



Central Coast Council - Schools Water Education Program
Geography - Working with Water

STAGE 3 GEOGRAPHY

Working With Water Game

FOCUS AREA - Factors that Shape Places

Outcomes explored

A student:

- Explain interactions and connections between people, places and environment GE3-2
- Compare and contrast influences on the management of places and environments GE-3

Skills Focus

- Investigate how people change the natural environment in Australia and other places around the world.
- Examine ways people influence the characteristics of places, including the management of spaces
- Explore how the environment influences the human characteristics of places

Content focus

Students:

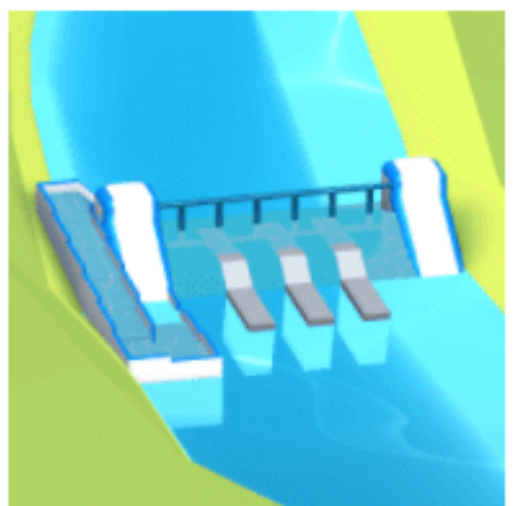
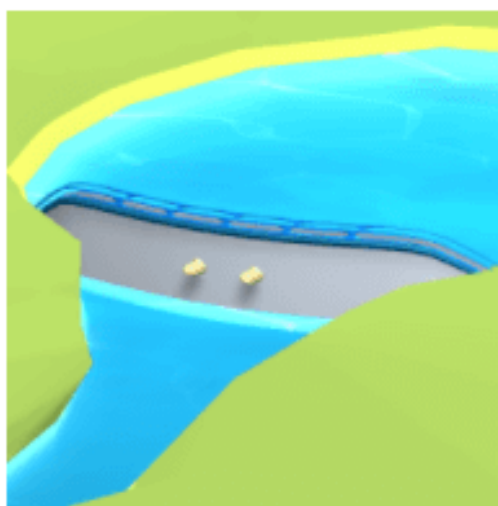
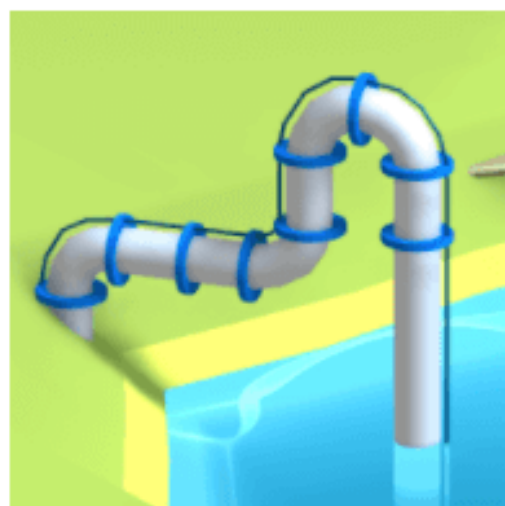
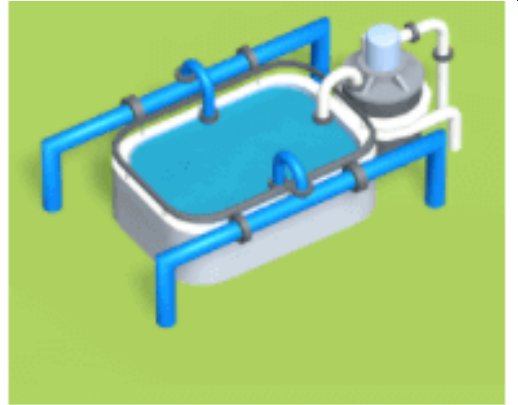
- Investigate how people influence places, for example:
 - o identification of ways people influence places and contribute to sustainability eg roads and services, building development applications, local sustainability initiatives

Content:

- Human Shape Places

Australian Syllabus Links:

- ACHKGK029



Central Coast Water Supply System

STAGE 4 GEOGRAPHY

Working with Water Game

FOCUS AREA - Landscapes and Landforms

Outcomes explored

A student:

- Describes processes and influences that form and transform places and environments GE4-2
- Discusses management of places and environments for their sustainability GE4-5

Skills Focus

- Students explore landscapes and landforms using examples from Australia and throughout the world
- Students examine issues of landscape degradation and ways to manage and protect landscapes and landforms
- Students also investigate a natural hazard associated with landscapes and people's responses to that hazard.

Content:

- Changing landscapes

Content focus

Students:

- Investigate the human causes and effects of landscape degradation, for example:
 - o identification of the ways people utilise and change landscapes
 - o description of the impact of a range of human activities on landscapes

Australian Syllabus Links:

- ACHGK051

Working with Water Game

FOCUS AREA - Places and Liveability

Outcomes explored

A student:

- Explains how interactions and connections between people, places and environments result in change GE4-3
- communicates geographical information using a variety of strategies GE4-8

Skills Focus

- Investigate features and characteristics of places across a range of scales that support and enhance people's wellbeing such as community identity, environmental quality and access to services and facilities.
- Students assess the liveability of places and propose strategies to enhance the liveability of a place in Australia.

Content:

- Influences and perceptions
- Access to services and facilities
- Environmental quality

Content focus

Students:

- Investigate factors influencing perceptions of the liveability of places, for example:
 - examination of environmental factors that influence perceptions of liveability eg climate, landforms, natural resources
- Investigate the influence of accessibility to services and facilities on the liveability of places, for example:
 - identification of services and facilities considered important to people's wellbeing
 - examination of variations in access to services and facilities between urban, rural and remote places
- Investigate the impact of environmental quality on the liveability of places, for example:
 - Discussion of factors that reduce environmental quality eg natural hazards, conflict, population pressures, land degradation

Australian Syllabus Links:

- ACHKGK029
- ACHKGK043
- ACHGK044
- ACHGK045
- ACHKGK046
- ACHKGK065



Water Supply Video Game

FOCUS AREA - Water in the World

Outcomes explored

A student:

- Describes processes and influences that form and transform places and environments GE4-2
- Explains how interactions and connections between people, places and environments result in change GE4-3
- Discusses management of places and environments for their sustainability GE4-5

Skills Focus

- Examine water as a resource and the factors influencing water flows and availability of water resources in different places
- Investigate the nature of water scarcity and assess ways of overcoming it
- Variations in people's perceptions about the value of water and the need for sustainable water management

Content:

- Water resources
- The water cycle
- Australia's water resources
- Water scarcity and water management

Australian Syllabus Links:

- ACHGK037
- ACHGK038
- ACHGK039
- ACHGK040

Content focus

Students:

- Investigate the characteristics and spatial distribution of global water resources, for example:
 - identification of different forms of water used as resources
- Investigate how the operation of the water cycle connects people and places, for example:
 - explanation of water flows within a catchment area
 - examination of factors influencing water flows and the availability of water resources in different places eg latitude, altitude, topography, location, climate change
- Investigate the quantity and variability of water resources in Australia and other places, for example:
 - explanation of variations in freshwater water availability across Australia eg precipitation, groundwater, runoff
- Investigate the nature of water scarcity and ways of overcoming it, for example:
 - assessment of strategies used to overcome water scarcity and the role of governments, non-government organisations, individuals and communities in sustainable water management
 - proposal of individual actions contributing to water management

2020

2027

2036

TURN COMPLETE! WELCOME TO 2028

2020

2028

2036

Untreated in Storage



Treated in Storage



Untreated Captured



Treated Produced



— Demand - 110ML per day

— Treated Supplied - 380ML per day



2020

2022

2024

2026

2028

2030

2032

2034

2036

CONTINUE

18/18 ML

Large Reservoir

50/50 ML

Terrigal

STAGE 4 SCIENCE

Water Supply Video Game

FOCUS AREA- Skills-Working Scientifically

Outcomes explored

A student:

- selects and uses appropriate strategies, understanding and skills to produce creative and plausible solutions to identified problems SC4-8WS

Skills Focus

- Identifying issues and problems
- Framing possible problem-solving processes
- Using creative thinking to develop ideas and possibilities that are new and applying them in different and novel situations
- Devising appropriate strategies to deal with issues and working through them in a logical and coherent way

Content:

- Problem Solving

Content focus

Students:

- Using identified strategies to suggest possible solutions to a familiar problem
- Describing different strategies that could be employed to solve an identified problem with a scientific component
- Using cause and effect relationships to explain ideas and findings
- Evaluating the appropriateness of different strategies for solving an identified problem

Australian Syllabus Links:

- ACSIS104
- ACSIS129
- ACSIS133



Love water, use it wisely

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