Blue Green Algae Blooms in November and December – why



- 1. Blue Green algae are always in your lake.
- 2. It is when they bloom that they pose a risk to people, pets and creatures in the lake.
- 3. Blooms will happen when the algae get enough nutrients to enable a bloom.
 - a. The #1 Nutrient they need is phosphorous
- 4. Phosphorous is available in the water and much more in the sediment at the bottom of the lake.
- 5. The Phosphorous in the sediment is usually tied up and unavailable.
- 6. As the ice off season progresses the Oxygen level in the water decreases. When it gets too low that triggers a reaction that causes the Phosphorous tied up in the sediment to release.
- 7. Blue Green Alge are the only algae that can travel down thru the water column to access this released Phosphorus thus they have it all to themselves with no competition.
- 8. This can then result in a Bloom.

In Haliburton County we see increasing number of blooms in November and December In one case the Bloom froze in to the ice and could be seen all winter!

Actions Recommended

- Keep as much Phosphorous out of our lakes as you can previously safe levels are no longer safe. (multiplier impact of Climate Change, Invasive species, loss of Daphnia, longer ice off season etc.)
- To do that we need
 - Properly operated and functioning septic systems. (Septics are the #1 source of Phosphorous in our lakes)
 - Natural shorelines with deep rooted native vegetation that intercepts phosphorus from both septic systems and runoff.