

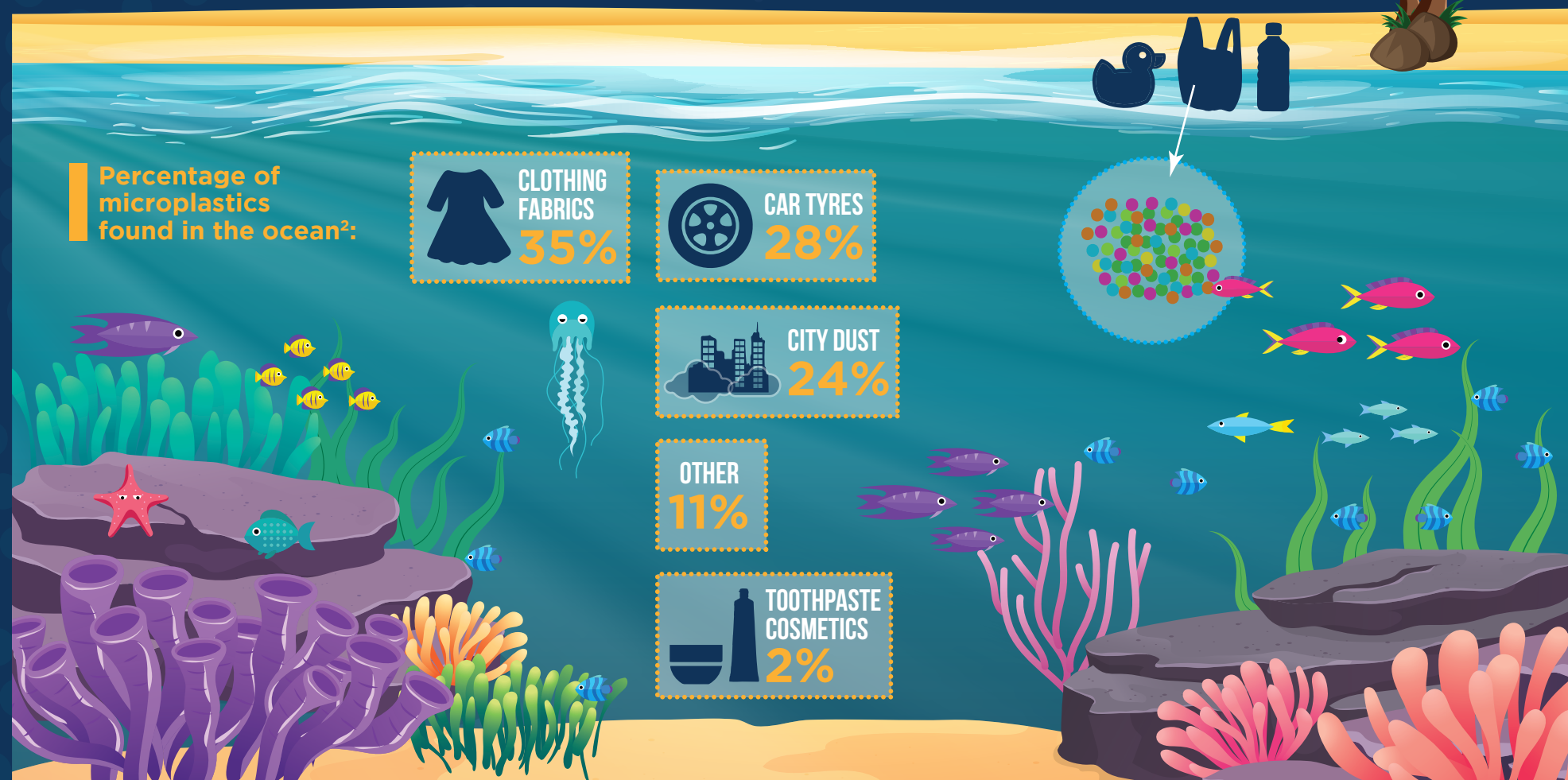
# Microplastics in the marine environment

## THE PROBLEM

The ocean is polluted with debris ranging from large fishing nets and abandoned vessels, to tiny plastic particles that can't be seen with the naked eye; all contributing to an estimated **5 trillion** pieces of plastic currently existing in the ocean. That's **268,940 tonne<sup>1</sup>** (**1 billion elephants in weight!**) of discarded plastic; all of which will break up into smaller and smaller pieces to create microplastics.

## WHAT ARE MICROPLASTICS AND WHERE DO THEY COME FROM?

Microplastics are tiny plastic particles less than 5mm in diameter. There are two categories of microplastics: **Primary microplastics** (tiny particles designed for commercial use like resin pellets and microbeads), and **Secondary microplastics** (particles resulting from plastic items breaking down such as water bottles, toys, clothing, tyres and paints). All have the ability to impact our environments.



## WHY ARE MICROPLASTICS A PROBLEM?

Microplastics don't break down into harmless molecules. They carry harmful pollutants; leaching the chemicals added to make them colorful or flexible. They also absorb pollutants from the water around them. Plastics can take thousands of years to decompose meaning they can wreak havoc on the environment well into the future.

Microplastics are found throughout the ocean, from tropical waters, to polar ice; in fresh water and the air we breathe. Microplastics have been detected in the digestive systems of marine organisms from plankton to whales, in commercial seafood, commercial beers, wines and bottled waters, and were recently found to be falling in rain!



## WHAT CAN WE DO?

We all have the ability to reduce our impact on the environment, starting at home. There is currently no way to stop all microplastics entering our natural environments, but we can help stop the microplastics at the source by making small changes. Some changes include;

- Say no to single use plastics.
- Choose natural fibres when purchasing clothes and wash your synthetics less often.
- Install a microfibre filter on your washing machine.
- Choose personal care products that don't contain synthetic microbeads.
- Pick up rubbish; even if its not yours!



For more information on how you can help reefs from home, head to [www.reefcheckaustralia.org](http://www.reefcheckaustralia.org)

<sup>1</sup><https://oceanlegacy.ca/the-ocean-plastic-problem/>. <sup>2</sup>Boucher, J. and Friot D. (2017). Primary Microplastics in the Oceans: A Global. Evaluation of Sources. Gland, Switzerland: IUCN. 43pp. Designed by: Michelle Triana