

What did we find?

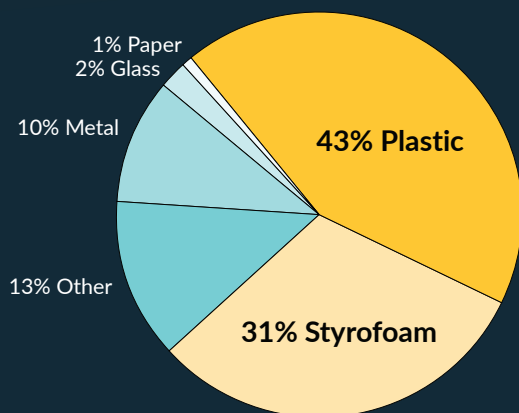
Let's dig into the details.

The U.S. Environmental Protection Agency's (EPA) **Escaped Trash Assessment Protocol (ETAP)** was used to characterize the litter collected in the traps. The ETAP is a tried and tested methodology that helps us get a better understanding of the types of litter that are prevalent in our ecosystems, and how best to reduce potential impacts. Using an existing protocol also helps ensure that the data collected is reliable and comparable. In this way, it can be integrated into larger analyses to get a better and bigger picture of the issue.

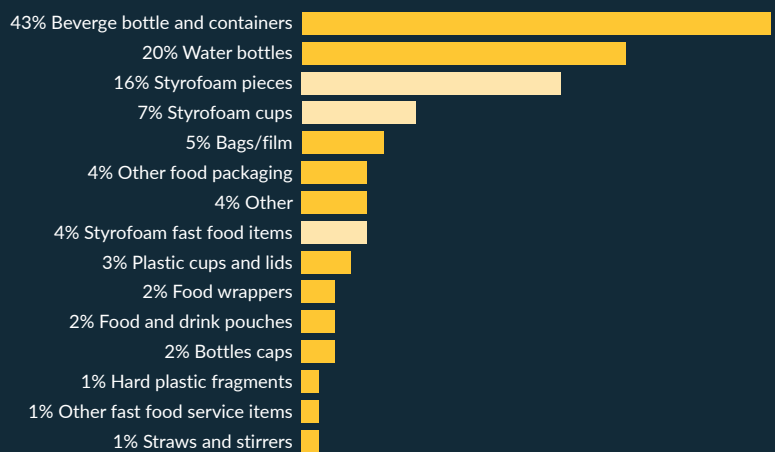


Davenport, IA Litter Snapshot

ETAP Major Category Breakdown



Plastic and Styrofoam Breakdown



The Plastic Problem

As you can see, most of the litter found in the local streams is made of plastic, and plastic is very persistent: it doesn't just decompose and disappear – instead, it travels. Marine litter's journey begins every time you drop trash on the ground, throw it out of a car window, or toss it off a boat. You can also create litter by accident if wind and wildlife move your discarded items to faraway places. Whether actively or passively, once litter is created, it enters the environment and begins its journey to the ocean.

These data paint a picture of the issue, giving us an idea of what needs to be addressed in the community. The more you dig into the data, the more clues you get. The condition of each of the items collected was noted, and we found that 49% of the litter in the waterways was intact, 37% was partially intact, and the remaining 14% was degraded. This helps us estimate how long most of the litter had been in the waterway.

Plastic litter doesn't just disappear, over time it slowly breaks down into smaller pieces. Wind, waves and UV rays damage the plastic and transform it into tiny bits called microplastics, which remain in the environment. Microplastics have been found in almost all marine and coastal environments, from surface water to the seabed, and from sandy beaches to Arctic ice.

The Power of Community Science

In October 2022, volunteers from the Quad Cities community participated in a citizen science activity during an Xstream Cleanup event. Volunteers logged the litter they picked up in the Marine Debris Tracker app. This app is a tool that engages volunteers in community science, allowing large numbers of people to contribute to science and learn about environmental issues in their community. During the event, **3,447 pieces of litter** were collected and logged in the Quad Cities area. See the top 5 items logged during the event below.



Top 5 Litter Items

from the Community Science Activity (October 2022)

