Our Great Lakes Plastic Problem
Striving for Plastic-Free Great Lakes

Last year, nearly 15,000 Alliance volunteers hit the beach and removed 36,128 pounds of litter. That's more than 18 tons of trash that didn't enter the Great Lakes. With 22 million pounds of trash entering the Great Lakes every year, even these impressive volunteer cleanup efforts are still nowhere close to matching the quantities polluting our lakes every year.

While there are no easy solutions, this is not an impossible problem to fix. Cleanups alone won't do it. Neither will outlawing specific single-use plastic items. But when combined with large-scale behavior change, innovation beyond plastic, and sustainable practices all along the supply chain, we can begin to change the tide. The movement against plastic pollution is multifaceted. Our volunteers and advocates are on the front lines.

From Adopt-a-Beach cleanups to policy victories like the one that recently outlawed plastic microbeads, the passion and dedication of our volunteers and advocates is incredibly heartening. To continue the fight against plastic pollution, we need to build a dynamic movement and advance thoughtful solutions that consider all the impacts and unintended consequences of well-meaning initiatives.

For example, plastic straws have recently come under fire. The same straws that are being banned or removed from restaurants in cities across the nation are vitally important to some people with disabilities, many of whom have voiced rightful criticisms of recent bans. These and other concerns must be included as we develop solutions to our plastic problem.

Our Great Lakes plastic problem has taken decades to come to light, and likewise it will not be solved overnight. We need systems-level change from our homes and businesses to city halls and Congress. We need to reduce our dependence on plastic through behavior changes, sustainable business practices, innovative plastic alternatives, and strong policies that consider impacts on people and the environment. From volunteerism to education to research to policy advocacy – we need all hands on deck to achieve plastic-free waters.

We've already seen communities and consumers mobilize to demand solutions – and we've seen it work. Now, we need to move toward a more comprehensive reduction of our reliance on plastic, especially single-use items that so often end up littering beaches and waterways. The good news is that our constituents and partners across the region are doing great work on many fronts to make our shared vision of a plastic-free Great Lakes a reality.

Joel Brammeier, President & CEO
In 2013, Dr. Sherri Mason embarked on a research voyage aboard the tall-ship USS Niagara. The research mission’s goal? To understand plastic pollution in Great Lakes waters.

Dr. Mason’s expedition, co-led by a team from the Five Gyres Institute, was a major moment for the lakes. The research, conducted over several summers, found stunningly high amounts of tiny pieces of plastic in all five Great Lakes. In Lake Michigan alone, she and other researchers estimated that 1 billion plastic particles are floating on the water’s surface.

Plastic pollution in the lakes comes from many sources. It’s left on the beach, flows in with stormwater runoff, and washes down the drain as tiny plastic fibers in our clothes break off in the wash. And it never really goes away. Instead, it just breaks down into smaller and smaller pieces known as “microplastics.” Researchers have since documented tiny pieces of plastic in bottled water, beer, and even tap water. Plastic also is frequently found in the guts of wildlife, which suggests that animals routinely mistake plastic pieces for food.

More than 22 million pounds of plastic pollution ends up in the Great Lakes every year, according to a study by the Rochester Institute of Technology. Solving this problem is going to take a multifaceted and large scale approach. We need to address the many forms of plastic pollution through a comprehensive effort. We need alternatives to plastic, sustainable business practices, and smart policies at all levels of government.

But it all starts with you. Take our plastic pledge and commit to reducing your use of plastic today: www.GreatLakes.org/PlasticPledge
Stephanie Kreuger is all-in for our world’s waterways. She leads the Buffalo, NY chapter of the Inland Ocean Coalition, which fosters land-to-sea stewardship efforts. While her organization cleaned up Woodlawn State Park Beach, Kreuger traveled to Washington, D.C. to attend the March for the Ocean.

For Kreuger, the Great Lakes and the world’s oceans are intimately connected, as are the advocacy movements to protect our waters. She feels it’s important to pair advocacy for our oceans with mindfulness of our freshwater.

“The Coalition focuses on how we affect our oceans even though we don’t live on a seacoast, and how plastic from Lake Erie can end up in the ocean,” she said.

Kreuger is a tireless supporter of the Adopt-a-Beach program, having led cleanups since 2011. “I enjoy raising awareness about the amount of plastic pollution in our Great Lakes and waterways,” she noted.

Kreuger’s crew also ventured out for an Earth Day cleanup earlier this year. Between the two events, they picked up about 270 pounds of trash, 2,774 pieces of which were made of plastic.

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July 1st passed by without a lot of fanfare. But it was a big day for the Great Lakes. It's the day the final phase of the nationwide microbead ban took effect. It is now illegal to manufacture or sell personal care products containing plastic microbeads in the U.S.

This victory for U.S. waterways began in the Great Lakes. When research showed hundreds of millions of plastic microbeads littering the lakes, the Alliance, our partners, and tens of thousands of grassroots advocates spoke up. The outcry led to local, state, and finally federal legislation aimed at stopping this pollution source.

Microbeads are tiny plastic particles formerly used as an abrasive in many products like facial scrubs, soaps, and shampoos. Because of their small size and buoyancy, microbeads escape treatment by sewage plants and end up in our rivers and lakes. Once in the water, microbeads can absorb toxic chemicals and are easily mistaken for food by wildlife.

People across the region mobilized, leading the fight for legislation to phase out microbeads in personal care products. Illinois was the first state to ban microbeads, and as the movement spread across the nation, several other states followed suit.

Eventually, this momentum led Congress to take action. The Microbead-Free Waters Act of 2015 first phased out the manufacture and then the sale of microbeads nationwide. Now, we’re continuing to work with researchers and policy experts to build on this victory against microplastics.
5 Ways Plastic Pollution is Different in the Great Lakes

Plastic pollution anywhere is bad news. But how is plastic pollution different in the Great Lakes compared to the ocean? Here are five big differences:

1. Generally, it’s really, really tiny.
   Plastic never really goes away. It just breaks down into smaller and smaller pieces known as “microplastics.” In our lakes and rivers, it’s what you don’t see that’s the biggest concern.

2. It’s in our drinking water.
   We don’t drink ocean water. But nearly 40 million people drink Great Lakes water. Scientists have found microplastics in drinking water and even beer.

3. It washes out, not up.
   Plastic pollution travels differently in the Great Lakes compared to the oceans. In the world’s oceans, trash and debris can wash up from far away due to global ocean currents. In the Great Lakes, plastic pollution doesn’t come from a far-off anonymous source. It flows off the land because we leave it there.

4. The water is different.
   Saltwater is more dense than freshwater. Currents are different in the ocean and Great Lakes. The oceans freeze at a lower temperature than the Great Lakes. All these factors affect how plastic pollution moves through the water, and how it breaks down.

5. There’s a lot less information about plastic pollution in the Great Lakes compared to ocean plastic pollution.
   Scientists have studied plastic pollution in the ocean for decades. But there is a lot less research about plastic pollution in the Great Lakes and freshwater. We work with some Great Lakes superstars whose research is beginning to fill in the gaps.
IN BRIEF

For the 8th year in a row, Charity Navigator has awarded us their highest 4-star ranking. Only 3% of ranked charities share this accomplishment.

Learn how you can help protect the Great Lakes this election season. Check out our new toolkit for getting involved:

www.GreatLakes.org/2018Midterms

Join us for our inaugural Clean Lake Benefit in Cleveland, Ohio on October 11th from 6-8:30pm at Great Lakes Brewing Company. Learn more online: www.GreatLakes.org/CleanLakeBenefit

We’re excited to welcome new members to our Chicago and Cleveland Young Professional Councils. Learn more online: www.GreatLakes.org/GetInvolved

TELL US WHAT YOU THINK

We’d love your feedback about our redesigned Watermarks newsletter. We’re also happy to answer your questions about plastic pollution and other pressing Great Lakes issues.

Email us at alliance@greatlakes.org
The Alliance for the Great Lakes works to protect the Great Lakes for today and tomorrow.