

# “Oceanfills”: Yet another dumping ground

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Last update: 21 June 2018



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**The world’s oceans are being damaged by a constant and unprecedented accumulation of waste known as marine debris. The waste, mostly from effluent human activities, is brought to the oceans through currents and often carried far from where it originated.**

The waste accumulates in every ocean, often far from our coasts, contaminating our oceans and the ecosystems they support. This litter is mostly made up of plastic, which is not biodegradable: upwards of between 5 and 12.7 million metric tonnes of the [300 million tonnes of plastic](#) being produced globally per year are being dumped into our oceans.

As debris travels down waterways, it eventually reaches the ocean forming giant [garbage patches](#) around the world. For example approximately 80% of the Great Pacific Garbage Patch—described as a garbage vortex and about twice the size of France—is made up of waste that comes from land-based activities in North

America and Asia. Much of this debris sinks below the surface, hiding the majority (about 70%) of the waste contaminating the water.

At sea, marine species risk getting entangled in plastic and sometimes mistake it for food, causing suffocation, starvation, physical trauma or damage from chemicals. “Ghost fishing” is part of this soup, involving discarded, lost, or abandoned fishing gear that continues to entangle or kill marine life and damages habitats, ultimately impacting fish stocks and quality. Seaturtles, for example, are known to ingest plastic bags, mistaking them for jellyfish, and in the Midway Atoll, an estimated one in three albatross chicks die from eating plastic debris .

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If this isn’t alarming enough, plastics decompose into minuscule [microplastics](#) that release toxic chemicals and enter the food chain, contaminating what we eat. Plastic litter threatens the access to clean water and the sustainable [management of water](#) in freshwater systems too.

In addition to the threat to marine species, ecosystems and food stocks, plastics cause enormous economic and social costs, as well as ecological damage. According to UNEP, the damage caused by plastics on the marine environment is estimated at US\$13 billion per year globally and upwards of US\$75 billion when considering the total natural capital cost of plastic used in consumer goods.

The socio-economic costs range from public health to tourism. The higher the marine debris that exists in the ocean, the higher the costs for coastal clean-ups and the heavier the loss of revenue. For example, in California, a six-year beach cleaning initiative to reverse a decline in tourism revenues cost an estimated US \$51 million (OECD, 2016). Bacterial pollution on the beaches of southern California have also been associated with rising healthcare costs, estimated at costing upwards of US\$400 million per year. It was reported that in the [Asia-Pacific region](#) alone, the fishing, shipping and tourism industry is losing US\$1.26 billion every year due to the damage caused by marine litter. The UNDP estimates that poor ocean management has a cumulative cost of US\$200 billion per year.

The United Nation’s [Sustainable Development Goals](#) (SDGs) emphasise the urgency of improving and maintaining the health of our water systems. [Goal 14](#) is specifically dedicated to the sustainable use of the ocean, sea and marine resources, and among its seven targets, target 14.1 calls for the prevention and significant reduction of marine pollution of all kinds by 2025.

Healthy oceans also contribute to poverty eradication (Goal 1) by creating sustainable livelihoods and decent working conditions in industries such as fisheries and marine aquaculture, shipping and shipbuilding, ports, tourism, oil, gas, mining, and maritime transportation. For billions of people around the world, taking care of our oceans means greater job security, healthier food and better

social protection. Plastic pollution is also a direct threat to food security (Goal 2) as it impacts fish stocks and infects the foodchain with microplastics.

[Studies](#) estimate that if waste management infrastructure on land is not improved, the quantity of plastic waste entering the marine environment is expected to increase by as much as 40% by 2025. The challenge will only get harder.

Reversing the impact of marine pollution is no simple task. Cleaning up less than 1% of the garbage in the North Pacific Ocean is estimated to take 67 ships over a full year. As pointed out by the 2017 G20 Action Plan on Marine Litter, there are many data gaps that need to be filled in order to develop and implement policies that can adequately preserve and protect our water systems. In the meantime, adopting a “circular economy” approach to recycling and reusing materials and reducing waste would help prevent land-based waste from entering the oceans.

The global nature of marine debris clearly requires an integrated approach. Governments, scientists, politicians, private sector, related industries, major users of plastics and chemicals, and the general public all need to take responsibility and play an active role in finding a solution.

The [OECD’s 2017 Green Growth and Sustainable Development \(GGSD\) Forum on “Greening the ocean Economy”](#), to be held on 21-22 November in Paris, will explore ideas, opportunities and actions to help clean up our oceans and safeguard the future of our earth.

For more information on the Green Growth and Sustainable Development Forum, see: <http://www.oecd.org/greengrowth/ggsd-2017>.

## References

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