

OPERATOR

November 2018 Edition



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John Harris is
WIOA's Eighth
Life Member.
More on Page 4.

The Victorian Tapping
competition in full flight.
A full conference report
is on Page 8.



Teresa Trevaglia from
Ixom with Ian Bail from
Wannon Water after
winning Best Tap
Water in Victoria.
More on Page 17.

Newsletter of the WATER INDUSTRY OPERATORS ASSOCIATION OF AUSTRALIA

FROM THE MD'S DESK

Welcome to the fourth and final edition of Operator for 2018. The year has flown by and it's not that long now until the big bloke in the red suit drops by. In reflecting on 2018, the pace has been hectic but enjoyable, especially with the addition of the South Australian Conference in August and the Water Industry Safety Event in Melbourne in October.

It is exciting to see the increasing level of support and participation by Members in all of WIOA's activities. Having just completed a revamp of the composition of our State based Advisory Committees, we thank all our members who nominated for a position on one of the Committees. Unfortunately, due to limits on the numbers in each Committee, some Members have missed out, but we hope that they will still assist us wherever they can.

There are a number of Interest Days just completed or about to occur, and one of the first tasks for the new Advisory Committee members in each State will be to set the program of events for 2019. It is really important that Members get behind the State based Advisory Committees and support these events whenever you can.

There has been a number of recent developments in the Operator Certification space. The Victorian Department of Health and Human Services has confirmed that as of 1 January 2019, the Victorian Best Practice Guidelines will be replaced by the national Certification Framework. At its meeting in October, the Water Industry Skills Taskforce was disbanded and a new body called the Water Industry Operator Certification Taskforce has taken its place as Framework owner. A combined certification Framework document now covering water, wastewater and recycled water treatment operators has been developed and is in the process of being finalised.

At the WIOA Interest Day in Parkes on 30 October, there were an additional 18 NSW water treatment operators Certified. This was the culmination of a huge amount of work by the team from Centroc, the employing Councils, the operators themselves, the trainers and WIOA staff. Finally on certification, WIOA will be developing an online certification platform during 2019 to allow us to deliver a user friendly system for recording of all the certification data and streamlining the application and renewal process.

After determining the Victorian Best Tasting Tap Water winner at the Bendigo conference (congratulations Wannon Water), the taste test program culminated in the Ixom Best Tasting Tap Water in Australia competition in Toowoomba in October. Held in the Grand Central shopping centre in Toowoomba, more than 150 members of the public sampled each of the State based Taste Test competition winners. Congratulations to Wannon Water and everyone at the Hamilton WTP in Victoria for being judged as having the best tasting tap water in Australia for this year. They will go on to represent Australia at the Berkeley Springs International Water Tasting Competition to be held in the USA in early 2019. We hope they will do Australia proud and bring home the gold medal.

The taste test event was used to help promote the great work that the water industry and all the operational staff do in

supplying safe drinking water to our communities. Our thanks are extended to all the organisations who participated in the heats held around the country throughout the year.

In September 2018, WIOA successfully staged our biggest annual event, the Victorian Water Industry Conference and Exhibition in Bendigo. For the third successive year the attendance record was broken with 1,513 people participating over the two days. All 203 exhibition sites were sold-out in around two days and there were many companies on a waiting list who unfortunately missed out. There is a complete wrap up on the conference, including all the very deserving award winners, later in this edition.

The Victorian conference was also a great place to recognise the achievements of some outstanding WIOA Members. John Harris became the 8th recipient of Life Membership for his considerable efforts spanning more than 25 years. Immediate Past President Ryan McGowan was inducted as the 36th IDIOTS member for his substantial contribution to WIOA. An additional IDIOTS member was inducted at our Interest Day in Cairns in October. Shane Bandiera from Cassowary Coast Regional Council became the 37th IDIOTS member for his amazing support of WIOA in the Far North Queensland region.

The 2019 conference venues have been finalised. The NSW event will be held in Orange from 2-4 April. The Queensland conference will be held in Bundaberg from 4-6 June and this will be the first time WIOA has held the event there. The last time the conference was in Bundaberg was in 1997 when it was under the WITA banner. The Victorian event will be in Bendigo again from 3-5 September. There will be another conference in South Australia, but the date or venue has not been confirmed just yet. To make all these conferences successful requires input from you - our members. Don't wait until the last minute. Start putting together the potential topics for a platform or poster paper abstract now. We will accept abstracts for future conferences at any time.

WIOA has a long history of raising and donating funds to various charities. The Victorian golf day was staged recently at Garfield Golf Club with \$2500 raised and added to the charity pool for distribution next year. The Far North Queensland Group held the TRILITY Charity Bowls Afternoon on the back of a very successful Interest Day in Cairns. This event has raised \$1300 which has been donated to the Cassowary Coast Mayor's Christmas Appeal. The generosity of all the members and the supporting corporate sponsors who participate in any of our charity events is greatly appreciated.

Finally, the Christmas/Holiday period is fast approaching, so to all our members and readers, please have a safe and enjoyable time, and I look forward to meeting as many of you as possible in 2019.

Until next time,

George Wall – WIOA Managing Director

PROFILE OF A MEMBER



Name: Stuart Silvester

Position: Treatment Operations Officer

Employer & Location:
Wannon Water Western region

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

I have worked for 3 different water corporation's over the last 17 years.

At first it was just a full-time job to support a young family, but soon developing into a passion for ground water treatment.

Thoughts on the water industry now?

Never a better time with good investments in new technology and methods, and the ability to optimise old systems.

What do you enjoy most about your job?

Nothing is ever constant; each system has its own quirks and seasonal variabilities.

What are the major challenges in your current role?

Keeping up with new science pertaining to water treatment. A balancing act where tried methods can be tweaked with new ideas or technology. But always maintaining the treatment processes for the best quality outcome at the same time.

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

10 years, have delivered a couple of papers at the Victorian conferences.

How do you relax?

Long distant trips across Australia's deserts.

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

Allestree Victoria, the ocean at our front door with the greenest farming country at our backs.

Your involvement with WIOA ?

As a member I attend the state conference when able. It's the best place to talk to other operators and share issues or breakthroughs.

Quick questions

Age: 48

Family Status: Married with two sons.

Pets: Multiple rehomed Greyhounds.

Favourite food: Pork Chow Mein.

Least favourite food: Anything aniseed.

Favourite TV show: (Netflix) Expanse.

Worst TV show: Any reality show.

Favourite Movie: Apocalypse Now.

Favourite Music: Nothing after 1998.

Favourite team: Brisbane Lions (Leigh Matthews era).

Ambition in life: Use long service leave going bush.

Hobbies: Hay growing, old bikes, land rovers.

Best Trait: Keep on keeping on.

Worst Trait: Don't suffer fools lightly.

Four people to invite to dinner: My wife, Nigella Lawson, Kevin McCloud, Dr Karl Kruszenlnicki.

NODP 2018

The graduates from the 2018 WIOA Victorian Network Operator Development Program (NODP) were presented their program completion certificates and a tee shirt at the WIOA Presidents Dinner on 4 September in Bendigo. They were each presented their certificates by Mike Rankin from Water Training Australia and George Wall from WIOA, and were acknowledged by all those present for their hard work and dedication.

Participants Marcus Pilgrim and Tony Evans presented a summary of their experiences and learnings from participating in the program during an interview with WIOA President Adrian Rijnbeek. Bryce Wellington delivered a poster on the Program at the Bendigo conference.

The NODP will be conducted again in 2019 and nominations from individuals wishing to participate will close on 20 November.



NODP participants & Committee 2018.



Bryce Wellington doing his poster on the program.

JOHN HARRIS – LIFE MEMBERSHIP

At the recent Victorian Conference in Bendigo WIOA presented our highest individual award to John Harris. In receiving the award, John became the eighth Life Member in the Association's 45 year history.

A brief outline of John's involvement with AWWOA, WIOA and the Water Industry is as follows:

1973 Commenced employment in water industry with Warrnambool City Council. (coincidentally the same year WIOA started). He has seen numerous mergers and amalgamations from South West Water right through to Wannon Water.

1994 Joined WIOA as a member

Aug 1998 Appointed to the Committee to fill a casual vacancy

2001-2002 Elected as Vice President

2003-2004 Elected as President

2005-2008 Elected as a Committee member after finishing his term as President

2007-2010 One of 6 inaugural Directors of WIOA Ltd when constituted on 16 January 2007 – resigned Feb 2010

10 years as a Committee Member as well as 4 years as a Board Member

Achievements & Awards

1993 Awarded AWA – Wal Whiteside Operator of Year award at conference in Ballarat

2000 R/up Actizyme Prize for Best Operator Paper at the Warrnambool conference. Paper on the Warrnambool WWTP - IDEA System and Filter Press.

2006 Inducted as an IDIOTS member

Other Service

2000 Instrumental in organising the Victorian conference in Warrnambool

2004 Signed MOU with NZWWA in his role as President

For many years John was the MC at the Awards Dinner at the Victorian conference (those around at the time won't forget his many hats).

He actively encouraged his colleagues to contribute papers and posters for the conference

John was one of the main drivers for Wannon Water joining the Operator Certification pilot in 2012 and Wannon Water employs 2 of the first 4 operators to be certified in Australia. John has been instrumental in Wannon's continued participation with around 20 operators now certified.

Other Industry Service

In 1994 he attended the November AWWOA Committee meeting to talk about the development of the national water training package. He took on the role to represent both AWWOA & ASU on the package development committee. UTW 98, the first ever national training package, was developed from this work.

He has represented the water industry on skills committees since the late 1990's in his roles on the Australian Local Government Training Board; then Government Skills Australia and most recently Australian Industry Standards. He has been Chair of the Water Industry Reference Committee from 2005 to the present.

No matter how busy he is, John always makes himself and his time available to WIOA (including out of hours). He has been an invaluable sounding board to discuss ideas or issues, as his opinion is always highly respected.

John has been a regular attendee at WIOA events including the Weekend and other Seminars, Interest Days, plant tours and even social occasions like the Golf Day. He has arranged sponsorship and then drove the bus for the Wannon operators to the golf days in Camperdown. With the support of his employer, he has attended interstate events and helped with the expansion of WIOA.



John Harris being presented his award on stage by George Wall.

The standing ovation that John received at the conference dinner when announced as a Life Member, is testament to how respected and valued he is in the water industry. John's commitment to the industry and WIOA, his enthusiasm and his friendly and nurturing nature are qualities that we all should aspire to emulate.

Retiring in June 2019 after 45 years in the water industry, he will certainly be missed.

George Wall – WIOA Managing Director



A happy group of Life Members in Bendigo.

NEW IDIOTS INDUCTEE - RYAN MCGOWAN

At the Bendigo conference, Ryan McGowan became the 36th WIOA member to be inducted into the IDIOTS fold.

Ryan's first contact with WIOA was at the 2008 conference in Bendigo where he presented a paper titled Ampla – Turning SCADA Data into Information. He came to the 2009 conference as a visitor and was obviously impressed enough to join WIOA as member that September. He has been a member for just on 9 years now.

We're not sure how he wrangled it, but he has managed to score a berth as a conference delegate pretty well every year between 2011 and 2018, only missing out in 2013. This is a good effort considering GVW's rotation policy for conference attendees.

Again, we assume he saw something special in WIOA and he nominated and was elected to the General Committee in 2011, 2012 as well as in 2017 & 2018. In between, he stepped up to the role of Vice President in 2013 & 2014 and then President in 2015 & 2016 where did an outstanding job.

He has been a highly respected Board member of WIOA Ltd from 2015-2018.

The Board and Staff of WIOA have tapped into Ryan's considerable IT expertise on numerous occasions. As part of WIOA's IT sub-committee he has been integral in helping us set the strategic direction for WIOA's ICT platform and products. WIOA has certainly been fortunate to have such a knowledgeable expert available and he has helped the staff immensely just by letting us bounce ideas off him. All our members will see the benefits of his efforts as we roll out more of our ICT solutions in the coming months.



Ryan presented his pin and plaque by George Wall.

He also put his technical knowledge to good use in 2014 doing a poster on GV Water's Intelligent Metering Trial and he presented a platform paper in 2017 on Operator' to the Future.

Like many in the world of IT, Ryan could be described as the shy, unassuming, even geeky type. He is highly intelligent and

astute, but with Ryan there is a fun loving side lurking just under the surface.

It has been great to see his confidence continue to grow and his speaking skills develop through his roles with WIOA. He has certainly impressed us all in his role as MC at recent conferences.

The term "quiet achiever" is an appropriate description of Ryan. He prefers to get on with things in the background and helps make sure everything runs smoothly. From looking after the papers room, MC'ing the Taste Test to sweeping the floors, you can rely on him being there and doing his bit.

Through his contribution, Ryan has played an important role in allowing WIOA to expand and gain acceptance nationally. We need more committed members like him. Congratulations on your efforts from all of us!



Ryan aka Elvis in full flight.

Like all inductees before him, to be accepted into the IDIOTS fold requires the inductee to perform a task to demonstrate their worthiness for such

an award. At the 2017 WIOA Weekend seminar in Eildon, we had a Las Vegas theme at the dinner. No Las Vegas night would be complete without some high class cabaret entertainment.

We're still not sure how Craig managed to get Ryan to agree to it, but Ryan was one of the best Elvis impersonators any of us had seen. It just happened that we had some of Elvis' clothes available and Ryan did an outstanding encore performance. Well done, and a very deserving winner.



Ryan kicking up his heels.

NEW IDIOTS INDUCTEE - SHANE BANDIERA

At the WIOA Far North Queensland Interest Day held in Cairns in October, Shane Bandiera from the Cassowary Coast Regional Council became 37th WIOA member to be inducted into the IDIOTS fold.

Shane joined WIOA in April 2003 and has been a member for over 15 years.

He attended WIOA's first Qld conference in Rockhampton in 2006 after WIOA took over the management of the event from WITA. Back in those days, Shane hailed from Johnstone Shire Council. He delivered a paper on the impacts of Cyclone Larry that was awarded the Actizyme Prize for Best Operator paper. As a result, he attended the 2006 Victorian conference in Bendigo to present his paper again. We think this trip possibly gave Shane the bigger picture of what WIOA was about.

He has also attended our Queensland conference in 2010, 2013 and 2015.

In August 2011, when WIOA created the Queensland Advisory Committee, Shane was one of the inaugural Members who put his hand up to help out. Although he didn't get down to any of the meetings held in the South of the State, he created some awesome opportunities for WIOA in the FNQ region.

In October 2011, Shane was instrumental in promoting the value of the WIOA network and introduced us to the team at the Qld Dept of Local Government and Planning. As a result, WIOA was invited to come and present about what we do at a capacity building workshop held in Cairns.

From that first workshop, WIOA was contracted to run an introduction to water quality seminar in Cairns in late 2011. This was later extended to a project where a range of water and wastewater training courses were held in places like Cairns, Cooktown, Napranum, Woorabinda and Yarrabah through 2013 & 2014.

In 2014, we were left with a decision about what to do with the FNQ network once some of Local Government staff moved on. On Shane's insistence, it was agreed that what we'd created was too good to let go, so we set up a small Far North Qld Committee with Shane as the unofficial (or maybe self-appointed) Chair. Obviously, lots of others from FNQ have helped over the past 5 years but Shane has been the common denominator.



Shane being congratulated by George Wall.

True to Shane's word, we have kept the network alive and the fact that the 2018 WIOA Interest and Charity Bowls day attracted 75 attendees is a real credit to Shane's determination and love of the organisation.

Each year he has been extremely active in providing feedback to help us shape the content of the Technical program and he is always doing more than his share at the event.

WIOA takes great pride in recognising those members just like Shane who have been able to do their bit, often unheralded, simply because they see the value in providing development opportunities for all operations staff.



Shane wearing the split jumper and loaded with bling.

Through his contribution, Shane has played an important role in allowing WIOA to expand and gain the acceptance we now enjoy in Far North Qld.

Shane's challenges were a little less extravagant than some of the other recent IDIOTS, but none the less, he took things in his stride. Wearing a half NSW, half Queensland jumper to Origin night at the Gold Coast conference in 2013, we thought there must have been a story to it. Turns out he just prefers to be like Switzerland and not takes sides. His Cassowary Coast workmates worded us up that he likes bling so we presented him plenty of new glitter to wear. Finally, we were told how uncoordinated he is, despite his protests that he is good with his hands. To test the theory, juggling 2 balls was no problem, but the introduction of a third caused lots of mess. Didn't even need the fourth ball.



The unco juggler.

Congratulations on your efforts from all of us!

TECHNICAL COMPETENCY PROJECT

In 2017, KPMG issued the “Workforce Skills of the Future” report, commissioned by WSAA and the Water Research Foundation (WRF, formerly WE&RF). The intention was to help prepare for the key future trends affecting the water sector and its workforces.

This project included a survey conducted among water utilities in Australia, the USA and the UK to collect information on: cost, capability, capacity, connectivity and compliance. Global challenges and risks affecting the industry were explored further during a two-day industry workshop held in Melbourne, Australia in 2017.

As an outcome of the KPMG report, eight key enablers were identified to help water utilities be successful in a rapidly evolving environment. These included; 1. Resilience and Flexibility, 2. Data and Analytics, 3. Utility Leadership, 4. Customer Focus, 5. Technical Skills, 6. Delivery Models, 7. Entrepreneurship, 8. Collaboration.

The **Technical Competency Project** is an initiative of WIOA, in co-operation with VicWater, Queensland Water Directorate (*qldwater*), and the NSW Water Directorate. Project objectives are to develop guidance material on technical competency for the water industry (Technical Competency Handbook). This includes examples of good practice through the presentation of a series of case studies to demonstrate approaches for organisational capability and staff competency development, as well as management of ongoing professional development needs of technical staff.

The Technical Competency Project speaks to three of the above-mentioned key enablers from the WSAA/ WRF project, and associated industry initiatives that were recommended in the KPMG report:

- **E1a. Resilience and Flexibility:** Develop and implement competency frameworks to guide recruitment and performance management.
- **E3e. Utility Leadership:** Map career pathways, indicative skills, capabilities and education/training required at each level to support recruitment and professional development opportunities
- **E5d. Technical Skills:** Improve access to technical skills training for both the current and future workforce.

In addition to WIOA and the Water Directorates, there are 13 industry partners involved, including a range of Water Utilities, consultants, university and contractors. Project participants provided either expert editing and drafting support for the Technical Competency Handbook, or contributed case studies of their experiences in implementation of organisational Capability Frameworks and Professional Development Programs.

The Technical Competency Project is expected to wrap up in the first half of 2019, with key deliverables being the publication of the Technical Competency Handbook and associated Case Studies.

Technical Competency Project Participants



The Technical Competency Project participating organisations.

WIOA LOOK-ALIKES

The entertainer at the Meet the Exhibitors Dinner at the Bendigo Conference latched on to our Kiwi guest John Pfahlert, CEO of Water New Zealand and called him Koschie all night. We can see why, can you?



*John Pfahlert
CEO Water NZ*



*David Koch (Kochie)
from Sunrise
on Channel 7*

If you know of a WIOA member who has a look-alike send us a photo.

RECORD NUMBERS ATTEND VICTORIAN CONFERENCE

A record number of 1,513 attendees participated in the **Victorian Water Industry Operations Conference and Exhibition** held at the Bendigo Exhibition and Events Centre on 5 & 6 September 2018.

The conference opening speaker, Klausch Schmidt from Australian Industry Standards, shared the water industry skills forecast and presented on the development and review of the National Water Package.

The keynote presentation was delivered by John Pfahler the CEO of Water New Zealand. John provided a very interesting insight into the consequences of the Havelock North campylobacter outbreak.

At the Awards Dinner on the Thursday evening, Adam Panozzo from North East Water was announced the winner of the prestigious Wal Whiteside Memorial, 2018 Victorian Operator of the Year award. Tabatha James from Melbourne Water was awarded the Young Operator of the Year and the Network Operator of the Year Award went to Tim Kiddle from Barwon Water.

A number of other water people were recognised at this event including **Michael Chapman** from North East Water who won the Hepburn Award for the Best Paper Overall. The Best Paper by an Operator was awarded to **Paul Beard** from Water Corporation, Western Australia with Scott Whitehead from Goulburn Valley Water and Simon Palframan from North East

Water both recognised for their presentations. **Scott Murnane** from Veolia was awarded the Best Operator Poster.

This year's exhibition included 203 sites where the latest in equipment, services and process technologies available to the water industry were demonstrated. **Absafe** was announced as the winner of the Ron Bergmeier Award for the Best Exhibition Site and their site included an impressive video wall and interactive display.

The conference hosted the Ixom Best Tasting Tap Water in Victoria competition with the **Wannon Water** entry from the Hamilton WTP entry judged as the best.

Through the WIOA charity fund raising efforts over the year, a cheque for \$3,500 was provided to WaterAid to assist their work across the globe supporting the world's poorest people who do not have access to safe water, sanitation or hygiene.

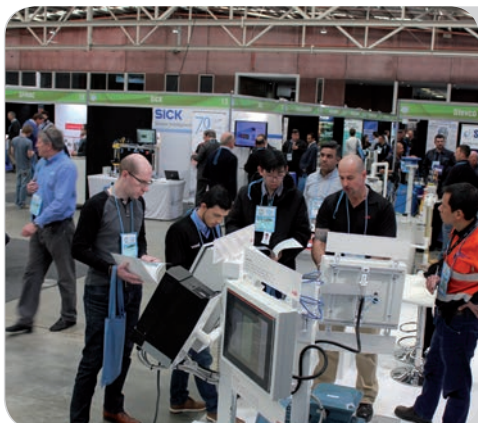
The winners of the Main Tapping Competition, **Gino Russo and Jack Dobson** from Goulburn Valley Water selected Buy-a-Bale as their charity of choice. A cheque for \$1000 has been forwarded by WIOA and matched by their employer Goulburn Valley Water. The donations will provide much needed drought assistance for Australian farmers by delivering hay and other essential items to farmers who have no feed left for their cattle due to drought conditions.



The GWV tap mascot at the tapping competition.



Poster presenters.



Checking out the equipment on display.



Heidi interviewing the Taste Test grand finalists.

VICTORIAN CONFERENCE 2018 AWARDS

Congratulations to all the award winners from the Victorian Conference and Exhibition.

**AUSTRALIAN
WATER**
ASSOCIATION



Victorian Operator of the Year
Adam Panozzo from North East Water

Victorian Young Operator of the Year
Tabatha James from Melbourne Water

Victorian Network Operator of the Year
Tim Kiddle from Barwon Water

Hepburn Prize for Best Paper Overall
Michael Chapman from North East Water

Best Paper by an Operator
1 **Paul Beard** from Water Corporation, WA
2 **Scott Whitehead** from Goulburn Valley Water
3 **Simon Palframan** from North East Water

Best Poster by an Operator
Scott Murnane from Veolia

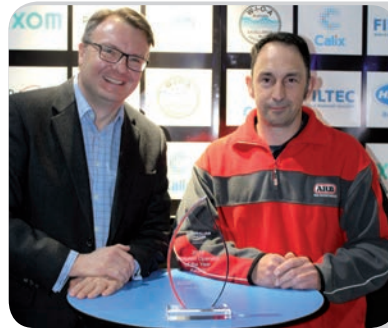
Ron Bergmeier Award for Best Exhibition Site
Absafe

Ixom 2018 Best Tasting Tap Water in Victoria
Wannon Water for the sample from the Hamilton WTP

Ixom 2018 Best Tasting Tap Water in Victoria – Finalists

- North East Water
- Coliban Water
- Falls Creek Resort Management Board
- Wannon Water

Main Tapping Competition
Gino Russo & Jack Dobson from Goulburn Valley Water



Victorian Operator of the Year Adam Panozzo (R) from North East Water with David Kirby from AWA Vic.



Victorian Young Operator of the Year Tabatha James (R) from Melbourne Water with Peter Quinn representing IWA Vic.



Victorian Network Operator of the Year Tim Kiddle (R) from Barwon Water with Mike Rankin from Water Training Australia.



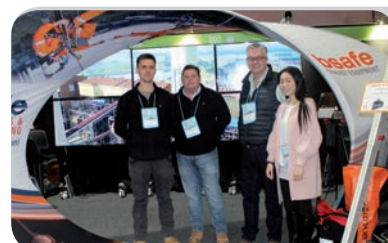
Winner of the Hepburn Prize for the Best Paper Overall, Michael Chapman (R) from North East Water with Damien Alston from Iwaki Pumps.



Best Operator Paper winner, Paul Beard (R) from Water Corporation, WA with Alex Maderasi from Actizyme.



Best Operator Poster winner Scott Murnane (L) from Veolia with WIOA VP Heidi Josipovic.



The Absafe team, winners of the Ron Bergmeier Award for best exhibition site.

2018 VICTORIAN CONFERENCE FEEDBACK

What the Delegates Thought

Kruse Rothnie Gippsland Water

Attending the WIOA conference is a great opportunity to interact with the broader water/wastewater industry in a more relaxed setting without the stresses of work. Its lunches and dinners also provide ideal chances to network with not only the businesses that supply our industry but with the operators facing the same challenges giving you a chance to compare ideas, learn and create partnerships for the future. Everyone who works within this industry should attempt to attend the next conference.

Mick Mahoney Wannon Water

Being involved in the network operations side of the industry, it was great to hear members from my team that attended comment on how diverse and inclusive the conference was for them. The opportunity to network and the variety of trade stalls really stood out. Having the tapping competition really added some interest and fun, while showcasing the capabilities and skills of our operators. Well done WIOA!

Emma Carden Vic Department Health and Human Services

Fantastic event for people of all levels in the water industry. If you want to see what is actually happening on the ground, it is a must attend.

Matthew Boyle Wannon Water

I found the conference very informing. Not only for the new equipment/devices found in the trade show, but finding out how other Water Authorities handle specific tasks. Great conference WIOA!

Justin Rigby Remedy AP

The culture and camaraderie of water industry attendees is warm and inclusive. Its admirable how WIOA has cultivated this spirit over its journey.

Its something that many industries could aspire to.



The Choose TAP mascot made an appearance.

Adam Medlock TRILITY

This was the first WIOA conference I've attended. From an operations' perspective it was extremely useful; the trade show section and many of the papers presented were highly relevant and I came away with knowledge and information that I can apply in my own area.

Chris Orchard Central Highlands Water

Yet again brilliant. Ran by operators for operators!

Exhibitor Comments

Bernd Vetter Evoqua WT

81st conference for WIOA in Victoria. I hope I will be as active, vibrant and switched on if I ever reach that milestone. Again, great show and organisation. The one not to miss.

James Blannin Stevco Seals & Pumps Victoria

As far as exhibitions go for the industrial pump market, this show rates as the best in Victoria giving great exposure to our business directly with operators in the water sector

Roger Summerill High Risk Safety

I think the turnout should be highlighted – the delegates, visitors, Exhibitors.

We can't forget the NZ guys what a bunch of fantastic people.

At the High Risk Safety stand we had over 35 good solid leads which my staff are following up as I write this email.

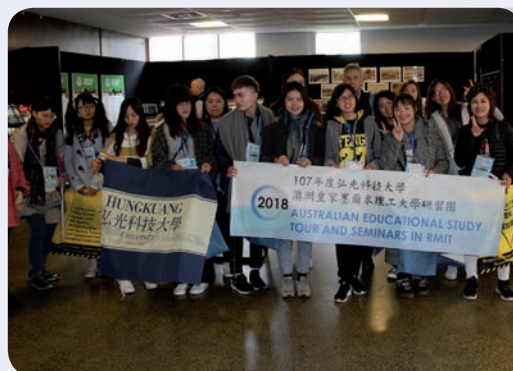
Paul Neville CRS Water

If your business is the water industry, this is the conference and exhibition for you.

Simon Tannock AlgaEnviro

The exhibition displays and information are a great way to see what is new and different, as well as to say Hi to old and current clients and friends.

With so many people spread so far in the industry, this is a great event for catching up, learning new things and meeting the people who are serious about making this industry leading edge.



The visiting group of Chinese university students.

VICTORIAN OPERATOR OF THE YEAR

Adam Panozzo is a passionate and skilled Treatment Technician at North East Water.

He commenced as an Operator at the Wodonga WTP, and has worked his way to the position as a Treatment Technician (which covers all of North East Water's region) in a small team led by Brain Scobie.

He takes pride in his work, and never allows safe drinking water to be compromised. He also has skills and knowledge in wastewater treatment, and is highly skilled at implementing optimisation and improvement projects.

Adam is constantly considering optimisation and reliability, and this has been demonstrated through his contribution to a number of initiatives and projects. He has been a driver behind the development, ongoing improvement and execution of both the internal and external instrumentation calibrations programs. He has worked alongside other departments within North East Water to facilitate and implement upgrades to improve water quality, provide less down time and reduce call outs.

Adam is very systematic and methodical in his approach to work which is reflected in the quality of projects he has delivered, and also the ongoing reliability of North East Water's assets which he has helped improve.

Adam lives North East Water's values, including exemplary teamwork, being honest, trustworthy and has broad respect across NEW. Adam has a strong passion for the water industry and enjoys the variety of work, challenges and different areas he gets to work in.



2018 Operator of the Year
Adam Panozzo from North East Water.

VICTORIAN YOUNG OPERATOR OF THE YEAR

The winner of the 2018 Victorian Young Operator of the Year Award is Tabatha James from Melbourne Water.

Tabatha (or Tab) commenced employment at Melbourne Water in the Water Supply Team as trainee in 2016. Tab has shown an amazing commitment to learning all she can about water industry management and implementing these skills in the workplace. She has an incredible, "Can Do" attitude and approaches each new situation she faces with great enthusiasm.

In her short term on the Melbourne Water team she has quickly progressed from Trainee to a qualified Operator who is often sought after by fellow team members for her knowledge and support. Not satisfied with just doing her job, Tab has also demonstrated a strong commitment to improving the systems and procedures her team rely on as part of their daily routine activities.

Her passion for OH&S has also led her to implement numerous safety initiatives providing major improvements to the safety of key tasks conducted by her and her team. With a background in conservation and land management, Tabatha has also demonstrated a strong commitment to improvement of land management and sustainability initiatives that impact on the assets she manages.

Tab epitomises Melbourne Water's core values of "Care Integrity and Courage".

For winning the award, Tabatha receives a Perpetual trophy, a plaque to keep and the best bit – IWA Victoria provides an all-expenses paid opportunity to join the WIOA delegation on their tour to New Zealand in May next year.



Victorian Young Operator of the Year
Tabatha James - Melbourne Water.



- Woolpunda WTP is located 170 km North-West of Adelaide
- The plant is staffed by a single operator and has a capacity of 1.8 ML/d
- Raw water is drawn from the River Murray and is pre-filtered with coarse disc filters and is then coagulated using aluminium chlorohydrate.
- Ultrafiltration membrane system filters out the particulate matter. The water is passed through three granular activated carbon vessels, which remove taste and odour compounds.
- The water is disinfected using chlorine and is dosed with caustic for pH correction and aqueous ammonia to form monochloramine.
- Monochloramine is used at Woolpunda to ensure the chlorine residual is able to persist throughout the large local water distribution network.
- Treated water is stored in a 450 kilolitre tank.
- The plant serves around 378 customer connections in the towns including Wunkar and Mantung
- A network of around 240 km of water mains connects feed water to rural properties and farms throughout the region for domestic and stock purposes.

- 1. Murray River**
- 2. Woolpunda raw water pump station**
- 3. Inlet works & coagulation**
- 4. Membrane building**
- 5. Granular activated carbon contactors**
- 6. Disinfection & chlorine contact tank**
- 7. Treated water storage tank & pumps**
- 8. Waste wash water tank**
- 9. Clarifiers**
- 10. Sludge drying lagoons**
- 11. Bulk chemical storage**
- 12. Office & laboratory buildings**

BIRDS EYE VIEW - Facilities Members Operate

Woolpunda Water Treatment Plant - South Australia



VICTORIAN NETWORK OPERATOR OF THE YEAR

Congratulations to Tim Kiddle from Barwon Water who was announced as the 2018 winner of the Victorian Network Operator of The Year Award, sponsored by Water Training Australia, at the Bendigo Conference.



Tim Kiddle proudly displays the perpetual trophy.

This award is presented to one of the participants in the WIOA Victorian Network Operator Development

Program. The aim of the award is to provide encouragement to all NODP participants to be engaged fully in the Program and to recognise the achievement of the most outstanding participant.

There were a number of exceptional candidates in this year's group and any of them could easily have been a worthy winner.

A number of activities are reviewed by the judging panel in order to determine the most outstanding participant including:

- Completion of all the projects and activities after each Workshop session.
- Completion of at least one presentation during the program.
- Proactive participation in all aspects of the Program and contribution to the discussions during the Workshops.
- Demonstrated growth in both technical and leadership fields.
- Provision of appropriate feedback from employers outlining the progress of their participants during the Program.

After considering all the activities, Tim was the stand out for the judges. Although very quiet at the start, by the end of the program Tim was one of the more confident and accomplished participants. His assignments were well structured and high quality. He was always respectful of the thoughts of the other participants, embraced all aspects of the program and participated fully.

For winning the award, Tim receives the Perpetual trophy, a plaque to keep and the best bit – Water Training Australia has provided a grant of \$3000 to be used for an appropriate professional development opportunity of his choice.



Tim intently inspecting the chlorine dosing unit at the water quality session.

WISE - SAFETY FOR LIFE



The Water Industry Safety Event (WISE) - what a fantastic initiative from WIOA!

It was great to see so many attending from other Water Authorities for its first safety specific event.

The exhibition stalls were popular from an operational perspective giving people the opportunity to look at technology specific to the water industry. Some of our staff attending really enjoyed the drones and believe the benefits of this technology very beneficial when conducting inspections over a large area.

Presentations on the day covered a range of issues from high level management focusing on safety statistics and behaviours, through to some heartfelt personal journeys experienced by some courageous staff around the 2009 Marysville Fires and Melanoma Awareness. There weren't too many dry eyes in the room.

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'.

Contributed by **Kim Wilson**, Gippsland Water



Mick Clewes presenting at WISE.

The hypothetical team hosted by Mary Tehan.



Some of the safety items on display.

"Virtual" safety.



FNQ OPERATIONS INTEREST DAY 2018

I was lucky enough to have the opportunity to attend again and it was great to see a few familiar faces from around the local area. Shane (self-appointed chairman of the north) Bandiera made the point in his welcome that the day is not just for treatment plant operators but for the entire water and wastewater industry. This was apparent with a lot of new faces, including many of our own Cairns Regional Council water reticulation team. Around 75 participants from across the FNQ attended.



The FNQ attendees listening to Dan Deere present.

The day started with Dan Deere giving a “hot-off-the-press” update on Health Based Targets. Dan explained that most utility providers already comply with the new targets and the HBT will either reinforce what is already being done, or help inform where to go in the future. Rulani Janse van Rensburg followed this with a presentation on a chlorination upgrade using a **Lonza** system which tied in nicely to HBT. Glen Twite then presented a paper on botulism in the bird life (I had no idea what botulism was till then), at Mt St John STP in Townsville. It was amazing to hear the extra lengths they went to, including collaborating with JCU to diagnose and resolve the issues. It was easy to see why Glen and his team won the Best Operator Paper at the Logan conference earlier this year.



Hayley Paton presenting.

We then broke for morning tea and a catch up with acquaintances from around the region. Hayley Paton, a trainee operator from Cassowary Coast, presented her first paper on a magnesium hydroxide trial. Well done Hayley!! You are braver than me. Rohan Geddes followed with a presentation on a Mareeba CBD water main upgrade. Though the project faced major challenges, these were resolved by the perseverance of the project team. Andy Elshaw, representing Cairns RC, bravely stood up and said engineers never make mistakes and was almost thrown out!! He then quickly thanked the operations staff involved in his diffuser replacement project at our Southern WWTP. Carl Sargent gave an update on what's going on at **glwater**. She called for increased input into what would be valuable for the Certification program. Aiden from Water Treatment Services did the final presentation on suppression of H₂S in trade waste through dosing some extra bugs which sounds impressive.

George Wall updated us on WIOA activities, then presented Shane Bandiera with the **I.D.I.O.T.S.** award. I couldn't think of a better candidate. He sits on the fence, wears all the bling in the world, and couldn't catch a ball to save himself - all of which

were demonstrated during his challenges. I do remember when I first met Shane. He was very enthusiastic about WIOA and very passionate about industry training. Shane is focused and committed to leading the industry to a better place and upholding the WIOA values.

Water Treatment Services sponsored the lunch and it was then



The tapping comp under way.

on to the mains tapping competition. MC D.ROCK (Denny Philips) was on the microphone commenting the thrilling event with turn by turn coverage. It was really great to see this competition held up in Cairns. **Reece Civil** supplied the equipment and were onsite to ensure everything was used correctly. We had two heats. First up was Cairns 1 vs Mareeba. Cairns 1 had an easy run

when Mareeba broke their TPFNR (the thing that drills into the pipe) and DNF. The second heat was between Cassowary and Cairns 2. Cassowary stepped up and looked the part, blitzing the time set by Cairns 1. Cairns 2 seemed to be standing still and also DNF when they gave up after 5mins. What a win for Cassowary!! Wait a minute. Upon inspection a protest was lodged. Seems they may have taken a short cut and not drilled all the way through the ductile iron pipe. It was like a midday soapy with all the drama in the air. There was plenty of waterworks over the final result.

Unfortunately, some of us had to return to work and as a result, I missed the afternoon of bowls sponsored by **TRILITY**. The ever important afternoon refreshments were sponsored by **Xylem**.

The message I took from the Interest Day was; this is becoming a big event and it could be whatever we make of it. For suggestions and recommendations to improve the day please talk to George or Shane and be prepared to roll up your sleeves and get involved. Thanks to all the sponsors for their involvement and making it a great day. Finally, thanks to WIOA for the effort in getting this day together. Your drive and passion is fantastic to see, and I'm sure all agree, it was a great day.



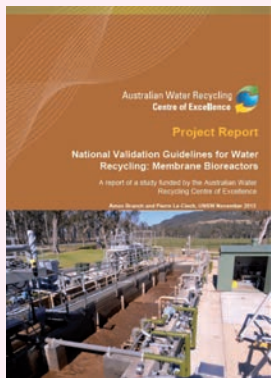
The winning team of Ces, Glen and Shane.

The **TRILITY** bowls arvo was won by the Professional Pump Services and Irrigation team of Ces Honeyball, Glen David and Shane Bandiera. Runner up was the Aquatec Maxcon team. Scott Buckley won the long bowl from corner to corner, and the

Cairns RC team came last (shame on you!). A total of \$1,300 was raised for charity from the afternoon, so thanks everyone.

Contributed by **Joe Robinson**, Cairns Regional Council

THE FUTURE OF WATERVAL WORKSHOP



WaterRA facilitated a workshop on the future of the WaterVal program in Melbourne on the 6 August 2018. The workshop was attended by 36 participants representing regulators (4), utility (15), industry (10) and research (4), along with 3 WaterRA staff.

The workshop commenced with two presentations from David Sheehan (past Chair of the Protocol Development Group) providing an introduction and Cedric Robillot (past NatVal and WaterVal program Manager) on the current state of the WaterVal IP.

Following the presentations, the participants undertook two activities. The first activity discussed stakeholder needs with a protocol validation program. The second task mixed participants from industry sectors to discuss potential business models for the ongoing governance and management of the WaterVal program.

So, What Is WaterVal?

WaterVal originated as a response to the Australian water sector's request for more cost-effective application of water recycling technologies. The WaterVal protocols were originally developed by the former Government-funded Australian Water Recycling Centre of Excellence (AWRCoE) as part of the NatVal program. The aim was development of a way to achieve national consistency in the validation of treatment technologies for water recycling.

This validation framework (WaterVal) is underpinned by Validation Protocols, which are independently developed and agreed methodologies to assess pathogen removal through implementation of various water treatment barriers. The framework and protocols are applicable to a broad range of water sources, and complement the objectives of the Australian Guidelines for Water Recycling and the Australian Drinking Water Guidelines.

After the AWRCoE closed its doors, there was a transition process for the intellectual property (WaterVal Protocols) to WaterRA, which was completed in 2018. To date, the validation protocols developed under the original WaterVal project included; chlorine disinfection, ozone disinfection, membrane bioreactors, reverse osmosis/nanofiltration, as well as guidance material for UV disinfection. These same protocols are currently available through the WaterVal page on the WaterRA website: <https://www.waterra.com.au/research/waterval/>

What's Next for WaterVal?

The next steps are for WaterRA to further analyse the stakeholder needs and examine the feasibility of how these needs could be met with potential business models. Further engagement with the water sector will occur to assist in refining these potential models.

WIOA TALKS TECHNICAL WEBINAR – WORKING SAFELY WITH TELCOS

The WIOA Talks Working Safely with Telcos webinar on 21 August put a spotlight on the issue of Telecommunications infrastructure on water assets, and the challenges faced by water utilities to manage water supply integrity. There is a growing need for water utilities to understand and exercise their legislative rights in order to; meet water supply and governance requirements, protect employee safety, reduce their business costs imposed by Telcos facilities, and to highlight any legislative deficiencies so things can be fixed.

The aim of the webinar was to describe; what can go wrong with water infrastructure when telecommunications installations on water assets are not carefully managed, what legal rights and obligations water businesses have when working with telecommunications companies and their installations on water assets, and what risks and protection measures are needed to protect water industry workers from electromagnetic radiation.

Jill Busch (Aqualift Project Delivery) gave an overview of what can go wrong with unchecked development of telecommunications infrastructure, including impacts to site security, increased risk of vandalism, reduced capacity to conduct maintenance and inspections, damage and possible failure of structures and potential for compromised networks water quality. This was well illustrated through a series of water asset photos that have been impacted by telco installations.

Jason Ip (Riverina Water CC) gave a fantastic presentation on the Telecommunications Legislation Framework and what the rights and obligations are for water businesses when negotiating with Telcos regarding installation of towers. For those water businesses who have been impacted, Jason provided a number of options to source documents and websites in his presentation, for further reading and research into how to protect water assets.

Finally, Murray Thompson (MTWS) gave a practical presentation on how to safely access reservoir sites with mobile phone antennas, dishes and panels. Murray's presentation covered; what is Radiofrequency Electromagnetic Energy (EME), how to work safely near antennas, featured the

Mobile Site Safety App (<https://www.radioworksafe.com.au>), talked about how to use the "RadMan" personal radiation monitoring device, and a safe operating procedure for accessing & inspecting reservoirs.

The WIOA Talks technical webinar series is proving to be a successful and popular format for WIOA members to hear and learn more about what's going on in their industry. The WIOA team have had fantastic feedback from the webinars, and we encourage members to contact us with ideas and suggestions for hot topics to feature in future technical webinars (info@wioa.org.au)



Jill Busch getting ready to give her presentation from home

VICTORIAN AND NATIONAL BEST TASTING TAP WATER

Hamilton has Vic's Best Tasting Tap Water

Wannon Water took on all comers to win the Ixom 2018 Victorian Best Tasting Tap Water Competition at the WIOA conference in Bendigo in September, with the sample from their Hamilton Water Treatment Plant.

After making it through a tough preliminary round of judging, the Grand Finalists were narrowed down to the samples from Wannon Water, Coliban Water, Falls Creek Resort Management and North East Water. The grand final was a closely fought affair under the gaze of a massive media throng awaiting the result.



The assembled media sweating on the result.



The "expert" judging panel doing their thing.

After the announcement, John Harris was glowing in his praise for the operations team from the Hamilton WTP. The award is a great achievement and acknowledges the hard work that the very dedicated Wannon operations teams put into producing safe, reliable and great tasting water for our communities. It is



Wannon Water Team celebrating after winning the Ixom Taste Test award in Bendigo

Best Tasting Tap Water in Australia as well

Not only did Wannon Water win the title as the supplier of Victoria's Best Tasting Tap Water, they can also now boast that they produce the Best Tasting Tap Water in Australia.

The national Final was held in Toowoomba in October. The winners of each of the Ixom Best Tasting Tap Water competitions held in the various States were pitted against one another with the community of Toowoomba invited to taste the samples and cast their vote. In one of the closest competitions ever staged, the Wannon Water sample came up trumps over the entries from NSW, Queensland, South Australia and Tasmania to win the award.



John Harris in the Australian winner jumper with the trophy.

The Wannon Water sample will now go on to represent Australia at the International Water Taste Test conducted in Berkley Springs, USA in February 2019. We encourage all water businesses to enter their respective State competitions in 2019, and we look forward to adding even more States to next year's national competition.

Hamilton's Water Treatment Plant

The Hamilton Water Treatment Plant supply water to Hamilton and the nearby rural townships of Dunkeld and Tarrington. Raw water is sourced from catchments in the Victoria Range at the southern end on the Grampians National Park.

Water is diverted from eight small and sometimes intermittent streams on the western slopes of the range. Historically, it has been high in colour and low in pH and dissolved salts.

The water flows by gravity through 47.4km of pipeline to three storages north of Hamilton. It is treated, delivered to an 11 ML clear water storage tank and then reticulated to 4,751 customers in Hamilton.

Only 10 years ago during the Millennium drought, the Hamilton Water Treatment Plant was struggling to produce great tasting and reliable water that met the ADWG.

The water had relatively high turbidity (10-35 NTU), very high colour (300-400 Hu) and a low alkalinity (2-5 CaCO₂). Wannon Water invested \$4 million to improve the plant's pre-dosing system and improve flocculation and dissolved air, with another saturator installed to allow a better DAF in each cell.

Following the upgrade and thanks to a dedicated team of operators, who use more selective water harvesting methods, the plant is now performing extremely well. There has been a huge reduction in Aluminum Sulphate from 300mg/L to between 90-110 mg/L and the plant is producing water of less than 0.1 turbidity zero colour.



The Hamilton WTP operators

VICTORIAN MAINS TAPPING COMPETITION

reece

civil

Coliban
WATER

As the second staging of the Victorian Mains Tapping competition got underway at the Bendigo conference before a bumper crowd, the big question on everyone's lips was who would win, and would they beat the best time set at the Queensland conference in June. Interestingly and confusingly for some, the main question on the MC's lips was "would the Goulburn Valley Water team succumb to the Wannon Water team for the second straight year".



Part of the large crowd watching proceedings.

With 8 teams entered, 2 heats with two teams in each, were held at

the morning tea break on both Wednesday and Thursday.

The Committee and participants of the Network Operator Development Program were again given the task of looking after and running the event, and they did a fantastic job.



Some of the contestants in full flight.

After months of competitive trash talk between Wannon Water and Goulburn Valley

Water (GVW) in the lead up to the event, Neville Whittaker from GVW sidled up to the microphone as event MC. He let everyone know that there was no question that the GVW team were out for vengeance after last year's disappointing effort.

Unlike last year, the Wannon Water team posted a relatively slow time on the Wednesday and were not in the hunt for the overall title.

The GV Water team of Gino Russo and Jack Dobson deserved a medal for being able to block out Nev's extremely loud encouragement and calmly went about the business of getting the job done. Much to Nev's delight and Wannon's dismay, Gino and Jack not only won their heat, they recorded the best time out of all the teams.



Jack Dobson with the trophy at the Awards Dinner

Reece Civil and Coliban Water supported the competition and the winning team nominated the "Buy a Bale" project to be the recipient of a \$1000 donation on behalf of the sponsors and WIOA. In an awesome gesture, GV Water's MD, Peter Quinn

committed to matching the sum at the Awards Dinner.

We look forward to even more teams entering next year, and we hear that some are already out practicing.

WAGGA WAGGA WATER INTEREST DAY

A Water Interest Day was held at Riverina Water County Council's (RWCC) Wagga Wagga Water Treatment Plant on 14 August 2018. Around 35 people attended, including a number from nearby regional Councils and water corporations. Riverina Water provided a fantastic morning tea for everyone as they arrived to register for the event.

We were greeted by Andrew Crakanthorp, RWCC's Managing Director, who gave a very warm welcome to everyone and a great introduction to the day. WIOA's Vice President, Heidi Josipovic chaired the first session and introduced Bede Spannagle who presented "Riverina Water - Who we are and what we do". The morning session was rounded out with an amazing warts-and-all presentation on their experience managing the "Wagga Wagga WTP Upgrades – the Good the Bad and the Ugly". The upgrade is a multi-million dollar investment into future-proofing the Wagga Wagga water treatment plant, involving upgrades to the raw water system and brand new 55 ML/d treatment process.

After a brief break the next speaker was David Bedggood (North East Water) talking about the Yackandandah Energy Storage Project. Following on from this Jason Ip (RWCC) talked about major bores inspection, maintenance and refurbishments, with some innovative approaches to bore refurbishments featured. Finally, Aaron Mitchell from SAFEgroup, the Interest Day sponsor, talked about the importance of keeping SCADA systems up to date, as well as providing a demonstration (along with representative from Wagga Wagga City Council) on SAFEgroups WaterOutlook data management technology.

After a light lunch, the attendees were given a tour of the newly upgraded Wagga Wagga WTP, with highlights being the raw water system, chemicals storage areas and an "industry best practice" approach to disabled access to the new water treatment facility. The disabled access will allow RWCC to host more site tours allowing a broader cross-section of the community to see the great work that they do.

Overall it was a fantastic day and thoroughly enjoyed by all who attended.



10 out of 10 from attendees for RWCC team's efforts in hosting the Interest Day.

Peter Outtrim explains the treatment process during the site tour.



A DAY ON THE GARFIELD GREEN

The 20th staging of the Annual WIOA Victorian Charity Golf Day was held at the Garfield Golf Club in Gippsland on 21 October. It was fitting that Prominent was the naming rights sponsor this year, given that whole event started following a conversation between Allan McIntyre and George Wall that they should have a hit one day. The first event was held in Broadford in 1999 on a very wet and stormy day, with Prominent coming out the winner of the tradies Cup.

The day started with a few snags in bread, which settled the nerves for many of the want-to-be competitors keen to show their prowess on the greens. The teams of 3 for the Ambrose Challenge were announced and a shot-gun start followed for the 40 assembled golfers. This was also the opportunity to purchase the "Cheats Packages" that included mulligan cards and for this year following the "Block" with a "Chance" card allowing certain liberties for the team. Some were seen kicking their ball, others got extra tee shots, and some could hit from the ladies tee. A couple of groups forgot which hole they could "cheat" on and one group didn't open their envelope until near the 2nd tee only to find out they could have had extra tee shots on the first – woops.

The Willprint Team from Shepparton made the long trek to defend the much sought after Tradies Cup. Sadly, too many hours in the car thinking about their title defence shot by shot, obviously caused them to arrive in a highly stressed state and their golf followed suit. The dream of going back to back evaporated early.



All the golfers raring to go.

It proved to be a day out for the ADC Plastics team of Chris, Dan and Trent Anderson. They smashed the field by having the best score of the day of 54.7 to win by nearly 3 shots and collected the Tradies Cup into the bargain.



Overall winners – the ADC Plastics team.

Despite Garfield being their home course, the team from TRILITY of David Aitken, Mark Starick and John Keys came in second on 58 just ahead of the team from Southern Divers 59.5.



Runners-Up the TRILITY team.

Nearest to the pins went to Roger Motteram, Dale Campbell, Trent Anderson, Jim Martin, Mark Starick, Dan Anderson and Robyn Woodhouse. The longest drive sponsored by ADC Plastics went to Trent Anderson.

During the day the PAAS refreshment cart kept up with players demands with Marilyn doing a fantastic job getting around to all the groups and keeping up the hydration levels. After winning the NAGA (not a golfers ar**hole) award in 2017, the PAAS team beat the odds and came in second last this year by just 0.2 of a shot. The Dial Before You Dig Team came home stone motherless last and were awarded the obligatory first aid kit to dress their wounds on the way home.



WIOA Chairman Jim lets one rip.

The course was in terrific condition and was amazingly green given how dry the north of the State is. A big thank you to the Garfield Golf Club team who supported the event and put on a great day including the meal after golf.

Finally, a big thank you must go to the sponsors that make events like this possible and all the golfers that travelled from other water corporations and businesses around the state. The highlight of the day was the total raised for charity, with more than \$2,500 to be donated in 2019, an awesome result.



David Aitken teeing off on hole 8.

MoU WITH WaterNZ

A Memorandum of Understanding between WIOA and Water New Zealand was signed at the Bendigo conference by their CEO, John Pfahler and George Wall on behalf of WIOA.

The intent of the MoU is to establish a strong partnership between the two organisations to advance our common interests. This includes identifying ways to better serve our members through communication and collaborative efforts, sharing information, promoting the uptake of professional development, and fostering recognition of the role and achievements of water professionals.

There are some specific undertakings attached to the MoU including establishing and maintaining a link between each Organisation's respective websites; sharing communications and publications, and attending the annual conference of the other party.



John and George signing the MoU.

HOLLYWOOD COMES TO WIOA

WIOA was approached by Swinburne University Film & Television student Jack Morrow in May, exploring the opportunity to create a documentary around the Victorian and National Best Tasting Tap Water competitions. The pitch stated the focus of the project is about "The Taste of Water" and how the water is judged.

We agreed to the request and after some initial discussions the team of 6 students come along to the Victorian conference to film all the action. The team included a producer, director, film crew and audio recorders who captured the competition from all angles and interviewed participants and competitors. The film crew also attended the national competition in Toowoomba, capturing the announcement of the Australian champion and more footage.

We eagerly await the final documentary that will have its debut screening along with other Swinburne University student projects in late November. The film crew included Jack Morrow, Lucy Demuth, Jordan Medic, Chloe White, Jayden De Oliveria, Alex Cann and Hamish Viney.



The students interviewing President, Adrian Rijnbeek

WATER WEEK

It's on again, it's water week
So come on in and have a peak.
See how it's done and ask what we do
To get safe water out to you.

We start off at the pump station
Into the basin for sedimentation.
A bit of pH stabilisation
Then adding Alum for flocculation.

Rapid mixing agitation
Gentle stirring coagulation.
Slow flowing weirs for clarification
Or adding air for Daff flotation.

Through sand and coal for filtration
Even UV radiation.
Gas or hypo for chlorination
And sometimes even fluoridation.

Before entering the reticulation
To feed a growing population.
So if it's knowledge that you seek
Then come on down, it's water week.

Aaron Sewell, 2018

WIOA Member Aaron Sewell from North East Water in Victoria is a well renowned bush poet, having performed one of his other compositions at the Victorian Conference a few years ago. His latest poem was performed to great applause for those assembled at the tapping competition. The words of the poem have now been used on the Water Week shirts worn by North East Water staff.



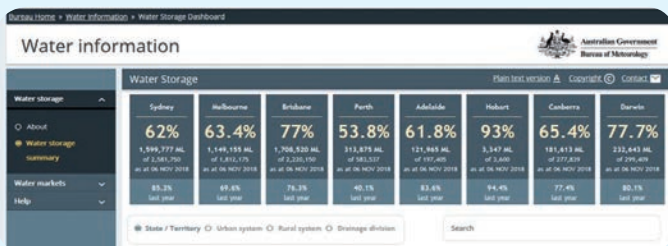
Water Week poem on the staff shirts.

BOM – WATER STORAGE DASHBOARD

Australia is the driest inhabited continent and has the highest per capita surface water storage capacity of any country in the world. The large number and size of the water storages is a function of both Australia's aridity and the highly variable rainfall.

The Bureau of Meteorology's Water Storage dashboard lets you compare water levels and volumes for more than 300 publicly-owned lakes, reservoirs and weirs in different States and Territories, and see how much water is available over the entire country.

You can find out how much water we have in our storages in each State, capital city, drainage division and major water supply system, as well as in individual storages.



You can also compare how the volume has changed over the previous, year, month, week and day.



Water management authorities in each State and Territory send water storage information to the Bureau of Meteorology (the Bureau) for processing and publication. The Bureau converts the data into a standardised form for easy comparison across different regions. Information about water storage levels and volumes is generated at different scales, such as by State, city, drainage division and water system.

The Water Storage dashboard:

- provides regularly updated and accessible information to inform forecasting and decision-making about how water resources are managed;
- helps increase public awareness – this information is available free-of-charge to all users;
- makes standardised, nationwide information available from one source.



For anyone interested, there is a huge amount of information available at <http://www.bom.gov.au/water/dashboards/#/water-storages/summary/state>

INDUSTRY ENGAGEMENT – A VITAL PART OF HIGHER EDUCATION

The University of Melbourne provides engineering graduates with a full range of technical and professional skills. However, they cannot always provide sufficient opportunities for students to immediately apply and embed their new knowledge and skills in an industrial setting, whilst they are still studying for their degree. It is essential to ensure that students also gain an understanding of their intended industry before graduation. Specifically, higher education institutions need input from operators who understand how the water industry works – not just what the textbook says.

The University of Melbourne invites the wider water industry to engage with them in providing this understanding and help develop the next generation of talented young water engineers and scientists. This industry engagement can involve taking on students for short or longer term internships within a company. Industry-related research projects can be sponsored where students work on the University campus, on site or a mixture of both. Companies can come to the University and work with a team of multidisciplinary students on an engineering project that is of interest. In doing this, the professional development of company staff can be boosted with training on leading such innovation teams. Case studies can be generated for use in the classroom and in the annual Melbourne School of Engineering Case Study Competition.

Additionally, mentoring programs provide industry mentors with the opportunity to enrich the student experience by providing the student mentees with insights into navigating the first steps into industry. Mentoring programs also provide junior staff members with a fantastic professional development experience as they gain proficiency in leadership and coaching skills throughout their mentoring involvement.

These programs provide students with a greater understanding of the workforce whilst also creating a framework for industry to network with future graduates. Employers from across the sector have used such programs for recruitment purposes and as a means to connect with the next generation of thinkers on commercial problems relevant to the operation of their organisation.

If you are keen to be involved, please contact: sandraek@unimelb.edu.au or the industry placements team at eng-placements@unimelb.edu.au

Contributed by **Professor Sandra Kentish** - Head of School, Chemical and Biomedical Engineering, The University of Melbourne.



TECHNOLOGY OF THE FUTURE: LOW PRESSURE 4.0

Intelligent and straightforward blower control: the Sigma Air Manager 4.0 is the solution for blower station automation. This sophisticated controller delivers maximum energy efficiency and cost savings whilst making the station ready for Industrie 4.0 applications.

The Sigma Air Manager 4.0 from Kaeser Compressors, is the core component of a blower station and the key technology needed in order to take advantage of the Industrie 4.0 services of the future. It acts as the central mastermind and controls the individual machines with maximum efficiency whilst perfectly adjusting the flow capacity to match flow rate demand. All it needs from the process control system is the desired differential pressure value – the SAM 4.0 then ensures optimal control of all blowers. Partial-load bridging and individual solutions are therefore things of the past, along with complicated setups. Now, all applications are supplied by one central blower station with a master controller that analyses operating data in seconds and simulates various scenarios in order to select the most efficient solution. The result? Previously unimaginable energy efficiency.

All components within the station are optimally matched and controlled to meet the customer's specific needs. Real-time process monitoring provides valuable operating data, which is forwarded for detailed evaluation. The analysed results help to predict potential faults as early as possible and prevent them by taking timely action.

The SAM 4.0 offers communication in 30 languages whilst the easy-to-operate 12-inch colour touchscreen display shows at a glance whether the station is operating in the "green zone" for optimal energy performance. It's incredibly easy to display and analyse a wealth of data, such as operating status, pressure curve, flow rate and power, as well as maintenance and any fault messages. And, thanks to a network connection, this can be done not only at the machine itself, but also conveniently from a PC at the office or elsewhere. This powerful capability therefore provides peace of mind and lays the foundation for predictive maintenance; it also enables sophisticated energy management per ISO 50001.

The master controller also makes it possible to take advantage of new options for predictive maintenance of blowers. Previously, maintenance could only be performed on the basis of a regular scheduled service date and repairs would be made only after a fault message had occurred. The SAM 4.0 now makes it possible to initiate maintenance before a fault occurs, thereby avoiding costly downtime and consequential damage.

The sensors and Sigma Control 2 controller integrated into the machine collect process data, which is immediately forwarded to the Sigma Air Manager 4.0. Specialised software is then used to transfer the information to the Kaeser Data Center for real-time analysis. The Kaeser Data Center performs central monitoring and processing of operating messages. Required predictive maintenance measures are then initiated as needed based on this information.

Ultimately this enables maintenance and necessary repairs to be performed at the precise moment they are actually needed. This saves time, minimises costs and ensures reliable blower availability, which in turn benefits all associated downstream processes.

For more information visit www.kaeser.com.au

CST FINE SCREENING RETROFIT AT RICHMOND STPS

Operating wastewater treatment plants in flood-prone and sandy areas is fraught with hazard. Overflows and clogging resulting from storms can not only result in smelly, unhealthy and damaging discharges into environmentally sensitive waterways, but also pose OH&S hazards to those charged with the dirty and heavy work of clean-ups.

One organisation that has overcome the problem in a long-term and cost-efficient manner is the Richmond Valley Council, which is now reaping the dividends of installing new fine screening and waste extractor technologies by CST, at its Casino and Coraki Sewage Treatment plants.

In the Richmond Valley applications, the new screening and grit removal technologies have extensively proved themselves in service in their first year of service in the Northern Rivers Region, where rainfall can vary from about 600-2900mm a year, including 187.6mm on March 31 this year.

The Casino and Coraki retrofit projects replaced the previous coarse raked screen design which not only allowed more solids to pass through to foul processing downstream, but also had to be manually and laboriously raked out when they clogged during high-flow events.

The new screening retrofit – combined with grit removal and clean bagging processes – captures more solids to reduce potential blockages in tanks and downstream equipment, while reducing odours by sealing the inlet works and by the installation of new odour control units.

Specified to handle flows of up to 500 litres a second, the Casino installation has coped flawlessly with everything nature had to throw at it in its first year of operation, including some of the worst floods in the district for years. Compacted and dewatered waste extracted from the system is automatically channeled into waiting bagging containers, where it is neatly collected without the need for direct handling of waste.

Richmond Valley Council's Coraki plant is a smaller works than Casino, but is subject to similar operational issues. It was upgraded simultaneously with pre-engineered package inlet works combining screening and grit removal in one pre-assembled tank.

For further information in Australia and New Zealand, please contact Michael Bambridge, info@cstwastewater.com or visit the website at www.cstwastewater.com.



Robert Sabol (Richmond Valley Council) displays grit extracted by the high-efficiency installation.

SIL2 / SIL3 CERTIFICATION FOR HAWK

Hawk Measurement Systems (HAWK), has announced that it has earned Safety Integrity Level rating SIL2 / SIL3 to aid in reducing safety risks in hazardous applications from the International Electrotechnical Commission. This Commission's (IEC) standard IEC 61508 defines SIL using requirements grouped into two broad categories: hardware safety integrity and systematic safety integrity. A device or system must meet the requirements for both categories to achieve a given SIL.

Achieving this SIL certification means HAWK's Centurion Guided Radar measurement systems will provide operators with the added insurance that it will consistently and reliably identify all processes considered hazardous and, if failure was to occur, determine that level of risk. The rating will help evaluate whether this specific technology for the measurement of multiple mediums such as liquids, sludge, powders and granules to a range of 18.5m (60ft) for level meets the selected risk tolerance level.

These standards have been widely accepted globally to help define Safety Instrumented Systems and their reliability as a means of assessing and improving their safety.

According to Jack Evans, Global President (Hawk Measurement Systems), "Risk reduction can be an expensive procedure and operators are looking to reduce that risk to a level as low as reasonably practicable. We take great pride that our Centurion Guided Radar measurement systems have sufficient operating history and that they have a proven track record. HAWK has long been committed to safety and risk reduction and earning SIL2 / SIL3 compliancy will establish a rigorous development process so that our customers can benefit from the advancing technologies that we have to offer. This certification is just another way we assist our customers achieve compliance while demonstrating our involvement to reduce risk."

HAWK is a world leader in level, positioning and flow measurement, providing cutting edge equipment to the global industrial market. With 30 years of experience and a record of success in a wide range of areas including mining/mineral processing, water supply/waste water, bulk material handling and chemical, our on-going commitment is to provide industry leading technology with cost-effective solutions.

For more information and global representatives, contact Graham Richards: graham.r@hawk.com.au or visit the website at www.hawk.com.au

HAWK is awarded SIL2 / SIL3 (multi channel) certification for Centurion Guided Radar (CGR)

Real Product, Real Application

Speed, Power and Precision

Level measurement of liquids, sludge, powders and granules to a distance of 18.5 metres (60 feet).



AUMA ACTUATORS

For several decades, AUMA actuators have proven their reliability in automating sluice gates, butterfly valves and gates in weirs, fish ladders, locks, and hydropower plants.

AUMA's comprehensive portfolio covers torques ranging from 10 Nm to 675 000 Nm offering homogeneous automation schemes throughout the plant: from simple OPEN-CLOSE applications to level control using an integral PID controller.

AUMA also has a division called STW where they are required to motorise steel structures over water. Some of these are radial gates for navigation locks, but many are Sequencing batch reactors in waste water plants.

Just recently AUMA was asked to provide the new Elektro Zylinders to mimic the original oil hydraulic cylinders in a water distribution network.

In this case, there were three oil hydraulic cylinders having a storage of about 400 litres of hydraulic oil. The client clearly identified that any oil leak would lead to \$Ms in clean up and compensation costs.

So the AUMA actuators were provided with Elektro Zylinders. These were manufactured in Sydney and incorporated the inverted bucket principal for flow grease retention.

In the unlikely event of a catastrophic leakage, there would only be 1 litre which would escape and then agglomerate with dust and just make a dirty mark.

The huge advantage to the customer which they didn't plan on, was the remarkable precision achieved.

These Elektro Zylinders effectively positioned the penstocks to plus or minus 5mm within the 3 metre stroke.

The bellows were special too. They were manufactured for us by Bellowflex who used UV resistant fabric and quality stitching. The idea being that we would get more than 10 years life from the easily replaceable bellows. For more information contact info@barron.com.au



Large electric actuator.



Three elektro zylinders installed in Sydney.

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:

Mark McNeil, Aaron Mitchell, Tim Irish, Stuart Stagg, Hamish Kibblewhite, Phillip Previte, Justin Archibald, Andrew Buenaventura, Hannah Kelly, Todd Stacey, Tabatha James, Matthew Slater, Victor Palmer, Bob McIntyre, Colin Long, Kathryn Harries, Mark Judson, Helen James, Vanessa Paterson, Rob Pearson, Dave Coombs, Elliott Vreeland, Darrell Stout, Ben Moran, Jesse Wisselo, Matthew Harris, Glen Harsh, Tas Hodgson, Will Kidd, Alex Britton, Kyle Bread, Paul Beard, Caro Wiggins, Greg Jeeves, Phil Harris, Jack Maull, Ken Phillips, Benn Conroy, Caleb Russell, Len Zischke, Aaden Naumann-Otto, Joel Mellor, Alex Jamieson, Katrina Standerwick, Nick Wellwood, Kurt Lacey, Skye Jackson, Kathy Long, Geoff Rintoul, Wayne Eveleigh, Warren Ferguson, Rodney Fordham, Craig West, Brent Lillis, Shaun McKenzie, Harley Angus, Jess Holland, Thomas Kindred, Kath Coughlan, Troy Webster, Gregory Bowles, Amanda Barbar, Neelan Rana, Garreth Pritchard, William Gilbert, Sarah Webber, Nathan Beasley, Shane Morey, Gina Watt, Jonathon Reynders, Travis Hutton, Natasha Chapman, Rodrigo Marquina, George Gale, Brandon Hobbs, Mitchell Tricarico, Leigh Seymour, Sharon Law, Tricia Marsden, Josh Crosby, Rendall Williamson, Stephen Coxon, Jake Henden, Graydon Johnson, Daniel Wooley, Cody Vincitorio, Brendan Fleming, James Voogt, Blake Keech, Geoff Dowling, Rhylan Rees, Bill Mineely, Lochlan Scott and Vjekoslav (Mick) Ognenovski.

New **Corporate Members** include:

Startco, Water Quality Solutions, Water Technical Consultants, Jacmor Engineering, Waterco Limited, ChemXpress Distributors, Triangle WaterQuip & Ultimate Products.

20 YEAR MEMBERS

WIOA recognises any Individual or Corporate Members who have maintained their membership for 20 or more consecutive years, presenting them with a special Membership lapel pin or certificate.

This year there are another 9 Individual Members and 7 Corporate Members who have qualified for the 20 year recognition pin. The recipients of the pin in 2018 are: Paul Brown, Dean Chambers, Pat Davis, Peter Dwyer, Greg Plier, Jeff Roscoe, Brian Scobie, Ken Turner and Mark Welsh. The eligible Corporate Members are Gippsland Water, North East Water, Complete Tapping Service, EDAC Electronics, Grundfos Pumps, KSB Australia and Metaval.

Congratulations to you all.



COMING EVENTS

2018

- 20 November **Victorian Network Operator Development Program**, applications close
- 21 November **Victorian Operations Interest Day**, Western Treatment Plant, Werribee
- 22 November **South Australian Wastewater Interest Day**, Mt Barker

2019

- 28 February **PASS Award applications close**

2019 Conference and Exhibition Schedule

- 3 & 4 April **13th WIOA NSW Water Industry Operations Conference & Exhibition**, Orange
- 5 & 6 June **44th WIOA QLD Water Industry Operations Conference & Exhibition**, Bundaberg
- 4 & 5 Sept **82nd WIOA VIC Water Industry Operations Conference & Exhibition**, Bendigo

2018 Committee

President

Adrian Rijnbeek
Mob 0419 698 367

Lindsay Walsh Mob 0427 105 421
Chairman NSW Advisory Committee

Colin Haynes Mob 0419 763 054
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NEXT EDITION

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