



Queensland Water

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

Issue 14 - December 2015

Ancient water tastes best!

Well done to Barcaldine Regional Council who has taken out the 2015 Ixom Best of the Best Queensland Water Taste Test at our second annual Innovation Forum on Thursday, 5 November with the ancient water from the Great Artesian Basin selected as the best through more than 300 individual "tastes."

Barcaldine Mayor Rob Chandler said the Taste Test was a great opportunity for Council's staff to be recognised for the superb job they do in providing top quality water to its residents.

"Council would not be accepting this Award had it not been for the efforts of the team in Barcaldine. Thanks also to the Outback Regional Water Alliance which has assisted many outback Councils with their water services."

Mayor Chandler is calling on prospective brewers to come and make use of this great-tasting resource, saying "Not only is our water good to drink, it is very good for our teeth and makes exceptional beer. I can just see a brewer making Barcaldine Bitter, Artesian Ale and Black Boar Beers here in town in the future."

As usual in the state finals, the results were very close and Barcaldine narrowly pipped Livingstone's Woodbury Water Treatment Plant drop to take the honours.

Barcaldine will take on the NSW winner in the fourth Water of Origin Taste Test to be held at the Water Industry Operators Association of Australia (WIOA) Conference in 2016. Queensland has beaten NSW for two years in a row with water from Richmond and Bundaberg beating NSW winners Orange and Bega Valley respectively.

But the fun doesn't stop there either – on 29 October WIOA held the first National 2015 Ixom Australia Best Tasting Tap Water competition with the five winning states of this year's water taste tests invited to submit a sample. Victoria's Goulburn Valley Water took the honours this year, but fingers crossed our ancient water will knock them out next year.

Next year we aim to change the format of the taste test with only one big event to coincide with the Innovation Forum to be held on 15 September 2016.

We'll be providing our members with taste test kits to ensure you enter your top drop for the competition. Watch this space!

Below: Brett Harvey from Barcaldine Regional Council receives the winning trophy from taste test sponsor Ixom's Glyn Parry



Merry Christmas
and a Happy New Year

from Dave, Rob, Heather,
Michelle, David S and Desiré

Update from CEO

Welcome to the last newsletter for 2015.

qldwater is celebrating its best ever membership result and despite being spread thinly at times, a lot has been achieved this year. We have successfully accumulated a large number of development tasks to keep us busy over the traditionally quieter time of year. This is probably “code” to suggest that some things have fallen a bit behind, but it reflects the nature of our role during a state election year (particularly a new flavour of government), leading into local government elections.

We maintain positive relationships with key agencies. Regional alliances, changes to SWIM and the introduction of mandatory KPIs have probably dominated our DEWS-related work, with ERA 63 featuring prominently with DEHP. DET (particularly training) continues to enjoy an enhanced profile with the new state government and we have been well engaged in the development of new training strategies.

We are extremely disappointed that the legislative amendments required to see the draft Code of Practice for Sewage Pump Stations enacted continue to be delayed. After over two years of development (at the department’s suggestion) the Code is ready and the uncertainty for service providers and environmental outcomes needs to be urgently addressed. Hopefully there will be something more positive to report by the time this newsletter is produced.

Our 2015 event program saw around 200 registrations, with many excellent papers and panel sessions. There will be several changes in 2016, with events in Hervey Bay, Emerald and Townsville and the Innovation Forum returning to Brisbane in September. Our Technical Reference Group has restructured its meeting format with strategic TRG meetings planned for February and September. Our DBYD Water Connections Week will happen in mid-May travelling in and around Townsville and down to Mackay. We will continue to offer small Ixom taste test events where there is interest (we have some other competitions planned for regional events) and will compile the score cards and other necessary materials into a kit for members who wish to run their own. Otherwise, our focus will be on a single major state-wide taste test in conjunction with the Innovation Forum in September, and Origin competition in June with WIOA.

There is no room here for a comprehensive review of our other priorities for 2016, but I’ve selected a few highlights which will warrant particular attention, primarily because they are front of mind with government, or aren’t but should be, in no particular order.

Private Water Utilities – I think Matt Dawson from AWA provided a great summary of how private-public partnerships can be effective at our Innovation Event – the private sector is a major service provider in the urban water space and the industry more broadly looks forward to the opportunities that greater

private sector involvement could bring. It is crucial however, that it is supported by a sound regulatory framework, which effectively manages risk.

Infrastructure Investment – Broad subsidy programs are clearly a thing of the past and we need to be taking steps towards something which is both sustainable and links better to planning for change. We (**qldwater**) need to raise the profile of the massive investment of local government entities in environmental protection through sewage treatment infrastructure to all key agencies, the importance of protecting those assets, and improve understanding of costs vs benefits. The draft State Infrastructure Plan has numerous notable omissions, but the near complete absence of sewage infrastructure is particularly embarrassing.

Drinking Water Quality – We bang on about it a lot and see evidence of significant improvements, however we still believe the support for regional and remote providers has to be better addressed. You will see the national Water Industry Skills Taskforce publish a revised operator certification framework soon and we will be doing our best to use that to focus attention on these needs. There are many other skills issues on the agenda.

Customers – Social media and technologies have driven different expectations from and of customers. It is a challenging space for a traditional engineering/ technical industry and ignoring those changes is no longer an option in many areas of the sector.

Monitoring, Reporting and Benchmarking – We have been building capacity in this area for a long time now. While we don’t expect you all to get as excited about the prospect of better data and benchmarking as we are, the opportunities for improving the strategic dialogue around who pays for what and defining efficiency are absolutely necessary for the future sustainability of the sector.

Thank you all for your support throughout the year, with particular attention to our parent bodies and tireless TRG and other reference group members. I’d like to specifically acknowledge our excellent and hard-working team – Rob, Heather, Michelle, Dave S and Desiré and also express thanks to Arron, Simone, and Greg Hoffman from LGAQ.

Our office will be closed between Christmas and New Year, but the phones will be diverted to someone as needed. As I look at the pile of uprooted shrubs at home from a bit of blowy weather I am reminded that storm season is invariably challenging for members, and wish you all the best for a safe and relaxing break.

Dave Cameron

Innovation Forum

The **qldwater** Urban Water Industry Innovation Forum was held on 4 & 5 November at the Sunshine Coast. Both the Unitywater technical tour and the conference were a great success with approximately 85 attendees.

We thank Unitywater for supporting the event as well as our conference sponsors – SPEL Environmental, LGAQ, Royce Water Technology, Water Research Australia, Lonza Treatment Technologies. Best papers at the event went to Kim Moore from Unitywater and Nicholas Paul from James Cook University.

The **qldwater** program for 2016 is being developed with the Innovation Forum to be held on 15 September.



Training top priority at Unitywater

The 2016 Innovation Forum kicked off with a technical tour of a number of Unitywater's facilities with attendees welcomed at the Northern Service Centre to learn more about the SCADA system, solar power and training facilities at the site.

Delegates were impressed by the two training environments set up to mimic the organisation's SCADA, electrical, instrumentation and control equipment at its sewage pump stations and STPs.

The training facility includes RTUs, PLCs, networking devices and infrastructure, radios, ClearSCADA servers and interface, all in a non-production environment where the trainees can learn and build their confidence to attack real world problems with confidence, proficiency and efficiency and in a safe manner.

Unitywater Acting Branch Manager (Mechanical and Electrical), Chris Dawson (pictured above), said the purpose of the training facilities was to train their electricians, fitters and pump station attendants how to diagnose, configure, program and replace STP and reticulation network electrical, instrumentation and control equipment and to use ClearSCADA to fault-find on real sites.

"We are currently delivering two hours per week for both northern and southern training environments which will be ramped up to four hours per week using the videoconference link between the two training environments," Chris said.

"Our aim is to upskill all M&E staff starting with the Electricians (including fitters that have restricted licence holders) in all the latest standard Unitywater equipment and keeping our M&E staff proficient at working on the equipment they face in the field."

Unitywater is also investigating the income opportunities in training staff from other water entities, industry and TAFE, given the large mining FIFO workforce on the coast.

The technical tour also included visits to the Maroochyodre STP, a Magnesium Hydroxide site and the Preston Road Pressure Reduction Generator.

Skills Update

New National Water Training Package Released (NWP15)

Over the past couple of years, a review of the National Water Training Package (NWP) was undertaken to both refresh the existing content and upgrade the package to the new standards for all national training packages. An updated version of the National Water Training package (now NWP15) has been endorsed and released.

Key changes in the new training package include;

- Streaming of qualifications
- Introduction of new 'skill sets'
- New rules regarding which units you can choose to create a qualification
- Individual units no longer have 'levels'

The New NWP15 Qualifications include;

- Certificate II in Water Industry Operations (specialisations – networks, source, treatment, irrigation, general)
- Certificate III in Water Industry Operations (specialisations – networks, source, hydrography, irrigation, general)
- Certificate III Water Industry Treatment (specialisations – drinking water, wastewater, general)
- Certificate III in Irrigation

- Certificate IV in Water Industry Operations (specialisations – networks, trade waste, source)
- Certificate IV in Water Industry Treatment (specialisations – drinking water, wastewater, general)
- Diploma in Water Industry Operations (specialisation – general, hydrography, trade waste, irrigation).

The current funding arrangements for water operations qualifications will need to be reviewed in light of the recent changes to the training package. **qldwater** has provided the Department of Education and Training (DET) with the relevant information on the changes to the training package for its consideration of the funding arrangements. An update will be provided when changes have been implemented.

There will be a twelve month transition period whereby learners currently enrolled in old NWP07 qualifications will be able to complete their qualification.

A simple information sheet outlining some of the key changes in the National Water Training package has been developed by **qldwater** and is available on the website under Skills and Training.

If you have any queries related to the changes to the training package, please speak to your training provider or contact Michelle Hill at mhill@qldwater.com.au or (07) 3632 6853.

Amendments to STP Operator Certification Framework

A number of amendments to the Sewage/wastewater Treatment Plant Operator Certification Framework (released by the Queensland Water Skills Partnership earlier in 2015) have been made and an updated Framework is now available on the **qldwater** website. The changes relate primarily to the professional development requirements and aim to establish more rigour.

Request for feedback on changes to the National Certification Framework for Operators of Drinking Water Systems

The Water Industry Skills Taskforce (WIST) is currently inviting industry comment on a number of proposed amendments to the Proposed National Certification Framework for Operators within Drinking Water Treatment Systems. Further details on all of the proposed amendments are outlined in the documents available on the **qldwater** website at http://www.qldwater.com.au/Skills_water_operator_programs.

Please email any feedback or comments to skills@qldwater.com.au by Friday 22 January 2016.

Strong growth in Water Skills Partnership

There was a very positive response from industry following our call for renewals and subscribers to the Water Skills Partnership for the 2015/2016 financial year. The Partnership has grown to 40 subscribers and welcomes the four new members.

The Water Skills Partnership Industry Leaders Group meeting was held on 8 October. Research was conducted at the meeting to inform the briefing papers to be provided to DET as part of the contract to provide information on vocational training in the Queensland water industry. There are a number of actions to follow up regarding training courses (e.g. contractor management training, asbestos training) and ongoing training coordination activities.

Alan Kleinschmidt stepped down from the role of Chair and Dick Went (Gold Coast Water) has been elected the new Chair. We thank Alan for his significant efforts in promoting skills development for the industry.

QWRAP secures funding

With State Government funding secured for another three years, the Queensland Water Regional Alliances Program (QWRAP) can continue its work to find fit for purpose solutions for participating members.

The additional funding through the Department of Energy and Water Supply and in partnership with the Department, LGAQ and **qldwater** will be used to analyse the costs and benefits of regional approaches, giving participating councils access to a bid pool of funds based on criteria which have been documented and circulated to each of the groups.

Under the new funding agreement, one new region is to be formed and greater emphasis will be placed on state-wide issues.

Not surprisingly, one of the key issues for the first year will be water security with much of regional Queensland in the throes of drought. A small annual allowance has been allocated for research projects and the first is likely to be focused on sharing ideas and technologies to improve water security in regional Queensland.

Negotiations to establish the fifth group are currently underway in the Downs and Surat Basin Alliance of Councils, with a separate pool of funds put aside for the new region.

A portion of the QWRAP funding has been allocated to support regional coordinators in the existing four areas to develop annual plans for regional approaches.

Funds have also been identified for **qldwater** to manage the QWRAP program.

SWIM Update

SWIMLocal streamlines data submission

This year saw the first use of the *SWIMLocal* Annual Data Tool as the data entry method for Service Providers' annual water and sewerage data. Some software improvements have been identified and planned to be implemented before 2015/16 reporting starts.

The new database system helped prevent many of the common issues previously experienced while using Excel and has greatly streamlined the management of indicators and data submission.

Development of a tablet (iPad/Android/Windows) data entry module for *SWIMLocal* has entered its testing phase and should be complete within the month.

If you are interested in trialling *SWIMLocal* or the Task Module or have any ideas, thoughts or suggestions, please contact David Scheltinga at dscheltinga@qldwater.com.au.

Coming to grips with KPIs

It's been a case of "just keep swimming" as we all come to grips with the Queensland Government's new Key Performance Indicator (KPI) reporting process with 82% of Queensland service providers using SWIM this year.

SWIM training was extensive this year (14 locations, 51 organisations, 125+ people). Next year's training will be limited, but if you need more information about the SWIM system (software and indicators) please contact David Scheltinga at any time.

The Water Supply Planning and Regulation division in the Department of Energy and Water Supply has completed its first round review of KPI data lodged through SWIM (and in a small number of cases directly to DEWS) in October. While the department has identified significant concerns with some of the submissions, they have indicated that they will not be issuing PINS in this first year of reporting and **qldwater** has been in discussions with DEWS to attempt to help facilitate practical ways of addressing these concerns. We are also holding discussion with DEWS, ABS, BoM and NPR regarding indicator rationalisation and definition improvement for 2015/16.

More information will be provided to WSPs on specific expectations, but in general:

- Many data cells included "ND" (No Data) without explanation.
- There were significant data gaps, including for indicators which DEWS considered either important or relatively simple to collect, without explanation.
- While many WSPs expressed concern around indicator definitions as data was being prepared, very few included feedback in the lodgement. This information will be reviewed with a view to improving the framework, if it's actually provided.

We will continue to offer full support to members in preparing their data for lodgement.

QWRAP facts



More than 2 billion dollars
Value of water and waste water assets managed by councils participating in QWRAP. Recent estimates have calculated Queensland's total value of water and waste water assets to be more than 25 billion dollars.



43% of Queensland's total land area
Size of the QWRAP areas, or about 10% of Australia's total land area. This area is roughly the same size as New South Wales, and would be the 38th largest country in the world based on total land area.



120 communities
Communities within QWRAP areas currently serviced by water and waste water infrastructure.



45% of Queensland's regional population
The population outside of South East Queensland that live in a QWRAP area.

IPWEAQ Water Project Awards

IPWEA Queensland announced the winners of the Excellence Awards at their Queensland State Conference and Gala Dinner held in Mackay on 13 October, with *qldwater* again sponsoring the water project awards.

Congratulations to the recipients of the following awards:

Water, wastewater, sewerage and drought management projects over \$10 million: Western Downs Regional Council Accelerated Capital Works Program

Managing infrastructure in a resources region which has experienced significant boom and bust cycles is challenging, but a new approach including a stakeholder steering committee has allowed Western Downs Regional Council to stage projects, ensuring that regional water and sewerage infrastructure stays ahead of growth in service demand and leaves a legacy of benefits for communities. By developing an innovative delivery model (Hybrid Early Contractor Tenderer Involvement Contract – HECTIC) to fast-track project delivery, the Accelerated Capital Works Program was due to deliver \$120M in capital investment by 2017, including three new Sewage Treatment Plants, six new Water Treatment Plants, four Sewage Pump Stations, 26km of new pipelines and 30 ha of sporting field irrigation.



Water, wastewater, sewerage and drought management projects \$5 million to \$10 million: Mackay Regional Council, Marian WTP

Mackay Regional Council was awarded for a well-planned process that considered supply and demand factors and delivering innovative technologies to address variable source water quality and ensure a small plant footprint. The recently commissioned water treatment infrastructure uses a new source, improving both water quantity and quality.



The project was split into two contractual delivery mechanisms (construct to detailed design for the raw water intake and design and construct for the WTP) to minimise project risk and positively influence price.

Water, wastewater, sewerage and drought management projects \$1 million to \$5 million: Richmond Shire Council/ Aeramix Richmond WTP



Driven by Richmond Shire Council's desire to improve the water provided to the community and visitors, as well as a desire to implement better approaches to demand management, RSC appointed Aeramix to find a fit for purpose solution to this small community.

By using a variety of innovative processes and field trials, they developed a solution that maximised the use of the "less than ideal" existing assets to successfully address significant issues with source water quality, including odour, iron and manganese. The plant now produces award winning water which further allows council to reduce demand through metering options. The "wins" for the community far exceed the costs.

Water, wastewater, sewerage and drought management projects under \$1 million: Etheridge Shire Council/ Aeramix/ Richmond Shire Council WTP / Georgetown WTP



With a rapidly dwindling water source producing excessive iron and manganese and ultimately delivering badly discoloured water to the community, this project set out to create a temporary fix for water quality issues, but ended up achieving a permanent solution in the process.

This project is an excellent example of collaboration facilitated by a contractor to adapt an unused package plant from another council to deliver quality drinking water to a community. The solution was implemented rapidly, adopting primary filtration for wet season turbidity with fine grade catalytic filter media for iron and manganese in the dry.

**Innovation and/or Introduction of New and/or Improved Techniques in water, wastewater, sewerage and drought management:
Mackay Regional Council - Transformation of a Water Business**

Mackay Regional Council fundamentally challenged “traditional” approaches to running a water and sewerage business by

acknowledging customers as an integral part of the approach. The project included the automation of field data capture, online source water quality monitoring, integrated water testing results and development of a single database to store and manage all operational data backed by a social marketing campaign and the introduction of real time tools to help customers manage their usage and identify leaks.

Investments have seen both a reduction in operational budgets and the forward capital program. The approaches to planning and culture of innovation are being keenly observed by the broader industry, with a strong state and national profile.

Dawson Wilkie Best Paper Award

Blackwater Improvement Project – Stuart Doak and Greg Bourke



GBR Taskforce aims for ambitious targets

The Great Barrier Reef Water Science Taskforce met for the third time in November 2015. The Taskforce was established in 2015 to provide advice to the State Government on how to can meet the ambitious water quality targets and priorities for investing an additional \$90 million over five years.

The main focus of the workshop was refining the Taskforce’s Interim Report which contained a series of conclusions and recommendations about broader systems reform that would improve communication, better align programs and reduce fragmentation. It also included recommendations about a blend of instruments to be used and the priorities for investing the additional funding.

The Interim Report, which included the conclusions and recommendations and investment priorities, will be finalised in coming weeks with the aim of releasing it for public comment in mid-December 2015 with a range of engagement activities planned. Submissions will be accepted until the end of February 2016. The Taskforce will then analyse the submissions, refine their recommendations and provide a final report to the Queensland Government by May 2016.

More information is available at <http://www.gbr.qld.gov.au/priorities/>.



Events Calendar

Date	Location	Host	Event
13 April - pm	Scarness, Hervey Bay	Wide Bay Water Corporation	Technical Tour
14 April	Scarness, Hervey Bay	Wide Bay Water Corporation	SEQ Conference
16 - 20 May	North Queensland		Water Connections Tour
20 July	Townsville	Townsville City Council	NQ Conference
11 August	Emerald	Central Highlands Regional Council	CQ Conference
14 September	Brisbane	qldwater and Seqwater	Queensland Best of the Best Water Taste Test - open to all Queensland Water Service Providers
15 September	Brisbane	qldwater and Seqwater	2016 Innovation Forum

Photo bomb us!

Over the years we've tried to engage our members in fun activities – some admittedly more successful than others. The Lego Water Treatment Plants provided to taste test winners have always been a hit and since we're all big fans of Lego, we've decided to set our little Lego minifigs free and see where they end up.

We will be handing out little Lego figures at all our events next year (the first ones have already found homes after the Innovation Forum last month), and we would like you to send us photos of your little man (or woman – keep an eye out for them!) at water and sewerage worksites across Queensland.

The best picture will be announced at the 2016 Innovation Forum. We haven't selected a prize yet, but trust us, it will be great!

