

Parameters

Please note:

- Each volunteer monitor must demonstrate that they can collect consistent quality data before they can participate in the more complicated monitoring parameters. Therefore there are restrictions on parameter enrollment that are clearly defined on the registration form. Applicants that do not follow the restrictions will receive a call or email from MLSA to resolve the problem.
- Similarly, enrolling in the more complicated monitoring parameters will require enrollment in the simpler parameters as well. These restrictions are listed on the registration form.
- Except for Secchi disk transparency and the exotic aquatic plant watch, all monitoring programs have a limited enrollment because of available equipment or laboratory capacity. Register early to ensure your lake community's participation in the monitoring parameters in which you are interested.
- The training for the monitoring parameters is a part of the 2017 Michigan Lakes and Streams Annual Conference, which is April 21-22 at Crystal Mountain Resort in Thompsonville, MI.
- YouTube videos and webinars (live internet-based broadcasts) will be available for training and refresher purposes. Currently, secchi, phosphorus, chlorophyll, exotic plant watch, and Score the Shore videos are available from www.micorps.net. The webinar is scheduled for May 1 2017, 6-8 pm EST. Webinar registration information will be sent via email at a later point.

Parameter Name	Parameter Description	Enroll Cutoff Date	Equipment	Training	Other Info
Secchi Disk Transparency	Water clarity is measured by lowering a black and white disk into the water until it disappears. Measurements are taken weekly or every other week from mid-May until mid-Sept.	May 5	A Secchi disk and measuring line. The disk may be built or purchased from MLSA.	Optional but recommended; written sampling procedures, video, and/or webinar.	
Spring Total Phosphorus	The greater the phosphorus concentration in a lake the more weeds and algae are produced. Spring is a good time to measure phosphorus in a lake, because the lake is entirely mixed.	March 1	Sample bottles provided by DEQ. Samples are taken within 2 weeks of iceout, based on volunteer's judgment of the water conditions. A boat and volunteer must be available in early spring.	Optional but recommended; written sampling procedures, video, and/or webinar.	Samples must be delivered to DEQ collection centers on specified dates.
Summer Total Phosphorus	Summer total phosphorus along with chlorophyll and Secchi disk transparency are used in the Carlson Trophic State Index to measure and evaluate the quality of lakes.	May 5	Sample bottles provided by DEQ.	Optional but recommended; written sampling procedures, video, and/or webinar.	Samples must be delivered to DEQ collection centers on specified dates.
Chlorophyll	Chlorophyll is a green pigment in plants. When measured in lake water it is an indication of the amount of algae in the water. Higher phosphorus concentrations in the water produce more algae which reduces water clarity.	April 1	Composite sampler bottles and filtering equipment must be purchased.	REQUIRED , either attend live training or the webinar.	Samples must be delivered to DEQ collection centers on specified dates.
Dissolved Oxygen & Temperature	Lakes in the summer often stratify into layers that have unique oxygen and temperature properties. In many lakes, the oxygen in deep water may be completely lost. Fish will not live in these waters and chemical changes will occur that can impact water quality in the upper layers.	April 1	A dissolved oxygen and temperature meter is loaned to the volunteer samplers by the DEQ.	REQUIRED , attend the live training.	Two or three lakes located near each other will need to share one meter.
Exotic Aquatic Plant Watch	Plants are essential to lakes but sometimes they can become too abundant and cause recreational problems. Plants like the exotic invaders Eurasian milfoil and curlyleaf pondweed cause particularly serious problems.	April 1	Volunteer samplers must build plant collection rakes and have other supplies.	REQUIRED , either attend the live training or webinar	Lakes new to exotic plant watch are eligible for a visit from a MiCorps staff biologist
Aquatic Plant Mapping	A diverse aquatic plant community in lakes provides essential habitat for fish and wildlife. Certain plants can become too abundant and cause recreational problems.	April 1	Volunteer samplers must build plant collection rakes and have other supplies.	REQUIRED , attend the live training.	After the first year, you can get a reduced cost if you do not need the full support of a biologist.
Shoreline Habitat Assessment	Development and natural vegetation on a shoreline are important indicators of the health of a lake's biological community.	April 1	A boat is the only equipment required.	REQUIRED , attend the live training or the webinar.	