

MARINE PLASTICS

A SUBSET OF PLASTIC WASTE

When most people think of plastic pollution, they think of marine plastic waste. This is the plastic waste that pollutes bodies of water. Often, it **originates from land, enters rivers, and then oceans**. It's a smaller subset of the problem of plastic waste as a whole.

Marine plastics come in all sorts of sizes, types, and former uses. These range from microplastics breaking down from consumer waste to macroplastics like fishing nets. **Only a small portion of these marine plastics are found on the surface of these oceans**, with the majority sinking to greater depths or the seafloor. These plastics are often ingested in marine food chains and via human seafood, although **more research is needed on their health effects**.



QUICK FACTS



Over 67% of all plastic waste that entered the ocean came from just 20 rivers in 2015. These are almost all found in Asia, where targeted efforts to clean plastic waste can be effective.



There were almost 5 trillion microplastic particles (smaller than 4.75mm) in the ocean surface in 2014, out of 5.25 trillion particles in total. Often, larger plastic waste breaks down into microplastics.



Out of 275M tonnes of plastic waste made in 2010, **only 8M tonnes (2.9%) entered the ocean and under 500,000 tonnes were in surface waters**. This is why plastic waste isn't just an ocean problem.



Ocean currents can collect plastic waste into 'garbage patches'. The largest one is slightly larger than Alaska and **made up 29% of plastic waste in ocean surface waters** in 2018.



80% of plastic waste in the ocean comes from land, often from 'mismanaged' waste like in open dumps in developing countries. The other 20% comes from marine sources like fishing fleets.



Plastic waste can wound or kill marine life (from seals to whales) that get entangled in waste. It also harms creatures that ingest or come into contact with plastic waste, including coral reefs.

NEW SOLUTIONS

AUTOMATED CLEANUP



People try to clean the oceans to decrease plastic waste. This is often ineffective if it doesn't stop more waste from entering the ocean. However, automated technology is now starting to stop waste at rivers leading to oceans.

NEW INFRASTRUCTURE



Plastic waste often enters the ocean due to mismanagement. This can be fixed by improving infrastructure like open dump enclosures or fishing net recycling facilities at ports. This means less waste reaches bodies of water.

REUSABLE PRODUCTS



If products aren't thrown away, they can't enter the ocean (which is important in developing countries). This requires stark changes to business norms. Solutions involve regulations, materials science, supply chain, etc.

DESIGNED BY THE PLASTIC SHIFT

To learn more about marine plastics, visit www.theplasticshift.com

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