



# QUARTERLY

THREE LAKES ASSOCIATION

SERVING LAKE BELLAIRE, CLAM LAKE AND TORCH LAKE IN NORTHWEST MICHIGAN

APRIL 2020



## The Status of Antrim County

By Jeremy Scott  
Antrim County Deputy Administrator

On March 17, Antrim County declared a state of emergency as a statement to the public that there was a threat at our door and that it would be taken seriously. Leslie Meyers, Antrim County Emergency Services Coordinator, stood up (activated) the Emergency Operations Center (EOC) soon after. The EOC team then set about building the foundation of relationships, communication, data tracking and supplies that first-responders and residents would so desperately need in the days to come. The EOC has and will continue to respond

and adapt to minimize the spread of COVID-19.

On March 17, the United States had 7,038 confirmed cases COVID-19 and Michigan had 65 confirmed cases. In three short weeks, the United States had 366,974 confirmed and Michigan had 17,221 confirmed cases. As a Country and a State, we have not even begun to see these numbers peak, Antrim County is just seeing the beginning with five cases, as of April 6. Many more COVID-19 cases are anticipated for our area in the coming weeks and months.



The more we can work together to minimize the spread of COVID-19, the more people we will protect and the sooner we will come out on the other side of this pandemic. The people of Antrim County, the people of Michigan, the people of the United States are a strong people, our communities built on the idea of working together for the best of all. Right now we are going through the fire, but if we work together, we will come out stronger.

This is where we need your help.

We are asking people to stay home and consider the risks to others when contemplating traveling during this pandemic. As Antrim County prepares for the number of COVID-19 cases to increase it is apparent that our emergency and health care resources will be strained. If you must travel, especially through or from an area with a large number of COVID-19 cases, please consider self-quarantining for 14 days and utilize delivery services for any essential needs.

Antrim County will continue looking forward, not just to the next setback that COVID-19 presents but to the challenges we will face when restrictions are loosened and we look at ways to support each other. Support for businesses forced to temporarily close, support for children who have missed months of their school year, and support for our neighbors and friends who may have lost money, lost jobs and lost loved ones.

One day we will look back at this time and be proud of this community and the sacrifices that were made, stand strong and stay safe Antrim County.

### Sneak peek

LAKE MONITORING	PAGE 2
WHY WAIT?	PAGE 3
SUMMER INTERNSHIP	PAGE 4
LAKE LANDSCAPING	PAGE 5
SHORELINES	PAGES 6-7
HOW CAN YOU HELP	PAGE 9
SEOP DEADLINE	PAGE 10



# THREE LAKES ASSOCIATION

## Officers

Mike Bertram, President  
Fred Sittel, Vice President  
Ed Gourley, Treasurer  
Tina Norris Fields, Secretary and Past President

## Zone Directors

- A. Clearwater Township: Cheryl Lynn Fields, Tina Norris Fields
- B. Milton Township: Rick Doornbos, Greg Fredericksen
- C. Torch Lake Township: Mike Novak, Vacant
- D. Central Lake Township: Todd Collins, Steve Laurenz
- E. Forest Home Township: Fred Sittel, Phil Weiss
- F. Helena Township: Vacant, Vacant
- G. Custer Township: Mike Bertram, Vacant
- H. Kearney Township: Duane Drake, Ann McClelland

## Directors at Large

Norton Bretz, Leslie Meyers, Becky Norris, Dean Branson, Art Hoadley, Gary Knapp

## Directors Emeritus

Stan Dole & Len Franseen

## Committee Chairs

Becky Norris, Water Quality  
Todd Collins, Membership  
Tina Norris Fields, Education  
Art Hoadley, Water Safety  
Duane Drake, Lake Monitoring Program  
Vacant, Publicity

## Executive Director

Jeanie Williams

## Administrative Assistant

Lois MacLean

The TLA Quarterly is published by the Three Lakes Association  
Please direct comments or questions to:  
P.O. Box 689  
Bellaire, MI 49615  
[3lakes.info@gmail.com](mailto:3lakes.info@gmail.com)

# President's Message

Dear TLA Membership,

We are in a pandemic crisis in this country. I am currently back in practice from retirement to guide frontline responders and give them the support they need. I am dedicating my message in this newsletter to Leslie Meyers, TLA Board member and Antrim County Emergency Management Coordinator. Leslie will update and inform you about how to be safe and healthy.

*Be well, Mike Bertram*



# Cooperative Lakes Monitoring Data Update

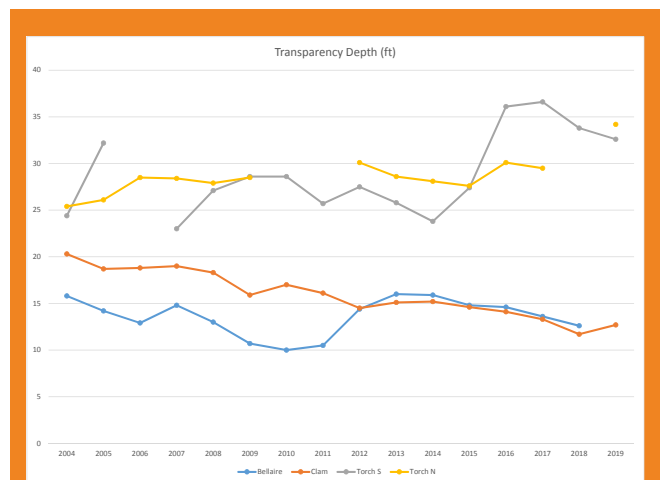
By Becky Norris

The data for the 2019 season have just been released. The full reports can be accessed online at [www.micorps.net/lake-monitoring/individual-lake-reports/](http://www.micorps.net/lake-monitoring/individual-lake-reports/), and select Antrim County. As in the past, our results continue to indicate excellent water quality. The parameters we have been tracking are depth of water transparency using Secchi disks; Chlorophyll a levels, an indication of the microscopic phytoplankton content of the water; and spring and summer total phosphorus, an indication of the amount of this growth rate-limiting nutrient in the water. A trophic status index (TSI) is calculated from these measurements and serves to classify the lakes with respect to productivity.

Very productive lakes grow lots of plant and animal life because they contain a large quantity of nutrients and are called eutrophic lakes. On the other end of the spectrum are oligotrophic lakes, which contain limited quantities of nutrients. Oligotrophic lakes tend to have very clear water, like our lakes do, and lower quantities of plant and animal life. Torch Lake, with TSI values generally below 31, is oligotrophic, meaning it supports very little growth. Lake Bellaire and Clam Lake, with TSI values in the 30 to 40 range are trending toward mesotrophic, meaning they are not quite as clear and support more growth. These results have varied

little over the past 20 years, indicating that there have been no major changes in the characteristics of the lake waters over the deep basins of the lakes.

CLMP program monitoring does not, however, provide an adequate profile of near-shore water quality. This is better addressed with the data collection that we have been undertaking in tracking the lake floor algae (GBA or golden-brown algae) on the sandy shoals, and will hopefully continue in 2020. Results of these studies continue to show higher levels of phosphorus near-shore than in the deep water basins. Groundwater and surface water run-off from the land are both sources of this near-shore phosphorus. Other articles in this newsletter will give some tips on how to reduce near-shore phosphorus, which should in time reduce the amount of algae growth in the nearshore zone.



This graph shows transparency of our three lakes since 2004. Transparency is measured by noting the depth at which a black and white disk disappears as it is lowered into the water. The greater the depth, the more transparent the water. Here you can see that North and South Torch Lake are consistently more transparent than Lake Bellaire or Clam Lake. Every lake has a different "normal" transparency, one is not better than another. The point is not to compare lakes to one another, but to track changes in an individual lake over time.



# Why Wait?

By Evan Craig  
TLA member

When I was a kid, the end of school every year meant the beginning of summer, and that meant we would be going to Torch Lake soon. But then Mom would make us wait – for weeks, saying the water was too cold. Of course, the water usually *was* too cold even in July and August when we finally arrived, so why wait? We could go now and she could wait for the water to warm up while we were there.

Every year when we arrived, I would jump out of the car, run down to the beach and put my bare feet in the lake. After the long drive, it would usually be dark out, and Torch, whether still or

ferocious, was like a brooding monster, with unfathomable mysteries, lurking.

Forty years later, we're still waiting, but not for Torch Lake to warm up. My wife, Paula, loves flowers, and she introduced me to phenology, the study of when plants bloom. For the past twenty years she has helped me discover the beauty behind our shores on Torch Lake, exploring the rich botanical treasures blooming at their preferred season in the lands that have been protected by MDNR, the GTRLC, Antrim County and the GRNA. Some years we plan our trip for the warm days of August to see the purple fringed orchids (*Platanthera psychodes*), the grass of

Parnassus (*Parnassia glauca*) and the turtlehead (*Chelone glabra*). Other years we brave the cold water, but enjoy the long days of June with yellow lady slippers (*Cypripedium parviflorum*), gaywings (*Polygala paucifolia*), star flower (*Trientalis borealis*), bunch berry (*Cornus canadensis*), twinflower (*Linnaea borealis*) and pink lady's slipper (*Cypripedium acaule*). It seems that we discover another rare beauty – like dragon's mouth (*Arethusa bulbosa*) – every year! Love of these plants has made us keenly aware that what's good for the land is good for the water quality of the Chain.

Now my siblings and I own the place on Torch that our grandfather built, and to hold onto our inherited gem, we begin every year with discussions not only of when each of us will visit, but when our renters will. One of us usually takes the job of opening before Memorial Day, and another closes after Labor Day.

As everyone with cabin fever this month already knows, Covid-19 is cancelling vacation travel across the country, and we wonder whether it will be legal – or



Photo by James Dake  
**Purple Fringed Orchid**

smart – to visit this year. When can we go? What if we get it while we're there? Without testing, will we risk bringing it home unaware? Will our renters bail? Will we see a tax hike? Will our caretakers stay well? Will they continue? And what if I lose my job? Will we lose our place?

I guess we'll have to wait and see.

## Upcoming Events

Due to the Covid-19 pandemic, all in-person events have been cancelled for the foreseeable future, including the Michigan Lakes and Streams Association conference. But MLSA has decided to put it all online, and for free. It's been going on all month and will continue



every Friday through May at 1:00pm Eastern. You can join in any of the future talks at their website: [www.mylmsa.org/](http://www.mylmsa.org/)

**Are you a TLA member with a story to tell? We are always looking for stories about your experience on our Three Lakes. Email Jeanie with your interest, [jwilliams.threelakes@gmail.com](mailto:jwilliams.threelakes@gmail.com)**

## New Members and Donations

**We'd like to welcome these new and returning members to TLA for 2020. We are so grateful for your participation in our mission!**

Laura Avery	Edward Haberer	Paula Leach
Butch (Charles) Bartz	Brenda Hasso	Pam Lewsley
Dan & Bridget Coleman	Caroline Jacob	Eddie & Linda Miller
Donald Paul & Mary Command	Karen Kienbaum	Beth Mountjoy Family
Martha Davidson	Gerald Kolb	Kim & Deborah Ware
	Lewis & Shelley Lake	David & Nicole Webb

**A big thank you to these generous donors who gave above and beyond their membership to support water protection in Lake Bellaire, Clam Lake, and Torch Lake.**

Chris Coble	Endowment match \$1000
Jonathan & Wendy DeWys	\$500
Caroline Jacob	\$500
Gerald Kolb	\$500
Tye Nordberg	\$500

# TLA Summer internship is unforgettable

Summer is so close now! We are finalizing our plans for 2020 and looking forward to our favorite program: the Three Lakes Association Summer Internship Program. Starting about now, we select several high school interns from area high schools, usually individuals just coming off their sophomore or junior years. Interns put in at least 60 hours of volunteer time over the summer, and receive a stipend of \$550 and ½ credit of environmental science on their school transcript. At the end of the season students compile their results in a written report and present to their school boards and the TLA board. Throughout their time with us, they are honored members of TLA and have access to all of our experts and equipment.

In this edition of the newsletter we want to honor the interns who we worked with in 2019. The photos show the interns on the days they presented their results to their school boards. These are the 2019 interns, in their own words. Riley Fillmore will start us off:

*My experience as a TLA Intern for the 2019 summer was one that I will surely never forget. When I first learned about the internship, I was excited, to say the least. I jumped at the opportunity to spend my summer on the lakes I love. The first few weeks were a little awkward; figuring out a groove that worked for everyone was a process. But we found it, and we made things work. The rest of the summer went swimmingly. Each Tuesday morning consisted of my getting the opportunity to be where I love to be - on the water. I was also getting the chance to help people; to see if we could find any swimmer's itch cercariae or enterococcus bacteria near the shoreline.*

*Learning about the life cycles of swimmer's itch and how enterococcus bacteria can get into the lakes was eye opening. I dipped my feet into freshwater ecology, and the experience was amazing. I learned more about the lakes I love to spend my summer days on, and how I can help to better protect them for future generations.*

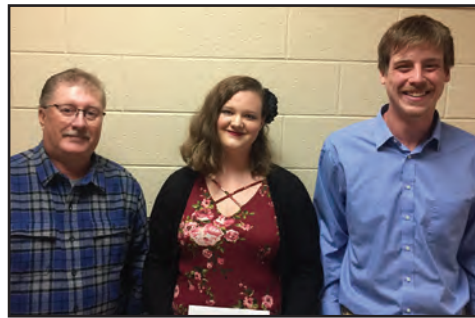
*I would one hundred percent recommend an internship with Three Lakes Association to any high school student who is interested in freshwater studies, ecology, and conservation. It's a great experience, and one you'll never forget.*

We hope all four stay in touch with us and we wish them mountains of success.

Matt Carter, 2019 internship coordinator and biology teacher at Elk Rapids High School, has this to say to anyone considering this program: "The Three Lakes Association summer internship is a great opportunity to experience the field work that scientists do. Interns will get a deeper understanding and

respect for their local watershed." He also told us about the 2019 group, "The students thought it was cool that they were spending their Tuesdays boating around; not everyone has a chance to do that."

If this sounds interesting to you, please contact Jeanie Williams, Executive Director at [jwilliams.threelakes@gmail.com](mailto:jwilliams.threelakes@gmail.com), to apply or ask questions.



**Riley Fillmore, Mancelona High School, with TLA President Mike Bertram (l) and TLA intern coordinator Matt Carter (r).** "It is important that we help conserve these beautiful resources we have so that the next generations can enjoy them. It's up to people my age to spread the word about the conservation efforts being made."



**Emily Comai, Kalkaska High School, with Principal Chuck Sorrentino (l) and TLA board member Dean Branson (r)** "It helped me learn more than...high school ever could." Emily would like next year's interns to know: "It's fun, but be prepared to work hard."



**Angel Shaw, Central High School** "In the very beginning I didn't realize that I would learn so much, but now I know proper water sampling techniques...as well as the process of how the pollution gets into our water. I also learned what swimmer's itch actually was and I was able to tell others so they knew more about it as well."



**Matt Baker, Elk Rapids High School, with TLA board member Dean Branson (l) and TLA intern coordinator Matt Carter (r)** We were not able to reach Matt to get his thoughts.

*Note: Due to COVID-19, we are currently evaluating the feasibility of an internship program in 2020. We are committed to protecting the lake and educating our youth, but above all we want to make sure our community is safe.*



# Protecting property values through water quality protection: **Healthy Lakes Landscaping**

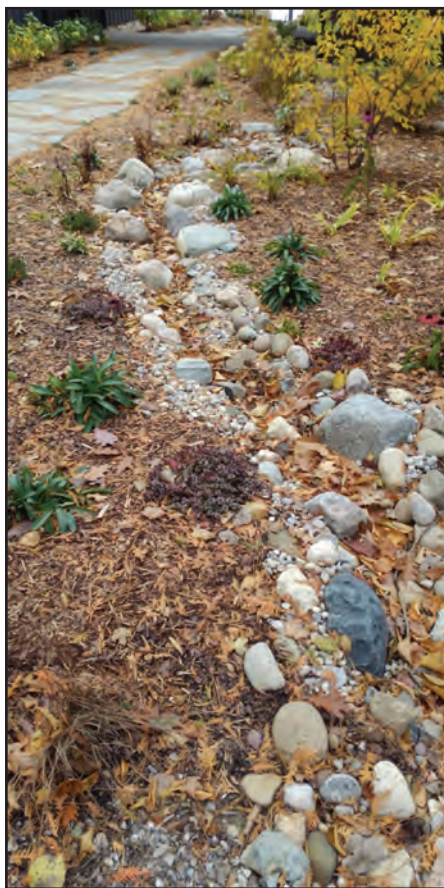
The Antrim Conservation District (ACD) has formalized an initiative to protect Antrim County's tax base by addressing the damaging effects of stormwater runoff. The Initiative is called *Healthy Lakes Landscaping* and we hope everyone will get involved. Not only will participation in this initiative protect the streams and lakes we all cherish, it will also protect our property values and our way of life.

Stormwater can be understood as precipitation and snowmelt that flows across the land, picking up dirt, petroleum products, fertilizers and other pollutants, which then wend their way into and contaminate our rivers, lakes, streams, and wetlands. *Healthy Lakes Landscaping* will employ a three-pronged approach: **education** of landowners and contractors on the impacts of polluted stormwater on the Chain of Lakes; **installation** of landscaping features that capture, filter, and clean stormwater; and **promotion** of effective landscapes through a county-wide *Healthy Lakes Landscaping* tour.

*Healthy Lakes Landscaping* uses simple landscaping strategies that capture and filter stormwater before it can enter a stream or lake. Techniques such as greenbelts, rain gardens, and permeable pavers for hard surfaces (see side bar for a description of each) allow residents to have beautiful landscaping while also protecting water clarity and quality.

Heidi Shaffer, Soil Conservation Officer at the Antrim Conservation District, says we can expect to see a variety of workshops and presentations on *Healthy Lakes Landscaping* throughout the community for both contractors and homeowners. In most cases workshops will be offered in partnership with Pine Hill Nursery and local lake associations, including Three Lakes Association. These trainings will include a basic how-to on calculating the amount of greenbelt or rain garden to install in order to slow stormwater on its way to the lake.

ACD is investing \$16,000 into the program from their annual tree sale and their millage funds for staffing, advertising, promotion, and cost-share incentives for qualifying land-owners.



Additionally, any homeowner can receive guidance on design and installation of lake-friendly landscaping for their stormwater retention needs.

Landscaping solutions on private properties can also be applied to public locations throughout our community, where there are also stormwater concerns. Ultimately ACD aims to develop a fund to support projects that help villages and townships resolve these problems. They hope the *Healthy Lakes Landscaping* program is well received and supported so their larger vision can be realized.

Clean and clear water is the center of our healthy economy and way of life. When pollutants can be diverted from our lakes and streams, we protect this way of life and demonstrate to all of our neighbors our willingness to take full responsibility for the protection and preservation of the water we hold dear.

Reach out to ACD to get involved at 231-533-8363 and dial ext.3 for Heidi Shaffer ([heidi.shaffer@macd.org](mailto:heidi.shaffer@macd.org)) or ext. 6 for Austin Jackson ([austinjackson@macd.org](mailto:austinjackson@macd.org)).

## A primer of *Healthy Lakes Landscaping* techniques

### **Greenbelt:**

How to: Fill the zone along the shoreline with plants. A greenbelt can extend into the lake with reeds and emergent aquatic plants, and up onto the shore with low shrubs, perennial flowers, and unmowed ornamental grasses.

How come? Greenbelts prevent erosion on the shore, keep pollutants out of the lake, and create habitat for pollinators, birds, and aquatic life.

Tip: Shoreside greenbelts work best when they contain a shallow depression that can collect and retain some water. See "Rain gardens" to find out why.

### **Rain gardens:**

How to: Create a shallow depression in a stormwater hot spot, such as off of a gutter spout or at the end of a driveway, and fill it with the same sorts of plants you'd put in the greenbelt zone.

How come? Depressions collect water so the water can seep slowly into the ground rather than run quickly across a maintained lawn and into the lake. Slow seepage of water is a great way to remove pollutants.

Tip: Soil types vary! Contact ACD for guidance about how to design your rain garden so it works as intended.

### **Permeable pavers:**

How to: When installing patios, walkways, and other hard surfaces, include gaps between stones, or install systems specifically designed to allow water infiltration.

How come? Water that sheets off of hard surfaces produces a lot of runoff. Let that water seep into the ground so dirt, oil, or chemical pollutants get a chance to breakdown in the soil and therefore won't end up in the lake.



# Walk the Talk on Shorelines

At Three Lakes Association, our board members walk the talk. They are committed to water quality and are determined to make changes in their own lives to protect and improve our lakes. However, that doesn't mean they have all the answers right away! It's a process to find the resources and people who can provide useful information, to determine what needs to be done, to sort out your priorities, and to make a plan for what to implement and when.

Board Member Steve Laurenz joined TLA in 2017 and has steadily been making improvements to the cottage and property he owns on Torch Lake with his wife, Linda, and her sister. This interview with Steve and Linda and TLA Executive Director Jeanie Williams gives you a peek into this process for Steve and his family. This interview was edited for clarity and to fit the confines of this newsletter.



*Image Courtesy of Steve Laurenz*

## The Tyson family cottage

### **Jeanie: How long have you been coming up to your cottage on Torch Lake?**

Linda: The cottage was built in 1905, and it's been in our family since 1962. [I've been coming up here] since I can remember, since I was 5 years old, and my mother came before that, when she was a girl. I believe [originally] my grandmother came to Bayview, to a women's Bible study there, so that's how they started coming to the area.

Steve: Linda grew up in Detroit and now we reside in the Chicagoland area.

L: We share the ownership of the cottage with my sister and her family, who live in California. My brother, sister, and I all come every year.

### **J: Can you tell me a little bit about the property and the cottage? How big is it, how much land do you have, anything like that? Give us a picture.**

L: It's about 60 feet of lakefront property. The original cottage hasn't changed much. We have added rooms around the original one-room cabin. When I was a girl we didn't have a telephone or a dishwasher or some of those modern conveniences, but we have added those slowly.

S: The septic has been updated.

L: My parents moved the mound. The septic is now behind the road.

### **J: Steve, what inspired you to take the Lake 101 course from MSU?**

S: My wife and I donated to the Three Lakes Association for many years while I still had my corporate gig. Once I retired, I wanted to do more than just throw money at it. I said, how can I walk my talk, how can I help out? [Leslie, TLA Executive Director at the time, invited me to be a board member] and she told me about this introduction to lakes [course]; it's all online. I jumped at the opportunity because I have always had a passion for the outdoors and lake ecology. [In the course], I learned about the different lake phases and different types of lakes. They went into some detail about the things to protect water quality. As homes and cottages have become more modern, there are these issues; whether you are talking about rain runoff adding sediment into the lake or runoff from cars on a driveway. All have an impact. Then they talked about shoreline restoration protection, where native plants are planted that have strong supportive root systems that can absorb nutrients and prevent runoff. The worst thing to do is have a yard that goes



# Walk the Talk on Shorelines

---

right up to the shoreline. So, how do you prevent that? I shared [all of] of this information with Linda and her sister.

## **J: Tell me about the concerns you have for your shoreline**

S: The cottage is very close to the lake.

L: It's only about 6 feet from the lake.

S: We do have a yard, but it drops off very quickly to the lake, it's a sharp decline. At one point, there were evergreen hedges on the hill, but Linda's parents took them down because they were impeding visibility. We also have a beach area where we bring in kayaks, a small sailboat, and such. So there's a lot of traffic there, and it may be a source of sediment that can get into the lake.

L: I'm a little concerned about erosion from the hill that can get into the lake. You know the dogs run up and down and the kayaks are pulled up and down. I'd like to secure that hill from erosion.

S: In the other area of the shoreline there are rocks separating the water from the hill.

L: And there is a great white pine, growing right in front of the cottage.

S: So that is a concern, the family would hate to lose that tree. What can we do, what should we be doing to ensure that we protect the area? The first step is to get somebody who has the expertise to evaluate it, suggest improvements, but still not impede the enjoyment of the lake.

## **J: Why do you think natural shorelines are important for healthy lakes?**

L: The natural shoreline would filter potential runoff...from cars, human activity, and maybe even farming that is nearby. If you have a natural barrier, it might work as a natural filter, which is what I understand.

## **J: And then you also get the benefit of vegetation that is attractive.**

S: There could be an assumption that if you put in more of these natural shorelines, it would not be very pleasing to the eye. Elk Rapids provided a garden show, and we attended one year and went to all these cottages that put in these natural shorelines, and they are just gorgeous. Natural shorelines and the protection they provide can also beautify the area.

L: In the Chicago suburbs, we all have manicured lawns, but people here are trying to move towards more ecological landscaping.

## **J: When you did the Elk Rapids garden tour did you see places that looked more on the wild side, or more on the manicured side?**

L: There was a mix of both. They were manicured, but natural.

S: I did not get the sense that they were just turning the clock back 100 years. It still looked beautified as if someone had come in and done landscaping. It's just that they had put in the right plants, they structured it in the right way, so it is also protective.

## **J: So, right now you are at the phase of, "we are ready to do something on our property." You have a list of resources and you are getting ready to start reaching out to these people.**

S: Yes. Every year we schedule collaborative projects with Linda's sister. Part of it is maintenance, that is always a top priority. Beyond that, [we ask ourselves] what are additional things [we can do] that will improve environmental quality?

## **J: I loved how your first priority is maintenance to make sure everything can continue to run, but your second priority is to ask what you can do to improve environmental quality. I think it is so cool that that is on your list. That is a game changer.**

S: It is important that we do what we can, still practical, but do what we can to preserve the environmental quality. Otherwise, we are going to lose it, and then who wants to be there?

My bias is that everyone is there because of the same basic things - connection to nature and beauty. But you have to educate them - landowners and visitors. Certain practices will improve the quality of the lake, and certain practices will harm it. People can't get it done unless they know what to do.

L: We are still in the information gathering phase.

S: The next phase for us will be about getting people out to do the evaluation [of our shoreline].

## **J: You are a part-time resident, why do you participate in Three Lakes Association even though you only live here for a short period of time each year?**

S: I would hope this would be the case for people who love going up there, why do they love it? The beauty, especially the beauty of Torch Lake. How can we preserve this? What resources can be applied to help preserve it? Guess what, there is an organization whose entire mission is to do precisely that. We want to affiliate ourselves with these types of organizations, so we can preserve that beauty.

L: If we see something good happening environmentally, we try to aid that in any way we can.

S: If you want to change policy and practices, you have to have data, you can't just cry about it. "If you have data to show, this is what harm can be realized if you do that, then people will say, "Oh, wait a minute. Maybe I should rethink how I landscape my property." This is where organizations like Three Lakes come in. It can harness those resources and focus them in a way that allows you to get some answers.

L: We aren't perfect. We are people, and people pollute just by the nature of being people. We try in our own way to reduce our impact. There is a lot more we can do.

S: We are trying to walk the talk and do the best that we can.

If you are ready to protect the lake you live on by creating a shoreline that is beautiful and functional, here are a few places to turn to get you started:

Heidi Shaffer at Antrim Conservation District Office (231) 533-8363 x3, [heidi.shaffer@macd.org](mailto:heidi.shaffer@macd.org)

Jennifer Buchanan at Tip of the Mitt Watershed Council: (231) 347-1181

Heather Smith at the Watershed Center of Grand Traverse Bay: (231) 935-3650, [hsmith@gtbay.org](mailto:hsmith@gtbay.org)

# Do you have a healthy shoreline?

By Rick Doornbos and Dean Branson

## Background

During the summers of 2016 and 2017, the Tip of the Mitt Watershed Council completed a comprehensive shoreline survey for all 14 lakes in the Elk River Chain of Lakes Watershed, including Torch Lake, Clam Lake, and Lake Bellaire. The purpose of this project was to document current conditions that have an impact on water quality with a focus on three key areas:

1. Documenting the presence of *Cladophora* patches (a native filamentous algae), an indicator of excess nutrients in the lake.
2. Evaluating the presence of an effective greenbelt as a buffer between land and water.
3. Estimating the amount of shoreline erosion associated with each parcel.

Shoreline conditions for all three of these areas play a large role in the overall health of our lakes and streams. With land development and waterfront construction continuing to grow at a rapid pace, it is more important than ever to monitor the condition of our shorelines and to take corrective action to protect water quality.

The shoreline survey was conducted on a parcel-by-parcel basis. Visual observations were used to develop a score for each of the three focus areas and the results were documented in a secure database maintained by the Tip of the Mitt Watershed Council. This database and the overall results for each lake can be found at the website address [www.freshwatercenter.org/ercolss](http://www.freshwatercenter.org/ercolss). Results for individual parcels are kept confidential and can ONLY be obtained by certain individuals. Contact the Tip of the Mitt Watershed Council (231-347-1181) to obtain your unique ID number and head to the database to unlock the results for your property.

## What does this mean for you?

Three Lakes Association encourages every waterfront property owner to obtain the findings for your parcel, and to become familiar with what they mean. We also would like you to consider taking action to improve the condition of your shoreline if the survey indicates improvement is needed, especially if you are thinking about retaining the services of a landscaping firm to improve the appearance of your waterfront. The website contains a wealth of information that will help you to both interpret your results and determine appropriate improvement actions. Improvement actions can include but are not limited to the following:

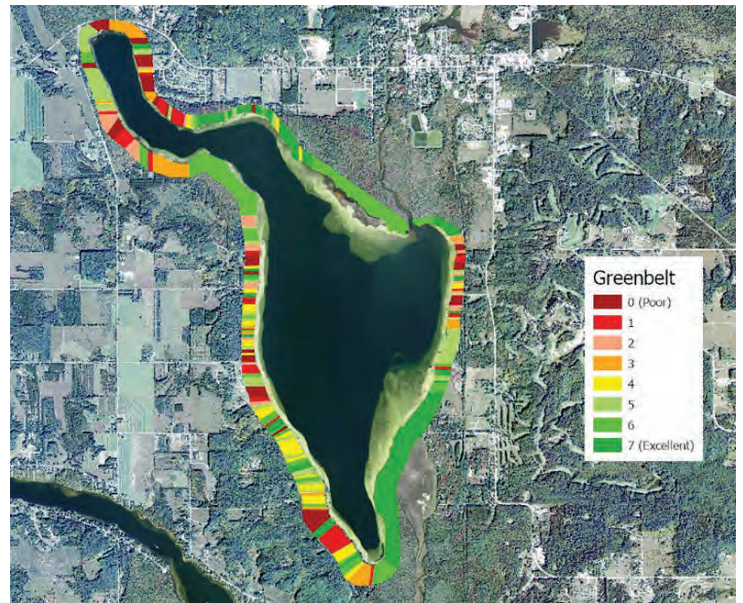


Image produced by Tip of the Mitt Watershed Council  
**Greenbelt scores around Lake Bellaire.**

## Adding to or improving your greenbelt

- Create a “no mow” zone or “greenbelt” 10-30 feet deep along the waterline.
- Plant native shrubs, trees, grasses, plants, and flowering perennials in “greenbelt” zone.
- Increase the depth of your existing “greenbelt” between land and water.
- Participate in the Shoreline Stewards program. Information can be found at [www.mishorelandstewards.org/](http://www.mishorelandstewards.org/)
- Learn more about greenbelts at [www.watershedcouncil.org/greenbelts.html](http://www.watershedcouncil.org/greenbelts.html)

## Reducing excess nutrients

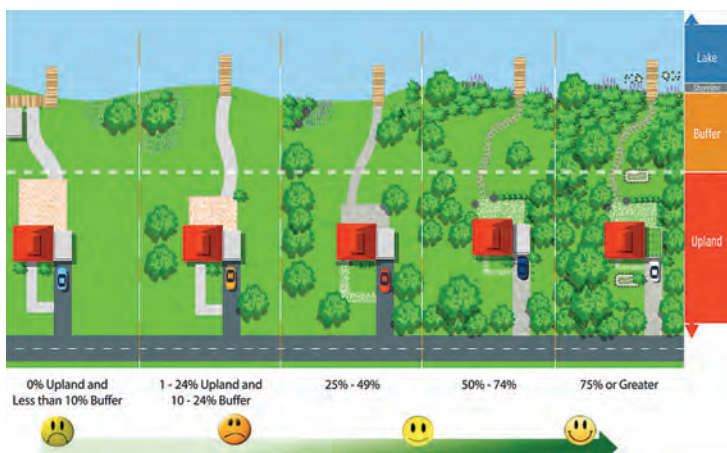
- Minimize use of fertilizers, only use fertilizers without phosphorus, and don't fertilize within 35 ft of water.
- Monitor and maintain your septic system on a regular basis.
- Plant deep-rooted native plants and shrubs such as coneflowers, which can absorb more nutrients.
- Learn more about *Cladophora* at [www.watershedcouncil.org/uploads/7/2/5/1/7251350/cladophora.pdf](http://www.watershedcouncil.org/uploads/7/2/5/1/7251350/cladophora.pdf)

## Controlling shoreline erosion

- Stabilize the shoreline by planting deep rooted plants in your “greenbelt” zone.
- Eliminate sources of direct or channeled runoff (see “Healthy Lakes Landscaping” article for more.)
- Contact a Certified Natural Shoreline Professional for options at [www.mishorelinepartnership.org/find-a-shoreline-contractor.html](http://www.mishorelinepartnership.org/find-a-shoreline-contractor.html)
- Learn more about erosion at [www.watershedcouncil.org/greenbelts.html](http://www.watershedcouncil.org/greenbelts.html)  
Select the Shoreline Erosion resource.

We all want to maintain the water quality of our lakes and streams for our families and for future generations. Please do your part by contacting Tip of the Mitt Watershed Council at 231-347-1181 to obtain your unique parcel ID, reviewing your shoreline results, and by taking appropriate follow-up actions. If you have questions or would like assistance to help you interpret your survey results, contact Dean Branson or Rick Doornbos at Three Lakes Association.

## Which one is your property?



Courtesy of MI Shoreland Partnership



# How can I help?

If you are ready to protect the lake you live on by creating a shoreline that is beautiful and functional, here are a few places to turn to get you started:

## MI Shoreland Stewardship Partnership

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

About: A collaboration of state agencies, academia, nonprofit organizations and private industry who work together to “protect Michigan lakes through conservation and restoration of natural shorelines.”

What can I do? Find out how your shoreline rates: [www.mishorelandstewards.org/rate.asp](http://www.mishorelandstewards.org/rate.asp) Then, become a certified MI Shoreline Steward by improving your practices. Visit their website (above) for shoreline stewardship educational information, resources, training, contractor directory, and so much more. They can help you create a natural shoreline.

## Healthy Lakes Landscaping

About: The Antrim Conservation District is mobilizing all lake dwellers to make modifications on their properties that reduce direct runoff into their lakes. Read the article in this issue for more.

What can I do? Take the survey that will be coming to your inbox soon! Then, request a simple stormwater management plan for your property or schedule a neighborhood workshop by calling Heidi Schaffer at the Antrim Conservation District 231-533-8363 ext. 3

## No Fertilizer Campaign

About: Fertilizing lakeside property is the most direct way excess nutrients enter our lakes, and excess nutrients lead to unsightly algae near shore. Torch Lake Protection Alliance is leading the movement to encourage us to stop fertilizing our lawns.

What can I do? Get a yard sign that symbolizes your pledge to keep nutrients out of our lake by ending fertilizing. Contact us to get one; email Todd Collins at [etoddi@aol.com](mailto:etoddi@aol.com)

## TRUE BLUE Landscaping

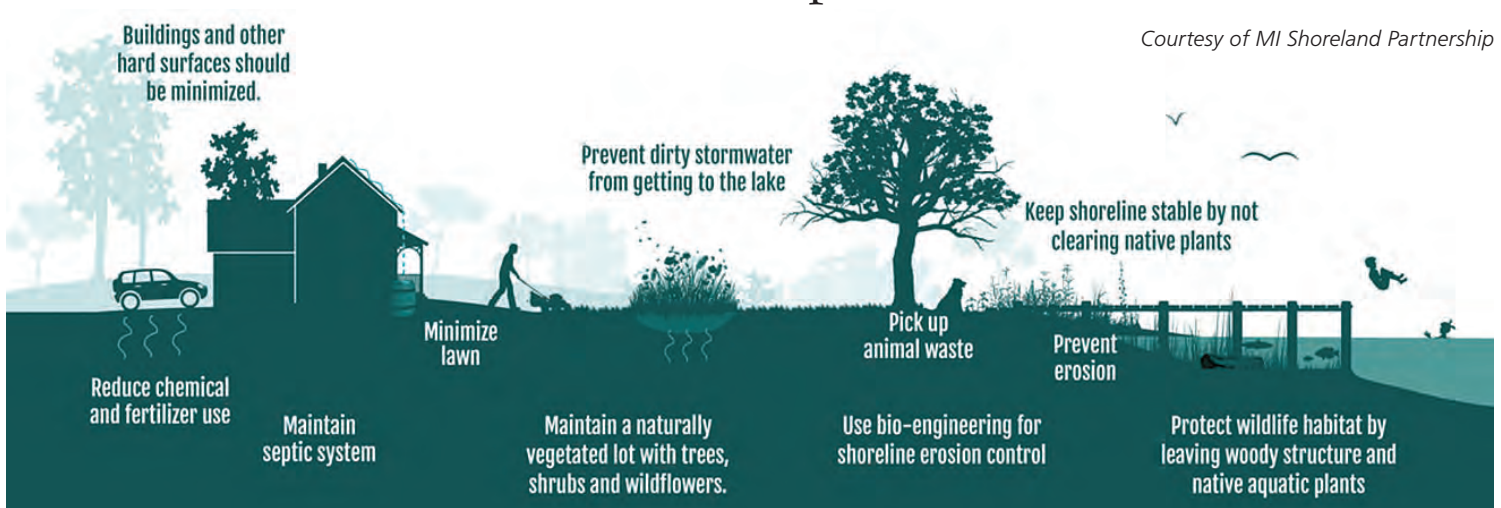
[www.conservetorch.org/caring-for-water/true-blue-landscaping/](http://www.conservetorch.org/caring-for-water/true-blue-landscaping/)

About: “The best way to keep Torch Lake clear and blue is to maintain the natural landscape of northern Michigan.” Torch Conservation Center is loaded with tips on landscaping and lawn care practices that protect water quality.

What can I do? Subscribe to TRUE BLUE news to send monthly tips right to your inbox: [www.conservetorch.org/subscribe/](http://www.conservetorch.org/subscribe/) And visit the TRUE BLUE gallery in Alden for free materials, educational displays, and answers to your questions. Opens May 25.

## Shoreland Stewardship Best Practices

Courtesy of MI Shoreland Partnership



# SEOP application deadline extended

This is the eleventh year of the TLA Science Education Outreach Program (SEOP), which came about thanks to the vision and passion of former Education Chair, Patricia Roush. Patricia is a retired teacher. When she joined the TLA Board of Directors, she contributed her special skills to the mission, including ways to reach out to the community and promote an understanding of the need for informed environmental stewardship.

What better way to encourage environmental stewardship than to help support the teaching of science in our area schools? SEOP provides funding to K-12 teachers who help the youth of our watershed cultivate care for our lakes, streams, and land.

The grant application period is open now for the school districts that surround our three lakes: Bellaire, Central Lake, Kalkaska, and Mancelona. The application materials are on our website: [www.3lakes.com](http://www.3lakes.com). Teachers who want to enhance their science curriculum with field trips, equipment, materials, curriculum modules, or even conference fees should apply.

Normally, the application period would close on April 15, and the awards would be announced on May 1. This is not a normal time. With our schools closed and our citizens under a "Stay at Home" mandate, we all are learning the techniques of "social distancing."

Everyone has been scrambling to adjust to these challenging circumstances. One way TLA can respond is to extend the grant application period.

**The SEOP grant application  
deadline is extended to  
May 15, 2020!**

We eagerly look forward to the return of a normal academic year this fall. We sincerely hope that extending the application deadline will make it possible for our teachers of science to take advantage of this opportunity.

Teachers, because we know that the SEOP grant may allow you to provide your science students with a valuable experience that might otherwise be unavailable, we hope you will take advantage of this grant program. Please, do contact me with any questions.

Tina Norris Fields, Education Chair

[tinanfields@torchlake.com](mailto:tinanfields@torchlake.com)

231.322.2787

## Membership counts!

**DONOR \$100**  **STEWARD \$500**  **BENEFACTOR \$1,000**  **LIFE \$2,000**  **BASIC \$60**

Michigan Riparian Magazine Subscription add \$17

**TOTAL AMOUNT ENCLOSED:** \$ \_\_\_\_\_

NAME: \_\_\_\_\_

SUMMER POSTAL ADDRESS: (Street, P.O. Box) \_\_\_\_\_

TOWNSHIP: \_\_\_\_\_ TOWN: \_\_\_\_\_ ZIP: \_\_\_\_\_

SUMMER PHONE: \_\_\_\_\_

WINTER POSTAL ADDRESS: (Street, P.O. Box) \_\_\_\_\_

CITY: \_\_\_\_\_ STATE: \_\_\_\_\_ ZIP: \_\_\_\_\_

WINTER PHONE: \_\_\_\_\_

EMAIL: \_\_\_\_\_

May we include your name in our newsletter donor list? Yes  No

**Are you interested in  
volunteering in any of  
the following areas?**

- Water Quality
- HS Intern Program
- Water Safety
- Education
- Invasive Species
- Membership
- Finance
- Public Relations
- Service
- Other

Three Lakes Association is a 501(c)(3) corporation. Your dues and other contributions are tax deductible. Call for further information.



**To join Three Lakes Association,**

please visit our website [www.3lakes.com](http://www.3lakes.com) or  
print and return this form with your check to:

**THREE LAKES ASSOCIATION, P.O. Box 689, Bellaire, MI 49615**



**The mission of the Association is to provide leadership to preserve, protect, and improve the environmental quality of the Elk River Chain of Lakes Watershed for all generations with emphasis on Lake Bellaire, Clam Lake, Torch Lake and their tributaries.**