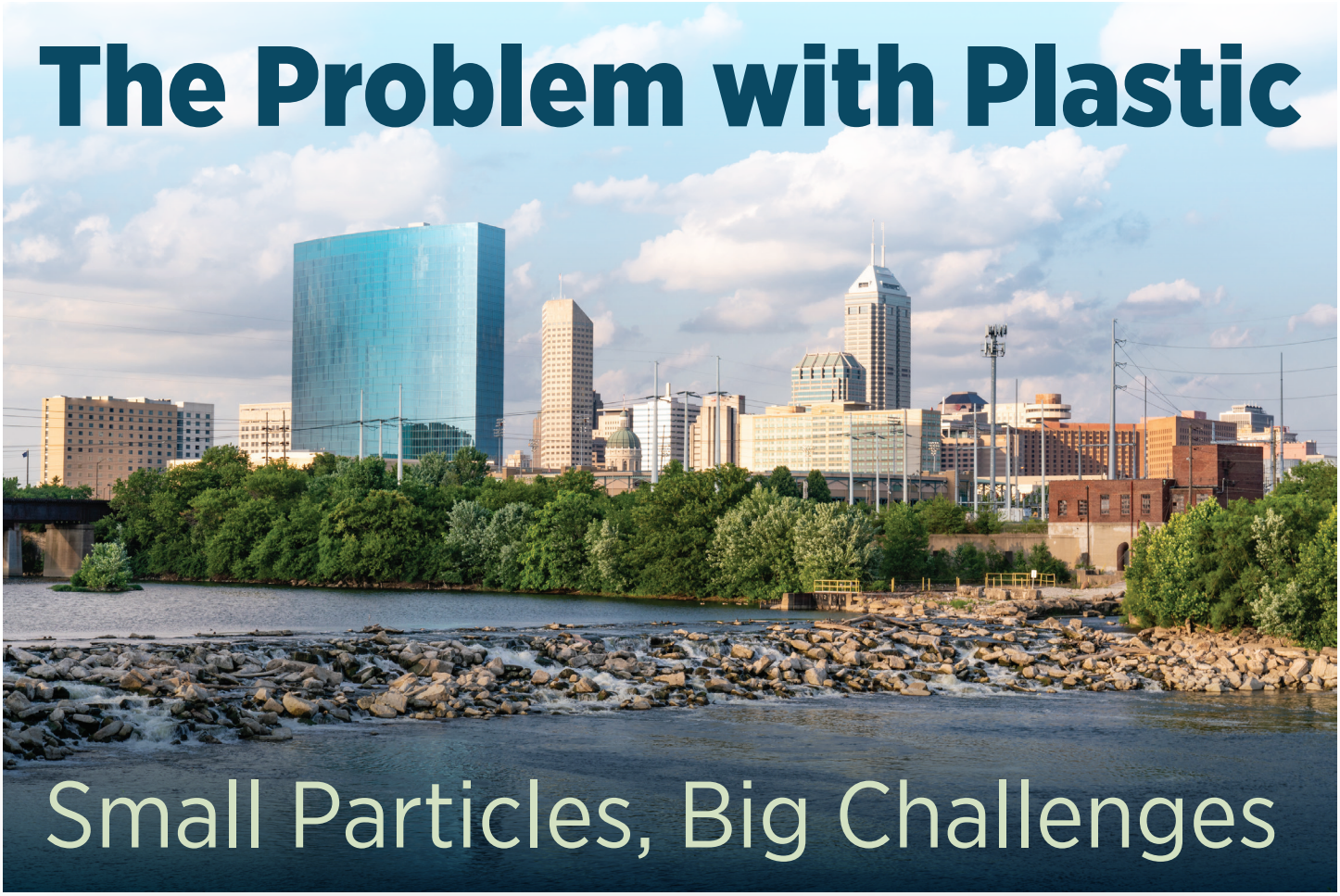
The Problem with Plastic

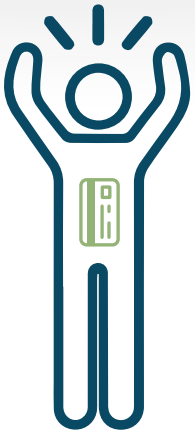


Small Particles, Big Challenges

Plastic production is on the rise and far exceeds the rate of recycling. According to the Ocean Blue Project[1], over 400 million tons of plastic are produced globally each year. A study[2] published in early 2026 by the Pew Charitable Trust and ICF International finds that unless action is taken, an additional 1 billion U.S. tons of plastic will be generated in the U.S. between 2025 and 2040, leading to over 30 million tons of plastic pollution in U.S. lands and water.

Plastic does not bio-degrade but over time it releases fragments, fibers, and micro and nano plastic particles into our environment. These micro and nano plastics are polluting our water, land, air, wildlife, and human health.

Plastics pollution persists throughout Indiana including our Great Lakes system, which contains 20% of the world's fresh surface water. Indiana has the opportunity to lead by example to prevent microplastic pollution from spreading.



CHEMICAL LEACHING

BODILY FUNCTIONS

WATER QUALITY

Human Health Risks

- Humans are routinely exposed to and ingest microplastics through food, water, and air, and one study[3] from the University of Newcastle suggests it could be equivalent to the weight of 1 credit card worth of plastic a week.
- The chemical additives in plastic leach out over time and can include hormone disruptors, heavy metals, and carcinogens.
- Research shows potential health risk links that affect the brain, heart, and other body systems. Microplastics have been found in human blood, lungs, and hearts.
- Particles can be found in bottled water and tap water and there are no laws requiring filtering and testing for microplastics.

THE PROBLEM WITH PLASTIC
SMALL PARTICLES, BIG CHALLENGES

The Myth of Disposability

The only way that plastic leaves this planet is if it is incinerated. We are bombarded with single use plastics whose end life ends up in our waterways, on our land, and in landfills. Recycling can help with collection and forms of reuse, but when plastic is recycled, it's downcycled to a different form and eventually becomes something that ends up as a pollutant or in a landfill.

Photo by Sarah Stierch/WikiMedia Commons; https://commons.wikimedia.org/wiki/File:2022_Indianapolis_500_-_Sarah_Stierch_04.jpg

Consumer Driven Corporate Responsibility

We all can do our part to limit the amount of plastic we purchase and use, but that's just a small impact on the overall objective.

Our individual commitment is a priority, but more important is corporate responsibility and commitment to this ongoing problem. Policy and legislation can hold corporations accountable and put safeguards in place to prevent further pollution. In addition, **local communities should be able to decide what is best for them to address this growing problem**. Indiana state legislators can lower local barriers to addressing plastic pollution.

Repeal the Single-Use Plastic Ban-Ban

In 2016, House Bill 1053[4] became law in IC 36-1-3-8.6[5], amending the Indiana home rule statute to prevent local communities from being able to regulate single-use plastic[6] in their own county or city.

Local communities need to be able to take steps to reduce plastic pollution in their environment; legislation is needed to remove the barriers and allow for local control.

LEARN MORE
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Long Term Systemic Change

Successful federal protections began to address the plastic problem when they passed the Microbead-Free Waters Act of 2015[7] prohibiting the manufacturing, packaging, and distribution of rinse-off cosmetics containing plastic microbeads 5 millimeters or less in size. Indiana acted swiftly with a statewide ban with the passage of House Bill 1185[8] which became law in IC 13-18-24-1[9] a prohibition on certain products that contain microbeads. We propose that similar steps need to be passed to further prevent the spread of microplastic pollution in our environment. We can learn from the passage of these federal and state laws that have led to the reduction of microbead pollution in our environment.

RESOURCES

1 https://oceanblueproject.org/plastic-pollution-statistics-key-facts-and-data-2026/

2 https://www.pew.org/en/research-and-analysis/white-papers/2026/02/10/new-report-shows-how-us-can-reduce-plastic-waste-pollution-and-costs

3 https://www.newcastle.edu.au/news/2019/06/plastic-ingestion-by-people-could-be-equating-to-a-credit-card-a-week

4 https://iga.in.gov/legislative/2016/bills/house/1053/details

5 https://iga.in.gov/laws/2026/ic/titles/36#36-1-3-8.6

6 https://www.indystar.com/story/news/environment/2022/01/11/why-indiana-cant-ban-plastic-bags/9094004002/?gnt-cfr=1&gca-cat=p&gca-uir=false&gca-epti=z112724u113024e1154xxv112724&gca-ft=238&gca-ds=sophi

7 https://www.congress.gov/bill/114th-congress/house-bill/1321/text

8 https://iga.in.gov/legislative/2015/bills/house/1185/details

9 https://iga.in.gov/laws/2026/ic/titles/13#13-18-24-1