

Years 7 and 8

Waterwise schools toolkit

The schools Waterwise toolkit is designed to support teachers by providing easy-to-use stand-alone activities which develop student understanding about water issues. The years 7 and 8 resources in the toolkit are organised by relevant Australian Curriculum subject links and cross-curriculum priorities: Sustainability and Aboriginal and Torres Strait Islander Histories and Cultures.

Classroom teaching ideas for:

Sustainability cross-curriculum priority

Aboriginal and Torres Strait Islander Histories and Cultures cross-curriculum priority

Resources by subject: Science, Geography, English

Sustainability cross-curriculum priority

Using water efficiently provides lots of additional ideas for promoting the importance of conserving our precious water supplies. They also explain how students, their families and the community can take action to use water more efficiently. Resources include classroom activities, games, posters, brochures, how to guides and water audits.

In addition to activities outlined in the subject curriculum sections below, the following Waterwise activities are suitable for Years 7 to 8.

Why is water precious?

In the **Buckets resource race** outdoor relay game, students experience what it's like to compete for scarce water resources.

How do we save water at home?

Students have fun identifying the Waterwise behaviours in the Family journey in **Whizzy's incredible journeys pick-a-path** book or in **Adventure 2 of Whizzy's new adventures: journey through the pipes**.

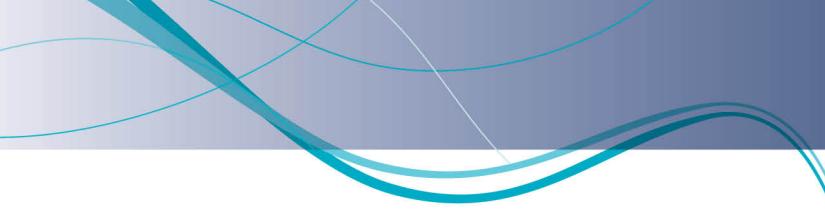
The **Be waterwise: make a difference today** video [1:56] offers simple suggestions to reduce water wastage at home.

The **Home water use audit years 5 to 8** enables students to estimate how much water their family uses and how to reduce water wastage.

The **Reading your water meter to detect leaks years 5 to 8** activity highlights of the importance of managing leaks and explains how to detect leaks in the home using the **Detecting leaks and reading your water meter** factsheet.

The **Home waterwise quiz** allows students and their families to assess how they can be more efficient in their use of water at home.

Bucket loads of savings is a detailed brochure or poster showing a range of Waterwise behaviours.



Whizzy's water saving tips is a poster useful for displaying ways everyone can save water.

How do we save water at school?

In the **Dripping tap investigation**, students measure how much water is wasted from a leaking tap.

The **Designing a Waterwise poster for Year 7** activity is a good way to promote awareness about key local water issues such as using water efficiently or flushing the right things down the toilet.

Aboriginal and Torres Strait Islander Histories and Cultures cross-curriculum priority

Incorporating Aboriginal and Torres Strait Islander water perspectives includes activity ideas for years 6 and 7 focusing on the Aboriginal and Torres Strait Islander peoples' connection to place and how they use water. These include:

In 'Special places', students consider how Aboriginal people view their special places in the landscape using Uncle Ernie's Framework. This holistic approach develops students' thinking skills, particularly their systems thinking skills and can be used to plan writing tasks.

'How do Aboriginal and Torres Strait Islander peoples use water?' discusses how Aboriginal and Torres Strait Islanders value water, how they sourced water when it was scarce and the different technologies they used. The fact sheet, **How did Aboriginal peoples manage their water resources** explores traditional use of water by Aboriginal peoples. While the **Water stories from Torres Strait – Dauan and Saibai Islands**_fact sheet explains some aspects of Torres Strait Islander people's use of water—traditionally, post-European contact and now.

Additional Aboriginal and Torres Strait Islander Histories and Cultures activities are included in the resources by subject section below.

Resources by subject

Science

Curriculum links	Teaching ideas
<p>Year 7</p> <p>Mixtures, including solutions, contain a combination of pure substances that can be separated using a range of techniques (ACSSU113)</p>	<p>Where does our drinking water come from?</p> <p>Students discuss and compare the different sources of drinking water in Queensland and identify the source/s of their local drinking water supply.</p> <p>What's in our river water?</p> <p>Students use the Story of a river demonstration to explore the different contaminants found in river water forming mixtures that need to be separated in water treatment.</p> <p>What is the difference between mixtures?</p> <p>Students use simple hands-on tasks relating to a water treatment context to explore different types of mixtures relevant water treatment.</p> <p>How do we make water drinkable?</p> <p>Students will predict how a mystery filter works and explore how separating techniques (filtering, decanting and flocculation) are used in water treatment systems.</p> <p>Is clear water safe to drink?</p> <p>Students learn that, just because water is clear, it may not be safe to drink.</p> <p>Clean water challenge</p> <p>Student groups investigate how to clean a dirty water mixture and compete to see who can design a filter that produces the cleanest water in the shortest time.</p> <p>Water journeys guest speaker for Year 7</p> <p>Students prepare questions they will use to interview a guest speaker about where their drinking water comes from and how it is treated to make it safe to drink.</p>

Curriculum links	Teaching ideas
<p>Year 7</p> <p>Some of Earth's resources are renewable, including water that cycles through the environment, but others are non-renewable (ACSSU116)</p>	<p>Is water renewable?</p> <p>Students appreciate how long our finite supply of water has been on Earth and evaluate whether or not this resource is renewable.</p> <p>How does water cycle through our catchment?</p> <p>Students explore the water cycle in their local catchment and create a concept map showing how the relationship between natural and human elements.</p> <p>Water's incredible journeys role-play</p> <p>Students devise a class role-playing activity about the journeys that a water molecule can take through the water cycle.</p> <p>Solar still activity</p> <p>Students create a solar still and use a Predict-Observe-Explain strategy to investigate changes of state.</p>
<p>People use science understanding and skills in their occupations and these have influenced the development of practices in areas of human activity (ACSHE121)</p>	<p>Water journeys guest speaker for Year 7</p> <p>Students prepare questions they will use to interview a guest speaker from their local Council or water service provider about where their drinking water comes from and how it is treated to make it safe to drink.</p> <p>How can floods affect our water supply?</p> <p>Students analyse a media article about a water supply crisis in the Lockyer Valley during the 2011 floods and explore some of the problems and solutions for supplying safe drinking water to residents during floods.</p> <p>Water careers and science</p> <p>Students work in groups to view videos about people who work in the water industry to gain an insight into the roles and the science that each of these people use in the day-to-day work.</p>

Geography

Curriculum links	Teaching ideas
Year 7 Classification of environmental resources and the forms that water takes as a resource (ACHGK037)	<p>Is water renewable?</p> <p>Students learn how long our finite supply of water has been on Earth and evaluate whether or not this resource is renewable.</p> <p>Water journeys guest speaker for Year 7</p> <p>Students prepare questions they will use to interview a guest speaker about water resource management in your region.</p>
The way that flows of water connects places as it moves through the environment and the way this affects places (ACHGK038)	<p>Water's incredible journeys role-play</p> <p>Students devise a class role-playing activity about the movement of water through the environment.</p> <p>Exploring our catchment</p> <p>Students investigate the environmental, economic and social uses and effects of the water in their local catchment.</p>
The nature of water scarcity and ways of overcoming it, including studies drawn from Australia and West Asia and/or North Africa (ACHGK040)	<p>Water supplies—now and in the future</p> <p>Students investigate conventional and alternative water source options for Queensland and how to sustainably manage water supplies in the future.</p> <p>Exploring our catchment</p> <p>Students investigate land use management practices that adversely affect water supply.</p>
Economic, cultural, spiritual and aesthetic value of water for people, including Aboriginal and Torres Strait Islander Peoples and peoples of the Asia region (ACHGK041)	<p>Water stories from Torres Strait: Dauan and Saibai Islands</p> <p>How did Aboriginal peoples manage their water resources?</p> <p>Students explore traditional use of water by Aboriginal and Torres Strait Islander peoples</p>
Year 7 Economic, cultural, spiritual and aesthetic value of water for people, including Aboriginal and Torres Strait Islander Peoples and peoples of the Asia region (ACHGK041)	<p>Water stories from Torres Strait – Dauan and Saibai Islands</p> <p>How did Aboriginal peoples manage their water resources?</p> <p>Students explore traditional use of water by Aboriginal and Torres Strait Islander peoples</p>
Causes, impacts and responses to an atmospheric or hydrological hazard (ACHGK042)	<p>How can floods affect our water supply?</p> <p>Students analyse a media article about the water supply crisis in the Lockyer Valley during the</p>

	<p>2011 floods and explore the impacts and responses to the challenge of providing safe drinking water.</p> <p>Thinking about floods—using Earth systems</p> <p>Students apply a systems-thinking approach to develop a deeper understanding of the impact of flood or other natural disaster events.</p>
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English

Curriculum links	Teaching ideas
<p>Year 7</p> <p>Plan, draft and publish imaginative, informative and persuasive texts, selecting aspects of subject matter and particular language, visual, and audio features to convey information and ideas (ACELY 1725)</p>	<p>School water audit for years 6 to 8</p> <p>Students conduct a school water audit and devise an action plan to reduce water wastage in the school. They then write a persuasive report to the school environment committee recommending three actions that the committee could take to reduce water use in the school.</p>