

Marine Litter Impact on Waterways

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Our Coasts are heavily impacted by what we do on land

Australia is home to the over 10,000 beaches and no part of Australia is more than 1,000km from the ocean. In Australia, 90% cent of the population lives in less than 1% of the country's land area, and 85% are living within 50km of the coast. As a result, our coasts are heavily impacted by what we do on land. Pollution and rubbish get washed into our rivers and waterways in stormwater runoff and end up on our shores. Rubbish can be found washed up on almost every Australian beach - and over 75% of this rubbish is plastic!

Plastics in the environment can take hundreds of years to break down, impacting marine species for generations. It is predicted that plastics pollution in our oceans could double by 2030.

A <u>report</u> from WWF in 2019 warns that the world's inability to manage plastic waste results in 1/3 of plastic ending up as land or marine pollution. They also state that over 75% of the plastic ever produced is already waste. Unless there is a dramatic change of approach, we will continue to be in a global plastics crisis.

WWF have provided the following example: on a tiny island in the far north of the Great Barrier Reef, researchers collected more than 70 kg of plastic and marine debris in a single day. The plastic included 308 plastic bottles, 112 pieces of styrofoam, 37 sections of plastic net and other fishing gear, and 144 rubber thongs.

Did you know?

- The Australian coastline extends approximately 35,000 kilometres and includes more than 1,000 estuaries.
- Australia's coasts are made up of a variety of habitats sandy beaches and dunes, rocky shores, tidal flats, and estuaries and bays.
- Around the world, more 1.15 million tonnes of plastic ends up in our coasts and oceans.
- Up to 40,000 pieces of plastic are estimated to float in every square kilometre of ocean.
- 800 species worldwide are impacted by marine debris.
- In Australia over 200 species of marine animals are impacted by marine debris, either by ingestion or entanglement.
- Over 75% of the rubbish removed from our beaches is made of plastic.
- Plastics don't biodegrade, and over many years it breaks down into smaller and smaller pieces, known as 'microplastics'.
- Microplastics are small pieces of plastic less than 5mm in size.
- Microplastics are the most abundant form of solid-waste pollution and have been found in all oceans, and even in the deep sea.
- Microplastics can be harmful to the marine environment and animal health.
- Microplastics are divided into two types: Primary and Secondary.
 - a. Primary microplastics include microbeads, plastic pellets and plastic fibres.
 - **b.** Secondary microplastics are the broken down parts of larger plastics.
- Floating microplastics absorb toxins dissolved in the water, including pesticides and detergents.
 - **a.** Toxic microplastics enter the food chain through plankton, crabs, mussels or small fish.
 - **b.** These chemicals then leach into the tissues of the animals and can accumulate up the food chain.

According to the **Australian Marine Debris Initiative**, the top 10 types of rubbish found in the marine environment are:

- 1. Plastic fragments
- 2. Plastic bottle tops and lids
- 3. Cigarettes/ cigarette filters
- 4. Insulation foam
- **5.** Plastic bottles
- 6. Food packaging; wrappers and containers
- 7. Plastic bags
- 8. Broken glass
- 9. Aluminium cans
- 10. Fishing line

What can you do to prevent marine litter in our waterways?

- At the beach, keep on the walking tracks. This protects the vegetation that provides habitat for local native birds and other animals, and prevents erosion.
- Woof woof! Ensure your dogs are kept on a lead in areas where dune vegetation is vulnerable. Landcare and Coastcare groups work on these sites to enhance the habitat for native animals to protect them.
- Avoid and Reduce by reducing your plastic footprint, you are helping to protect our rivers and waterways that will keep our beaches and oceans clean and protect marine animals from the impact of rubbish including plastics.
- Reuse if you need to use plastic products, make sure you reuse items over and over again before disposing of them thoughtfully at the end of their useful life.
- Recycle if you can't reuse an item or if it is at the end of it's useful life, recycle it or compost it. Putting something in the rubbish bin for landfill should only be a last resort. Many household groceries come in soft plastic wrapping, and most major supermarkets now will recycle your soft plastics for you. Just bag them up and take them in to the supermarket when you go shopping.
- Take a bag with you to the beach to collect rubbish on your next walk.
- Every piece of plastic removed from the marine environment can save an animal's life, and reduce the amount of microplastic created.

Acknowledgement

- https://wwf.org.au/news/2019/wwf-releases-report-on-global-plastic-pollution-crisis/
- <u>https://ozcoasts.org.au/</u>

This Coastcare resource has been developed by <u>The Forever Agenda</u> for Landcare Australia. The Forever Agenda have a great suite of training, facilitation and support solutions for community groups. You can read more about their great work here <u>www.theforeveragenda.com.au</u>