

# OVERVIEW



## Overboard and Underwater

## Year 10 Program

*Overboard and Underwater* is a full-day program in which students observe marine debris and investigate possible impacts of this on marine environments.

With one of the United Nations Global Sustainable Development goals being *to conserve and sustainably use the world's oceans, seas and marine resources*, this program is deliberately tailored to provide students with an authentic experience and the opportunity to adopt the important role of Environmental Managers.

On board our boat, *Inspiration*, students travel out onto Moreton Bay to collect data about marine debris and possible sources of microplastics using a sediment grab or plankton trawl. They explore the Manly foreshore where they survey land use and annotate maps notating the movement of rubbish through the environment.

Students identify microplastics and investigate types of marine debris by conducting a rubbish audit on Manly Foreshore using the Tangaroa Blue method and national standard for rubbish audits. They analyse and evaluate management strategies and recommend ways to minimise marine debris using systems thinking and geographical criteria.

When considering strategies to manage an environmental problem, students will have access to classroom activities investigating people's views and behaviours around environmental issues in Australia.

The Overboard and Underwater program helps students answer the key inquiry questions:

- How can spatial variation between places and changes in environments be explained?
- What management options exist for sustaining human and natural systems into the future?
- How do world views influence decisions on how to manage environmental and social change?

### Curriculum Intent

#### Geography – Unit 2 Environmental change and management

#### Geographical Knowledge and Understanding

- Human-induced environmental changes that challenge sustainability ([ACHGK070](#))
- Environmental world views of people and their implications for environmental management ([ACHGK071](#))
- The application of systems thinking to understanding the causes and likely consequences of the environmental change being investigated ([ACHGK073](#))
- The application of geographical concepts and methods to the management of the environmental change being investigated ([ACHGK074](#))
- The application of environmental, economic and social criteria in evaluating management responses to the change ([ACHGK075](#))



**Moreton Bay**  
ENVIRONMENTAL EDUCATION CENTRE  
*Inspiring Champions for the Bay*



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## Geographical Inquiry and Skills

### *Collecting, recording, evaluating and representing*

- Represent multi-variable data in a range of appropriate forms, for example scatter plots, tables, field sketches and annotated diagrams, with and without the use of spatial technologies ([ACHGS074](#))

### *Interpreting, analysing and concluding*

- Apply geographical concepts to synthesise information from various sources and draw conclusions based on the analysis of data and information, taking in to account alternative points of view ([ACHGS077](#))

### *Reflecting and responding*

- Reflect on and evaluate the findings of the inquiry to propose individual and collective action in response to a contemporary geographical challenge, taking account of environmental, economic, political and social considerations; and explain the predicted outcomes and consequences of their proposal ([ACHGS080](#))

## General Capabilities

### *Critical and creative thinking*

- Inquiring- identifying, exploring and organising information and ideas
- Generating ideas, possibilities and actions

### *Numeracy*

- Interpreting statistical information
- Using spatial reasoning

### *Literacy*

- Comprehending texts through listening, reading and viewing

### *Ethical understanding*

- Reasoning in decision making and actions
- Exploring values, rights and responsibilities

## Cross-curriculum Priorities

### *Sustainability*

- All life forms, including human life, are connected through ecosystems on which they depend for their wellbeing and survival
- Actions for a more sustainable future reflect values of care, respect and responsibility, and require us to explore and understand environments
- Sustainable futures result from actions designed to preserve and/or restore the quality and uniqueness of environments

\*A Curriculum Activity Risk Assessment is available on request.

