

News

Updates and news No. 3 August 2005



\$6m on offer for Water Champions

Communities and businesses with a water saving idea are invited to apply for a share of \$6 million in additional funding recently announced by the Smart Water Fund.

The Fund's third round of funding is available for innovative and sustainable water saving, water recycling or bio-solids management projects in their planning, design, construction or operation stages. Funding is also available for research and development projects.

Three different streams of funding are available:

- up to \$3 million in Smart Water Fund grants for Victoria-wide urban community and business innovations.
- up to \$2 million in Smart Water Fund grants for metropolitan Melbourne R&D projects into key challenges facing the water industry, and
- \$1 million in Victorian Water Trust grants for Victoria-wide urban R&D projects.

For the first time the funding is being extended to include regional urban Victoria, as a commitment and action from the recent Victorian Government white paper on water reform – "Our Water Our Future".

Over the past 10 years Melbourne has consumed enough water to fill the MCG 570 times over, and with the population expected to grow by 1 million by 2030, additional burdens are being placed on Victoria's water resources. Projected growth of 350,000 in regional Victoria is also expected to add to the pressure on the state's water resources.

"Victorians need to be even smarter about how we use water in our cities and towns. The Smart Water Fund is playing a vital role in encouraging people to think differently about how they use water," Smart Water Fund spokesperson, Dennis Cavagna said.

"The Smart Water Fund has made a significant difference in metropolitan Melbourne and extending the program to regional areas is a very positive step," said Steve Bird, CEO, Victorian Water Industry Association (Vic Water).

"By expanding the program's reach, we will now be able to consider innovative ways of extending the benefits of what has been learnt in Melbourne and apply them in the regions.

"We recognise that there will be different applications for regional Victoria and are confident that the new funding will encourage regional communities to explore new ideas and new solutions," Mr Bird said.

There are funding categories available to individuals, community groups, businesses, industry organisations and research & development bodies for projects that will deliver broad environmental, community and commercial benefits.

Previous Smart Water Fund recipients are encouraged to re-apply for funding to introduce further innovations.

To obtain a Smart Water Fund Application Pack: visit www.smartwater.com.au or Freecall 1800 882 432. Applications close 18 August 2005.

Inside | 2

Water wise by design

3

Smart Water Fund projects bring home the gold

4

Water savings a sweetener for Cadbury Schweppes

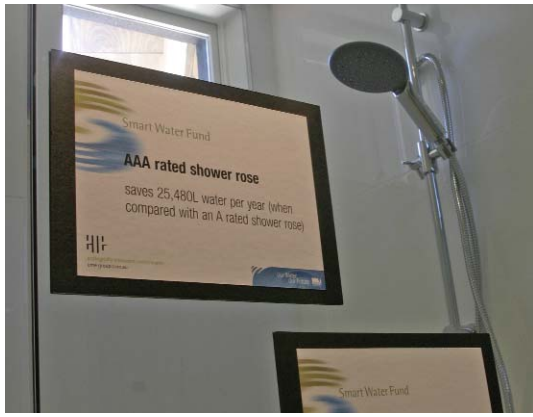
Above: Metropolitan and regional CEOs and Chairs of Victoria's Water Authorities joined Elaine Carbines, Parliamentary Secretary of the Environment at the launch of third round funding at the Melbourne Museum.

City West Water
Melbourne Water
South East Water
Yarra Valley Water

Department of Sustainability and Environment



Water wise by design



Water saving design is high on the agenda of plumbers, builders and DIY renovators, judging by the large turn out to an industry open day featuring the EME Group's water wise townhouse in Brighton.

The EME Group, headed by designer Luke Middleton, was awarded funding from the Smart Water Fund to research a range of practical water saving technologies for medium density housing design, reducing average household water usage by 60%.

Rainwater harvesting systems, products and solutions to save water when building a new house or retrofitting an existing property were a key part of Luke's thinking for the project.

'When I heard that 90% of rain falling in urban areas ends up in drains and waterways, I explored ways of capturing this water and putting it to use around the house,' says Luke.

The main water saving feature in the townhouse is the water harvesting system that collects water from the roof and surrounding garden and stores it for later use in flushing toilets and watering the garden.

The Group's research on choosing the right rain tank size for the household's water needs were also presented at the open day.

The EME Group's four townhouses in Brighton use the entire roof space, first floor decks, paved entry pathway and basement trap – a total of 575msq – to collect water normally destined for the stormwater drains. The water is filtered using a mesh and sand filtering system before being stored in two 10,000L tanks in the basement carpark.

A pump and pipe system directs the water to each townhouse for uses including toilet flushing and to the communal garden area for watering – two of the greatest areas of water consumption. A meter attached to the basement pipes monitors how much mains water has been saved.

Water saving features in the bathrooms, kitchen and laundry include low-flow restrictors on the taps, 6/3 dual flush toilets, water efficient dishwasher and water wise shower roses.



Anti-clockwise from top: AAA rated shower rose; attendees at the open day; all taps feature low flow valves; filter for purifying water collected from the roof.



Waste not want not – with greywater

Melbourne is fast becoming the leader in water conservation in Australia.

Melburnians are exploring new and innovative ways to save water such as re-using the water used when showering, washing clothes and brushing our teeth.

Yet 65% of household water is still used just once and is destined then for the sewer as waste.

Greywater, the used water from the laundry and bathroom excluding water from the

toilet, can be diverted or recycled within the home and safely used for garden watering or toilet flushing.

Thanks to a grant from the Smart Water Fund, the Alternative Technology Association (ATA) is advancing community understanding of greywater.

The Association's community open days of seven households trialling different greywater recycling systems have proved highly popular with people wanting to learn more about

households living sustainably with water. The ATA has also hosted a bus tour with expert speakers and a full tour of each household.

Stuart McQuire's 1929 weatherboard home, which was fitted with water recycling and rainwater systems under another Smart Water Fund project, was one such home on display. Stuart has been able to reduce his household mains water consumption by 95% compared to the average Melbourne household – using only three buckets a day. Over summer, his water bill was just \$2.25.

CSIRO working to get more out of our water

The CSIRO is embarking on a project designed to change forever the way we use water in the home.

The CSIRO's Smart Water Fund project is testing four different recycling systems to ensure they meet stringent Australian standards.

The four systems will all recycle wastewater – including used water from the washing machine, laundry and bathroom – to a standard that can then be reused for such things as watering gardens and flushing the toilet.

Working from a purpose-built facility in Highett, four systems will be tested over the next 12 months. The first to be tested is a high-tech machine from Germany called the Pontos Aquacycle.

Dr Roger O'Halloran, Project Leader, Water Technologies, from the Manufacturing & Infrastructure Technology division at CSIRO, said the Pontos Aquacycle used a mixture of mechanical and biological treatments for initial cleaning.

"The final step sends the water through a UV lamp, which disinfects it before it runs into the storage chamber for later reuse."

Each system will be tested for about three months, Dr O'Halloran said.

At the end of the project, the facility will remain in use as an independent testing site for greywater recycling systems before they come on the market.

Dr O'Halloran said the Highett facility is just weeks away from testing the first system. Between two to four people will work full time at various stages of the project.

"Once the pilot is complete, we will have an established set of protocols in an independent testing facility. Regulators can be sure that when a device is sold, it is sold with confidence."

It will also provide a safe environment to further develop new technologies and test the effectiveness of changes that may be necessary to meet Australian standards.

He suggested that in the future the only viable way to have a nice vegetable garden or a lush green lawn would be by installing a greywater recycling unit.

"When you think how much of our drinking water doesn't get used for drinking, it makes you realise that we need to look at alternatives," said Dr O'Halloran.

Hot topics

Smart Water Fund projects bring home the gold

Museum Victoria

Projects aimed at leading the community in saving water have been recognised at home and overseas, with two Smart Water Fund projects receiving awards for excellence this year.

Museum Victoria was awarded gold at the internationally recognised American Association of Museums' awards, for its Water Smart Home interactive exhibit.

The exhibit, on display at the Melbourne Museum, competed with 137 entries from museums in North America, Europe, Australia and Asia to win a MUSE for best exhibit in the Science category.

Water Smart Home exhibit was recognised for the high standard of excellence in the use of media and technology for science education. The judges said the entry was "an engaging exhibit covering the topic of water conservation, with a goal to educate visitors on how to conserve water in their homes".

Melbourne Museum senior curator Liza Dale Hallett said the exhibit showed how easy it is to save water in the home.

Briar Hill Primary School

Briar Hill Primary School's Smart Water Fund project, a joint water saving initiative between 11 primary schools in the Banyule and Nillumbik areas, won the Keep Australia Beautiful Victoria *Sustainable Cities*® Proud Schools Award.

The award recognises environmental initiatives by primary or secondary schools, and effort in enhancing the local environment.

The schools have reduced water use by 40 percent by introducing water saving features into each school and incorporating water conservation and recycling into their curriculum.



Dennis Cavagna (left), Managing Director, South East Water and Liza Dale-Hallett (right), Senior Curator, Sustainable Futures, Melbourne Museum show Elaine Carbinas, Parliamentary Secretary for the Environment, the award-winning "Water Smart Home" exhibit at the Melbourne Museum.

In the next edition...

- CSIRO Land and Water Aquifer project
- Gisborne Junior Soccer Club
- Western Health
- State Netball Hockey Centre
- Victorian University of Technology Vegetable Hydro-cooler

Smart Water Fund

Enquiries

internet www.smartwater.com.au
freecall 1800 882 432
email info@smartwater.com.au

Fund address

Smart Water Fund
PO Box 60
Moorabbin VIC 3189

The Smart Water Fund is an Unincorporated Joint Venture established in August 2002 by City West Water Ltd, Melbourne Water Corporation, South East Water Ltd, Yarra Valley Water Ltd and the Department of Sustainability and Environment.

Water savings a sweetener for Cadbury Schweppes

Cadbury Schweppes Australia & New Zealand aims to save over 20,000 kilolitres of water a year thanks to an innovative new program and support from the Smart Water Fund.

The leading confectionery, food and drinks company is using its grant to replace eight water-based lubricant conveyor lines with new water-free conveyor belt technology at its beverages manufacturing plant.

The retrofit will save 21,620 kilolitres of water a year, or the equivalent of approximately eight Olympic sized swimming pools per year.

Peter Morgan, Operations Manager at Tullamarine, said the multinational decided to do the water-saving retrofit for financial, environmental and social reasons. "The new method of lubricating conveyor belts will be generally more efficient," he added.

The use of water free conveyor belts is a relatively new concept in Australia, according to Morgan. "Provided our project is successful, we hope it will encourage other beverage manufacturers to adopt similar technology and promote environmental responsibility," he said. "We see that as a major indicator of the broad success of the project."

The project demonstrates that Cadbury Schweppes is committed to playing its part in reducing industrial water use. Currently, industry use accounts for 28%, or 134,400 megalitres, of Melbourne's total water consumption.



Peter Morgan, Operations Manager at Cadbury Schweppes at Tullamarine, watches the production process.

Securing Our
Water
Future
Together

4



This newsletter has been produced using recycled paper and environmentally friendly print techniques.