

THE LAKE GUARDIAN



SPRING 2026

The Charlevoix Historical Society proudly announces *The City on Three Lakes: A Maritime History of Charlevoix & the Surrounding Region*, published by Mission Point Press. <https://chxhistory.com/press-releases/>

CHARLEVOIX HISTORICAL SOCIETY,
MUSEUM AT HARSHA HOUSE
PHOTO BY BOB MILES, CA. 1965

The Lake Charlevoix *Watershed*

Protecting What Connects Us

Joel Van Roekel

The Lake Charlevoix Association owes its origin to a single individual who in 1970 decided to reach out to fellow lake residents to raise awareness of the resplendent lake they had and the importance of protecting its natural beauty and health. Over the past 56 years, the group has grown to 700 members supporting dozens of projects and programs designed to protect and preserve our lake. However, it has become evident that there is far more to achieving that goal than focusing solely on its 17,200 acres. In fact, the health of the lake is affected by the entire 214,000 acre watershed that stretches across Antrim, Charlevoix, Emmet, and Otsego counties.

The watershed surrounding Lake Charlevoix is more than a network of streams and shorelines—it is the living system that connects our forests, farms, neighborhoods, and communities. Every drop of rain that falls within this watershed eventually finds its way to the lake, carrying with it the story of how we care for the land.

Stretching across rolling hills, wetlands, towns, and townships, the Lake Charlevoix watershed plays a vital role in water quality, wildlife habitat, recreation, and our local economy. Clean water supports fish populations, provides drinking water, and draws visitors who value boating, swimming, and the lake’s natural beauty. Healthy shorelines prevent erosion, filter runoff, and provide habitat for birds and other wildlife.

But watersheds are sensitive systems. Stormwater runoff from roads and driveways, excess nutrients from fertilizers, septic system failures, and shoreline alterations can all affect water clarity and ecosystem health. Because everything is connected, small actions across the watershed add up—for better or worse.

This newsletter highlights ongoing projects and celebrates the individuals and organizations working to protect our watershed. Caring for the watershed means caring for each other. What we do upstream shapes what we experience downstream. Let’s continue to protect the water that connects us all. Together, we can ensure that Lake Charlevoix remains a clean, vibrant resource for future generations.

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PHOTO CREDIT: JULIE STRATTON

President's Message

Our Lake Charlevoix Watershed is the focus of this Spring 2026 issue of The Lake Guardian. Our fundamental mission is to protect the natural quality and beauty of the Lake



Charlevoix watershed. There is an important distinction between protecting natural quality and protecting the status quo. The natural beauty of our 2026 watershed

is much altered from its appearance in the 1950's, when I was playfully running a 2 cycle outboard along the undeveloped south shore on the back of the Loeb Farm where there are now docks and houses every 100 feet, leaving a rainbow sheen from my exhaust behind. Yet, I felt equally in the presence of beauty running a much cleaner engine further offshore as the sun set on a September evening in 2025.

The foundational document guiding our preservation efforts is called the Lake Charlevoix Watershed Management Plan. It is not a resistance plan, but rather a plan to preserve and protect this unique body of water. While our shoreline protection ordinances did not prevent development, there is solid evidence around the lake that they had a significant impact. A lot of human activity occurs within those shoreline protection zones but there is also a good deal of vegetation. When those old cottages were rebuilt as year-around lakeshore homes, their septic systems had to be upgraded to modern specifications.

Ordinances and management plans, however, are not self-enforcing and they establish only minimum standards. Preserving beauty requires more than minimum standards, particularly with climate change added to development. It requires well organized, well-funded, community organizations. We need a competent professional grade office operation to give our volunteers the support they need. As a first step, we adopted a new membership rate structure at our 2025 Annual meeting.

What are the benefits of joining our organization?

- 1 Whenever one of us sees the sun set over a blue and green horizon, that experience is sweetened because they know they are contributing to preserving that beauty.
- 2 When one of us worries about some particular discordant note in the watershed, they can know that their organization is addressing those concerns.
- 3 When one of us worries about whether this beauty will be available to their grandchildren, they know that our organization can be part of preserving that beauty.

The watershed we work to preserve is open to everyone, member or not. But when you love something, you want to care for it and keep it available. How do you do that? Support our work and get involved.

I want to close with a heartfelt thank you to our newsletter team of Joel Van Roekel and Julie Stratton. These semiannual newsletters are at the core of our mission work to advocate for the beauty of our watershed, Joel and Julie have worked for many years to craft our issues and are still going strong. Great work Julie and Joel! I'm sure the watershed has benefited.

*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.*

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www.lakecharlevoix.org
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Nutrients Matter

How Everyday Choices Affect the Lake

John Hoffman

Lake Charlevoix is one of the most beautiful lakes in America and many of us are so privileged to be able to live in its watershed. However, common everyday activities can add significant amounts of nitrogen (N) and phosphorus (P) to the lake. These nutrients fuel algae and aquatic plant growth, reduce water clarity, create foul odors and stress fish and other aquatic wildlife. Understanding the main sources of nitrogen and phosphorus and what homeowners can do will make a big difference in maintaining the water quality of our lake.

Lawn and garden fertilizers are a primary source of nitrogen and phosphorus pollution. Phosphorus binds to the soil and is transported in surface runoff and ground water making its way to the lake. Nitrogen, especially in the form of nitrate, is highly mobile and can leach into groundwater that then flows into the lake. Michigan state law restricts the use of phosphorus containing fertilizers on residential and commercial lawns. In fact, lawns do not require phosphorus for healthy growth.

Failing or poorly maintained septic systems are another significant source of nitrogen and phosphorus being carried by groundwater to the lake. Pet waste and wildlife droppings are rich in

nutrients and when left on the ground are washed into the lake by surface water. Yard waste, such as leaves and grass clippings, contain nitrogen and phosphorus that is released when it decomposes.

Practical steps homeowners can take to reduce or eliminate nitrogen and phosphorus inputs include:

- Eliminate or reduce fertilizer use. Perform a soil test to determine the proper amount needed.
- Use phosphorus free fertilizers. The formula for fertilizers comprises three sets of numbers, such as 20-0-10 where the middle number refers to the phosphorus content. That one should be "0".
- Avoid fertilizer application before a heavy rain.
- Create and maintain a 50-foot greenbelt buffer at the shoreline, using native plants, trees, shrubs and grasses instead of turf grass to reduce runoff and take up nutrients.
- Never apply fertilizer near the water's edge, and preferably not in the 50-foot greenbelt buffer.
- Maintain septic systems with regular inspections and pumping every 3-5 years.
- Manage yard and pet waste by removing it from the shoreline area.
- Educate and collaborate: work with neighbors, homeowner associations, governmental entities and The Lake Charlevoix Association to coordinate good shoreline practices.

Understanding the sources of nitrogen and phosphorus and the steps that can be taken to prevent their introduction in to the lake will help to ensure that the beauty and health of Lake Charlevoix are preserved.

Protecting Our Lake Today Helps Preserve It for Tomorrow

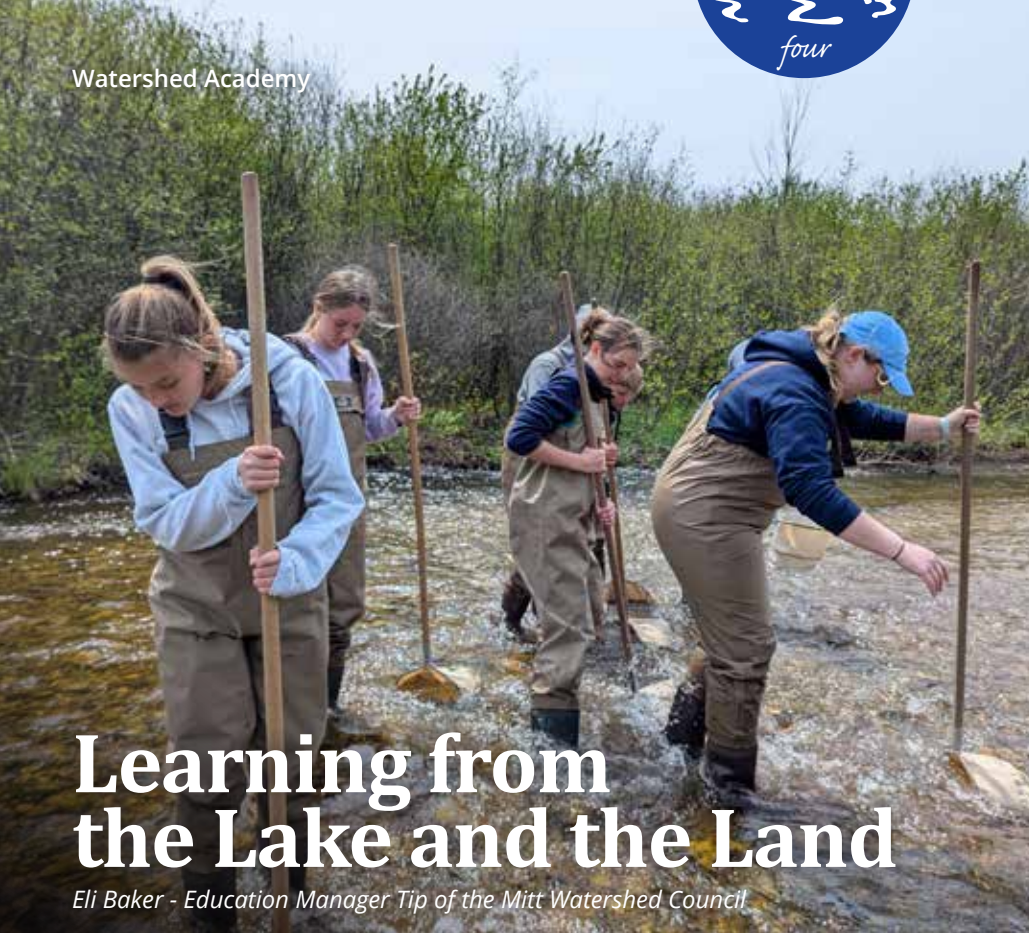
What does this lake give you? Quiet mornings? Days of laughter and joy? Memories that last a lifetime? Whatever it's given you, please give back. Join or renew your membership in the Lake Charlevoix Association. Our efforts include research, education, advocacy, and collaboration with other environmental organizations. Protect what you love, so future generations can feel the same magic.

Please go to <https://www.lakecharlevoix.org/support-us.html> or use the enclosed envelope to renew or increase your annual support.

Your support helps sustain our ongoing work and keeps us ready to respond to new challenges as they arise.

Thank you for your ongoing support!





Learning from the Lake and the Land

Eli Baker - Education Manager Tip of the Mitt Watershed Council

PHOTO CREDIT: TO TIP OF THE MITT WATERSHED

On the upper deck of the Beaver Islander ferry, a group of Fifth/Sixth grade students gathers around a watershed model during a **Students Experience Lake Charlevoix** field day. It is the same ferry students have stood on since 1994, looking out over the waters of Lake Charlevoix while learning about their connection to the lake.

Small houses and roads sit on the model landscape. Someone sprinkles brightly colored Kool Aid powder across the "land." When water is sprayed over the model, the color runs downhill through streams and storm drains before pooling in the lake below.

You can see the moment it clicks.

Pollution does not start in the lake. It starts on the land. That is how watersheds work, and it is one of the first lessons thousands of local students learn about Lake Charlevoix.

For some students, that understanding grows into action. Through the Watershed Council's High School Stream Monitoring Program, students return to tributaries like

the Jordan River and Boyne River to collect real water quality data that contributes to long term monitoring of the watershed. That information helps guide restoration work and protection efforts throughout the Lake Charlevoix watershed.

Education, science, and stewardship all play a role in protecting Lake Charlevoix. Sometimes that lifelong connection begins with something simple: a ferry ride, a watershed model, and the realization that the lake belongs to all of us.



Students Experience Lake Charlevoix

PHOTO CREDIT: TO TIP OF THE MITT WATERSHED

The Lake Charlevoix Association values its long-standing partnership with Tip of the Mitt Watershed Council. We are committed to the shared work that makes Students Experience Lake Charlevoix possible each year and to supporting the Watershed Academy as an ongoing program. We also value our role in the bioengineering restoration at East Jordan's Tourist Park, along with the many other important projects we've worked on together over the years. We are grateful for their leadership and for our continued collaboration to protect the watershed.

LCA Partners in Preservation:

Charlevoix Conservation District The Lake Charlevoix Association is once again excited to partner with the Charlevoix Conservation District and the Walloon Lake Association & Conservancy for the Native Plant Sale on Saturday, June 6th from 12-2 PM at the District Barn. All plants are locally grown by Birdsfoot Native Nursery, ensuring high-quality, regionally adapted species for your landscape. We hope you've placed your order with CCD and will be joining us there!

CAKE CISMA We're pleased to be collaborating with CAKE CISMA on proactive European frogbit monitoring and prevention across the watershed. Stay tuned for ways you may be involved as this effort moves forward.

Stream Stewards in Action

*Emily Johnson - Aquatic Resources Coordinator,
Tip of the Mitt Watershed Council*

FOR OVER TWO DECADES, DEDICATED VOLUNTEERS FROM TIP OF THE MITT WATERSHED COUNCIL HAVE ENTERED STREAMS EVERY SPRING AND FALL WITH THEIR KICKNETS TO COLLECT VALUABLE DATA. FROM NOTING HABITAT TYPES TO COLLECTING AQUATIC MACROINVERTEBRATES, SMALL INSECTS THAT PLAY A LARGE ROLE IN OUR FRESHWATER ECOSYSTEMS, THESE VOLUNTEERS WORK HARD TO GAIN INSIGHTS ON STREAM HEALTH.

Water, important to everyone who lives in and visits the Lake Charlevoix Watershed, is reliant on this data collection through our Volunteer Stream Monitoring Program. With the help of citizen science, we can engage watershed residents to help safeguard their beloved streams.

Our sites on the Boyne and Jordan Rivers have consistently shown excellent stream quality while sites like Deer and Stover Creeks show fair quality. These historic trends can help us make decisions about pollution, habitat degradation, and invasive species to improve and keep our streams healthy.

To learn more about your favorite stream, visit <https://watershedcouncil.org/our-waters/rivers-streams/>.



Volunteer
Stream
Monitors

PHOTO CREDIT: TIP OF THE MITT WATERSHED



Stover Creek Dam

PHOTO CREDIT: TIP OF THE MITT WATERSHED

Protecting Lake Charlevoix Watershed Projects in Action

*Carrie Coy - Water Resources Manager,
Tip of the Mitt Watershed Council*

Every drop of precipitation and surface water in the watershed flows into Lake Charlevoix. This water replenishes the lake, supports many aquatics species, and significantly contributes to the biodiversity of the lake. However, this same water can also carry trash, a variety of contaminants, and excess sediment. To that end, Tip of the Mitt Watershed Council is implementing multiple watershed improvement projects in 2026. On the corner of Mill and Maple Streets in East Jordan, a rain garden will be installed that allows stormwater to infiltrate the soil to stop nearby erosion and reduce pollutants. Educational signage and permanent seating will allow visitors to enjoy the flowers and foliage. On the South side of Charlevoix, the Stover Creek Dam is to be removed, rock weirs will be installed to maintain fish habitat, and streambanks will be stabilized with plantings and coir logs. This restoration work will reduce flooding concerns, allow for fish passage, and improve habitat for fish and macroinvertebrates. Both of these boots-on-the-ground projects are funded by EGLE. The East Jordan Tourist Park was restored in 2022 using bioengineering techniques in response to erosion from lake level changes. Coir logs and native plantings have helped to stabilize and beautify the site. We're now looking for volunteers to help maintain the site during the summer.

Power or Preservation?

The Boyne River Debate

Brian Kozminski

The hydropower facility operated by Boyne USA on the Boyne River is currently undergoing federal relicensing through the Federal Energy Regulatory Commission (FERC). This process has generated significant concern among local conservationists, including the Friends of the Boyne River. Critics argue that the dam and reservoir alter the river's natural flow, warm the cold-water system, trap sediment, and block upstream fish passage from Lake Charlevoix. These impacts can negatively affect the Boyne River's trout and aquatic insect populations. Local advocates also raise concerns about public access to the reservoir and question whether the relatively small amount of power produced justifies the ecological impacts on the river.

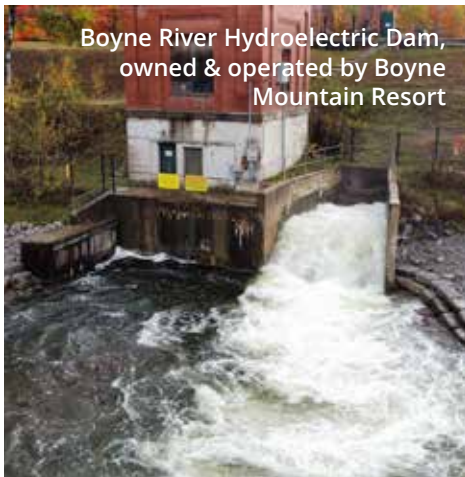
Safety concerns have also been raised about the facility's aging infrastructure, including reports of leaking penstocks that carry water to the turbines. Critics say this highlights the need for major repairs or a reconsideration of the project's long-term viability as part of the relicensing decision.

Much has been learned in the 125 years since the dam was built about the importance of watersheds and free-

flowing rivers. Rivers and streams serve as the arteries of a natural circulatory system upon which water quality depends. Our understanding of the balance between the public's right to use waterways and the rights of riparian owners to manage them has also evolved over time.

Opportunities to move the needle toward free-flowing rivers and streams

do not often arise. Coupled with current plans for dam removal and river restoration at the M-75 crossing in Boyne Falls, our community is being presented with a historic opportunity to shape the watershed for the next 125 years. Doing it right will require thoughtful engagement with all stakeholders in our beautiful and fragile watershed.



Boyne River Hydroelectric Dam, owned & operated by Boyne Mountain Resort

PHOTO CREDIT: BRIAN KOZMINSKI



Freeing the South Branch of the Boyne River

Meredith Freeby - Conservation Resource Alliance

For more than a century, the Boyne Falls Dam has blocked the South Branch of the Boyne River—but its future is changing. Built in the late 1800s for milling and later converted to hydropower, the dam no longer serves these purposes. Today, it holds a shrinking, sediment-choked pond with just 7 acres of open water averaging less than a foot deep. Hundreds of thousands

of cubic yards of sediment remain trapped behind the aging structure, which shows concrete deterioration and active seepage.

The dam blocks aquatic organisms from accessing 77 miles of connected river habitat and contributes to warmer, lower-oxygen conditions that stress cold water species like brook and brown trout.

The Village of Boyne Falls, in partnership with Conservation Resource Alliance and other collaborators, is planning for dam removal and river restoration. A feasibility study by GEI Consultants is evaluating sediment management, channel restoration, potential relocation to the river's historic course, and updated road crossings.

If funded, design could begin this year—advancing a long-term vision of a free-flowing river, restored habitat, and a healthier watershed for generations to come. Community support plays a critical role in moving this work forward, helping advance planning, restoration, and long-term river health.

Learn more and support the project:
<https://www.rivercare.org/project/boyne-river/freeing-the-south-branch-the-future-of-boyne-falls-dam/>

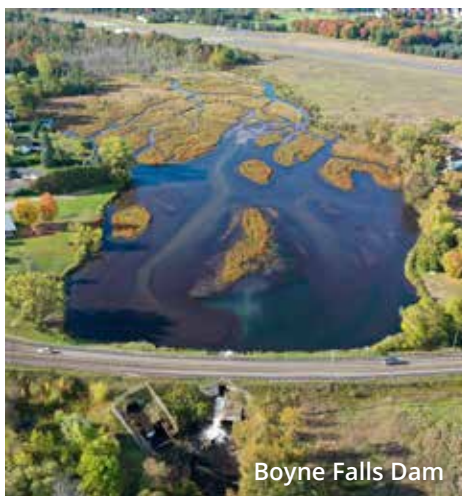


PHOTO CREDIT: CONSERVATION RESOURCE ALLIANCE

Protecting and Preserving the Environment Can Take Many Forms

It may be an individual tackling a project single-handedly, or an organization dedicated to caring for land, lakes, and streams. But the most significant and lasting impacts happen when groups come together. Collaboration extends beyond the reach of any one entity. Pooling resources, knowledge, and community support addresses the complex challenges facing an entire watershed. To that end, we would like to acknowledge just some of the organizations we are proud to work alongside:

CAKE CISMA

- Charlevoix Conservation District
- Conservation Resource Alliance
- Friends of the Boyne River
- Friends of the Jordan River Watershed
- Land Information Access Association
- Little Traverse Bay Bands of Odawa Indians
- Little Traverse Conservancy
- MI DNR
- EGLE
- Michigan Lakes & Streams Association
- Michigan Natural Shoreline Partnership
- Michigan Shoreline Stewards
- Michigan Waterfront Alliance
- Tip of the Mitt Watershed Council



Tributes

**In Memory of
Walt & Martha Landis**

Connie Landis

In Memory of Bill Little

*Stephen Little &
Barbara Wotila*

**In Memory of
John & Irene Miller**

*Donald Homan &
Bonnie Miller*

In Memory of Paul Nowak

Jonathan & Lynn Friendly

**In Memory of
Ann & Mike Rosenthal**

*Rochelle & Randolph
Forester Foundation*

**In Memory of
Sue Clark-Schank**

Sarah Clark

The Hidden Costs of a Sandy Shore

Joel Van Roekel

Along the shores of Lake Charlevoix, a wide sandy beach may look inviting—but creating one through beach sanding can quietly harm the lake’s delicate balance.

Many shorelines are inherently lined with grasses, reeds, and low shrubs that anchor soil and protect against erosion. Sanding buries or removes this vegetation, leaving the shoreline more vulnerable to wave action. Over time, this can lead to increased erosion and the loss of valuable property and habitat.

Just as important, natural shorelines provide critical habitat for insects, fish, amphibians, and birds. Fallen leaves, woody debris, and aquatic plants support a complex food web. When these features are replaced with a smooth layer of sand, that diversity disappears. Fewer insects mean less food for fish and wildlife, weakening the entire ecosystem.

Beach sanding can also affect water quality. Loose sand and disturbed soils wash into the lake, carrying nutrients like phosphorus that fuel algae growth. This can reduce water clarity and lower oxygen levels, stressing fish and other aquatic life.

While a sandy shoreline may feel like an improvement, it often comes at a cost. Protecting and preserving native shorelines helps maintain the beauty, water quality, and ecological health that make Lake Charlevoix so special.



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Join now!

Lake Charlevoix Association

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News Bites

Thank you: We are grateful to Kim Baker for his time and contributions to the LCA Board, and we extend our best wishes for what comes next.

Board Addition: The LCA Board is strengthened by the addition of Ed Willis, whose service we truly appreciate.

Organizational Milestone: A warm welcome to Sarah Elgart as she joins the LCA as our new Administrator — an exciting milestone for the organization.

Stay Informed: Want to receive timely LCA updates by email? Let us know at info@lakecharlevoix.org and we’ll add you to our list.

Our Sincere Thanks: As the only organization solely dedicated to protecting Lake Charlevoix and its watershed, we are deeply grateful to our members, donors, and volunteers. Your generosity and commitment make our conservation work possible and help safeguard the natural places we all cherish.