



Wateraid Bowls Night a success

by Lisa Welsh, State Water Corporation

The ever-popular WaterAid and NSW YWPs annual barefoot bowls night was held at the North Sydney Bowlo on 12 February.

120 participants braved the tempestuous weather conditions for a night of good-natured competition amongst friends and colleagues.

Despite play being weather interrupted, the competition for the cup and the horse's ass trophies was fierce, with the PSP Alliance team taking home the winner's trophy.

Appropriately for a water event, play was suspended due to rain just in time for a BBQ dinner, followed by the raffle and an impromptu "Heads and Tails" Trivia in place of the normal "bowl-off".

The night was a huge success and we raised over \$4000 for WaterAid.

A fun night was had by all, due in no small part to our generous sponsors: the Baccico Group who sponsored the raffle, Condition Monitoring Australia who sponsored the raffle and Addelec Power Services, the trivia sponsor.



ABOVE - Richard Ioffrida, Isabel Nobre, Margaret Zhou, Mark Nethery, Mal Noronha, Toni Markovski, Kay Cooney, Sean Brothers, Ian Blair, Chris Greedy and Danny Tamburini.



RIGHT - Margaret Zhou, Mark Nethery, Chris Greedy and Danny Tamburini.

Waterart competition

Do you have artistic ability? Then this is the competition for you!

The NSW AWA Branch is running an art competition!

Art submissions can be a painting/drawing/ graphic design or photos that express the importance and significance of water to you.

The winner will win two tickets to Heads of Water 2010!



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Editors Note

Welcome to the first Newsdrop for 2010! Hope you all had a safe and happy Xmas and New Year – the holidays probably seem to be all but a blur!

I hope that you enjoy reading Newsdrop this year and if you have any suggestions/comments, please send them through to me!

In this issue, I would like to analyse the flexibility of the water industry.

When we were just getting used to drought management actions, those in the NSW water industry have quickly had to manage with the issues that torrential rain brings in!

The good news is that the rain received over the past few weeks has meant that Sydney's dam levels have increased to total storage levels of well above 50% - the inflows into Sydney's dams are the best since mid 2007!

While I was in Dubbo over the holidays, areas in the Central West of NSW were preparing to protect properties and farms from flood damage.

It was a very wet Xmas and building rooves were leaking water – it was like seeing India in the monsoon season!

We even had to call the police for help when we spotted one poor bloke whose car had gotten stuck in a local creek crossing.

It is important to keep in mind that while we all complain about how the rain has spoilt our weekend plans, plenty of plant operators have had to quickly respond to sewer surges and plant failures to maintain customer water and wastewater services.

Australians are resilient to cope with changing weather extremes.

We know not to get complacent – we are a country with extreme weather and with global climate change in the picture, these extremes will be more exacerbated.

All come with different issues and management strategies, and we need to display characteristics such as quick response, risk management and high flexibility!

I was encouraged to see an advertisement the other day on Indian cable channel that had village women singing about sharing water and using it sparingly as it is a precious resource.

Even with our catchments filling up and Sydney's Desalination Plant being up and running (you can read more about it in the next issue of Newsdrop) – please remember that water is a precious and valuable resource!

President's Bit



One of the benefits of being the President of the NSW State Branch is that you get invited to attend water related workshops in the State.

I recently attended a workshop hosted by GHD, Department of Climate Change and Water (DEECW) and Australian Green Infrastructure Council titled- "Exploring Future Directions for NSW Infrastructure in a Changing Climate".

It was well attended by academics, Government Agencies, State Local Council's and Consulting firms.

The key climate issues for debate were the impacts of climate change on infrastructure, adaptive responses for infrastructure resilience, and requirements for support, policies, technical guidance and codes and standards to cope with the change.

So basically a climate change risk assessment approach to the future.

As you would imagine water came into play with the supply issues, infrastructure issues, increased storm intensity and our ability to cope and rising seawater levels.

There was brainstorming sessions where we were put into groups and had to present back to the main body on a "way forward".

One thing was evident there a many-many different opinions of the impacts, solutions, policies needed and who will be responsible if predictions come true.

The great thing about the day was that the debate and working parties are starting to get some traction for action.

The timing of the workshop was ironic, as we had just seen Malcolm

Turnbull replaced by his own party as Federal Opposition Leader on the issue of climate change and his support of the Rudd government's response.

Obviously a large risk we still face are the climate change sceptics.

My response is, that if the climate change scientist's are wrong – at worst we would have spent money returning our atmosphere to closer to pre industrialised levels of carbon dioxide.

If the sceptics were wrong then we put at risk the lifestyle we enjoy – for to cope with the changes in our climate, infrastructure planning would have to start now.

Personally, working in the front line of the water industry, the last two weekends have seen our infrastructure stretched to the limit coping with the latest storms.

It's been awhile since I strapped on the gumboots and joined our wonderful and dedicated treatment plant operators in the cleanup.

It was an honour to work along side them in such difficult circumstances. The storms were the worst I have seen in my 19 years of experience, in particular the speed the rain was received.

It was evident to me that we have to be mindful of the changing needs of our environment so our systems can continue to deliver water and wastewater services to our communities.

On a final note can I remind all of you that if you have been working on a great project or know someone that deserves to be recognised to put an application into our NSW Industry Awards.

The applications close on the 31st of March. It was a great night last year and promises to be so this year.

The Hon. Philip Costa, Minister for Water will be attending along with some of the Wentworth Group of Concerned Scientists and family members of the late Peter Cullen. The venue is Watersedge where the view of the bridge is breathtaking! Hope to see you all there.

Loo've been framed...



take
action >>

Loo've been framed

Take a stand while sitting down...

Wateraid are asking you and the rest of their global network of supporters to get snappy on the loo as part of an online petition to help end the global sanitation and water crisis.

By submitting an image to the "Loo've been framed" page, you can encourage Kevin Rudd to talk toilets in the run-up to the first annual high-level meeting for Sanitation and Water in Washington on April 22.

Wateraid and the End Water Poverty coalition are calling upon the Australian government to send along a senior representative to act as a sanitation champion for the 2.4 billion people currently living without access to adequate sanitation.

Head to www.wateraid.org.au to find out more about the global meeting and to add your photos to the online petition, just like AWA Chief Executive, Tom Mollenkopf (right).

Article by Freya Paterson, Wateraid.



Get active and give back to the water industry!

The NSW Young Water Professionals want mentors!

Have you ever wished someone had given you that bit of invaluable yet simple advice throughout your career?

Have you ever wanted to share your own professional and learning experiences to those who are interested?

How about becoming a mentor to a young water professional?

The NSW Young Water Professionals are seeking water professionals with more than five to 10 years experience that share a passion for growth and development of young people in the water industry.

We want you to coach and guide your mentee and give back your insights into today's water industry.

If this sounds like you, register as a mentor for the NSW Young Water Professional's Mentoring Breakfast held at Bovis Lend Lease on Wednesday, 16 June 2010.

You will be paired with a mentee and an expert will provide you both with some pointers to kick-start a fruitful professional relationship.

We will keep the event to roughly 20 pairs so you will get the most out of the breakfast.

See you there!



The Young Water Professionals are hoping to tap into some of the wealth of knowledge that exists in the water industry through a proposed mentoring program in June.

Grab Sample



Malcolm Warnecke

Malcolm is a senior consultant at Ecowise Environmental (now the ALS Water Resources Group), focusing on microbiology and water quality.

He was previously a lab microbiologist at Sydney Water for a long time, specialising in Cryptosporidium and Giardia analysis.

He spent a few years in Bozeman, Montana doing a Masters degree in the mid-90s ("pathogens in model distribution system biofilms"); and

has more recently studied public administration.

Most vivid childhood memory involving water?

Bodysurfing at Whale Beach in Sydney. The most vivid part would probably be getting churned by a really big wave.

What was your first job and how did you get it?

"Cooking" at a fast-food outlet – one of my mates was employed there, and talked me into it.

How did you end up involved in the water industry?

I was employed straight out of Uni to do water sampling and microbiological analysis. This was great, and combined outdoor work with the science I'd just been studying.

Favourite part of your job?

"Eureka" moments when solving a problem.

Worst part of your job?

Seeking that elusive work-life balance.

Most boring job you've ever had?

"Cooking" at a fast-food outlet.

Most bizarre job you've ever had?

Explaining why I'm taking that water sample at 3am.

Pastimes / hobbies?

Child wrangling would be my major pastime right now.

What's the riskiest thing you've ever done?

Dive training with an over-enthusiastic instructor. I'm still not quite sure how I survived that one.

Your ideal weekend consists of ...?

I haven't discovered the answer to this yet, but am determined to keep trying.

What are you currently reading?

"The Joke's Over" by Ralph Steadman.

Favourite food?

This keeps changing. I'm usually up for something where I have no idea what's in it, if only for educational purposes.

Favourite book?

Anything by HS Thompson. On a water theme, Tim Winton's written some good stuff, but he really needs to cheer up a bit.

Favourite music?

I have many & diverse favourites.

Favourite film?

Anything by the Coen brothers.

What's your vision for the water industry in 10 years time?

Sustainable, adaptable and innovative. It looks like we'll have less water quantity and less water security, along with more people, so things aren't going to stay the way they are now.

How much value does community participation add to our industry?

Probably an increasing amount, as our water management solutions become more complex. We can overcome technical challenges and lead the community on water issues, but political opposition from a community that feels disenfranchised is a risk to any major change in how water is managed. Industry needs to know what is important to the community, and invite everyone into the tent when the big decisions are being made.

What are your views on indirect potable reuse?

Routine elsewhere in the world, and inevitable here where it's cost-effective. IPR is a good example of where community participation with the water industry needs to happen successfully.

What's your greatest asset?

Support from colleagues, friends & family. They're awesome!

What's your greatest liability?

Sometimes getting too wrapped up in what I'm doing.

Best advice you've ever been given?

To listen widely, and then make up your own mind.

Who inspires you and why?

Anyone who overcomes serious adversity, or who truly excels in something worthwhile. Nelson Mandela and Howard Florey spring to mind.

If there were one thing you could achieve in your lifetime, what would it be?

Leave the world a better place than when I found it.

Name 3 people you'd like to be stranded with on a desert island?

A fisherman, a boat-builder and a navigator would make a pretty good project team.

If you had a time machine and could choose a date to go back to/forward to, what year would you pick and why?

I'm a bit of a history buff, so I'd do a lot of hopping around just to see what did or will happen.

What is one thing that not many people would know about you?

That I'm a bit of a history buff.

Interview compiled by Leonie Huxedurp

AWA NSW Branch Update

Australian Water Association - Trusted Leadership in Sustainable Water Management

The closing date for award nominations is fast approaching so please ensure you submit your nominations soon to avoid disappointment.

The NSW Branch will be honoured again with The Peter Cullen Post Graduate Scholarship being awarded by the The Hon. Phillip Costa, Minister for Water at the NSW Water Industry Awards Night. Representatives from funding bodies, the Wentworth Group of Concerned Scientists along with Peter Cullen's family members will be attending this event.

NSW Water Industry Awards 2010

Wednesday 5 May 2010

Watersedge, Pier One, Walsh Bay

CALL FOR NOMINATIONS for the NSW Water Industry Awards are now open.

Award Categories are:

- NSW Infrastructure Project Innovation Award - (Previously the NSW Water Construction Award)
- NSW Program Innovation Award - (Previously Water Environment Merit Award -WEMA)
- NSW Water Research Merit Award
- NSW Young Water Professional of the Year Award - Sponsored by Bovis Lend Lease
- NSW Water Professional of the Year Award
- NSW Undergraduate Water Prize

The closing date for award submissions is 30th March 2010

Book Report

by Diane Wiesner, Principal Scientist Australian Water Association

Microbial Ecology of Activated Sludge

Editor(s): Robert Seviour & Per H Nielsen

Publication Date: 15 Jan 2010 • ISBN: 9781843390329

Pages: 688 • Hardback

Microbial Ecology of Activated Sludge, written for both microbiologists and engineers, critically reviews our current understanding of the microbiology of activated sludge, the most commonly used process for treating both domestic and industrial wastes.

The contributors are all internationally recognized as leading research workers in activated sludge microbiology, and all have made valuable contributions to our present understanding of the process.

The book pays particular attention to how the application of molecular methods has changed our perceptions of the identity of the filamentous bacteria causing the operational disorders of bulking and foaming, and the bacteria responsible for nitrification and de-nitrification and phosphorus accumulation in nutrient removal processes.

Special attention is given to how it is now becoming possible to relate the composition of the community of microbes present in activated sludge, and the in situ function of individual populations there, and how such information might be used to manage and control these systems better.

Detailed descriptions of some of these molecular methods are provided to allow newcomers to this field of study an opportunity to apply them

in their research.

Comprehensive descriptions of organisms of interest and importance are also given, together with high quality photos of activated sludge microbes.

Activated sludge processes have been used globally for nearly 100 years but there is still a lot to learn.

In the past 15 years the advent of molecular culture independent methods of study have provided tools enabling microbiologists to understand which organisms are present in activated sludge, and critically, what they might be doing there.

Microbial Ecology of Activated Sludge will be the first book available to deal comprehensively with the very exciting new information from applying these methods, and their impact on how we now view microbiologically mediated processes taking place there.

This is an excellent title and one which has been expected for almost three years.

It will be of use for wastewater engineers, environmental biotechnologists and scientists involved in designing and managing these plants. It will also be suitable for postgraduate students working in this field.

Available from AWA Bookshop bookshop@awa.asn.au Cost \$219 plus p. & h. for AWA members

AWA NSW Branch 2010 Event Calendar

Thur 18 Mar 2010	NSW Branch Presidents Dinner
Mar 2010	NSW YWP Mentoring Breakfast
April 2010	NSW YWP Regional Seminar – Newcastle
Wed 5 May 2010	NSW Water Industry Awards Night
May 2010	YWP Untangling NSW Water – Perspectives on Desal
Wed 23 June 2010	NSW Technical Seminar
Wed 28 July 2010	NSW Technical Seminar
Fri 6 Aug 2010	Heads of Water Gala Dinner
Wed 25 Aug 2010	NSW YWP Water Seminar Series – Water Reform
Mon 13 – Wed 15 Sept 2010	National Water Operations Network & NSW Engineers & Operators Conference/Exhibition
Wed 29, Sept 2010	NSW YWP Water Seminar Series – Climate Change Adaptation
Wed 27 Oct 2010	NSW YWP Water Seminar Series – Water & Society
Sun 31 – Tues 2 Nov 2010	Source Management Conference/Exhibition
Thur 25 Nov 2010	Legends of Water Seminar & Christmas Party

Did you know...

- Majority of people live in developing nations and must walk at least 3 hours to fetch water.
- To process one chicken we need 44 litres of water.
- To process one can of fruit or vegetables we need 35 litres of water.
- About 25,700 litres of water is required to grow a day's food for a family of four.
- If all the world's water were fit into a 3.8 litre jug, the fresh water available for us to use would equal only about one tablespoon!