

Plastics in the River Wear

Did you know that as much as 80% of the plastic in the oceans originally comes from litter in rivers?

Rainwater and wind carry plastic waste into streams and rivers, and through drains. As we know, all drains lead to the ocean!



Source: blueseasprotection.com

Plastics that are carried by the River Wear into the North Sea can be split into two groups depending on how big they are.

Large pieces of plastic are called **macroplastics**

Tiny pieces of plastic are called **microplastics**.

Macroplastics:

If we drop litter, it is usually a **macroplastic** item; such as a sweet wrapper, plastic bottle or crisp packet. These can all end up being washed or blown into the River Wear.

Even if we put **macroplastic** items into a bin, after they have been taken to landfill sites, they might still be at risk of getting blown away by the wind.

Below are some of the most common **macroplastic** items that start their journey to the ocean by being washed or blown into the River Wear:

- Bottles
- Food wrappers
- Takeaway food containers
- Cotton bud sticks
- Takeaway cups
- Straws, cutlery and stirrers
- Plastic bags

Microplastics:

Microplastics are tiny pieces of plastic, smaller than 5mm, so they are hard to see. There are three types of microplastics that can be found in rivers:

- **Microbeads:** They are small plastic beads that used to be in some toothpaste, shower gel and facial scrub products, however, they were banned in the UK in 2018. Even though we can't buy products containing them anymore, they may still be in our rivers as they last a long time.
- **Nurdles:** These are tiny plastic pellets about the size of a lentil, which are usually melted down in a factory, and then made into an everyday macroplastic product.
- **Bio-beads:** These are small plastic pellets that are used to filter water at sewage treatment plants. They provide a surface for bacteria and fungi to grow on as part of the wastewater treatment process, however, sometimes they escape into the drains and then into the river.

We can all help to prevent waste and pollution by following the 3R's: Reduce, Reuse Recycle. The most important thing we can all do is use fewer macroplastic items, or products containing microplastics.

Activities:

- Imagine that you are a nurdle, plastic straw or sweet wrapper, write a story about your journey along the River Wear to the North Sea.
- Perhaps using your 'Plastic Diary' activity sheet, make a leaflet to show how your family or school can reduce or reuse some of the plastic items.
- You can use some of our tips below or come up with your own!

Top tips to reduce plastic waste:

Item:	Actions:
Bottles	Use a refillable water bottle
Food wrappers	Put them in a bin
Takeaway food containers	Take a reusable container
Cotton bud sticks	Use cotton buds with paper sticks
Takeaway cups	Use a reusable cup
Straws, cutlery and stirrers	Use reusable cutlery, paper straws and wooden stirrers
Plastic bags	Use a cotton or reusable bag