

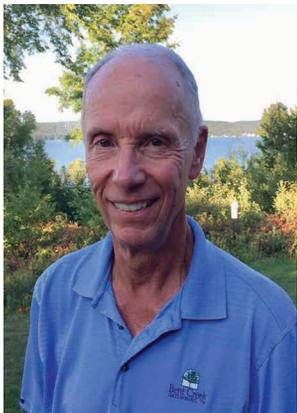
# THE LAKE GUARDIAN

SPRING 2020

Photo Credit: Gary Osterbeck

## CELEBRATING 50 YEARS OF PROTECTING LAKE CHARLEVOIX

### President's Corner



*As I write this in early April the full impact of the rapidly escalating COVID-19 epidemic on our lives is difficult to ascertain. However, I hope that by the time you read this the crisis has peaked and we can begin to start our journey back to normalcy. LCA plans to continue its work to the fullest*

*extent possible in these times so please enjoy reading about past and future projects and our comments on current issues concerning Lake Charlevoix.*

Fifty years old and going stronger than ever! 2020 marks the 50th anniversary of the Lake Charlevoix Association which started in 1970 as a home owners association and has evolved to the environmentally focused organization that it is today. We plan to take this opportunity both to celebrate the occasion and to more fully engage with our members as we move into the future. Members will be invited to join us at our annual meeting and 50 year celebration which we have postponed to September. Please keep an eye out for your invitation.

Any hope that water levels might start going down doesn't seem to be in the cards. As of this time, the US Army Corps of Engineers is predicting that this summer may bring even higher levels than last summer. Protecting against severe erosion is clearly necessary, and we ask that everyone consider doing so in a lake friendly way.

(See pages 4-5). Please keep your neighbors' adjacent waterfronts in mind when making changes to avoid collateral damage to them.

In our Fall 2019 newsletter we reported the overall results of the 2018 shoreline survey. The survey focused on greenbelt quality, shoreline erosion and the presence of cladophora. We are happy to share the survey results with you individually about your property. (See page 3) We are always here to provide advice on greenbelt and shoreline improvement.

Septic Systems: not a topic that any of us like to spend much time discussing. However, proper functioning of these waste water treatment systems is critical to keeping Lake Charlevoix clean and safe for swimming, boating and fishing. Partnering with the Health Department of Northwest Michigan and Central Michigan University, we are embarking on what will likely be a multi-year project to assess the existence of leaking or malfunctioning septic systems around the lake and remain proactive in finding solutions to these hazardous situations (Article on pages 6 & 7). We welcome your questions, comments and input on this project.

May is membership month so if you are not currently a member, please join many of your Lake Charlevoix neighbors supporting the work of LCA. As we look forward to our second fifty years, the lake protection endeavors that we plan to engage in and the greater need for paid administrative support will require increased finances. If you are already a member, please consider moving up a membership level or two or making an additional contribution to support our efforts.

Stay well and enjoy the outdoors on our beautiful lake this summer.

John Hoffman, President

SPRING 2020  
Inside...

2 & 3 - 50 Years of LCA  
4 - Shoreline Survey  
5 - Swimmer's Itch

6 & 7 - High Water  
8 & 9 - Septic Study  
10 - No Wake Buoys

11 - Regulations High Water  
12 - Boat Signage & Newsbites

# 50 Years of LCA...From the Beginning

Joel Van Roekel

The year was 1970. Large-scale concern for the environment was an idea that was just catching on. That year marked the inauguration of the Environmental Protection Agency, celebration of the first Earth Day, and in northwest Michigan, the inception of the Lake Charlevoix Property Owners Association.

As with many movements, LCPOA started with a single individual and a powerful idea. John Kiser, a longtime lake resident, single-handedly knocked on every door along the lake. He wanted to awaken the consciousness of lake front owners and increase their appreciation of the beauty and health of the lake. He urged them to take loving care of it to keep Lake Charlevoix healthy and beautiful.

His diligence lit a flame, and a proposal to form an association was made. A meeting was called to see if there was enough interest to make an organization plausible. The response was immediate, and a board was elected on the spot. *(Kiser, of course, became the first President, and Mary Juday was Secretary Treasurer. The Board's primary duty was to establish association by-laws and a meeting schedule, including an annual meeting.)*

Water Monitoring commenced immediately, with records kept and findings reported to association members. That monitoring has continued over the years by many volunteers from the association and still takes place today.

The second decade of LCPOA saw a number of changes including renaming itself to 'Lake Charlevoix Association'

in 1985. The board wanted to include all those "who love the lake" rather than only lakefront property owners. Opening the organization to "lake lovers" worked. Membership jumped from less than 300 in 1985 to more than 400 in just two years. The major concerns of the LCA in the 1980's included the effects of the all-time high-water levels in Lakes Michigan/Huron, shoreline Cladophora, deep water oxygen depletion, and a Lake Charlevoix Tributary Study looking at sources of pollution in ten tributaries.

The 1990's was a decade of good news and bad news. The Students Experience Lake Charlevoix (SELC) began in 1995, no swimmer's itch was found in the lake, LCA celebrated its 25th anniversary, and a series of water quality monitoring studies were conducted. The bad news was the arrival of Zebra Mussels, low levels of deep water dissolved oxygen, the noise from personal watercraft and power boats, concerns about leaking septic systems, the discovery of the invasive Eurasian Watermilfoil plant, and 11% of lake properties were found to have Cladophora along their shoreline.

The twenty-first century began with the launching of the "Lake Keeper" program with the help of the Charlevoix County Community Foundation and the Tip of the Mitt Watershed Council. The program included public relations outreach and water quality monitoring. The "state of the lake" in 2001 was mixed in that the trophic index (a measure of lake health) was rising slightly and the number of parcels found to have Cladophora was 14%. The boat count that year totaled 4,200. 2003 brought a rash of complaints about Personal Watercraft

#### Mission:

Protect the natural quality and beauty of Lake Charlevoix.  
Promote understanding and support for safe and shared lake use.  
Advocate sensible and sustainable practices for lake use and development.

## LCA Board of Trustees

John Hoffman - President  
Tom Darnton - 1st Vice President  
Joel Van Roekel - 2nd Vice President  
Mike Dow - Treasurer  
Sherry Pursel - Secretary

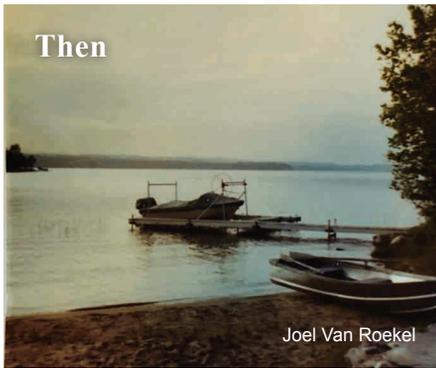
Chris Heroy - Director  
Joe Kimmell - Director  
Larry Levensgood - Director  
Dan Mishler - Director

[www.lakecharlevoix.org](http://www.lakecharlevoix.org)

Like us on Facebook!

Continued from page 2

being too fast and too noisy. At the end of the decade, Asian Carp, Cladophora levels, lake pollutants, and Phragmites were the environmental topics of concern.



The twenty-teens began with low lake levels (a foot lower than average), oil leases and gas drilling causing a fuss, freshwater jellyfish invading the South Arm, and a continuation of the battle against

Phragmites. The boat count in 2010 was 5,458. There was a noticeable shift in the attention being paid to natural shorelines, greenbelts, and the rules that regulate them. The Lake Guardian program was inaugurated in 2012 to educate property owners in lake-friendly practices. Water levels became the prime topic of conversation in 2013 as the water dropped to an all-time low.

For the past 25 years the LCA has supported Students Experience Lake Charlevoix, a half-day on-the-water experience aboard the Beaver Islander as it anchors a mile off the entrance to Round Lake. In that time, over 8,000 fifth or sixth grade students from area schools have cycled through seven stations that measure water clarity, sample life on the lake bottom, see how ground water moves throughout the watershed, gotten the latest updates on aquatic invasive species, and learned about safety on the water. SELC has been made possible through the cooperation and support of Tip of the Mitt Watershed Council, Beaver Island Boat Company, and the LCA.



Fifty years ago, the LCA started with a single individual who cared about our lake. Since then, it has grown into a highly respected, proactive organization whose mission is to protect and promote one of the most beautiful lakes in the country. Today, the LCA has 675 members. If you are a member, we thank you for your support. If you are not a member, please consider becoming one. The Lake Charlevoix watershed is ours to protect.

## If you are wondering “What has LCA done for me lately?”, here is the answer.

The past five years have seen an expansion of watershed related programs. LCA has initiated or supported the following programs:

- ◆ Lake Guardian Program
- ◆ Charlevoix Tributary Assessment
- ◆ Lake Charlevoix Homeowner’s Guide
- ◆ Low Speed Poker Run
- ◆ Lake Charlevoix Watershed signs
- ◆ Swimmer’s Itch Study
- ◆ Aerial & Surface Survey of the Lake
- ◆ LCA/Boyne City Shoreline Demonstration Garden
- ◆ A single-use plastic reduction program
- ◆ Participation in the Lake Charlevoix Watershed Plan
- ◆ A Reduce/Reuse/Recycle Program in all three cities on the lake

In addition to support of programs like those above, LCA has continued its Phragmites Eradication program. For more than a decade, volunteers have walked or floated along the shoreline checking for the invasive grass, marking its location, and after Labor Day, spraying each plant with a state-approved herbicide. What started out as a situation requiring professionals with specialized equipment has now been reduced to LCA members spotting small stands or individual stalks of Phragmites. Due to the tenacity of this plant, we will never completely eradicate the problem but with continued vigilance should be able to keep it from getting out of hand.

# Shoreline Survey Completed on Lake Charlevoix

Dan Mishler, John Hoffman, & Tom Darnton

## How does your greenbelt rate? Do you have erosion, algae?

As you know, protecting the natural beauty and quality of Lake Charlevoix is the number one goal of the Lake Charlevoix Association. With that in mind, we regularly contract for a survey of our lake shore and work with landowners to lessen their impact on the lake. Lake shorelines are the critical interface between land and water where human activity has the greatest potential for degrading water quality. Maintaining a high quality greenbelt can help. We encourage everyone to learn how your shoreline rates and to work to improve your greenbelt as needed.

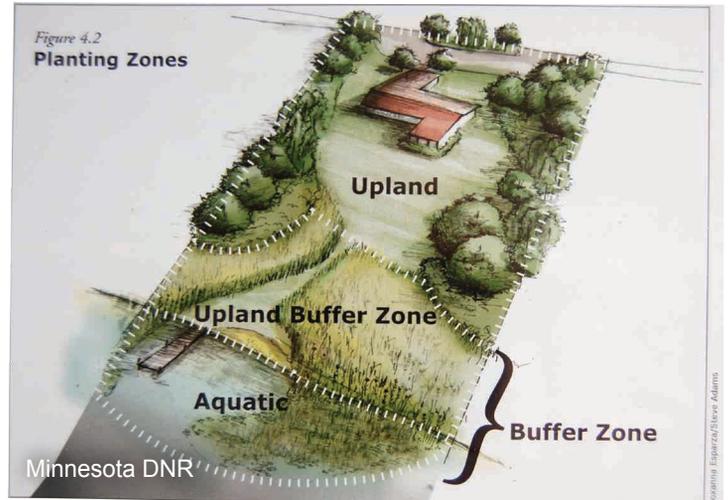
### The Survey

In 2018, Tip of the Mitt Watershed Council and ZeroGravity Aerial Drones, funded by the Charlevoix County Community Foundation and LCA, surveyed the shoreline on Lake Charlevoix. Each of the properties fronting Lake Charlevoix was carefully analyzed, and *Cladophora* algae, greenbelts, erosion, and alterations (e.g., seawalls, beach sanding) were documented. At this time, we are focusing on *Cladophora* and greenbelts.



**Cladophora**, a green filamentous alga, is known to grow only where excess nutrients are present. The presence of *Cladophora* is therefore a strong indicator that nutrients may be entering the lake in that area. We plan to focus on areas with *Cladophora* presence as we begin

our work in the summer of 2020, looking for leaking septic systems and other nutrient input.



A **greenbelt** or buffer zone is the vegetated area along the shoreline, and our townships require up to 50 feet of native vegetation. A healthy greenbelt, consisting of a mix of native trees, shrubs, and herbaceous plants, provides many benefits to the lake ecosystem. Importantly, greenbelts improve shoreline stabilization and erosion control, provide habitat for shoreline-dependent species, filter runoff and contain sediments, pollutants and chemicals. With deep-rooted native plants, the greenbelt will also absorb and utilize nutrients, helping to prevent them from causing excessive plant growth in the lake. Please note that turf grass from door to shore does not function well as a “greenbelt”.

### Your Rating

Results from the 2018 survey were tabulated and are available in comprehensive reports online. Please use the following directions to access your results. Greenbelts are rated 1 through 7, with 7 being the best. If you received a 5 or higher, great job, keep utilizing those native plants. If your greenbelt rating was on the lower end, we encourage you to consider adding native plants to help protect the lake. If you would like advice or help with improving your greenbelt, email us at [info@lakecharlevoix.org](mailto:info@lakecharlevoix.org). Native plants and a robust, filtering greenbelt can be a beautiful addition to the shoreline and will help protect the lake forever.

### To Access the Confidential Results for Your Property:

- ◆ Find your randomized code on the LCA mailing label included with this newsletter.
- ◆ Go to the website <https://www.freshwatercenter.org/lca.html>.
- ◆ Enter your random code number as illustrated in the photo on this page.

Sample Label:

S	5, 78, 655, 1398
Paid thru: 05/31/2020	
Name	
Name	
Address	
City, State Zip	



# IT'S TIME TO RENEW YOUR LCA MEMBERSHIP!

We know that you understand how important Lake Charlevoix is to our quality of life and how much the LCA does to protect our lake. Your support of the LCA is very much appreciated and makes a big difference. We want to continue to do all possible to protect the lake we love, and your contribution will assist us in doing so.

## WHY SUPPORT THE LCA?

### LCA Programs:

- Shoreline Greenbelt Demonstration Gardens
- Lake Guardian Program
- Plastic Reduction Program
- Phragmites Control
- Watershed Awareness Signage Project
- Boat Count
- Poker Run
- Boat Launch Aquatic Invasive Species Signage Project

### LCA Supports:

- Students Experience Lake Charlevoix
- Watershed Academy for Students
- Septic Issue Studies
- Shoreline Survey
- Swimmer's Itch Studies
- Watershed Restoration Studies
- Invasive Species Control Projects
- Educational Website & Newsletters

Please take a few minutes now to join or renew with the enclosed membership envelope or use our website: [www.LakeCharlevoix.org](http://www.LakeCharlevoix.org). (Please remember that May is renewal month. Our membership year is June 1<sup>st</sup> to May 31<sup>st</sup>.)

***We truly appreciate the patronage our 675 members give us and welcome anyone not currently on our membership roll to join us in protecting our lake.***

Your LCA Membership helps to protect Lake Charlevoix and its beautiful watershed. Thank you!

## Swimmer's Itch Update

*John Hoffman, Tom Darnton and Dan Mishler*

### 2018

#### STUDY RESULTS

- There is evidence of significant Schistosome flatworm presence in Lake Charlevoix.
- The analysis of waterfowl fecal samples showed that several species of birds in Lake Charlevoix are infected, including: common mergansers, mallard ducks and geese.
- A study of Lake Charlevoix snails indicated some abnormality, which may explain why Lake Charlevoix has not yet had a great deal of reported cercarial dermatitis cases.

### 2019

#### STUDY RESULTS

- Majority of sampling sites indicated very low levels of the Schistosome flatworm.
- Waterfowl fecal samples revealed a decreased percentage of birds infected with parasitic miracidia. (2018 study: 57% infected vs. 2019 study: 25% infected)
- Waterfowl numbers remain essentially constant. Concluded no significant jump in total number of birds.

**We** are fortunate that Lake Charlevoix does not appear to have a significant swimmer's itch problem. Our fears of an upward trend in parasite population and infected waterfowl based on the results of the 2018 study were eased by the results of the 2019 study. The results indicated that nearly all of the sites where water samples were taken show no or very low levels of itch-causing parasites.

Although there is no current intention to conduct a further swimmer's itch study, the LCA board continues its request that anyone experiencing swimmer's itch report this to LCA by emailing us at [info@lakecharlevoix.org](mailto:info@lakecharlevoix.org). You can also report it directly to the database maintained by one of the agencies that conducted the studies by filling out the online survey at [www.swimmersitch.ca](http://www.swimmersitch.ca). Various prevention strategies can be found in a publication entitled "Preventing Swimmer's Itch with 2020 Vision" ([www.freshwatersol.com](http://www.freshwatersol.com))

LCA would like to thank the Charlevoix County Community Foundation for funding assistance with this project.

# Can We Save the Lake When We Save the Land?

Joel Van Roekel

The line of trees along my shore has been there for almost a half-century. Birch, Tamarack, Red and Sugar Maples, and a clump of Cedars that has been on the point seemingly forever. These now stand defoliated, grim testimony to the ravages of record high water levels.



Water, Water, Everywhere! was the headline of our last newsletter. Water levels continue to be of concern as new record highs have been recorded for January, February, and March of 2020.

While high water can cause a number of issues for shoreline owners, a major concern is the “result” of what happens when the water meets the land. Twenty years ago, Douglas Fuller, then with Tip of the Mitt Watershed Council wrote that “Shorelines are areas of unending conflict between the land and the natural forces of wind, waves, gravity, and currents.” 1.

The current status of this ever present conflict is a level of shoreline erosion that we have not seen in the past 30 plus years. People are literally watching in real time as their beaches are submerged and their shoreline dissolved. The record high water levels we are currently experiencing are once again taking us into uncharted territory. With this much water in Lake Charlevoix, simple, quick-fix solutions that also provide long-term, lake-friendly shoreline protection are few and far between.

## Shoreline Erosion 101 - Five Fundamental Questions

According to the Michigan Natural Shoreline Partnership, [mishorelinepartnership.org](http://mishorelinepartnership.org), there are five steps required to solve a shoreline erosion problem.

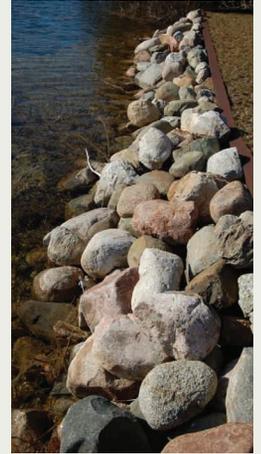
### 1 How do my lake and my land meet?

A critical step in dealing with a shoreline erosion problem requires answering two important questions. (1) What is my shoreline made of? (Some are naturally rocky while others are mostly sand, gravel, or soil) and (2) how much wave energy do I get? (Wave energy on the Main Body is different than that on the South Arm.)

To learn about lake conditions and lake processes go to Tip of the Mitt Watershed Council’s website, [www.watershedcouncil.org](http://www.watershedcouncil.org). Go to “About Us,” > “Resource Library,” > “Publication Download Library,” > “Shoreline Stewardship/LID Practices,” > click on “**Understanding, Living With, and Controlling Shoreline Erosion**”. It is a highly regarded publication on the what, why, where, and how of shoreline erosion.

### 2 Assess what is happening on the land.

What type of shoreline do you currently have? What is at the water’s edge? Where on the continuum of “natural” to “hardscape” shoreline do you fall?



If you have chosen not to “hard armor” your shoreline with a sea wall or riprap, a buffer strip of native, natural, diverse vegetation is critical. A blend of trees, shrubs, grasses and ground cover provides woody root systems and flexible stems that absorb wave energy.

### 3 How do I construct an erosion control system?

The first step is to educate yourself on the factors that will impact any type of erosion control you choose. Lake Charlevoix is a “high-energy” lake that requires a thoughtful plan designed by someone with expertise in shoreline protection and erosion control. Two credible sources for lake-friendly erosion control information are: Tip of the Mitt Watershed Council [www.watershedcouncil.org](http://www.watershedcouncil.org), and Michigan Natural Shoreline Partnership, [www.mishorelinepartnership.org](http://www.mishorelinepartnership.org).

In addition to thoughtful, up to date publications, these sites can provide you with shoreline assessment information and guidelines for locating professionals to aid you in design or installation.

Remediating your shoreline will depend on your answers to Question #2, “Assessing Your Shoreline.” A variety of erosion solutions are available, each with its own strengths and weaknesses. However, there are no “magic bullets” for high water problems.

## VERTICAL SEA WALLS, RIPRAP, AND REVETMENTS

**Sea walls** work by reflecting wave energy back into the lake. Well engineered sea walls can last for many years. Those with poor designs have caused a number of problems at their sites. “Scouring” occurs when



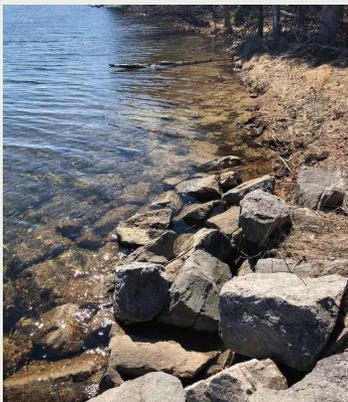
Continued from page 6

wave energy is forced downward after hitting the sea wall. This downward wave action then undercuts the base of the wall and leads to wall failure.

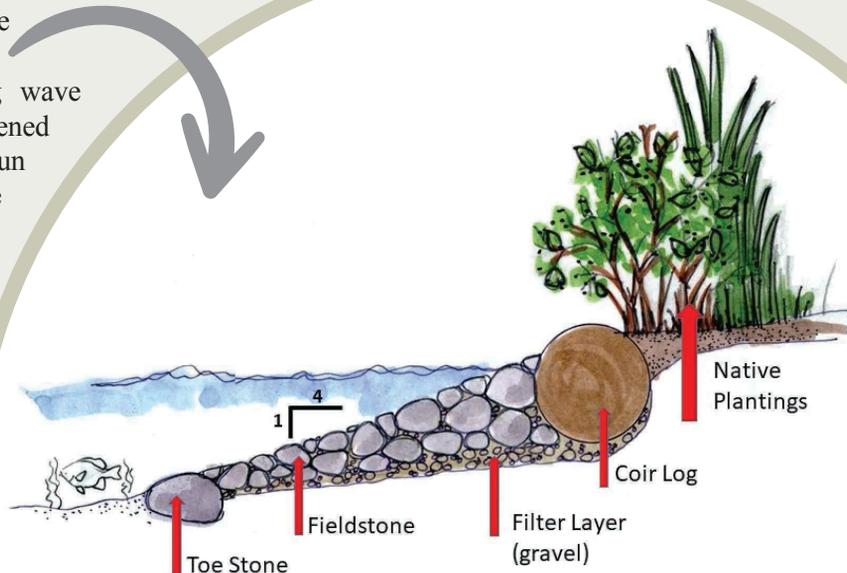
Several environmental issues are associated with certain sea wall and riprap designs. "Flanking" can cause the erosion of neighboring shorelines. This occurs when wave energy strikes the face of the seawall or hardened slope and is then deflected sideways eroding adjoining properties. Sea walls also receive criticism for disrupting the natural movement of sand and shoreline materials around a lake. Due to their design sea walls may create a barrier that disrupts wildlife movement from lake to shore to lake.



**Riprap** is a permanent layer or mound of stones ranging from boulders to four inch cobbles. It is often used on lake shores where the wave energy is too great for natural or vegetative solutions. There are a number of technical requirements related to stone size, mass and density of the stones and slope that require advice from a shoreline professional.



**Revetments** are highly effective sloped structures for absorbing wave energy. Instead of rebuffing wave energy like a vertical wall or hardened mound, they allow waves to "run up" the rough surface of their slope depleting wave energy. They also reduce wave scour and rebound with their carefully designed slope.



#### 4 What do I have to do to maintain my system?

Each design has its own maintenance requirements. Steel sea walls need to be inspected for signs of cracks, corrosion, plugged weep holes, and lake bed scouring. Riprap requires inspection for dislodged stones, wave scouring on the bottom layer, and inspection of the soils underlying the mound or wall. Revetments require inspection of the toe stones, fieldstone slope, the filter layer base, and the coir logs.

#### 5 What can landscaping do to help my shoreline?

Landscaping can play a crucial role in shoreline erosion control. By using native plantings and natural materials at the shoreline, you get a greenbelt that requires less maintenance, has deeper root systems, and supports the birds and animals native to our area. For ideas, visit the LCA/Boyer City Shoreline Demonstration Gardens.

#### Two Important Reminders

- 1 The type of shoreline protection you select should be based on the specific features of your site, the specific cause of the erosion, and include only the minimal amount of shoreline hardening necessary. The key is obtaining a well-informed, professional analysis of the characteristics native to one's particular shoreline.
- 2 It is important to note that any work on your shoreline below the Ordinary High Water Mark requires a.) Checking your township's requirements, b.) County soil erosion permit, c.) A permit from Michigan Environment, Great Lakes & Energy, and d.) Possibly one from the Army Corps of Engineers. Information may be found at [michigan.gov](http://michigan.gov) on their PDF on "Shoreline Erosion Protection".

# Preventing Leaking Septic Systems in the Lake Charlevoix Watershed

Septic Study by Dan Mishler, John Hoffman & Tom Darnton

The following is a general outline showing the 3 major parts of our plan for this multi-year project.

## PART A - Community Outreach and Education

1. We are Partnering with the Walloon Lake Association and Conservancy in our outreach and education efforts. We both agree that part of the responsibility of owning waterfront property is maintaining septic systems. We also agree that education is key to helping people do their part.
2. Our initial educational outreach effort is the centerpiece of this newsletter, which is being mailed to all riparian owners around Lake Charlevoix, approximately 2600 homes.
3. We encourage you to use the information in this newsletter, which includes helpful septic maintenance tips from the EPA, and a file folder designed to keep your septic system maintenance records.
4. You can find more helpful information about septic systems and maintenance thereof of at: <https://www.epa.gov/septic/septic-systems-outreach-toolkit>.
5. It is important that everyone understands that septic systems are not "Flush It and Forget It". These systems need TLC, including limiting what is flushed and regular pumping and inspections.

## PART B -An extensive study of enteric bacteria, and the general quality status of our lake

1. We plan to collect approximately 120 samples around the lake, roughly every  $1/2$  mile, with special emphasis on areas of inlets, where Cladophora was found in our recent shoreline survey, and where we suspect older septic systems may be leaking.
2. In a second round of sampling, we plan to focus on any locations that had positive results from the first round, as well as following up where Cladophora was found and in suspect areas. We plan to run these samples for human specific enteric bacteria using qPCR. At this point we also plan to test for free Chlorine and Boron. Both Chlorine and Boron are only in the environment from human input and are good indicators of leaking septic systems.

## PART C - Involve Homeowners in Affected Areas

1. Engage the Health Department of NW Michigan for support to reach out to owners in areas where enteric bacteria were found. Through the health department we would work to gain neighborhood support for having systems in the area tested.
2. If needed, apply for grants to help owners where remediation is warranted.

## We proceed with this multi-year project

with the assumption that everyone who uses and enjoys Lake Charlevoix is committed to helping keep Lake Charlevoix beautiful, clean, and safe for recreational use. It's never easy addressing septic systems, but we feel it is a necessary part of keeping Lake Charlevoix one of Michigan's true gems. One thing we know for sure is that septic systems need regular pumping and maintenance. A big part of our responsibility as lakefront owners is to take care of our septic systems. This is especially important when our system is near the lake.

## VOLUNTEERS NEEDED

For our **Septic Study**, we need;  
small boat drivers & drivers to transport samples

Please contact us at  
[info@lakecharlevoix.org](mailto:info@lakecharlevoix.org)

Several data points have led us to believe that septic systems in the Lake Charlevoix Watershed could be negatively impacting our lake. These data points include; Cladophora growth, studies done on other lakes, discussions with the Health Department of Northwestern Michigan Director, Scott Kendzerski, and our participation in a focus group that looked into "The Septic Question", led by Grenetta Thomassey of Tip of the Mitt Watershed Council (TOMWC).

*Continued on page 9*

## LICENSED SEPTIC HAULERS

### CHARLEVOIX COUNTY

- Jordan Valley Septic Pumping
- Roadrunner's Septic Pumping
- Bradley's Septic Service

### EMMET COUNTY

- Bob's Septic LLC
- K & J Septic Service

*Cladophora as an indicator: See Survey Article for details. Cladophora, a green, filamentous alga that grows on solid substrate in shallow water where excess nutrients are available, was found in many areas of our lake. This could indicate leaking septic systems in those general areas.*

Studies on other area lakes, especially Higgins Lake, have reportedly uncovered significant evidence of septic systems leaking into their lake. Their association is actually pushing for a sewer system all the way around their lake. Another study by Dr. Joan Rose of MSU showed conclusive evidence of human bacteria from septic systems leaching into surface waters, stating, "But in this study, sample after sample, bacterial concentrations were highest where there were higher numbers of septic systems in the watershed area."

To pull this all together we have been working with Scott Kendzerski to develop a plan to assess the problem in Lake

Charlevoix. Our program will include a major educational effort around maintaining septic systems, and a water quality study looking for septic system input into Lake Charlevoix, which we will be initiating in the spring of 2020. We plan to make use of the intern at the Health Department of NW Michigan for 2 days per week for 10 weeks to help us with sampling. We also have an agreement with Central Michigan University, whereby two research students will be carrying out some of the research for both general water quality and also helping us look for human enteric bacteria in the lake. We have received a grant from the Charlevoix County Community Foundation to support our project.

# Do Your Part. Be SepticSmart!



**Shield Your Field**  
Divert rain and surface water away and avoid parking vehicles and planting trees on your drainfield.



**Don't Overload the Commode**  
Don't flush diapers, wipes or other items meant for a trashcan down the toilet.



**Think at the Sink**  
Limit use of your garbage disposal and avoid pouring fats, grease, solids and harsh chemicals down the drain.



**Don't Strain Your Drain**  
Use water efficiently and stagger use of water-based appliances, such as your washing machine or dishwasher.

**Protect It and Inspect It**  
A typical septic system should be serviced every one to three years by a septic service professional.

**Pump Your Tank**  
Ensure your septic tank is pumped at regular intervals as recommended by a professional.

**Keep It Clean**  
If you are on a well, test your drinking water regularly to ensure it remains clean and free of contamination.

**Drainfield**  
**Groundwater Recharge**



**Well**

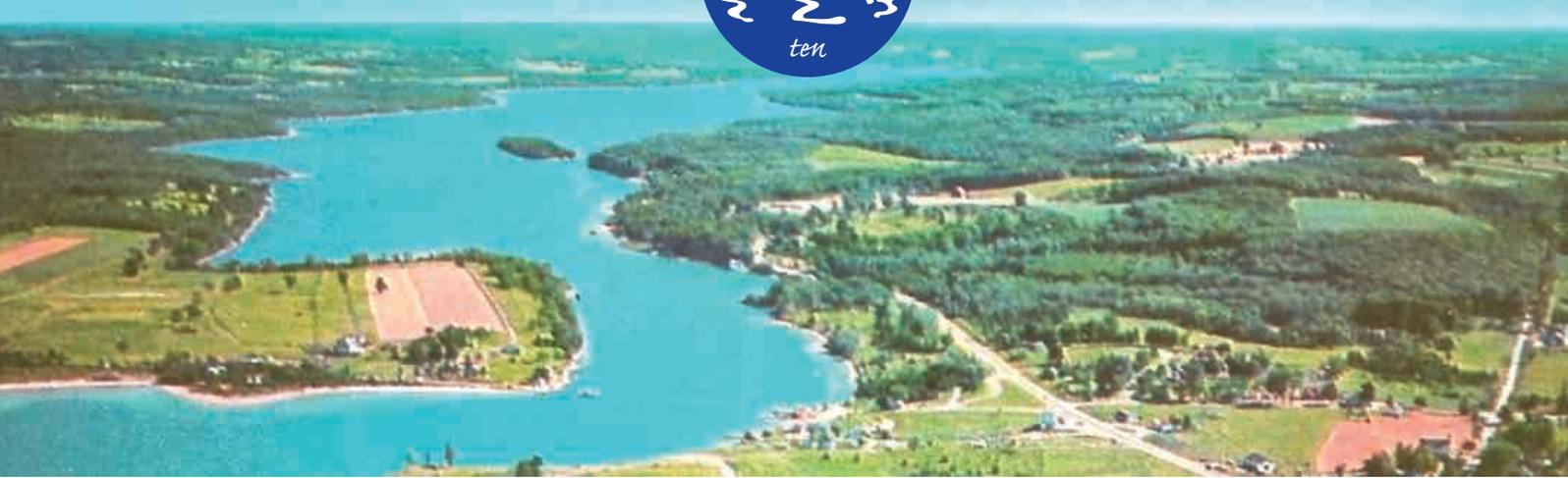
Aquifer



**WALLOON LAKE**  
ASSOCIATION AND CONSERVANCY



830-F-180-03 | May 2018



# Buoys in the Narrows

## CHANGES AHEAD FOR IRONTON NARROWS NO WAKE ZONE

Joel Van Roekel and Joe Kimmell

It's a beautiful day on the West Arm of the lake. You've made good time across the big water and are ready to see what the South Arm has to offer. Just south of Hemingway Point, off your port bow, you see the first of four bobbing white cylinders, their black letters spelling out "SLOW NO WAKE" and your voyage becomes a crawl. For some, it is a quiet time to gawk at the many beautiful summer homes along the channel or to chat with shipmates. For others, it is an unnecessary restriction in a navigable waterway and a waste of valuable time on the water.



No Wake Signage and Buoys from 1991. The LCA continues to champion the importance of boater safety on Lake Charlevoix.

This drama first played out fifty years ago, when the Michigan DNR and shortly thereafter Eveline Township, passed regulations that defined "The Narrows" between the two arms of Lake Charlevoix. The wake regulations stated that boats less than 26 feet had to proceed at slow-no wake speed within 500 feet of shore or dock or pier. The distance to shore doubled to 1000 feet for boats over 26 feet.

Because the width of the channel varies from wider than 1000 feet at the entrances to less than 500 feet in the channel, vessel speed became problematic. To that end, the LCA received permits from the DNR and U.S. Coast Guard to place four buoys along the channel in the early 1990's. LCA eventually relinquished responsibility for the installation and maintenance of the buoys to Eveline Township.



Project chairman Leon Vercruyssen stands between two of the four LCA buoys for the Ironton narrows purchased through LCA member dues. Each buoy stands nine feet tall and contain six 9-volt batteries for three different lights.

Due to concerns over potential liability, and the cost of maintenance and installation, Eveline Township has decided to discontinue the placing of "No Wake" buoys in the Narrows. After deciding to terminate the Township's involvement, Charlevoix County was approached to assume responsibility for the buoys, but the County expressed similar concerns over assuming liability for the operation and maintenance of the buoys. They declined to continue the program as a County function. Current plans are to install "No Wake" signage at both ends of the Narrows, and to increase Sheriff patrols during busy periods for the coming summer.

Placing buoys in the narrows has not been without controversy. Over the years there have been letters of appreciation from property owners along the channel and castigation from those who felt the buoys infringed on their rights as boaters. Given the current water level, concern for its impact on docks, piers, and the shoreline of the narrows, as well as safe operation of the Ironton Ferry, the LCA is supporting efforts to encourage government entities to install and maintain the buoys.

# HIGH WATER REGULATIONS

Joe Kimmell

In May, 2013, LCA hosted a community forum to address the near record low water levels on the Great Lakes. Amid the clamor for action, Lana Pollack, U.S. Chair of the International Joint Commission overseeing the Great Lakes, cautioned hasty action, pointing out that the water levels have always been subject to seasonal fluctuation. Six years later, with water levels near all time highs, her advice is once again relevant. Overreaction to or looking for simple solutions for our water levels will in the long run prove ineffective.



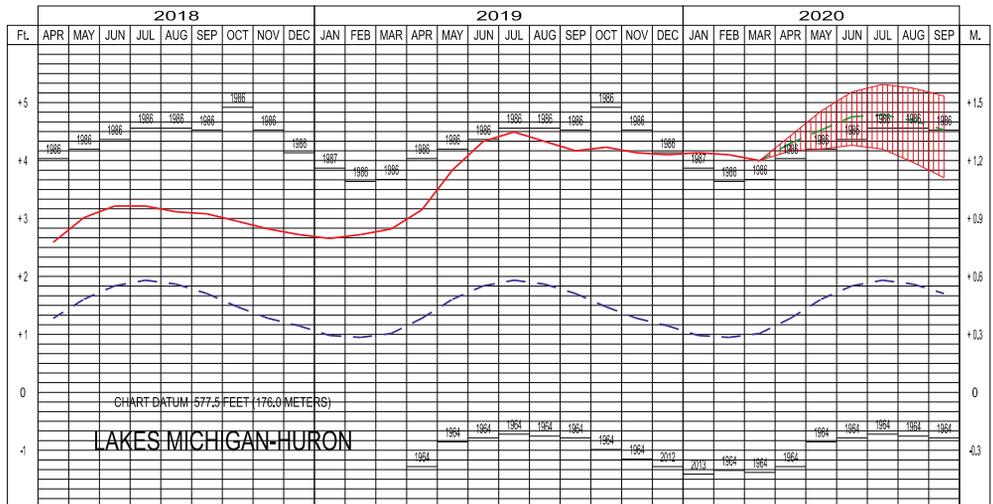
That said, current water levels are causing significant shoreline erosion, particularly on the shores of Lake Michigan, and the State is acting to ease some permit requirements. Senate Bill 714, currently under consideration in the Legislature would permit temporary structures to be installed, and later removed, and specifies DNR approved material. For Lake Charlevoix, a permit is still required from the Department of Environment, Great Lakes and Energy (EGLE), and the Army Corps of Engineers. A permit application can be completed on-line. “Minor projects” such as sand bag stabilization are expedited and do not require public notice.

Specific information can be obtained from the Environmental Assistance Center at 800-662-9278, letting them know you are calling about high water or through e-mail at EGLE-assist@michigan.gov.

We are fortunate that we have not experienced the severe erosion occurring along the dunes areas of Lake Michigan, but some shores are eroding and may need to be addressed. As was the case with low water (WHAT HAPPENED TO MY BEACH SAND I TRUCKED IN?), measures taken now can adversely affect future shorelines and beaches, as well as fish and animal habitat and

greenbelt protection. Erosion control can be accomplished in ways to enhance or restore greenbelt areas and provide energy absorbing shorelines to minimize wave action. Improper installations can increase erosion for each of your neighboring properties, add to wave action on the lake, introduce pollutants, and destroy lake bottom habitat. If you are considering a shoreline project, please keep in mind the protection and health of our lake. Heed Ms. Pollack’s advice: what you put in the lake today, you, your neighbors, and the lake will have to live with tomorrow and beyond. The lake remains: ours to protect!

LAKES MICHIGAN-HURON WATER LEVELS - APRIL 2020



Category	Year 1	Year 2	Year 3	Year 4
AVERAGE **	1985	1985	1973	1973
MAXIMUM **	1936	1934	1926	1934
MINIMUM **	** Average, Maximum and Minimum for period 1918-2019			

Lake Charlevoix/Lake Michigan current water levels (the red line) have been creeping downward but are forecast to rise in the coming months.



Julie Startton



# BOAT LAUNCH SIGNAGE

Working with support from the Michigan EGLE (Department of Environment, Great Lakes and Energy), LCA will be installing educational

signage at all public access points on Lake Charlevoix this summer. This is part of the state's new law designed to prevent the spread of aquatic invasive species. If we miss an access point please let us know.



Join now!

Lake Charlevoix Association  
P.O. Box 294  
Charlevoix MI 49720  
info@lakecharlevoix.org  
www.lakecharlevoix.org

Non-Profit Org.  
U.S. Postage Paid  
Petoskey, MI  
Permit No. 110

**VOLUNTEERS NEEDED**

For our **Clean, Drain & Dry Project**, we need assistance with installation of boat launch signage.

Please contact us at [info@lakecharlevoix.org](mailto:info@lakecharlevoix.org)




# MOBILE BOAT WASH

Aquatic Invasive Species, such as zebra mussels, aggressive weeds, and fish diseases, threaten the health of our lakes and rivers, decrease water quality and can limit recreational enjoyment. Movement of boats and trailers among water bodies is the most common way Aquatic Invasive Species spread in Michigan. Washing your boat down is an easy way to stop them. This summer the LCA in collaboration with Tip of the Mitt Watershed Council, Michigan State University and EGLE will be hosting Mobile Boat Wash stations around Lake Charlevoix.

**VOLUNTEERS NEEDED**

For our **Mobile Boat Wash Unit**, we need assistance with mobile boat wash events.

Please contact us at [info@lakecharlevoix.org](mailto:info@lakecharlevoix.org)



# NEWS BITES...

**Renewal Time:** May is our renewal time for LCA Memberships. If you have not yet renewed/joined, please take a moment to do so with the enclosed Membership envelope. You may also renew/join online through our website: [www.lakecharlevoix.org](http://www.lakecharlevoix.org). The LCA lake protection programs are only possible through the generous contributions of our members. Thank you very much for your support.

**50 Year Anniversary:** The LCA would like to thank all of you who have supported our organization over the last 50 years. Our lake protection efforts would not be possible without you. Thank you!

**Website:** You may have noticed that our website has a new look. The LCA website, [www.lakecharlevoix.org](http://www.lakecharlevoix.org), provides several 24/7 webcams pointed to the lake, along with timely and important information for all Lake Charlevoix enthusiasts.

**Volunteers:** Thank you to our many volunteers and committee members. Your help and input are invaluable and are an integral part of our success!

**Upcoming Events:** During these unprecedented times with COVID-19, we most of all wish you good health. We have many events planned this year (LCA Poker Run, SELC, Annual Meeting/ 50th Celebration, etc). However, at this time we are committed to safety and will remain flexible with the dates for these events until further developments allow us to gather. We have tentatively rescheduled our Annual Meeting/50th Celebration for Sept. 10, 2020 from 5:30 to 7:30 at the Depot in Charlevoix. Members please look for a postcard invitation later this summer. Hope to see you. We will remain in touch with event rescheduling or cancellations. Please check our Facebook page or website for updates.

**Emails:** We are making a concerted effort to launch more of our communication efforts via email. Please be sure to include your email on your renewal envelope or contact us at [info@lakecharlevoix.org](mailto:info@lakecharlevoix.org). We do not share our email list.