



Like any ecosystem, lakes and ponds naturally change over time through succession. As many outside inputs accumulate, changes in water chemistry, sediment makeup, and organism presence occurs. The aging of a lake or pond is a natural process, but can be highly accelerated through human activity and industry, reducing a waterbody's life by decades.

Ponds or lakes can typically be described to be in three stages of a life cycle:

STAGE 1: NEW OR RELATIVE NEW PONDS AND LAKES

- blue or green highly transparent water
- low dissolved nutrients (especially nitrogen and calcium)
- sediment with low levels of organic matter

STAGE 2: AFTER 5 YEARS AND NO PREVENTATIVE TREATMENT

- Lakes are commonly clear but can be murky for short periods of time
- Smaller bodies of water and ponds will form beds of submerged aquatic plants
- A medium level of dissolved nitrogen and calcium and typically phosphorus
- Sediment have a much higher level of organic matter (muck starts to form)

STAGE 3: AFTER 10 YEARS AND NO PREVENTATIVE TREATMENT AND OFTEN MISUSE*

- Ponds and lakes have excessive nutrients, especially nitrogen and phosphorus
- Established beds of aquatic plants at the shore line and sometimes several yards into the water
- Often cloudy, murky water throughout most of the summer and fall
- Algae will form as early as July and become progressively more prevalent throughout the summer
- Low available oxygen
- Frequent fish kills and other amphibians and aquatic organisms
- Reduce nutrient load entering into our waterways

Address the issue in the lake using nutrient reduction beneficial bacteria, installing fine bubble subsurface aeration to increase dissolved Oxygen and control algal blooms (snowball approach – bloom, dye, decompose, release nutrients, bloom again)



Box 1948, 35032 Road 21 W
Carman, MB R0G 0J0



Cell: (204) 750-1199
Toll Free: (877) 745-6898



info@cleanwaterpro.ca
lynne@cleanwaterpro.ca