

Parameter Name	Parameter Description	Enroll Cutoff Date	Training	Equipment	Amount of People and Effort Needed	Other Info
Secchi Disk Transparency	Water clarity is measured by lowering a black and white disk into the water until it disappears.	May 10	Live training is optional but recommended; written sampling procedures, & video are available.	A Secchi disk and measuring line. The disk may be built or purchased from MLSA. A boat and anchor are needed.	One person; measurement is very fast. Taken every week or every other week May-September.	
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	Live training is optional but recommended; written sampling procedures, & video are available.	Sample bottles provided by DEQ. Samples are taken within 2 weeks of ice out, based on volunteer's judgment of the water conditions. A boat must be available in early spring.	One person; water sample is retrieved very fast. Done once during the spring.	Samples must be delivered to 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 10	Live training is optional but recommended; written sampling procedures, & video are available.	Sample bottles provided by DEQ. A boat is needed.	One person; water sample is retrieved very fast. Done once during the summer.	Samples must be delivered to 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.	April 1	REQUIRED , attend live training	Composite sampler bottles and filtering equipment must be purchased. A boat is needed.	One person; 45- 60 minutes once per month May-September.	Samples must be delivered to 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.	April 1	REQUIRED , attend the live training.	A dissolved oxygen and temperature meter is loaned to the volunteer samplers by the DEQ. A boat and anchor are needed.	Two people; 30-45 minutes; twice a month May-September.	Two or three lakes located near each other will need to share one meter. Volunteers with their own meter receive a reduced enrollment cost.
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 starry stonewort cause particularly serious problems.	May 10	REQUIRED , attend the live training	Volunteer samplers must build plant collection rakes and have other supplies. A boat and anchor are needed.	The more the merrier; at least one day and perhaps more; time commitment depends on lake size.	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.	May 10	REQUIRED , attend the live training.	Volunteer samplers must build plant collection rakes and have other supplies. A boat and anchor are needed.	The more the merrier; at least one day and perhaps more; time commitment depends on lake size.	After the first year, you can get a reduced cost if you do not need the full support of a biologist.
Score the Shore	Development and natural vegetation on a shoreline are important indicators of the health of a lake's biological community.	May 10	REQUIRED , attend the live training.	A boat with a motor is the only equipment required.	3-4 people; 3 hours on a moderate sized lake up to many hours on a large lake.	

- 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.
- The training for the monitoring parameters is a part of the 2019 MLSA Annual Conference, which is May 3-4 at Crystal Mountain Resort in Thompsonville, MI.