Lesson Plan

Different perspectives

Students will travel to a remote village in Kenya to learn of their struggles with water scarcity. By comparing their own lifestyles, students will gain an appreciation for Western Australia's water supply. They will deep dive into issues close to home such as drought and plans to secure water for our future.

Subject area:

Humanities and Social Sciences

Year level:

Year 7

Learning objectives:

- Compare and contrast water scarcity issues in Africa and Australia.
- Understand the problems water scarcity causes and potential solutions.
- Apply a variety of methods to collect relevant information and/or data from a range of appropriate sources, such as print, digital, audio, visual.
- Select the best method for recording selected information and/or data.
- Interpret information and/or data to identify key relationships and/or trends displayed in various formats (e.g. change over time in a series of images, identify spatial distributions from a map).
- Represent information and/or data using appropriate formats to suit audience and purpose.
- Draw evidence-based conclusions by evaluating information and/or data to generate a range of alternatives and plan for action in response.

Curriculum links

Water in the world	ACHGK037
Water in the world	ACHGK039
Water in the world	ACHGK040
Place and liveability	ACHGK043
Place and liveability	ACHGK044
Place and liveability	ACHGK045
Place and liveability	ACHGK047
Analysing	WAHASS71
Communicating and reflecting	WAHASS76

Cross curriculum priorities - Sustainability

OI.1	The biosphere is a dynamic system providing conditions that sustain life on Earth.
OI.3	Sustainable patterns of living rely on the interdependence of healthy social, economic and ecological systems.
OI.4	World views that recognise the dependence of living things on healthy ecosystems, and value diversity and social justice, are essential for achieving sustainability.
OI.7	Actions for a more sustainable future reflect values of care, respect and responsibility, and require us to explore and understand environments.

General capabilities

Literacy

Critical and creative thinking

Personal and social capability

Information and communication technology (ICT) capability

Ethical understanding

Activity 1

Evelyn's story

Evelyn, a young girl living in Turkana, Kenya is experiencing an extreme water crisis. Students will be taken on a journey with Evelyn. Following this immersive experience, students will compare and contrast water sources in Kenya to Western Australia, gaining an appreciation for securing water for the future.

Time required:

1 hour

Resources required:

- **iPad per student**
- **Virtual reality goggles (optional)**
- **Poster paper**

Preparation:

1. Ensure student access to Oxfam's VR film: Evelyn's Story.
2. Provide poster paper to students.

Steps:

1. Students will investigate water scarcity as they watch Oxfam's VR film: Evelyn's Story. If students have VR goggles, view the video with this technology, otherwise, students can use their cursor to move around the footage.
2. Discuss with students:
   a. What type of water scarcity does this region in Kenya suffer from?
   b. What could be causing this type of water scarcity?
   c. What impact might water scarcity have on the people of this area?
3. Working with a partner, students will create a compare and contrast poster of water sources and availability in Kenya compared to Western Australia. Students must include information about the water sources, impact to community members and climate resilient actions in place for securing water for the future.

Water for the future

Students will investigate why the people of Kenya are taking water supply into their own hands and the impact this is having on their lives. Students will create a detailed report on Lake Turkana and provide suggestions on how they may secure water for the future.

Time required:

2 hours

Resources required:

- **iPad or computer per student.**

Preparation:

1. Ensure student access to:
   a. Video Kenya's semi-arid Turkana county holds vast irrigation potential.
   b. International Union for Conservation of Nature news article on Turkana.
   c. Water Corporation website.

Steps:

1. Students view Kenya's semi-arid Turkana county holds vast irrigation potential. Turkana in northern Kenya is one of many parts of Africa struggling with drought. The vast border area is notorious for its harsh conditions. Yet some locals are convinced it's a land of untapped wealth.
2. After viewing this report on Turkana, discuss with students:
   a. The ways farmers in the area are providing water for their land.
   b. Whether this is enough to sustain the farmers on the land.
   c. How the local government are supporting these efforts.
3. Allow time for students to research why Lake Turkana is listed as 'in danger' by UNESCO's World Heritage Committee and how long the current supply of water can be sustained.
4. Students will research Water Corporation's actions for securing water for the future in Western Australia.
5. Students will then create a detailed report which summarises findings on:
   a. The impact of receding water levels of Lake Turkana to surrounding farmers, flora and fauna.
   b. Suggestions for improving the supply of water to farmers requiring water in Turkana, Kenya.
   c. Compare how Water Corporation is looking at ways to secure our water supply.

Clean water for the future

Water scarcity is not just an overseas issue. Students will investigate water supply challenges in Western Australia and apply their understanding of climate resilient water sources to possible solutions for our community.

Time required:

2 – 4 hours

Resources required:

- **Student computers**
- **Student workbooks**
- **Activity page 1: Clean water for the future**

Preparation:

1. Ensure students have access to:
   a. ABC news article.
   b. Water Corporation's website.
   c. Print Activity page 1: Clean water for the future for students.
   d. Presentation platform of their choice.

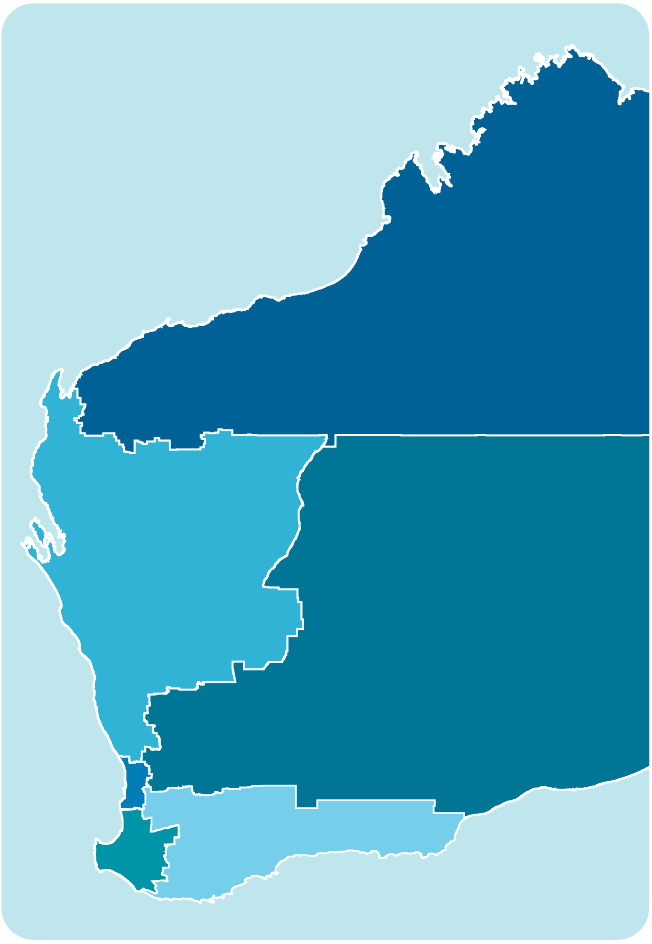
Steps:

1. As a class, read and analyse the ABC news article on the water shortage in the Great Southern region of WA.
2. Students will then explore and take notes from Water Corporation's website and media release focussing on climate related issues facing the region and plans to overcome the water shortage challenges.
3. In small groups, ask students to create a mind-map in their workbook exploring ideas about water scarcity in the Great Southern region. Ideas to include:
   a. Causes leading to the water shortage.
   b. Impacts to community members.
   c. Impacts to flora and fauna.
   d. Ideas on how to address a solution.
4. Hand out activity page 1: Clean water for the future to students to review instructions for presentation.
5. In pairs, students will then spend time working on a presentation about:
   a. Comparing similarities or differences to Great Southern region and Africa's water shortage situation.
   b. Factors involved in reaching this unprecedented water shortage in WA, including data on rainfall, population growth, and industry development.
   c. Government plans to secure water to the region.
   d. A detailed climate-resilient solution to long-term water supply to the region, justifying their solution.
   e. **Optional:** an illustrative plan on where they believe their climate-resilient water supply will be placed in the region to benefit the community, with scope for continual population growth and water for the future.

Clean water for the future

Water scarcity is not just an overseas issue. Rainfall has dramatically decreased in many areas of our state of Western Australia. Since the 1970s May to July rainfall in the south west of WA has reduced by around 20 per cent.

In this project you will investigate the water supply challenges faced in our state and apply your understanding of climate resilient water sources to possible solutions for our community.



Steps:

In pairs, spend time working on a presentation about:

1. The Great Southern region and similarities or differences to Africa's water shortage situation.
2. Factors involved in reaching this unprecedented water shortage in Western Australia, including data on rainfall, population growth, and industry development.
3. Government plans to secure water to the Great Southern region.
4. A detailed climate-resilient solution to long-term water supply to the region, justifying your solution.
5. **Optional:** an illustrative plan or map indicating on where you believe your climate-resilient water supply could be placed in the region to benefit the community with scope for continual population growth and water for the future.