

# Waste and Waterways Lesson



years  
7 and 8

## AUSTRALIAN CURRICULUM LINKS

### Year 7 Geography

- **Water in the World:** The nature of water scarcity and ways of overcoming it; investigating whether the use of water in their place is sustainable (ACHGK040)
- **Place and liveability:** The influence of environmental quality on the liveability of places (ACHGK045) and
- **Place and liveability:** Strategies used to enhance the liveability of places (ACHGK047)

### Year 8 Geography

- Landforms and Landscapes: Human causes and effects of landscape degradation (ACHGK051)
- Landforms and Landscapes: Ways of protecting significant landscapes (ACHGK052)

### Year 7/8 Design and Technologies

- Processes and Production Skills: Generate, develop, test and communicate design ideas, plans and processes for various audiences using appropriate technical terms and technologies (ACTDEP036)

## Objectives

Students will be able to:

- Outline the nature of waste in waterways (marine waste)
- Describe the impacts of marine waste
- Propose solutions to respond to marine waste

**TIME REQUIRED:** The time required for this lesson sequence varies according to whether some tasks are completed by students in class or at home.

## TEACHING AND LEARNING STRATEGIES

*Tip: Teachers do not have to follow the entire sequence of tasks.*

*Activities can be omitted or modified according to the needs of the teacher and students.*

1

### INTRODUCTION TO MARINE WASTE

**Teacher-led discussion:** Introduce students to the theme of Waste and Waterways by verbally discussing the following questions:

- What is marine waste?
- What types of material does marine waste consist of?
- What are some impacts of marine waste?

The following video may also be helpful to introduce this theme:

*National Geographic How We Can Keep Plastics Out Of Our Ocean (3:10 minutes)*

<https://www.youtube.com/watch?v=HQTUWK7CM-Y>

2

### NATURE & IMPACTS OF MARINE WASTE

**Student task:** In groups, students are to create a fact sheet that aims to inform the school population about the problem of waste in our waterways. It should address the following:

- Define marine waste
- Outline the composition of marine waste
- Describe how waste ends up in the marine environment
- Describe the impacts of marine waste

This fact sheet should be visually appealing, yet informative and easy to understand. It should use relevant images, diagrams, graphs, tables and/or maps. The best poster can be posted on the Eco-Schools noticeboard or emailed to Eco-Schools at [eco-schools@kab.org.au](mailto:eco-schools@kab.org.au) for uploading onto the Eco-Schools Facebook page.

*Internet resources 1-4 below can be used for this task.*

### 3

#### RESPONSES TO MARINE WASTE

**Student task:** In groups, students create a two minute video which proposes an innovative technology-based solution that could be applied to their school or local community to reduce waste in waterways. The following two videos can be shown at the beginning for inspiration. The best videos can be emailed to Eco-Schools at [eco-schools@kab.org.au](mailto:eco-schools@kab.org.au) for uploading onto the Eco-Schools Facebook page.

##### Video 1:

Meet the drain sock – a simple pollution solution taking the world by storm (1:49 minutes) [https://www.youtube.com/watch?v=3klSpelek\\_4](https://www.youtube.com/watch?v=3klSpelek_4)

##### Video 2:

Australian schoolboy turning plastic waste into sunglasses | Nine News Australia (1:57 minutes) [https://www.youtube.com/watch?v=RiB2RO\\_GDy8](https://www.youtube.com/watch?v=RiB2RO_GDy8)

*Note: Teachers can consider implementing a cross-curriculum project to develop and produce feasible solutions in D&T.*



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#### INTERNET RESOURCES:

**Resource 1:** Australian Government: <https://soe.environment.gov.au/theme/marine-environment/topic/2016/marine-debris>

**Resource 2:** National Geographic: <https://www.nationalgeographic.org/encyclopedia/marine-debris/>

National Geographic: <https://www.nationalgeographic.com/news/2015/1/150109-oceans-plastic-sea-trash-science-marine-debris/>

**Resource 3:** CSIRO: <https://www.csiro.au/en/Research/OandA/Areas/Marine-resources-and-industries/Marine-debris>

**Resource 4:** Ocean Health Index: <http://www.oceanhealthindex.org/methodology/components/trash-pollution>

This lesson plan was prepared and written by Carlynn Yong.