

2019 Special Project Annual Report: Blue-Green Algae Monitoring Program

Because blue-green algae can be a potential health hazard, we have made it a priority to monitor the prevalence and severity of blue-green algae blooms on our waterway and the toxins that they can produce. Previously, Wisconsin Lake and Pond Resource handled the sampling on an as-needed basis. We now have a volunteer (Brandon Begotka) who is running the program and collecting the samples for us at no charge.

Tim Hoyman of Onterra has recommended that these samples be taken four times a year: within two weeks of ice out, June, July and August. He also recommended that the samples be taken at four sites: Conservancy Bay, Tichigan, the Fox River near the Waterford Lake Channel and Waterford Lake.

Because we were transitioning to a volunteer sampling program this year, we only sampled in July and August. At the time of this report, we have received the analysis of the samples collected in July but are still awaiting the analysis of the samples taken in August.

The samples are sent to the Wisconsin State Lab of Hygiene to be analyzed for the presence or absence of any blue-green algae. There are many types, some produce toxins and others do not. If the sample contains a toxin-producing type, we have the option of analyzing the sample for the presence or absence of toxins. Just like there are many types of blue-green algae, there are many types of toxins. The most common toxin is microcystin, and it was recommended by the state lab that this be the one we test for.

The cost to identify and enumerate blue-green algae in a sample is \$128.00. The cost to analyze the sample for the presence of microcystin is \$85.00. Assuming that all of the samples are tested for both, the total cost for four samples in the four different time frames is \$3,408.00. In addition to the lab charges, there is also the cost of overnight shipping to the lab, which is typically between \$30 and \$40.

In order to execute the program in 2020, the amount requested in the budget is \$3,568.00.