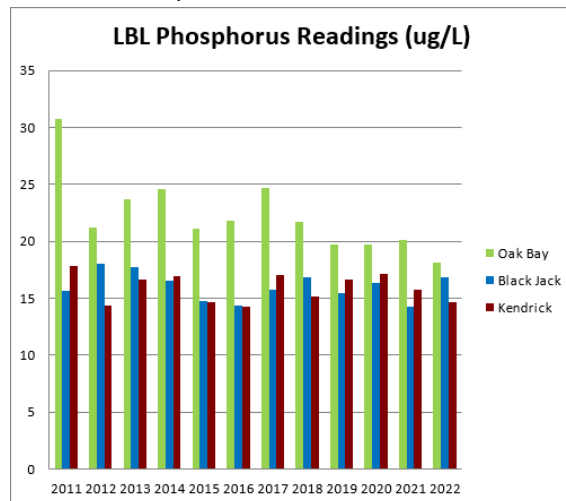
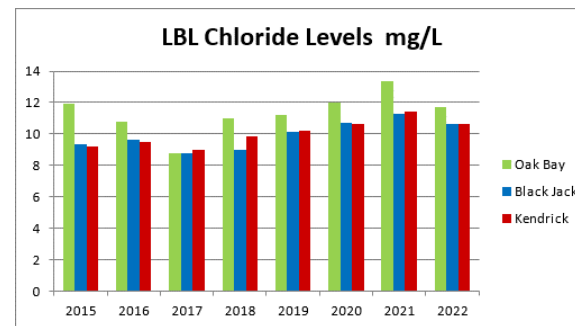


by the Association, while others are done by labs supported by a provincial program. And here's what we've found in our "recent" monitoring (over roughly 20 years) on the following pollutants and other aspects of water quality.

Phosphorus – a common ingredient of fertilizers, phosphorus is essential to plants. But too much of it causes major problems, especially excessive algae growth which isn't just gross but leads to other problems including inadequate deep water oxygen levels for several fish species. Lower Beverley's phosphorus levels over the past twenty-some years have been trending downward, which is considered good, but are still probably above base levels (before European settlements).

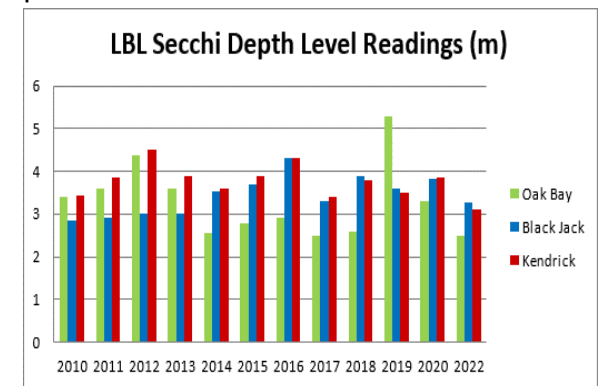


Chloride – chloride (particularly from winter road salt) has been a concern in urban areas for many years. But it has only recently been an issue in most rural areas, except right next to salted roads. The Association began sampling it about a decade ago, and so far the LBL samples have been low, but showing a modest increase over about ten years.



Calcium – a major component of limestone bedrock, calcium also relates to a common variety of "hardness." The level in LBL is moderate, and fairly steady over ten plus years. And again, calcium isn't inherently "bad"; some level of calcium is even a good buffer against acid rain fall-out. But it also provides the raw material for shell production by some invasive species and it's safest not to alter the levels artificially.

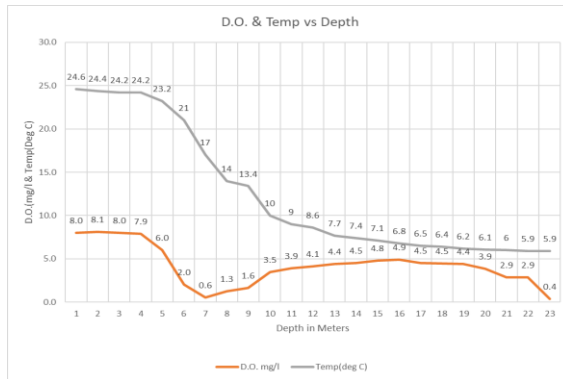
Clarity – our volunteers measure water clarity by how far down a patterned "Secchi" disk can be seen as it's lowered into the water. The clarity trend for LBL is increasing, which is generally good. But perhaps paradoxically, extreme clarity could indicate a problem, as when zebra mussels first invaded and consumed much that was floating in the water, causing a sudden sharp rise in clarity that set the stage for subsequent unwelcome excessive growth of weeds including invasives, and algae, as light penetrated further into the water.



Dissolved Oxygen – the levels of dissolved oxygen (D.O.) in deep water play a role in habitat suitability for various fish species and other aquatic life. The D.O level in LBL deep water becomes critically low late in the summer season.



Dave Champagne tests for deep-water oxygen June 5, 2025



D.O. (orange) and temperature (grey) off English Island August 9 2023

Overall, LBL trends have been steady or in a preferred direction; but there is still more to do, especially to improve late summer conditions. For residents and neighbours, our primary request is to limit or decrease the flow of nutrients into the lake, especially from fertilizer and wastewater effluents. And we're always looking for more volunteers including to monitor more aspects of water quality in more places.



Lower Beverley Lake Water Quality

As part of its mission to help cottagers enjoy the lake to its fullest, the Lower Beverley Lake Association works to “foster the preservation of the pristine character of the lake environment” including our dedicated volunteers regular sampling and testing water quality. The results are fairly encouraging but there's much more to do so we wanted to share with you both how we test it and what we're finding.

There's some debate over what constitutes “good” (let alone “pristine”) water quality. But generally if lake water is fairly clear, supports desirable fish and other aquatic life, and is pleasant for swimming and other recreation, it's “good”, while people generally don't like excessive or undesirable plant growth, from algae blooms to invasive species, along with murkiness.

Lower Beverley Lake water samples have been collected regularly for decades by Association volunteers. Some tests we do ourselves with equipment purchased

