

# waterMAP

NEWSLETTER

Edition 1 – August 2010



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## Thank you for your participation in waterMAP

...and for your commitment to better water management.

Securing the future of Victoria's water supply is a top priority. Water is essential for the long term economic future of the State as well as the health of the environment and well-being of communities. The Victorian Government's strategy for water has been to secure additional supplies and encourage everyone to use water more efficiently, for today and for the future.

With this encouragement Victorian's have reduced their average water consumption by 40 per cent per person since the 1990's and have changed the way they use water wherever they live, learn, work or play.

Victoria's business and commercial sector, have been a part of these achievements by improving their efficiency through programs such waterMAPs, which helps them to plan permanent changes to their water use and improve their business efficiency.

**The waterMAP program has over 1,750 customers across Victoria and these businesses have saved over 15 billion litres of water since the program began in 2007.**

Completing and implementing a waterMAP benefits your organisation in multiple ways. You'll gain a better understanding of your operations and once you start saving water you'll also enjoy lower operating costs.

Promoting water saving as part of your organisation's sustainability efforts is also a valuable tool in educating staff and customers on water conservation and efficiency, and can be an effective marketing tool for your organisation.

***Thank you again for your participation in waterMAP. By working together we will continue improve your organisation's water efficiency and achieve Victoria's water-saving goals.***

For further information visit  
[www.ourwater.vic.gov.au](http://www.ourwater.vic.gov.au)

DSE Customer Service Centre  
136 186

Our Water  
Our Future

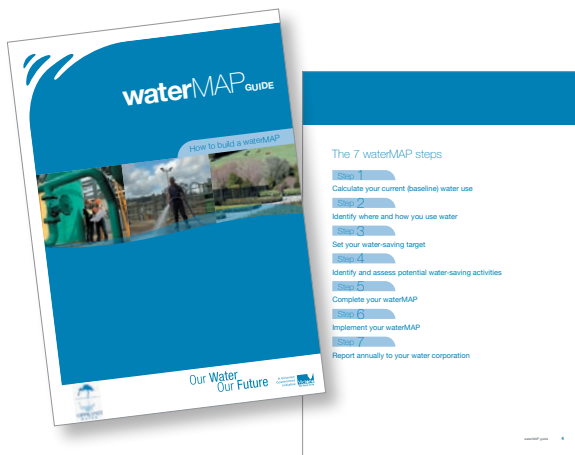
A Victorian  
Government  
initiative  
**Victoria**  
The Place To Be

# WaterMAP at a Glance...

## In 2008/09:

- 1,734 non-residential customers across Victoria participated in waterMAP
- Breakdown of:
  - 565 Regional customers (33%)
  - 1,169 Melbourne customers (67%)
- Savings of over 4 billion litres made over 2008/09
- Combined with the 10 billion litres of savings made over 2007/08, waterMAP customers have saved around 15 billion litres of water since the program's inception in 2007

## Have you seen the new waterMAP handbook?

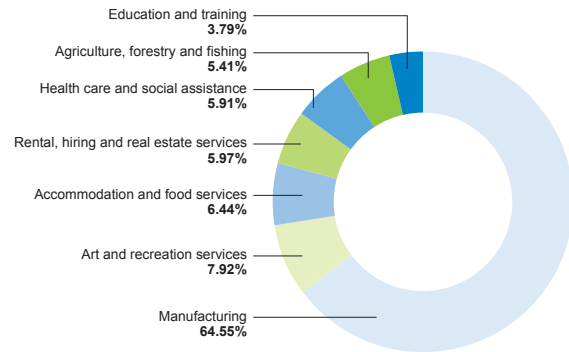


- New streamlined handbook and templates
- Simplified and easy to read format for all customers
- Fewer reporting requirements for waterMAP customers

Contact your local water corporation for more information  
Also available at [www.ourwater.vic.gov.au](http://www.ourwater.vic.gov.au)

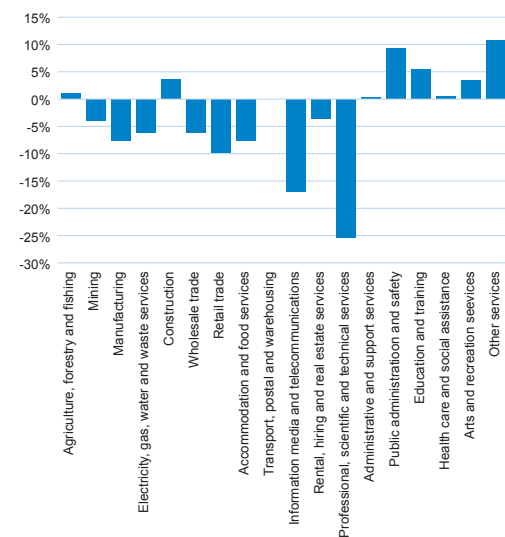
## Who are our major waterMAP customers?

WaterMAP consumption (%) by top seven industry sectors (2008/09)

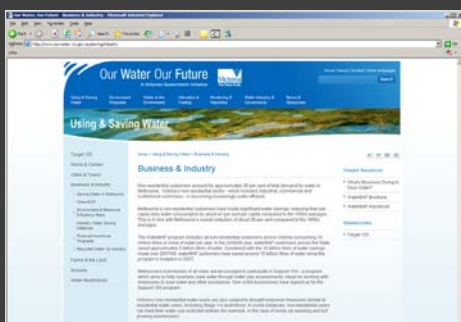


## Savings in 2008/09 by key industry sectors

WaterMAP consumption changes between 07/08 and 08/09



## Have you visited the Our Water Our Future website lately?



This website is managed by the Office of Water in the Victorian Department of Sustainability and Environment and aims to provide comprehensive information about water management and planning in Victoria, and to help all Victorians contribute to the sustainable management of our precious water resources.

You can use this website to:

- Access the latest updates from the Department's water monitoring and reporting activities.
- Learn about Victoria's water systems, and how the state's water resources are allocated and used.
- Track progress on major infrastructure projects and other government programs.

- Get involved in water efficiency and conservation in your home, school, farm or business.

The Our Water Our Future website contains extensive information relating to water management in the non-residential sector and features regular updates as new projects, key statistics and new publications are developed.

[www.ourwater.vic.gov.au](http://www.ourwater.vic.gov.au)

## Laundries Water Efficiency Program: *Making Water Work*

**The Laundry Water Efficiency Program works with you to make the water in your laundry work smarter, with simple solutions to make every drop count.**

This \$1 million program funded by the Department of Sustainability and Environment is being delivered in partnership with your local water corporation. The program will identify cost-effective water saving alternatives for laundries across Victoria and assist to improve efficiency through education, monitoring and evaluation tools, supplier discounts and financial incentives.

Your business will have access to a range of benefits that include:

- Free products, discounts, reimbursements and financial incentives
- Free online calculator to work out how much water and money your business could save
- A water conservation education package for engaging your staff and users
- A water use monitoring and assessment system
- Recognition for participation in the program.



Download your Laundries Water Efficiency Programs Options Report.

The report:

- Documents and explores 26 water efficiency approaches, each with case studies and cost benefit analyses;
- Explores barriers and drivers to change in order to support the consideration and implementation of efficiency options; and
- Profiles the innovation and leadership of the steps several commercial laundries have taken to improve water efficiency and a sustainable future.

[www.makingwaterwork.com.au](http://www.makingwaterwork.com.au)

## The Westin Melbourne – Luxury showers with saving powers



**The Westin Melbourne is a modern, elegant and luxurious 5-star hotel in the heart of the city. Last year, over 110,000 guests stayed at the hotel, using over 50 million litres of drinking water.**

As part of its waterMAP actions in 2008, The Westin Melbourne replaced the employee and swimming pool showerheads with more efficient models, using the

City West Water Business Showerhead Exchange program.

For the 540 guest showers, the hotel has installed new premium showerheads that not only improve water efficiency, but also deliver a luxurious shower that matches The Westin Melbourne's 5-star quality standards. City West Water agreed to contribute \$10,800 to the project – equivalent to the cost that City West Water would normally have incurred by providing standard showerheads under its Business Showerhead Exchange program – greatly accelerating the showerhead changeover and the subsequent water savings at The Westin Melbourne.

Showers account for more than a quarter of water use in Melbourne hotels, which is greater than consumption in a hotel's restaurants and bars, cooling towers and toilets. *The new showerheads are expected to reduce water use at The Westin Melbourne by 12.6 million litres per year.*

In addition to its water saving initiatives, the hotel has committed to reducing its carbon footprint and is now monitoring energy consumption to help achieve its overall sustainability goals. The showerhead upgrade will make a significant contribution towards these goals, as energy used for heating water accounts for a large proportion of the hotel's overall energy consumption. This project alone will reduce gas consumption by 3,600 gigajoules per year, and has reduced greenhouse gas emissions by 184.9 tonnes, equivalent to more than 3.6 million black balloons.

From a customer satisfaction perspective, early feedback from guests regarding the new showerheads has been extremely positive, proving that water-efficient showers can also be luxurious. Showerhead exchanges are one of the cheapest and easiest ways to reduce utility costs. They can be exchanged with minimal disruption and save significant amounts of both water and energy. City West Water encourages all business customers to consider exchanging old showerheads for water-efficient ones. To find out more about our Business Showerhead Exchange program, please contact Snezana Jagos at City West Water on (03) 9313 8254.

City West Water Ltd (2010)  
*Liquid Assets*



## NATIONAL FOODS – Milking every drop

From Pura Milk, Yoplait and Big M, to the delectable range from Dairy Farmers and Classic Cream – every drop of these much loved brands comes with additional value for customers.

As one of Australia's largest food companies, National Foods has steadily implemented new water saving techniques and technologies over recent years, benefiting the environment, enhancing the reputation of its product and delivering real value to consumers. Most notably, these initiatives have been at the Chelsea Heights based processing plant, the home of its cream and flagship label Pura Milk.

Thanks to the changes and developments at Chelsea heights, National Foods has continued to reduce not only its water use, but its solids and liquids waste. These savings mean a reduced environmental impact and a more environmentally charged product choice for customers.

Not content with these reductions, National Foods is continuously on the look out for opportunities to increase efficiency at its processing plant. As Risk Manager Peter Brouwer explains, water savings aren't just good for business, they're great for the environment. "The changes we've made in how we approach production have provided enormous value to National Foods, not least of which has been the saving to our water bill thanks to a 32 per cent reduction in water use. And that's only since 2008."

*"We're keen to continue to work with South East Water and draw on their knowledge in order to improve the efficiency of our water use and lower the amount of waste going into our sewers."*

To highlight areas for improvement in water management and to ensure water efficiency, National Foods actively collaborates with South East Water on its Water Management Action Plan (waterMAP).



In addition to impressive water savings, National Foods also achieved a decrease of 100 tonnes of total dissolve solids produced each year due to reductions in milk losses and improved Clean in Place efficiency (a process for cleaning the equipment used in producing dairy, beverage and processed foods without requiring disassembly).

An audit of the electronic production monitoring system has also helped ensure that excess water was not being wasted during set point, or the different cleaning cycle, changes.

By exhibiting strong leadership in water efficiency, National Foods is not only helping enhance the long term value of its products, it is also ensuring its footprint is an environmentally conscious one.

Plus, with the economic benefits and water efficient practices in full flow, National Foods really is milking every drop – and for consumers, that makes some of our much loved brands all the more satisfying.

South East Water Ltd (2010) *Aquabiz*

## National 2010 – savewater! awards®

Now in their eighth year, the prestigious savewater! awards® recognise and reward excellence in water conservation and efficiency by business, government, schools, local communities, and individuals.

The national 2010 savewater! awards® program is now open for nominations, with the following seven categories available:

- Australian Achiever
- Business
- Community Groups
- Educational Institutions
- Government
- Photographic (open internationally for the first time)
- Product Innovations (open internationally)

The key dates for the national 2010 savewater! awards® program are:

Entries open at 9am (AEST) on Monday 17th May 2010

Entries close at 5pm (AEST) on Monday 9th August 2010

Finalists announced Wednesday 22nd September 2010

Winners announced at gala ceremony to be held in Sydney on Friday 12th November 2010

[www.savewater.com.au](http://www.savewater.com.au)



THE DROUGHT HAS BROKEN BY ANNETTE BLATTMAN

## Water efficient Cooling Towers

Cooling tower systems in commercial buildings account for an estimated 30% of a site's total water use. They are used for air conditioning, refrigeration of goods and industrial cooling.

It has been found that by making simple operational changes and improving the maintenance of cooling tower systems businesses can save water and money, whilst maintaining public health and safety.

The Victorian Government in collaboration with the Australian Institute of Refrigeration Air Conditioning and Heating (AIRAH), Victorian water corporations and a range of industry stakeholders, have provided an opportunity for businesses to improve their cooling tower performance through the **Water Efficient Cooling Tower System Program**.

AIRAH have undertaken almost 1000 assessments of the efficiency of cooling tower systems across Victoria. This program is now complete.

Through this program, AIRAH have been able to produce the following resources for facility managers:

- development of a new training course on cooling tower efficiency delivered by AIRAH
- best practice guideline for use by cooling tower professionals. This publication is available at [www.airah.org.au](http://www.airah.org.au)
- an innovative online cooling tower calculator which can provide an indication of cooling tower efficiencies. The online calculator can be accessed at: [www.ctwec.com](http://www.ctwec.com)



*For further outcomes on the Water Efficient Cooling Tower System Program and training, please contact Carolyn Hughes at AIRAH on (03) 8623 3000.*

## Smart Water Fund – Round 7 awardees

The Smart Water Fund recently announced \$2 million in Round 7 grants for 17 innovative Victorian water projects.

The grants come as part of the Victorian water industry's commitment to developing new and innovative 'next generation' solutions to water conservation, water recycling and biosolids management.

Announced at the Melbourne Zoo, itself a Round 7 grant recipient, the funding winners represent a diverse range of businesses, research institutions and community groups.

The Melbourne Zoo received a grant to test a new water treatment process to help manage bacteria levels in the Pygmy Hippopotamus pool.

Using novel 'Silver Water' technology the Zoo will be able to better manage the quality of the Hippopotamus pool, saving 3.4 million litres of water per year by reducing the frequency of changing display water and saving energy by reducing the need for UV water treatment and gas consumption required to heat a new body of water.

The trial will allow the Zoo to measure the effectiveness of the technology, with a view to expanding its use across the Zoo's many displays, and complements the extensive water conservation and educational programs already underway.

The Fund will also support Grocon's Pixel project at the former Carlton Brewery site. The Pixel building will be Australia's first carbon neutral building and the lowest water consuming commercial building in Australia by incorporating a range of innovative features including vacuum flush toilets, a green roof and living wetland areas and an anaerobic digestion blackwater treatment plant.

Other projects announced include four research projects, to be managed by Water Quality Research Australia, that will investigate new approaches to recycled water quality verification, water treatment processes, residential greywater reuse and small scale desalination technology.

Smart Water Fund Chief Executive Officer Christine Cussen said that the Round 7 grant recipients should be proud of the leadership and innovation they have demonstrated in their approach to water conservation.

*"Each of these projects provide us with new understanding about how we can use our water resources more sustainably and the Smart Water Fund is pleased to support these organisations in their efforts to develop and share innovative new ideas" Ms Cussen said.*

Smart Water Fund (2010)



## H M Prison Tarrengower: Prison With a Water-wise Vision

Established in 1988, Tarrengower is the only minimum security female prison in Victoria. Situated about 40 km to the south of Bendigo, it is one of Coliban Water's major business customers.



British historian Dr Thomas Fuller said, *"We never know the worth of water till the well is dry"*. This is exactly what the continued drought in Victoria has done. The drought has made us all place a higher value on water. The Victorian Government's Water Management Action Plan (WaterMAP) is one of the actions implemented, recognising the need for larger water users to place a higher value on water efficiency.

In 2007/8 the H M Prison Tarrengower used 11,152 kilolitres (11.152 megalitres) of water, and as a result the site was required to complete a WaterMAP. Engaging in the development of a WaterMAP led to many water saving measures being implemented at Tarrengower Prison. They include water harvesting, flow reduction, shower timer installation and switching to front loading washing machines. As part of its waterMAP actions in 2008, Tarrengower also replaced their showerheads with more efficient ones provided by Coliban Water.

**As a result, Tarrengower has almost halved its annual water consumption.**

The switch to using front loading washing machines alone has saved 600 kilolitres of water for the Prison. The reduction in water consumption has seen a significant decrease in waste water output as well. This has set an example and has provided the Prison with impetus for future environment conservation efforts such as reducing carbon emissions, establishing a wildlife corridor and educating prisoners. The Department of Justice has played a vital role in providing funding opportunities for the environmentally friendly measures taken at Tarrengower.

Tarrengower has proactively sought opportunities to reduce its reliance on mains water. The new harvesting system has successfully achieved this. Water is harvested off approximately 2,200 square metres of roof space and collected in rainwater tanks. Having total water storage of over 600 kilolitres, the Prison facility is mainly using harvested water. About 60% of total water consumed at the site is used in toilets, showers and accommodation. The Laundry uses about 25% and outdoor watering about 5%. Harvested rain water is ideal for the site's toilets, laundry, livestock and irrigation.

Tarrengower aims to further reduce water consumption by installing water recycling unit and trialling drought tolerant pastures. Will Dodson, the prison officer taking care of the environmental portfolio, is very keen on making the Prison a more environmentally sustainable site. He advised that the water consumption through rain water tanks is regularly monitored through water meters and keyed into a database. He says, *"This has not only provided work for prisoners, but has also instilled a sense of water conservation in them"*.

In May 2009, as part of Coliban's water conservation efforts, Managing Director Gavin Hanlon gave a presentation to the prisoners. The presentation was another way to educate on water security and water conservation, to assist prisoners to prepare and integrate back into the community. Practices implemented at Tarrengower are evidence that small things can make a huge impact.

Coliban Water (2010)

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