

A swan is swimming in a body of blue water, moving from left to right. The swan's long neck is extended forward, and its wings are slightly spread. The water has a textured, wavy appearance.

LAKE

SAVERS™

Management Strategies for Healthier Lakes

**Scotia, New York – Collins Lake
CLEAN-FLO Restoration Project**

August 2008



Contents

- **About Lake Savers**
- **Collins Lake, Scotia, New York Project Background**
- **Interview Highlights – Brian Kling, President Clean-Flo and Jim Marks, Director Scotia Parks Department**
- **Collins Lake – Before and After Pictures**



About Lake Savers...



Mission:

To dramatically improve the health and recreational quality of lakes, ponds and waterways.



Collins Lake

Scotia, New York

About the Lake

- **Sixty acre lake with public beach.**
- **Beach closed for two years due to fecal bacteria issue.**
- **Milfoil and pondweed growth out of control.**
- **Lily pads growth spanned from “shore-to-shore” on shallow end of the lake.**
- **Watershed management strategies and herbicide treatment were not producing adequate results.**
 - ▶ **Utilizing a range of Systemic and Contact Herbicides for several years prior to 2006.**
 - ▶ **Watershed studies confirmed that they were effectively controlling nutrients entering the lake through a ten year watershed management effort initiated in the 1990’s.**



Collins Lake Restoration Project

Lake Management Program Initiated in 2006

- **Program initiated to control geese population around the lake (Australian Border Collies).**
- **Lake-wide Sonar Treatment applied in June of 2006.**
- **CLEAN-FLO System Installed in July of 2006.**
 - ▶ **19 diffusers deployed.**
 - ▶ **Bacteria and enzyme treatment applied 3 weeks after installation.**
 - ▶ **System run through November 2006, winterized and restarted in March of 2007. Repeated same process in 2007/2008.**



Collins Lake Restoration Project

Results Summary

2006

- **Beach opened 4 weeks after installation of the Clean-Flo System.**
- **Weed levels remained in control through 2006 – Sonar treatment did its job.**
- **Early evidence of breakdown of organics – dead weeds.**

2007

- **No further herbicide treatments required. Milfoil almost non-existent.**
- **Beach open throughout 2007 season.**
- **Notable improvements in the fishery.**
- **Significant reductions in lily pads.**

2008

- **No further herbicide treatment. Milfoil problem eliminated.**
- **Lily pads receded over 150 yards back toward shore – now at a more balanced, natural level.**



Collins Lake – Restoration Project

Interview Excerpts Conducted for the “Sustainable Planet” Television Program Featuring the Clean-Flo System

Brian Kling, President of Clean-Flo International

- *In 2006 when we came to the lake to install the system it was so choked with milfoil and other weeds that we could not get the boat through it. We had to come back with an airboat to install the system.*

Jim Marks, Director, Scotia Parks Department

- *We tried everything to improve this lake. We had been doing chemical treatments and had gotten serious about watershed management over 10 years ago.*
- *Clearly it wasn't working. We couldn't open the beach and the milfoil and lily pads were everywhere.*
- *We took a shot with Clean-Flo because, quite frankly, we were desperate. We weren't sure how well it would work, but we had nothing to lose.*



Collins Lake Restoration Project

Jim Marks, Director, Scotia Parks Department (continued)

- *The results have been terrific. We were able to open the beach four weeks after the system was installed.*
- *The herbicide treatment in 2006 knocked back the milfoil which made an immediate impact. Our herbicide applicator fully expected that we would need additional treatments in 2006 and beyond. We haven't had to treat again since installing the system.*
- *The most amazing thing is the lily pads. They covered the entire shallow end of the lake from shore to the Island and to the other shore. Today, there is just a nice ring of lilies in that area of the lake. They've receded over 150 yards in 2 years.*
- *I can remember last fall over at the outflow to the lake seeing this huge mass of root material. I wasn't even sure what it was. I called Clean-Flo.*
- *It turns out that these were the lily pad roots or tubers. They were literally popping to the surface as the Clean-Flo System gradually reduced the muck on the bottom.*



Collins Lake Restoration Project

Jim Marks, Director, Scotia Parks Department (continued)

- ***Just looking at the lake, you can see how clear it is today. We are getting a lot of positive response from the community.***
- ***Another benefit is the fishing. Its been fantastic. We had a 54" Northern Pike caught this year and several more over 40". What's amazing is catching big bass right off the bottom in the deepest part of the lake in the middle of the summer.***



Jim Marks, Scotia Parks Department on Camera interview on Clean-Flo Project



Collins Lake “Before” Pictures 2006





Collins Lake “After” Pictures 2008 *(Similar View of the Lake)*





Collins Lake “Before” Pictures 2006





Collins Lake “After” Pictures 2008 *(Similar View of the Lake)*





Collins Lake “Before” Pictures 2006





Collins Lake “After” Pictures 2008 *(Similar View of the Lake)*





Collins Lake Before Pictures





Collins Lake “After” Pictures 2008





Collins Lake “After” Pictures 2008

