Mississippi River Plastic Pollution Research Project



Are plastics littering your community? Interested in implementing community-based solutions to address plastic pollution?

The U.S. Environmental Protection Agency (EPA) is leading a new project to learn more about the current state of plastic pollution in communities along the Mississippi River. Working with and learning from four pilot communities, the project will prioritize the types, sources, and areas with high plastic waste concentrations that matter most, identify implementation barriers and benefits, and come up with ways to better manage materials and prevent plastic pollution.



Why this project and emphasis on the Mississippi River?

The Mississippi River spans four EPA regions from the headwaters to the Gulf of Mexico. EPA recognizes the importance of plastic pollution to many local governments and stakeholders in the Mississippi River watershed, the largest source of plastic aquatic debris in the U.S. EPA developed this project as a complement to existing programs and projects (e.g., the Mississippi River Cities and Towns Initiative's [MRCTI] Plastic Pollution Initiative) in order to address a perceived knowledge gap. The project seeks to connect community plastic waste data with a more comprehensive analysis and understanding of human activities in order to design community-driven solutions for plastic pollution.

More broadly, EPA's goal is to accelerate the reduction of plastic pollution and help Mississippi River communities demonstrate the positive impact that implemented solid waste and water quality improvements can have on the environment, thereby serving as powerful examples and spurring replication nationwide.

Pilot Communities

Collaborating with MRCTI, EPA plans to pilot this project with key community partners in:

- Minneapolis and St. Paul, Minnesota
- St. Louis, Missouri, and East St. Louis, Illinois
- Vicksburg, Mississippi
- Baton Rouge, Louisiana

EPA Partners

Office of Research and Development

Region 4 (covering Kentucky, Mississippi, and Tennessee)

Region 5 (covering Illinois, Minnesota, and Wisconsin)

Region 6 (covering Arkansas and Louisiana)

Region 7 (covering Iowa and Missouri)

Project Period

Now through September 2024

Community Benefits

Throughout the project period, EPA will provide each pilot community with:

- Three to four community workshops direct plastic pollution and social marketing technical assistance via subject matter experts and researchers.
- Plastic pollution summary fact sheets featuring research-driven models and data that synthesizes community knowledge and provides a viable blueprint to action implementation.
- Overview of related funding opportunities and grant writing support.
- Access to free tools and resources.
- Community networking opportunities.

What is aquatic debris?

Aquatic debris consists of many different types of products and materials, including commonly found plastic items such as bags, bottles, food containers and wrappers, cutlery, and clothing fibers. Plastic aquatic debris can come in all shapes and sizes, but those that are less than 5 millimeters in length (or about the size of a sesame seed) are called microplastics. These are extremely small pieces of plastic that break down from common plastic materials and end up in our environment.

What are the human health and environmental risks from aquatic debris?

Animals and marine life often mistake plastic aquatic debris for food, which can lead to them choking or starving to death. They can also become entangled via fishing lines, six-pack rings, and many other types of plastic waste. In addition to these impacts, there is growing concern and increasing scientific research about the potential for microplastic particles to toxically impact marine species. These impacts are related to the ingestion of plastic particles and associated toxic chemicals that move through the marine food web, posing potential risks to human health due to contaminated seafood consumption.

Contact Information:

Andrew Wynne, EPA Region 7 wynne.andrew@epa.gov or 913-551-7993