Includes a teacher guide & student activity pack

Contributes to:
Stage 2 (Years 3-4)

- **ST2-4WS –** investigates their questions and predictions by analysing collected data, suggesting explanations and communicating
- **ST2-5WT –** applies a design process to produce solutions that address needs and opportunities
- **GE2-1 –** examines features and characteristics of places and environments
- **GE2-2 –** describes the ways people, places and environments interact
- **GE2-4 –** acquires and communicates geographical information using geographical tools

Teacher Resource Guide

SEA LIFE Sydney Aquarium x Seabin Stage 2 Learning Pack

Includes:

- Teacher Resource Guide (download separately)
- Student Pack
- Refers to data in Impact Reports. Find these reports here: https://www.visitsealife.com/sydney/conservation/local-conservation-projects/project-seabin/#sea-life-sydney-x-seabin-impact-report-2025-annual

Please Note:
This resource has been produced for teachers to use for FREE and for them to use within the attraction, in a classroom and online learning environments. This resource works best with an excursion to SEA LIFE Sydney Aquarium.

Go to our website https://www.visitsealife.com/sydney/schools/ to find out more about school excursions!

Students are encouraged to:

- identify common types of marine litter found in waterways
- explore how pollution can travel from streets and drains into the ocean
- observe and interpret real Sydney Harbour pollution data
- build basic graphing and data-reading skills
- investigate how technology like Seabin supports ocean health
- describe how marine litter impacts animals and habitats
- reflect on how personal choices can reduce waste
- apply their learning through creative poster design and action planning

Clean Harbour, Healthier Ocean

SEA LIFE Sydney Aquarium x Seabin Stage 2 Learning Pack

Our oceans connect every living thing on Earth. Even though Sydney Harbour is local to us, the pollution that enters waterways can travel into the open ocean, affecting marine animals and ecosystems worldwide.

The SEA LIFE Sydney Aquarium and Seabin partnership is helping to reduce marine pollution in Sydney Harbour by filtering water and collecting litter before it breaks down into microplastics.

This resource will help you explore real data from the harbour and consider how small actions can lead to significant change.

What is a Seabin?

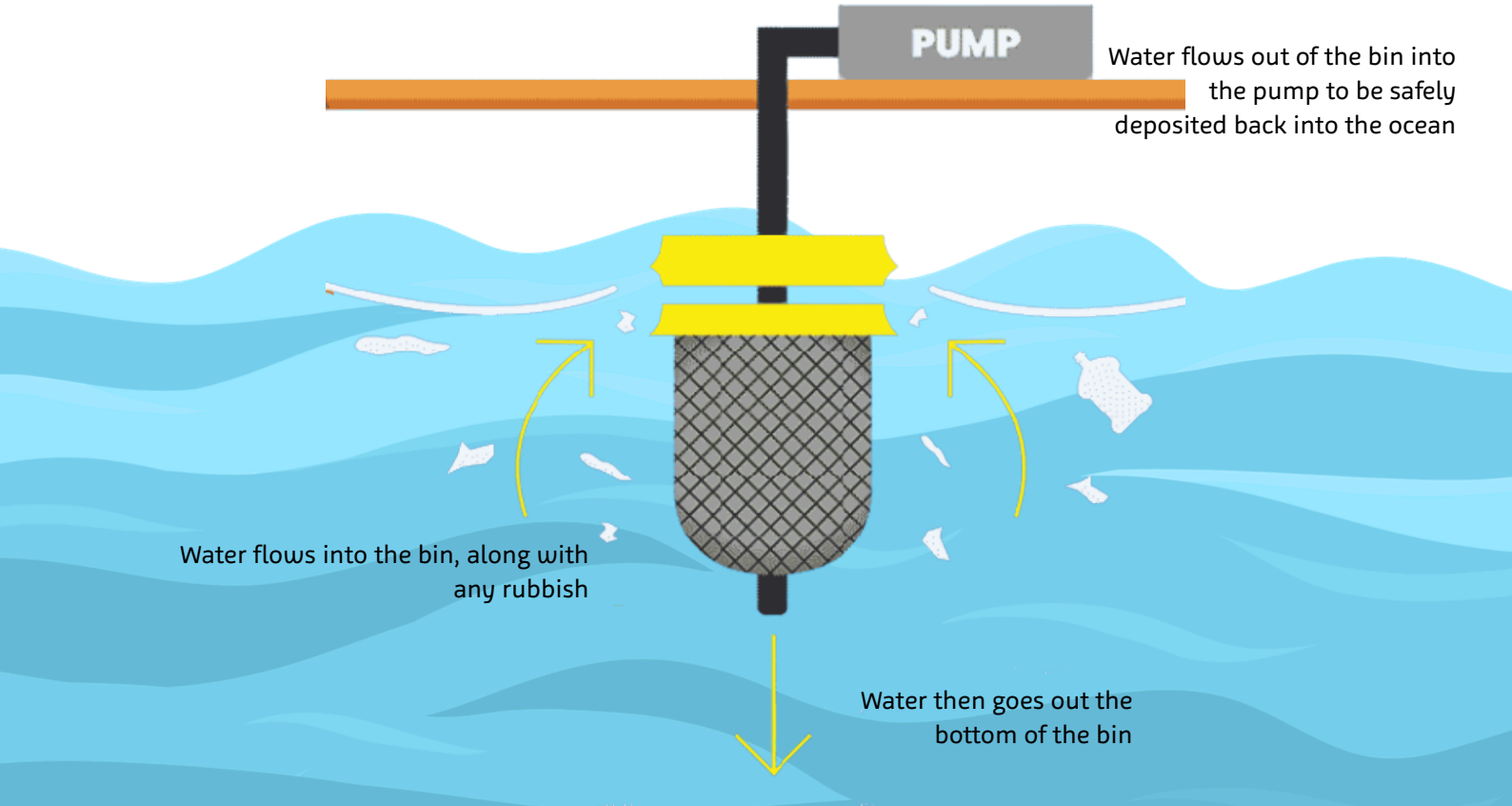
Seabin is like a “bin in the sea.” It floats in marinas and harbours and collects rubbish that is floating in the water.

It also filters the water to catch tiny pieces of plastic called microplastics.

In 2025, SEA LIFE Sydney Aquarium’s Seabin captured 664.09kg of marine litter in Sydney Harbour

How it works

The Seabin is situated at the water's surface and is plumbed into a shore-based water pump on the dock. The water gets sucked into the Seabin, bringing all floating debris inside. The water then flows out through the bottom of the bin and up into the pump on the dock.

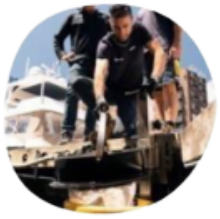


The Seabin is easy to empty and replace. It can work 24 hours a day, 7 days a week.

SEA LIFE Sydney

Sydney Harbour Impact (2025)

664.09
kilograms
of marine litter captured



248.97
million
litres of water filtered for microplastics and plastic pollution

100
Olympic swimming pools

525,084
thousand
plastic items captured. This equates to 1,521 plastic items per day!

383,022
thousand
microplastics were captured

SEA LIFE Sydney Seabin

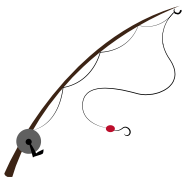
Worksheet One: Marine Litter Basics

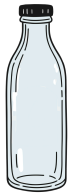
What is marine litter?

Circle the items that could become marine litter.










What is marine litter?

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Why can plastic be dangerous for sea animals? Write two reasons.

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Draw a simple ocean food chain below. Then, draw a piece of plastic showing where pollution could enter the chain.

My food chain drawing

SEA LIFE Sydney

Seabin

Worksheet Two: Data Detective

In 2025, SEA LIFE Sydney Aquarium's Seabin captured:

664.09kg of marine litter

248.97 million litres filtered

525,084 thousand plastic items

383,022 thousand microplastics

Which number shows the amount of litter collected?

.....

What does 'filtered water' mean?

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.....

Which number is bigger: the amount of plastic items or the amount of microplastics?

.....

Why do you think collecting microplastics is important?

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Predict what might happen if the Seabin did not exist.

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SEA LIFE Sydney

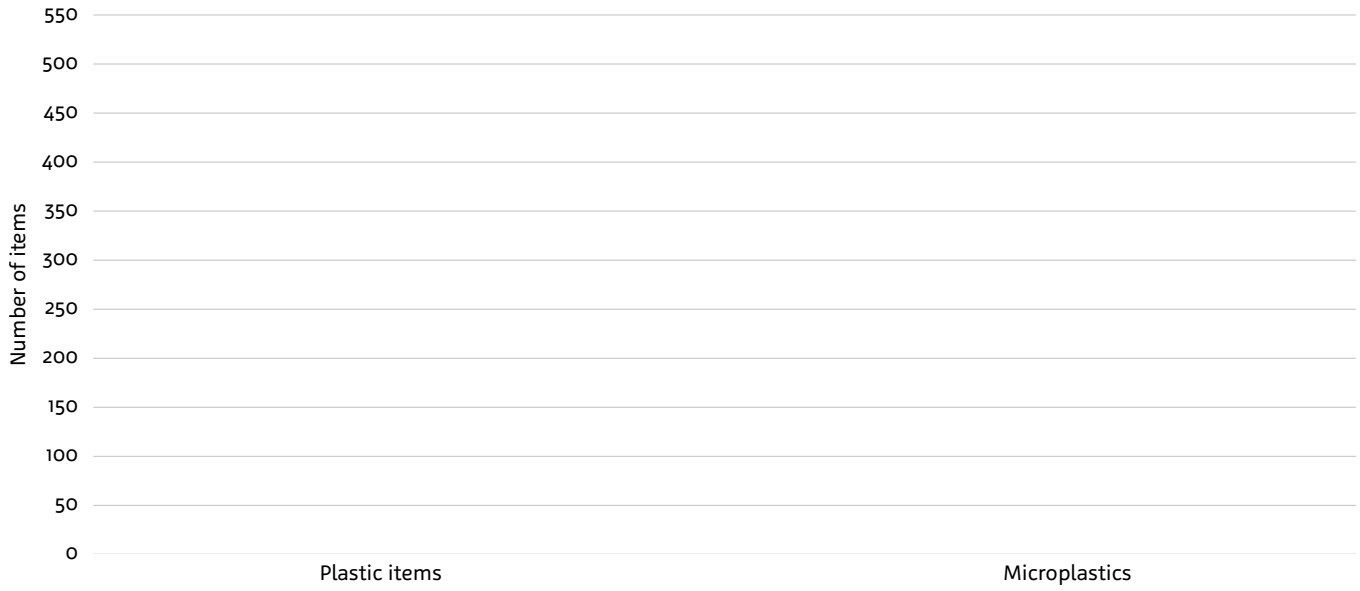
Seabin

Worksheet Three: Graph the Pollution

Use the numbers below to create a bar graph.

525,084 thousand plastic items

383,022 thousand microplastics



Which type of pollution was captured more?

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Why might plastic break down into microplastics over time?

.....

.....

Write one sentence describing your graph.

.....

.....

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Seabin

Worksheet Four: Creative Task

Create a poster encouraging people to protect our harbour.

Your poster must include:

- One ocean animal
- One fact from the Seabin data
- One action people can take
- A catchy slogan
  - E.g. “The ocean starts here.”
  - “Small choices. Big impact.”

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Seabin

Reflection: What did you learn?

What surprised you the most?

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What is one thing you can do this week to reduce plastic waste?

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Why is Sydney Harbour important?

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SEA LIFE Sydney

Seabin