



ALLIANCE for the
GREAT
LAKES

Adopt-A-Beach:

20 Years of Great Lakes Litter Data

**A Story of Plastic Pollution
Told Through Citizen Science**



Executive Summary

For over 30 years, dedicated Alliance for the Great Lakes Adopt-a-Beach volunteers have been on the front lines of keeping litter off our beaches and out of the Great Lakes, removing over half a million pounds from the Great Lakes shoreline since 1991. In 2003, volunteers took their efforts a step further by contributing to our online Great Lakes litter database, indicating what type of litter they were finding on the beach. Adopt-a-Beach is the biggest Great Lakes cleanup volunteer program and has the largest litter dataset exclusively for the Great Lakes.

Through analysis of 20 years of litter data from over 14,000 cleanups covering beaches along all five Great Lakes, some strong patterns emerge. Our most consistent finding is that we find a lot of plastic on the beach. On average, 86% of the litter collected in a given Adopt-a-Beach season is composed either partially or fully of plastic. We know this plastic is not going anywhere; it's just breaking down into smaller and smaller pieces and leaching dangerous chemicals into our waterways. In fact, since we started collecting data for "tiny trash,"

which we define as pieces of foam, glass, or plastic measuring less than 2.5 cm, our top category of collected pieces of litter has been "plastic pieces" (measuring less than 2.5 cm).

Research tells us that plastic is pervasive in the Great Lakes. The dangers of plastic emerge from every step of its life cycle—from production to disposal, harming wildlife, communities, and the environment, including our drinking water.

The Adopt-a-Beach program is a great example of the power that lies in people coming together for a common cause. However, if we are going to change the tide on this issue, we need action that goes well beyond the individual. We need to reduce single-use plastic, advance business innovations such as reuse and filtering out microfibers, conduct research on the impacts of plastic, and engage governments (at all levels) with plastic and packaging producers to work together to create a sustainable future. In short, we need systemic and forward-thinking solutions.

Ultimately, the most effective way to reduce plastic pollution is to reduce the production of single-use plastic and to hold producers responsible for the waste their products generate. Residents, businesses, governments, manufacturers, and organizations like the Alliance for the Great Lakes all need to come together and encourage policy that does the following:

- Reduces or eliminates the most problematic plastics, like single-use plastic (including plastic foam and plastic bags) and microfibers;
- Prevents pollution at the source by stopping industrial plastic pellets from spilling into our lakes;
- Encourages business innovation and deploys new technologies such as including microfilters in all washing machines just as we do for dryers;

- Increases access to clean water through water refilling stations as well as reuse and refill packing solutions; and
- Holds producers responsible across the life cycle of their products and packaging from design and materials to end-of-life management, and incentivizes innovation, moving toward reusable and sustainable alternatives, with the objective of using less plastic in the first place.

The Alliance for the Great Lakes is working with partners across the region to identify innovative, impactful, and lasting solutions. We are eager to expand our partnerships, mobilize our supporters, and advance smart policy solutions. We want to look back 30 years from now and see less plastic pollution across the Great Lakes region.