

WATERMATTERS

VICTORIAN WATER INDUSTRY ASSOCIATION NEWS

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VICTORIAN WATER
INDUSTRY ASSOCIATION INC.

"Innovation, Co-operation and Sustainability"

Suite 1, Level 6
2 Collins Street, Melbourne,
Victoria 3000
T: (03) 9639 8868
F: (03) 9639 8860
E: vicwater@vicwater.org.au
www.vicwater.org.au

If you'd like to have an article considered for inclusion in Water Matters, email the finished article to vicwater@vicwater.org.au
Due dates: 15 January, 15 April, 15 July and 15 October or call T: (03) 9639 8868

FINANCE ISSUES WORKSHOP

The Finance Issues Workshop was held on 29 and 30 May this year at Bellinzona Grange in Hepburn Springs. This year the event had its biggest turnout yet with over 100 business personnel from the Victorian Water Industry and relevant stakeholders in attendance.

The opening speaker was Neil Brennan, Managing Director of Central Highlands Water. This year the workshop had speakers from TCV, DTF, DSE, ESC, AG's Office, PWC, Commonwealth Bank, NextGen, IBM, Strategic Purchasing and Melbourne Water. VicWater would like to express its most sincere gratitude for the contribution of speakers at the Finance Issues Workshop and have expressed their thanks for the time and effort spent in the development of such high quality presentations. Special thanks go to the Finance Issues Steering Committee for chairing of the sessions and providing advice on the programming of the event.

We should also acknowledge our sponsors Commonwealth Bank, TechnologyOne, TCV, DTF, Strategic Purchasing, PricewaterhouseCoopers and Central Highlands Water for their support.

VicWater trusts that the workshop's 100 plus attendees received considerable benefit from hearing updates from the major water industry stakeholders and other finance issues affecting the industry. We would like to remind readers to put the end of May in their diaries in anticipation of next year's event which is the most valuable networking opportunity for business people in the Victorian Water Industry.



“from
the CEO's
desk”



It is hard to believe that we are already heading towards this year's VicWater Annual Conference. George Tchobanoglous, Professor Emeritus and world-renowned expert in wastewater treatment will be the Keynote Speaker this year.

Decentralised wastewater systems is one of his areas of expertise and, given the interest generated by the VicWater tour of decentralised systems in South

East Queensland last year, I am sure that George will spark off some interesting debates over the course of the Conference.

Naturally, we have a very good group of speakers who will present on the current industry issues and we look forward to seeing you at this year's conference.

With the retirement of Geoff Michell; John Barnes completing his 5th year on the Board in October and David Heeps completing his initial term it has been necessary to call for nominations. As there was only one nomination in each of the categories

I am pleased to welcome Harry Peeters and John Wilkinson to the Board and confirm that David has been re-appointed for another two year term. The positions will need to be confirmed at the Annual Meeting in October and we look forward to having them represent the industry from that time.

Geoff retired at the end of June and John completes his term at the AGM and I am sure that they will be formally recognised at that time but I would personally like to thank them both for their encouragement and support. John Barnes will continue as the Chair of the Sustainability Task Group.

VICWATER 2008 ANNUAL CONFERENCE 2 & 3 OCT 2008

The Sebel Heritage Yarra Valley will be the venue for the Conference.

The theme this year is ***"Facing Challenges and Seeking Solutions"***.

The Conference will focus on how

water businesses and key stakeholders are tackling the challenge of planning in such changing conditions, while seeking innovative solutions and opportunities.

The brochure (including registration form) can be downloaded from www.vicwater.org.au. Registrations close on Wednesday 10 September 2008.

VICTORIAN REGULATORY AUDIT FOR DRINKING WATER RISK MANAGEMENT

YARRA VALLEY WATER SAILS THROUGH AUDIT

Yarra Valley Water is the first water utility in Victoria to undertake and pass the 'Victorian Regulatory Audit for Drinking Water Risk Management Plan' - an initiative by the Department of Human Services. This means that checks and balances are in place to ensure the drinking water supplied to Yarra Valley Water customers is safe.

This audit was developed to ensure that the water companies have systems in place that not only manage water but more importantly facilitate early identification of any abnormalities in the water quality. Yarra Valley Water Managing Director Tony Kelly said: 'It is great that we are

now being recognised for systems that we have always considered an essential part of our water quality system'.

According to Mr Kelly 'In 1999 Yarra Valley Water was one of the first water companies in the world to apply the proactive and preventative risk management process control tool of Hazard Analysis and Critical Control Points (HACCP) - and was accredited to HACCP 9000 standard - to ensure safety of the water supply.'

The HACCP system was originally developed by NASA to ensure the safety of food for astronauts when they travel in space and has been adopted by the food industry since the 1960's. Mr Kelly said: 'We always felt that it was important to apply

the HACCP process and were keen to undertake the audit because passing it confirms that we are looking after the water supply for our customers and that is vitally important. Having HACCP in place ensures our focus on every part of the water supply system that will have the greatest impact on water quality such as treatment, pressure management and maintenance of the system,' he said.

The Yarra Valley Water Risk Management Plan incorporating HACCP complies with the requirements of the preventive risk management Framework recommended in the Australian Drinking Water Guidelines 2004 and the Safe Drinking Water Act 2003. Mr Kelly said, 'Over 25,000 water quality tests are performed each year



Marondah Reservoir

to verify the safety and quality of the water supply, so our customers can be confident that we are closely monitoring and managing the quality of their water. This monitoring and testing helps us to maintain water quality and protect community health ensuring the water is safe to drink.'

'The routine testing is conducted at selected customer taps, reservoirs and storage tanks that are considered to be representative of the water supplied to our customers in that local area. We conduct routine and specific testing for the water supply for up to 53 microbiological, aesthetic (or physical) and chemical parameters across its supply area. As a result of our ongoing testing processes we will pick up any slight change in the water quality which is further investigated and addressed immediately enabling us to maintain high water quality.'

The majority of Melbourne's water comes from forested catchments and is treated to comply with the Water Quality Standards set out by the Department of Human Services (DHS).

**WESTERN WATER
PASSES QUALITY TEST**

Western Water is the first regional Victorian water utility to successfully achieve certification in the first Victorian Department of Human

Services (DHS), Regulatory Audit for Drinking Water Risk Management.

The audit is the first based directly on the Australian Drinking Water Guidelines and Victorian Safe Drinking Water Act. Importantly, this uses auditors certified under the RABQSA Drinking Water certification system. This certification was developed by the Victorian DHS working closely with WSAA and VicWater.

The audit system fits seamlessly with those utilities who have implemented quality management systems such as ISO9001, HACCP, Aquality and the WHO Water safety plan approach.

Auditors can also assess those utilities using the WSAA developed Aquality assessment approach.

"Western Water has a positive track record in ensuring that the quality of our drinking water exceeds the set standards." John Wilkinson, Managing Director Western Water said.

"Western Water has assisted WSAA in the development of Aquality by being the first regional utility to be externally assessed during the pilot testing phase in 2006." This experience assisted us to better understand the comprehensive management system requirements and pass the Victorian audit.

"In line with international best practice, our drinking water risk management plan identifies potential risks from catchments, through to the tap. It focuses on a "multiple-barrier" approach to provide several layers of protection for the customer." Mr Wilkinson said.

The Western Water Drinking Water Risk Management Plan covers seven water treatment plants, including two new plants commissioned in the last two years at Myrning and Lancefield. The Plan also includes the management of the water that we receive from Melbourne Water.

"Western Water's continuous improvement program for drinking water quality goes beyond the requirements of the regulatory audit." John Wilkinson said.

"We are currently conducting a major review of our Drinking Water Risk Management Plan to ensure that new risks presented by the current drought are carefully managed both now and into the future."

Western Water's commitment to providing quality and safe drinking water for its customers is documented through their Annual Water Quality Report, with regular quality information also available to the public at www.westernwater.com.au.

BARWON WATER STRIKES GOLD!

Barwon Water has won a gold award at the prestigious Australasian Reporting Awards for the sixth consecutive year. Barwon Water received gold for its 2006/07 Annual Report.

More than 500 companies, government-owned corporations and not-for-profit organisations from Australia and New Zealand entered the awards, now in their 57th year. To achieve

a gold award, a report must satisfy demanding ARA criteria based on world's best practice and be a model report for other organisations in the same field. Reporting principles include transparency, inclusiveness, auditability, relevance, accuracy and clarity.

Barwon Water Managing Director Michael Malouf said it was pleasing to receive national recognition for the corporation's reporting efforts. "It is a

great honour to receive our sixth gold award from the Australasian Reporting Awards," Mr Malouf said.

"I commend our employees and acknowledge their excellent work in producing this award winning report. It stands as an example of our on-going commitment to achieving the highest standard of reporting."

WESTERN WATER PRAISES RECYCLED WATER CUSTOMER'S SUCCESS

Witchmount Estate 2004 Shiraz was recently named the top Shiraz in the world in the Syrah du Monde wine competition held in France. One of Western Water's first recycled water customers; Witchmount Estate irrigates more than 55,000 vines. Situated in Rockbank, the winery is connected to the 42km Sunbury-Melton recycled water pipeline.

"With prolonged drought conditions, recycled water has become an integral part of our business," said Tony Ramunno, owner of Witchmount Estate. Currently, 84% of all inflow water at Western Water is recycled to supply a growing list of customers, including farms, sporting venues, public reserves and Council road constructions.

"Western Water aims to increase our recycling to 100% of all inflow water by 2013," said John Wilkinson, Managing Director. "Customers like Witchmount Estate demonstrate that recycled water can help businesses to produce outstanding results." Western Water is soon to supply Class A recycled water to residents of the new Eynesbury development, south of Melton. The

recycled water will be used for toilet flushing and garden watering, reducing the use of drinking water by up to 50% per household.



Tony Ramunno with Western Water Chair Terry Larkins and Western Water MD John Wilkinson.

MELBOURNE SCHOOLS

TOP OF THE CLASS FOR WATER SAVINGS

Students across Melbourne will receive a valuable lesson about water conservation with the launch of a new education resource. *Water – Learn it! Live it!* is a free education program aimed at primary and secondary schools which encourages them to include water conservation lessons in the classroom.

Launching the new education resource on behalf of the metropolitan water industry, Managing Director of City West Water, Anne Barker, said the kit would give schools new ideas and tools needed to teach students about the importance of saving water. "The drought, one of the worst on record, has taken its toll on Melbourne's water supply, and climate change will pose long-term challenges for our young people," Ms Barker said. "The program encourages students to save water in their homes and schools. Every drop saved puts less pressure on our catchments and goes towards helping the long term sustainability of our water supply. Young people face a drier future and we want to teach them water conservation habits for life," she said.

The new resource provides a framework for schools to include water conservation lessons in all areas of the curriculum. It also incorporates the new Victorian Essential Learning Standards and current learning theories. Younger students might learn about how water is used in the community while older students might tackle more challenging projects like researching the impacts of drought or developing water saving technologies," Ms Barker said.

"Many schools already involved in the program have incorporated water conservation lessons in really innovative ways, including students carrying out a school water audit, hosting water forums and planting drought tolerant gardens. *Water: Learn it! Live it!* has been developed by Melbourne's four water businesses, City West Water, South East Water, Yarra Valley Water and Melbourne Water. More than 190 Melbourne schools have signed up since it was launched two years ago.

Schools can become accredited as a *Water – Learn it! Live it!* school by working through a series of milestones. More than 100 schools have achieved accreditation, including two reaching 'gold' level accreditation. Schools need to reduce their water use, incorporate water conservation lessons across all grades and promote water conservation messages to their local community to achieve the top 'gold' level accreditation.

"I encourage all Melbourne schools to get involved in the *Water: Learn it! Live it!* program. It is vital that future generations understand what a precious resource water is," Ms Barker said.



Bentleigh West Primary students check out *Water Learn It Live It*

SOME WATER: LEARN IT! LIVE IT! STAR SCHOOLS

NIDDRIE PRIMARY SCHOOL

In the spirit of Wallace and Gromit, Niddrie Primary School students made two water themed claymation films last year. The Raindrop Escapade follows the journey of three raindrops, while Residential vs. Industry tackles the misconception that big companies use more water than households. The students have also recorded a song and performed at a story telling competition.

The school has also installed four rainwater tanks to flush toilets and irrigate the oval and set up a weekly environmental forum called the Unwasteables. They were the first school to receive gold accreditation through the program.

HILLSMEADE PRIMARY SCHOOL

Students and staff at Hillsmeade Primary School have slashed their water use to less than one bucket each. The school

celebrated World Environment Day with lots of water related activities and are making a 'save water' themed patchwork quilt. They also held a showerhead exchange for parents, family and teachers. Hillsmeade Primary also participates in the Schools Water Efficiency Program, a Victorian Government water audit and retrofit program. They recently received silver accreditation for their involvement in the program.

KINGSWOOD COLLEGE

Kingswood College at Box Hill has made a song and dance about water, producing a school musical with a water theme. Students wrote and performed the production to an audience of 800 people.

The school has also included water conservation lessons in the classroom and taken practical steps to save water around the school grounds, installing rainwater tanks, dual flush toilets and flow restrictors on taps. They received bronze accreditation in April.

TASK GROUP TOPICS

SUSTAINABILITY TASK GROUP

The STG met on 3 July 2008 with a presentation being made by Professor Stephen Gray on Victoria University's Water Research Programs. The group received excellent feedback about the Sustainability Seminar including the commendable sustainability initiatives. STG members reviewed the performance of the 2007/2008 Business Plan and suggested activities for the upcoming year such as:

- ◆ A workshop on sustainability reporting
- ◆ Facilitate improved information sharing between water businesses and CMAs
- ◆ Assist in the development of a Sustainable Event Management Tool
- ◆ Share information on sustainable procurement practices in water businesses and
- ◆ Approach RMIT to conduct the Water and Sustainability Course before or after the new year

GREENHOUSE EMISSIONS REDUCTION WORKING GROUP

The group met on 19 June 2008 with a presentation being made by Fraser Chitts (SV) who provided the group with an update on the Emissions Trading Scheme. The group discussed the greenhouse and energy reporting KPIs and modified some of the ratios and decided to provide explanations for variations in data from previous years. VicWater will publish the data before the next meeting in September. Tim Clune (North East Water) and Catherine Rees (Western Water) informed the group on the project proposal on improving accuracy of fugitive emissions from lagoons. Win (SV) advised on the cessation of the Greenhouse Challenge Plus program and distributed the water industry toolbox which contains electronic sustainability tools for the water industry.

WATER EFFICIENCY TASK GROUP

The WETG met on 10 July 2008. Les Walker (DSE) provided the group with an update on water concessions. Les and Brendon Clarke (Central Highlands Water) provided the group with an update on the Water Smart Behavioural Change Program. Yarra Valley Water is still recruiting households and will be sending out a resource kit. The three regional businesses (CHW, Barwon and Coliban) will retender the contract with one business incorporating energy with water into the behavioural change program. Members discussed possible topics for the demand management workshop and VicWater will be sending out a survey to gauge interest in the workshop. Members agreed to create a demand management strategies spreadsheet for the Victorian Water Industry.

WATER EDUCATORS TASK GROUP

The group met on 1 July 2008 with a presentation being made by Conrad Remenyi (Department of Education and Early Childhood Development) on the Sustainable Schools Framework. Members provided suggestions for the 2009 Educators Forum such as provision of water education resources for pre schoolers. Nick Abrams (City West Water) informed the group about the successful launch of the new Water Learn It Live It (WLiLi) resource. Nick Stone (Barwon Water) has volunteered to head the group to create a regional version(s) of the WLiLi resource. The NWW promotional posters were available in mid August with the state poster judging to take place in early October.

BIOSOLIDS TASK GROUP

The Biosolids Task Group is a new Task Group formed by VicWater at the end of 2007 following the completion of the National Biosolids Research Project (NBRP). The Biosolids Task Group is chaired by Allen Gale of Goulburn Valley Water and contains representatives from metropolitan and regional water businesses together with DSE and the EPA.

The Task Group has been very active in 2008; having met four times since February and has established a network of contacts across Victoria. A Survey Form has been developed and forwarded to water businesses in order to determine how biosolids are used across the State. There are also a number of SmartWater projects related to biosolids which will be progressing later in the year.

Members of the Task Group are also currently working on taking forward the key issues associated with biosolids including further research, communication strategies and regulations.

TRAINING

VicWater staff attended the recent consultation forum on skills shortages in the water industry. This national consultation will report to COAG in October this year.

The Water Industry Advisory Committee (WIAC) will meet in Adelaide in late August to consider a number of enhancements to the National Water Training Package and to consider a range of projects for implementation in 2008/2009.

Planning is now underway for the annual VicWater Training Seminar which will be held in late October/early November.

GIPPSLAND WATER FACTORY: A NEW WAY TO CARE FOR WATER

The Gippsland Water Factory is on target for completion by the end of this year and will have many benefits for the Gippsland community and environment when operational early 2009.

The first of its kind in Australia, Gippsland Water Factory (GWF) will be an innovative new wastewater treatment system that will address a serious local environmental issue, while also incorporating recycling into the solution.

GWF is primarily a new wastewater treatment infrastructure that is much needed to replace the existing 50-year-old system that has been deemed environmentally unsuitable by the Environment Protection Authority.

GWF's main treatment plant at Maryvale will use innovative technology to treat up to 35 million litres of Gippsland's domestic and industrial wastewater each day. This wastewater will come from more than 15,000 households and businesses from nine local towns and Australian Paper's Maryvale mill.

Eight million litres a day of the domestic wastewater will be treated to an extra high standard and recycled to Australian Paper, which will purchase

the water. The remaining highly treated wastewater will be sent down the ROS, free of the odour causing organics.

By selling recycled water to Australian Paper, GWF will save about three billion litres of fresh water in the Moondarra/Latrobe system each year for use in Gippsland; be it for environmental flows in local rivers, drinking purposes, or to support future growth in the area. Three billion litres of fresh water savings is the equivalent of 1200 Olympic sized swimming pools every year.

The entire GWF system will service a population base of 48,000 and the technology used to treat Australian Paper's pulp and paper wastewater is believed to be a world first that will set a new standard for treatment of this type of waste. Overall, the project is also the first of its kind in Australia in that recycling has been incorporated into the wastewater treatment plant from the start, rather than added to existing infrastructure.

GWF will also reduce its carbon footprint by incorporating renewable energy into its operation. Gases produced in the wastewater treatment process will be captured and used to

generate electricity, while a micro-hydro scheme will be built in one of the pipelines to create further power. About 20 per cent of GWF's total power usage will be self-generated through these 'green' energy sources. In addition, the original plant design was selected based on the lowest possible carbon footprint over the life of the facility.

The GWF system is being built using an alliance model, made up of a consortium of companies working collaboratively and sharing equal responsibility for design, construction and commissioning. The GWF Alliance includes Gippsland Water, Transfield Services, CH2M HILL, and Parsons Brinckerhoff. As the principal sponsor, Gippsland Water will take possession of the Gippsland Water Factory upon project completion and after a two year operational optimisation and proving period. The project is jointly funded by Gippsland Water and the Victorian Government.

To find out more about GWF visit: www.gippslandwaterfactory.com.au or phone: 1800 066 401.

Maryvale Treatment Plant June 2008



YARRAWONGA-DEVENISH PIPELINE

The Minister for Water, Tim Holding, opened North East Water's Yarrowonga-Devenish pipeline in Tungamah in June. The 42-kilometre pipeline carries treated water from the Yarrowonga water treatment plant to the three towns of Tungamah, St James and Devenish. It was built at a cost of \$3.9 million, including Victorian Government funding of \$700,000 under the Flows for the Snowy scheme.

North East Water Deputy Chairman, Lin Crase, said the pipeline brings greater efficiency to the Corporation's operations by replacing the treatment

plants in each of the small towns. The project essentially replaces three water treatment plants with one, and in so doing reduces operational costs and the call on other precious, non-renewable resources," he said.

"We now have fewer operational sites, and have thus been able to cut down on staff travel, and the use of power and chemicals, all of which mean the organisation has less impact on the environment. Dr Crase said the pipeline also raises the quality of water customers in the three towns receive, and assists the Victorian Government in

its commitment to restore flows in parts of the Murray-Darling basin.

"When Tungamah, St James and Devenish were supplied from the previous open channel system, Goulburn-Murray Water was forced to release 835 megalitres per year to enable North East Water to extract a mere 135 megalitres for the town supply," he said. "Much of this difference was accounted for by evaporation and seepage. The piping of the channels, combined with North East Water's component of the project, means that an additional 700 megalitres per year can now be allocated to the Snowy River."

PUBLIC RECORDS AWARD

GWMWater has won a major award at the Hamer Records Management Awards in the Government and Water Authorities - Places of Deposit Category.

The Awards began in 1998 and are named after Sir Rupert Hamer who was the Victorian Premier when the Public Records Act was passed in 1973 and when Public Record Office Victoria opened its first office and repository in 1975.

GWMWater was announced the winner of the award during an event held at Queen's Hall, Parliament House,

Melbourne on Thursday 15 May 2008. Business Records and Information Administrator Karen Stewart attended the event and was presented with the award on behalf of GWMWater by Peter Harmsworth, President, Public Records Advisory Council and Debbie Prout, Records Management Association of Australasia, Victorian Branch Director.

The award recognizes Government innovations in ensuring approved public records of local significance are accessible. GWMWater was nominated for the award after it recently transferred ownership and handed over hundreds

of rural and urban water rate, meter and cash books dating back as early as 1889 to historical societies across the region. These records had been held at archive storages in Horsham and district offices around the Wimmera and Mallee.

"Karen was the responsible staff member for the sorting and registering of each record in preparation of handover to historical societies and we were delighted that she was able to be in attendance to personally receive this award," said Managing Director Jeff Rigby.

SUSTAINABLE HOME DELIVERS MAJOR WATER SAVINGS

Barwon Water's innovative water-saving display home, Sharland Oasis, uses up to 77 per cent less drinking water than Melbourne and Geelong households. Data collected over the past 18 months shows that total average daily water use at the eco-sustainable home comprises 346 litres of drinking water and 228 litres of rainwater.

In comparison, the average Melbourne household consumes 750 litres of drinking water a day and the average Geelong home 543 litres. The comparisons relate to non-restriction periods in 2005-2006.

The statistics have been compiled as part of a comprehensive joint Barwon Water/Deakin University

School of Engineering and Technology research project.

Barwon Water and industry partners built Sharland Oasis in 2005. The three-bedroom home on the Sharland Estate at Hamlyn Heights incorporates a range of water and energy saving features.

Barwon Water Chairman Roger Lowrey said the home was proof of the "outstanding savings" that could be achieved through ecological sustainable urban design.

"By adopting simple measures such as rainwater tanks, greywater systems and 3-star and better appliances people can make a significant contribution to protecting the environment and our precious water resources.

"The research will provide valuable input into the future design of residential development in our region," Mr Lowrey said. A university project team has been monitoring and evaluating water and energy usage at Sharland Oasis since September, 2006. Information was gathered on the quantity and quality of rainwater harvested and greywater collected, the amount and source of water (rainwater, greywater and drinking water) used in the home and garden and a detailed breakdown of consumption. Every tap was individually metered, along with the dishwasher, washing machine, toilets and garden watering system.