

# THE LAKE GUARDIAN



FALL 2023

Jordan River, MI

PHOTO CREDIT: ALEX CHILDRESS,  
ALEXCHILDRESS.COM

## Historical Highlights: *East Jordan and Its River*

Kim Baker

### The River

In the early days of logging, “Big Wheels” were used to move massive timbers over rough terrain. Logs, too large for horses to skid across the ground, were lifted and chained underneath the axle of the 10–14-foot diameter wheels.

One day in May 1910, Stanley “Big Sam” Graczyk was driving a team of horses fully loaded on a steep Michigan hillside west of Elmira, when fate struck. Soon to be married, Sam stumbled and

was crushed under a big wheel. The site of the tragedy, which overlooks the Jordan River Valley, is known as “Deadman’s Hill.” Today, hikers can explore the nearby 18,000-acre, spring-fed headwaters of the Jordan River on a 3- or 18-mile trek.

The river, 24.9 miles of pristine playground and natural habitat, was the first river that Michigan designated in its Natural Rivers Program. The program’s purpose is to preserve a river’s historic,

free-flowing condition, recreation, floodplain, fisheries, and wildlife habitat.

Since 1970, over two-thousand miles of sixteen Michigan rivers have seen the program’s positive effects. As a result, the Jordan remains high on the list for fly-fishers and paddlers alike. It’s the largest tributary to Lake Charlevoix.

### The City

Long before Europeans came to this area, the Odawa called it home. Numerous villages coincided with the lakes, streams, and woods. The Odawa fished, grew crops, hunted, and utilized the world around them to create a sustainable and thriving way of life.

The Odawa have endured wars, threats of forced removal, and numerous changes to their communities to remain in the lands of their ancestors. Land and water continue to be vital in their story. Fishing and the harvesting of natural resources for art and food are still carried out today. Charlevoix County is home to both the Little Traverse Bay Bands of Odawa Indians and Grand Traverse Band of Ottawa and Chippewa Indians.

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PHOTO COURTESY OF EAST JORDAN HISTORICAL SOCIETY

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PHOTO CREDIT: JULIE STRATTON

## President's Corner

**A**s your LCA President, I engage with our watershed planning community on a regular basis.



For example, I am currently working with a team working to revive the annual Planners Forum, a program of presentations and workshops designed to help planning commission

members in our watershed better serve their communities. In partnership with the Charlevoix County Planning Commission and Tip of the Mitt Watershed Council, we are developing the content for that program. Over the last year, I attended meetings of most of our local planning commissions to discuss how best to care for the lake we love. I've developed some pet ideas preparing for and learning from these opportunities.

Beginning with the things which could be done right away, we could empower our existing Watershed Advisory Council with a mission statement, organizational structure, and some coordinated energy. This Council, created within our Watershed Management Plan, already meets quarterly, and is made up of the important stakeholders in our watershed. Let's give it a mission and put it to work.

A second innovation that could be put in place is a pre-application process for those seeking to do work within the recognized shoreline protection zones. This work currently is reviewed in two separate processes, one for the "dry side" of the Ordinary High-Water Mark and one for the "wet side." The State of Michigan and the Corps of Engineers have figured out a way for one application to trigger review by each entity. It would not require an act of either the US Congress or the Michigan legislature to create a process where the local township or city involved would also be present and a part of the process.

The way we frame the conversation

also can have a big impact on outcomes. A repeated theme with the planning commissions I visited was a frustration with "enforcement" of shoreline protection ordinances. Zoning has been in place now for 50 years. If "enforcement" is still an issue, perhaps it is time to change the conversation. How about moving from "enforcement" to "seeking compliance." If we are seeking compliance, a range of options opens up that includes reaching out to those in control of property and engaging them in dialogue before the expensive landscaping plans have been hardened into a proposal. Another reframe that seemed to have appeal to the commissions I visited was to shift from "greenbelt protection" to "maintaining a living shoreline." We learned at the June 2022 Lake Charlevoix Day that there is only one, always changing, natural shoreline. It is, in a real sense, alive and evolving. Those of us who are blessed with the opportunity to care for our lake can reframe our understanding of that shoreline and give the lake the room it needs to be its natural self.

*Tom Darnton,  
LCA President*

### 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**

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Kim Baker | Director  
Erin O'Donnell | Director

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# How to be Shore Smart

Dan Mishler & Jennifer Buchanan

## riparian (adjective):

relating to or living or located on the bank of a natural watercourse (such as a river) or sometimes of a lake or a tidewater

What Webster's fails to include in their definition is the notion that being a riparian comes with both privileges and responsibility. If you are a Lake Charlevoix riparian, you have the privilege of an up close and personal relationship with one of the most beautiful bodies of water anywhere. With that privilege comes the responsibility of stewardship, to protect and preserve your stretch of living shoreline.

The LCA is excited to offer expert, individualized, lake-friendly advice for Lake Charlevoix riparian owners. We have contracted with Jennifer Buchanan, a respected water quality

expert to provide free consultations as described below.

## This free service includes information on:

### General Shoreland Stewardship:

Equipping property owners with information and resources to become proactive stewards of Lake Charlevoix.

**Shoreline Erosion:** Identifying potential erosion issues and recommending effective solutions to protect your property and the lake's integrity.

**Greenbelt Maintenance and Restoration:** Assisting in the restoration of greenbelts to enhance ecological diversity and resilience and create a living shore.



**Stormwater Management:** Offering practical tips and techniques to manage stormwater runoff responsibly. Have you thought about a rain garden?

**Bioengineering:** Introducing sustainable and nature-based solutions to shoreline stabilization.

*If you are interested in learning more about your shoreline, then Shore Smart is the perfect choice for you. Contact Jen Buchanan for a free site visit at your shoreline. [redtwigenvironmental@gmail.com](mailto:redtwigenvironmental@gmail.com)*

## Septic Study: Cause for Concern?

Dan Mishler

In 2022 the LCA initiated a septic study that sampled specific segments of the lake shoreline.

It revealed high nutrient levels in both surface water and ground water in several areas. Analysis of the nutrient levels by Dr. Uzarski at CMU indicated that failing septic systems were contributing to the high levels detected.

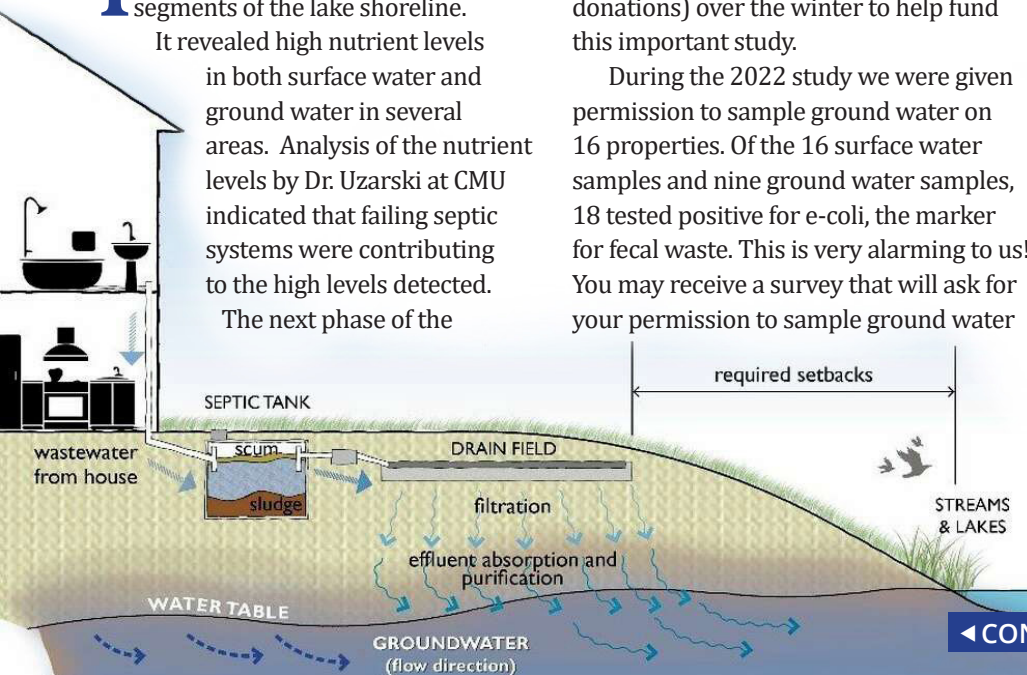
The next phase of the

study is planned for 2024. We will be applying for grants (and perhaps seeking donations) over the winter to help fund this important study.

During the 2022 study we were given permission to sample ground water on 16 properties. Of the 16 surface water samples and nine ground water samples, 18 tested positive for e-coli, the marker for fecal waste. This is very alarming to us! You may receive a survey that will ask for your permission to sample ground water

on your property. Please consider allowing us that permission.

Positive e-coli tests do not bode well for our lake. Please be vigilant in maintaining your septic systems. Know where your tank and drain field are located. Get your tank pumped out every three to five years. If your system is near the lake and/or is older, be sure your system is functioning properly. Signs of failure include soggy ground over your drain field, foul odors, excess algae growth along your shoreline. Please take immediate action to have it tested and if needed repaired. Our beautiful lake depends on all of us doing our part to keep it that way.



◀ CONVENTIONAL SEPTIC SYSTEM

# Bubble, Bubble, Safeguard or Trouble?

Erin O'Donnell

**REGULAR CRUISERS OF THE LAKE CHARLEVOIX SHORELINE HAVE PROBABLY NOTICED THE UPTICK IN PERMANENT DOCKS AROUND THE LAKE. WINTER ICE CAN WREAK HAVOC ON UNPROTECTED DOCKS WHICH LEADS MANY OWNERS TO INSTALL BUBBLERS OR THRUSTERS THAT PREVENT WATER FROM FREEZING AND POTENTIALLY DAMAGING THE PILINGS.**

In deeper water, typically 12 feet or more, agitators are used to draw warm waters from the depths of the lake to the surface. They can keep large areas of water from freezing. In shallower water, the most popular system is a bubbler. This system creates a curtain of bubbles that ensures no ice forms above.

## Potential concerns of de-icing

Lake water temperature and light conditions are altered by dock de-icers. This can impact algae and plant growth and affect the feeding habits of fish

and other aquatic organisms. Ice cover blocks sunlight from reaching the lake bottom, thus reducing algae, and weed growth. Disturbing bottom sediments with motion can also release nutrients such as phosphorus which results in increased algae growth.

In fact, in certain areas along the lake shore, open water areas may lead to greater ice damage to a dock. During the spring melt, ice floes from larger open areas can accelerate toward the shoreline with great force. Keeping the bubbler system as small as possible can minimize this issue. Even a 1/2 HP (horsepower) system can open a hole up to 60 feet in diameter.

Removing ice may raise safety and liability implications for lakefront property owners. Bubblers can create larger than necessary open water areas and thin ice conditions. In case of injury or damage, the risk of liability exposure and a potential lawsuit may fall on the property owner.

## Current proposed bubbler ordinances affecting Lake Charlevoix

On September 12, 2023 the Boyne City Commission held the first reading of the proposed new ordinance to regulate bubblers that are used to keep ice away from permanent docks along Lake Charlevoix. The second reading of the proposed ordinance was at the October 24, 2023 meeting.

## Tips if using a de-icing device:

- 1 Choose the smallest size possible to maintain an ice-free zone limited to your dock area.
- 2 Set up your de-icer to form a narrow open water area around your dock.
- 3 Keep circulator type de-icers, pointed in a vertical direction, not an angle towards the middle of the lake as dangerous thin ice conditions that are hard to detect may occur.





# Our Lake Charlevoix Vision. Where We Are Now.

*Tom Darnton*

The LCA recently completed a year-long effort to renew connections with the Planning Commissions of the cities and townships around our lake. Partnering with Tip of the Mitt Watershed Council (TOMWC) and Land Information Access Association (LIAA), we met with each group and a final report is now ready. You can view it here: <http://www.lakecharlevoixprotection.org/2022visioning.asp>. This report represents the best current thinking about caring for our lake.

The project included two in-person visits to each of the 10 planning commissions. In round one, representatives of TOMWC, LIAA and LCA appeared in person and engaged with the commissioners to learn of their challenges and concerns in implementing shoreline protection strategies. For the second round, we presented recommendations for dealing with those challenges and concerns. The final report provides a comprehensive review of current and available

strategies for preserving and protecting Lake Charlevoix.

As the LCA representative, I attended all the sessions in person. I learned the following about where we stand in our efforts to care for our lake.

First and foremost, our planning commissioners understand the need for and support our community's right to establish reasonable regulations intended to protect the lake, including vigorous shoreline protection ordinances. They are frustrated by the apparent limited effectiveness of the tools available to achieve their goals. A perceived lack of commitment at the state and federal levels leaves our planning commissions feeling exposed and unsupported. There is a sense that "big money" will have its way around the lake despite the sincere and ongoing efforts to protect the lake from the impact of large-scale development. Overall, I found that our planning commissions have a sense of patience and remain able to take the long view as they engage with these issues.

Secondly, it became apparent to me that two influential interest groups, some new riparian owners, and some landscaping companies, are not participating in the dialogue. In many areas, family cottages with tree-lined shores and sheltered cabins are being replaced by substantial, year-round resort homes where large, cleared areas showcase statement homes with expansive views. The businesses and property owners responsible for that shift are not at the tables where shoreline protection is being discussed. Why is that and what can we do to involve them in the conversation?

One possible answer is that the current conversation is framed as "preservation vs development." Those engaged in new development view "shoreline protection" efforts as an opposition to their desired plans. What if we reframe the discussion from "protection versus development" by dropping "versus"? The resulting conversation would be about preservation development. Perhaps that is a conversation our new neighbors and their landscape companies would be ready to join.



# Stunted Bluegills

*So Many Questions?*

Dan Mishler

**MOST PEOPLE WHO FISH GOT HOOKED ON THE SPORT FISHING FOR BLUEGILLS AS A KID. I'D VENTURE TO SAY THAT EVEN PEOPLE WHO DON'T FISH OFTEN, HAVE CAUGHT A BLUEGILL OR TWO IN THEIR PAST. THESE FISH ARE COMMON IN LAKES AND PONDS THROUGHOUT THE COUNTRY. THEY ARE PROLIFIC REPRODUCERS AND RELATIVELY EASY TO CATCH.**

Bluegill management can be problematic. They often get stunted which happens when smaller bluegills dominate the population. Stunting can happen due to lack of large predators, so much cover that small 'gills can avoid predation, and/or too many bluegills for the food available. Research also indicates that the removal of large males from the population also contributes to stunting. They are relatively easy to catch during the spring spawning season because they are in very shallow water building and defending their nesting beds. These beds are easy to spot and the territorial males will take a bait without much hesitation. This fishing pressure selectively removes large males from the population. The fact that bluegills make tasty table fare has an impact too.

It appears the smaller males grow much slower when they are able to spawn, which can happen in the absence

of the larger males. A 10" bluegill can be 10 years old, so it takes a while for these guys to get there. Having a healthy population requires the presence of a significant number of large males.

So, what does all of this have to do with Lake Charlevoix? I have been casually looking for bluegills on their beds on our lake for years. This past 4<sup>th</sup> of July, I finally found a lot of them. They were in very shallow water in the Boyne City marina. What I witnessed was quite disheartening. The beds were the size of tennis balls, instead of dinner plate-sized beds like I've seen on other lakes. There were hundreds of 2-inch fish participating in the spawning games of one fish darting in on a nest and the defender chasing it away. None of the bluegills were over 3 inches long!

This link will take you to a video showing the action in the BC marina on 7/4/23. <https://youtu.be/5jSkuvnNQvM>

Lake Charlevoix doesn't fit the mold for lakes with stunted bluegills. The question is why? Are all the large males fished out? Do larger predators consume the larger males? Has the presence of invasive mussels cleared the water of important food for the small 'gills? Is the Boyne City marina an isolated population?

I haven't been able to find answers to these questions in the research yet. Sounds like a good master's degree thesis research opportunity if anyone is interested. We will post this article on our LCA Facebook page where anyone can comment. I'll be interested to see what others think.



Bluegill Beds



# BEFORE & AFTER East Jordan Tourist Park

Kim Baker

As a stop-gap measure to curb erosion decades ago, large slabs of concrete were placed along the shoreline at East Jordan's Tourist Park. Unfortunately, the concrete created a hazard to park visitors and did little to prevent further erosion.

Over the last year, 200 feet of that shoreline was restored using bioengineering techniques—installing coir logs made from coconut fiber interspersed with fieldstones and then planted with native plants. This June, Lake Charlevoix Association volunteers placed an additional 500 plugs of native vegetation and spread mulch to conserve moisture and limit weed growth.

The project was a collaboration with the Michigan Natural Shoreline Partnership, the Watershed Council, Lake Charlevoix Association, and East Jordan Parks and Recreation, and was funded in part by the Michigan Department of Natural Resources Aquatic Habitat Grant Program.



BEFORE



IN PROGRESS



AFTER

PHOTO CREDITS: TIP OF THE MITT WATERSHED COUNCIL

## Historical Highlights: *East Jordan and Its River*

*Continued from page 1*

Although William Empey, a Canadian by birth, is credited with settling East Jordan and building its first store in 1873, many settlers arrived during the 1860s. They established South Arm, an earlier community on the west shore. Notable among those was Amos Williams, a Methodist circuit rider who is remembered for naming the Jordan River and building a bark canoe named *The Good Ship Zion*.

The village grew during the 1880s, soon boasting two railroads and a foundry that supported the lumber industry. That foundry, dating to 1883, became East Jordan Iron Works, one of Charlevoix County's longest and largest employers.

Still family-owned, the business (now EJ) is a global leader specializing in street castings and other infrastructure.

East Jordan came into its heyday in the early 1900s, when entrepreneurs like William Pitt Porter diversified the logging



PHOTO COURTESY OF EAST JORDAN HISTORICAL SOCIETY

Making up to three round trips a day, the steamer *Hum* was a popular way to travel from East Jordan to Charlevoix. Circa 1910.

industry. Unable to pursue a college education, William moved to East Jordan with \$600 in hand and partnered with his uncle, J.C. Glenn, who owned a lumber mill. Together, they started a flooring mill, shingle mill, planing mill, and cabinet mill. When lumber became limited, William purchased a farm and planted several thousand cherry trees. Others followed suit.

*To learn more about the history of East Jordan, swing by the East Jordan Chamber of Commerce to purchase two volumes: **East Jordan Remembers** and **The Business Interests of William Pitt Porter**. Then stroll down to City Hall to take a self-guided tour of the East Jordan Historical Society's display.*

*To learn more about the Odawa, visit [www.ltbbodawa-nsn.gov](http://www.ltbbodawa-nsn.gov)*



# Tributes

eight



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**In Memory of Anthony Foust:** *Julie Foust*

**In Memory of Trisha Anne Kelley:**  
*Larry & Gayle Levensgood*

**In Honor of Gordon Wilson:** *April Wilson*

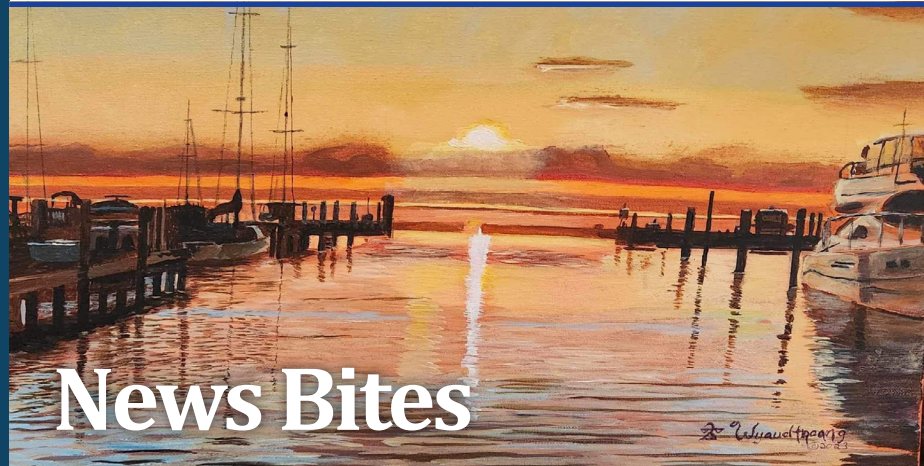
**In Honor of Julie Stratton's Birthday:**  
*Bill & Shannon Berg*                      *Bill & Leslie O'Neill*  
*Shawn Marie Nicely*                      *Charlie Stratton*

## Lake Charlevoix Association

P.O. Box 294  
Charlevoix, MI 49720  
[info@lakecharlevoix.org](mailto:info@lakecharlevoix.org)  
[www.lakecharlevoix.org](http://www.lakecharlevoix.org)

## 10 Effective Ways to Protect Lake Charlevoix

- 1 Shoreline Buffer Zones:** Maintain native vegetation along the shoreline to prevent erosion and filter pollutants before they reach the water.
- 2 Choose Native Plants:** Opt for native plants in your shoreline buffer to support local biodiversity and reduce the need for excessive watering, fertilizers, pesticides and chemical treatments.
- 3 Septic System Management:** Have your septic system inspected & pumped regularly.
- 4 Rainwater Management:** Install rain gardens, permeable driveways, and rain barrels to manage stormwater runoff and prevent pollutants from entering the lake.
- 5 Reduce Water Usage:** Conserve water by fixing leaks, using efficient appliances, and practicing mindful water consumption at home.
- 6 Responsible Boating Practices:** Avoid excessive speed and adhere to no-wake zones to prevent erosion and water turbidity. Drain & dry your boat after each use.
- 7 Minimize Chemical Usage:** Use non-toxic cleaning products, detergents, and chemicals to reduce water pollution from household runoff.
- 8 Proper Waste Disposal:** Dispose of trash, fishing lines, and other waste responsibly to prevent contamination of the water and harm to aquatic life.
- 9 Support Local Conservation Organizations:** Contribute to or volunteer with local environmental groups actively working to protect and restore the lake's ecosystem.
- 10 Advocate for Strong Policies:** Support and advocate for legislation that aims to protect the water quality and overall health of Lake Charlevoix.



## News Bites

PAINTING CREDIT: THE ARTIST WYAUDTNOONG, WWW.WYAUDTNOONG.COM

**With Gratitude:** We extend our sincere appreciation to retiring LCA Board Member, Peggy Smith for her many contributions to the Lake Charlevoix Association. Thank you for advancing our mission and preserving the beauty of our cherished lake.

**Welcome:** The LCA welcomes new Board Member, Erin O'Donnell. We're excited to have her expertise and enthusiasm enriching our organization. She will undoubtedly enhance our mission and contribute to the success of our endeavors.

**Thank You:** We want to express our profound gratitude to the dedicated members and tireless volunteers of the Lake Charlevoix Association. Your unwavering commitment and selfless contributions are the driving force behind our mission's success, and we deeply appreciate your ongoing support in preserving the natural beauty and vitality of Lake Charlevoix.

**Year-End Donations:** The LCA is a 501c3 and always appreciates being included in your year-end giving. Your tax-deductible donation funds lake protection for Lake Charlevoix. You may donate on our website, <https://www.lakecharlevoix.org/support-us.html>, or donate with the enclosed envelope.

**Opportunity:** Tip of the Mitt Watershed Council is seeking a full-time Finance Director. Learn more at [www.watershedcouncil.org](http://www.watershedcouncil.org).



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