QueenslandWater

/ Issue 26 / December 2019

The best of 2019

As we near the end of another year, we look back on the highlights and acknowledge our members who serve their communities day in and day out, battling drought, fires and floods and whatever nature can throw at them. We trust that the connections forged through the Directorate will give us the strength to tackle the challenges that 2020 and the next decade will throw at us – and being Queensland, it seems like we need to be prepared for just about anything!

Mackay water best in Australia

Water from Mackay Regional Council's Marian Water Treatment Plant continued its winning streak having won the *qldwater on tap* Best of the Best Queensland Water Taste Test two years in a row before being selected top drop in the fifth annual Ixom Best Tasting Tap Water in Australia.

The national taste test was held at the 3 Peaks festival in Dunkeld, Victoria in October where festival goers participated in a blind taste test of seven entries from across the country.

Stuart Boyd from Mackay Regional Council was pleased to accept the trophy on behalf of the Mackay water team.

"In many ways having the community do this was a true

test of the best tasting water rather than being conducted by a panel of industry professionals that might focus on other aspects of the water other than taste," Stuart said.

"All state finalists had excellent entries and there was plenty of debate in the community about what they thought was the best tasting and why. The overall consensus was that they were all fine drops and there was increased awareness of not just the health and economic benefits of tap water but also the high quality of water that is available around Australia."

Stuart said the win was a pleasant surprise, providing greatrecognition to the dedicated and professional MackayWater Treatment Team.(...continued p.2)



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Taste Test continued...

The source of water is the headwaters of the Pioneer River which originates in the tropical rainforests of the Eungella National Park and the Crediton State Forest. It is treated at the Marian Water Treatment Plant which provides water to more than 6,000 Marian and Mirani residents. The plant uses clarification, filtration and chlorine disinfection processes to treat the water to meet the Australian Drinking Water Quality guidelines.

The other samples came from Nowra in New South Wales, Launceston in Tasmania, Swan Reach in South Australia, Geelong in Victoria and Perth representing Western Australia. Mackay will now go on to represent Australia at the Berkeley Springs International Tap Water Tasting competition in the US next year and will get to host the next national event on home turf.

Previous Winners:

- 2018 Hamilton, VIC Wannon Water
- 2017 Mt Kynoch, QLD Toowoomba Regional Council
- 2016 Barrington WTP, TAS Tas Water
- 2015 Marysville WTP, VIC Goulburn Valley Water

IPWEAQ President's Award

The water industry featured well at the IPWEAQ Annual Conference gala awards night in October, most notably for the President's Award going to long time *qldwater* stalwart **Trevor Harvey** from North Burnett Regional Council.

Trevor first joined the **qldwater** Technical Reference Group originally as a councillor back in 2005 and has the honour of having attended the most **qldwater** meetings and events of any member representative since then. Trevor served as TRG Chair from 2013 to 2014 and had the opportunity to join the annual Water Connections Tour (to North West Queensland) in 2018. He has always been an incredible supporter of the Directorate, and particularly the smaller organisations it represents.

Trevor is an incredibly likeable bloke and his friendly and pragmatic demeanour has often meant those with whom he engages are more inclined to "open up" when troubleshooting.



Trevor epitomises *qldwater*'s "fit for purpose" infrastructure management mantra, implementing a range of innovative trials for North Burnett's small communities and openly sharing the results to encourage more costeffective approaches for members with similar challenges.

Congratulations to all other IPWEAQ awards nominees and recipients, but special note to the "watery" winners:

Asset Management Award

Logan City Council, with the The ultimate airtask: the Greenbank Reservoir Complex renewal project.

Innovation & Sustainability in Water

Urban Utilities & Abergeldie Complex Infrastructure / Obayashi Corporation (AOJV), with the Kenmore Jindalee Cross-River Water and Sewer Pipeline Project.

Water Projects under \$1 million

Cassowary Coast Regional Council, Cardwell Water Quality Improvement Project.

CEO Report

Our last TRG meeting for the year is done and dusted which means the Christmas break is approaching. I'm very proud of what our staff and key stakeholders have helped us achieve in 2019 in influencing the broader policy agenda towards manageable outcomes for members and their customers, as well as the significant growth in collaborative initiatives.

I'm also mildly apologetic that we haven't quite delivered yet to our proposed "roadmap" deadlines, but aside from the dog eating the homework, there have been a few good reasons for that, including the whole thing being crazily ambitious. Our revised plan will see sections of the document released for feedback between now and June 2020 – we really need the benefit of events and associated workshops like the small communities one in development for Goondiwindi in May to be able to do the related roadmap section justice, for example.

What we can do now is attempt to give a brief sense of the sentiment expressed by members throughout our consultation to date. This is by no means a comprehensive list, but it is supported by polls and workshops and does reflect themes which came out in some way at pretty much every event held during the year. It captures apolitical "next steps" which should be done now to best enable improvement in the way our sector manages its infrastructure and services. It is important to note that we are probably trying to pitch at some sort of "midpoint" for the sector, which is a challenge with utilities ranging from fewer than 100 to 600,000 connections:

- **Transparency** Improved transparency of costs to serve across communities and among tiers of government, better use of existing data, a targeted approach to capturing new data.
- Incentivised or mandated long term asset management planning beyond budget cycles, with stronger education and involvement of customers in infrastructure investment decisions.
- Collaboration across the sector and at a regional scale, including engaging a range of smart people from the sector in targeting investment to fit-for-purpose infrastructure, TOTEX, operational capacity, and ongoing mentoring, training and support.

Consider the Reef MIP approach to prioritising investment as a future model of sound, "bottom up" infrastructure planning.

 Sustainable funding for water and seweragereplacing current grants with a model targeted to priorities, strategically evaluated, and not restricted to capital. The recent Productivity Commission and Infrastructure Australia reports include options to be considered.

"...New South Wales and Queensland provide assistance through poorly targeted capital grants. The Australian Government has also provided capital grants for urban water projects, contrary to NWI principles. These capital grants should be replaced by CSO payments that are tightly targeted at high-cost service areas and not tied to capital expenditure. CSO payments should be made contingent on the recipient providers exploring all opportunities to improve the efficiency of their services, taking into account the future viability of services and alternative options."

- Productivity Commission Report 2017

"Grant funding for specific capital projects also raises risks of over-investment in new assets when other options such as demand management or targeted maintenance programs to extend the life of existing assets could be more efficient and beneficial to local users."

- Australian Infrastructure Audit 2019

Does this resonate with you? Please feel free to argue if you think this is on the wrong track.

Have a safe festive break, from all of us at the Directorate.

Dave Cameron



QWater '19

The AWA QWater Conference featured an excellent line up of speakers covering a wide range of topics. Some of the highlights included:

Lessons learned from Havelock North

When the drinking water supply for Havelock North was contaminated with Campylobacter in August 2016, the resultant outbreak led to 4 fatalities and an additional 5,500 people becoming sick.

Featuring excellent presentations by Hastings District Council, Seqwater and Taswater, the session was livestreamed to 20 participants representing 13 members or affiliates, and we know that there were several people listening in at many of the sites.

3 Waters Manager from Hastings District Council, Brett Chapman, provided a first-hand account of the preconditions for a disaster, followed by accounts from Seqwater and TasWater on decisions taken to either upgrade or shut down unsafe schemes they inherited post amalgamations. By openly discussing the common problems, we hope that other providers can pre-emptively act to prevent their own waterborne outbreak.

Those who missed out on the livestream can now **watch it online** – it is highly recommended viewing.

Indigenous Program Wins Best Paper

The best paper was awarded to Chris Blake from the Tropical Health Service for his overview of the Safe and Healthy Drinking Water in Indigenous Local Government Areas Program.

While the tangible reduction in E. coli detections and reduction in boil water alerts across the participating communities are significant achievements, the way the program has engaged the staff and contributed to a positive culture is awesome. And who wouldn't put in a bit of extra effort to be rewarded with an awesome team shirt!

Southern Downs Brace for Day Zero

Two other presentations that provided real experiences to underpin an issue which has been at the forefront of the media for a while came from Southern Downs Regional Council. In "Water Security – Be Prepared" and "A Parched Community", Jill Yeaman and Catherine Travers gave an honest review of the dire situation in their community as they approach day zero when their dams will run dry. Jill's presentation coincided with the first delivery of raw water being trucked in from Warwick to Stanthorpe.

It was interesting to hear about the different programs implemented to get community understanding about the situation. According to Catherine, timing is everything with water saving campaigns and their initial foray into community engagement wasn't as successful as hoped.

When Council started to hand out water saving buckets at the start of the campaign, the community thought it was a joke and social media poked fun at what was believed to be a media stunt, but when the reality of the situation hit, the buckets became life savers! Truth is, there is nothing quite like a bucket to stretch water resources, and according to Catherine there wouldn't be a home in Stanthorpe and Warwick that doesn't have a bucket collecting bath and shower water to reuse for flushing toilets or watering plants. The "What can 100L look like" publication has been widely popular too.



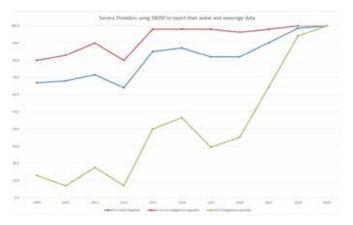
Membership Highs

We are proud to have secured 100% qldwater membership renewals for 2019/20 with 72 full members and 6 affiliates investing in our projects and services.

This is the second time in our 15-year history we've managed to achieve this great result. While strong membership obviously helps the Directorate's financial security, this voluntary response is fantastic for a notfor-profit organisation and particularly important in supporting our advocacy to government on behalf of the sector.

SWIM is also breaking records, with 100% of service providers using the system to report their water and sewerage data. Built for the industry, by the industry, we will continue to improve and enhance the system to ensure our members get the maximum benefit. Along with the success of QWRAP and the WaterSkills Partnership, our programs continue to build strength and resilience in an increasingly difficult environment.

Thanks to all our members for the continued support of these critical industry initiatives .



Scholarship brings Mornington Shire employee to Cairns

Mornington Shire Council Plumbing Supervisor Jarrod Martin enjoyed a trip to Cairns to attend WIOA's FNQ Interest Day in Cairns and spend some time exploring treatment plants thanks to a QWRAP/ QWRCIP Scholarship, supported by the Queensland Government.

Mornington Island Shire Council said they valued any support to increase their workers' knowledge, skills and professional development, and that it was a great learning experience.

Jarrod was pleased to be nominated and for the opportunity to progress his career in water and wastewater treatment and water management solutions.

"My goal is to gain a better understanding of water treatment and wastewater management solution industries and I will use the knowledge I gained from the experience in practice at Mornington Shire Council's water treatment management and wastewater solution programs," Jarrod said. "This experience will not only help me but will also positively impact and benefit my local community's progress in the management of water and wastewater."

Jarrod spent two days with the Cairns water treatment team and technical experts where he was shown around various treatment plants and accompanied them on the reservoir runs.

He then attended the WIOA Interest Day in Cairns on Friday, 11 October which included presentations from operations staff about new or updated plants, processes, innovations and technology. The day concluded with barefoot bowls and a couple of coldies with other water operators.

The Queensland Water Regional Communities Innovations Program (QWRCIP) provides up to four scholarships to employees of *qldwater* full member organisations with 10,000 or fewer connections to attend *qldwater* events and spend time with a technical specialist at larger utilities.

Image: Jarrod catching up with Mark Gwynne, Mark Smith and Simon Page



Annual Forum Wrap

The **2019 Annual Forum** hosted by Logan City Council received excellent feedback on presentations and particularly the Cedar Grove Tour. Apart from the technical aspects relating to the design and construction of the new facility, it was interesting to hear about the high level of customer engagement which turned complainants into community advocates.

Day two involved an i**ndustry roadmap planning workshop** to help inform collaborative opportunities and policy recommendations for the Queensland water industry.

Six topic leaders set the scene for discussions around certain themes:

(mages from Cedar Grove Tour and Annual Forum held at Logan Metro Indoor Sports & Events Centre)

Industry skilling challenges

Narelle D'Amico, Bundaberg Regional Council

"Asset management is critical to our sector and if we as an industry don't consider different approaches to the way job roles are structured to support this function, we are going to struggle to continue to provide critical services to our communities. We need employees who have a **commitment to learning and are adaptable**, to cope with rapidly changing technology, population growth (and decline) and ageing infrastructure."



Catchment resilience in a changing environment

Chris Mooney, Dept of Env and Science

"With **limited resources** and capacity issues we know many sewerage service providers can struggle to manage systems at times and **climate change will see more challenges** with increased instances of extreme events. Environmental protection cannot be compromised, but regulators are **developing more flexibility** to help utilities implement **fit for purpose solutions**, including point source offsets. When are you going to get your act together and start taking them up?"



Data transforming the water sector / Next Gen Water

Martine Watson, Unitywater / SWAN

"SWAN is a cost-effective way of tapping into a group of utilities with a common interest. These **emerging technologies can be overwhelming** and while our sector has a strong track record of embracing change, it tends to do so in isolation. We have a great opportunity to **stimulate better information exchange** and collaborative trials, leading to **more robust technology solutions** for the ultimate benefit of our customers."





Sector-wide investment and regional innovation Trevor Dean, Fraser Coast Regional Council

"Under-utilised infrastructure, flawed technology, unaffordable OPEX- there would not be a person attending the forum that couldn't give an example of a 'dumb' investment they have seen... or unfortunately been part of. How do we, as water service providers, make sure that our asset investment programs are 'prudent and efficient'? What can we do to ensure that a pipeline of funding is available to allow replacements to be delivered at the optimum time and not just when grant funding permits? All this while still delivering an affordable service. What is the definition of 'affordable' anyway?"



Understanding customer expectations Ben Steel, Logan Water

"The reality is that **customer expectations are changing**, other industries are moving with them and **the Water Industry needs to respond**. Strengthening the experiences of our customers and renewing water utilities' focus on ensuring customers are at the heart of everything we do is critical to ensuring the sustainability and success of water and wastewater service delivery. Water utilities across the globe are investing significant effort and attention into **creating positive customer experiences** to deliver greater power to the customer. Expectations carry over, and soon customer experience will be a baseline, not a differentiator. The customer of the future wants to be at the centre, meaning an industry shift from asset to people-centric mindset is needed."



Harmonising water regulation Lisa Welsh, Sunwater

"As a state-owned entity, Sunwater is monitored by QCA. There are pros and cons to regulation and for smaller organisations the cost of delivering rigorous pricing oversight will often outweigh any benefits to customers. Whether regulated or not, every QLD publicly-owned utility has an obligation to work towards understanding its costs and benchmarking appropriately for the ultimate benefit of its customers. Indeed, with successive national reviews recommending independent economic regulation for urban water service providers, the ability to demonstrate some rigor in these areas is becoming increasingly important."



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Annual Forum Wrap continues...

The workshops enjoyed strong participation from stakeholders and lots of valuable discussion, and while it is impossible to fix everything that's problematic with our sector in a day, the top 5 themes from the voting process at the end of the day were:

- 1. Regionalisation/ collaboration
- 2. Salary and industrial relations
- 3. Mandatory competencies
- 4. Consistent complaints mechanism
- 5. Offset delivery broker

Other highlights from the event included **Chris Bradley** from Bombardier who gave some great insights into safety in the rail industry, and fascinating keynotes from Linda Dobe and David Brooker.

View more Annual Forum photos from **Day 1** and **Day** 2 on Smugmug or **download presentations** from the event (available to delegates or **gldwater** members only).



Thanks to our small group of committed sponsors:



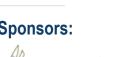
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QUATEC-MAXCON We treat water properly

Vendor Showcase:



TRG News

Congratulations to Narelle D'Amico who has been appointed as the new TRG Deputy Chair.

We have sign off on the approach for the majority of our planned 2020 activities with two major workshops with themes around managing services for small communities, and making the most of existing systems with a focus on networks.

There are many new topics under investigation from the group including a potential UK study tour mid 2021, an outreach program working with DNRME for some targeted remote communities, research collaboration

with Seqwater, and investigations around Low Explosive Level (LEL) gases. We are investigating adding a new event mid-year – a chance to look at both collaborative research opportunities and revisit/ compare notes around automated metering with interested service providers.

There are several discussions on our **Zoho Forums site** so keep an eye out and get involved, or contact enquiry@qldwater.com.au if you think our broader member network might be able to help with an issue you're having.

Vendor Showcase Winner

We checked in with Mark Wiltshire from Aquatec Maxcon with a few questions, including why winning the Vendor Pitch session at our Annual Forum was the best thing since sliced bread. Here's what he had to say:



Why did you decided to participate in the vendor pitch at our Annual Forum, and what does your win mean for your organisation?

We have been supporting all of the Water Directorate's forums across Queensland and the annual forum is a great way to cap off the tour. It's also great to see so many QLD water industry managers and decision makers at this forum in particular and to be able to participate in the feedback sessions that the Water Directorate facilitate and take back to policy makers.

We are very grateful to have an opportunity to showcase Aquatec Maxcon's role in the water industry to this key audience. Like the Water Directorate, we like to offer different perspectives on our work and present it in a more interactive and fun way. So it's great to feel that the audience appreciate our efforts and acknowledge our messages.

What are you / your organisation trying to achieve with the urban water sector, and what excites you?

Aquatec Maxcon build and upgrade water and wastewater plants. From this solutions-based focus we have grown a products and technology supply and service business. So the innovation capacity we have in design flows through to our products and services. This is shown throughout our 50 year history where we frequently introduced new more efficient and effective treatment technologies to the Australian and overseas markets. Many of these technologies are now accepted business as usual approaches such as MBR, Aquablade fine bubble diffusers, Nereda granular sludge treatment etc. Aquatec Maxcon is very much at the 'doing' end of the urban water sector and applying that great body of knowledge and experience to share and innovate at the cutting edge of industry is very exciting.

What do you think about the current technologies available now and what it means for the water industry?

The key drivers of climate change and increased urban densification and development in the water sector are focussing emerging technologies on **more compact**, **lower cost**, **lower carbon solutions** with greater automation. More importantly, these drivers are requiring water asset managers to **adopt new ways of doing things in shorter timeframes**. Aquatec Maxcon sees great opportunity to apply these technologies in the water sector and more specifically help water asset managers adopt and integrate these into their businesses.

Is there anything exciting in the pipeline that you are looking at bringing to the market?

Aquatec Maxcon have entered the modular, low carbon wastewater treatment space with the Fluence **MABR** packaged treatment system. The MABR system provides small to medium sized towns and commercial sites with a low cost, simple to manage secondary and tertiary wastewater treatment systems. The modular design allows the systems to scale up or be moved to different locations. We are receiving great interest and feedback on how the MABR design can be utilised by our clients, so we are very excited for the future of this product in rural, regional and emerging urban communities.

The UV water disinfection sector continues to innovate and drive greater power efficiencies. In the coming year we will be introducing new much more compact and power efficient water and wastewater products.

Read more about Aquatec Maxcon's products and services bly clicking on the image below.



Program Updates SWIMming, not drowning

We're nearing the end of a busy period for SWIM and swimlocal as Program Manager David Scheltinga tie the bows on a number of projects.

Drought / water security reporting

qldwater has included a new fortnightly drought report through swimlocal for the 14 or so impacted Councils. Reporting via **swimlocal** will reduce time in data entry and reporting while saving DNRME time sending files and collating data. We are now working with DNRME to investigate adding the four-monthly and annual water security reporting for the Department to **swimlocal**.

2018/19 benchmarking report

Work on *qldwater*'s **ninth annual Urban Potable Water and Sewerage Benchmarking Report** is almost complete with Louise Reeves developing a Power BI system to produce graphs and tables of the data. The finalised data has now been uploaded into Power BI and the report will be released before Christmas.

Better Connections

Work is progressing on getting data from external labs like Qld Health, Cairns and Toowoomba uploaded straight into swimlocal, with Cairns Lab now producing Lab results in files that can be loaded automatically. Transferring STP data directly from **swimlocal** to the WaTERS database is ongoing as well.

Improved Portal

Several modifications and improvements have been made to the swimlocal Mobile data entry web portal. It has had a major upgrade to the web-side software and systems, and now shows sync/non-sync'd data more obviously. Users can now also limit their access to the site level (not just a whole scheme). This will be released in the new year.

SWIM annual water and sewerage data reporting 2018/19

Reporting of annual water and sewerage data for 2018/19 is now complete with data successfully validated, checked and delivered to DNRME (QG KPIs), ABS, BoM and NPR.

73 Service Providers used SWIM this year to report their annual water and sewerage data. This is up from 71 last year and includes data from RTA Weipa. The Office of the Water Regulator was very happy with Service Providers supplying data on time, with limited missing data and minimal errors.

swimlocal licence subscriptions

Two new water service providers have signed up to the fully licenced version of **swimlocal**. We welcome **Kyogle Council** from northern NSW and **RTA Weipa** to the group of 41 WSPs now using the full version of **swimlocal**.

We held a SWIM planning day in November to discuss software enhancements. As a result, in 2020 we will likely be developing a new user agreement, and investing in more system redundancy.



Skills and training to tackle industry challenges

There's no doubt that our biggest asset in the water industry is our people, and qldwater continues to advocate for skills and training on a number of fronts.

Water Skills Partnership / WIW Meeting

Congratulations to Angela Robinson from Seqwater who was elected as Chair at the December meeting of Water Skills Partnership and Water Industry Worker members. Following updates on the Urban Utilities WIW Framework evaluation and Mackay Regional Council's Regional WIW pilot, the group voiced concern around the training supply market and discussed ideas to manage this growing problem. Increased collaboration between service providers, teaming up with RTOs to provide subject matter experts perhaps through a transition to retirement program were discussed. *qldwater* will pull together some ideas on different models.

Brendan Guiney, EO of the NSW Water Directorate, attended the meeting to provide an overview of skilling and training initiatives in NSW and explore potential opportunities for collaboration.

DESBT Industry Advice & Activities

qldwater received an extension to its contract to provide industry advice to DESBT for a further 5 months through to February 2020. DESBT's industry advice arrangements are under review and expected to be put out for tender to determine arrangements from 2020 onwards with three-year contracts likely to be offered. *qldwater* will submit a tender to continue providing advice on behalf of the Queensland water industry.

qldwater has also provided submissions to a number of skilling related reviews and participated in consultation at both the state and federal levels including:

• A submission in response to proposed amendments

to the Training Package Organising Framework, stressing the need for greater flexibility in the development of Skill Sets.

 Participation in co-design workshops for the establishment of a National Skills Commission, Skills Organisations and a National Careers Institute as part of the Federal Government's Skills Package.

Aqua Card

There have been 247 completions so far with the number of completions per week steadily increasing. Completions by contractors or employees of non*qldwater* members is starting to increase, with 28 paid to date.

We have been working with some councils to arrange bulk uploads of registrations and alternative options for incorporating the course into their internal training programs and are keen to do more of that. Bundaberg has enrolled 70 employees to complete the course and will be asking contractors to do the same.

Logan City Council hosted a training day for approximately 120 staff and contractors, incorporating the course into a broader Aquacard/Contamination Prevention Training workshop (see image below). Assessment was done by Logan City Council and they will provide *qldwater* with the names of alliance partners who completed the course. *qldwater* will do a bulk upload of completions to maintain our database and generate certificates.

A presentation is available to provide an overview of the course for employees or contractors – contact Carlie Sargent for a copy.



Proserpine WIW Trainees



Logan Water Alliance training day

Career Resources

qldwater has created a **new workforce section on the website** which includes a number of resources promoting careers in the water industry as well as tools to support employers. The site includes profiles of employees, career fact sheets, videos about working in the Queensland Water Industry, Operator Position Descriptions and links to other organisations' resources and will continue to be added to in the coming months.

National Water Training Package

The review of the Certificate II Water Industry Operations and Certificate III Water Industry Operations has been completed and the draft materials are awaiting final endorsement. The review of the Certificate IV in Water Industry Treatment and Cert IV in Water Industry Operations has commenced with five Queensland representatives, including *qlwater*, participating. It is intended that the two qualifications will be combined into one.

Regional Traineeship Program - WBBROC

A training day has been organised for Kingaroy on 11 March 2020 to cover off common units of competency for trainees and operators in the region. SkillsTech will provide the training with 10-12 operators expected to participate from Fraser Coast, Bundaberg, South Burnett, North Burnett as well as Banana Shire Council. Thanks to Adam Branch for hosting and for organising a tour of SBRC plants the day prior to the training.

Regional Training Collaboration - FNQ

FNQROC decided not to proceed with collaborative training, however *qldwater* is continuing to provide support to a number of councils in the region to undertake training with some still keen to collaborate. Training is being arranged in Douglas, Carpentaria, Wujal Wujal, Cairns and Cook.

Indigenous Councils Training

qldwater recently met with representatives from the Department of Health who are working with Indigenous Councils to ensure operators are appropriately trained to deliver safe drinking water. Public Health Officers are considering options for partnering with an RTO to contextualise a few key treatment units of competency from the training package. **qldwater** is supporting the Department with options and also exploring funding opportunities with DESBT.

Mandatory Certification – Operator Workforce Plan

qldwater has been working with DNRME to explore options for mandating some form of competency framework for operators. In support of this, *qldwater* is developing an 'Operator Workforce Plan' to better understand the operational workforce profile and likely investment required by the State if a mandatory competency framework was introduced. The first stage is a request for information about operators which will be sent to Water Skills Partners in the coming weeks.

Brown Card

Work has commenced on the development of an online training course for those working on Wastewater and Recycled Water network assets, similar to the Aqua Card for drinking water assets. We expect to be able to show off some initial materials at the 2020 Water Skills Forum.

Water Skills Forum 2020

The 2020 Water Skills Forum will be held on Thursday 5 March in Brisbane. Following feedback from the 2019 event, we are trialling a new venue, the Brisbane International Virginia in Boondall. The venue is less than a 20-minute taxi ride from the airport and for those travelling, the venue has on-site accommodation and preferential rates will be offered to delegates. The program is currently being developed with input from Water Skills Partners and registrations will open in January 2020.

Water Skills Partnership Subscriptions

Water Skills Partnership Subscriptions for 2019/20 were due in July with just a couple still outstanding. Just a reminder that only financial members will get access to the free registrations for the Skills Forum.



Townsville WIW Trainees

QWRAP - a year in review

The 2018-19 period saw the completion of a range of projects across each region with all QWRAP regions deriving demonstrable savings and customer service benefits from cooperative projects.

QWRAP has created a discussion at political level and demonstrated pathways for alternative institutional arrangements. This would not have occurred without the Program and incentives provided by funding to overcome the initial barriers to cooperation and institutional change.

More detail about current and future QWRAP projects as well as the benefit assessment methodology will be available in the QWRAP Annual Report due to be released soon.

Wide Bay and Burnett Regional Organisation of Councils Water Alliance



Smallest in terms of area but largest in terms of population (292,000 people), the region has a history of championing new collaborative opportunities and was one of the original three QWRAP regions that reviewed institutional arrangements in 2013. The region has strong growth and a demonstrated interest in strategic development particularly focusing on efficiencies and water supply security to underpin regional development.

Work funded in the last financial year:

- Developing a four-year plan to guide strategic collaboration and identify and prioritise opportunities for collaboration including shared services, resources and assets
- Investigating water security across smaller schemes in the region not covered by current RWSSAs
- Design and Construction Code development and governance (ongoing)
- Regional joint sewer relining project (ongoing)

Whitsunday Isaac Mackay (WIM) Water Alliance

Dominated by the resources sector and transient population changes reflect the boom and bust cycles of the region with a population of 170,000. A QWRAP group since 2013, it has evolved into one of the most progressive alliances, selecting strategic projects that demonstrate a high level of regional maturity. An ongoing hurdle within the group is the diversity across the communities served, which range from large coastal populations to small rural towns.

Work funded in the last financial year:

- Creating a training framework for Water Industry Workers
- Review asset useful lives
- Transitioning operational control of four regional STPs including a transition manager
- Hosting a regional operators forum
- Joint design of contracting arrangements for regional STPs

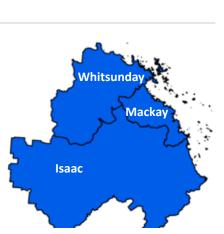
Downs and Surat Basin (DASB) Region



With a population of over 260,000 people, DASB councils are still considering the governance review that is a prerequisite for accessing QWRAP funding. Three of the five councils have agreed in-principle to proceed with recommendations from the review to date. Parts of the region are currently facing significant challenges from drought conditions and other councils and state government have sought to assist through QWRAP initiatives and joint investment in public 'water conservation' communications.

Work funded in the last financial year:

- Expansion of water security resources for regional councils
- Developing regional standards for SCADA systems



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Regional Area Planning And Development Water and Sewerage Alliance (RAPADWSA)



Encompassing a large and remote area of central western Queensland spread across roughly 400,000 km², RAPADWSA is well known for their collaborative approach to uncover economies of scale for their 10,700 residents. Despite the vast distances between communities, the region has undertaken a range of collaborative programs since 2011. Some parts of the region struggle with population decline and large seasonal tourist influxes challenging already stretched resources. The progression of projects over the prior year show what is possible in a remote region even with access to limited funds.

Work funded in the last financial year:

- A collaborative review of telemetry and SCADA systems used across the • region
- Operational database training to operators within the region
- An investigation of STP regulatory requirements and performance across the region
- Joint procurement and contracts for sewer relining

Far North Queensland Regional of Councils (FNQROC)

The 13 councils servicing 50 communities and a population of 250,000 include some of the smallest and largest council areas in regional Queensland with coastal areas spanning 1,235 km of coastline as well as remote and arid inland areas. This diversity sets the region apart from all other QWRAP regions. The group has long be known for joint procurement processes and has developed their capacity for water and sewerage projects in recent years through joint contracting for biosolids management. They are currently investigating opportunities for joint sewer relining among member councils. Some of the councils are also participating in jointly developed training programs including the Water Industry Worker training developed by the WIM Alliance.

Work funded in the last financial year:

- Training workshops to improve understanding, effectiveness and uptake of a newly developed suite of regionally consistent procurement and contract documents
- A regional drinking water quality symposium exploring key and unique • water quality issues in the region



Analysis of water and sewerage networks in Yarrabah

Emerging Regional Collaboration

Council collectives outside of the five funded QWRAP regions have been discussing regional collaboration on water and sewerage issues and some have elected to undertake cooperative projects. Potential regions include:

- North West Queensland ROC (Mornington, Doomadgee, Burke, Mt Isa, Carpentaria, McKinlay, Cloncurry, Richmond and Flinders)
- **North Queensland ROC** • (Hinchinbrook, Charters Towers,
 - Palm Island, Townsville and Burdekin)
- Central Queensland (Central Highlands, Livingstone, Rockhampton, Banana and Gladstone)
- **South West Regional Economic** Development (Quilpie, Murweh, Paroo, Bulloo, Maranoa and Balonne)

Progress is slow without seed funding to encourage the communications, coordination and trust required for joint initiatives. Three of the regions have held recurring meetings to share information, documentation and skills facilitated through QWRAP. Some groups have sought to develop cooperative projects and learn from the successes of the funded QWRAP regions.

QWRAP Research

The research budget for QWRAP in the 2018/19 period was directed to two new projects. The first undertook an extensive survey of Queensland councils to better understand **asset management practices** across water and sewerage infrastructure. The survey was conducted by experts in the field of asset management and was supported by the LGAQ. The survey received a strong response from a majority of regional councils, resulting in a high participation rate. The analysis of the results will be finalised by the end of 2019.

The second research project seeks to better understand the **value of water and sewerage services to regional economies** through engagement with an economic specialist in the sector. This research, which will examine both the tangible and intangible value of the services to the community is expected to be completed in 2020. This year also saw the finalisation of the research on the **ageing of network assets**. QWRAP Research Report 5.2, which modelled the tradeoffs in timing funding for repair and replacement of water and sewer pipes, was completed in 2018 and released as a discussion paper.

This report attracted significant attention within the industry and from industry stakeholders. Feedback from key stakeholders has led to a revision of the report involving significant restructuring and rationalisation, with the revised report being re-issued in August 2019 along with flyers to promote the key messages.

All QWRAP documents can be found on our website at https://www.qldwater.com.au/QWRAP



Reef Councils Major Integrated Project New Regulations Will Affect All Communities in Great Barrier Reef Catchments

Communities in Great Barrier Reef catchments may find the advantages of living near a World Heritage Area to come with a down side as higher scrutiny leads to increased regulation.

Primary producers, point source industries and councils (including sewerage service providers) will bear the brunt of new Reef Protection Regulations that came into effect from 1 December 2019. The draft legislation was introduced to Parliament in late April and passed on 19 September following extensive consultation between 2016 and 2019.

The Regulations introduce a raft of requirements for some primary producers including record keeping, minimum practice agricultural standards, nitrogen

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and phosphorous budgets for sugarcane farmers and Environmental Authorities for new cropping and horticulture activities. They set minimum practice standards for all sugarcane, beef cattle grazing, grains, banana and horticulture production in Reef regions along the coast of Queensland, excluding Cape York. This focus reflects the recommendations of the Reef Taskforce and ongoing science and research that highlight the importance of addressing diffuse run-off to reduce stress on the Great Barrier Reef.

The Regulations also include specific requirements for "new, expanded or intensified industrial development" that applies to 'point source' discharges including sewage treatment, aquaculture or intensive animal industries.

A key element is that any new, expanded or intensified 'Environmentally Relevant Activities' must not increase nutrient or sediment pollutant loads flowing out of each reef catchment. For sewerage managers, this approach of "no-net-decline" means that activities must be managed so that they do not contribute nutrients in addition to those currently allowed in their Environmental Authorities (EAs). If this cannot be achieved through changes to design, operation or reuse – which will often be the case for large communities with advanced STPs- the only option is to rely on the new Point Source Water Quality Offsets Policy which was finally released in October. Offsets aim to allow for discharges that cannot otherwise be managed by reducing nitrogen or sediment loads elsewhere so that the total loads reaching the Reef are reduced.

The Regulations have introduced significant new uncertainty for GBR communities. The focus on agriculture has been interpreted by some stakeholders as unfair for a sector that is already struggling in some areas. Some stakeholders including many primary producers have quickly adopted enhanced practices as a way to demonstrate their commitment to their industry and protecting the land they manage. Others have sought to discredit the well-established science underpinning the Regulations. Existing EA holders including some council sewerage services have interpreted additional requirements as inequitable because their sites are already heavily regulated and many have been upgraded over the past two decades. There is concern that "no-net-decline" means any growth of Reef communities must be addressed through expensive treatment alternatives or rely on a new and largely untested Offsets Policy.

Despite these challenges, the new Regulations could prove a benefit to urban communities as well as the Reef. The Regulations were initiated to avoid the GBR being ranked by the World Heritage Committee as 'in-danger' in their next review in 2020, but this has also brought some muchneeded attention and increased investment.

While most funding will be directed to the agriculture sector, there is some hope for urban areas as well. The State has recognised the need to invest wisely in public sewerage systems and has partnered with LGAQ and *qldwater* in the Reef Councils Major Integrated Project to assess options to best fund improvements to council sewerage systems. The Department's "report card project" represents a genuine attempt to engage councils and industry experts to develop a meaningful assessment of the management of STPs and their networks. The longdelayed new Offsets Policy demonstrates a willingness by the State Government to develop essential innovative alternatives to direct attention to catchments and diffuse contaminant sources and build an approach that can include councils and primary producers.

A recent joint press release by the State and Federal environment Ministers reflects the (welcome) collaboration by those two levels of Government on issues facing the reef. The Ministers jointly supported the large body of peer-reviewed science that supports the need for change in the catchments, acknowledged climate change as the key driver of degradation while also recognising the role of Traditional Owners in protecting and managing the Reef.

In an unusual show of joint support, the forum "endorsed current reef management strategies and highlighted the importance of a coordinated Federal and State approach in protecting the Reef's future". This collaborative approach is key to releasing appropriate funding to allow Reef communities to work collaboratively to ensure the sustainability of the World Heritage Area they manage for the benefit of all stakeholders.



SWEAPing in a new direction

The **Sewerage and Water Environmental Advisory Panel** (SWEAP) is an expert group comprised of representatives from water service providers across Queensland, ranging from small indigenous councils to the very large distribution retail entities.

The panel was originally convened as the ERA 63 Expert Panel in 2012 to provide a forum for discussion and consultation on environmental matters relating to sewage treatment, which concerns all service providers that treat sewage. Since then the group has been meeting regularly to provide advice on environmental management and regulation of STPs and sewage pump stations, and to foster collaboration on joint submissions to the Queensland Government on policy issues.

At the last SWEAP meeting, held on 16 October 2019 a mini strategic planning session was held on the suggestion of one of the members of the panel. At the session it was clear that members were interested in a change of direction away from the previous more reactive model towards a focus on industry leadership. Despite representation from a diverse range of utility types, sizes and internal policy positions, participants agreed on a common set of objectives and priorities for the group to consider, as follows:

- 1. Foster partnership and industry leadership towards a whole-of-catchment management approach (rather than focus on individual point sources).
- 2. Seek Smart Regulation, flexibility and self-responsibility (rather than a 1994-style compliance framework and laboured communication between the Department and utilities).

- 3. Challenge perverse outcomes from regulation and policy (e.g. any unbalanced response to contaminants).
- 4. Predict and proactively respond to pressures on cost to serve.
- 5. Foster innovation

We are working with members to develop these objectives into a focussed program of works aligned with the *qldwater* Roadmap.

In recognition of items 3-5, members asked that expressions of interest be sought from members for developing a consortium of water utilities to participate in national industry research and innovation about contaminants of emerging concern. Individually, most councils do not have the resources to maintain membership in national research organisations or to influence the direction of research. A cooperative consortium coordinated through *qldwater* could provide opportunities to direct research in technology and policy at state and national levels.

The first priority for the consortium is to investigate participation as an industry partner in the CRC CARE (Contamination Assessment and Remediation of the Environment) program, which is currently in the process of seeking renewal of funding from the Australian Government.

To be involved in the SWEAP or the proposed Consortium, please contact Rob Fearon or Louise Reeves at *qldwater*.



2020 Events Calendar

Our 2019 events attracted around 300 people allowing representatives from around 45 service providers to connect with industry and key decision makers from a range of government departments.

We hope to catch up with most of our members in 2020- here's a line up of events scheduled to date.

March

- 5 Water Skills Partnership Forum, Brisbane International, Virginia
- 6 TRG Meeting, Brisbane International, Virginia

April

23-24 CQ Regional Conference, Gympie

May

- 11-15 Water Connections Tour, Downs and Surat Basin Region
- 13-14 Small/remote communities workshop, Goondiwindi

June

- 3-4 WIOA Qld Conference, Toowoomba
- 11 Unseen Infrastructure Workshop: Getting the most out of your existing systems and networks, Albion
- 12 TRG Meeting, Albion

Sponsorships

We have a range of sponsorship opportunities available - please contact **dgralton@qldwater.com.au** if you are interested.



Comms survey

We are keen to get some feedback on the way we communicate with you.

Are we using the correct channels?

Are we telling you the stuff you need to hear?

What can we do better?

Please **complete our survey** to go in the draw for one of three \$50 gift vouchers.



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July

- 16-17 CQ Trade Waste Interest Group, Yeppoon
- 29 NQ Regional Conference, Mackay

September

- 9-10 Annual Forum, hosted by Redland City Council
- 11 TRG Meeting, Albion

October

7-8 FNQ Regional Conference, Atherton

December

4 TRG Meeting, Albion

"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."