



Stage 4

Geography – Investigating the Wetlands

Geography outcomes

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

GE4-5 - discusses management of places and environments for their sustainability

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

Content

Water in our World

Key inquiry questions

- How do natural and human processes influence the distribution and availability of water as a resource?
- What effect does the uneven distribution of water resources have on people, places and environments?
- What approaches can be used to sustainably manage water resources and reduce water scarcity?

The water cycle

Students:

- investigate how the operation of the water cycle connects people and places, for example: (ACHGK038)
 - explanation of water flows within a catchment area M ST
 - examination of factors influencing water flows and the availability of water resources in different places eg altitude, topography, location, climate change M VR

The value of water

Students:

- investigate the economic, cultural, spiritual and aesthetic values of water for people, including Aboriginal and Torres Strait Islander Peoples and/or peoples of the Asia region, for example: (ACHGK041)
 - discussion of variations in people's perceptions about the value of water eg economic versus aesthetic

Natural hazard

Students:

- investigate ONE contemporary atmospheric hazard or hydrologic hazard including causes, impacts and responses, for example: (ACHGK042)
 - prediction of the impact of climate change on the occurrence, frequency and extent of this type of hazard M ST
 - discussion of management strategies to reduce the future impact of similar hazard events

Learning Across the Curriculum: Aboriginal and Torres Strait Islander histories and cultures, Critical and creative thinking Civics and citizenship, Sustainability Information and communication technology capability Difference and diversity Personal and social capability Critical and creative thinking Ethical understanding

Program Description

Students will examine a wetland ecosystem including investigating water quality, weather and climate, Aboriginal seasonal calendars, catchment management and mapping skills using GPS.

Students examine water as a resource and the factors influencing water quality, flows and availability of water resources. Students investigate variations in people's perceptions about the value of wetlands and the need for sustainable water management. Students also investigate processes that continue to shape the environment including a hydrologic hazard.

Introduction

Activities:

- Catchment and management - Investigate the water flows within the Hunter catchment
- Wetland weather and Aboriginal seasonal calendars - Measurement of wetland weather conditions and comparison with climatic data.
- Habitat Health - Water quality testing
- Compass and GPS skills - basic direction and map reading skills and using a GPS to complete a challenge activity

Students will be using specialised equipment for various activities.

This program is delivered over 4 hrs, 10am to 2pm.

The basic program will be changed to suit larger groups or weather conditions.

Location

Wetlands Environmental Education Centre (WEEC) located at Hunter Wetlands Centre, 412 Sandgate Rd, Shortland, Newcastle. Please use School entry.

Site Description

Wetlands Environmental Education Centre is located at the Hunter Wetlands Centre, which is a managed wetland reserve with natural and artificial water features accessed by decks and established walking tracks. The site is classified as part of the Hunter Estuary Ramsar Site under the International Convention on Wetlands (Ramsar). WEEC have a purpose built education centre including theatre, wet room and classroom. The WEEC is a NSW Department school and staff are trained DoE teachers specialising in Environmental Education.

Excursion information

What to bring: Printed student workbooks, clipboard and pencils, recess and lunch, refillable water bottle, hat, sunscreen, covered walking shoes plus any special requirements of the group. (Wet weather gear when necessary). Non-aerosol insect repellent is advisable.

WEEC teachers rely on the participation of visiting teachers to meet recommended supervision levels. Visiting teachers are ultimately responsible for behaviour of students, students with existing medical conditions or special needs.