

Scarce water in remote country

Overview

About the lesson

Learn about how Aboriginal people found water in arid areas and explore the issue of water scarcity facing some Aboriginal people living in remote communities today.

Year level

Year 7

Learning objectives

Students will:

- Examine climate maps to identify rainfall patterns in Australia.
- Identify a range of traditional methods used by Aboriginal people to source water in arid areas.
- Identify some reasons for poor water supply in remote communities, and some possible solutions.
- Investigate how a water filter works.
- Optionally, conduct research into one of the following: remote communities, water sources and purification methods, significance of water in Aboriginal culture, indigenous methods of water use around the world.

Curriculum Links

HASS	
Geography	ACHGK039
	ACHGK040
	ACHGK043
	ACHGK044
	ACHGK045
	ACHGK047
Aboriginal and Torres Strait Islander histories and cultures	OI.4
	OI.5
	OI.9

> Lesson Plan

Engage and set the scene

Australia is often referred to as a 'dry land'.

1. Create a Y chart:
 - What does a 'dry land' look like?
 - Sound like?
 - Smell like?
2. Would you describe the area you live in as 'dry'?

Explore

1. Show students the Bureau of Meteorology annual rainfall map of Australia, and discuss which parts of Australia experience the highest/lowest annual rainfall. You can also look at other rainfall statistics, such rainfall variability or days of rain.
2. Discuss the advantages and disadvantages of living in areas of high, low or highly variable rainfall.

Equipment and Links

[BOM Average annual rainfall map](#)

Explain

1. Explain that the quote comes from the journal of Show students a map of Aboriginal Australia, and identify some Aboriginal language groups within the wettest/driest parts of the country.
2. Explain each language group holds close spiritual links to their country, and has specialised knowledge about that country, including about how to find and use water. This knowledge would have been particularly important in arid areas.
3. Divide students into three groups and allocate each group to watch a short video about how Aboriginal people found and used water in dry areas. Get the groups to share what they learned with the rest of the class.
4. Discuss other ways Aboriginal people found water that may not have been mentioned in the videos. See the Royal Society of Western Australia's article [Review of how indigenous people managed for water in desert regions of Australia](#) for reference, or, ideally, invite a member of your local Aboriginal community who has knowledge about traditional ways of finding and using water to talk to the class. Discuss the effort required to access sufficient water in the traditional ways.
5. Explain that although most people in Australia tend to live in towns or cities near the coast,

thousands of Aboriginal people live in remote communities on their traditional lands. There are approximately 12,000 people living in over 270 remote communities in WA. About three quarters of these communities have a population of less than 50 people.

Today, water is supplied in many ways to people across the state: desalination, wastewater plants, groundwater, and water recycling. However, it is difficult and costly to supply water to remote areas with small populations and some remote Aboriginal communities face significant difficulties in getting sufficient clean water. In some cases, traditional ways of getting water are no longer viable e.g. water sources might be contaminated through nearby mining activity, or they may now be located within privately owned land.

Equipment and Links

- [AIATSIS Map of Aboriginal Australia](#)
 - [Finding Water in the Desert - Ray Mears World of Survival](#)
 - [Through our Eyes - Finding water in an arid environment with Badger Bates](#)
 - [Finding outback water](#)
 - [Review of how indigenous people managed for water in desert regions of Australia](#)
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Extend and elaborate

1. Show students The Conversation article and use two different pens to highlight:
 - the problems with water supply or the reasons why natural water sources can be contaminated
 - The possible solutions to fix the issues.
2. Show a short video about Uriah Daisybell's water filter which won him Young Scientist of the Year award.
3. Get students to investigate how to make a simple water filter - and build one if your time and resources permit.

Optional

4. Students can research and create a presentation on one of the following topics:
 - The different methods of sourcing and purifying water today.
 - Living conditions and issues affecting remote communities.
 - The significance of water in Aboriginal culture and the ways that this knowledge was/is shared.
 - Ways that other indigenous people around the world found and used water.

> Lesson Plan

Equipment and Links

- [The Conversation: Getting clean drinking water into remote Indigenous communities means overcoming city thinking](#)
 - [Daisybell water filter](#)
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Evaluate and reflect

1. Write a paragraph explaining how traditional Aboriginal people accessed water in arid areas.
2. Why do you think people decide to live in remote communities with limited services or in areas which significant water shortage?

Debate: if people decide to live in remote communities, should they still have the same right to water services as others in the state?

Useful resources

- Bayly, I. (1999) Review of how indigenous people managed for water in desert regions of Australia. [https://www.rswa.org.au/publications/Journal/82\(1\)/82\(1\)bayly.pdf](https://www.rswa.org.au/publications/Journal/82(1)/82(1)bayly.pdf)
- Water Corporation - assorted educational videos about WA water supply <https://www.watercorporation.com.au/home/education/teaching-resources/videos>
- ABC. (2015). Closing communities <http://www.abc.net.au/btn/classroom/closing-communities/10526848> remote communities closing
- Regional Services Reform Unit (2017). Remote communities <https://regionalservicesreform.wa.gov.au/p/remote-communities>