

# OPERATOR

May 2019 Pink Edition



## Inside

President's Message.....	2
Profile of a Staff Member .....	3
2019 NSW Conference.....	4
NSW Operator of the Year.....	6
NSW Taste Test Winners.....	7
Silver Medal in USA .....	8
New Kwayte Award Launched.....	9
Queensland Interest Day .....	10
Victorian Interest Day .....	11
Birds Eye View - GV Water Depot.....	12
2019 Pass Award Winner .....	14
Queensland Charity Bowls Day .....	15
Where Are They Now?.....	16
Technical Competency Project .....	18
Erika has a Passion for Water.....	19
Most of us Answer to Hanna! .....	20
Peta's BGA Tour of the Murray.....	21
Queensland's Aqua Card .....	22
Catching up with Christina .....	23



Thumbs up from some of the women attending the Queensland Interest Day. More on page 10.



The dramatic end to the womens bowls competition in Queensland. Find out the winners on page 15.



Julie Smith meeting the Governor of Queensland. Find out why on page 16.



Newsletter of the WATER INDUSTRY OPERATORS ASSOCIATION OF AUSTRALIA

## PRESIDENT'S MESSAGE

Welcome to the May PINK edition of Operator. This is the second time we have run a pink edition of Operator, the last being in 2011. Women are contributing more and more to the success and development of operations within our water industry. Amongst our usual articles and features, in this edition you will find stories contributed by female WIOA members and about female WIOA members. If you work with women in operational roles or if you are keen to spread the diversity message within your workplace, please ensure you share this edition of 'Operator' with as many people as possible. The proportion of WIOA's women members has grown significantly over the past 13 years from 6.7% to 13.3%. This is great news, it demonstrates the maturity of our industry and the growing diversity within it.

The Operator newsletter is a great way for Members to share their learnings and learn from others, celebrate achievements, converse with people who have similar working experiences, and to sharing ideas, issues and successes. If you are reading this edition and think you have a story or experience you would like to share with our water industry community, then please send it in.

Earlier this year, WIOA conducted our first online AGM which opened the door for more Members from right around the country to participate and contribute. At the meeting I was honoured to become WIOA's 2<sup>nd</sup> female President, supported by Mark Samblebe who was elected as Vice President. We also welcomed Elise O'Keefe and Grant Waite onto the Committee for the first time. Our thanks were extended to outgoing Committee members in Glenn Alford and Adrian Rijnbeek. I am very excited to welcome two new staff members to our WIOA team who both started in March. It is with pleasure that we welcome Dale Osborne as our new Project Officer and Abbey Kaine as our new Trainee Administration Officer.

In early April, we staged the 13<sup>th</sup> NSW conference in Orange at the PCYC with just under 630 attendees joining us over the two days. There were some excellent platform papers presented and the exhibitors as always impressed us with their product display booths and services. As part of our role to help promote diversity in the industry, WIOA has introduced the free Women of Water networking breakfasts into the program for all our conferences. The breakfasts aim to encourage women within the water industry to attend our events and meet like minded women to help build on their own professional networks. We have also actively sought out guest presenters for each conference who can assist us in delivering the diversity and inclusion message at our events. We have only just embarked on this journey and we welcome any feedback and new ideas from our members on how we can continue to progress this very important message.

Our thanks once again are extended to our excellent conference host and major sponsor in Orange City Council, along with all our other sponsors, the exhibitors, delegates and visitors. A huge congratulation to all our award winners announced at the NSW conference, including Shoalhaven Water for taking out the prestigious NSW/ACT Best Tasting Tap Water competition.

Our next event is in Bundaberg for the 44<sup>th</sup> Queensland conference in the first week of June. We have an outstanding technical program including a diverse line up of presenters

covering a wide range of topics. I look forward to attending the conference and meeting our Queensland based members face to face. Remember ladies, put your names down for the free networking breakfast on Wednesday morning so we can make them bigger and better and grow the diversity message within the water industry.

In May a group of 14 WIOA Operators Toured New Zealand. The group participated in the Water Industry Operations Group (WIOG) conference in Christchurch. Once again, the WIOG team did a fantastic job not only in organising and hosting the tour, but running another successful conference with 100% volunteer staff.

Late last year we revamped our State based Advisory Committee structures, and courtesy of some great work and assistance by all our State based Advisory Committees, the WIOA events calendar is rapidly filling. Apart from our now four conferences, there are a variety of interest days and tours either just completed or happening soon, along with some seminars and Water Taste Test events. Although we do understand that not everyone can go to every event, please make sure you support the work of your own members by participating and assisting whenever you can.

The WIOA staff are working on a number of projects and assisting on a number of national committees at present. Some of these include the review of the Certificate II and III in the National Water Training Package and working with WSAA on a safety project for our industry. We are excited that a contract is about to be signed to commence work on the development of a database system and access portal that will streamline the certification process. We look forward to launching this later in the year.

I would also like to thank and congratulate Kathy Northcott for all the work that she put into the Technical Competency Project whilst on staff, and later as well. It was exciting to see the Technical Competency Handbook and a number of associated Case Studies launched at Ozwater during Kathy's presentation. Additionally, Kathy has been awesome in helping us to run the webinars for the first part of this year while our new staff members are getting up to speed.

I can't sign off without giving the team from Wannon Water a huge pat on the back for their Hamilton WTP sample taking out the Silver Medal in the Municipal Water section of the International Water Taste Test competition held in Berkeley Springs in the USA in February. This is an enormous achievement and one that we know WIOA Life Member John Harris can't resist sharing with anyone and everyone from the water industry. It's a great retirement present for John after a long and distinguished career in the water industry.

Happy reading for now – I hope you enjoy this edition of 'Operator' and I look forward to hearing from you and catching up during one of our interest days, events or at the Queensland conference in Bundaberg.

Bye for now.

**Heidi Josipovic** – WIOA President



## PROFILE OF A STAFF MEMBER



**Name:** Abbey Kaine

**Position:**  
Administration Trainee

**Employer & Location:**  
WIOA Shepparton

**How long have you worked in the water industry and what attracted you to it?**

I had not previously worked in the water industry but thought a traineeship in the area would be new and interesting field to learn about.

**What do you enjoy most about your job?**

I enjoy being able to meet new people at conferences and events and being able to travel to new places like Orange and Bundaberg.

**What are the major challenges in your current role?**

I have not previously done any business work so there is always something new to learn and remember. I meet a lot of people and while I am good with remembering faces, I'm not so good at remembering names.

**How long have you been a WIOA member? (your involvement)**

I started working at WIOA on the 25<sup>th</sup> of March 2019

**How do you relax?**

Watching a movie or going away camping for a weekend.

**Where do you live and what's the best thing about it?**

I currently live in Shepparton and the best thing about it is having a wide variety of shops to choose from, where I used to live only had a handful of stores.

**Quick questions**

**Age:** 22

**Nickname:** Abb

**Family Status:** Mum, Dad and a younger Brother

**Pets:** 2 cats

**Favourite food:** Chocolate

**Least favourite food:** Egg

**Favourite TV show:** This Is Us

**Worst TV show:** Love Island

**Favourite Movie:** Me Before You

**Favourite Musical artist/s:** Little Mix

**Favourite book:** Call me King by J. J. Waddington

**Favourite team:** Melbourne Vixens

**Ambition in life:** To have a career that I enjoy and live a long and happy life

**Hobbies:** Camping, fishing and netball

**Best Trait:** Positive attitude

**Worst Trait:** Can be quite shy

**Four people to invite to dinner:** JoJo Moyes, Gabriel Iglesias, Scott Pendlebury and Hugh Jackman

## WISE – EOI TO PRESENT



WIOA seeks expressions of interest (EOI) to present at the 2019 Water Industry Safety Event (WISE).

The Water Industry Safety Event (WISE) is a fantastic opportunity for the sector to share experiences and learn from one another to improve safety in the water industry. The event is hosted by Melbourne Water and will be conducted on 9 October 2019 at the Batman Royale in Coburg, Melbourne.

EOI to present are invited from all sectors of the Water Industry and may address any safety topic including:

- New or innovative technology
- Sharing key learnings from incidents or near misses
- Advances in safety for water or wastewater operations
- Safety in operations and maintenance
- Safety management or OHS issues
- Mental health initiatives
- Fatigue management

EOI's close on 28 June 2019 and more information is available on the WIOA conferences website

<https://wioaconferences.org.au/wise2019/>

Kim Wilson from Gippsland Water attended the 2018 WISE and commented "it was a great opportunity to network with other safety professionals and discuss topics of interest and areas of focus in their business. I took home some valuable information from the day and look forward to next year's event. Safety for Life."



Mary Alexander from Melbourne Water leads the hypothetical at the 2018 WISE.

# 2019 NSW CONFERENCE REPORT

The 13th Annual **WIOA NSW Water Industry Operations Conference and Exhibition** was staged at the Orange PCYC on 3 & 4 April 2019. With Orange City Council acting as event host and major sponsor, more than 630 people from nearly 40 NSW and Interstate Councils attended the conference and exhibition.

During the conference Opening session on the Wednesday morning, delegates were officially welcomed to Orange and the event by Cr Reg Kidd, the Mayor of Orange. The opening address was presented by Graeme Bayliss from Parkes Shire Council who spoke about the development opportunities provided to their council staff through working closely with the Tier 1 contractors during the upgrade of their water and wastewater treatment plants.

Jillian Kilby from the Infrastructure Collective delivered the conference Keynote Address providing a well-received insight into working in the water industry from a woman's perspective. Jillian shared a range of stories about her career and experiences from working in a variety of roles and situations.

The conference culminated in the Awards Dinner on Thursday evening where Danny Roberts from Port Macquarie Hastings Council was named the winner of the 2019 NSW Operator of the Year. The team from Shoalhaven Water were awarded bragging rights for the next 12 months for having the Best Tasting Tap Water in NSW/ACT after winning the Ixom taste test.

## NSW CONFERENCE – WHAT ATTENDEES HAD TO SAY

### DELEGATES

Being new to the industry, the WIOA Conference was a great opportunity to network and learn more about the industry. It was good to learn about a wide range of challenges faced in the industry and how these issues were overcome. There are certainly opportunities for people to learn from other people's experiences by attending the papers sessions (it is a shame that they are not all well attended by delegates). I am also excited to see the Women of Water network grow in the future. Thanks for a great conference. **Alayna Gleeson, Orana Water Utilities Alliance**

Fantastic event providing relevant, up to date information on evolving technologies and lessons learnt within the water industry. Very professionally run and organised, my first WIOA and can't wait for the next. Big congratulations to the City of Orange, beautiful town, great facility and very welcoming. Great work WIOA Team. **Luke Tener, MidCoast Water**

For my first time at a WIOA conference, I found it very informative in ways to help me improve the running of my plant from the talks other operators had about their plants. **Lou Grozdanovski, Oberon Council**

It was a great way to meet with a variety of suppliers. I was able to organise a few upcoming projects through these meetings. It was also a great way to see innovative options available for our industry. **Graeme Bayliss, Parkes Shire Council**

### EXHIBITORS

I was very impressed with the organisation and how helpful the volunteers were. I found it a great environment to show case innovative products and to learn more about the challenges facing our various councils and really enjoyed the fun and enthusiasm of the tapping contest. **Mark Bonnici, Viadux**

If your business supports the operations of water utilities and water operators, you need to participate or at least attend the WIOA conference event in your state. **Jason Lindsay, Elster Metering**

Thanks to the WIOA staff for a successful event! Share more smiles and continue to recognise skills and talents in the water/wastewater industry. **Dorothy Dellosa, NOV Australia**

The NSW WIOA conference is a friendly, informal approach to the upskilling and the ongoing professional development of the water and sewer operators who are the frontline protectors of public health in the community. **Gary Mitchell, NSW Water Directorate**

The WIOA conferences are well organised by an enthusiastic team and the event is well attended by industry. **Jadon Townsend, ADM Instrument Engineering**

This was our first time exhibiting at WIOA. It's a great place for operators and suppliers to come together for the greater good of water in various applications. It opened our eyes to the depth of knowledge and products in our industry. We will be back for sure. **Casey Addison, Nowchem**





# NSW CONFERENCE 2019 WINNERS

Congratulations to all the award winners from the New South Wales Conference and Exhibition.



## NSW Operator of the Year - Winner

**Danny Roberts**

- Port Macquarie Hastings Council



NSW Operator of the Year, Danny Roberts making his acceptance speech.

## NSW Water Directorate Operator Dedication Award

**James Davis**

- Upper Hunter Shire Council



NSW Water Directorate Operator Dedication Award, James Davis (R) with Gary Mitchell.

## Best Paper by an Operator

**1 Shawn Charlton**

- Federation Council

**2 James Davis**

- Hunter Shire Council

**3 Matthew Benstead - TRILITY**



Shawn Charlton (R) winner of Best Paper by an Operator with George Wall from WIOA.

## Best Paper Overall

**Alex McCaffrey** - Port Macquarie Hastings Council



Alex McCaffrey (R) winner of Best Paper Overall with Lindsay Walsh from WIOA.

## WIOA Conference Charity

**McGrath Foundation \$1,500**

## Ron Bergmeier Award

- Best Exhibition Site

**SAFEgroup Automation**

## PASS Award 2019

**Toby Spark** - Gippsland Water

## NSW Main Tapping

Orange City Council

**Daniel Eassie and Adam Whiteley** donated \$1,000 to **Beyond Blue**

## IXOM 2019 Best Tasting Tap Water in NSW/ACT Finalists

- Orange City Council
- Albury City Council
- Shoalhaven Water

## Winner

- Shoalhaven Water



Tapping competition winners Daniel Eassie and Adam Whiteley from Orange City Council.



The team from SAFEgroup Automation, winners of Best Exhibition Site.



Ixom 2019 Best Tasting Tap Water in NSW/ACT winners, the Shoalhaven Water team.



## DANNY IS NSW'S BEST

Danny Roberts was announced as a very deserving winner of the 2019 NSW Operator of the Year Award at the WIOA conference in Orange.

Danny has been employed at Port Macquarie-Hastings Council since 2005 and has progressed from the electrician to the Water Treatment Operator in Charge.

Danny has been a pivotal part of the Water Process team for many years and has continued to grow and develop into a very knowledgeable and well respected individual. Danny has an open mind when it comes to process improvements and is able to work through and implement changes and new systems to allow optimisation of the various treatment processes.

Danny's commitment to WHS is evident through the attention to detail in his SWMS & SOP's. Danny ensures that the highest level of safety is maintained in everything from chemical awareness to general safety management, ensuring that toolbox talks and hazard identification are key topics on a weekly basis.

Danny is always looking for the next development opportunity. In the past 12 months he has successfully completed a series of leadership development sessions "Lead the Crew". The skills developed during these sessions have allowed Danny's management confidence to mature. This in turn ensures that any team performance issues are managed appropriately.

Danny has a Certificate IV in operations and is actively working on completing the required training to allow him to become a Certified Operator. He takes great pride and commitment in the internal development and training of the Water Operators under his leadership, ensuring they have the appropriate guidance and coaching required.

His manager noted "Danny has taken on some challenging new ways of carrying out our process control at my request, and although he was initially sceptical he took on the challenge with enthusiasm. Danny has been front and centre with our centralised data management software integration. Danny sets extremely high standards for himself and his team and without his dedication and commitment to the water industry, my job as Water & Wastewater Process Engineer would be considerably harder".



*Danny Roberts (R), with Gary Mitchell from the NSW Water Directorate.*

As Operator of the Year, Danny will be sponsored for a trip to New Zealand to attend WIOA's annual tour of NZ water facilities as well as attending the WIOG NZ conference. The NSW Water Directorate has been pleased to sponsor the award for the past 13 years, to raise awareness of the unsung work done by Operators across New South Wales.

## NSW CONFERENCE - WoW

Being new to the water industry, I was fortunate enough to attend the NSW Conference held in Orange which allowed me a great chance to learn more about the industry and provided fantastic networking opportunities.

I got a great deal from attending the paper sessions. It was really beneficial to hear about the challenges other Councils face and how these were overcome and to also hear about new technologies. I think there is a lot all conference delegates can take from attending these sessions along with visiting the trade expo.



*Attendees at the Hanna WoW Breakfast in Orange.*



*The Hanna team, sponsors of the NSW WoW breakfast.*

For me, the highlight of the conference was the Women of Water (WoW) Breakfast. This small group setting provided a great networking opportunity and allowed us all to introduce ourselves and get to know each other. I learnt so much about the diversity of the industry, the key roles these women play in the industry and for many, the juggles between having successful careers and managing life at home.

Since the Conference, I have kept in touch with other WoW network members and I am excited to be involved in future events. There are so many passionate and driven women who play key roles in our industry and it is great to see this being recognised and celebrated.

**Contributed by Alayna Gleeson from the Orana Water Utilities Alliance (OWUA).**



# SHOALHAVEN WATER HAS NSW/ACT TOP DROP

Shoalhaven Water was announced as the winner of the Ixom 2019 Best Tasting Tap Water in NSW/ACT at the WIOA NSW Conference in Orange, for their sample taken from the Bamarang Water Treatment Plant.

The heats to determine the three Grand Finalists were held on the Tuesday afternoon. All the samples submitted for judging by the various NSW Councils and water service providers were randomly allocated to 3 tables.



Heidi and Abbey at the Taste Test heats.

Using a blind taste test approach, the samples were judged on colour, clarity, odour and taste. The conference attendees were invited to taste all the samples and place their vote into the one they preferred most from each table.

The three Grand Finalists chosen were Shoalhaven Water, Albury City Council and the local hope, Orange City Council. The Grand Final judging took place at lunch time on Wednesday with a huge contingent of media assembled and anxiously awaiting the result.



The serious business of being a taste test judge - the judging panel put their taste buds to the test.

This year's grand final judging panel included media personalities Mike and Gia from local radio station Hit 105.9, Jillian Kilby from the Infrastructure Collaborative and Jarryd Millard from Ixom. Mike and Gia really got into the swing of the grand final and interviewed one another on stage between tasting samples to use in their radio show the next day.

There can only be one winner and this year it was the sample from Shoalhaven Water.

The competition is a fun way of allowing WIOA and the industry to raise awareness of the hard work that our operational staff do behind the scenes to ensure a quality drinking water supply is available to communities all around Australia.



The Shoalhaven Water team with Jarryd Millard from Ixom.

The Shoalhaven Water sample will now go on to represent NSW/ACT in the Ixom Water of Origin Taste Test against the Mackay Regional Council, winners of the **qldwater** Best of the Best Water Taste Test. The Water of Origin competition will take place at the WIOA Queensland Conference in Bundaberg in June.

Queensland currently leads the Water of Origin 4-2, but confidence levels are high and maybe after last year's victory NSW can get over the line again.

## SHOALHAVEN WATER'S BAMARANG WTP

**Bamarang Water Treatment Plant** is one of 4 water treatment plants in the Shoalhaven and supplies water to approximately 86% of the residents of the Shoalhaven area. It was purpose built to provide ongoing provision of water to the growing population of the Shoalhaven and was commissioned in 1982.

The plant services the area from Berry and Shoalhaven Heads in the north to Bandalong and Lake Conjola in the south, it also provides a back-up supply to the Milton/Ulladulla area in times of peak demand.

Water from the northern Shoalhaven is pumped from the Shoalhaven River at Burrier (approximately 47km upstream, from Shoalhaven Heads) to a 3,800 megalitre storage dam at Bamarang where it is treated at the plant.

Shoalhaven Water supplies more than 45 million litres of water daily to more than 48,000 homes and businesses through a reticulation network comprising around 1500km of pipeline.



Shoalhaven Water's Bamarang WTP.

## SILVER MEDALLISTS ON THE WORLD STAGE



After winning the best tasting water competitions in 2018 at both State and National level, the next logical step for Wannon Water was to see how samples from our Hamilton Water Treatment Plant stood up to scrutiny on an international stage.

Western Treatment Operations Coordinator Tim Holmes and I took the precious cargo in our checked luggage to the World Championships in Berkeley Springs, West Virginia. We left Melbourne 11am on Sunday and arrived in Los Angeles at 6.30am on the same day! Talk about going back in time.

We stayed overnight in Los Angeles and visited the Weymouth Water Treatment Plant in San Dimas run by the Metropolitan Water District of Southern California. This is an enormous facility, treating approximately 2,400 ML/d, with a clear water storage of eight acres and 18 feet deep. It features 650 miles of 12-foot water mains and 400 miles of six-foot mains - a real eye opener.



Weymouth WTP.

On Monday, Tim and I travelled to Washington DC and spent two nights there visiting some of the great sites. We were very lucky with the Australian Embassy supplying a limousine to show us around for four-and-a-half hours. We woke on Wednesday to a temperature of -2 degrees C and around 150 millimetres of snow - the first time Tim had seen snow!



John Harris and Tim Holmes in Berkeley Springs.

We travelled to Berkeley Springs which is a beautiful little country town nestled in a valley with the surrounding hills

covered in snow and checked in at the Country Inn where the water tasting championships and convention was being held.

Once we checked our samples in, we went off to discover more about Berkeley Springs. The town is a popular tourist destination because of its natural spa baths, including one of the first in America dating back to 1748. US President George Washington used to visit regularly and had a personal bath which has now become a tourist attraction in its own right.

The convention began on Friday and I presented a paper on the unique water sources within Wannon Water. This was a great experience because the delegates thought I had an extremely broad accent but thought Tim was a southerner (he's actually just a young farmer from Western Victoria).

I was lucky enough to meet Scott Shipe from American Waterworks who arranged a television interview with the CNN

network. I assumed it would only be a news clip, but when it went to air that night, it went for 10 minutes. Scott also interviewed me on a couple of topics which were posted on the website and able to be viewed on YouTube.

Hundreds of people gathered at the Country Inn on Saturday to watch as the judges tasted the various waters. The competition has six categories ranging from various bottled waters to municipal tap waters. The final judging was completed in the evening to a packed house with the presenters announcing that the municipal waters had been narrowed to a final field of five entries. Tim and I were a little tense and wondering if Hamilton's sample had even made the final five.



Grand final judging under way.

Our water was not named in fifth, fourth or third place, making us even more nervous. The presenters then explained it was a close competition between the final two entries. After what seemed an eternity, they announced Hamilton's water from Australia as the silver medallist with first place awarded to the small town of Clearbrook in British Columbia, Canada, for the fifth time in nine years.

Wannon Water are very proud to have represented Australia at the World's Best Tasting Water Competition in Berkeley Springs.

From here on Sunday we travelled to Detroit and had the opportunity to visit the Ford Field Centre, and then visited the Great Lakes Water Authority treatment plant which is one of the largest in the United States and basically treats all the snow-melt stormwater. The next day we were treated to a visit to the Ford Motor factory in Detroit where we witnessed F250 pick-up trucks being assembled, an unbelievable experience.

All I can say is what a trip! I would like to thank Wannon Water for sending Tim and I to represent them at the championships. A very special thanks to WIOA for organising the competition entry.

Wannon Water looks forward to hosting the IXOM Best Tasting Tap Water in Australia event on 19 October 2019 in Dunkeld as part of the Three Peaks Festival.

**Contributed by John Harris, Wannon Water Manager Operations.**



## NEW KWATYE AWARD LAUNCHED

After a short hiatus, the Kwatye Award been relaunched with the generous support of new sponsor TRILITY and has now evolved into a Cultural Recognition Award.

The new Kwatye Award will recognise an initiative involving any cultural or diversity and inclusion-based activities within a project or community in which our members serve. The synergies with our indigenous forebearers is obvious, however, the award aims to be inclusive of a wide range of contributions that support diversity and foster inclusion in the workplace or community.

The award focuses on those who have gone above and beyond to further inclusion, connection and belonging for co-workers, members of the community and people from disadvantaged and marginalised groups.

The winner of the award will receive a one week all-expenses paid cultural exchange trip to China, a very generous opportunity provided by sponsor TRILITY. The winner will visit a number of water and wastewater plants and will also include some sightseeing opportunities including the Great Wall, Tiananmen Square and the Temple of Heaven.

Nominations for this fantastic opportunity closes on 20 July 2019 with application forms available from the WIOA website at <https://wioa.org.au/awards/national-awards/kwatye-award/>

In moving to a new sponsor, WIOA would like to thank the original instigator of the Kwatye Award, Thermo Fisher Scientific for supporting the Award from 2005 until 2017.

In 2005 when the award was initiated, WIOA commissioned aboriginal artist Marie Elena Ellis to produce the artwork which has become the symbol of the WIOA national Kwatye Award on behalf of the Australian Water Industry.

Marie resides in the Northern Territory and recognises herself as both an Arrernte and Walpiri woman. To the aboriginal Arrernte people "Kwatye" means water.

The story of the painting is that it shows a main water hole in the centre which can also represent a community or a country. The lines radiating from the centre represent rivers and creeks. The outer circles represent other water holes where rain water is collected and then travels back along the creeks and rivers to the centre circle, the main place.

For many people in Australia, water is a resource more precious than gold. The current drought in Eastern Australia is testament to this.



*Tim Sells from TRILITY relaunching the Kwatye Award at the NSW conference.*

## NSW MAIN TAPPING COMPETITION

The inaugural NSW Main Tapping Competition was staged at the NSW conference in Orange with seven teams participating. The competition received outstanding support with a large crowd of spectators congregating to watch the action on both Wednesday and Thursday mornings.



*Tapping competition under way.*

Run in two heats of two teams on each day, the participants were certainly taking things seriously. With an enthusiastic crowd cheering the teams on, there was plenty of action and on occasions there was plenty of water for the crowd to dodge.

The Orange City Council team, "The Drips" (Daniel Eassie and Adam Whiteley) finished with the best time of 4 minutes and 24 seconds, ahead of the other teams from Cowra, Dubbo, Singleton, and Peter and Paul representing WIOA.



*Daniel Eassie & Adam Whiteley Winners of the 2019 NSW Tapping Competition.*

It was a great effort by everyone involved in the first staging of the event, but the best team in NSW has a lot of improving to do if they want to catch up with the fastest Queensland teams who regularly complete the task in less than 2 minutes.



*Part of the large crowd watching on with interest.*

Thanks to the Orange City Council (in particular Josh Barnes and Wayne Beatty and staff) for their huge efforts in setting up the pipework, facilities and water supply used for the main tapping competition.

Thanks also to Reece Civil for sponsoring the event, supplying all the equipment and providing the prize of \$1,000 which was donated to the charity nominated by the winning team. The Drips chose Beyond Blue as the recipient of the \$1,000 donation from Reece Civil.



## QUEENSLAND INTEREST DAY – LUGGAGE POINT

It was a great day at the Queensland Interest Day held at the Queensland Urban Utilities, Luggage Point STP – Innovation Centre in partnership with WIOA. The day provided a great opportunity to network with other Utilities and Councils across SE QLD.

The theme for the day was “Biosolids in our industry”. The attendees listening to four excellent speakers who covered – the Urban Water cycle; Biosolids dewatering across South East Queensland (Data collated over ten years); Arkwood detailing their Biosolids business; and Ron Bergmeier who spoke on Desludging Lagoons and the Management of Sludge.

A big shout out to Sonja Toft (QUU) and Kelly Hopewell (Gold Coast Water) for allowing Michael Moroney (QUU Senior Operator), to do their Biosolids presentation on the Performance and Improvement of Biosolids Dewatering Equipment, to the Operator Forum. The paper was a collaboration between Utilities and Councils across SE QLD spanning ten years.



*Members from all over Queensland networking over a cup of tea.*



*Andrew Ward describing the algae project at the Innovations Centre.*

A special thankyou to industry partners, Arkwood and Bergmeier Environmental, who provide transport, treatment and disposal of Biosolids across a large part of Australia. Their papers were both informative and innovative.

Feedback from attendees highlighted the presentation from Prof Zhiguo Yuan (Advanced Water Management Centre – UQ) which covered the Urban Water Cycle from the Potable Water production to the Wastewater – very interesting and challenging for the industry.



*Queensland Advisory committee members taking a rest - from left John Granzien, Bill Collie and Colin Haynes.*



*Prof Zhiguo Yuan presenting.*

Thank you to QUU and WIOA for supporting this opportunity, and thankyou to the Innovation Center Team at Luggage Point STP who provided a tour of the centre. The centre sparks much interest in the future options for treating water and other areas of our industry.

**Contributed by Theresa Dalby, Queensland Urban Utilities.**



# WIOA INTEREST DAY AT THE GIPPSLAND WATER FACTORY

The Gippsland Water Factory was the venue for a recent WIOA Victorian Interest Day. The Water Factory is an innovative wastewater treatment and recycling system, that is the first of its kind in Australia. The main part of the award winning treatment facility is located in Maryvale (Central Gippsland, Vic), and provides waste treatment solutions for a population base of 48,000. The treatment plant treats up to 35ML daily, from 15,000 homes and businesses across nine Gippsland towns, and industrial waste produced by the Australian Paper Mill. The Factory is able to produce around 8ML/d of high quality recycled water, which is then sold back into local industry, freeing up available fresh water for the community.

We all met onsite around 9:30am, for registration in the “Vortex Centre”, which is an educational resource for the community, focusing on the treatment process, and water conservation with an array of interactive stations. We were welcomed by Gippsland Water MD, Sarah Cumming, who gave us a quick overview of why the Water Factory was built, and how such a critical part of infrastructure for the area remains.



*Welcome by the Gippsland Water MD, Sarah Cumming.*

The first to present was Lillie Hardy, who gave us an insight into how she has progressed within the water industry, starting from a Trainee, to now being a nominee for Young Operator of the Year. Congratulations Lillie!

The next presentation was given by Ryan Snell, Adrian Harper and Gavin Pearson, who provided us with an in depth look into how the facility works to process different streams of waste, with the most interesting being how they are using world first technologies to tackle the industrial waste produced by the paper mill.



*Inspecting the Gippsland Water Factory.*



*2 tour groups checking out the water factory, Gippsland Water.*

After trying to wrap our heads around the process, we were broken up into three smaller groups to do a walk-around site tour. It was really interesting to see how the site was set out, and I was surprised by the total lack of foul odour. Our tour leader, Colin, explained that each part of the process is under negative suction, with arterial pipes that transfer any gases into the Cogen system. The Cogen reactor removes the sulphides from the gas, and then uses it to produce electricity helping to power the entire site.



*Follow the leader, Gippsland Water style.*

The domestic and industrial waste streams are treated separately, with the industrial waste going through an anaerobic process. Next both streams are subjected to treatment via MBR, ultrafiltration, and then RO if they need to produce high class recycled water. The high class effluent is then gravity fed down the Regional Sewer Outfall (ROS) for 87km where it reaches the Dutson Downs Treatment Facility. The ROS was a huge area of community concern. Built in the 1950's, a 46km section of the ROS was open channel, and raw sewage travelling in an open channel for that distance is no longer acceptable in Australia. This explains why the Factory needed to be built.

After Lunch, the next presentation was by Stephanie Badger (Water Treatment), who explained how improper chemical mixing can affect the performance of electromagnetic flow meters. This was followed by Julien Schill, from Gippsland Water Bulk Water group, who shared some information about how his team accesses the intake tower of the Moondarra Reservoir.

Thank you to WIOA, the Gippsland Water Factory and the presenters for putting on such an informative Interest Day for all who attended. It was a great way to share knowledge, and I look forward to the next one!

**Contributed by Stephanie Badger from Gippsland Water.**



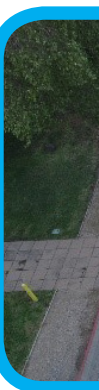
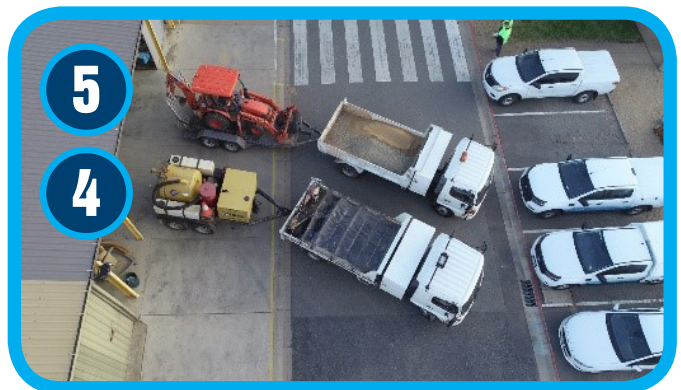
*Stephanie Badger presenting at the Victorian Interest Day.*





## BIRDS EYE VIEW - Facilities Members Operate

### Shepparton Operations Works Depot







1

### **Backhoe (Large)**

Used for mechanical digging. Often used to dig up mains that have burst or have cracks.

2

### **Front End Loader**

For loading the truck with sand/rock.

3

### **Burst Trailer**

Used for response to water main bursts.

Contains lighting, traffic control equipment, Safe Water

Mains Repair equipment, materials/ fittings, pumps and Layflat.

4

### **Hydro/Vaccum Excavation Trailer**

Used for hydro excavation of water services, valves, and small water mains.

5

### **Kubota Backhoe (Small)**

Used for mechanical excavation of services.

6

### **Tipper Truck with Crane**

For transport of spoil and cleanfill (and anything else that needs moving). Mounted with a crane to enable transport of large and heavy items.

7

### **Jetter Truck**

Fitted with two high pressure hoses, one large and one small. This truck responds mainly to sewer blockages and pushes high pressure water through the main or service pipe to break up and blast away the blockage. Also used for cleaning up after a burst main.

8

### **Pump Truck**

Our responding vehicle to pump maintenance work. The truck is fitted with a crane to lift pumps, and confined space entry equipment.

## 2019 PASS AWARD WINNER

The winner of the 2019 **PASS award** was announced at the NSW Conference in Orange in April. The winner was Toby Spark from Gippsland Water. Toby's winning idea was the development of a perforated retractable disinfection dosing lance for use in large diameter water mains.



*Toby Spark  
(C) with  
Jillian Busch  
and David  
Barry from  
Aqualift  
Project  
Delivery.*

Gippsland Water has a number of large water mains that are Trim dosed with sodium hypochlorite. Managing and controlling disinfection dosing, mixing and maintaining residuals in large dual flow direction pipes using conventional dosing lances was difficult, often producing inconsistent results.

The new dosing lance is a generic design that can be sized to the specific main size to ensure adequate volume of hypochlorite is delivered and mixing occurs across the entire diameter of the pipe not just at the inject point and relying on mixing in the pipe.



*The new  
perforated  
retractable  
disinfection  
dosing  
lance.*

Thorough mixing occurs in a shorter space so that when the sample is taken it is representative of the pipe mix. Shorter loop times with homogenous samples for sample analyser reading and real alarms when they occur for response.



*Mixing  
tracer using  
the original  
lance.*



*Mixing  
tracer using  
the newly  
designed  
perforated  
dosing  
lance.*

The solution is manufactured from readily available materials already in use in disinfection systems and comply with drinking water material requirements, therefore maintenance and replacement costs are minimal. Importantly the dosing lance can be constructed by technicians and is not a proprietary product, keeping cost down. Gippsland Water has engaged contractors to manufacture the dosing lances.

The solution is safer when working on the dosing lance, as the perforated dosing lance with sleeve can be safely closed and removed/withdrawn without the operator getting drowned/saturated under mains pressure or from residual chemicals in the lance.

The 2019 PASS awards had 8 great ideas submitted for consideration with entries from South Australia, Victoria, NSW and Queensland. **Aqualift Project Delivery** is the PASS Award sponsor and provided sponsorship for the winner to join the WIOA team on their annual operational tour of New Zealand in May 2019.

## SA NETWORKS INTEREST DAY

The WIOA SA Advisory Committee staged the first Interest day focusing on Networks issues in Tonsley in April. Although the turnout was a little lower than hoped, those in attendance heard some outstanding presentations.

Adrian Cavallaro from Allwater presented on the Adelaide smart water network and discussed how the system is being monitored to locate and reduce leakage. Julien Anese and Daniel Ford presented on proactive mains flushing and the benefits to customers from improved water quality. Jeremy Lucas presented on the changing responsibilities for network operators for customer service. Finally, George Wall from WIOA talked about the importance of keeping contaminants out of the network.

After a bite of lunch, Richard Scott provided a tour of the specially constructed network facilities within the TAFE SA Tonsley campus used for training plumbing and water industry operations students. Although we did want to make it a competition, the live main tapping component turned into a demonstration only. Thanks to Martin Trenwith & Sean Russell for coming along and showing how it's done.

A special thankyou to TAFE SA for making the facilities available for the day and for helping with the all the equipment for the main tapping demonstration.



*Adrian Cavallaro  
presenting.*



*Martin and Sean doing the main  
tapping demonstration.*



# INTERNATIONAL WOMEN'S DAY ON THE GREEN

After a couple of hours drive we arrived at Yandina, (Qld) bowls club. There were quite a number of cars in the carpark already, so it looked like it was going to be a bigger event than last year.

Inside there were people everywhere laughing and talking. The bowls club ladies had laid out pikelets and buns for all to enjoy.

The day kicked off with McBerns providing a talk on their new data analytics H<sub>2</sub>S monitoring data logger and their "man up" tool for opening sewer lids.

I didn't even know it was international women's day, and it was great to see WIOA celebrating Women at such an event with #BalanceforBetter flash cards being used in photos that were also placed on social media. The Queensland Water Directorate was well organised and had their own womens' team, the Women of Water.



*Supporting the #Balanceforbetter cause.*

Craig gave a run down on how the day's program would be played, and we divided up into our 17 teams which was a fantastic turn up, I was on the McBerns Gold team.

The day was extremely hot, but we could get out of the sun when we weren't bowling.

What a funny game, to try and get an oblong ball as close to a little white ball as possible. There were balls going everywhere. One team (who I won't name) bowled their ball and it rolled right up to the white ball. The only problem was it was the game being played in the next lane to theirs and was not their white ball.

There was a BBQ lunch and fruit platters which were refreshing. They all went down well after my extreme bowling.

In an unusual turn of events there was 3 Grand Finals, one for the Tradies Cup (McBerns Green v Netzsch), one for the Women's Competition (McBerns Gold v Hanna instruments) and one for the Best of the Rest (WIOA v Seqwater). It turned out to be a big day for team McBerns who won both the Tradies Cup and the women's event with the WIOA team winning the other grand final to the humorous moans of those in attendance.



*The McBerns Green team of Ian Cuthbertson, Noel Southern and Paul O'Kane, winners of the Tradies Cup.*

The Women's Grand Final came down to a tense conclusion with the winner decided by a single bowl - bowl off between opposing captains Kathleen and Peta. Kathleen (McBerns Gold) got closest taking out victory, which meant I was in the winning team - whooo hooo!



*The McBerns Gold team of Leah Jones, Mandy Murchison and Kath Jobberns, winners of the Womens event.*

To celebrate International Women's Day and to recognise the contribution to the Queensland charity bowls days and on her retirement, a special Kathleen Jobberns Medal was awarded to the Best Women Bowler on the day. Peta Berry from Hanna Instruments took home this prestigious (maybe overstating it) award and celebrated in style.



*Kathleen presents the medal for best woman bowler to Peta Berry from Hanna Instruments.*

There were plenty of laughs, especially at the cross the rink bowl at the end of the day. This involved bowling diagonally across the green to get closest to that little white ball again. Ross Paulger from Seqwater won this competition with a great shot.

Overall it was a great fun day and it was enjoyed by all. I would highly recommend taking a day off to support the day that allowed over \$2,500 to be raised for charity. Even the team from Toowoomba who took home the infamous Bunny Ears for coming in last had a cracker of a day and picked up a raffle prize or two. I will definitely be there again next year.



*The Toowoomba team took away the bunny ears (again).*

**Contributed by Leah Jones from QUU.**

## WHERE ARE THEY NOW?



### SARAH WALTON

A lot has happened in five years! Shortly after receiving the 2014 Queensland Young Operator of the Year award, I applied for and was successful in obtaining an Operator position with Seqwater in the Scenic Rim.

Driven by the confidence from the award nomination

and support from my team (and Seqwater) to further a career in the Water Industry, I continued with my completion of Certificate II and Certificate III over the next year. I operated as a level 3 Operator for three years until successfully being appointed a level 4 Operator in Nov of 2018. Over that time, I have had several opportunities at acting in both Supervisor and Environmental roles which has given me a wider perspective on both the impacts from and influences on Water Treatment. Last year I was fortunate enough to be given the opportunity to complete the LMA course and learnt some very valuable leadership skills.



*Sarah Walton (L) Seqwater with Dave Cameron from qldwater 2014 Qld YOOTY.*



*Sarah got to out fish the blokes on the WIOA tour of New Zealand in 2015.*

On a personal level – Five years ago I was studying outside of work hours and have since completed my master's in Environmental Management. Those who attended the 2015 WIOA trip to NZ (part of the award prize) would remember I was hiking up to intakes and deep sea fishing while 4 months pregnant! I gave birth to our second girl, Emily, in August 2015. My family and I are settling into life in the Scenic Rim with our eldest, Mia, now in Year 2 and Emily to start Kindy next year.

Looking ahead, I hope to continue learning and furthering my career in the Water Industry with Seqwater and hope to be involved in the development of a new Water Treatment Plant in the near future.

### JULIE SMITH

Since receiving the Queensland Operator of The Year Award in 2014, I have completed a Diploma in Water Operations, along with one of our operators in Shelley-Anne Cottam. This was made possible through a Government grant we received for women working in male dominated industries. It was the first time Water Operations had been included in the grant, and we were selected among 148 recipients from 500 applicants.

We have put two trainees through their training. Both are still working in the industry, one is working in England and the other is still working for Isaac Regional Council.



*Julie (L), and Operator Shelley (R) receiving their diplomas from the Isaac RC Mayor.*

I have been involved with some capital works projects. We have recently finished building a 15 ML potable water reservoir, this was made possible through the Queensland Government and Council funding. So I got to meet a few dignitaries last year including the Governor of Queensland.

In 2018, I notched up my 30 years with Isaac Regional Council and at present I am studying a Certificate 4 in Wastewater Operations.

Last year I won the Inspiring Woman in Isaac Award for Moranbah, a very humbling experience.



*Julie with her Inspiring Woman Award.*

This year we are starting a chemical upgrade of the plant, so a busy few months ahead. There will be a few stressful days, but nothing we can't handle as a team.



*Julie and Shelley at the WTP.*



## WHERE ARE THEY NOW?

### CYNTHIA LIM - TOTALLY REWIRED!

I recall Jim Martin always said “I’m not retired, I’ve rewired!” This is exactly how I feel. Having said my goodbyes to the water industry at 40 years of age it was time to do something different. Life has been so interesting and with a few twists and turns, I now find myself in the world of farming, catering, hospitality, tourism, farmers markets, community radio, and consulting.

For those of you who don’t know me, WIOA was an amazing part of my life as a young person entering the workforce and learning the ropes of the water industry. The supportive people, the fun, the challenges it’s all worth it as a rewarding life experience. For those of you who do remember me - “Hello! How are you? What an amazing adventure WIOA offered us!”

It’s been a while and I am really happy to see so many familiar faces still playing active parts in WIOA via the annual report and newsletters. Craig Mathisen thought a little catch up on what life is like for me now might make a good story. I am really used to sharing my story these days as my local council calls on us often to take part in regional development and tourism initiatives.

Apparently, Nick and I are the model tree-changers! Our farmstay, cafe and events venue in Seymour attracts hundreds of guests each year, often with people keen to learn about off-grid living utilising solar and wind energy, self sufficiency, strawbale passive design homes etc. The self sustainability bit comes and goes based on the growing season and water. With 2018/2019 being particularly challenging as our dam has dried up and we’ve had to let the veggie garden go this season, but in the past there have been great times of abundance and preserving jars rattling on the stove! I hope those days are not far away again. It’s interesting the different levels of understanding people come to us with and Nick and I are always happy to share our experiences - the good, the bad, the everything!

I never know what day it is - the weekend, the week days, it doesn’t really matter and we enjoy the busy times as much as the quiet times. The life of hosting guests has brought so many fulfilling conversations and discussions with people from all around Australia and the world. We still host Willing Workers on Organic Farms (WWOOFERS) too, who help during the blueberry season. This experience can be quite challenging when dealing with new languages but there’s always fun to be had in summer when we wear our blueberry farmer hats at *Blue Tongue Berries*.



Cynthia on community radio.

Community radio has become a passion as a presenter and I also organise the sponsorship/sales (surprise, surprise!) as well as being part of the committee having held the positions of President and Treasurer in the past. There is so much power in radio to affect what our community hears and how we can act upon things.

*Out on a Lim... that's where the fruit is!* is my own little business that takes on various projects, the most recent being *Seymour in Spring... a festival of events*, which celebrated everything my gorgeous town of Seymour has to offer during Spring.



Cynthia at her BnB.

I also received a grant from Goulburn Broken Catchment Management Authority via Beyond SoilCare and worked with GVFood Coop to create a series of podcasts called “Get the Dirt” to help new stewards of the land better manage their little patch. Check it out at [www.exchangefood.org/getthedirt](http://www.exchangefood.org/getthedirt)

I am also the founder of *the food eXchange* which sprung up as a community group to explore more about our local food systems and growers. It’s the name of my radio show too. The Tallarook Farmers Market is another gig I manage, a once a month accredited farmers market that helps feed my community with high quality, locally grown food and another form of community education.

This diversity of work has ensured I rarely get bored. From delivering cooking workshops to arranging musical performances, running the BnB, organising the farmers market, catering for functions and producing a weekly radio show, to writing and recording radio promos, no two days are ever the same. Sometimes it is hard to believe that I did live another life in the water industry. I do look fondly upon those days grateful for the opportunities given to me to travel, explore, learn and develop my skills.

I was pleasantly surprised and delighted as I took a look at the latest WIOA Annual Review and all I can say is - WOW! Congratulations to everyone involved to continue to grow this amazing organisation. As a real I.D.I.O.T (in every sense) I am so proud at what I see and I know how much hard work has been put in to get WIOA to where it is today. This Association continues to grow, respond and flourish with such amazing people at the helm and I’m glad I played my little part all those years ago. If ever travelling up the Hume through Seymour look us up! Cheers Cynthia.

## TECHNICAL COMPETENCY PROJECT

The Technical Competency Project is a major industry initiative to promote upskilling and professional development in water industry operations. The project was managed by WIOA and South East Water, supported by VicWater, **qldwater**, and the NSW Water Directorate in collaboration with 13 other industry partners including water utilities, consultants, and contractors. Project participants provided either expert drafting and editing support for the Technical Competency Handbook, contributed Case Studies of experiences in the development of technical competency, or of ongoing professional development programs.

The project objective was to develop guidance material on technical competency in the water industry (Technical Competency Handbook). This included examples of good practice through the presentation of various case studies. These case studies demonstrate approaches for organisational capability frameworks and staff competency development, as well as management of ongoing professional development needs of technical staff.

The Technical Competency Handbook is intended to be used by Human Resources (HR), learning and development (L&D) practitioners, and direct line managers who are tasked with the creation and implementation of L&D programs for staff in water industry operations.

The Technical Competency Handbook, provides direction on important aspects of developing technical competency across an organisation, including; principles of technical capability framework design; identifying and articulating technical roles and responsibilities; adopting an annual cycle of L&D planning; identifying and evaluating the L&D needs of technical staff; assessing and recognising preferred styles of learning; and recognising and maintaining technical competency.

The process of organisational technical capability development was demonstrated practically in the Technical Competency Project, through the development of a series of industry case studies. Each case study was contributed by a different project partner and each demonstrated a different aspect of good practice, in either capability/competency development or ongoing professional development.

For more information and to access the Technical Competency Handbook and case studies, visit the WIOA website: <http://www.wioa.org.au/operatorcompetency>

## TRAINING USING VR

Virtual Reality (VR) is going to play a large part in training for both industry and the education sector. The efficacy of VR training has been studied by institutions and in many cases indicated improvements in time taken to complete a task. VR training has also been shown to increase a learner recall over traditional training delivery methods.

The brain response in VR is much closer to true to life situations than any screen-based 3D models. In a basic form, VR offers the viewing of 360° video and stills providing students with an immersive experience. This may be achieved by developing or purchasing software to suit the application required.



SA training with VR.

Think about the application to water industry training such as disconnecting and reconnecting gas draw or liquid draw chlorinator systems. Ideally you want to practice these tasks several times prior to undertaking the final practical assessment. This is not always practicable in an operating treatment plant. VR provides the opportunity to go through the process and when performed incorrectly, follow required emergency protocols and procedures relating to liquefied chlorine gas hazards.

TAFE SA provides water industry training through the National Water Package and is currently working with VR and other adaptive future learning techniques.

**Contributed by Lena Marchesan from TAFE SA.**



Project Participants that contributed management, editing support and/or case studies to the Technical Competency Project



**Contributed by Kathy Northcott from WaterRA.**



## ERIKA HAS A PASSION FOR WATER

My passion for water started while I was studying at Queensland University of Technology (QUT). During my studies I was involved in different projects to solve water issues for people in need in developing nations, places where access to clean, safe water is a privilege. Most people in developed countries take water for granted and we tend to forget the importance of it. People use water every day, and there is not a single activity on our daily routines where water is not involved in our lives.

There is hardly a single industry that does not require water. For example, the food and beverage industry, mining, chemical processing, power, transportation, among other industries where water is an integral part of their production process. However, few individuals ever think about the amount of water used in simple activities such as having a shower, where we use around 9 litres of water each minute. Or consider the amount of water needed to produce common foodstuffs; for example, 1kg of beef requires nearly 15000 litres of water, 1 kg of rice around 2000 litres of water and one egg approximately 200 litres of water. If we start to think about the importance of water in our lives, we could become wiser about the way that we use and treat water.



*Erica with Ben, Glenn and Paul from Unity Water at Luggage Point.*

The water industry presents challenges and rewards that will help me to progress in my career as a Chemical Process Engineer. I am currently working at Unitywater, where I have gained an understanding of, and I am astonished by the work and processes to deliver clean, safe water to, and the sewage treatment process implemented, transforming wastewater into clean effluent before being discharged to the environment.

I consider that water is liquid gold and it should be treated that way. Water is a finite resource, and we need to consider that the population is growing and the demand for water is infinite. During my studies at QUT and my work experience, I have realised the significance of water and wastewater management for the Australian economy. Specially, the importance of achieving sustainable outcomes for current and further generations.



*Erika at the Qld Interest Day.*

I believe that working in the water industry I am contributing to the community, for me, it means helping to deliver a fundamental need. I can see the importance of providing or improving access to safe water, as well the environmental impact that treating wastewater the right way has on our planet. I want to be part of a new generation where sustainable practices are implemented to solve the current challenges in the industry by integrating water management practices that minimise environmental impacts to achieve sustainable communities.

**Contributed by Erika Amado Martinez from Unitywater.**

### NSW CONFERENCE - FIRST TIMERS PERSPECTIVE

This was my first time attending a WIOA conference and what a great experience it was! The organisation really encourages women's roles in a male dominant field. Starting the event off with a women's morning tea (don't worry, they have one for men too) really provides the perfect opportunity to converse with others in similar roles.

Following the Keynote speech by Jillian Kilby (about diversity in the industry), I was able to meet her, along with Lucy Parsons (Chemical Engineer - Atom Consulting) & Philippa Childs (Project Engineer - Cowra Shire Council). Together we spent some time during the day to learn about each other's roles, ideas and aspirations. It was great to be meet these girls and make these valuable connections.



*Jillian Kilby presenting.*



*Jessica Andrawes from Redox (2nd from Left).*

I really encourage everyone in the water industry, whether in operation, sales, production or management to come along to these events. It is not only a great way to gain insights about new processes and equipment, but most importantly, is an awesome opportunity to socialise and network with people in the industry outside of a work environment. The dinners are amazing, and the comedian put a smile on everyone's face.

**Contributed by Jessica Andrawes from Redox.**

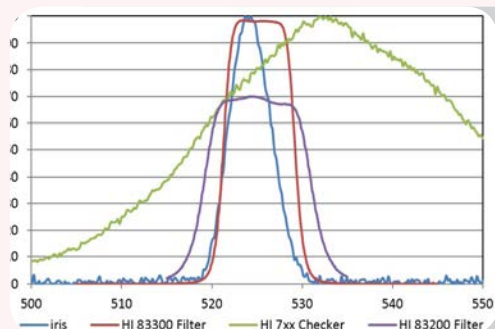
## MOST OF US ANSWER TO HANNA!

WIOA is going pink? Here at Hanna Instruments in Australia – we're a strong female team who proudly rock a blue logo. For those not familiar, Hanna Instruments is the largest family owned electro-analytical instrumentation company globally. In Australia, we're led by a female General Manager, Deidre De Fazio who hails originally from the US and has been growing with the company for 7 years. When she started with the organisation, she was a specialist for water and wastewater and completed a Water Operators Training course. Of the 12 team members nationally, 10 are female and we also proudly have 2 Technical Sales Specialists who are males and very secure in their masculinity!

In Queensland, you will meet our other female State Manager - Peta Berry. Peta brings 9 years of dedicated water industry experience that includes lab, field and process instrumentation to the role, as well as a number of WIOA 'tours of duty'. She was most recently involved in co-hosting the WIOA Women of Water breakfasts in Orange and will again in Bundaberg in June.

Hanna supports a wide range of solutions for drinking water, wastewater and treatment applications. Some of these include the new 'iris' spectrophotometer with more than 80 preloaded methods and capability custom methods. The HI9829 is a best-selling multi-parameter portable meter due to its affordability and features such as turbidity, auto logging probe & GPS capability. Also offered are Bluetooth pH electrodes which are as accurate as a benchtop pH meter, but at a fraction of the cost. Other products include field photometers for chlorine/turbidity monitoring (in one unit!), low range iron, manganese and many more.

A common question asked in relation to colourimetry is accuracy Vs portability. Obviously there are the benefits of a handheld meter in operations. However, the graph below shows the difference in resolution between portable checkers and field photometers Vs the accuracy of a spectrophotometer, namely the recently launched 'iris' featuring a 5nm tolerance! A narrower beam selection in the spectro allows for greater reading accuracy.



*Accuracy of portable checkers Vs a spectrophotometer.*

Hanna looks forward to another year of supporting WIOA – including the 2019 WIOA exhibitions, the sponsorship of WIOA's Women of Water breakfasts and sponsoring a bowls team at WIOA water interest days. And yes, the team do answer to the name Hanna on occasion!

Please contact the Hanna team nationally on 03 9769 0666 or [sales@hannainst.com.au](mailto:sales@hannainst.com.au) or visit their website [www.hannainst.com.au](http://www.hannainst.com.au)

**Contributed by Peta Berry from Hanna Instruments.**



*Deidre and Peta with George at the WIOA FNQ Interest Day in 2018.*

## COUNCIL LEADS WAY ON AIR QUALITY TESTING

Logan City Council is conducting an Australia-first trial using portable wireless technology to monitor air quality around wastewater treatment facilities. The technology allows Council to react immediately to any elevated hydrogen sulphide odours. It also triggers an alarm if pre-determined odour levels are exceeded.

The battery-powered device, which is not much bigger than the size of a mobile phone, has been monitoring air quality around Council's Beenleigh Wastewater Treatment Plant at Eagleby since March this year. The results from this monitoring have been used to assess the performance of the facility's odour-treatment system and guide improvements to the management of odour around the site.



*William Smith from Logan City Council monitors air quality at Beenleigh WWTP.*

Previously, air quality around treatment plants was logged by devices that were downloaded manually after a set period of time or by analysing air samples taken by staff, which could take several days. The new technology allows Council to quickly pre-empt any possible odour concerns raised by residents. The data can be used in conjunction with wind and weather data to locate the source of any detected odour.

The trial is being conducted in conjunction with Queensland-based gas monitoring company Acrulog. Council approached Acrulog seeking better solutions to odour issues and were asked by the company to be the first in Australia to trial the new technology. Results of the trial will be reviewed in coming months before a decision is made on whether to install devices at other Council waste treatment facilities.

**Contributed by Samantha Stiller from the Logan City Council.**



## PETA'S BGA TOUR OF THE MURRAY – MARCH 2019

After the success of the 2017 Blue Green Algae tour of the Murray, I decided to hitch up the 456 ponies and again visit the wonderful operators along the mighty Murray. I started out with the Huons Hill WTP and met with the lovely team at North East Water. This plant was currently dosing powdered activated carbon (Acticarb PS1300) at 2mg/L due to the amber alert of the raw water, even though there wasn't any detectable taste and odour (T&O) present.



*Huons Hill - North East Water.*

I then popped next door to see Garry at Albury WTP who makes a lovely cuppa and got to see his shiny new DAF plant which he is extremely happy with.

Then it was off to visit Federation Council at Cowra who struggle to dose PAC at anything higher than 7mg/L. We talked about all things jar testing and ran an interesting study looking at each of their raw source water and the PAC dose required to treat MIB and geosmin.

I crossed over to NSW and popped in to see the operators at Tocumwal WTP in Berrigan Shire. Their DAF plant was looking much more sedate than in 2017 when they were pushing off the blanket with shovels!



*The big Cod on the Tocumwal foreshore.*

While in NSW I popped into Deniliquin WTP to see Ric who is always doing interesting things. We spoke about all things ATP monitoring within the distribution system and he showed me the latest Luminultra software that can trend ATP along with other parameters such as temperature and chorine residual.



*Deniliquin WTP – Edward River Council.*

Then it was back down to the river to meet the team at Moama WTP run by Murray River Council. There was a fantastic turn out of operators and they were very interested in making sure their jar testing techniques were accurate.

Popped back to Victoria to see the Echuca plant run by Lendlease/ Coliban Water before heading back to Barham WTP run by Murray River Council. After a bite of lunch I popped into Swan Hill WTP operated by Lower Murray Water which has one of the prettiest views from the clarifier and some of the nicest people in the industry.

From Swan Hill it was overnight in Tooleybuc to visit a good friend of mine before meeting with Balranald Shire Council at their WTP in the morning. They are also looking at upgrading their plant so it was good to chat about all things granular activated carbon.

Next to Mildura WTP to meet up with more of the team from Lower Murray Water. I then started the trek home via Gol Gol - a plant with some of the cleanest settling lagoons I have ever seen – operated by Wentworth Shire.



*Gol Gol - Wentworth Shire.*

On the way home I stopped in Bendigo and called into the Sandhurst WTP to catch up with the team at Veolia Water. We planned the next lot of BAC Aging Profiles and then I headed home.

It was a big week and I would like to thank everyone for their hospitality and to Activated Carbon Technologies who shared the costs.

**Contributed by Peta Thiel, Research Laboratory Services.**

## QUEENSLAND'S AQUA CARD

All providers of drinking water services have clear public health responsibilities to their customers. For most employees of utilities, this responsibility is reinforced through regular formal training and on-the-job learning. However, our industry relies on many others, including contractors involved in construction and maintenance activities, particularly around network infrastructure. These other staff may have very different typical day jobs, and a number of Queensland stakeholders identified the need for a simple and effective way to communicate key risks to these staff before work starts on or around water supply assets.

The end result is the release of the Queensland Water Directorate's (**qldwater**) 'Aqua Card', an online training course designed to provide contractors, and other staff as necessary, an understanding of fundamental drinking water quality issues and how their work can potentially increase risks, including the introduction of contaminants into the drinking water system. The course provides a simple overview of what contaminants are, the risks they pose, how they can enter a drinking water system and the responsibilities of those working on infrastructure to reduce that risk and includes practical guidance on how to operate within work sites including good housekeeping and disinfection practices.



The course is available to employees of **qldwater** member organisations and is now available to other organisations and contractors for \$50 including GST.

The course is available at [www.watertaining.com.au](http://www.watertaining.com.au) and provides a certificate of completion. Detailed instructions on accessing and completing the course are available at: <https://www.qldwater.com.au/aqua-card-instructions>.

A number of organisations in Queensland are considering mandating the course as part of their contractor induction and introducing specific requirements for contractors to complete the course before working on their assets. The course is designed for Queensland and refers to state legislation and regulations. However, the fundamental principles and majority of content are just as applicable to other jurisdictions. If there is sufficient interest in the course from other states, **qldwater** will consider developing a specific version for use outside of Queensland. The fee we charge for users is directly invested in updating materials, and hosting costs.

Feedback on the training has been overwhelmingly positive and it is the result of input from a large number of people. We'd particularly like to acknowledge Alan Kleinschmidt, Brian Hester, Shannon McBride, Jill Busch, Dave Barry, Trevor Dean, Laura Shiels, Phil Wetherell and Palith Siriwardana for their support in its development.

Please contact Carlie Sargent on 07 3632 6853 or [csargent@qldwater.com.au](mailto:csargent@qldwater.com.au) to discuss your needs.

**Contributed by Carlie Sargent from qldwater.**

## CHECKING YOUR SKIN IS AS EASY AS ABC...DE

Australia has one of the highest rates of melanoma in the world, ranking as our third most commonly diagnosed cancer. If detected early more than 90% of all melanoma cases can be effectively treated. As an industry with a high proportion of employees working outdoors, it is important that awareness of this disease and options to enable early detection are communicated.

At a personal level, most of us naturally want to ignore the possibility of skin cancer. It's common to avoid looking for health problems, particularly if it involves something as serious as cancer, even if we know that early detection saves lives.

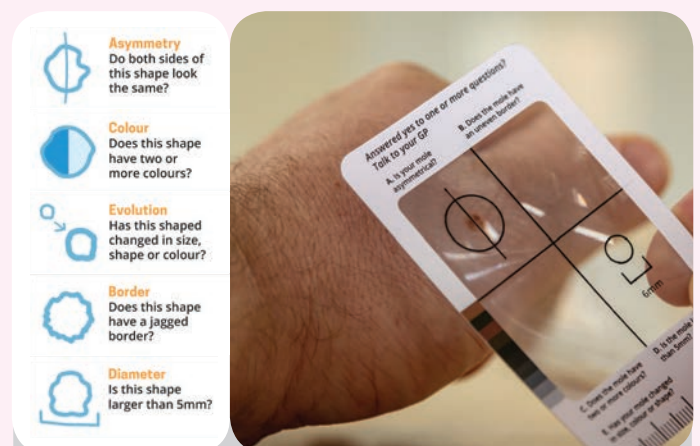
At the 2018 Water Industry Safety Event (WISE) Kate Seabrook from North East Water courageously shared her deeply traumatic experience with melanoma, to encourage everyone to conduct regular skin checks.



Kate Seabrook sharing her story at the Water Industry Safety Event.

Following Kate's emotional story and to support her awareness campaign, WIOA is distributing a Skin Check Tool at our events and to all conference delegates and exhibitors this year. Skin Check Cards are a way to teach yourself and your family to think of skin spots in terms of simple shapes, rather than possible skin cancers. This simple process can change negative perceptions of self-checking and increase your chances of noticing new and changing skin spots before it's too late.

Most skin cancers are found by people checking their own skin or are noticed by a loved one. By checking your skin regularly, you are better placed to detect changes early. Early detection of skin cancer saves lives.



Using the skin check tool to monitor skin spots.



## CATCHING UP WITH CHRISTINA

Meet Christina, one of the newest trainees at Programmed Facility Management. Christina recently completed her cadetship with a new program offered by Programmed and City West Water. The cadetship was a 12-week program where cadets are able to learn about water industry operations and work alongside industry professionals to learn about how a network is operated and maintained.

### How did you hear about the program?

I spent many years working in the retail industry and felt like I needed a change. I wasn't entirely sure of what I wanted to do, but I've always enjoyed hands-on learning and working with people. As I began searching for opportunities which required a Construction White Card, I came upon the cadetship opportunity with City West Water and Programmed. The position sounded interesting and seemed like a great way to learn about the industry before committing to a traineeship.



*Christina learning on the job.*

*"Every day is different – it's the same basics, but being able to come to work and not know what is going to happen is exciting," says Christina.*



### How have you found customer service for the water industry different from customer service in retail?

For water, customers just want to know when their water is going back on – how soon something will be fixed. I had an opportunity to meet a number of customers in the field and we work hard to repair a water fault as quickly as we can to minimise the water outage to our customers. I worked with a very experienced supervisor who investigated the fault and repaired it the first time. Once it was fixed the supervisor then provided this feedback to the customer. We are providing a service that can impact many customers every day... they just want a timeframe to know how long something will take.

### What has been the biggest reward so far?

Every day is different – it's the same basics, but being able to come to work and not know what is going to happen is exciting. I've also enjoyed learning the theory about why we complete jobs a particular way.

### Did any part of the training surprise you?

It was interesting to learn how to trace the water and why it is important. For example, we have customers on dialysis and patients rely on water for dialysis sessions. Some patients have 5-6 sessions a week, so they need to be informed if their water is going to be shut off. Water is so important and you don't appreciate what occurs until you are out talking to customers.

### Do you have any advice for other women interested in a cadetship?

Just give it a go and see if it's right for you, that's what the cadetship is all about. The cadetship has allowed me to explore areas. I would have never have considered an option in the past, but a curious mind will take you to places never considered possible.

### What are you looking forward to learning during your Traineeship?

I'm anticipating the traineeship will be a great opportunity to get more in-depth knowledge of water operations and to spend time working in different areas like water and sewer. I'm ready to be more hands on, and take the opportunity to focus on water and operations.

**Contributed by Ingrid Jorgensen from Programmed Facility Management.**



*Christina and a couple of other Cadets working at Programmed Facility Management.*

## NEW MEMBERS

Welcome to the following people and companies who have recently joined our Association as a Member or Corporate Supporter.

New **Individual Members** include:

Raquel Esteban, Susan Larsen, Adam Drenoyanis, Luke Elliott, Andrew McVey, Erik Pasfield, Nick Millard, Warren Nazzari, Michael Piggott, Sarah Walton, Raymond Mortensen, Brett Gumbelton, Aaron Riding, Douglas Walker, Robert Knight, Tony Polchleb, Frances Smith, David Bartley, Lucy Parsons, Paul Day, Dale Osborne, Lou Grozdanoski, Tony Corby, Brendon Ford, Stephen Ledgard, Chris Breen, Geoff Veneris, Hudson Dowell, Chris Lovejoy, Josh Van Hout, Sam Zanetti, Roy Janz, Daniel Mees, Janet Martin, Nathan Malcolm, Jason Cass, Nilakshi Fernando, James Davis, Andrew Brown, Jeremy Taylor, Cameron Rich, Michael Boyce, David Tynan, Jon Fitzgerald, Geoff Jones, Bobbie Brenton, Andrew Archer, Nick Marinos, Sunil Tennakoon, Gatut Sudarjanto, Glenn Herpich, Jaques Mik, Callum Haigh, & Rosario Scharf.

New **Corporate Members** include:

Aquapac, Treadwell Group, HydroTerra, Fluid Control Sales & Installations, SMC Corporation Australia, ABS Solutions, HITC Australia, Barossa Quarries, Integrity Pumps & Engineering, FCR Motion Technology, Instrument Solution Australia, WAGO & Vogelsang.



**WIOA Talks** provide members across Australia and internationally access to information, the opportunity to hear updates and share knowledge and experiences from the comfort of their own desk. They are a great way we can keep members up to date with industry issues

Over 500 members have been engaged in the webinar series to date, and they have proven to be an engaging way to access key industry issues, the latest trends and technologies, as well as general interest webinars on topics and issues that impact water businesses.

The next topic for the WIOA Talk is a training and development session examining **Training and Competency Development in Water Industry Operations**. It is scheduled to be held at 2pm on Friday 5 July 2019. Registration and further details are available on the WIOA website.

For suggestions of future WIOA Talks topics and presentations, or to volunteer to give a presentation at an upcoming webinar, please contact Dale at WIOA: [dale@wioa.org.au](mailto:dale@wioa.org.au).

## COMING EVENTS

- 28 June **EOI for presentations at WISE** close
- 5 July **WIOA Talks Webinar – Training and development**, Online
- 20 July **Kwatye Applications** close
- 24 July **Water Interest Day & Ixom Best Tasting Tap Water in Tasmania**, Launceston
- 26 July **NSW Interest Day & Charity Bowls**, Port Macquarie

## 2019 CONFERENCE AND EXHIBITIONS

- 5 & 6 June **44th WIOA QLD Water Industry Operations Conference & Exhibition**, Bundaberg
- 7 & 8 August **2nd WIOA SA Water Industry Operations Conference & Expo**, Murray Bridge
- 4 & 5 Sept **82nd WIOA VIC Water Industry Operations Conference & Exhibition**, Bendigo
- 9 October **Water Industry Safety Event - WISE**, Coburg

## 2019 COMMITTEE

President	Vice President	Managing Director
Heidi Josipovic Mob 0429 701 237	Mark Samblebe Mob 0400 126 141	George Wall Ph (03) 5821 6744 Mob 0407 846 001
<b>Chair NSW Advisory Committee</b> Lindsay Walsh Mob 0427 105 421		Ryan McGowan Mob 0440 055 508
<b>Chair QLD Advisory Committee</b> Colin Haynes Mob 0419 763 054		Elise O'Keefe Mob 0438 346 852
<b>Chair SA Advisory Committee</b> Robran Cock Mob 0407 226 130		Simon Page Mob 0447 058 377
<b>ChairTAS Advisory Committee</b> Mark Abela Mob 0448 485 238		Sally Taylor Mob 0409 307 554
<b>Chair VIC Advisory Committee</b> Anthony Evans Mob 0419 103 885		Grant Waite Mob 0447 450 513

## NEXT EDITION

**Article Contribution Deadline for the next edition is 7 July 2019**

**All correspondence should be addressed to:** The Editor  
PO Box 6012, SHEPPARTON, VIC. 3632  
or email: [Craig@wioa.org.au](mailto:Craig@wioa.org.au) Website: [www.wioa.org.au](http://www.wioa.org.au)

### Disclaimer

The WIOA assumes no responsibility for opinions or statements of facts expressed by contributors or advertisers. All material in 'Operator' is copyright and should not be reproduced wholly or in part without the written permission of the Editor or Managing Director.



Printed on Recycled Paper.