

Activity Sheet 6

“Case Study –Cape Town“

Introduction

This case study provides a recent example of the causes and consequences of water scarcity. It focuses on the causes and impacts of the Cape Town drought and the strategies implemented in a bid to overcome it. Cape Town provides a unique case study of water scarcity and allows students to consider the similarities/differences between Cape Town and Australia and whether Australia could ever face a similar situation.

The content of this activity sheet relates to the following Geographical Concepts and Skills and Geographical knowledge.

Geographical Concepts and Skills:

Place, space and interconnection

- Explain processes that influence the characteristics of places
- Identify, analyse and explain spatial distributions and patterns and identify and explain their implications

Data and Information

- Collect and record relevant geographical data and information from useful primary and secondary sources, using ethical protocols

Geographical Knowledge

- Nature of water scarcity and the role of humans in creating and overcoming it, including studies drawn from Australia and West Asia and/or North Africa
- Causes of an atmospheric or hydrological hazard and its impacts on places, and human responses to minimise harmful effects on places in the future.

Activities

1. Introduce the case study by watching a clip such as [“Cape Town is 90 days away from running out of water”](#)
2. Working in pairs or small groups the following questions could be researched and then reported on. Using Bloom’s taxonomy could be a good way to differentiate tasks for students or allow you to set the classroom up so that students are working in ability groups.

There are a number of current resources and articles on Cape Town such as

- [Let's talk about the drought in Cape Town](#)
- [In Cape Town day zero is coming soon](#)
- [Worst drought in 30 years hits Cape Town](#)
- [Water crisis grips Cape Town](#)
- [Cape Town 'Day Zero' pushed back to 2019 as dams fill up in South Africa](#)

Remembering: List all the factors that have cause the shortage of water in Cape Town.

Understanding: What is “Day Zero”? When is it expected to occur?

Applying: If Day Zero is reached how will water supplies be allocated and how will residents collect their water supplies?

Analysing: Identify the impact the drought and the imposed water restrictions has had on residents of Cape Town.

Synthesising: What water saving methods have residents used to prevent Day Zero? How effective have these been? Use your knowledge of water scarcity to think of other water-saving methods and comment on how these would be more effective than current measures.

Evaluating: Identify the strategies the government has put in place to extend the water supplies. Evaluate the effectiveness of these approaches.

Strategy	Comment on the effectiveness of the strategy

3. a. List how you use water on a typical day. Think about from the moment you wake up until you go to bed at night, all the ways in which you use water (shower, brushing teeth, watering animals etc)
- b. Go to [“How much water does your family use”](#) and use this as a guide to estimate how many litres of water you would use in a typical day.

If day zero is reached in Cape Town each resident would only receive 25 litres of water per day. What things would you need to adjust in your typical day to only use 25 litres of water per day? Identify where you could limit your water use. How would this affect your lifestyle?

It may be useful to use a table such as the one below to track water use and water savings.

Identified Water Use	Current usage per day	How could I cut this back?
E.g.: Shower	2 X 7 min showers = approx. 200 litres	Turn off taps when I wash Only wash hair once a week Limit showers to 1-2 mins
Total Usage per day		25l

Students may also find it useful to refer to sites such as [“How to live on 13 gallons of water a day”](#)

Extension Activities

These extension activities require students to consider whether Australia could face a Day Zero. Depending on the makeup of your class several approaches could be taken. Some of these are:

1. By referring back to the content covered in this unit and by conducting further research on whether Australia could face a similar situation to Cape Town complete the table below.

Evidence suggesting Australia should not face a Day Zero	Evidence suggesting Australia could face a Day Zero

Using the evidence compiled in the table, determine if a Day Zero is a possibility for Australia.

2. Divide the class into groups. Each group is to conduct similar research to that above. Using the evidence obtained each group creates a presentation outlining their view as to whether Australia could face a Day Zero.

Presentation options include: Powerpoint or Keynote, iMovie, oral presentation, poster, small group discussion or think, pair, share.

3. Research and evaluate the strategies:

- That have been implemented
- That could be implemented in order to avoid a Day Zero in Australia.