

Towards a sustainable future: Water conservation

Conserving precious water supplies will ensure that there will be ongoing supplies for the future. To conserve water, we need to reduce the amount of water used, especially in places where there is little rainfall.

Fast fact

Throughout Australia, state governments are implementing water saving measures. For example, Victoria has permanent water saving rules for gardens.

Measures to conserve water and to stop overuse can include:

- using less water by thinking about where savings can be made
- reusing water, for example, by watering gardens with kitchen and laundry water
- recycling used water by purifying it for reuse
- decreasing evaporation, including piping water and holding it in closed tanks rather than in open reservoirs.

Using less

Using less water requires people in homes, industry and agriculture to think about water conservation as a responsibility. When water flows freely by turning a tap, it is easy to overuse. Adopting simple measures to make many little savings each day can save large amounts of water.

This family in Brisbane gets all the water they use in their house and garden from rainwater falling on their roof.



Rainwater tanks can collect water from any roof.

CASE STUDY

Catching rainwater

Catching rainwater off the roofs of houses can add a great deal to the fresh water supplies that are available. Some people living in homes in Australian cities have shown they can catch all the rainwater they need for a whole year.

Installing rainwater tanks

Households in the middle of large cities are now installing water tanks. Having a water tank to collect rainwater from the house roof has a long history in Australia. Rain falling on the roof runs through downpipes into the tank.

Perhaps in the future all houses will have rainwater tanks. Small tanks that are used for watering the garden are now becoming common in many Australian cities as regulations on using town water supplies in gardens are enforced.

What can you do?

Save water and reduce air pollution

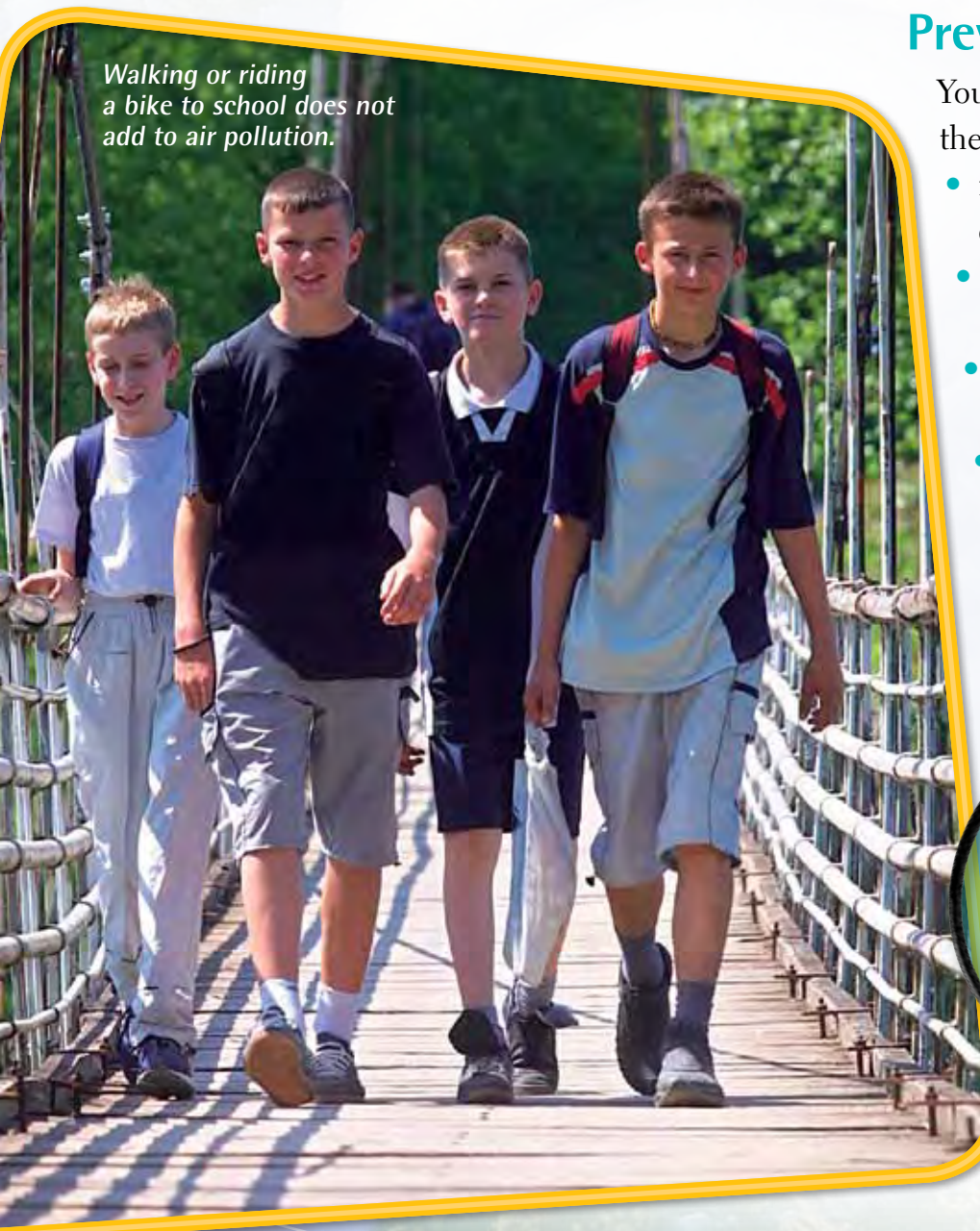
You may think that just one person cannot do much, but everyone can help. If every person is careful, the little differences can add up.

Prevent air pollution

You can make a difference to the quality of the air by:

- reducing your reliance on the car
- walking or riding a bike for short trips
- using public transport when it is available
- reducing the use of heating that can add to air pollution.

Walking or riding a bike to school does not add to air pollution.



Fast fact

A slow dripping tap loses about five litres of water an hour.

Fast fact

In 2004–2005, each Australian consumed an average of 92 000 litres, which is 18% less than the per-person average in 2000–2001. The majority of household water was used for outdoor purposes (44 per cent), such as water for gardens and swimming pools.

Use less water

You can make a difference in water use by:

- having shorter showers
- turning off the tap while cleaning teeth
- reusing bath water in the washing machine or garden
- catching clean kitchen water to use in the garden
- fixing dripping or leaky taps
- fitting water-saving showerheads, taps and toilets.

Conduct a water audit

On average, showers make up about one-fifth of average household water use in Australia. That's about 50 000 litres per house per year.

What to do

- Time the length of your shower (in minutes)
- Collect water flowing as you usually have it in a shower, in a bucket for 10 seconds.
- Measure the litres of water collected in the bucket.
- Work out how much comes out in one minute. (Multiply the amount you collected by six.)
- Multiply the length of your shower by the amount that comes out each minute.

How much water do you use each day, in a week and in a year?

Towards a sustainable future



Well, I hope you now see that if you take up my challenge your world will be a better place. There are many ways to work towards a sustainable future. Imagine it... a world with:

- a stable climate
- clean air and water
- non-polluting, **renewable** fuel supplies
- plenty of food
- resources for everyone
- healthy natural environments.

This is what you can achieve if you work together with my natural systems.

You must work together to live sustainably. That will mean a better environment and a better life for all living things on Earth, now and in the future.

Websites

For further information on air and water quality, visit these websites:

- GreenHome acfonline.org.au/default.asp?section_id=86
- Planet Ark www.planetark.com
- Worm waste treatment www.wormdigest.org

Glossary

acid rain

rain containing acids which falls from polluted skies

algae

living things that are found in water and make food using the energy from the Sun

atmosphere

the layer of gases surrounding the Earth

ceramic

hard material such as pottery, porcelain and bricks, made by heating materials from the earth such as clays to high temperatures

climate change

changes to the usual weather patterns in an area

consumption

amount used or consumed

contaminated

polluted with unwanted substances

degraded

run down or reduced to a lower quality

desert

area of low plant cover and low rainfall

developed countries

countries with industrial development, a strong economy and a high standard of living

developing countries

countries with less developed industry, a poor economy and a lower standard of living

emissions

substances that are released into the environment

eroded

area where rock and soil have been broken down and carried away by wind and water

fossil fuels

fuels such as oil, coal and gas, which formed under the Earth from the remains of animals and plants that lived millions of years ago

fresh water

water low enough in salt and other chemicals to be suitable for drinking

global warming

an increase in the average temperature on Earth

groundwater

water found below the surface of the land

radioactive

material that produces waves of energy, called radiation

recycle

reprocess a material so that it can be used again

renewable

a resource that can be constantly supplied and which does not run out

respiratory diseases

diseases of the lungs and airways used for breathing

sewage

human wastes

smog

thick air pollution from burning coal combined with fog

sustainable

a way of living that does not use up natural resources

United Nations Environment Program

a program, which is part of the United Nations, set up to encourage nations to care for the environment

World Health Organisation

a section of the United Nations that deals with public health