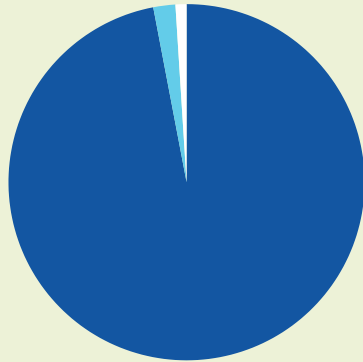


CONSERVING OUR WATER

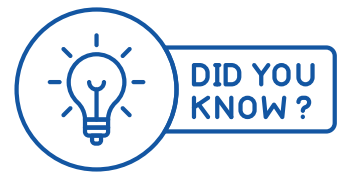
- Salt water (97%)
- Fresh water (2%) (we **can't** use)
- Fresh water (1%) (we **can** use)



Fresh water is a precious resource that everyone needs to survive. The total amount of water on earth remains constant. The water cycle continually reloads fresh water.

Living in the driest, permanently inhabited continent, we must be aware of the amount of fresh water that we use, and where possible try to use less.

If we use more freshwater than the water cycle reloads, we will experience water scarcity / water stress. That means there won't be enough freshwater for people to use.



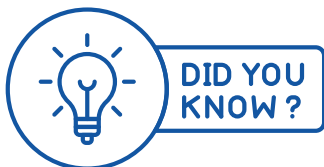
Circle how you used visible fresh water today.

- Had a bath
- Showered
- Flushed toilet
- Cooked food
- Washed hands
- Brushed teeth
- Did laundry
- Watered garden
- Drank water
- Washed dishes
- Filled pet bowls
- Did a recreation activity (e.g. fishing, swimming, kayaking, etc.)

VISIBLE fresh water: water we can see, hear, and/or feel when we use it

1 Identify which visible water uses you can reduce the most.

2 State some reasons people are wasteful with fresh water.



The average household in Australia uses roughly 220,000 litres of water per year.

This means that each person uses roughly 200 litres of water each day!

3 Outline what water restrictions will be in place for your household if another major drought occurs.



DROUGHT ALERT!

Warragamba Dam stores more than 80% of Sydney's drinking supply. However, during the Millennium Drought in 2004, the dam's storage capacity dropped to 38.8%. Consequently, there were restrictions placed on households' fresh water use.

Most of the water we use is hidden. Its in the food we eat, the fibres we wear, and the products we use.

For example, this is the amount of water needed to produce and deliver these products.



94 L



1100 L



2700 L



22000 L

HIDDEN fresh water: the water it takes to make the products we use

4 Explain how everyday products contribute to hidden water use and their impact on water scarcity.

BLUE VS GREEN WATER

- **Green water** is rainwater stored in the soil. It is used by plants such as pastures and forests. It makes up about 80-85% of global agricultural water use (the rest comes from blue water).
- **Blue water** comes from rivers, dams, and groundwater. It is used by people in their homes, for irrigating crops, and to cool data centres. It accounts for only 15-20% of total water (blue and green water) use, but causes the most water scarcity problems.

PROJECTED WATER USE OF DATA CENTERS (2030)



3 BILLION

litres per day globally

- Demand is expected to double from current levels
- Driven by AI expansion and cloud computing
- Increased stress on limited water resources



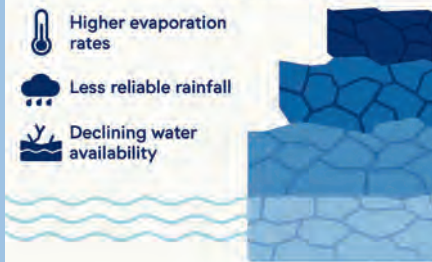
CLIMATE CHANGE AND DROUGHTS IN NSW



INCREASING FREQUENCY OF DROUGHTS

Drought risk is projected to rise in the coming decades

- Higher evaporation rates
- Less reliable rainfall
- Declining water availability



POPULATION GROWTH IN SYDNEY

MID-2040s
6 MILLION
people projected

Sydney's population is expected to grow significantly in the coming decades

- Rising demand for urban water supply
- Increased pressure on limited water resources
- Greater risk of drought impacts



A larger population will put Sydney's water supply under strain

5 Examine projected blue and green water usage and their impacts on water availability in NSW.
