

## EDUCATOR NOTES:

Educator notes for [Caring for our Coasts: beach survey](#) and [beach clean-up](#)

### Learning and Engagement Approach

This activity is designed to engage students from 13 – 18.

The activity is intended to:

- facilitate an investigation and help students understand the impacts of microplastics on estuaries, wetlands and the coastal habitats
- understand the journey of water through the natural and urban water cycle
- learn how different pollutants including microplastics enter the marine environment
- appreciate that what happens on land can impact our rivers and oceans
- increase understanding of how to organise an event and the importance of volunteering to help the environment
- implement the learning from the previous components of the activity series

### Safety Considerations

- Check the weather before conducting any outdoors activity. If there is going to be extreme temperatures, an expected high UV index, storms or high wind, postpone the activity
- Ensure that everyone is wearing closed shoes, hats, and sunscreen and has a water bottle handy
- Keep any allergy plan information at hand and any associated allergy medication
- Conduct the beach survey at low tide
- Wear gloves when picking up rubbish
- Look at the [clean-up safety posters](#) by Tangaroa Blue for potential hazards: silver canisters, asbestos, syringes, heavy items
- You may require a sharps container for syringes, this will be established during your pre-clean up visit. Only adults should undertake the task of handling syringes
- Provide a safety briefing for the children covering hazards to watch out for: syringes, broken glass, old car batteries, snakes, spiders, crocodiles and ants nests.

### Materials and References

#### Beach Survey

Discover more about [Marine Debris Research](#) with the CSIRO.

Find out more information on the [common marine debris](#) with Marine Conservation Australia. Oceanwatch Australia has a list of [6 great programs tackling Ocean Plastics](#).

Learn about the scope and purpose of the CSIRO [marine debris research](#).

Discover how debris is transported from the [coastal margin to the ocean](#).

Watch the short video from CSIRO [How can we solve the ocean plastic crisis?](#) (3 minutes).

### Beach clean up

Find out more about [Plastic and how it affects our oceans](#) with ABC Science

Discover more about [marine debris and microplastic with these factsheets](#) from Tangaroa Blue.

Print this infographic for your school '[Plastic doesn't go Away](#)' from the Boomerang Alliance

Watch how [a remote island in the Great Barrier reef](#) is impacted by plastic with the video from the World Wildlife Fund Australia (1 minute)

Watch the [Impact of pollution in the sea?](#) With ABC Science Catalyst (12 minutes). Warning some graphic footage of dead and injured animals.

### Site Suggestions

- Conduct a pre-site visit to choose an area that is easy to access, has toilets nearby and water for drinking and washing hands
- Refer to local tide charts so you can visit at low tide
- If it is too far to travel to a beach you can also conduct this activity along a river.

### Educator Tips

- Before the clean-up, visit the site and identify any potential hazards for your students and any volunteers
- The beach survey and beach clean-up can be conducted on the same trip
- If cleaning up in public spaces, check with your local council, Traditional Owners or rangers to seek approval and see if any guidelines need to be followed
- Map out the area designated for the clean-up to help determine a suitable timeframe and let participants know the start and finish time
- Check with the local recycling centre to determine what they will accept and how it needs to be sorted before the clean-up
- Plan for how and where you will dispose of all collected items.

### Community Engagement

Use The [National Landcare Directory](#) to find out if there is a Coastcare or Landcare group active in the area where you conducted your beach survey clean up and ask about the programs they run.

Look to the [Junior Landcare Community Page](#) for organisations to contact to help support your investigations.

### Aligning this Activity

This learning activity is the first part of a sequence of 2 individual learning activities focused on Caring for our Coasts. The order of these learning activities is: [Beach Survey](#) and [Beach Cleanup](#).

These activities can also be combined to form a larger project with the catchment management series: Story of a river, Water sustainability, What's in a drop, The drain is just for rain and Where the river meets the sea.

### Extension Activities

1. Sort through and classify the microplastics found during the beach survey
2. Sort through and count the different type of rubbish collected in the Beach clean-up. Recycle or reuse the rubbish where possible
3. Link your Clean-up project to Coastcare week, Landcare Week, [Clean up Australia Day](#) or the [Marine Environment Litter Program](#).

### Curriculum and Framework Links

#### SCIENCE

Year 7: [ACSSU111](#), [ACSSU112](#), [ACSSU116](#), [ACSHE120](#), [ACSHE121](#), [AC SIS124](#), [AC SIS125](#), [AC SIS130](#), [AC SIS131](#), [AC SIS132](#).

Year 8: [ACSHE135](#), [AC SIS140](#), [AC SIS145](#), [AC SIS146](#), [AC SIS234](#).

Year 9: [ACSSU175](#), [ACSSU176](#), [AC SIS164](#), [AC SIS165](#), [AC SIS170](#), [AC SIS172](#), [AC SIS174](#)

Year 10: [ACSSU189](#), [ACSHE191](#), [ACSHE194](#), [AC SIS199](#), [AC SIS204](#), [AC SIS206](#), [AC SIS208](#)

#### Biology

[Unit 1: Biodiversity and the interconnectedness of life](#)

#### Earth and Environmental Science

[Unit 1: Introduction to Earth systems](#)

[Unit 3: Living on Earth - extracting, using and managing Earth resources](#)

[Unit 4: The changing Earth - the cause and impact of Earth hazards](#)

#### HUMANITIES AND SOCIAL SCIENCES

Year 7: [ACHASSI152](#), [ACHASSI155](#), [ACHASSI154](#), [ACHASSI155](#), [ACHASSI156](#), [ACHASSI158](#), [ACHASSI159](#), [ACHASSI160](#), [ACHASSI161](#), [ACHASSI162](#), [ACHASSK183](#), [ACHASSK185](#), [ACHASSK187](#),

#### GEOGRAPHY

Year 7: [ACHGK037](#), [ACHGK038](#), [ACHGK040](#), [ACHGK042](#), [ACHGS047](#), [ACHGS048](#), [ACHGS049](#), [ACHGS050](#), [ACHGS051](#), [ACHGS052](#), [ACHGS054](#),

Year 8: [ACHGK048](#), [ACHGK050](#), [ACHGK051](#), [ACHGK053](#), [ACHGS055](#), [ACHGS056](#), [ACHGS060](#), [ACHGS062](#)

Year 9: [ACHGK065](#), [ACHGS068](#), [ACHGS070](#),

Year 10: [ACHGK070](#), [ACHGK073](#), [ACHGK074](#), [ACHGK075](#), [ACHGS079](#)

[Unit 1: Natural and ecological hazards](#)

[Unit 2: Sustainable places](#)

[Unit 3: Land cover transformations](#)

#### HEALTH AND PHYSICAL EDUCATION

Year 7 & 8: [ACPPS073](#)

#### ETHICAL UNDERSTANDING

[Exploring values, rights and responsibilities.](#)

#### PERSONAL AND SOCIAL CAPABILITY

[Social awareness](#)

#### CURRICULUM CONNECTIONS



[Outdoor Learning](#)

**CROSS CURRICULUM PRIORITY**

[Sustainability](#)