

News

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National Water Week visitors to Michael Corrie's house were treated to a touch of Zen in the suburbs and some clever examples of water efficiency.

Water savers open their homes to the public

Melbourne Museum's third annual Water Smart Homes and Gardens Tours attracted record crowds during National Water Week with double the attendance figures of last year.

Six water-efficient homes and gardens around Melbourne were opened to the public to show how water conservation and recycling works in new and existing houses – without compromising standards of living.

Visitors to the Mitcham home of Michael Corrie were treated to a tour of a Japanese-influenced house with a traditional tea ceremony room, outdoor waterfall and views of the garden from every room.

A 10,000 litre rainwater tank collects water from the roof for toilet flushing and garden watering, while the automated garden watering system is fitted with rain sensors which ensure the system is not activated during periods of rainfall – all easy water saving ideas without compromising living standards.

"Having a sustainable home is incredibly satisfying – it feels really good to know that you're doing your bit for the environment. You can use the water from the tank to water the garden on a nice day, without feeling guilty.

"The only problem with a sustainable home is once you start conserving water, you keep thinking to yourself 'how could I improve?' It's a great feeling," Mr Corrie said.

Museum Victoria's 'Water Smart Homes program' was funded by the Smart Water Fund.

Smart Tips for Saving Water in Your Home:

- Install a rainwater tank for flushing toilets, washing your car, running water features and watering the garden.
- Fit a water saving shower rose in your bathroom and install dual flush toilets.
- Look for water-efficiency star ratings when purchasing washing machines and dishwashers.
- Ensure automated irrigation systems have soil moisture and rain sensors.

Information on each of the homes is available on the Museum Victoria website www.museum.vic.gov.au/watersmarthomes. More tips on saving water around the home are available in the Shoestring Steps to Saving Water brochure at www.vicwater.org.au.

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Carter Holt Harvey boiler ash water recycling

Myrtleford Sawmill operator Carter Holt Harvey (CHH) is dramatically reducing the amount of fresh water it uses to cool and remove ash waste from its boilers.

The boiler ash water-recycling project went into operation at the end of October.

It aims to cut the potable water used to run the boilers from 38 million litres a year – about 5 per cent of the town's water supply – to around 4 million litres.

"We've been using town water to quench the ash, but this project puts in a settling

system that gets the ash out of the water and that means we can reuse the water up to 10 times," said project manager Laurie Medlock.

The settling concept was copied from the water treatment industry. It was adapted for the sawmill by CHH engineer Shane Relouw and constructed by local firm Nicoll Engineering.

"A lot of planning went into the process in terms of switching to the system. We needed to do it without stopping the boilers, so the

two systems ran together for a few days.

"It was a smooth introduction and already the results are encouraging," Mr Medlock said.

As well as the savings to the town's water supply, the sawmill expects to reduce its water and trade waste bills by about \$60,000 a year.

It will take three months before results confirm the efficiency of the process. CHH will then consider using the technology across its sawmills in Australia and New Zealand.

Barwon Health: saving water and energy

Linencare, Barwon Health's commercial laundry, will reduce its current annual water consumption by 40 per cent with the introduction of new water-saving equipment.

A Smart Water Fund grant has helped fund the installation and trial of the innovative Aquamiser and Energy Optimiser machines. The Aquamiser is an advanced filtration unit and the Energy Optimiser uses heated effluent to heat cold water. Both pieces of equipment use water that would otherwise be discharged to a sewer.

Linencare's chemical supplier Ecolab introduced the technology and helped to install the units. Ecolab also managed the process to ensure increased chemical concentrations in the recycled water had no effect on the 85,000 kilograms of linen cleaned each week.

Linencare has been able to reduce energy and gas consumption while reducing the volume of wastewater discharged into sewers.

Graeme Nimmo, Linencare spokesperson, said the new equipment is meeting their expectations and the company encourages other businesses to look for smarter uses of water, too.

"The laundry industry, businesses and the Victorian community all have a role to play in using water more wisely," Mr Nimmo said.

"The long term result for Barwon Health is an annual saving of 28 million litres of water a year, based on current water usage.

"With the machines operational, we can save 45 per cent water, 25 per cent steam, 10 per cent gas and reduce our yearly waste by about 60 per cent."



The Aquamiser filters water to achieve savings through reuse of "cleaned" water. The system removes lint, sand and other particles down to 25µm.

"With the machines operational, we can save 45 per cent water, 25 per cent steam, 10 per cent gas and reduce our yearly waste by about 60 per cent."

Low cost soil moisture sensor means even greater water savings

Low-cost soil moisture sensors to optimise watering systems may soon be available to help homeowners and commercial gardens become more efficient with their garden watering.

Senviro Pty Ltd has received funding to develop and trial their new device – engineered to be low-cost and easy to use for the domestic and commercial markets.

Helping with the trial, Frankston City Council plans to use the sensors to determine the quantity of water that can be saved. In another positive outcome Frankston City Council will be using recycled water during the trial.

Soil moisture sensors send a signal to turn off watering systems if the desired moisture level is achieved before the end of the watering cycle.

They also prevent watering systems from automatically switching on when the soil is moist, providing better water management and ultimately saving water.

“Water is becoming an ever more precious resource and our soil moisture sensors have the potential to make significant water savings in domestic and commercial garden watering,” said CEO of Senviro Dr Steve Davis.

“We expect to distribute the product through the large garden products retail stores in the near future.”

The trials are expected to be complete by mid 2007.

“Water is becoming an ever more precious resource and our soil moisture sensors have the potential to make significant water savings in domestic and commercial garden watering.”

Flushing success for Penguin Parade

Phillip Island Penguin Parade is harvesting rainwater to flush toilets at Australia's most popular natural wildlife attraction.

Attracting 500,000 visitors every year, the Penguin Parade uses approximately 5.5 million litres of water for its toilets alone.

Sally O'Neill, Phillip Island Nature Park spokesperson, said it was very important for the ecotourism operation to be using sustainable practices where possible.

“This project is a great opportunity for us to save water and educate our visitors about the importance of water conservation through the demonstration of these water saving practices, including the 50 per cent of people who visit the penguins from overseas,” Ms O'Neill said.

Capturing water from the roof of the Visitor Centre, the Penguin Parade uses a 159,000-litre water tank and has also installed low flush, AAAA rating toilets to further save water.

Water meters will be installed to monitor the amount of water being saved daily and these results will be communicated to visitors on a plasma screen in the Visitor Centre.

Signs with water saving messages will also be positioned near the tank, in the Visitor Centre and inside the toilets.

“We all think about water saving, but many of us don't get past the thinking stage. The Smart Water Fund has helped us to achieve what seemed like an enormous task,” said Ms O'Neill.

“Our staff are amazed and excited that we have taken this idea further and implemented a great strategy to save water – and hopefully our visitors will be just as excited and encouraged to implement water conservation measures in their own homes.”



The Penguin parade Visitor centre uses a 159,000 litre water tank to store run-off from the roof for re-use in toilet flushing.

Tap into a wealth of information with the Smart Water Fund

The Smart Water Fund has supported over 75 projects. All of them provide unique learnings on innovative water conservation, recycling and biosolid management solutions.

Newsletters, case studies and comprehensive project information on a wide range of innovative sustainable water use projects are available from the Smart Water Fund website at www.smartwater.com.au

Case studies are available for:

- Sporting Facilities
- Waste Water Treatment
- Building and Renovating
- Educational Programs
- Food and Beverage Manufacturing

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Water rap lyrics

The Dandenong Ranges Music Council and The Patch Primary School have held a special presentation of two water cycle songs, 'Where does the water go?' and 'The water rap' to friends and family. The CD of water songs will prove to be a valuable learning aid in Victorian schools through the use of music to create awareness of water conservation issues. Below is a sneak preview of some of the lyrics, which will soon be recorded to CD.

Stay tuned for news of the official CD launch and how to obtain a copy.

The water rap

You gotta' listen,
Listen to my jingle,
My famous
Water music single,
The message
It is clear and it's simple,
H2O- It is the greatest symbol,
In this time of climate change,
In this dry, dry spell,
A tank will capture the precious rains,
You just got to look after that water well, well, well,
Well, well, well,



Yarra Valley Water Education Officer, Nick Abrams discusses the Smart Water Fund with Dorset Primary School students, Madeline and Mitchell. Dorset Primary School is just one of the Victorian schools involved in the "Our Water Our Future – Water Learn it! Live it!" program.

Smart Water Fund bookmarks and posters were distributed to community libraries and schools around the State during National Water Week to raise awareness of the online knowledge bank as a useful resource on water conservation.

Securing Our
Water
Future
Together

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