



QueenslandWater

The Water Industry's Resource for News, Events and Information

Issue 11

Richmond wins the Grand Finale!

The 2014 Orica Australia Best of the Best Queensland Water Taste Test concluded in style at the IPWEAQ State Conference on the Sunshine Coast with the nation's favourite science communicator, Dr Karl Kruszelnicki launching the taste test final at his keynote address on Wednesday, 8 October 2014.

Through some 440 individual tastes, delegates sampled and scored the six best tasting tap water samples from regional events around the state with water from Richmond Shire Council's pilot water treatment plant coming out tops.

Richmond Shire Council CEO, Peter Bennett, said the plant will be fully commissioned by December 2014 and will be the perfect Christmas present for the town.

"Council is also conducting a major overhaul of its water mains with \$1 million being spent this calendar year. These two projects will ensure that the residents of Richmond will

have the best water in Queensland from the end of the year and into the future. This award showcases the hard work the Richmond Shire Council has gone through to get the best result possible."

Aeramix Manager – Technical Services and Innovation, Mark Samblebe said his team was thrilled with the win and very happy for Richmond residents who will now be able to enjoy top tasting water.

"Our hands-on field-based approach to assessing process options and developing solutions has certainly delivered a great outcome on this occasion, and we look forward to seeing how the water from the full-scale plant will perform in the Water of Origin competition against NSW next year."

As usual in the state finals, the results were very close and Richmond narrowly pipped Rockhampton to take the honours, with Bundaberg a close third.

Brian Jackson from Local Government Infrastructure Services won the Best Palate competition. Introduced in 2014, this competition requires delegates to match samples to sources and treatment processes – no mean feat when you are dealing with the best tasting water in the state!

Congratulations to our six regional finalists and ultimately to Richmond for taking out the title – we wish them all the best in the Water of Origin 2015!

Bottom Left: Graeme Osbourne from Richmond Shire Council accepts the winning trophy from Dave Cameron.

Middle Top: Rockhampton Regional Council's Jason Plumb receives the runner-up prize.

Middle Bottom: Dr Karl entertained the crowd with his lively keynote address.

Bottom Right: The man with the best palate - Brian Jackson.



Update from A/CEO

Greetings and holiday salutations to all.

qldwater has recently delivered its last event for the year with our inaugural innovation forum (see later article) and that should now mean a chance to catch up and focus on some new publications and templates. A week out and it hasn't happened yet with the general mad rush to finalise meetings before Christmas!

In reflection, the year has been significant and challenging for our industry. For *qldwater*, the greatest focus for the first half was changes in government, particularly DEWS and EHP including the Water Supply (Safety and Reliability) Act, publication of WaterQ and ongoing changes to ERA 63. In the latter half we have focussed on further collaboration and the buzzword of the moment is clearly "innovation" as we have endeavoured to ensure that industry's efforts are understood and recognised in the new state agenda.

Like many of our members, our reliance on grant funding to support our membership income has generated significant pressure; the higher tiers of government have taken remarkably similar approaches to cost reduction and grants have been thin on the ground. We are proud that we have been able to sustain our expected levels of member service although we expect to have to make some small changes in 2015.

2015 will also see a state election and likely another shuffle of portfolios, irrespective of the election result. Our work program will adapt accordingly but there are some clear and obvious trends which will underpin it:

- Data and data management. SWIM has been around for a long time, but 2014/15 is the first year the state has imposed

mandatory indicators for all service providers, it will be the fourth year of our benchmarking efforts and other organisations including LGAQ are introducing broader benchmarking programs. What we as an industry capture generally continues to grow rapidly and the trend seems to be towards reducing the requests for new data to focus on what can be done with that already held.

- Skilling, especially focussed on operators and other technical staff. Our first certified Drinking Water Treatment Operator will be announced in 2015, the state has committed to implementing the certification program more broadly (in some way) and industry is keen on a sewage treatment equivalent.
- Collaboration at all levels. While we report a lot on QWRAP and regional alliances are developing well, our event program has helped seed a lot of interest in councils and other service providers working together on R&D, shared services, and just general shared experience.

I would like to acknowledge and personally thank Trevor Harvey for his efforts over the last two years as TRG Chair, and welcome John Betts into the role and Dave Brooker as the new deputy.

Our office will be closed from 25 December to 2 January inclusive. In the event of any emergencies both Dave Cameron (dcameron@qldwater.com.au, 0407 761 991) and Rob Fearon (rfearon@qldwater.com.au, 0428 300 208) will monitor emails and phone messages.

Regards

Dave



*Merry christmas and
a happy new year!*

*From Dave, Rob, Heather,
Michelle, David and Desire*

Outstanding Achievements Awarded

Each year *qldwater* sponsors Water Project Awards at the IPWEAQ State Conference, and this year we had the added bonus of seeing some of our proactive member representatives rewarded through the President's Awards at the Gala Dinner on Thursday, 9 October 2014.

A big congratulations to President's Award recipients Trevor Harvey, Chris Hegarty and Pat McGuire on this proud achievement.

Trevor has been a long-term supporter of the IPWEAQ and played a critical role in building *qldwater*. As one of the longest standing members of the TRG, Trevor was elected as Chair in 2013 helping to build and strengthen the Directorate during his term.

Chris spent almost 20 years at Rockhampton City Council including various roles in water and sewerage and development engineering, and the last nine years with Cardno as a Senior Water Engineer.

Pat is a strong supporter of *qldwater*, regularly providing input to our expert panels and is particularly active in staff skills development. Water samples from TSIRC's Saibai scheme have been perennial favourites and won regional taste tests.



Water Project Award winners were announced in the following categories:

Projects over \$10m

Winner - Desalination Plant Upgrade, Torres Strait Island Regional Council

The purpose of the project is to ensure a reliable water supply to six unique and remote communities in the Torres Strait. Commissioned by Torres Strait Island Regional Council (TSIRC), AECOM undertook sustainability investigations of water supplies, predominately desalination of seawater, throughout the Torres Strait. AECOM subsequently project-managed the delivery of upgraded facilities. This included development of a standard 70kL skid mounted "plug & play" unit to be used in parallel with similar units to provide

supplies across the communities, upgraded treatment plant facilities and refurbished and new raw water intake structures, including sea water intakes and bores.

Projects \$1 – 5m

Winner - Cloncurry Water Treatment Plant Upgrade, Cloncurry Shire Council & Cardno BTO

Cloncurry Shire Council (CSC) required improvement in the quality and quantity of drinking water for the residents of Cloncurry. The Cardno BTO-managed upgrade of the Water Treatment Plant used an innovative approach to procurement, delivering a cost effective solution.

Projects less than \$1m

Winner - Biggenden Sewage Treatment Plant Upgrade Utilising Subsurface Rock Filtration, North Burnett Regional

The innovative rock filter installed during the overhaul of the 40 year old Biggenden Sewerage Treatment Plant has helped achieve environmental compliance without the use of disinfection. Low operating costs have been maintained and major capital expenditure deferred using this fit-for-purpose solution.



QUU Innovation Centre

On Wednesday, 26 November we had the pleasure of visiting Queensland Urban Utilities' Innovation Centre at the Luggage Point Sewage Treatment Plant. We would like to thank QUU for the tremendous effort they put in to inspire our Innovation Forum delegates in the lead up to the event the next day.

The technical tour included a guided tour of the centre, innovation stands and displays (manned by QUU iQ Group), innovation videos and a collaboration station.

We were impressed by the great ideas and innovations brought forward by QUU staff, and by the organisation's willingness to take those ideas and make them a reality.

One example was a clever idea by local engineer Sriya Fernando (pictured below right), who developed a new plastic pit to protect vital flow meters which help detect underground leaks in the water network.

At a cost of \$25,000 each, the custom-designed plastic pits are much cheaper and easier to install than the currently used concrete pits which cost up to \$110,000 each. The plastic pits have also been designed to be water resistant so the electronic components in the flow meters are better protected from the weather.

Queensland Urban Utilities spokesperson, Michelle Cull, said the first plastic pit had been installed in Mayfield Road, Moorooka and will be trialled for three months.

"If successful another 25 will be installed across Brisbane, delivering a cost saving of \$1.12 million," she said.

The idea is one of 35 innovations approved for development by Queensland Urban Utilities' iQ innovation group since it was established 10 months ago, with expected operational savings of \$4.5 million across the organisation.



Water Innovation Forum



Our first inaugural Water Innovation Forum literally went off with a bang as an enormous thunder clap announced the hail that pelted vehicles and covered the Allan Border Field in a white sheet on 27 November.

The forum provided an opportunity for presenters from water and sewerage service providers to promote their most interesting innovations and opportunities for the future to their peers with a view to increasing collaboration. It also promoted a strong message - that future investment and planning will require strong industry involvement to be successful.

In his keynote address, Water Supply Minister Mark McArdle announced the WaterQ Innovation Panel's 100 day action plan and a further \$130,000 funding to support the four regions participating in the Queensland Water Regional Alliance Program (QWRAP).

More than 40 different organisations were represented at the event and although the day was hectic, the feedback has been overwhelmingly positive with a similar event likely in 2015.

Skills Update

Queensland Water Skills Partnership Activities

The Water Skills Partnership Industry Leaders' Group met in mid-October to review current activities and future funding and other projects. Alan Kleinschmidt from Toowoomba Regional Council was appointed new chair of the ILG at the meeting.

The Partnership has been very active with a number of key activities for 2014 including; finalisation of a second NWDF application, completion of the 'Technical Assessment and Mentoring for Regional and Remote Drinking Water Operators' Project, provision of industry intelligence on water industry skills and workforce needs to the Ministerial Industry Commission, publishing of a Water Industry Worker Program Evaluation, review of current online industry courses and development of a new 'Basics of Risk Management for the Water Industry' online course and finalisation of the third Queensland Urban Water Industry Workforce Composition Snapshot Report.

The Partnership also continues to have national representation on key national industry skills bodies including the Water Industry Advisory Committee (WIAC) and Water Industry Skills Taskforce, with WIAC efforts mainly focussed on the review of the National Water Training Package.

The partnership is currently gearing up for a coordinated industry submission for the Department of Education, Training and Employment (DETE) Industry Partnerships Strategy fund which commenced in October. While "government-owned bodies" appear ineligible to apply directly, the DETE are encouraging the water industry to apply via *qldwater* through a joint industry application. The Water Skills Partnership ILG has prioritised two project areas subject to further discussions with DETE regarding eligibility and funding rules. A call for expressions of interest is expected to go out early in the new year. Contact Michelle Hill mhill@qldwater.com.au for further information on Partnership activities.

Drinking Water Operator Certification

The Department of Energy and Water Supply, *qldwater* and the Water Industry Operators Association of Australia have signed an MoU in relation to the Drinking Water Operator Certification project.

The primary purpose of the memorandum is to ensure that operators who are "certified" under the 2012 Draft national framework are not required to be re-certified under a future mandatory scheme for five years from the date of initial certification. It commits the parties to work together to encourage adoption of this approach which has significant benefits to employers but importantly a defined continuous training and development pathway for staff.

The business case prepared by *qldwater* earlier this year promoted mandatory adoption of operator certification reflecting the original intent of the national framework and recommendations of the Queensland steering group. While it is currently not possible for a regulatory amendment to make this happen, DEWS has been very supportive of the program. It has proposed to develop a guideline to be released by Q2 2015 which explains its position on Certification and recommendations made in the business case to make minor modifications to the draft national framework to suit the Queensland context.

A number of organisations are actively progressing operator training in relation to this work, including Bundaberg Regional Council and Toowoomba Regional Council. It is likely that others in the Central West including Longreach and Barcaldine will commence training in early 2015. One operator in Queensland has successfully completed all of the requirements to be certified – an announcement to come soon!

An Introduction to Risk Management in the Water Industry

Our most recent addition to e-learning, an Introduction to Risk Management in the urban water industry, is now available to our members at http://www.qldwater.com.au/Skills_Risk_Management

The course provides an overview of the basics of risk management relating to drinking water, wastewater, OH&S, customers, infrastructure, legislation and more.

Release of the third Queensland Urban Water Industry Workforce Composition Snapshot Report

The third Queensland Urban Water Industry Workforce Composition Snapshot is now available to view online on the *qldwater* website. A published hardcopy version of the report will be available early in the New Year. For the 2014 report we received responses from ten organisations of varying sizes covering a total of 2964.7 employees (which we estimate reflects approximately 50.5% of the Queensland water industry workforce). The 2014 Snapshot Report provides a first opportunity to begin to analyse some of the potential trends in workforce composition since the first Snapshot Report published in 2010.

Some of the notable trends (from the 2010, 2012 and 2014 reports) include;

- Minor changes to job family composition, including a reduction in Water Industry Operator - Civil roles.

- Significant changes to age profiles for key job roles.
- A gradual increase in the proportion of women in engineering paraprofessional and science/technical professional roles.
- An increase in the number of Water Industry Operators - Civil holding Certificate II or higher level qualifications and an overall increase in the number of water operations staff with formal VET qualifications since the last report.

While this series of snapshot reports can only provide a glimpse into ongoing change in the sector, they remain an important initiative to support both sector-wide attempts to focus efforts on skills needs, and individual organisations in developing their analyses of external environments to support workforce planning. To receive a hardcopy of the published report contact Michelle Hill on mhill@qldwater.com.au.

QWRAP Update

An important milestone in the QWRAP occurred in October 2014 when Councils in the Central Western Queensland Remote Area Planning and Development Board (RAPAD) signed a Memorandum of Understanding to form the Outback Water Regional Alliance. In addition to the Memorandum of Understanding, a Constitution was endorsed to describe the governance for the Alliance. A part-time coordinator has been selected to coordinate activities and provide strategic advice to the Alliance.

The formation of the Outback Water Regional Alliance is the culmination of three years of investigations under the QWRAP banner. This work showed that an alliance model was best suited for building strategic collaboration in the region, which is notorious for its 'tyranny of distance' affecting 16 communities that are often separated by 100s of kilometres. The new alliance is an effort to reduce **costs while improving urban water services among the five local government areas of Barcaldine Regional Council, Barcoo Shire Council, Boulia Shire Council, Diamantina Shire Council and Longreach Regional Council.**

Three other QWRAP groups have also progressed their investigation on regional models, including further development of region collaborative activities.

- The Wide Bay Burnett Steering Group has completed their investigation of **four alternative collaboration options and is deciding on the potential benefits** of transitioning to an alternative model. The councils have already developed a number of 'no regrets' collaboration opportunities that have demonstrated **benefits for all participants and will be continued by an advisory group** reporting directly to the Wide Bay Burnett Regional Organisation of Councils.
- The Whitsunday Steering Group has completed a staged investigation **examining the potential benefits of several regional collaboration approaches** to water and sewerage services. The Whitsunday Regional Organisation of Councils is considering the options and potential for future change in December.
- The Far North Queensland Region of Councils has agreed to pursue four joint **regional initiatives subject to receiving financial support, and is currently considering appointing a part-time coordinator to oversee these projects.**

The Minister for Energy and Water Supply, the Hon. Mark McArdle, recently announced additional funding of \$130,000 for QWRAP at the *qldwater* Innovation Forum on 27 November. **This financial support will allow each of the QWRAP groups to initiate a collaborative project identified through their investigations, as well as two state-wide investigations on cost drivers for water and sewerage service providers. Although the additional funding extends QWRAP to the end of April 2015, discussions are underway to secure continued support to existing QWRAP groups, and to extend QWRAP to a fifth region in Queensland.**



SWIM Update

SWIM reporting is over for another year with almost 85% of all possible service providers reporting via SWIM. Thanks for everyone for their hard work on this!

The new DEWS KPI framework has come into effect and everyone should now be recording data for the 55 KPIs for reporting in 2015. If you haven't started and need some help please contact David Scheltinga at dscheltinga@qldwater.com.au.

In our efforts to gauge what would be difficult to collect and where concerns might exist when the results are benchmarked with the new DEWS KPI system, twelve service providers put their hands up to participate in a trial collection of all the indicators using data for the 2012/2013 reporting year.

The information was reviewed at a recent TRG meeting and it was agreed to continue examining possible ways of reporting the KPI data both at a state wide and individual service provider level, as well as further examination of any issues related to indicator definitions. All information/conclusions will be distributed to a wider audience for input.

Other news:

- The SWIMAnnual software development planned for the 2015 reporting year is nearing completion and will be ready for testing in February.
- A grant application was completed for LGAQ/ Telstra funding to help develop tablet/phone connectivity for data collection in SWIMLocal.
- Big data – two small projects examining the use of large data sets in Queensland are in initial stages of investigation and planning.
- We are currently looking into ways we can better provide data back to Service Providers to help with their own reporting, analysis and benchmarking requirements.

Events Calendar

As 2014 comes to an end, we can look back at six regional conferences that brought together over 200 attendees representing more than 35 water service providers across the State.

qldwater also had a strong presence giving presentations at the IPWEAQ and LGAQ State Conferences, OzWater, WIOA Queensland and the AWA Northern Queensland Conference.

Our 2015 events calendar is still being finalised and we have recently sought interest from members to host other events, but here's a taste of things to come:

February

- 19 TRG Meeting, Brisbane
- 20 Steve Hrudehy Workshop, Brisbane

March

- 11 IPWEAQ CQ Branch Conference, Biloela

April

- 16 CQ Regional Conference and Taste Test, Rockhampton
- 17 TRG Meeting, Rockhampton

May

- 4 - 8 Water Connections Tour – Cairns and surrounding councils
- 8 Cairns Conference and Taste Test
- 12 Ozwater, Adelaide
- 14 IPWEAQ SW Branch Conference, Kingaroy

June

- 3 WIOA Conference and Water of Origin
- 5 TRG Meeting, Brisbane

Gold Coast Water wins Business/Higher Education Round Table Award

Over a decade of hard work has come to fruition for Gold Coast Water when their Sewer Corrosion and Odour Research (SCORE) Project received a Business / Higher Education Round Table Award for Best Research & Development and Outstanding Excellence in Collaboration on 20 November 2014.

The project started 12 years ago when Gold Coast Water approached the University of Queensland's Advanced Water Management Centre (AWMC) about odour and corrosion issues in the city's sewer network system. In 2003, this initial work led to a successful Australian Research Council (ARC) grant between UQ AWMC, Gold Coast City Council and Sydney Water, entitled 'Understanding the biotransformation processes in a sewer system to achieve optimal management'.

The Sewer Corrosion and Odour Research (SCORE) Project - Putting Science in Sewers was jointly delivered by its five research and eleven industry partners: The University of Queensland, The University of New South Wales, The University of Newcastle, The University of Sydney, Curtin University of Technology, Sydney Water Corporation, Barwon Water Corporation, CH2MHILL, City of Gold Coast, Hunter Water Corporation, Melbourne Water Corporation, South Australian Water Corporation, South East Water Limited, Veolia Water Australia and New Zealand, Water Research Australia Limited, and Western Australia Water Corporation.

The successful outcomes of this ARC project, including the development and calibration of the hydrogen sulphide (H₂S) model further led to a \$21M SCORE project. This research project also won the IWA Global Awards (Applied Research Category) at the IWA Water Congress in Lisbon, Portugal in September 2014.



From L to R: Thomas Kuen (Melbourne Water), Dr Dean Moss (Uniquest), Bill Capati (Gold Coast Water), Ken Boal (B/HERT President), Prof Peter Hoj Vice Chancellor UQ, Prof Zhiguo Yuan (UQ AWMC), Dr Anne Jobling (UQ), Terry Anderson (South East Water), David Halliwell (Water Research Australia receiving the B/HERT Award in Melbourne).



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"The Queensland Water Directorate (qldwater) is the central advisory and advocacy body within Queensland's urban water industry and represents members from Local Government and other water service providers across Queensland."