

Water Conservation

being wise with your water...

info sheet 11

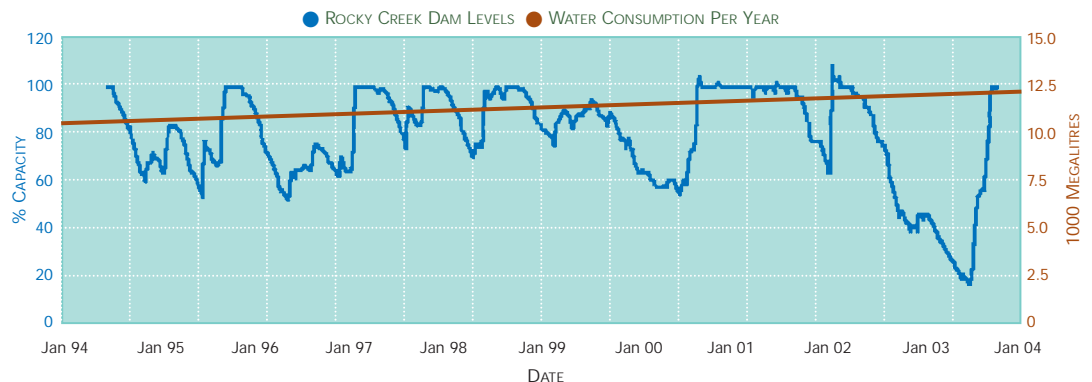


Check out the water level indicator next to this sign on the Water Walk, to see how full Rocky Creek Dam is at the moment.

The level of Rocky Creek Dam varies over time (see the blue line).

Water consumption, however, continues to rise (see the straight red line). This is partly because of continuing development and increasing population pressures in the region.

If we do not manage to reduce our water consumption, or our 'demand' for water, we need to increase its 'supply'. This would mean building more dams (which have significant environmental and social impacts), and/or finding alternative water sources, such as rainwater tanks, recycled water, and desalination. All of these options require extra investment in technical infrastructure, which costs money.



WHY SAVE WATER?

We could easily run out! In times of drought, we use way more water than is being replaced by rainfall. In January 2003, for example, an average of only 6.5 megalitres a day was flowing into the dam, while nearly 20 megalitres a day was being used. We need to remember that the Rocky Creek water supply services the urban centres within an area of over 3,000 square kilometres, servicing about 100,000 people. The *catchment* of Rocky Creek Dam, however, is only 29 square kilometres. That's about 1% of the area that it supplies water to!

Water quality in the dam reduces as the water level reduces. This is because the concentration of nutrients and organic matter increases. This means that the water needs to be treated more intensively, which uses more chemicals, more electricity and more money. Everyone pays for this, and it is likely that the water will not taste as good.

Low water levels and poor water quality affects **ecosystem health** in and around the dam as well as downstream from the dam. The more water we use, the less there is available for nature. (You will learn more about this later in the Water Walk.)

Even if there is a plentiful supply of water, and the dam remains topped up and healthy, there are still reasons to save water.

The more water we use, the more we have to process through the **water filtration** plant. This costs money, electricity and chemicals. We pay for this in our water rates, and the environment is also affected because using electricity contributes to the production of Greenhouse gases and global warming.

The more water we use, the more **wastewater** that we produce which then needs to be treated, recycled and finally released appropriately back into nature. This costs money, electricity and chemicals (which

Saving water is important for us and for nature!

Save money, save the environment!

Wastewater treatment



everyone pays for in our sewerage rates). If the wastewater treatment plants are overloaded, then improperly treated sewage can be released into the environment with negative effects. Upgrading wastewater treatment plants requires more investment in technological infrastructure, which also costs a lot of money and other resources.

Even when wastewater is treated and recycled (eg, used for growing crops, rehabilitating wetlands or watering playing fields), it would be less energy intensive to use less water in the first place!

The less water we use, the longer we can manage with existing water sources without the need to develop new ones. This means that we can postpone the **building of new dams and pipelines**. Delaying construction can mean that new technologies can provide other alternatives, or water use can be reduced even further.

Using less water also means that the dams that are built can be of a smaller size. This means smaller construction and operating costs, and also less environmental impact.

Saving water is important for us *and* for nature!
Save money, save the environment!

HOW CAN YOU SAVE WATER?

In the home

- install water saving appliances (showerheads, dual-flush toilets, front-loading washing machines, dishwashers, tap aerators)
- fix leaking taps and toilets
- flush the toilet less
- don't run the tap when you brush your teeth
- have shorter showers (have a bath if you plan to have a shower longer than 5 mins)



In the garden

- reduce lawn area, and water only when it really needs it
- wash the car with a bucket, not a hose, and do it on the lawn
- use mulch and compost, plant native species, and group plants according to their water needs
- use a broom not a hose to clean pathways and driveways
- cover your swimming pool, and allow it to be topped up only by rainfall
- install a greywater treatment system so you can reuse the water from the shower, laundry and kitchen
- install a rainwater tank



In businesses and schools

- dual flush toilets and urinal controllers
- flow regulators on taps used in hand-basins
- improvements to industrial processes and re-use systems (eg commercial laundries and carwashes)
- landscaping improvements

It is up to all of us to play our part. It may seem that the water we each save is a very small amount, but taken together, the water saved will have big effects!

For example, did you know that by installing a water-saving shower-head, a dual-flush toilet and a front-loading washing machine, you and your family can save:

- \$100 every year (at current water and energy costs)
- 80,000 litres of water every year (that's one-and-a-half backyard-sized swimming pools).

WHAT IS ROUS WATER DOING TO HELP YOU SAVE WATER?

Rous Water have developed a series of what they call 'demand management' projects including:

Home Tune-Up.

Subsidised check-up of home water fittings, providing and fitting of water efficient shower roses by an accredited plumber.

Washing Machine subsidy.

From time to time Rous offers rebates to encourage people to buy water efficient washing machines (eg, front loaders save 50 litres/load).

Dual Flush Toilet subsidy.

Rous Water offers rebates to encourage people to replace old single flush cisterns with dual flush units.

Holiday Accommodation Tune-Up.

Check of water fittings and practices, recommendation of appropriate changes and 50% rebate of cost of the tune-up.

'Every Drop Counts' Schools Program.

A dynamic and interactive presentation to educate students in simple water auditing techniques and motivate them to save water at home and at school.

Community education & promotion.

Brochures, information packs, posters and newspaper advertisements provide water-saving tips and information on the level of the Rocky Creek Dam. Check out our website www.rouswater.nsw.gov.au

'H₂O Awards' Schools Grant Program.

Grants to schools in the Rous Water area to support water management projects by school students and their community.



Rainwater Tank Rebate.

Town water customers who buy a rainwater tank over 2,000 litres are eligible for a rebate of up to \$670. Rainwater tanks, used for 'non-potable' purposes, could provide up to 57% of total household water demand.

Water Recycling.

Perradenya is a new residential estate being developed by Rous Water as a model for 'dual reticulation'. This means using high quality recycled water in a second set of water pipes for garden use and toilet flushing.

Restrictions & Permanent Water Conservation Measures.

A series of restrictions are put in place as the water level in the dams drop, which are enforceable by law. Even when the dam is full, however, there are certain things we shouldn't do.

User Pays Water Charges.

Water meters read how much water is used by each property connected to town water. Your water rates are based on how much water is used. The more you use, the more you pay. Saving water means saving money.



Did you know that by installing a water-saving shower-head, a dual-flush toilet and a front-loading washing machine, you and your family can save \$100 a year ... and 80,000 litres of water every year!

TRY THIS!



Learn with your ...



"In January 2003, how many megalitres of water were being lost every day from Rocky Creek Dam? If one Olympic swimming pool contains 2 megalitres of water, how many Olympic swimming pools of water were being lost every day from Rocky Creek Dam?" (And for the really keen: How many times bigger is the Rocky Creek water supply area than the Rocky Creek Dam catchment?)



"Think of a time in your life when you have saved, or cared for, something really precious to you. It might have been finding a favourite toy or special thing when you thought it was lost, or saving your pet from having an accident, or nursing your child through an illness. How do you feel inside when you think back to that time? [pause] Now, imagine yourself practicing a few of the water saving activities. Visualise yourself very clearly, consciously turning taps off, taking shorter showers, and any of the other things that would seem easy for you to do. [pause] Now, bring together that feeling of 'saving something precious' with the image of saving water. Realize that you are indeed doing an important thing for yourself and for the natural environment."



"If you are with another person or in a group, take turns speaking out loud your ideas for saving water until you can't think of any more. Let your imagination run wild. Crazy ideas are often good ones! (And for the really keen: Make a list of things that you will do when you go back home, or to school or work.)

Learning objective: To understand the need for water conservation, and ways in which everyone can do this.

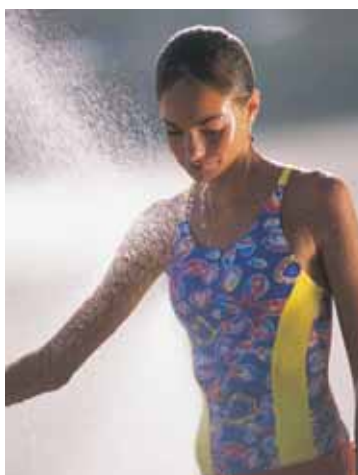
You can get your own copy of Rous Water's **'Your Guide to Saving Water in Your Home and Garden'** by phoning 6621 8055; writing to us at PO Box 230, Lismore NSW 2480 or water@rouswater.nsw.gov.au; or visiting our educational showroom at 218-232 Molesworth Street, Lismore.



Let Rous Water know if you have any other good ideas for projects that will help us all save even more water. Good ideas can be sent to the following address:

Water Saving Ideas
Rous Water Centre
218-232 Molesworth St
PO Box 230
Lismore 2480
email: water@rouswater.nsw.gov.au

(Sources: water efficiency brochures produced by Rous Water, Department of Land & Water Conservation, and WaterWise (QLD Department of Natural Resources); The Water Cycle newsletters and W.E.T. youth 'zine' produced by Maclean Shire Council)



For further information contact:

Rous Water
218-232 Molesworth Street
PO Box 230
Lismore NSW 2480
Ph: 02 6621 8055
www.rouswater.nsw.gov.au



These information sheets were prepared for Rous Water by Sustainable Futures Australia in liaison with Wadjabul elders. © Rous Water & Sustainable Futures Australia, 2004. This is an educational project for the protection of water and land, and for reconciliation.

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