









Stage 4 - Overview

In this lesson your students will be able to explore the journey of water through the Snowy Scheme and apply this knowledge to other parts of Australia and the world. Through a series of activities, students will be given a platform for critical and innovative thinking, to formulate their own opinions. There is opportunity for students to work collaboratively, or as an independent learner.

Learning area	Content descriptions
 Science <u>ACSSU116</u>	Science understanding Earth and space sciences Some of Earth's resources are renewable, including water that cycles through the environment, but others are non-renewable
 <u>ACSHE223</u>	Science as a human endeavour Nature and development of science Science knowledge can develop through collaboration across the disciplines of science and the contributions of people from a range of cultures
 <u>ACSHE121</u>	Use and influence of science People use science understanding and skills in their occupations and these have influenced the development of practices in areas of human activity
 HASS <u>ACHGK037</u>	Knowledge and understanding Unit 1: Water in the world - Yr 7 Classification of environmental resources and the forms that water takes as a resource
 <u>ACHGK38</u>	The way that flows of water connects places as it moves through the environment and the way this affects places
 <u>ACHG039</u>	The quantity and variability of Australia's water resources compared with other continents
 <u>ACHGK040</u>	The nature of water scarcity and ways of overcoming it, including studies drawn from Australia and West Asia and/or North Africa
 <u>ACHGK042</u>	Causes, impacts and responses to an atmospheric or hydrological hazard

The subject of sustainability is a foundation for all learning areas and key concepts - sustainability - cross-curriculum priority (ACARA)

Resources

<u>Fact sheet</u> - Water overview
<u>Activity sheet</u> - Water overview comprehension + answer sheet <i>Please download prior to printing</i>
<u>Website</u> - Snowy Live & Snowy Hydro under 'water'
<u>Fact sheet</u> - Snowy Hydro
<u>Activity sheet</u> - Journey of a water drop
<u>Activity sheet</u> - Water Audit

Lesson ideas and activities

Introduction

As a class, brainstorm the following questions. Has anyone heard of the Snowy Scheme and Snowy Hydro? Take a poll by counting hands up. Proceed with the following two questions, depending on poll results. Ask - what does it do? Why was the Scheme built? What does it sound like? Visit the website to gain a basic understanding.

Lesson

Provide your students with the Snowy Hydro fact sheet (either online or printed) and take your students through the information.

- Start with the explanation of the Snowy Hydro logo - in addition, ask your students, what does hydro mean? Hydro means, 'water' originating from the Greek language. Discuss the relationship between water and the generation of clean, renewable electricity
- Ask students to locate the Snowy Mountains Scheme on a map. What characteristics does this terrain have that lends itself to building a system of tunnels, aqueducts and power stations to generate renewable hydro-electricity? Ask them to follow the journey of the water through the Snowy Scheme to where it ends up for irrigation purposes
- Guide your students through the 'water' fact sheet information
- Visit 'Snowy Live' and watch the interactive graphs with information about inflows into the Scheme
- Hand out the comprehension work sheet and discuss as a class, placing any questions posed on the board for later reference
- **Activity sheet - Water overview comprehension** - this worksheet correlates directly to the water fact sheet. It is recommended they be used together
- **Activity sheet - Water audit** - collate water usage at school on the sheet provided. Work through the questions either in groups or individually
- Research water saving ideas. How can I apply these ideas to school? Arrange class data into graphs. Discuss innovative ideas and place them on the board for group research to broaden out the ideas
- Reflect on the power of water within the Snowy Scheme and the generation of renewable hydro power

Extension ideas

HASS

- **Activity sheet - water audit**

Students investigate an audit of water usage in their homes. Bring findings back to class and compare to school findings. Is there a correlation? Graph findings to compare.
Independent research into water saving ideas

- **The Snowy Scheme water cycle module**

For more on the topic of water, check out the water cycle fact sheet, activities and lesson ideas

English - creative writing

- **Activity sheet - Journey of a water drop**

- Build on this activity over several sessions to complete a published piece of work - digital technology skills
- For students that require more structure, brainstorm starting points for the water drop and place ideas on the board
- Collect all student's work, compile into a class book

Science

- **Water of the Snowy Scheme module**