As the world’s driest inhabited continent, Australia often has droughts. In fact, there have been twelve major droughts recorded in Australia since the 1860s, the most severe being between 1895–1903, 1963–1968, 1982–1983 and 2002–2003.

The most recent drought of 2002–03 took its toll on both livestock and the lives and livelihoods of Australian farmers. For example, the 2002 winter was the fourth driest in Western Australia for over a century, and the third driest in New South Wales. Regions of Queensland were drier than they had been for over a decade, with severe water restrictions in place in regions such as the Gold Coast. Many farm dams dried up and major water supply reservoirs were very low.

What is drought?

Drought occurs in a region when the normal water needs of its people cannot be met due to an unusually long period without rain. Rainfall deficiency in a particular region can be serious or severe. It is serious if, over a period of three months of more, rainfall is somewhere between the lowest five and ten per cent of recorded rainfalls for that time of year. It is severe if it is among the lowest five per cent of recorded rainfalls.

Droughts can devastate the landscape, the economy and the personal lives of rural people. Below are some of the impacts of drought.

- Crops can fail, meaning loss of income for producers and higher prices for consumers.
- Stock can die of starvation or thirst, with many having to be shot.
- Farmers may have to borrow huge amounts of money to hand feed surviving stock, and import water to keep themselves in business.
- Faced with such hardship, many farmers may sell up and move to cities. This, in turn, affects the profitability of many small businesses in rural communities, which lose much of their customer base.
- Droughts also cause severe loss of vegetation, promoting erosion.
- As dams and watercourses dry up, water quality can decline, often leading to outbreaks of toxic algae.
- Severe bushfires and dust storms are more likely during droughts.
What causes drought?

Some droughts are localised, due to particular climatic variations that may occur. Many of Australia’s widespread droughts, however, are related to what meteorologists call an El Niño event.

In a normal year, warm surface water is blown west across the Pacific towards Australia. This brings heavy rain to northern Australia, Papua New Guinea and Indonesia. On the other side of the Pacific, South America experiences drought. When there is an El Niño event, these winds and surface ocean currents reverse their direction. The warm, moist air is pushed towards South America. This produces rain in South America and drought in Australia.

Use the information in this worksheet and in relevant sources listed in the References to complete the activities below.

1. The ready availability of supplies of fresh water is primarily influenced by a region’s rainfall. What other factors can impact this?

2. Refer to the diagram on page 1 of this worksheet listing major droughts in Australia since 1860. What patterns, if any, can you detect in Australia’s drought history over the last 150 or so years?
3. Using hypothetical examples, and your own words, describe the difference between serious rainfall deficiency in a certain region and severe rainfall deficiency.

4. Use your own words to describe an El Niño event? Why is it typically so often associated with drought in Australia?

5. Imagine that you are a teenager who lives on the land with your family during a particularly severe drought in Australia. You observe first hand some of the things that happen. Choose one of the following to demonstrate your understanding of the impact of drought on an Australian landscape and its people.
   - Write a letter to the editor of a city newspaper, drawing attention to the need for support.
   - In groups, role play for the class a meeting of interested community members about what action can be taken to offset the impact of the drought.
   - Write a poem, or a song lyric, that expresses empathy with Australians who live with the effects of severe drought. You might like to read or perform your piece for the class.
   - Construct a collage entitled ‘Drought in Australia’. This might consist of images, newspaper headlines, and a range of data.

6. Research the information contained in the web link listed below. Write a short written response to the question: ‘How can Australians best protect themselves against the effects of drought?’