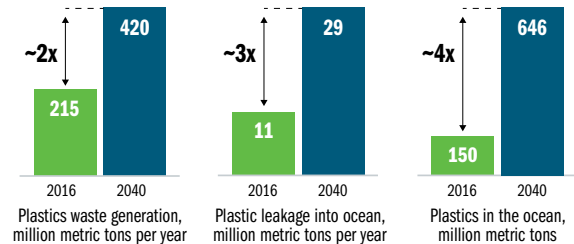


Per capita, America produces more plastic waste than any other country on Earth, making the U.S. a leading contributor to plastics pollution. Plastics leakage from our economy becomes debris in the deepest depths of the ocean to the highest mountain peaks. Plastics are in the food we eat, the water we drink, and the air we breathe, and throughout the human body.

We Need to Turn the Plastics Tide

An inspired approach to plastics removal and reuse, the **Waterborne Plastics Assessment and Collection Technologies (WaterPACT)** project is working to develop technology solutions for plastics in U.S. waterways, creating jobs, reclaiming plastics for the supply chain, improving human health, and protecting our precious marine and riverine ecosystems—all fueled by clean, renewable water power technologies.



Without intervention, plastic production is expected to double, plastic leakage triple, and plastics in oceans quadruple by 2040. Research and graphic by The Pew Charitable Trusts.

Beyond Business as Usual

The WaterPACT vision is to achieve a reduction of at least 50% in waterborne plastics waste in U.S. waterways by 2040.

As part of this project, the National Renewable Energy Laboratory, the Pacific Northwest National Laboratory, the Bio-Optimized Technologies to keep Thermoplastics out of Landfills and the Environment (BOTTLE™) Consortium, and the Environmental Molecular Sciences Laboratory are teaming up to:

- **Characterize, quantify, model, and value the broad range of plastics** found in U.S. waterways
- **Develop modeling, analysis, and technology tools** to understand, reclaim, and remediate waterborne plastics debris
- **Leverage U.S. Department of Energy R&D capabilities** to advance key technology solutions
- **Identify, understand, and reduce pollution-related harms** that disproportionately impact underserved American communities.

Scoping the Remediation and Reclamation Possibilities

Coordinated, meaningful efforts to stem the flow of plastic pollution are hindered by a scarcity of data.

Join us as we work to overcome these data gaps and **characterize the full spectrum of plastics debris in major waterways across the United States.** This will lay the groundwork for the development of technology solutions for plastics debris sensing, collection, and conversion, as well as pioneer pollution-relevant product design.

Help Us Turn the Tide on Plastics Pollution

Are you a researcher or organization focused on inland waterways pollution? This includes waterway, riverine, water power generation, aquatic, and terrestrial plastic reclamation, supply chains, certification and standards, regulation, policy, or environmental justice.

Join our team and help focus and guide our efforts. Learn how you can wield the power of world-class facilities and leverage the research experience of the national lab system!

CONTACT US:

email: waterborneplastics@nrel.gov

Provide a brief summary of your interest as well as your contact information.



Photo by Dennis Schroeder, NREL.

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