



Accelerating Nature's Way To A Healthy Lake

[Click here for a video on how aeration works](#)

Mission Statement

To improve the HEALTH of water bodies using natural, sustainable technologies that work!

- 50 Years of experience
- Custom engineered solutions
- Industry leading performance
- Driven by engineering / science / results





Our technology has been tested and scrutinized by multiple independent 3rd party organizations across multiple applications.

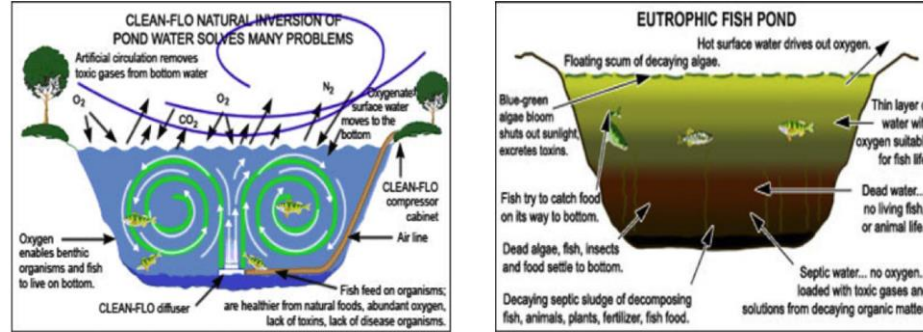


Weeds B Gone History

- WeedsBGone started out 30 years ago harvesting weeds. We have developed many products along the way from screening products, cutters and boat harvesters to get rid of the weeds in cottage waterfronts and pond's. Over the years we have realized that these methods are a quick fix and can be short term solutions.
- WeedsBGone connected with Clean-Flo who have been in business aerating lakes and reservoirs with amazing results all over the world for over 40 years. Weedsbgone has now been working with Clean-Flo for the last 7 years in the USA and CANADA aerating lakes and installing continuous laminar flow inversion oxygenation systems. This whole group is achieving great results through aeration.
- WeedsBGone installed over 150 systems in the last 7 years in southern Ontario and show results with all our systems where people are seeing a muck reduction of 4-6 inches per season. Less weeds, cleaner water and more fish. This overall has lead to much more enjoyable waterfronts. This is the most natural and effective long term solution of dealing with our water quality problems.

Please view [this video](#) for additional knowledge on our systems and the benefits you will get from using continuous laminar flow aeration in conjunction with beneficial bacteria's and enzymes

Eutrophication Definition



Eutrophication – The process by which a body of water acquires a high concentration of nutrients, especially phosphates and nitrates. These typically promote excessive growth of algae. As the algae die and decompose, high levels of organic matter and the decomposing organisms deplete the water of available oxygen, causing the death of other organisms, such as fish. Eutrophication is a natural, slow-aging process for a water body, but human activity greatly speeds up the process.” - Art, 1993(USGS website)

[Watch This video to see a YouTube video on how this process can kill fish over time from a lack of oxygen](#)

Harmful Herbicides

Harmful Herbicides will lay the weeds to the bottom of the lake and turn into a rotten composition year after year. This is eventually fill the bottom of the treated area. This is very bad for the eco-system and it is very rich in nutrients and will feeds the weeds for years to come.

- **Herbicides / pesticides may exacerbate the problem**
- **Findings of endocrine disruption**

(Endocrine disruptors are chemicals that may interfere with the body's endocrine system and produce adverse developmental, reproductive, neurological, and immune effects in both humans and wildlife.)



Continuous Laminar Flow Aeration

Inversion Oxygenation

- **Custom engineered**
- **Laminar non-turbulent flow**
- **Restores and maintains aerobic conditions by removing toxic gases and carbon dioxide**
- **Oxygenates entire water column and into the sediment pore water**
- **Prevents release of nutrients from anoxic sediments – reducing/eliminating internal loading.**
- **Reestablishes the aerobic environment required to accelerate biological breakdown of organic nutrients.**

Continuous Laminar Flow Aeration (The Process)

- The most important part of CLEAN-FLO's unique water improvement process is called "Continuous Laminar Flow Inversion and Oxygenation". Laminar flow inversion sets the stage for other functions to take place that lead to eutrophication reversal and water quality improvement. CLEAN-FLO invented and engineered this energy efficient process for a wide range of fresh water and wastewater applications. Unlike ordinary diffused air systems, surface aerators, paddlewheels, hypolimnetic aerators, or propeller-aspirator aerators, our process oxygenates an entire body of water from top to bottom.
- Laminar flow created by our systems is non-turbulent and will not increase suspended solids or increase turbidity. In fact the opposite is true, suspended solids and turbidity will be reduced. Our diffusers are placed on the bottom and are not suspended above the sediments, to ensure oxygenation of the sediment-water interface. As the bubbles release from a diffuser, oxygen is transferred to the water from the bubble, and they also move water gently to the surface and across the surface where additional oxygen is absorbed by the water. CLEAN-FLO systems are designed to completely mix the surrounding waters and evenly distribute dissolved oxygen throughout the sediments for efficient microbial utilization.

- Laminar flow inversion and oxygenation carries oxygenated, toxic gas-free surface water down to the bottom where it binds phosphorus and nitrogen to the sediments and kills anaerobic, often pathogenic (disease producing) bacteria that produce acids and toxic gases. This oxygenation helps purge the water of carbon dioxide (CO₂), which is a primary nutrient necessary for aquatic plant photosynthetic growth and productivity. Other gases such as hydrogen sulfide (H₂S) and ammonia are also purged from the sediments. Oxygenation enables beneficial microorganisms to feed on bottom organic sediment. It enables aquatic insects to feed on the microorganisms, and fish to inhabit the bottom waters and feed on the insects, providing a valuable natural food source to improve fish growth and health.
- CLEAN-FLO laminar flow systems increase inversion of a water body to several times a day or several times a week or month. The amount of inversion depends on CLEAN-FLO's engineering design to counteract incoming pollutants and pollutants in that particular body of water. Our systems are designed for a particular site and account for variables such as water depth and volume, basin morphometry, water flow rates, presence of aquatic weeds and algae growth, and thickness and composition of lake sediment.
- Continuous laminar flow aeration and oxygenation has provided valuable improvements in water quality and fish health and growth, while also producing reductions of nutrients, algae and aquatic weed growth, organic muck, foul odors and disease bacteria.

Clean-Flo Inversion / oxygenation Trent Port Marina Layout

Legend

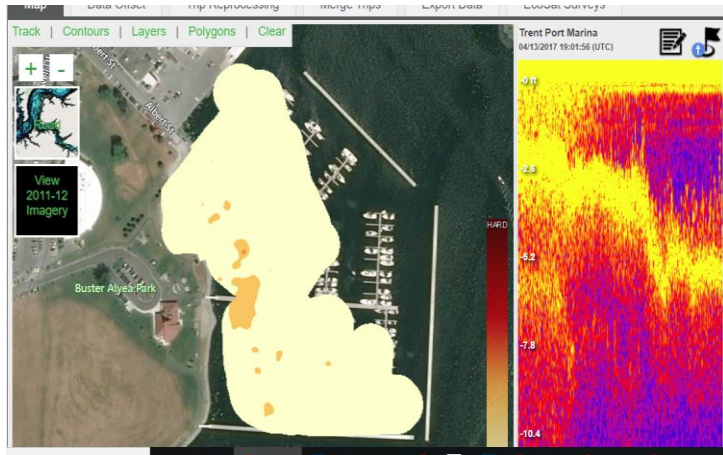
Marina - WeedsB Gone

Google earth

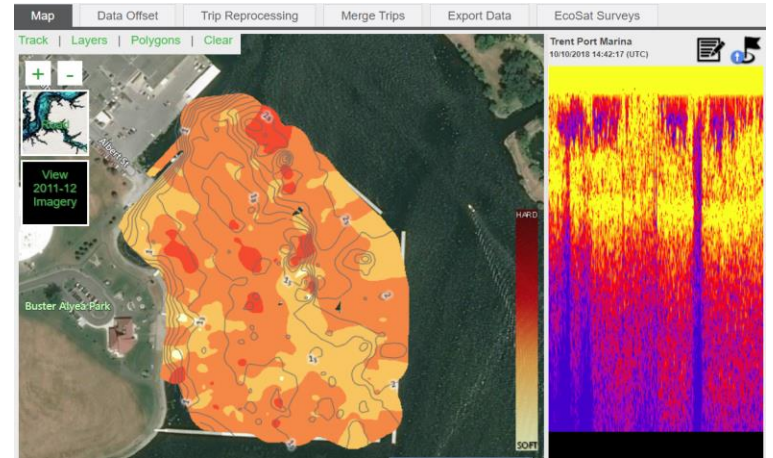


400 ft

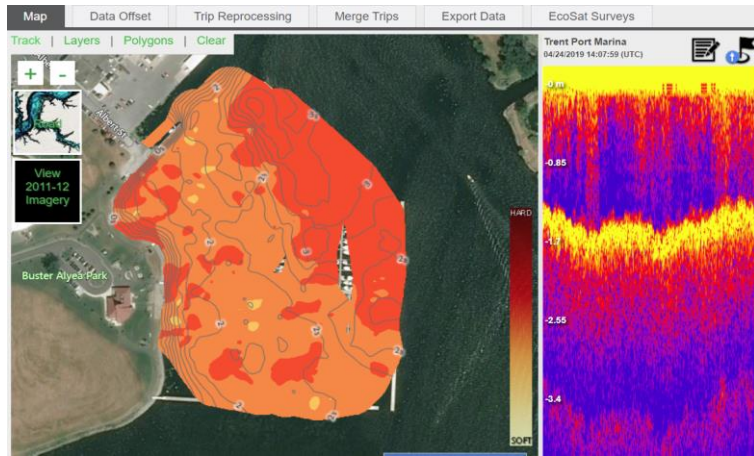
Trent Port Marina 04/13/2017



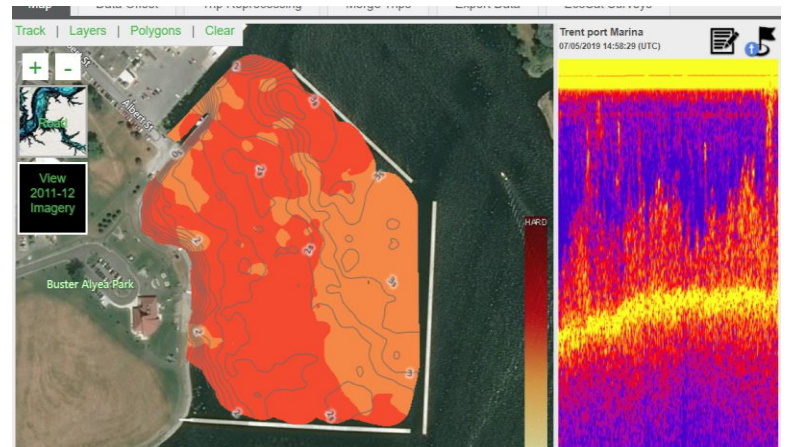
Trent Port Marina 10/10/2018



Trent Port Marina 04/24/2019

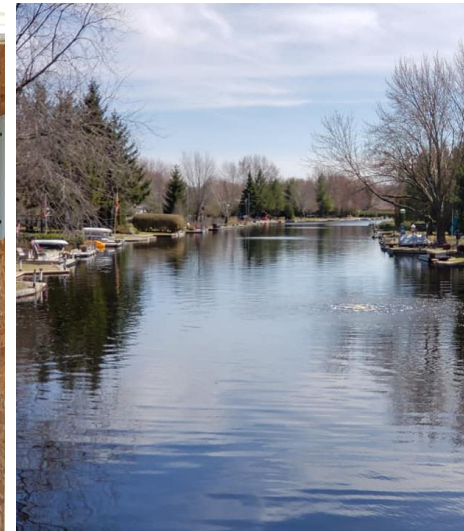
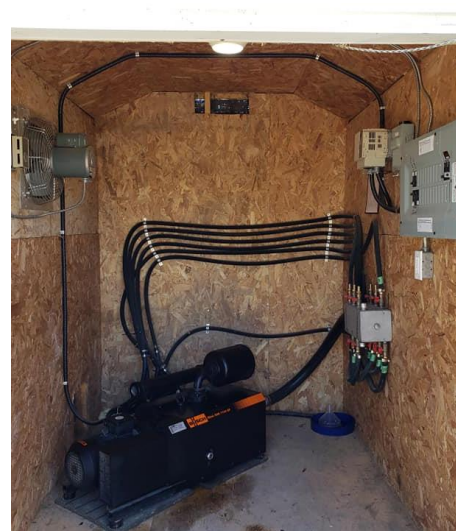


Trent Port Marina 07/05/2019



.....

Lagoon City Ramara Township Aeration project 2016





Lagoon City Ramara Township Aeration project 2016



Clean Flo-Pike Lagoon

This project was undertaken with the financial support of:
Ce projet a été réalisé avec l'appui financier de:



Environment and
Climate Change Canada

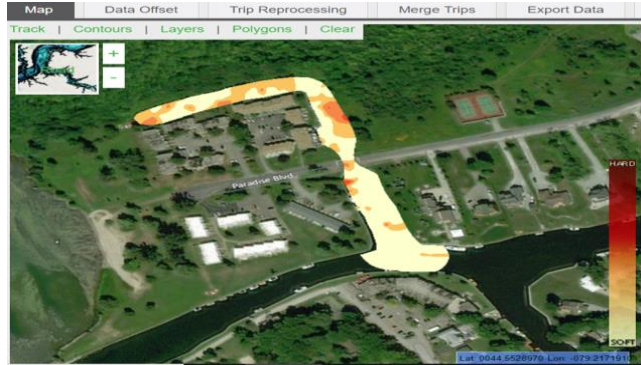
Environnement et
Changement Climatique Canada

Lagoon City Pike Lagoon 2016 – 2019 Sonar Imaging Results

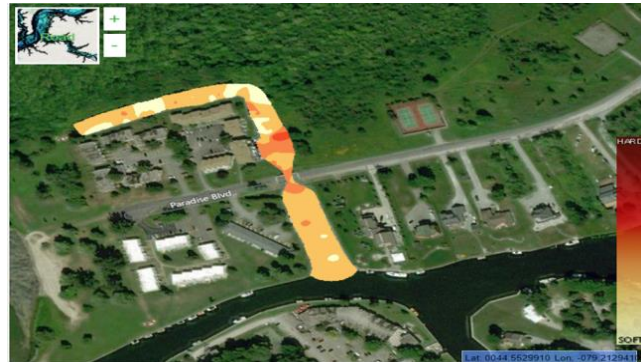
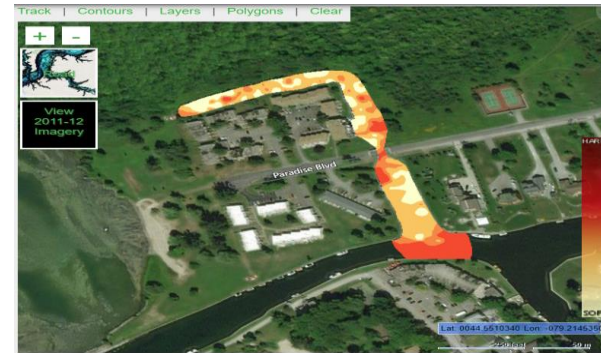


The Scans are showing a change in colour year after year from a light brown colour to more of a red. This happens over years of using treatments with beneficial bacteria's and enzymes. The rotting composition is being reduced at a fraction of the cost of dredging. This process is great for insects and the eco system. As the beneficial microbes feed on the bottom insects will then feed on them and insects are the best food for fish.

04/19/2016 Pike Lagoon



10/05/2017 Pike Lagoon



10/12/2018 Pike Lagoon



04/25/2019 Pike Lagoon

Lagoon City Project was undertaken by the financial support of
environment Canada and climate change

Clean Flo-Turtle Lagoon

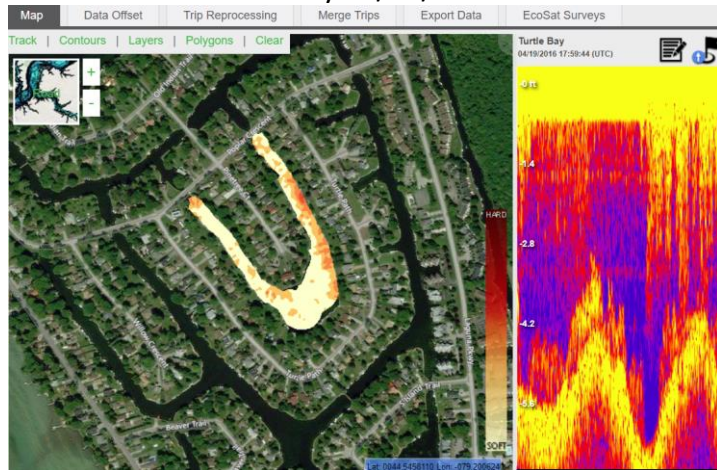
This project was undertaken with the financial support of:
Ce projet a été réalisé avec l'appui financier de:



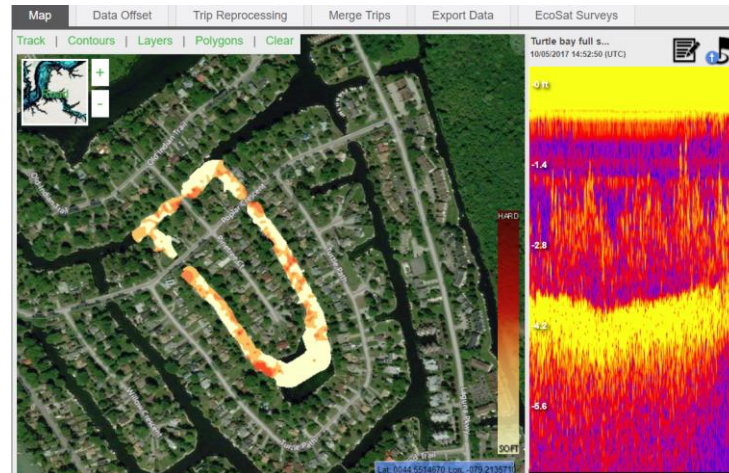
Environment and
Climate Change Canada

Environnement et
Changement Climatique Canada

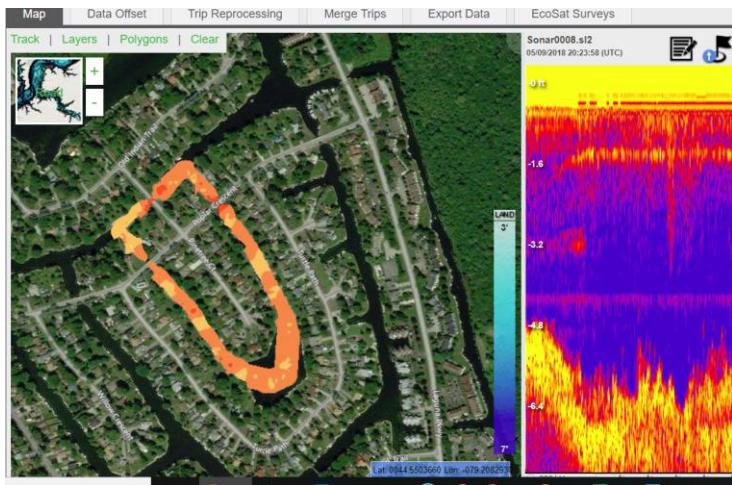
Turtle Bay 04/19/2016



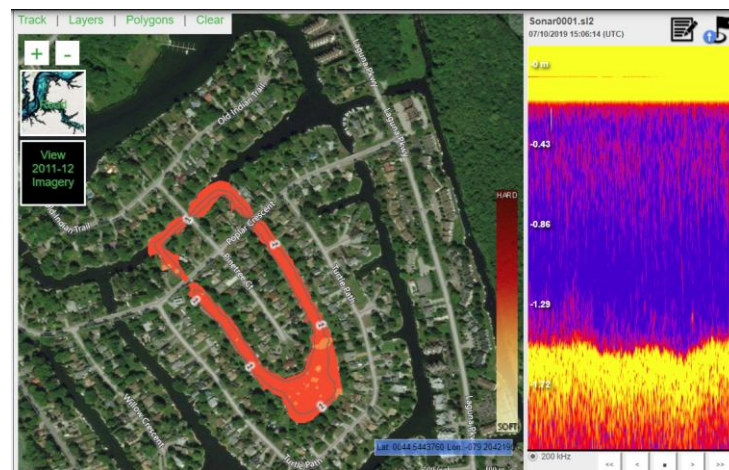
Turtle Bay 10/05/2017



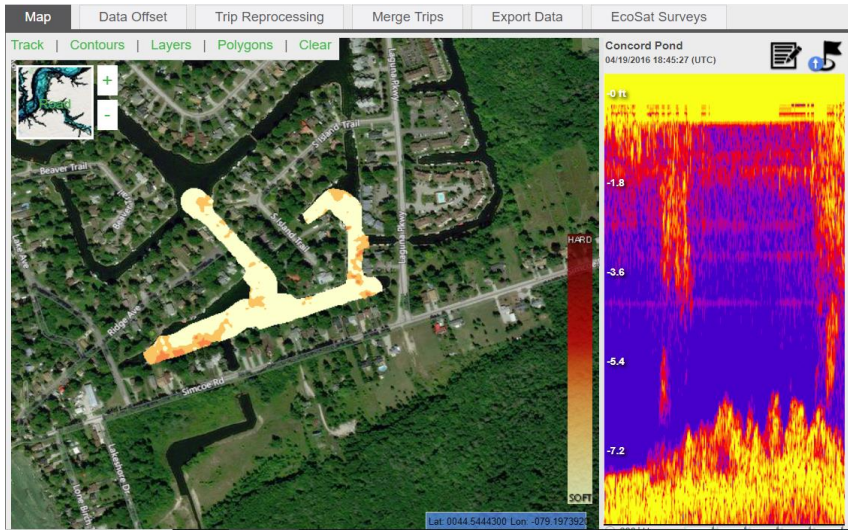
Turtle Bay 05/09/2018



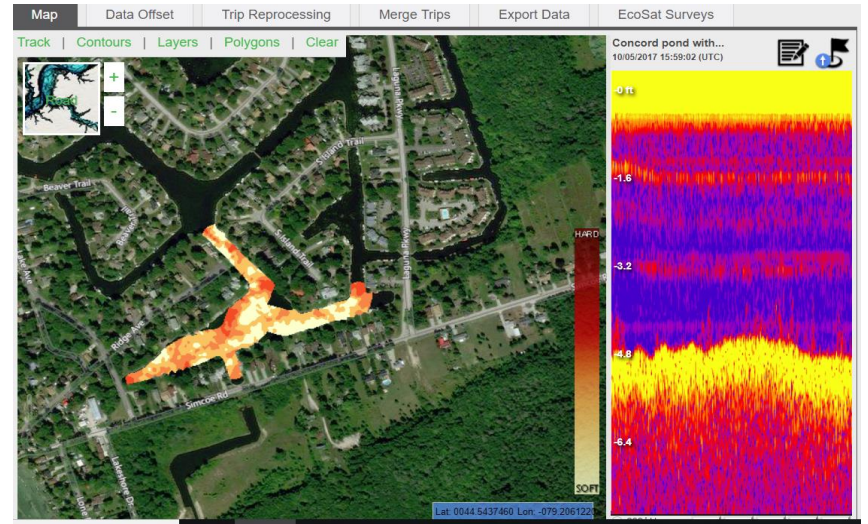
Turtle Bay 07/10/2019



Concord pond 04/19/2016



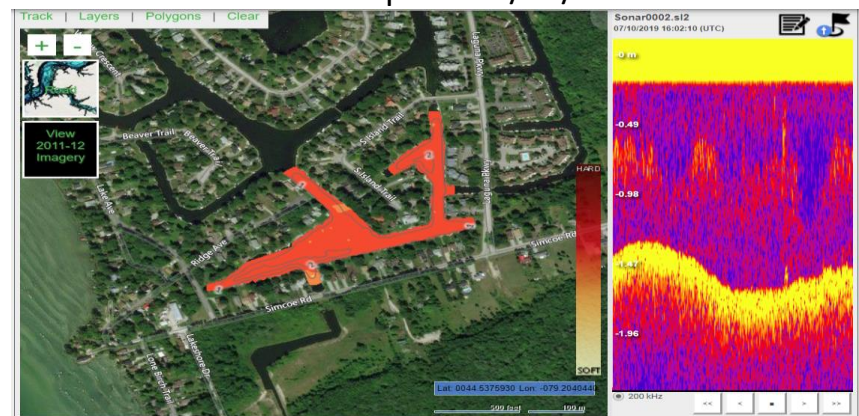
Concord pond 10/05/2017



Concord pond 04/25/2018



Concord pond 07/10/2019

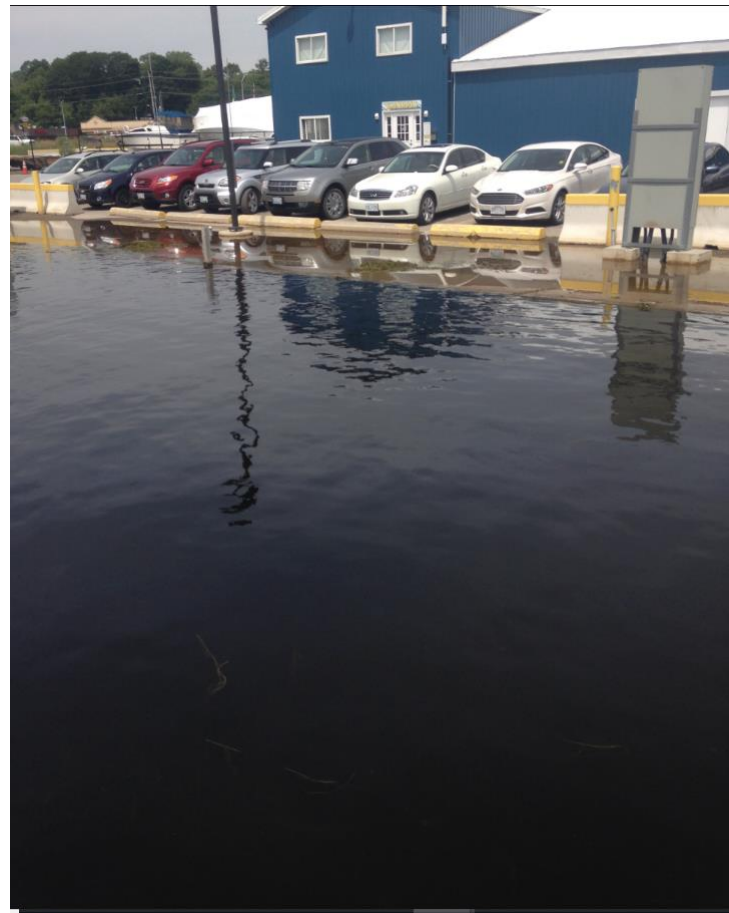
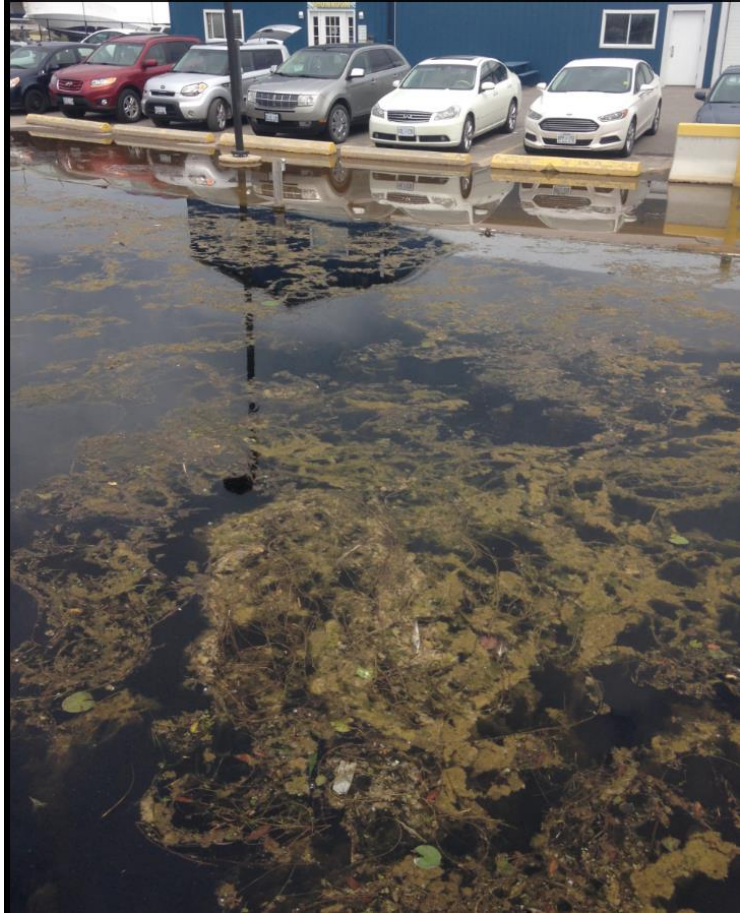


Non-Turbulent Micro Porous Diffuser 12 inch

Laminar flow created by our systems is non-turbulent and will not increase suspended solids or increase turbidity. In fact, the opposite is true, suspended solids and turbidity will be reduced. Our diffusers are placed on the bottom and are not suspended above the sediments, to ensure oxygenation of the sediment-water interface. As the bubbles release from a diffuser, oxygen is transferred to the water from the bubble, and they also move water gently to the surface and across the surface where additional oxygen is absorbed by the water. CLEAN-FLO systems are designed to completely mix the surrounding waters and evenly distribute dissolved oxygen throughout the sediments for efficient microbial utilization.



Crates Marina Belleville Ontario



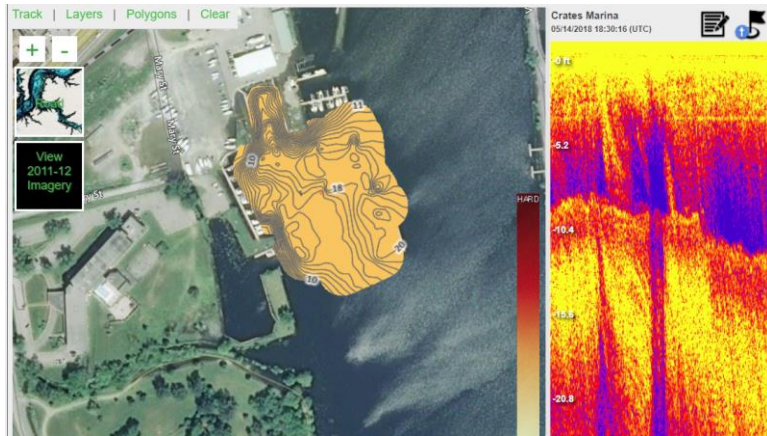
Crate Marine Belleville



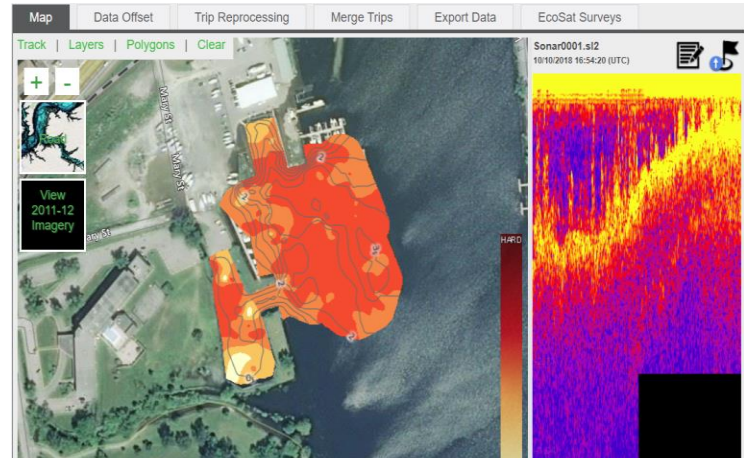
8- 10 ft throughout

Belleville
Harbour

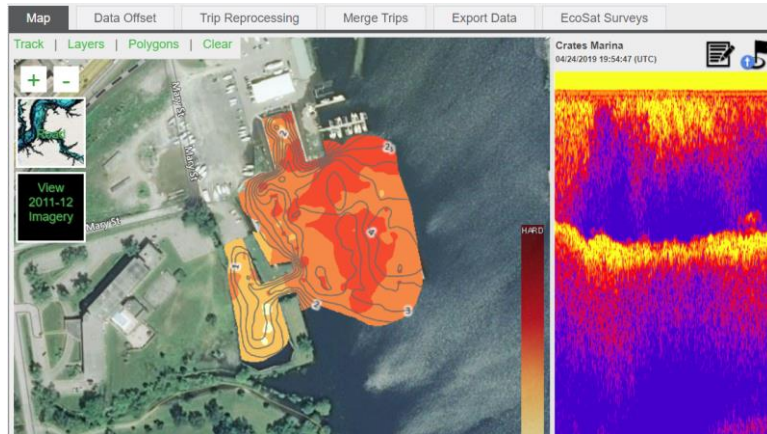
Crates Marina 05/14/2018



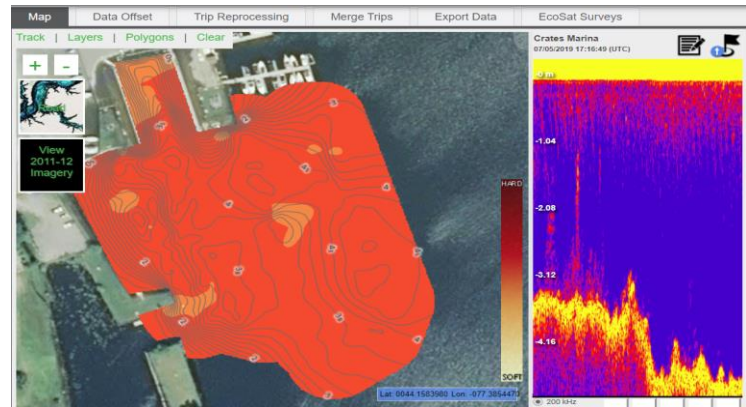
Crates Marina 10/10/2018



Crates Marina 04/24/2019



Crates Marina 07/05/2019



Private waterfront system Lake Ontario











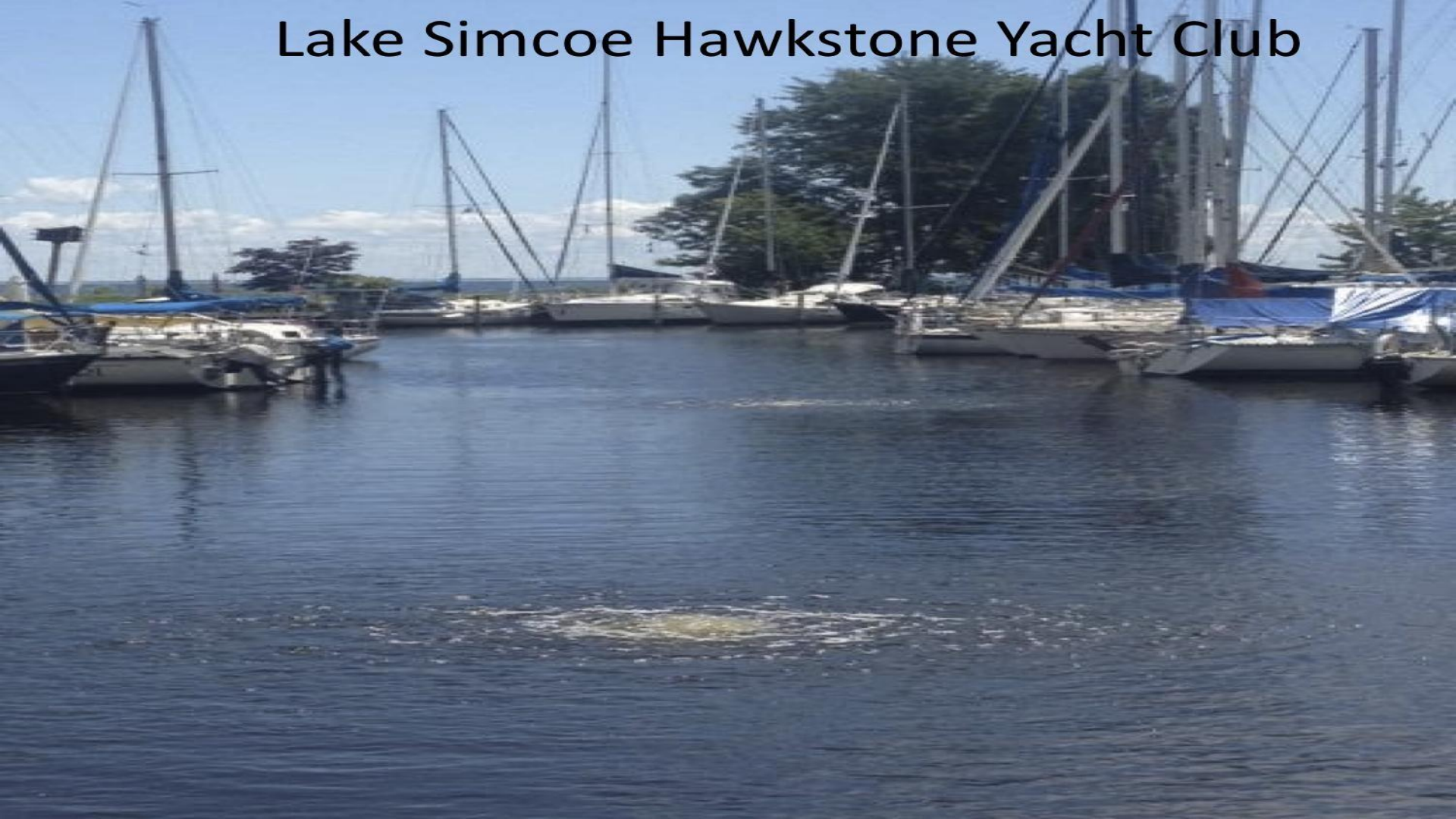
Continuous Laminar Flow Aeration



Continuous Laminar Flow Aeration



Lake Simcoe Hawkstone Yacht Club



De-icing

WeedsBGone's aeration systems are able to keep the ice from freezing around your dock and allow you to leave it in all winter long



Canadian Forces Base Trenton Ontario

The out side temp is around -8. The open water will fluctuate with warmer and colder weather. Working great.
Thanks Dennis



Application's for Aeration Systems And Where It is Used



What Aeration Does

- Improve water quality / clarity
- Reduce phosphorus, nitrogen, hydrogen sulfide
- Organic muck reduction
- Algae control – shift to diatoms
- Weed control
- Reduce pathogenic bacteria
- Eliminate odor
- Reduce fish kills / improve overall fishery
- Reduce iron, manganese and other metals and Stabilize dissolved oxygen levels
- Reduce beach closures
- Ice prevention
- Improve irrigation water
- Meets organic farm standards
- Increase water depth
- Increase property values
- Reduce mosquito breeding
- Reduce sediment nutrient release

Where Aeration Is Used

- Ponds – retention, golf course,
- Lakes(Waterfronts) Canals
- Drinking water reservoirs
- Rivers
- Aquaculture
- Wastewater
- Water containment tanks

List of aeration projects in ontario completed

List of Completed Lakefront Systems

- Buckhorn Lake
- Stoney Lake
- Chemong
- Cordova Lake
- Sturgeon Lake
- Big Bald Lake
- Wolf Lake (Cottage association)
- Manitouwabing Lake
- Lake Simcoe
- Walker Lake
- Lake Dalrymple
- Bogart Pond (Newmarket)
- 4 Mile Lake

List of harbours and marina's

- Canadian Air Force Base (Trenton)
- Acali Place (La Salle)
- Cobden Beech (Muskrat Lake Association)
- Trent Port Marina (Trenton)
- Crates Marina (Belleville)
- Hawkstone (Oro-Medonte)
- Lagoon City (Ramara Township)
- Snug Harbour (Lindsey)
- Hammock Harbour (Orillia)
- Wildwood Port Severn Campers (Port Severn)●
- Bell Haven Trailer Park (pigeon lake)
- Lone Pine Resort (Port Severn)

List Of Ponds

- Park Bridge lifestyle Communities (aeration installed throughout Ontario at several locations)
- Founders Village (Park Bridge)
- Spring Valley (Park Bridge)
- Silent Valley (Park Bridge)
- Park Place (Park Bridge)
- Shady Acers (Park Bridge)
- Wasaga Country Life(Park Bridge)



The Mobi – Trac In Action In 2017

[Click Here To View The Mobi - Trac In Action](#)



Bioaugmentation

- **Biological augmentation involves the supplemental application of non-toxic, natural, beneficial microbes, enzymes and minerals to clean a body of water.**
- **Stimulation of Indigenous Microbes – use of food grade electron donors and cofactors to stimulate indigenous microbial populations to improve organic and inorganic bioremediation.**
- **Ph.D. Microbiologist – 40 years of experience**
- **Proprietary product formulations**
- **Customized product formulations**
- **Driven by science**
- **3,000 microbial strains in culture bank**

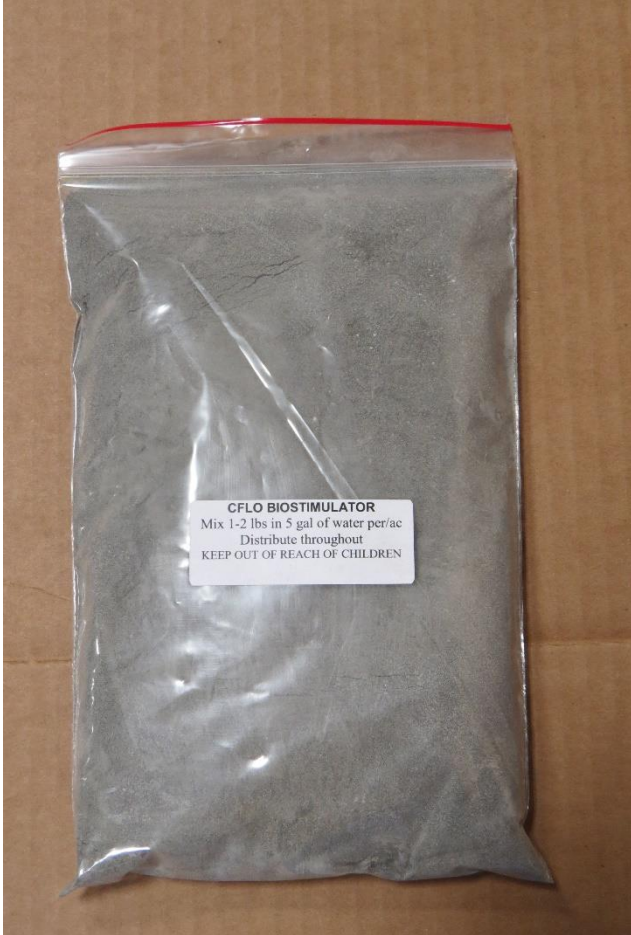




Bio-Augmentation



Bio Stimulator



Bio-Stimulator stimulates and enhances natural microbial populations in situ for increased nutrient and muck reduction. This helps the pucks and pellets feed more and work more efficiently. This will be mixed in to a 10 gallon pail and spread around the treated area.



Winter Warrior



What it does:

- Winter Warrior is a unique microbial consortium developed by CLEAN-FLO to increase biological efficiency during the winter months and improve water quality and organic muck reduction all winter long. Bio augmentation is a process of improving natural biological activity to breakdown organic pollutants. Bacteria are living organisms, which require optimum environmental factors to achieve best results. The important factors are carbon, nitrogen, phosphorous (food energy source) dissolved oxygen, PH and temperature.
- While treatment facilities can make adjustments to control most of the parameters, it is challenging to control temperature between 40-150 F. Most of the microbial process have optimum temp, between 70-90F. During late fall and winter, water temperatures fall below 55F in many parts of the world. This decrease in the temperature slows down the growth process and reduces the benefits of bio augmentation by over 85%. Such reduced efficiency can lead to increased nutrients and organic muck build-up, resulting in increased algae and weed growth once the water warms in the spring. Now you can do something to get ahead of these spring concerns.

How It Works:

- To improve biological activity during these cold water periods, CLEAN-FLO has developed a unique microbial consortium that can quickly adapt to the lower water temperature and continue functioning in a broad temperature range (34 – 75F). This unique nutrient reduction technology will increase biological efficiency during the winter months and improve water quality and organic muck reduction all winter long. Benefits of using Winter Warrior 1.Improves B.O.D. and C.O.D. 2.Reduces sludge build-up 3.Reduces odors, degrades many organic pollutants. 4.Breaks down F.O.G.5.Natural biological system 6.Works at low temperatures 7.Works under reduced oxygen levels. Best D.O. 4-5 ppm

Application:

- Shake the container well and apply over diffuser boils and broadcast around surface of water body. Application rate is 1 gallon per acre – foot. Acre-foot equals total surface acres multiplied by average depth. Results may vary based on watershed activity and continual nutrient loading. Application use: Lagoons, lakes and ponds, reservoirs, waste water treatment plants, rivers, fish ponds, aquaculture.

C-Flo + Beneficial Bacterial slow release disk



How It Works:

- C-FLO+™ is a slow release disk of special beneficial microbes with natural plant enzymes which feed on organic sediment (muck) at the bottom of ponds and lakes. These organisms are found in the woods feeding on dead leaves, bark, weeds and other dead matter. When you walk through the woods, you step on as many as 300,000,000 of these tiny organisms with every step. C-FLO+™ is comprised of healthful organisms that are natural food for aquatic insects. Microbes multiply as they feed on organic sediment, and insects grow and multiply as they feed on C-FLO+™. Fish then feed on the insects and grow rapidly, as insects are one of the best foods for fish.

WHAT IT DOES:

- C-FLO+™ feeds on bottom organic muck, ooze, and peat, digesting and converting it to carbon dioxide and water. As C-FLO+™ feeds on bottom muck, your pond or lake will deepen, making a better environment for fish, and less opportunity for weeds to grow. Cattails and lilies have gradually disappeared due to muck reduction. This process replaces dredging the organic material at a tiny fraction of the cost. C-FLO+™ is harmless to fish, wildlife, pets, humans, and the environment when used as directed.

APPLICATION:

- About two weeks after the inversion system is started, C-FLO+™ is applied at a rate of 1 pound per acre. There are eight 2 oz. disks per pound. Recommended application is 2-4 times a year. More applications may be required if a CLEAN-FLO Inversion system is not used. C-FLO+™ can be applied by distributing the disks evenly around the water body during the summer months or when the water temperature is 55° F or higher.



Clean And Clean Enzymes



Reservoir Algae Control

How it works:

CLEAN & CLEAR™ CONCENTRATED ENZYMES for lakes, ponds and reservoirs result in bioremediation of green algae, filamentous algae and blue green algae to control environmental water pollution. CLEAN & CLEAR™ ENZYMES is a special blend of non-toxic vegetable enzymes from nature that acts as a catalyst to biodegrade nonliving organic matter and reduces available nutrients in the water, thus improving water quality.

What it does:

CLEAN & CLEAR™ ENZYMES softens the cell walls of dead organic matter, making it easier for beneficial bacteria to feed, giving the bacteria a “jump start” in controlling environmental water pollution. Enzymes activate and help natural bacteria to digest organic matter in lakes, ponds, rivers, reservoirs and wastewater. CLEAN & CLEAR™ reduces odor caused by toxic gases from pathogenic (disease-type) bacteria, including hydrogen sulfide, ammonia, amines and mercaptans. CLEAN & CLEAR™ provides the following benefits:

Application :

1. Accelerates biodegradation of organic matter 2. Helps beneficial bacteria compete with weeds and algae for fertilizers such as phosphorus and nitrogen 3. Helps improve water quality 4. Reduces odors, including animal manure odors; improves air quality 5. Safe to use; no health problems 6. Safe in the environment; no pollution concerns 7. Safe around animals 8. Easy to apply 9. Economical to use 10. Helps liquefy organic waste

USE: In lakes, ponds, rivers and reservoirs: Dilute 3-5 ounces into 4-5 gallons of water and spray or pour over water to be treated. Use one gallon per acre-foot of water. Examples: 1/2-acre x 4 feet deep = 2 acre-ft; 4 acres x 10 feet deep = 40 acre- ft. For manure or sewage lagoons, dilute one gallon to 4-5 gallons of water and add to 25,000 to 50,000 gallons of wastewater. CLEAN & CLEAR™ combines enzymatic action with the natural deodorizer yucca schigrada. CLEAN & CLEAR™ ENZYMES for lakes, ponds and reservoirs result in bioremediation of green algae, filamentous algae and blue green algae to control environmental water pollution.

Hydro Consumption

1-3/4 Horse Power Compressor

Drawing 9 amps

Approximately hydro costs \$70.00 per month



Typical Clean-flo waterfront aeration system



Typical cottage Waterfront Inversion Oxygenation Equipment System 1 covering 100ft x 100ft

**1- 3/4 Horse Power Compressor drawing 9 amps
In insulated cabinet**



Total of 5-8 inch micro-porous ceramic diffusers with brass check valves



Approximately 500 ft of self sinking 5/8 airline and all required brass fittings



5 lbs of Weeds B Gone oxygen enriched muck reduction pellets 3 Gallons Winter Warrior 1 lbs of bio-stimulator

Treatments Included

Total cost \$7900.00 Installed Plus Hst

Years 2 and 3 Bio -Augmentation

| | |
|--|--|
| 1 gallons of Clean and Clear Enzymes | 1 gallon of Clean & Clear – pour a gallon over diffuser boils each time CFLO is added. |
| 5 lb's of Weeds B Gone (Oxygen enriched Muck reduction pellets) | CFLO – Distribute 5 lbs of oxygen enriched muck reduction pellets around the treatment area once water temperature hits 60 degree F (End of June) |
| 3 Gallons Winter Warrior | Add 2 gallon in the spring as soon as the system is started. Add 1 gallon 1 month before the system is turned off in the fall. |
| 1 lb. of Bio-stimulator | add 1 lb. to the treatment area - Bio-stimulator enhances the growth of natural bacteria and increases natural biological activity along side of the CFLO and muck pellets |
| For A Total Of 1 Gallons Of Clean and Clear, 5 lbs of Weeds B Gone oxygen enriched muck reduction pellets 3 Gallons Winter Warrior 1 lbs of bio- stimulator | Years 2 and 3 Treatments Aprox \$625.00 Plus HST |