

As The Lake Churns

Newsletter for the Residents of Lake Harmony – Spring 2019



Spring Edition!

This newsletter is to inform residents of Lake Harmony of the many on-going projects supported by your donations.

The Lake Harmony Association (LHA), The Lake Harmony Watershed Preservation Group (LHWPG), Lake Harmony Estates (LHE), and the Lake Harmony Group (LHG) Board of Directors would like to thank all who donate time and financial support for projects that help keep Lake Harmony a beautiful place to live.

Lake Harmony Benefit

by **Angelo Dubravski (LHWPG-President)**

LHWPG has set the date for the Lake Harmony Benefit to be **held June 15th at Nick's Lake House**. This year again the Benefit will graciously be hosted by Louis and Cyndi Pantages who support this Benefit every year. We hope many other local businesses will continue donating food and auction items as they have in the past along with personal donations from many homeowners. The Benefit raised over \$20,000 last year with all proceeds going towards the Clean Flo Lake aeration project.

HOPE TO SEE YOU IN JUNE



LHG CORNER

The Lake Harmony Group (LHG) is a non-profit corporation that consists of LHA and LHE who own the access roads that run from North and South Lake Drives, the access areas at the base of these roads and the majority of the lake bed. Our mission is to promote the environmental integrity and preservation of Lake Harmony and the adjacent areas. Funding to maintain bulk heads and storm water control come from your support via the Boat Sticker program and Slip Rental Program. Working with LHWPG, we now are supporting the Clean Flo Project to achieve our mission for Lake Harmony. http://www.lakeharmonygroup.com/Boat_Stickers.html

SUPPORT THE LHG PROJECTS BY PURCHASING A 2019 BOAT STICKER

Highlights

- LHG and LHWPG Lake Harmony
- Clean Flo Lake Restoration System set up and started operation June 16th 2018
- All groups working together to support Clean Flo Project
- Clean Flo update
Spring Bio Scan Results
- 2019 Clean Flo Budget
- Projects completed 2018
- 2019 LHG/LHWPG Lake Harmony Benefit
- June 8th LHWPG Open Meeting – LH Firehouse

LHG/LHWPG PROJECTS RECENTLY COMPLETED or TO BE COMPLETED

- Redirecting Storm water and the Paving of Kidder Street \$ 20,000
- Paving upper Summit Street - \$5,000 - 2019
- Upgrade swale at Osceola Street \$ 3,600 2019
- Leaf Pick pickup \$ 5,000
- Clean Flo Upgrades - 2019



Clean Flo Aeration Bubblers at work.

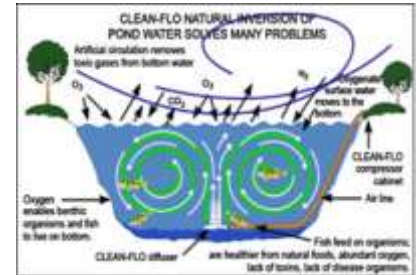


Clean Flo Diffuser Layout at bottom of Lake.

Over the past three years LHG and LHWPG have been working on plans to increase the lake depth and water quality. This has been necessary due to many years of home construction, storm water runoff and organic muck build up. Many options were analyzed but found to be very expensive and with limited funds and lack of grant money available to a private lake, we found a cost effective alternative.

The Clean Flo Process inversion systems are designed using various sized compressors along with self-sinking airlines and micro-porous ceramic diffusers that supply a steady stream of microbubbles from the bottom to the surface of the water. Increasing oxygen throughout the water column allows

to start a sequence of events that provide aquatic weed control, improve water quality, reduce organic muck, odor, harmful gases, coliform bacteria, nuisance algae growth and at the same time increasing water depth, nutrients and improve the fish health.



PROJECTED COST - \$150,000.00

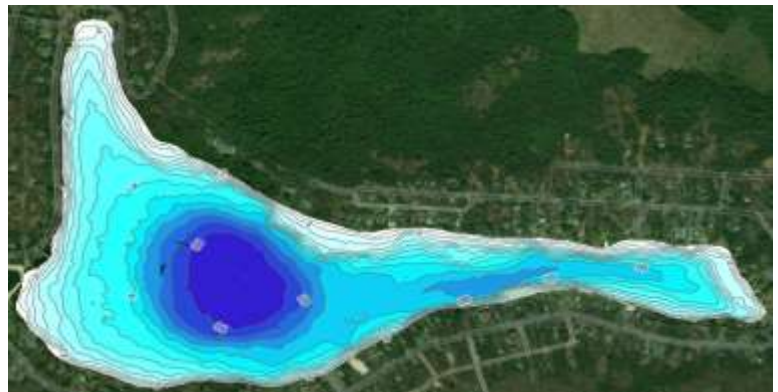
BIOSCAN HISTORY

BioScans have been utilized over the past few years and are designed to give a true picture of the bottom of a body of water through the use of sonar. BioScans were taken in 2013, 2017 and then in 2018. Between 2013 and 2017 we lost about 3 ft of water in some areas due to muck (organic) sediment build up. In 2018 we installed the Clean Flo System and in October of 2018 performed another Bio Scan and compared against the 2017 scan

2018 Bioscan-The water volume increase of 29.9 acre-feet is due to a reduction of 29.9 acre-feet of organic sediment. This is equivalent to 48,239 cubic yards of organic sediment reduction!.

2019 – April BioScan- Map above right (Post Winter operation results) The deepest reading obtained in the lake was 15.41'. There is a small area starting to develop that is at least 15' deep that can barely be seen on the contour map. The sonar data had 49 readings at 15 feet or more. The 11' contour down the eastern section of the lake has more than doubled in size. Many of the other contours have also increased in size, including creeping up further into the cove. The area of water inside the 10 foot contour has increased from 37.85 acres in October 2018 to 39.37 acres in April 2019 and the average depth inside the 10 foot contour has increased from 12.01 feet to 12.12 feet.

April 2019 BioScan Map



Scan Details 10/9/18

The volume of water in 2018 was 940.12 acre-feet of water compared to the volume of water in 2017 was 910.22 acre-feet of water.

Scan Details 4/4/19 (Post Winter Operation)

The reduction of 8.08 acre-feet of sediment is equivalent to 13,036 cubic yards of sediment reduction. That is equivalent to approximately 652 tri-axel dump trucks of sediment leaving the lake. There is a water volume increase of 10.47 acre-feet from October 2018 to April 2019.

The full Clean Flo report can be found on www.lhwpg.com or email lhwpg1@gmail.com

We are planning another Bio Scan in the Fall 2019

2019 Clean Flo Budget

Current Balance	\$ 17,785.70
Est. Oct thru Dec Electric	\$ 1,500.00
Winter Advertising	\$ 1,000.00
End of Year 2018 Balance:	\$ 15,285.70
Projected Income 2019	\$ 45,000.00
Beginning Balance 2019	\$ 60,285.70
Est 2019 Expenses	
Loan Pmt \$ 6,876.42 x 4	\$ 27,505.68
Electric \$ 500 x 12 month	\$ 6,000.00
Shed Insurance	\$ 500.00
Clean Flo Charges	\$ 21,800.00
2 additional Diffusers	<u>\$ 1,387.00</u>
TOTAL EXPENSES :	\$ 57,192.68
ASSETS 2019	\$ 60,285.70
EXPENSES 2019	\$ 57,192.68

Winter Operation- Clean Flo

As you have noticed, we made an effort to maximize the effectiveness of the Clean Flo process by running the aeration system throughout the winter.

Even though this reduce the amount of ice that formed in and around the bubblers, many ice fishermen, skaters and snowmobilers heeded the warning when venturing onto the lake.

THANK YOU FOR YOUR PATIENCE AND UNDERSTANDING FOR ALLOWING THE SYSTEM TO MAXIMIZE IT'S EFFECTIVENESS THIS PAST WINTER SEASON

We will be monitoring the results of our Bio Scans to determine winter operation for 2019/2020

Clean Flo Funding

The Clean Flo project was not possible without the initial loan from a private homeowner who gave us a \$ 120,000.00 loan. We (LHWPG and LHG) are responsible to pay this loan back in quarterly installments of \$6,876.42 for 5 years. This agreement has been entered into with the confidence that all the homeowners of Lake Harmony will step up and support this program. We need your continuing support to make these payments. Local businesses, private individuals and all of the three Lake Harmony groups (LHA, LHE and the Lake Group) have donated or earmarked funds (\$10,000 per year) and homeowners in Split Rock to help defer the cost of saving our lake.

WAYS TO SUPPORT THE CLEAN FLO PROJECT

Send check to LHWPG

PO Box 791, Lake Harmony, PA 18624

Note in memo field that the donation is for the Clean Flo project

Or

Credit Card Payment link: <http://www.lhwpg.com/donate>

Click on the "Aeration/Bio Augmentation Fund Button"

Join Use at the next LHWPG Open Meeting
Saturday June 8th at Lake Harmony Firehouse

LHWPG is a 501(c) (3) non-profit organization

ALL DONATIONS ARE TAX DEDUCTABLE