

## 2021 Water Quality Report Summary

The water quality report by URI for the year 2021 will not be available until after our season ends in October.

However, I and Doug can tell you that the trends remain the same. We check and record throughout the season from May to October for: depth of the lake, temperature, clarity, dissolved oxygen, phosphorous, and chlorophyll levels, E.coli, nitrates, ph, alkalinity, and chloride.

We seasonally have a clear lake in spring and early summer then the amount of dissolved oxygen at the bottom of the lake decreases to zero and we have an algae bloom because of the large amounts of phosphorous that are released from the sediment. Simply put the more phosphorous and nitrogen the more algae. The abundance of phosphorous and nitrogen accumulating in the lake comes from runoff of fertilizer, waste from animals both domestic and wild, road salt, and failed septic systems. Some of these issues can be mitigated by creating a buffer of plantings at the water's edge, pick up after your animals, use little or no fertilizer on your lawns, store any fertilizer in a watertight container on a concrete floor, and do not throw clippings or leaves in the lake. Any new homeowners are reminded that any failed septic system needs to be replaced within a year of purchase. DEM considers all cesspools as failed systems.

In June of this year, we asked URI to perform an E.coli test taken in the small cove opposite the dam. These tests came about after it was brought to our attention that there was an odor of sewerage in the area. After discussion and a vote, the board decided to play it safe and have the tests done and thereby have a baseline to go by if there were any future problems. The cost was \$35. The results came back negative and well within the range for safe swimming. Elizabeth Herron, the program director for the Watershed Watch felt that the probable cause was a failing system that has sewerage reaching the surface causing the odor, but not large amounts are making it to the lake. Nevertheless, it is imperative to replace a failed system and all others should be pumped regularly.

Remember...the quality of our lake is directly related to our property values.