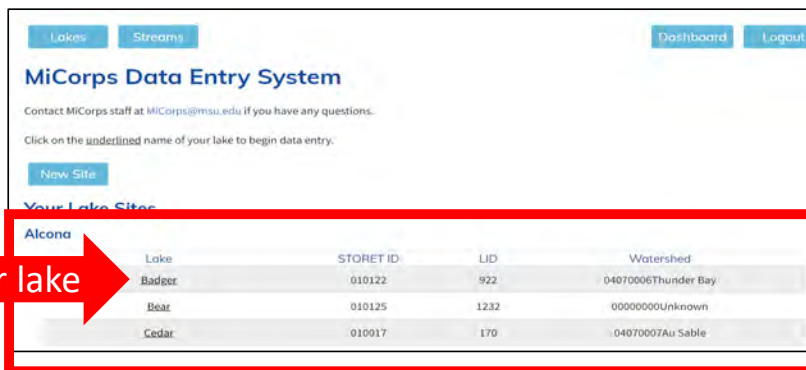
Click lakes

Step 2



Step 3

Click your lake



MiCorps Data Entry System

Contact MiCorps staff at MiCorps@msu.edu if you have any questions.

Lake Site Information	
Lake	Badger
STOREID	010122
Description	
Country	Alcona
Township	
Section	0
HUC/Watershed	4070006 Thunder Bay
Latitude	44.77750
Longitude	-83.43750
GPS Source	
Datum	NAD83/WGS84
Collecting Organization	
Tier	

Step 4

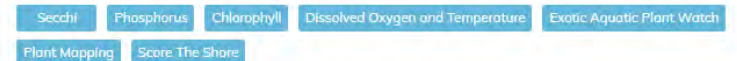
Tier 1 Data: Generated under MiCorps QAPP.

Tier 2 or 3 Data: Follow the Collecting Organization link (above) to view the QAPP or SOPs (monitoring protocols) that were utilized in the collection of this data.

More information on the Macro three-tiered data classification system is available [here](#)

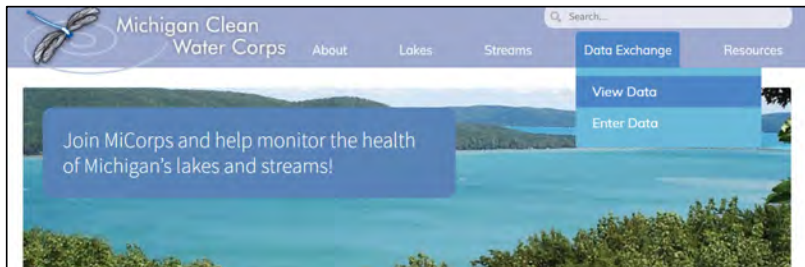
Enter a New Sample

Click a button to enter information from the corresponding data sheet. You will be given a chance to return to this page if you would like to enter more data.



How to check your data in our database

Step 1



MiCorps Data Exchange Network

The MiCorps web-based data exchange platform provides online access to volunteer monitoring data through a searchable database. Choose which water bodies you would like to search through and narrow down your search by county, hydrologic unit code (HUC) and/or water body name.

Search by Streams or Lakes

Streams

Lakes

Step 2

Narrow Your Search

County

HUC

Name

All

The left column contains items you can filter your search with. Click an item on the left to move it to the right column, which contains any items you've chosen to filter with. If you change your mind, click on an item in the right column to stop filtering with it. Multiple types of filters can be selected by clicking on each button above.

Type a word into the search box to only show items that contain that word.

badger

An empty rectangular box representing the search results area on the left side of the interface.A rectangular box representing the search results area on the right side, containing the text 'Badger'.

Date Range

From January 01 1970 to July 11 2023

Sampling Parameters

- Secchi Disk
- Phosphorus (Spring Overturn)
- Phosphorus (Late Summer)
- Chlorophyll
- Dissolved Oxygen/Temperature
- Aquatic Plants
- Exotic Plants
- Score The Shore

Data Tier

Data generated under different Quality Assurance Project Plans (QAPPs) belong to different tiers.

- Tier 1: The MiCorps QAPP
- Tier 2: Another acceptable QAPP
- Tier 3: No QAPP, but acceptable Standard Operating Procedures

Step 3


View Results

Download in Excel

How to check your data

Step 4

MiCorps Data Exchange Search Results [Download in Excel](#) [New Search](#)

Showing all results from January, 01 2024 to July, 24 2024 Page 1 of 10 

Sort by: **County** • Watershed 5, 10, 25 sites per page

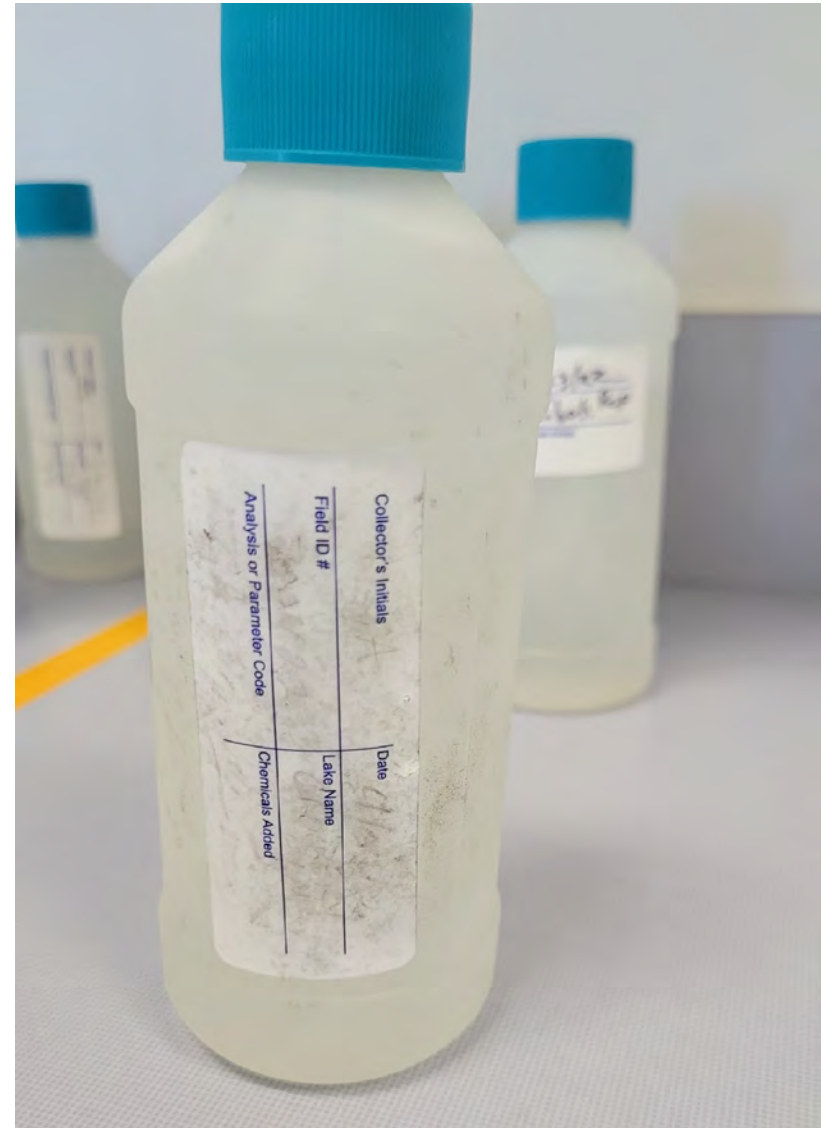
County <small>HUC and Watershed</small>	Lake Name	STORETID		
Alcona 4070006Thunder Bay	Hubbard (6)	010106		
Secchi				
Date	Time	Depth	Weather	
Jul 12, 2024	10:00:00	20.5 ft	Cloudy	View Graph
Jun 27, 2024	10:10:00	22.5 ft	Sunny	View Graph
Jun 15, 2024	10:15:00	23.5 ft	Sunny, Windy	View Graph
May 30, 2024	10:15:00	17.5 ft	Sunny	View Graph
May 18, 2024	11:00:00	27 ft	Sunny	View Graph
Allegan 4050003Kalamazoo	Duck	030258		
Secchi				
Date	Time	Depth	Weather	
May 23, 2024	14:40:00	7 ft	Sunny, Windy	View Graph
May 16, 2024	10:15:00	4.5 ft	Sunny, Windy	View Graph
Allegan Unknown Watershed	Green	030225		
Secchi				
Date	Time	Depth	Weather	
Jul 18, 2024	10:00:00	7.5 ft	Sunny, light wind	View Graph

Keep your sample clean



Use a pencil
or waterproof
pen or marker

Note: Summer P
bottles are being
sent as we speak



Chlorophyll: Slow down the Squeeze

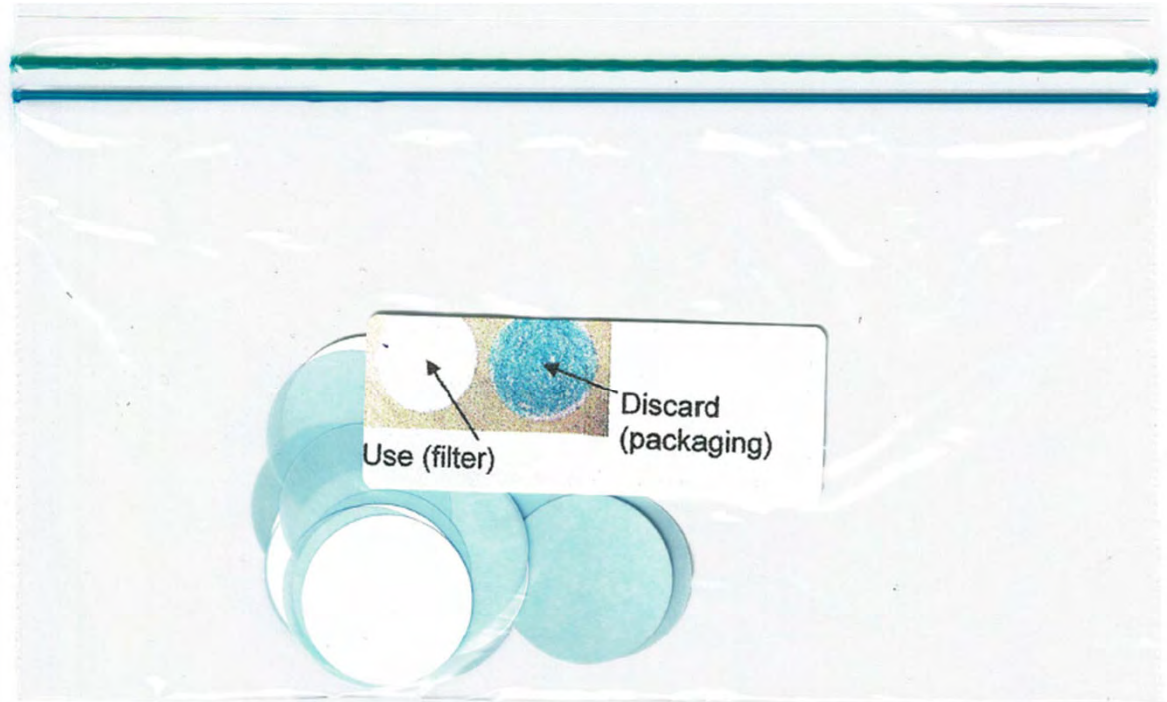


Chlorophyll Filters

Blue = BAD

Separator sheets look like tissue paper.

The good filters are solid white, “plastic” looking



Chlorophyll degrades when exposed to light
- Make sure to wrap your sample in foil



No need to wrap P
bottles in foil, though!



Data Forms

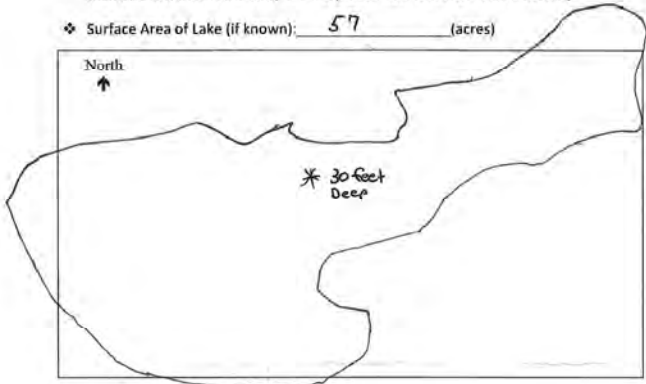
- Important to fill everything out
- Map is important for quality control

Lake Name, County, and Field ID number: Island Lake, Gladwin County, ID-260134

❖ In the box below, draw an outline of your lake (i.e., lake map). Or attach a copy of a lake map.

❖ On the lake map, mark your total phosphorus sampling location (this should be at the deepest location in your lake) and write the LAKE DEPTH at this location. (Note: If you sample at more than one location in the lake, use a separate data form for each location.)

❖ Surface Area of Lake (if known): 57 (acres)



North
↑

* 30 feet Deep

DATA ENTRY

If you can, please enter your data into the MiCorps Data Exchange by October 31st.

DATA SHEET TURN-IN PROTOCOL

Please do the following:

- (1) Make a copy of your field data sheets to keep for your records
- (2) Put one copy in a baggie to keep it dry
- (3) Deliver the frozen total phosphorus samples together with the data sheet copy to the designated drop-off location on the designated turn-in date (according to the Spring Phosphorus Sampling Schedule).

CLMP Phosphorus Data Form (Spring) Page 2 of 2

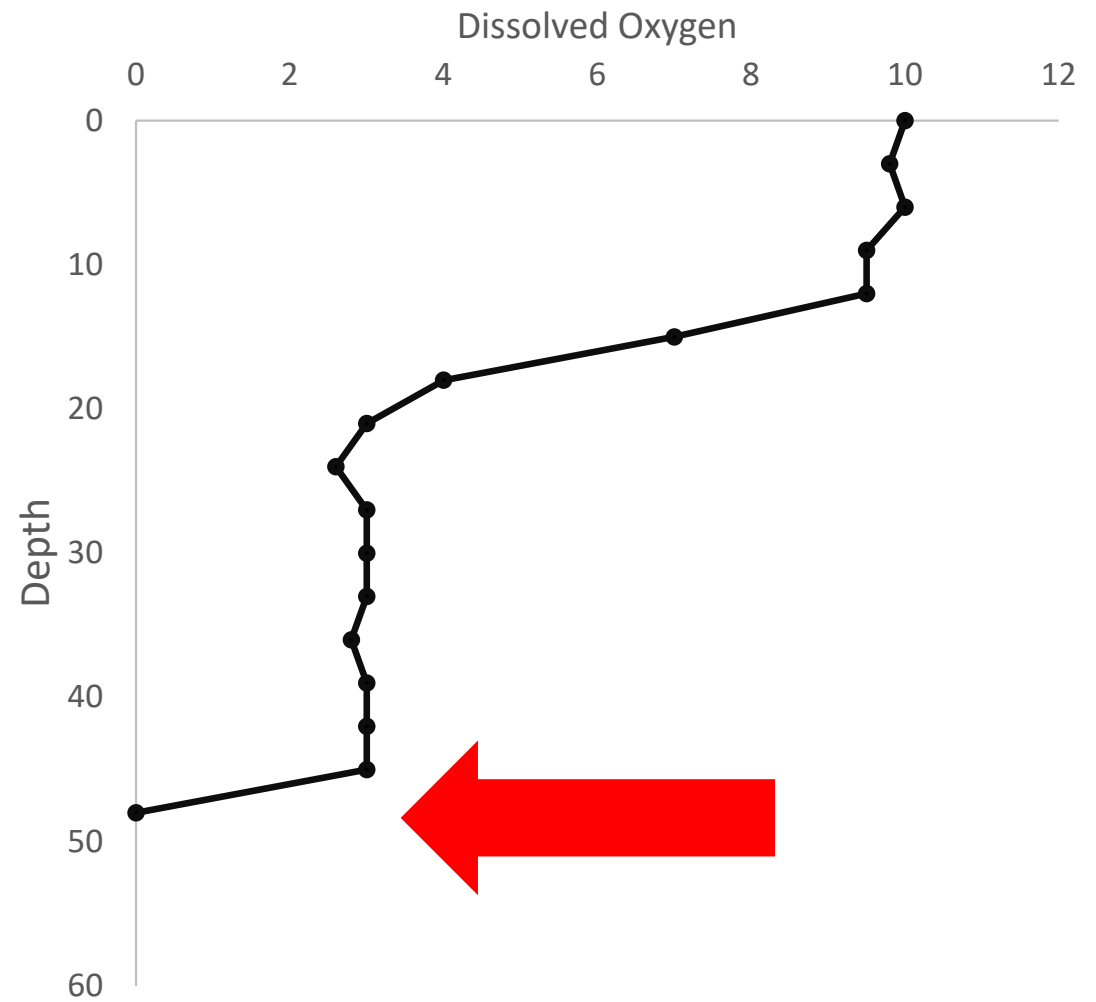
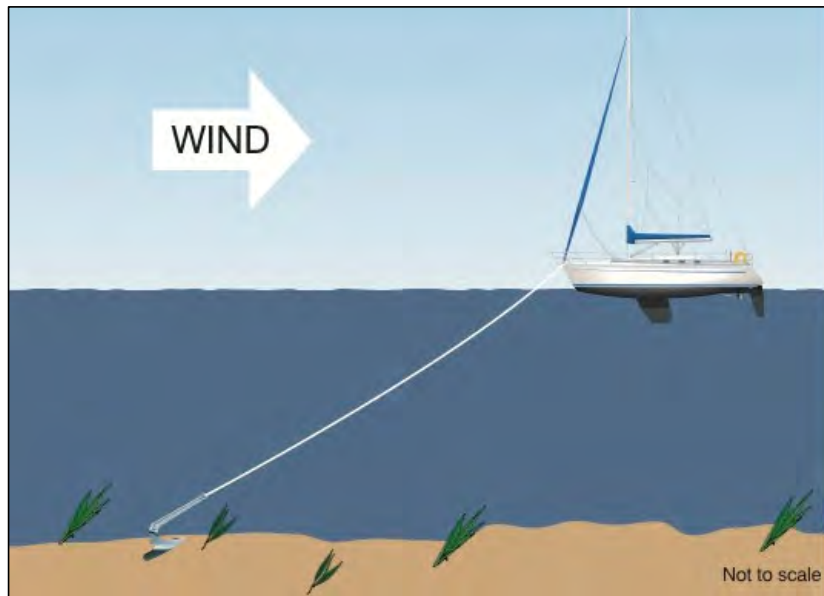


Dissolved Oxygen (DO) Reminders

- Turn on meters 15 minutes prior to calibrating
- Keep sponge in calibration chamber wet, but no standing water
- Make sure reading mg/L not % Saturation and in °C
- Keep case open after use to dry out

Temperature and Dissolved Oxygen

- Watch for drift and bottom reading
- Anchoring is important
- Check depth before proceeding with measurements



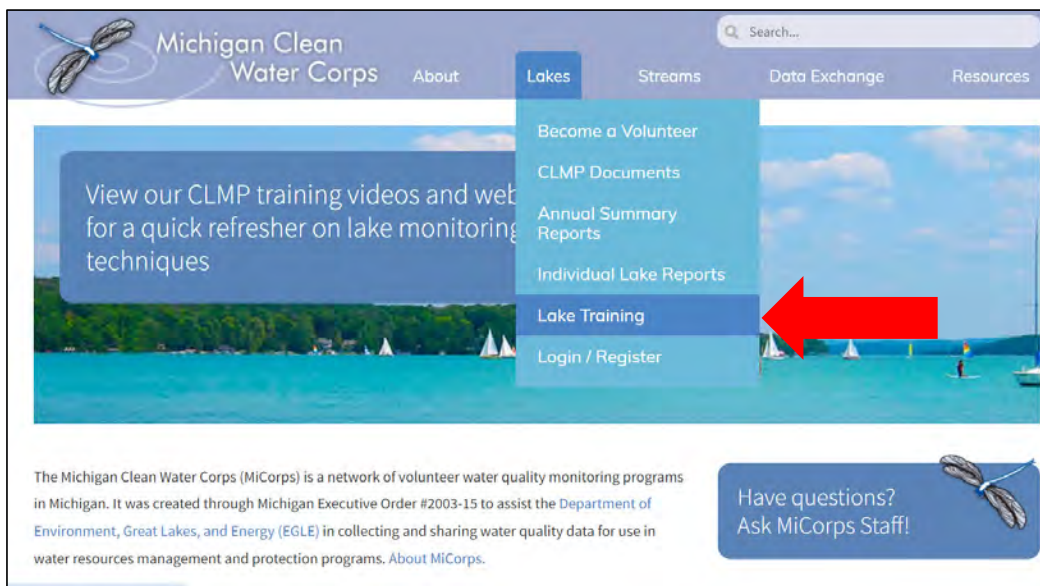
From where do you measure Secchi?



A: Top of the boat

B: Top of the water

Need a refresher? Training Videos



Michigan Clean Water Corps

About Lakes Streams Data Exchange Resources

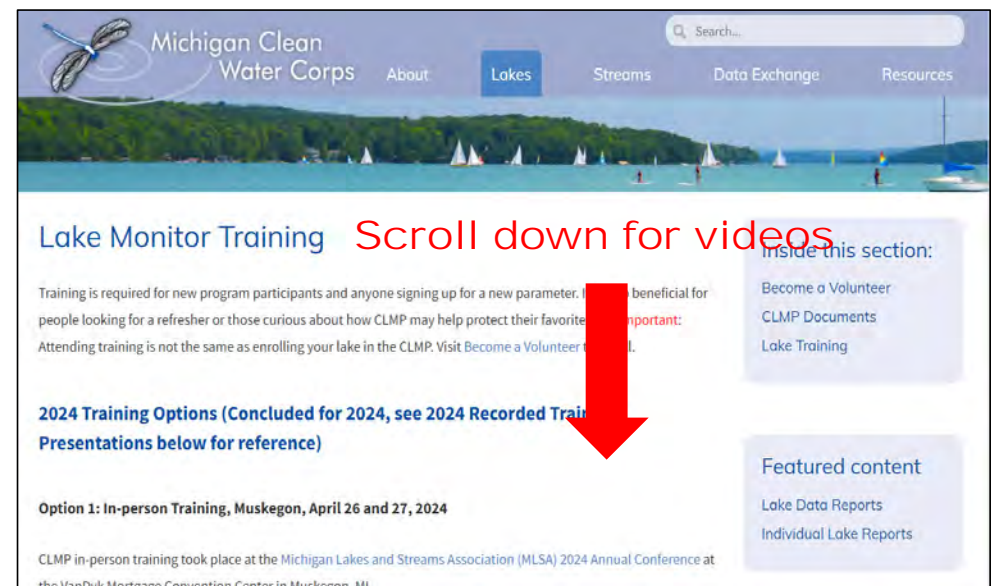
Search...

View our CLMP training videos and webinars for a quick refresher on lake monitoring techniques

- Become a Volunteer
- CLMP Documents
- Annual Summary Reports
- Individual Lake Reports
- Lake Training**
- Login / Register

The Michigan Clean Water Corps (MiCorps) is a network of volunteer water quality monitoring programs in Michigan. It was created through Michigan Executive Order #2003-15 to assist the Department of Environment, Great Lakes, and Energy (EGLE) in collecting and sharing water quality data for use in water resources management and protection programs. About MiCorps.

Have questions? Ask MiCorps Staff!



Michigan Clean Water Corps

About Lakes Streams Data Exchange Resources

Search...

Lake Monitor Training

Scroll down for videos

Training is required for new program participants and anyone signing up for a new parameter. It is beneficial for people looking for a refresher or those curious about how CLMP may help protect their favorite lakes. **Important:** Attending training is not the same as enrolling your lake in the CLMP. Visit Become a Volunteer for more information.

2024 Training Options (Concluded for 2024, see 2024 Recorded Training Presentations below for reference)

Option 1: In-person Training, Muskegon, April 26 and 27, 2024

CLMP in-person training took place at the Michigan Lakes and Streams Association (MLSA) 2024 Annual Conference at the VanDyk Mortgage Convention Center in Muskegon, MI.

Inside this section:

- Become a Volunteer
- CLMP Documents
- Lake Training

Featured content

- Lake Data Reports
- Individual Lake Reports

Michigan Inland Lakes Convention: Working Together for Healthy Lakes

October 2-4, 2024
Sheraton Grand Rapids Airport

Photo courtesy of Susan George



MiCorps
Monitoring Michigan's Water Quality

Questions?

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Jean Roth - jean.roth@mymlsa.org

Tamara Lipsey - lipseyt@michigan.gov

Not sure who to ask?

MiCorps@msu.edu

