



# Water

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## Ground water

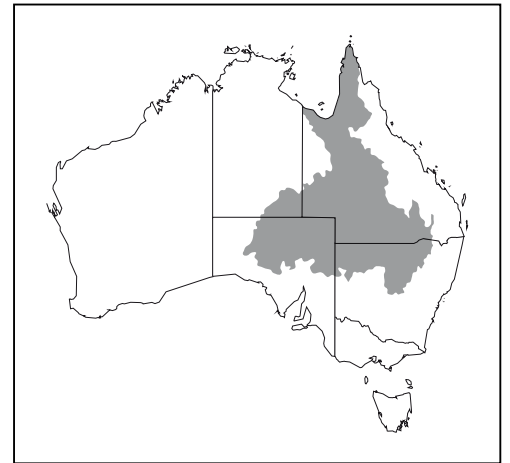
### What is ground water?

Ground water is water that is located below the Earth's surface. When it rains, the water soaks into the soil and collects in the spaces between the soil, sand and rocks. This is called an 'aquifer'. Aquifers often supply water to bores and wells. Australia is a very old continent and a lot of the ground water that we have is tens (or maybe hundreds) of years old.

### Where is ground water stored in Australia?

Australia has one of the largest aquifers in the world, called the Great Artesian Basin (located in central Australia), which covers 22% of our country. The water in the Great Artesian Basin is more than a million years old.

In many parts of Australia, ground water is the only source of water available. The water can be brought up from the ground by bores and windmills. Sometimes you will also see ground water come to the surface naturally into natural springs, rivers or wetlands.



### Is ground water an unlimited resource?

No, ground water is not an unlimited resource. As you know, ground water collects when it rains. Australia is the driest inhabited (people live there) continent on Earth and we do not have high rainfall. This means that the amount of water that soaks into the ground is limited. Our surface water resources (rivers, lakes and dams) are also limited.

### What are the threats to ground water supply?

There are two main threats to our supply of ground water:

#### 1. Overuse

The amount of water we extract from our ground water resources is a major threat to its supply. During times of drought (low rainfall) we rely on ground water to supply us with water for drinking and irrigation. Many ecosystems, which rely on water, draw extra water from below the ground during times of drought.

Overuse can only be fixed by making sure we use water wisely.

#### 2. Pollution and contamination

Even though it is stored under the ground, ground water can become polluted or contaminated. This can happen from a number of things: pesticides and fertilisers from farming, toxic substances from mining, untreated waste from septic tanks and even chemicals just poured onto the ground can seep into water over time.