# How plastic gets into the environment

### Te parakino kirihou me te taiao

Plastic pollution harms our communities and industries



#### He aha te mate?

#### What's the problem?

Plastics are useful because they are strong and lightweight. Unfortunately these properties also mean plastic waste stays in the environment a long time and is easily transported around the globe.

#### Kei whea rā?

## Where is the plastic pollution?

Plastics are everywhere, from mountain tops, to waters surrounding Antarctica, to remote beaches and the deepest part of the ocean.

#### He parakino kirihou?

### How do we get plastic pollution?

Poor waste management, deliberate littering, illegal dumping, and accidental loss of plastics during use and transportation are the main contributors to plastic debris.

#### Ki roto i te moana?

### How much plastic is in the ocean?

Everyday millions of pieces of plastic find their way to the ocean. The equivalent of one garbage truck of plastics is dumped into the ocean every 38 seconds.

Unless we act now, by 2050 there will be more plastics in the ocean (by weight) than fish.





Look at the diagram on the next page that shows the sources and movement of plastic pollution. How can you stop plastic from getting into the environment?



Plastic pollution sources and pathways

#### **Land Sources**

Plastics can enter the environment at any stage of product manufacturing, use and disposal, and may eventually reach the ocean.

Use of products

creating microplastics



Abrasion from

Poor waste

Overflow and

discharge at treatment plants

management

car tyres

Illegal dumping





at production sites



Raw materials lost



From landfills due to run-off and wind





Wind blows plastic and plastic particles into the environment



Rain sweeps plastics into the waste and stormwater system or directly into rivers and streams



Plastics are directly discharged illegally or legally into rivers and streams

Waste and stormwater systems can overflow during



storms and high tides



Four out of five pieces of plastic in the ocean actually originate from land-based use.

#### **Marine Sources**

Deliberate littering

Waste may be dumped overboard intentionally or due to negligent behaviour, a lack or waste storage facilities, or lost into the ocean during periods of bad weather.



As part of

sewage sludge

Recreational fishing

**Approximately** 640,000 tonnes of fishing equipment is discarded into the marine environment each year.



Aquaculture





Commercial fishing







