



Watermarks

From Abundance
to Accountability:
Securing the Great Lakes



Protecting What We've Won, Leading Use Ahead

Generations have built lives, families, and futures along the shores of the Great Lakes, trusting that this abundance of water would always be here. But abundance without care can fade into conflict and loss. And that is the tension we face now.

Hard-won federal programs that have helped us remove toxic pollution and restore habitats for wildlife and people are threatened by cuts. So is the deep well of scientific research that has enabled such progress. You can argue about budgets, but at their heart these programs aren't numbers. They are lifelines for the Great Lakes, restoring damaged places into sources of pride and hope. Pullbacks on Great Lakes protection feel like an attack on our shared values.

And our shared value for safe and clean water is what's keeping me and the Alliance team motivated every day. We know we can choose to collectively take control of the work to protect and restore the lakes.

More than a year ago, we started to track the rising pressure on our water supply from growth in large-scale water-using industries like data centers, agriculture, and mining. While our lakes are protected from diversions to places far away, our recent groundbreaking report shows that the region is not at all ready to manage a growing thirst and competition for water here at home. Even in our place of abundance, water use conflict is emerging. The good news is we still have time to choose a more sustainable path.

This is the crossroads for the Alliance and for our Great Lakes: Defend progress made, but don't let that define us or dictate what comes next. Protect the historic programs that work, and keep building the future we know the Lakes and the people who depend on them deserve.

I believe in this work because every day I see the value people like you place on our precious Great Lakes. You are the ones who stand with us, year after year, to keep these waters safe. Together, we can protect the best of what the Great Lakes are today and lead our region in tackling the risks on the horizon. With your support, we'll all continue to create a healthy and vital Great Lakes.

With gratitude,

A handwritten signature in black ink that reads "Joel Brammeier". The signature is fluid and cursive, with a long horizontal line extending to the right.

Joel Brammeier, President & CEO

Nitrate on Tap: The Hidden Costs in Wisconsin's Water



Mary Warner of Nekoosa, Wisconsin, with bottled water she is required to purchase as her well is currently testing above the federal regulatory standard of 10mg/L for nitrate.

In Wisconsin, families should be able to turn on the tap without worry.

But for thousands of households, especially in rural areas with shallow bedrock or karst geology, nitrate contamination has turned something as simple as a glass of water into a daily gamble.

Nitrate exposure is not just an inconvenience. It's been linked to cancer, pregnancy complications, and infant methemoglobinemia, better known as blue baby

syndrome. Behind every statistic are families carrying heavy burdens: parents paying for bottled water, homeowners forced to replace wells, and ratepayers shouldering multimillion-dollar infrastructure upgrades. *Nitrates on Tap: The Cost of Nitrate Contamination in Wisconsin's Drinking Water* is our new report that highlights these impacts through interviews of affected residents, analysis of the problem, and science-based solutions. It was produced in partnership with Clean Wisconsin.

The math is staggering. Four municipalities—Chippewa Falls, Plover, Janesville, and Trempealeau—have already spent more than \$45 million on nitrate mitigation. Factoring in private well replacements, the costs exceed \$116 million. And yet the price tag keeps climbing because the contamination continues. For many private well owners, replacing a contaminated well can cost up to \$20,000. That bill punishes the victims rather than holding polluters accountable.

We know where the problem comes from. More than 90 percent of nitrate pollution in Wisconsin's waters is tied to agriculture. Excessive use of nitrogen fertilizer and manure application is driving the crisis. In 2022 alone, over 16 million pounds of nitrogen was likely applied beyond crop needs. The result is contamination in every county and watershed, degrading both drinking water and aquatic ecosystems. Current state policies and voluntary programs have failed to curb this problem. Instead, those costs are being shifted to individuals and ratepayers while putting communities that depend on public and private drinking water systems at risk.

The solutions are clear. Update outdated groundwater standards. Strengthen fertilizer and manure rules. Expand well compensation programs. Create accountability systems for high-risk operations. Delay only increases the costs, in both dollars and human health.

Nitrate pollution isn't unique to Wisconsin. The report also serves as a blueprint for how other states across the Great Lakes can analyze and address the issue. The truth is simple: Safe water is a right, not a privilege. Protecting it means addressing nitrate pollution at its source, before the next family pays the price.



Mark Brueggeman of Nelsonville, Wisconsin, with his well, which had to be dug to a depth of 197 feet and cost nearly \$20,000.

NITRATE IN WISCONSIN'S WATER

90%+—Share of nitrate pollution linked to agriculture (fertilizer and manure).

16 million pounds—Excess nitrogen likely applied in Wisconsin beyond crop needs in 2022.

Every county—Nitrate contamination affects every county and watershed in Wisconsin.

\$45 million—What four municipalities have already spent on nitrate mitigation.

\$116 million+—Combined costs when private well replacement is included.

\$20,000—What a single private well replacement can cost a homeowner.

Health risks—Cancer, pregnancy complications, and infant blue baby syndrome are tied to nitrate exposure.

The numbers tell the story: Families and communities are paying the price while contamination continues. Real solutions must tackle nitrate pollution at its source.

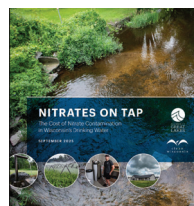
WHAT YOU CAN DO

Nitrate pollution is preventable—but only if we act together. Here's how you can help:

LEARN MORE. Read the full Nitrate on Tap report (will add link here) and share it with your community.

RAISE AWARENESS. Talk with local leaders and neighbors about nitrate risks and the need for stronger protections.

SUPPORT SOLUTIONS. Your donation helps push for policies that stop pollution at its source and protect families.



LEARN MORE

Read the full Nitrate on Tap report at:

<http://greatlakes.org/nitratesWI>

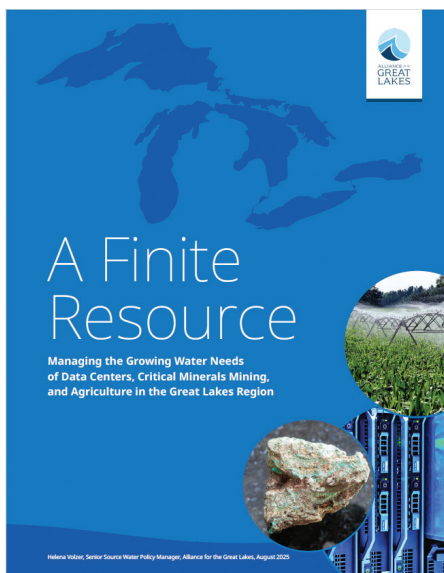
When Abundance Meets Demand:



Safeguarding Great Lakes Water in a Time of Rising Use

Strong leadership is essential to ensuring a thriving future. Only about one percent of the water in the Great Lakes is naturally replenished each year. Groundwater, though often overlooked, supplies up to 40 percent of the Lakes' total water budget, and as many as 75 percent of residents in Great Lakes states rely on it for drinking water. While the Lakes appear abundant, the truth is that abundance has limits.

At the Alliance for the Great Lakes, our role is to clearly present the facts about this shared resource and to advance policies that ensure its long-term security. Our new report, *A Finite Resource: Managing the Growing Water Needs of Data Centers, Critical Minerals Mining, and Agriculture in the Great Lakes Region*, highlights the pressures building across the basin and the consequences of inaction.



The Pressure Building

Three industries are driving significant new demand:

Data centers. Hyperscale facilities can use more than 365 million gallons of water annually. That is equivalent to the needs of 12,000 residents. Illinois and Ohio rank among the top five states for data center development.

Critical minerals mining. Minerals like copper and nickel are essential for clean-energy technologies. Their extraction requires large volumes of water, often from the same aquifers that communities depend on.

Agricultural irrigation. Hotter, drier summers are changing farm practices. Areas that were rarely irrigated before now rely on wells to sustain crops. This trend is expected to increase as the climate warms.

Individually, each sector contributes to economic growth. Together, they raise important questions about how much the region's water systems can withstand.

Warning Signs

The strain is already visible:

- In Michigan, shallow aquifers are stressed by competing residential, agricultural, and development demands.
- In Wisconsin's Central Sands, extensive irrigation pumping has lowered lake levels.
- In Indiana, homeowners west of South Bend have reported dry wells linked to industrial construction.
- In major cities, including Chicago, Detroit, and Indianapolis, groundwater extraction is contributing to land subsidence. This has long-term implications for infrastructure.

Current Protections and Gaps

The 2008 Great Lakes Compact remains a strong safeguard against diversions outside the basin. However, it was not designed for today's pressures.

- Fewer than one-third of data centers report water use.
- Economic development incentives are often awarded without assessing local aquifer capacity.
- Groundwater monitoring and mapping remain underfunded, leaving communities without critical data.

The Path Forward

Our report outlines steps to better manage demand:

- Require disclosure of water and energy use before projects are approved.
- Expand permitting and reporting thresholds for industrial and agricultural water users.
- Fund groundwater and aquifer mapping for data-driven decisions.
- Establish efficiency standards for large-scale water users.
- Eliminate tax incentives that encourage high-water-use projects without oversight.

These measures are not about halting growth. They are about ensuring that development aligns with the region's water capacity. The Great Lakes are the region's most valuable asset. With planning, transparency, and accountability, we can balance economic growth with long-term water security.

BY THE NUMBERS: WATER UNDER PRESSURE

1%—The share of Great Lakes water replenished each year. The rest is a one-time gift from glaciers.

365 million gallons—What one hyperscale data center can use in a year—equal to the annual water use of 12,000 people.

2 millimeters a year—The rate at which cities like Chicago, Detroit, Indianapolis, and Columbus are sinking due to groundwater extraction.

97%—The percentage of data centers that get their water from municipal sources. The numbers are sobering, but they also make one thing clear: We have the data to act. If we protect the water now, the water will continue to protect us.



Data Centers



Agriculture



Critical Minerals Mining

WHAT YOU CAN DO

Protecting the Great Lakes starts with all of us. Here's how you can be part of the solution:

- **Learn the facts.** Read our full report, *A Finite Resource*, and share it with friends and community leaders.
- **Raise your voice.** Urge your state and local officials to factor water availability into decisions about new development.
- **Support solutions.** Your donation fuels research, advocacy, and community action that keeps the Lakes protected.

The Great Lakes have always given us more than enough. Now it's our turn to give back.

“If states and communities begin incorporating water availability into their decisions now, we can avoid dangerous and unsustainable outcomes later.”

— Report author Helena Volzer, Senior Source Water Policy Manager, Alliance for the Great Lakes



DONOR PROFILE

Nick Longo — Steward of the Lakes, Advocate for Generations

For Nick Longo, the Great Lakes are not just a place on a map. They are woven into the fabric of his life. Childhood summers spent at Chicago's Oak Street and North Avenue beaches with his older brother were his first introduction to Lake Michigan. "That was my first connection to the Great Lakes," he remembers. "It made a big impression on me."

That early spark grew stronger when his mother began working at the U.S. Environmental Protection Agency in the early 1970s. Inspired by her example, Nick leaned toward water as his passion. By high school, he had started an ecology club and turned to the Lake Michigan Federation, now the Alliance for the Great Lakes, for resources. "They provided materials for my presentations. I was very grateful," he says.

Nick went on to earn degrees in hydrology and project management and built a career in environmental

remediation and emergency response. After years working across the country, returning to Chicago gave him the chance to reconnect with the lakes and with the Alliance. He joined the Alliance's Ambassador program, participated in Adopt-a-Beach cleanups, and later accepted an invitation to serve on the Board of Directors. "It was sort of a coming-home moment for me to be involved with the Alliance again," he reflects.

For Nick, volunteering and board service are part of a bigger vision: ensuring that future generations inherit clean, healthy water. That's why he and his wife decided to include the Alliance in their planned

"The Alliance's mix of stewardship and advocacy made it the perfect fit for our legacy plans."

giving. "My goal in retirement is to help bring up the next generation of environmental scientists and leaders," Nick explains. "The Alliance's mix of stewardship and advocacy made it the perfect fit for our legacy plans."

Nick hopes others in his community see the Great Lakes not just as a municipal water source, but also as a treasure to protect. "People don't always realize how valuable and vulnerable this resource is," he says. "It's not limitless, and it deserves our care."

GREAT LAKES VOICES IN ACTION:

Thousands of Messages for Change

Some victories don't come with fireworks or headlines. They come in the steady work of people raising their voices, calling their legislators, and refusing to let the Great Lakes be taken for granted. So far this year, that steady work has added up to more than 12,400 messages sent from Alliance supporters to federal and state lawmakers across the region.

We've mobilized supporters in all eight Great Lakes states to urge their leaders to monitor and reduce plastic pollution so microplastics stay out of our lakes and our drinking water. In Michigan, residents pressed for affordable water, reminding decision-makers that access to clean, safe water is a basic human need. In Ohio, people spoke up to maintain funding to remove lead pipes, improve water infrastructure, and fight harmful algal blooms. And across the region, supporters called on Congress to enact federal priorities for 2025, preserving the funding, research, and expertise needed to safeguard the Great Lakes. In our meetings with legislators, they tell us these messages are breaking through and making a difference.

Every message carried the same belief that the health of the lakes is not a partisan issue; it is a personal one. For families, farmers, fishermen, and future generations, protecting this resource means protecting home.

When thousands of messages land on legislators' desks, it is a reminder that the Great Lakes have advocates ready to defend them.



From L to R: Alicia Smith, Debra Shore, Joel Brammeier, Joyce Solberg, Novem Cheng

GREAT BLUE BENEFIT 2025: Wavemakers in Motion

On a warm June evening, supporters of the Alliance for the Great Lakes gathered at Chicago’s Columbia Yacht Club for the annual Great Blue Benefit. The event was both a celebration and a call to action, spotlighting the people who embody what it means to be true Wavemakers—our annual award for those who make an outsized impact on the Great Lakes movement.

This year’s honorees reflected the diverse ways leadership takes shape across our region. **Novem Cheng**, an Alliance Ambassador, brings boundless energy to Adopt-a-Beach cleanups and inspires others to step into stewardship. **Debra Shore**, Regional Administrator for the U.S. EPA’s Region 5, has dedicated her career to protecting clean water through both policy and public service. **Alicia Smith**, co-founder of Toledo’s Junction Coalition, turned the 2014 water crisis into a movement for environmental justice, youth engagement, and healthier communities. And **Joyce Solberg**, longtime Alliance board member and dedicated fundraiser, was celebrated for her years of leadership and generosity that have helped sustain this very event.

Though the evening has passed, its spirit carries forward. Each honoree reminds us that protecting the Great Lakes is both personal and collective. Together, our community of Wavemakers ensures these waters remain a source of life, resilience, and joy for generations to come.

SAVE THE DATE

December 2, 2025: Giving Tuesday

TELL US WHAT YOU THINK

We’d love your feedback about our Watermarks newsletter. We’re also happy to answer your questions about pressing Great Lakes issues. Email us at alliance@greatlakes.org



The Alliance for the Great Lakes is a nonpartisan nonprofit working across the region to protect our most precious resource: the fresh, clean, and natural waters of the Great Lakes.

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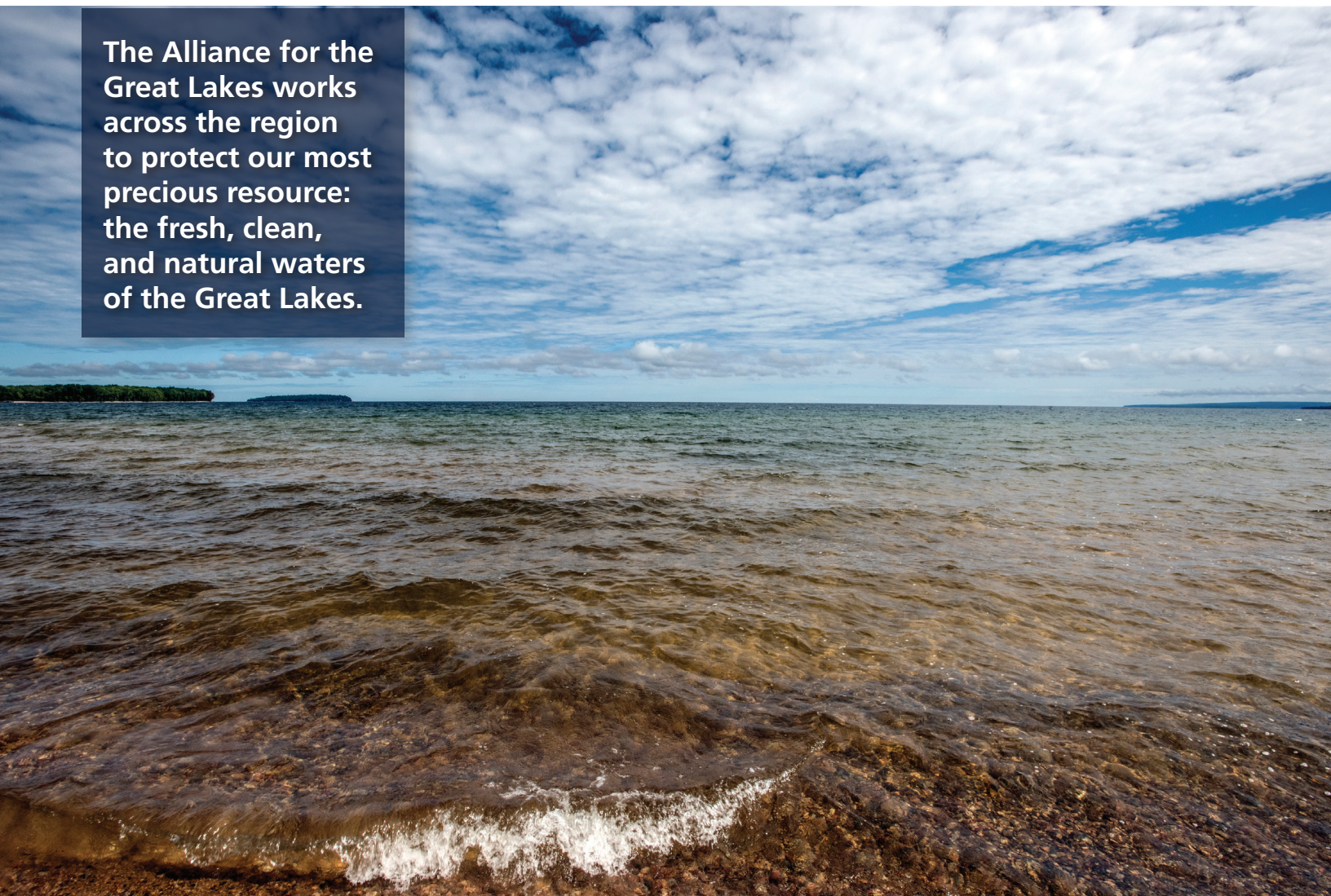
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A wide-angle photograph of a Great Lakes shoreline. The foreground shows dark, pebbly rocks with gentle waves washing over them. The water extends to the horizon under a vast, blue sky filled with soft, white clouds. A dark, tree-lined shore is visible in the distance on the left.

The Alliance for the Great Lakes works across the region to protect our most precious resource: the fresh, clean, and natural waters of the Great Lakes.