

STORIES

of the changing

BEACH

Stage 4 (Years 7 & 8)



SURF LIFE SAVING
NEW SOUTH WALES



Overview

HSIE

Stage 4 (yr 7-8)

3-4 Weeks

“The beach has a place in everyone’s story”

Story telling is part of all languages and cultures. Surf Life Saving is much more than just saving lives on the beach. A key priority for us is reaching out to all Australians through our substantial community education programs. We aim to teach all Australians how to keep themselves and their families safe at the beach.

The beach and inland waterways have many stories to tell. Through Surf Life Saving NSW Beach Safety Education Programs, we are bringing the beach to your class. Our program brings the story of both the coastline and inland waterways water safety journey. Each program has been designed to be delivered solely in Key Learning Areas or as a Cross- Curriculum learning experience. This unit focuses on delivering the key water

safety message that the beach is a place for everyone to safely experience the beach, coastline and inland waterways. It also gives students an opportunity to further develop their literacy skills, address the Cross-Curriculum Priorities of the NSW Curriculum and give students to experience authentic learning by creating meaningful projects through inquiry-based tasks.

Unit overview

The beach has a place in every person’s story. Each student has their story about their experience about interacting with the aquatic environment. This unit explores how students use their story to arm themselves with strategies to have hard conversations with peers and family and make well informed decisions about their safety and wellbeing around water. The learning intention is to give students strategies to prevent unnecessary drownings and practice safe behaviours at the beach.

The Secondary School program provides an engaging, interactive learning experiences supported by a range of teacher and learner resources.

- "Beach is a part of everyone's story". The beach is a place of inclusivity, energy and place to enhance your health and wellbeing.
- The beach is always changing. Plan for a safe and fun beach experience for you, your mates and family. Know the beach you are going to.
- Know your safety plan in place ready to put into action.
- Fight the "mob" mentality.
- Be self-aware of my own and mate’s competency to get you and yourselves out of an unsafe situation on the beach.

About Surf Life Saving NSW

Surf Life Saving New South Wales (SLSNSW) is the peak water safety, drowning prevention and rescue organisation in NSW and one of the largest volunteer-based community service organisations in Australia. Today the organisation encompasses a range of diverse activities – lifesaving services, community education, surf sports, member development and training, all which contribute to the primary purpose to save lives and meet our target of zero preventable deaths and injuries on NSW beaches.

Why have we created this resource?

Our mission is simple; save lives, create great Australians and build better communities. In order to do this, we want to provide you, our schools, teachers and students

with the best possible programs, resources and opportunities to engage with us and learn about water safety, the beach and coastal environments. This resource has been created to help you integrate beach and coastal safety information and broader water safety activities and our programs into your lesson plans in an easy and simple way. We want to ensure our communities understand beach and ocean safety, but we also want to make sure that we provide opportunities to do so in a fun, engaging and relevant way. We hope that this resource will support our mission to equip all communities with the confidence, knowledge, resources & tools to prevent drownings & create safe, fun, welcoming & enjoyable beach side experiences.

Creating a quality teacher resource

We understand the unique challenges that our teachers face and the difficulty in finding quality resources and content in line with the curriculum. In order to bring our teachers a quality resource that they can easily integrate into their classrooms we have utilized the expert skills of highly trained and experienced teachers to develop and build this resource. We will continue to annually review, amend and add to this resource and as part of this process we will value the feedback from all teachers. If you would like to provide your feedback, recommendations or comments regarding this resource please contact us at community@surflifesaving.com.au



Opportunities to engage with SLSNSW (Stage 4 - Geography)

This unit outline includes opportunities to bring the content to life by engaging with one of our offered programs, depending on your school location and your availability, you can choose from a number of programs to suit your needs. For further information and assistance with any of the below please contact us at community@surflifesaving.com.au

Race to the Flags Virtual Program (Years 7-9)

In this stage based, curriculum aligned virtual session, students will have the opportunity to compete in groups with their classmates, as they problem solve real life Lifesaving scenarios. Learn more: [Race to the Flags \(7-9\) - Beach Safety Hub](#)

Lifesaver @ My School (7-12)

Bring a Lifesaver to your school and give your students the opportunity to learn about beach and ocean safety in their own classroom and backyard. Learn more: [Lifesaver @ My School \(7-12\) - Beach Safety Hub](#)

Engage with your local SLSNSW area program

If your school is located in a coastal area there may be a local run program by one of our SLSNSW Clubs or Branches. You can always contact your local club to find out more or contact us and we can put you in touch with the right person.



Contact the Community Education Team



Beach & Coastal Safety Resource Hub **Surf Life Saving NSW**

- ✓ Secondary School Education programs and resources Secondary School Students - Surf Safety Programs (beachsafetyhub.org.au)



02 9471 8000



community@surflifesaving.com.au



NSW Syllabus outcomes by learning area

Geography K-10

GE4 1 locates and describes the diverse features and characteristics of a range of places and environments

GE4 2 describes processes and influences that form and transform places and environments

GE4 3 explains how interactions and connections between people, places and environments result in change

GE4 7 acquires and processes geographical information by selecting and using geographical tools for inquiry

GE4 8 communicates geographical information using a variety of strategies

Outcomes

Landscapes and Landforms

investigate different landscape and the geomorphic processes that create distinctive landforms

- ✓ identification of a variety of landscapes and landforms
- ✓ explanation of geomorphic processes that create landforms e.g. weathering, erosion, deposition, tectonic activity
- ✓ examination of ONE landscape and its distinctive landforms

Value of landscapes and landforms

investigate the aesthetic, cultural, spiritual and economic value of landscapes and landforms for people, including Aboriginal and Torres Strait Islander Peoples

- ✓ explanation of the aesthetic value of landscapes and landforms to culture and identity
- ✓ description of the cultural and spiritual value of landscapes or landforms in different places
- ✓ identification of how a landscape can have economic value for different people

Changing landscapes

investigate the human causes and effects of land degradation

- ✓ identification of the ways people utilise and change landscapes
- ✓ description of the impact of a range of human activities on landscapes
- ✓ examination of ONE type of land degradation including its spatial distribution, causes and impact

NSW Syllabus outcomes by learning area

Geography K-10

Landscape management and protection

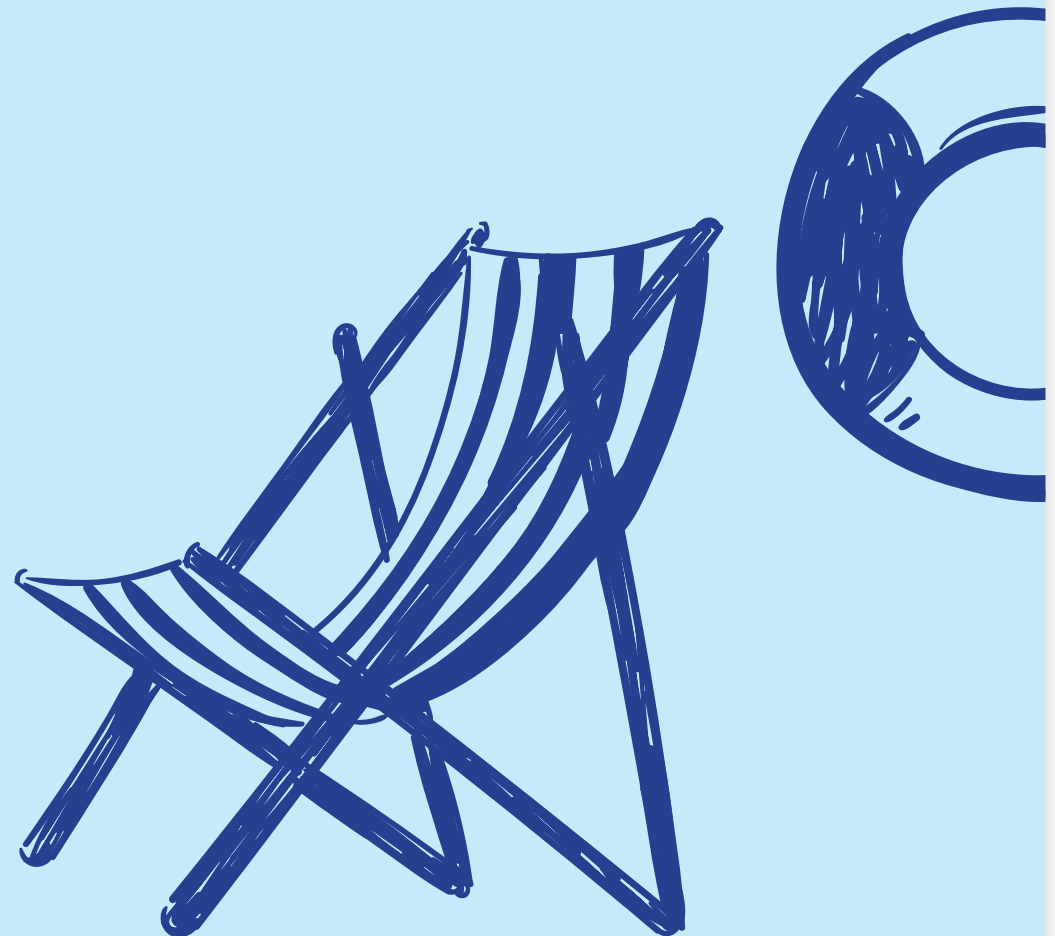
investigate ways people, including Aboriginal and Torres Strait Islander Peoples, manage and protect landscapes, for example:

- ✓ description of the nature and extent of landscape protection across a range of scales e.g. locally protected places, national parks, world heritage listing
- ✓ examination of management and protection strategies for ONE landscape
- ✓ assessment of the contribution of Aboriginal and Torres Strait Islander Peoples' knowledge to the use and management of an Australian landscape or landform

Geomorphic hazard

investigate ONE contemporary geomorphic hazard including causes, impacts and responses

- ✓ description of the spatial distribution of the disaster
- ✓ explanation of geomorphic processes causing the disaster and its impacts
- ✓ examination of the responses of individuals, groups and government to the impact of the disaster
- ✓ discussion of management strategies to reduce the future impact of similar natural hazard events including the role of technology in monitoring and predicting geomorphic hazards



Lesson 1: Coastal Landforms

Explicit Teaching - Coastal Landforms

[Coastal Management High School Study Guide](#) is produced by Refraction Media for the NSW Office of Environment and Heritage and School of Civil and Environmental Engineering, UNSW Sydney -

Learning Intention: Describe processes and influences that form and transform places and environments

Success Criteria:

- ✓ identify a variety of landscapes and landforms
- ✓ explain geomorphic processes that create landforms e.g. weathering, erosion, deposition, tectonic activity
- ✓ examine of ONE landscape and its distinctive landforms

Activity 1: Explicit Teaching Coastal Landforms

- ✓ Read pages 12 -13 of Coastal Management High School Study Guide
- ✓ Draw diagram 1.1 (p12)
- ✓ Explain how Longshore Drift works (1 paragraph).

Alternate Activity 1:

Students to work through the bbc [bitesize coastal erosion](#) and complete the test at the end.

Activity 2:

[Geoactive 2 Coastal Management](#)

Watch the video on [coastal formation](#)

- ✓ Read Chapter 4.2 How are coasts formed?
- ✓ Answer Questions 1-3, 5,6 (p82-83)

Activity 3:

Use the following resources to create a profile of geomorphic features of the coastal landscape.

Create a table or sketches with the following details:

- ✓ Name of feature
- ✓ Sketch of landscape - show how the landform is created
- ✓ Caused by erosion or deposition
- ✓ Example of the landform

Resources:

- ✓ http://www.jaconline.com.au/essentials/downloads/JEG2_04.pdf - pages 84-89
- ✓ [Geography Pods Beach Profile](#)
- ✓ “Sea Wins!” and “Keep on Moving?”
- ✓ [Additional resource with information for completing table](#)

Activity 4: Types of Waves

Read and copy of diagrams. Label the main feature of the type of wave. Mention if it is dangerous to swimmers.

Resource: What is an ocean wave? How are waves formed at the beach? (beachsafetyhub.org.au)

Activity 5: How does a wave break?

Copy and explain a diagram

Resource: http://www.jaconline.com.au/essentials/downloads/JEG2_04.pdf - page 90

Diagrams of waves can be copied from [activity 4](#)

Lesson 1: Coastal Landforms

Activity 6: Profile of erosional and depositional beaches

Copy and label diagrams 2.1 and 2.2

Resource: [Coastal Management Guide](#) page 13

Extension Activity:

Participate in collaborative study: Changing coastal environments

Download "CoastSnap" app to help document the changing coastline

Activity 7: Rip Current Safety - Explicit Teaching

What is a rip current and how can you spot a one at the beach? (beachsafetyhub.org.au)

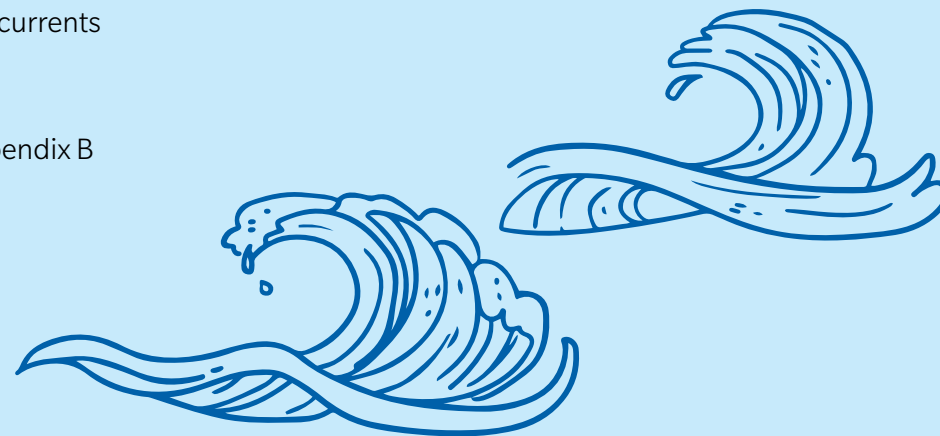
Resource: [rip currents](#)

- ✓ Watch the videos
- ✓ Explain the diagram (Photocopy the information sheet)

Resource: [SLSA Rip Currents Fact Sheet](#)

Task:

- ✓ Use Virtual Reality to experience the natural process of rip currents
- ✓ [Life Saving Victoria VR](#)
- ✓ Surviving a Rip current - Complete worksheet Appendix B Page 4



Lesson 2: Human Impacts

Learning Intention: Explain how interactions and connections between people, places and environments result in change

Success Criteria:

Students:

- ✓ investigate the human causes and effects of land degradation
- ✓ identify the ways people utilise and change landscapes
- ✓ describe the impact of a range of human activities on landscapes
- ✓ examine of ONE type of land degradation including its spatial distribution, causes and impact

Human Impact on the changing beach - Case Study - Killalea Beach

Task: Gain contextual knowledge of Killalea Beach

Use the Beachsafe app to find the following:

- ✓ Nearest patrolled area
- ✓ Marine hazards
- ✓ General conditions for beach activities

Resource: [Shellharbour - Killalea](#)

Activity 1: Create your own topographic map for Killalea Beach

[Spatial Collaboration Portal \(NSW Government\)](#) - (Geographic Information Systems)

- ✓ After putting Killalea into the search - from the Aerial photograph, describe the human activities that may impact on the Killalea Beach
- ✓ Open the Spatial Viewer to create a topographic Map.
- ✓ After searching for Killalea Beach, click on the last widget for labels. Click on GeoPDF and Imagery (3rd box from the bottom of the list to create the map.
- ✓ Press Print to create the PDF Map

Activity 2: Respond to the following questions

- ✓ What natural features are visible on the topographic map?
- ✓ Is the landscape steep or relatively flat? (If it is steep, the contour lines are closer together)

Lesson 2: Human Impacts

Activity 3:

Create an aerial photograph of Killalea Beach using Google Earth. Take a screenshot to label the following:

- ✓ natural features
- ✓ longitudinal drift
- ✓ rip currents
- ✓ erosion
- ✓ deposition
- ✓ access to the beach
- ✓ Label with name of Aboriginal country (Map of Indigenous Australia)

Look at the pop up on the right side

- ✓ List other features that cannot be identified on the topographic and aerial photograph

Resources:

- ✓ [Map of Indigenous Australia](#)
- ✓ [Google Earth](#)

Activity 4:

Watch Gardening Australia - Killalea

During viewing complete skeleton notes on:

- ✓ ecosystems
- ✓ human induced change
- ✓ management strategies by groups, individuals and Aboriginal communities

Resources:

- ✓ [Gardening Australia](#)
- ✓ [Map of Indigenous Australia](#)

Activity 5: Geomorphic Hazard Case Study - Coastal Erosion

[Coastal Management High School Study Guide](#) is produced by Refraction Media for the NSW Office of Environment and Heritage and School of Civil and Environmental Engineering, UNSW Sydney

Individual Task

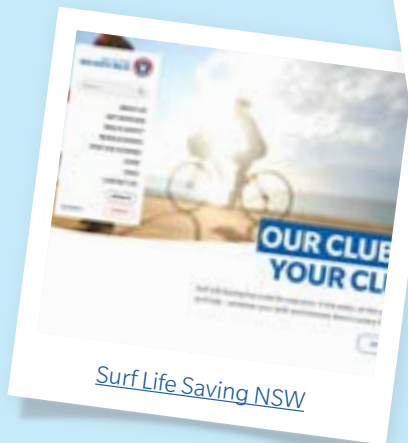
- ✓ Read page 17-20
- ✓ Complete tasks - Station 5 page 29 - 31
- ✓ Read page 34-36
- ✓ Complete tasks - page 37-38
- ✓ Read page 40 and 41 and watch the videos
- ✓ Complete the tasks - page 42 and 43



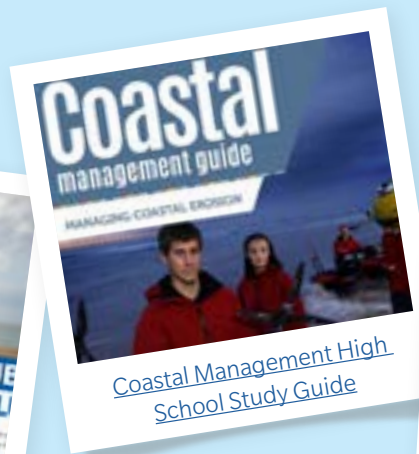
Subject Specific Resources



[Beach & Coastal Safety Resource Hub](#)



[Surf Life Saving NSW](#)



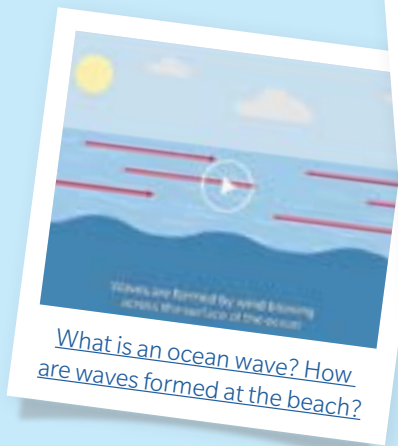
[Coastal Management High School Study Guide](#)



[Coastal Landforms](#)



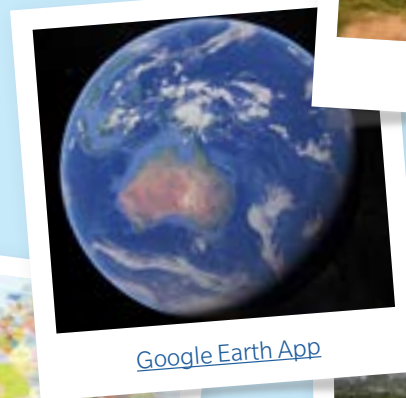
[Sea Wins! and Keep on Moving?](#)



[What is an ocean wave? How are waves formed at the beach?](#)



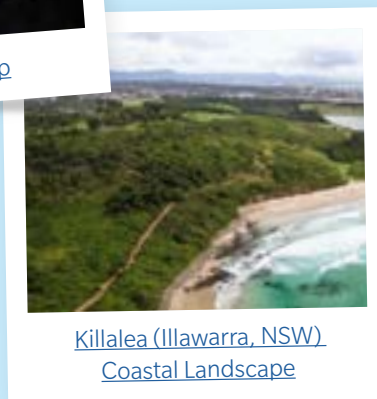
[Life Saving Victoria VR](#)



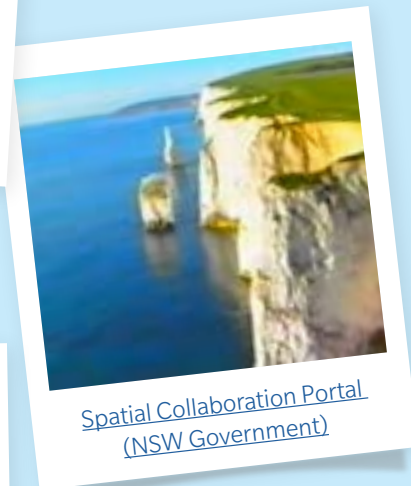
[Google Earth App](#)



[Map of Indigenous Australia](#)



[Killalea \(Illawarra, NSW\) Coastal Landscape](#)



[Spatial Collaboration Portal \(NSW Government\)](#)

Resources

- ✓ [Beachsafe](#) (link to the app); [The think line](#); [Welcome to Surf Safety](#)
- ✓ SLSA Factsheet: [Rip Currents](#)
- ✓ Types of waves [What is an ocean wave? How are waves formed at the beach?](#)
- ✓ [National Coastal Safety Report 2020 - Youtube](#)
- ✓ [SLSA Coastal Safety](#)
- ✓ [SLSA Youtube Channel](#)
- ✓ [The Think Line](#); [Derek's Story](#); [Samantha's story](#)
- ✓ [Royal Life Saving Australia](#); [classroom e-learning](#)
- ✓ [National Drowning Reports](#)
- ✓ [Science of the Surf](#) (Dr Rip - Dr Rob Brander UNSW)
- ✓ [CoastSnap](#) shoreline tracking technology app How it works - CoastSnap- Citizen Science App
- ✓ [Rip Current Heroes Documentary](#)
- ✓ [Rip Current Heroes Study Guide](#)
- ✓ [Geoscience Education Centre](#)
- ✓ [Surf Life Saving NSW](#) [Acknowledgement of Country](#)
- ✓ [North Bondi SLSC Online Exhibit](#)
- ✓ [Surf Life Saving Rescue Methods](#) - Tube, Board, IRB and Unaided Rescues
- ✓ [Surf Life Saving NZ Lifeguard skills and response techniques](#)
- ✓ [Catching Waves Blog Posts](#)
- ✓ [Geoscience Australia - Coastal Erosion](#)
- ✓ [What is Geocaching?](#); [Geocaching](#); [Geocaching Activity](#); [Geocaching Guide](#)
- ✓ [Geocaching app](#)
- ✓ [OzCoasts](#) - Online Coastal Information Service
- ✓ [Rivers: Sharing our water](#) [Student workbook](#) - Environment, Energy and Science Department of Planning, Industry and Environment
- ✓ [Growing Old in Eora Country - Djon Mundine](#)
- ✓ [United Nations High Commissioner for Human Rights Native Title Report 2008 Chapter 6 Indigenous Peoples and Water](#)
- ✓ [Oceans Teacher Notes](#) - Download & print worksheet here: [CSIRO Publishing](#)
- ✓ [PLC Perth Library and Innovation Centre Yr 8 Landforms webpage](#)
- ✓ [Sea creatures-the driftwood animal sculptures](#); [Local sculptor Pete Rush](#)
- ✓ [Jeannie Baker](#) (Collage) (Where the Forest Meets the Sea); [Jeannie Baker-collage picture book](#); [Jeannie Baker-circle comes to life](#)
- ✓ [Baker J \(2019\) Playing with Collage Walker Books Australia](#)
- ✓ [Arts & Culture - Sculpture by the Sea](#); [Sculpture by the Sea](#); [Peter Adler - Aqualand Artist Interview](#); [Aqualand Artist Interview Series with Karin van Der Molen - YouTube](#)
- ✓ [Australian National Surfing Museum](#); [Surfing Australian Identity](#); [Jacob Stuth](#)
- ✓ [National Archives of Australia - Summer's Past Online Exhibit](#); [Australian News and Information Bureau collection](#); [Between the Flags Exhibit](#)
- ✓ [Peng C, Yamashita K, Kobayashi E \(2015\) An Empirical Study on the Effects of the Beach on Mood and Mental Health in Japan. J Coast Zone Manag 18: 412. doi: 10.4172/2473-3350.1000412](#)
- ✓ [Physical and mental health effects of repeated short walks in a blue space environment: A randomised crossover study Environmental Research, Volume 188](#)
- ✓ [The Guardian - Blue spaces: why time spent near water is the secret of happiness](#)
- ✓ [Coastal Landforms](#)
- ✓ [Coastal landform/Coastal dunes](#)

Scoutle Resources

- ✓ [Australian Disaster Resilience Knowledge Hub: Australian disasters TFL-ID M019317](#)
- ✓ [Student Wellbeing Hub: secondary student resources TFL-ID M021182](#)
- ✓ [Digital Stories of the Land TFL-ID M019609](#)
- ✓ [The world of Mickey of Ulladulla TFL-ID M025740](#)
- ✓ [Save our catchment - virtual excursion TFL-ID M025282](#)

