In 2007, volunteers from Lake Camelot joined Wisconsin's Citizen's Lake Monitoring Network and began monthly testing on 8 spots in Lake Camelot as well as 6 spots in the Upper Watershed. Volunteers from Sherwood and Arrowhead were added in 2010 and began collecting data in those lakes as well.

Volunteers observe and document lake water quality by measuring water clarity with a Secchi disk. The 8-inch diameter black and white disk is lowered into the water on a rope until it can no longer be seen, then this depth is recorded. These readings allow you to track your lake's clarity over time.

Additionally, these citizen monitors sample monthly for phosphorus, chlorophyll and lake temperature. With this information, the trophic state (overall health) of each lake can be measured more reliably. All tests are sent to the State Lab of Hygiene for analysis and measuring of levels.

Phosphorus levels are tested because phosphorus, whether from natural sources or commercial fertilizers, is plant food. Too much phosphorus in our lakes causes excessive aquatic plant growth and algae blooms (when lakes turn green). Excess algae can reduce desirable bottom-rooted plants by blocking sunlight. When algae, plants and other organic materials decay at the bottom of lakes, oxygen is depleted in the water, making it difficult for fish and other aquatic life to survive. Reduced oxygen levels also contribute to winter fish kills in shallow lakes.

Phosphorus provides the fuel algae need to transform lakes into a thick, smelly green soup. Where it takes 20 parts per million of soil phosphorus to grow healthy turf, 25 parts per billion (a quantity 1,000 times smaller) can promote excessive algae growth in lakes. One pound of phosphorus can support 500 pounds of algae.

Results of our water testing programs have been posted on our website at:
https://14milewatershed.org/in-lake-water-testing/

The data collected over time will be instrumental in assessing and determining the best course of action for preserving and/or improving our lakes' water quality. The data is also used by a variety of people including lake managers, researchers and staff at the Environmental Protection Agency.