



Architects Advisory Service

Your Home – Water Wise Living

As drought conditions continue to play havoc across Australia, homeowners must now look at simple and innovative ways to save our precious natural resource. A water-wise home is a great home to live in as being energy wise can save you money, enable you to live comfortably year-round and reduce your impact on the environment.

A water-wise home employs subtle design features to collect and conserve our water. These features help:

- Reduce the amount of water used
- Use water that falls from the sky
- Recycle water through natural means, and improve the quality of discharge from the site.

WATER USE

Water doesn't just come from a tap, you know! Hundreds of thousands of litres of water are diverted away from our homes and out into the street every year. If we collect rainwater on site, we get the benefit of being able to use that free rain when we want to. Rainwater tanks come in all shapes, sizes and materials, and can be connected to supply your house and garden.

USE RAINWATER

- For drinking and cooking – but make sure you have it tested for portability first!
- In the garden for summer watering

- In the hot water service to give 'soft water' (this can prolong the life of your HWS in some areas)
- For the washing machine - your clothes will be whiter, and you will use less detergents
- To flush the toilets

There are many ways to improve the quality of the water you collect, from first flush systems, to filtration and settlement tanks. No matter what your situation, rainwater can be used to reduce your water use.

REDUCE WATER CONSUMPTION

The amount of water we use can be reduced a number of ways:

- Install a dual flush toilet cistern
- Install a AAA rated (reduced flow) shower head
- Install mixer taps in your bathroom and laundry
- Make sure no pipes or taps are leaking
- Design a garden with a mulched bed, low-maintenance plants and paving as an alternative to a large thirsty lawn.

Reduce wastage by:

- Taking snappy, yet thorough showers.
- Using the correct settings on your dishwasher and washing machine.
- Giving plants a long soak once a week. In time, they will develop a better root system, and eventually need less watering.

Water-wise Living - RECYCLE

With costs for domestic water increasing recycling systems present an obvious advantage.

Water for recycling is categorised as follows, and must be treated as follows:

- **Grey water** – waste water from the bathroom and the laundry
- **Black water** – waste water from the toilet and the kitchen (sometimes chemicals and food scraps can increase the level of bacteria in water from the kitchen sink)

It is important you select a method of recycling that ensures a safe and continuous supply of water, which can then be used for flushing toilets and watering some sections of the garden.

The systems all use a method of treating the bacteria anaerobically (where water is starved of air), and then aerobically (where the water is oxygenated and aerated).

Systems available include:

- Reed beds, a completely natural grey water recycling system, that uses a plant's roots in a bed of gravel to aerate the water and break down the bacteria.
- Dual tank treatment systems that can be used for Black and Grey water. The treatment method will determine the way in which the final product is used. By putting water that is normally discarded from our site back into the water table, we are able to maintain soil moisture levels and support the growth of trees and larger plants. All of these issues ensure that the natural balance of the environment is maintained. Talk to your Archicentre Australia Architect about the water conservation features you can include in your home design.

If you would like to talk to an Archicentre Australia architect – a building expert - about a particular matter, please call Archicentre Australia on 1300 13 45 13 or go to www.archicentreaustralia.com.au