Operator

February 2021 The Water Industry Operators Association of Australia Magazine

VIC 2020 OPERATOR OF THE YEAR AWARDS

LEAK DETECTION SAVING WATER AND MONEY IN THE TERRITORY

SUN POWERS THE MORGAN-WHYALLA PIPELINE

A FERRET TALE WITH A HAPPY ENDING

CRACKER JACK ACCESS COVER LIFTING SYSTEM

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Let's Solve Water

From the MD's Desk

Welcome to 2021 and our first edition of Operator for the year. Although we are off to a bumpy start with 5 day lock downs in several States, we look forward with hope that the pandemic will be managed and we can get back to providing development opportunities and sharing information face to face with our Members.

The WIOA Annual General Meeting will be held online on 21 April with Committee nominations closing in late March. If you are interested in helping WIOA with the important work we do in the operational side of the water industry, please consider nominating.

Our current President Heidi has a couple of months of her term remaining. Heidi has done an amazing job over the past couple of years engaging with our members with great enthusiasm and warmth. She has promoted the association at every opportunity and her commitment to WIOA's Diversity and Inclusion Group and her promotion of the role of women in the water industry has been outstanding. Hats off to her for being able to do all this with a new job, a young family and a brand new baby.

Planning for the 2021 conferences is proceeding. Our conferences are included in the Approved Business Event list giving our Corporate Members an opportunity to apply for a grant to cover some of the cost of participating. The program requires registrations for delegates and exhibitors be available by the end of February. To do this, we intend to use an Expression of Interest process to set the order in which we will offer access to sites in each exhibition. We will confirm booth allocations with exhibiting companies once the floor plan for each event is finalised.

There will be changes in how we run all our events to make sure that they are COVID safe and that we meet the requirements of the various health regulators. We expect that all Members attending our events will be understanding and will support us to ensure we deliver safe events.

All State based Advisory Committees have held meetings in early 2021 and work is well under way on a range of activities and services for the benefit of all Members. There are a number WIOA Talks scheduled for the first half of the year and we look forward to a return to Interest Days later in the year.

We hope you will enjoy reading our 2020 Annual Review that will be available to Members. The Review provides an excellent snapshot of our organisation and provides the opportunity to celebrate the achievements of many of our members.

Until next time.

George Wall
WIOA Managing Director

February 2021

Cover The Power & Water leak checking team in Katherine found that a staggering one in five homes has a potential leak.

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PO Box 6012, Shepparton, Victoria 3630

Managing Editor George Wall

Online www.wioa.org.au
Email info@wioa.org.au

In this issue

Member Profile - David Reyne

Distribution Water Quality Officer

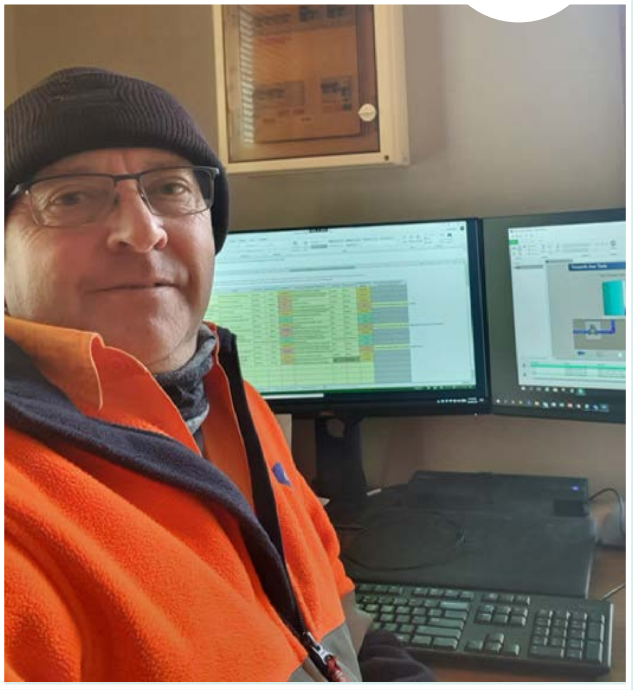
Employer Central Highlands Water
Favourite team Essendon
Pets Jazz brindle Staffy
Favourite food Sausages Chips and Eggs
Least favourite food Tuna
Favourite TV show Don't really have a favourite like watching car racing when I get a chance
Worst TV show Bachelor, Bachelorette, MAFS any fake reality crap
Favourite Movie O Brother Where Art Thou
Favourite Musical artist/s Pink Floyd, Lana Del Ray, The Reverend Payton's Big Damn Band, AC/DC
Ambition in life Have a prosperous and healthy retirement touring Australia
Hobbies Farming, bee keeping, riding my motorbike
Best Trait Easy going, adaptable
Worst Trait Wife says I don't listen??
Who do you admire The ANZAC's
Favourite saying or quote Only believe half of what you see and nothing of what you hear

Four people you would invite to dinner
Michael Long, Bon Scott, Samuel L. Jackson and Uma Thurman.

How long have you been a WIOA member?
I have been a member of WIOA for more than 25 years and have enjoyed seeing the association grow over that time into the great organisation it is today.

Your involvement with WIOA, what contributions are you hoping to be able to make?
I have been a member of the Victorian Advisory Committee for 5 or 6 years and have enjoyed this role in organising interest days and helping out at the Victorian conference every year. I would like to continue to assist WIOA where ever possible.

How long have you worked in the water industry?
I have been working in the water industry for over 36 years all of it with CHW. Back in the day there was no attraction to it, it was just a job, but I soon realised how good the industry was and have loved every minute of it. I was lucky to be able to move around the organisation and learn from many people along the way. It has given me a good understanding of the industry and the opportunity to give something back. I have been involved in training staff which I enjoy and hopefully giving something back to this great industry.



What do you enjoy most about your job?
Working in the Networks Assets and Operations team which is a small team of 5 who are responsible for the operation of CHW's Water and Wastewater distribution systems. There is always some minor or major issue to deal with which can make life challenging, I enjoy the flexibility of my role as one day I could be working on a water quality issue at a tank site and the next dealing with a sewer spill. There's never a dull moment in our team.

What are the major challenges in your current role?
We are finding as with many authorities that our assets are reaching the end of their useful life at similar times. This is challenging, prioritising the replacement or refurbishment of these assets.

Thoughts on the water industry at the moment
I think the water industry is in a good place. It will be interesting to see how we as an industry cope with reductions in emissions and the stresses on the natural environments and communities due to drought.

How do you relax?
I enjoy being at home around the farm, there's always something to do which is relaxing for me. I also like listening to music and riding my motorbike.

Where do you live and what's the best thing about it?
I live in a small community called Navigators where we have a small farm that we run a few cows and sheep on. The best thing about living here is that we are in a rural setting but only 10 minutes from the centre of Ballarat.

Industry Recognition for Stephen Westgate

WIOA's Tasmanian Advisory Committee Chair Stephen Westgate, a Senior Water Quality Scientist with TasWater, has been awarded the Australian Water Association's 2020 Tasmanian Water Professional of the Year.

The award recognises individuals who make a significant contribution to the water sector and the communities they serve.

Stephen started his career at TasWater seven years ago after relocating to Tasmania with his family from the United Kingdom.

"What I have tried to do is take what I learnt in the UK, adapt it for our situation and implement innovations where possible. I work for the Water System Optimisation team, which is responsible for ensuring our water treatment assets are running at their full potential. To me, making an impact and improving water quality is just part of doing my every-day job" Stephen said humbly in receiving the award.

Stephen has a passion for his job and for the Tasmanian community's health and wellbeing.

Stephen's work is focussed on improving community outcomes and enhancing the standard of quality the water industry provides. He is a trusted and respected leader within TasWater and the wider industry.

Renowned for his innovative and dedicated approach and his willingness to challenge the status quo, Stephen drives continuous improvement for TasWater's customers and ensures TasWater is at the forefront of the industry.

WIOA congratulates Stephen on his well deserved award. His contribution to the industry and importantly, his support of the importance of the role operators play is obvious and his contribution to support WIOA in Tasmania is highly regarded and appreciated.

IMPORTANT NOTICE For Corporate Members

2021 WIOA Conferences & Exhibitions Site Allocations

The 2021 WIOA Queensland, Victorian and New South Wales Conferences and Exhibitions have been included in Austrade's Approved Busines Event list, giving our Corporate Members an opportunity to apply for a grant to recover some costs of participating.

To meet the grant program requirements, we must open registrations for delegates and exhibitors for all events by the end of February.

To do this, we have to alter our site allocation process for this year. A single Expression of Interest (EoI) process will be used which will include all three WIOA major events in Queensland, Victoria and NSW.

The order in which we receive the completed EoI will set the order in which we will offer access to sites in each exhibition. We will confirm site allocations with each company individually later, once the floor plan for each event is finalised. Even if companies wish to participate in only one event, an EoI form must be completed now. Further information and timelines will be provided to all Corporate members by email.

Welcome Parker

WIOA congratulates Hayley Paton and her partner Brendon on the birth of their beautiful baby boy, Parker Walter Evans born on the 25 May 2020.

Hayley is an Assistant Operator at the Tully Wastewater Treatment Plant and a member of the WIOA Queensland Advisory Committee who has just returned to work from maternity leave.

Victorian Operator of the Year

Congratulations to Dion Bull from Gippsland Water who was announced as the winner of the 2020 Wal Whiteside Memorial Victorian Operator of the Year Award sponsored by AWA Victorian Branch.

AUSTRALIAN WATER ASSOCIATION

A strong field of candidates were nominated for this years award that saw Mark Reid from Grampian Wimmera Mallee Water being highly commended.

Dion is currently employed at Gippsland Water Corporation as Senior Water Treatment Technician. His role entails relief coverage across all 15 of Gippsland Water's Water Treatment plants and he is a Water Treatment mentor to new trainees who join the business.

He has over 20 years' experience in the Water Industry, 15 of which have been at Gippsland Water. Dion was previously employed by Coliban Water as a Wastewater Treatment Technician. Dion has always been assigned the highest risk water treatment plant because of his expertise, plant knowledge and commitment to public health. It is because of these traits and his ability to share knowledge that Dion is the preferred trainer for trainee Water Treatment Technicians. One of the trainees, Mae Jobson went on to win the 2017 Victorian Young Operator of the Year Award.

Dion has operated, at various stages, all of Gippsland Water's 15 Water Treatment plants, exposing Dion to operations including Conventional Treatment (both Sedimentation and Clarification Plants), Dissolved Air Flotation Filtration (DAFF) Plant, Dissolved Air Flotation (DAF) Plant, Membrane and Direct Filtration Plant as well as Chlorine (Gas and Liquid) and Chloramination disinfection systems.

Dion holds a Certificate II & III in Water Industry Operations and is currently working towards Certificate IV. In the time he has been at Gippsland Water, Dion has been instrumental with the Water Treatment Workgroup helping to generate some of our highest quality services through his commitment to people, processes and systems.

More recently his commitment to training the next generation of water treatment technicians is what motivates and inspires him.

Gippsland Water

Victorian Young Operator of the Year

IWA

Michael Tulloch from Gippsland Water is the winner of the IWA 2020 Victorian Young Operator of the Year Award. Michael commenced with Gippsland Water at the age of 18 as part of a two-year Operations trainee program. Michael's traineeship was located at the Gippsland Water Factory where he developed on the job operational and process work experience.

Michael demonstrated a passion to learn and understand all aspects of water and wastewater operations. Within seven months of starting the trainee program, Michael was successful in obtaining a full time position at the Gippsland Water Factory as a Wastewater Operator. Michael performed at a level more expected of an experienced operator and demonstrated his willingness to take on these responsibilities.

Michael getting down and into his work.

Michael has been a key member of Gippsland Water, taking on additional tasks outside of his core role, such as a Health and Safety Representative, active participant in process improvement teams and more recently a member on the Gippsland Water Wellness Organisational Workgroup.

Michael is a very worthy winner of the Young Operator of the Year and receives a plaque and an all expenses paid trip to join the WIOA delegation on their tour to New Zealand in May this year (assuming the borders are open to NZ by then).

Leak Checkers find Hundreds of Potential Leaks

Last year, Power and Water's annual Leak Check Program in Katherine found that a staggering one in five homes has a potential leak. Water is precious and should be valued, it can also inadvertently cost households and businesses a lot of money.

Over 15 days, some 2,200 homes and businesses had their water meters checked to identify any leaks. The Power and Water team of leak checkers made their way around town carrying out the simple 2 - 6 minute inspection at the water meter. The leak checkers team identified 389 possible leaks.

The largest leak found was measured at over 234 litres an hour, which over 12 months would cost $4,062 if not repaired.

Collectively, all the leaks found totalled a huge 12,473 litres per hour. That equates to 109,268,829 litres at an annual value of $214,303. That is the equivalent of the volume of water required to completely refill the Katherine town swimming pool 44 times in a year.

Over the past four years, the Community Leak Program has identified over 1,764 potential leaks in Katherine homes and businesses. Homes or businesses that had a possible leak detected are encouraged to use the Power and Water's Leak Find and Fix Rebate program through one of their registered plumbers. Since the program has been running, over 1,400 residents have taken advantage of a $200 Leak Find and Fix rebate to locate and repair leaks.

Contributed by Jethro Laidlaw, Power and Water

FLASHBACK SA Water Vehicle Fleet - 1951

The SA Water service vehicles looked 'wheely' different back in the 1950's compared to today!

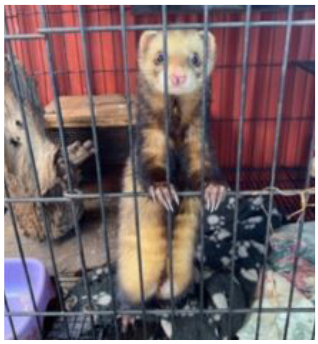
Here, the fleet of four wheelers is ready for action at the Thebarton Depot in 1951.

A Ferret Tale with a Happy Ending

What's the weirdest thing that you've found in the sewer? We've all heard of the jocks and socks, a $20 or $50 note here and there, and even an engagement ring, but how about a ferret?

Earlier this year, two GVW network operators (Bryce and Billy) responded to a blocked sewer in Murchison, Victoria. Whilst checking the manholes to identify the location of the blockage, they noticed something moving at the bottom of a manhole. On closer inspection it was found to be a ferret, a bit light on and very stinky, but also very much alive. Not wanting to leave the poor fella in the sewer much longer, the operators were able to lower a pole into the manhole and get the ferret to climb onto it, and then pull the ferret out of the manhole.

Billy, our resident ferret expert, found some dog food to feed it, while Bryce felt the moment was too good not to share, so snap chatted the story to the rest of the team. The ferret was now safe, another life saved by the GVW Operations team (all in a day's work), yet so many questions remained; How did the ferret get there? How long had he been down there? Whose ferret was this!



After getting the ferret out of the hole it is returned home safely to its owner.

Well five days earlier I had noticed that one of my own ferrets was missing from its enclosure. I watched the snapchat with interest until the very familiar face of the sewer creature was revealed, and it became apparent that not just any random ferret but my missing ferret had been found by my own work colleagues.

The jury's still out as to whether the ferret was simply getting a taste for the outside world or whether it was a full blown Andy Dufrense escape attempt, but he appears to have entered the sewer system via an open pipe and promptly found himself up sh*t creek... literally.

The ferret was returned home, and after a good feed and wash, appears to have come out of the experience without too much trauma.

*Contributed by **James Milne** from Goulburn Valley Water.*

The Return of WIOA TALKS

Utilising the expertise of our Members, a WIOA Talks webinar will be staged on a monthly basis commencing in March 2021. The webinars will run for around one hour and will share practical information on a range of operational topics.

The March event is being managed by WIOA's Diversity and Inclusion Group and will be a Women of Water Coffee and Conversation session concentrating on the topic - Young women in the water industry, attract & retain. It will be held on 25 March from 10.30am and is open to both men and women.

With many of the water and wastewater facilities still under COVID lockdown to visitors, all the Advisory Committees have decided to postpone any face to face events to the second half of the year. Each Advisory Committee will be assisting with the organisation and hosting of webinars up to July.

25 March	Women Of Water
28 April	Asset monitoring
19 May	UV Disinfection
23 June	Catchment management & water quality issues
21 July	Anammox

Newest IDIOTS Member

Adrian Rijnbeek (R) was announced as the latest inductee into the IDIOTS society on the Virtual Water platform in October 2020. We wanted to present his trophy and pin in person, so WIOA Life Member and fellow IDIOTS member Peter Tolsher caught up with him in Wodonga recently. Congratulations Adrian.

It was this big!

While the Network Operator Development Program (NODP) is in hiatus due to pandemic restrictions, some of the committee members turned their focus over the holiday season to fishing, letting other members of the NODP committee know of their prowess.

If you made a great catch or did something special over the summer, tell us about it by emailing it to the WIOA office and we will share it with other WIOA members.

WIOA MD George Wall puts his 63cm Murray Cod in the mix for the best catch.

Simon McEwan and Jamie Rossato from NEW with a haul of Flathead & Bream caught at Tamboon inlet.

Dean Barnett from the IWN caught this 60cm beauty near Torrumbarry on the Murray River.

TOOWOOMBA REGION

BIRDS EYE VIEW
Facilities Members Operate
Cressbrook Dam

Cressbrook Dam is located approximately 45 km northeast of Toowoomba. It is one of the three dams (Cressbrook, Perseverance, and Cooby) that are owned and operated by the Toowoomba Regional Council to supply water to the City of Toowoomba and some of its neighbouring communities. Cressbrook Dam was commissioned in 1983.

Dam type	Zoned earthfill central clay core
Crest length	363 m
Maximum height of dam	59 m
Crest width of embankment	7 m
Dam crest level	RL 290.00 m
Storage capacity at FSL	81,800 ML
Surface area at FSL	517 ha
Catchment area	326 km^2
Spillway type	Concrete lined open chute with flip bucket
Spillway length	20.3 m
Outlet	Submersed intake shaft into concrete conduit/tunnel plugged just upstream of dam centre line
Inside tunnel dimensions	Height 2.6 m, width 1.7 m (invert)
Outlet conduit	500 mm dia CIP (Class D)
Wivenhoe pipe line	Connected into the outlet conduit

1. The embankment
2. Outlet works
3. Spillway
4. Storage
5. Wivenhoe - cressbrook pipeline
6. Cressbrook pump station
7. Cressbrook valve house
8. Cressbrook to jockey reservoir pipeline

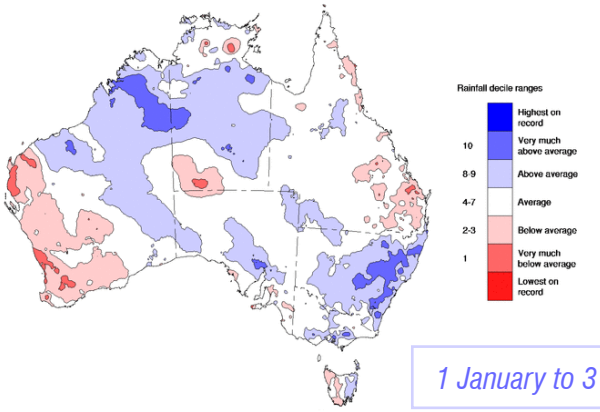
Australia's Curious Climate Continues in 2020

Australian Government
Bureau of Meteorology

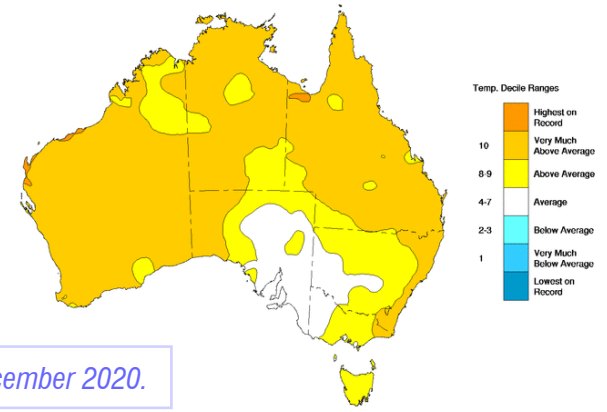
2020 was the fourth-warmest year on record for Australia, with the nation's area averaged mean temperature for the year 1.15 °C above the 1961 - 1990 average. Rainfall was close to average overall, at 483.4 mm - 4% above the 1961 - 1990 average with some regions such as the west of Western Australia, western Tasmania and southeast Queensland receiving below average rainfall. In the southern Murray Darling Basin water storages saw significant increases during 2020, while in the northern Basin water storage levels remained low.

- Australia's fourth-warmest year on record
- Both mean annual maximum and minimum temperatures above average for all States and the NT
- The year commenced with much of Australia affected by drought
- Warmth was persistent throughout the year, with 6 of 12 months in the ten warmest on record for each of mean, maximum, and minimum temperatures for their respective months
- Extreme heat and widespread bushfires in eastern Australia early in the year
- Heatwaves affected large parts of south eastern and eastern Australia in November
- Nationally averaged rainfall 4% above average for the year at 483.4 mm
- Rainfall above average for much of NSW, the north and east of WA, and much of the NT
- Rainfall below average for some parts of Australia, including the west of WA, south eastern Queensland, and western Tasmania
- While southern Murray Darling Basin water storages saw significant increases during 2020, in the northern Basin water storage levels remained low
- Flooding affected eastern Australia during February and March, particularly through Queensland
- La Niña was declared in September, reaching moderate strength by the end of the year

2020 Rainfall deciles.



2020 Mean temperature deciles.



1 January to 31 December 2020.

FLASHBACK Jim Martin School Footy - 1965

WIOA President Heidi shared this photo of Chairman Jim Martin from his footy playing days with Myrtleford High School.

We are not sure how they got on with only 14 players but the team did include North Melbourne premiership player and Australian Lamb Ambassador "Slamming" Sam Kekovich.

For the record Jim is standing not seated in the picture, a rover not a ruckman.

Summer Sun Powers the Morgan-Whyalla Pipeline

One of the nation's largest drinking water pipelines, spanning across a large part of regional South Australia, is now being powered by more than 19,000 newly installed solar panels as SA Water continues to make progress towards a zero-cost energy future.

The solar array located at the Morgan to Whyalla Pipeline's third pump station in Geranium Plains, approximately 15 kilometres east of Robertstown, is now participating in the National Electricity Market, with the large solar photovoltaic panels capable of generating 14,000 megawatt hours of clean, green energy.

At a length of around 358 kilometres, and starting from SA Water's Morgan Water Treatment Plant, the concrete pipeline transports treated, high-quality drinking water from the Murray River to the Upper Spencer Gulf region.

The solar array forms part of SA Water's industry-leading renewable energy project working towards a zero-cost energy future. This is headlined by the installation of more than 500,000 solar panels across the state, producing a total of 242 gigawatt hours of green energy each year. Each panel at the pump station is constructed on a pivoted racking system, to track the sun from east to west throughout the day.

Given the Morgan to Whyalla Pipeline is responsible for delivering clean, safe drinking water to tens of thousands of customers from the Riverland, Barossa, Mid North and Upper Spencer Gulf regions, the energy requirements to pump such volumes of water are significant.

The large solar array is now energised and capturing the sun's rays, harnessing green energy to reduce pumping expenses without any impact to the pump station's overall performance. The direct current (DC) voltage captured by the panels is converted into high voltage alternating current (AC) energy, where it travels underground to a connection point for use at the pump station.

Excess electricity generated at the site can also be sold to the national grid. The array is one of four being installed along the Morgan to Whyalla Pipeline, with a further 15,000 solar panels at the fourth pump station outside Robertstown aiming to be energised by mid-2021.

SA Water's extensive water and wastewater operations make it one of South Australia's largest electricity consumers, with the utility's 2019-20 electricity costs reaching approximately $86 million.

Increasing renewable energy generation will help SA Water to sustainably reduce operating expenses and keep prices low and stable for customers across the state.

Contributed by Tom Nancarrow from SA Water

Starting from the Morgan WTP, the pipeline transports water from the Murray River to the Upper Spencer Gulf.

Maintenance Access Cover Lifting System

THE CRACKER JACK

Lifting maintenance access covers manually is a strenuous, high load, high frequency task often encountered by field workers across all utilities. It is believed that for workers in these industries, lifting access covers can be a significant contributor to injury and lost time.

The Cracker Jack lifting system consists of a lightweight portable jack driven by a battery-operated power drill, a specialised roller and Wi-Fi camera system. By using the jack and Wi-Fi camera, users can quickly crack and inspect inside access structures, without any load from the access cover being placed on them.

The light weight Cracker Jack, reduces loads on the user lifting access covers.

When removal of the lid for access is required, the Cracker Jack allows the user to crack and then remove the lid with minimal effort. This is achieved by using the jack to lift the lid, lowering the lid onto the specialised roller, and then rolling the lid off the access structure.

This system has been proven to work with all access cover types, and across the wide variety of terrain which field workers often encounter.

One person can operate The Cracker Jack.

The team at Icon Water hope others see as much value in the use of this device as we do, and that through release of the design under a creative commons license it can continue to evolve and become a big part of the way access covers are lifted everywhere.

The model CJ001 Cracker Jack is a light weight, portable, advanced prototype system for lifting maintenance access covers.

It was designed to lift covers that would normally be lifted by one or two people using manual methods.

It weighs 9 kg, can safely lift 500 kg and significantly reduces loads on the user when compared to manual lifting methods.

*Contributed by **Eric Nielsen** from Icon Water.*

www.iconwater.com.au/Community-and-Education/crackerjack.aspx

Successful First Year of Water Battery at USC

A solar-powered water battery that keeps an entire university campus cool has saved more than 4,232 tonnes of carbon dioxide emissions in its first year of operation at the University of the Sunshine Coast (USC).

The Australian university partnered with Veolia ANZ to build a thermal energy storage tank and install more than 6,500 solar panels across campus rooftops and carpark structures.

USC is the first university in Australia to install a water battery powered by renewables. In the first full year of operation, the system has generated more than three million kilowatt hours of solar electricity for the Sunshine Coast campus, representing more than 34 percent of the total electricity required. An additional two million kilowatt hours of electricity are fed back into Queensland's energy grid.

The 2.1-megawatt photovoltaic system produces enough energy to cool 4.5 megalitres of water, effectively acting as an eight-megawatt battery. The cooled water is stored and used for air conditioning, which is currently the single biggest user of electricity at the campus.

The solar powered water battery at USC.

The system is expected to save more than 100 thousand tonnes of carbon dioxide emissions over 25 years, equivalent to the emissions of 525 average Australian houses for the same period. It will lead to an estimated $100 million saving for the university over the 25-year life of the project.

The project won the prestigious Out of the Box category of the Global District Energy Climate Awards in 2019.

It also recently won the Denis Joseph Award for Innovative Use of Solar Energy in HVAC&R from the Australian Institute of Refrigeration, Air Conditioning and Heating.

*Contributed by **Kathy Northcott** from Veolia Australia.*

National Water Training Package 4.0 Update

The National Water Training Package has been endorsed by Skills Ministers for implementation. The Water Industry Reference Committee, with technical support from subject matter experts on the Technical Advisory Committee, has revised and developed occupational skills standards for water industry operations and treatment. The Training Package now provides streamlined qualifications and flexible career pathways, enabling workforce mobility to support workforce retention.

The Certificate IV in Water Industry Operations and Certificate IV in Water Industry Treatment qualifications and associated Units of Competency have been amalgamated into a single streamlined qualification to incorporate all skills required by senior water industry operators.

The revised Training Package also includes three new Units of Competency and updated core units and electives, covering contemporary industry practices, new technologies, and operator certification changes in water operations and water treatment.

To support the delivery of the Training Package, a Companion Volume Implementation Guide (CVIG) has been developed to assist assessors, trainers, Registered Training Organisations and enterprises. The CVIG contains a comprehensive list of all products in the Training Package; mapping information which details the changes that have been made to the materials; regulation and licensing implications and useful links to other information. The National Water Training Package materials are now available on:

training.gov.au

For more information on this project, please contact the Industry Skills Specialist at Australian Industry Standards or visit the project review page:

tinyurl.com/1114wbpi

The Lighter Side

Border Collie working from home.

Local Water Legends

Unitywater and Sunshine Coast Lightning are 'teaming up' to encourage locals and visitors to Moreton Bay, Noosa and the Sunshine Coast to be water wise.

The utility launched a community education campaign, 'Local Water Legends', after combined South East Queensland dam levels dropped below 60% in September. The two-time Suncorp Super Netball Champions are backing the campaign to help spread the water wise message to their fans and the local community.

Unitywater Manager Communications and Engagement Jana Dore said the campaign would be rolled out across a number of channels, and aimed to celebrate those in the community who made positive changes to their water use.

"Local Water Legends is a really empowering campaign that encourages everyone to take small steps to make a big, collective difference to water use in our region," she said.

"It's been a dry year and with dam levels dropping, we can all work together to save water."

Sunshine Coast Lightning player Steph Wood said the team was keen to build community support for the Local Water Legends campaign.

Midcourt player Laura Scherian said she was excited to spread the water wise message to the community.

"Water is an important part of our region's lifestyle and we can all do our bit to help save water for the community that we love and call home."

Local families are jumping on board too. The Garlands, of Dicky Beach, say they're on their way to improving how they use water around the home. "We've started to make small changes to reduce our water use. We have three kids and a pool. We have some room for improvement but we know we can all help to make a difference." Mum Nicki said.

Daughter Alice, 12, said it could be a competition with some friendly rivalry in the house. "my brother, sister and I could challenge each other to see who can have the shortest showers! We're asking the community to think about how they use water particularly as we approach the warmer months." she said.

Residents could save water by:

- checking for hidden leaks
- keeping showers to four minutes
- turning the tap off when brushing teeth
- only using full dishwashers and washing machines
- using a pool cover to reduce evaporation
- watering gardens at cooler times of the day
- fixing leaking taps and toilets.

Water-saving resources, tips and how to check for leaks:

unitywater.com/legends

Challenges of 2020

We know the challenges of 2020 have affected many of us in different ways. Beyond Blue has been experiencing an increase in demand across all our programs and services. In fact, from March to November 2020, there has been a 43 per cent increase in calls to Beyond Blue's support services compared to the same time in 2019. These are record numbers and we are seeing more acute distress.

In the last 12 months, more than 262,000 people contacted the Beyond Blue Support Service and every call was answered.

What hasn't changed is the wonderful desire in our communities to help others. This desire has in fact been even more obvious and a lot has been achieved in 2020.

Sometimes it's difficult to talk about what's going on but it could be as simple as sending a text, a message on social media, inviting someone over for a cuppa or making a phone call. If you're supporting someone who has anxiety or depression it's important to look after yourself too. We want you to know that we're always available to ensure you and your loved ones have access to the support you need, when you need it.

Trained mental health professionals are available to talk to you 24 hours a day, seven days a week, via a phone support line. If you need assistance please visit the Coronavirus Mental Wellbeing Support Service.

1800 512 348

tinyurl.com/3orlamd8.

go-aigua Launches in Australia

Award winning smart water platform will drive digital transformation in the Australasian water industry.

After making its mark on water technology in different countries, the globally renowned water network analytics company Idrica is set to enter the Australian and New Zealand markets in partnership with the local specialist in smart water network management services - Aqua Analytics. The partnership will bring GoAigua to the Asia Pacific water sector that will transform water utilities into smarter, more proactive and more robust entities.

GoAigua can help water utilities to unlock value from their distributed data generated by the digital components of the water utility infrastructure - SCADA, GIS, ERP, Smart Meters, CMMS and IoT Sensors. The platform uses advanced Artificial Intelligence (AI) and Machine Learning (ML) algorithms to improve operations, maintenance, asset management, customer experience and reduce water loss.

Having won several global awards such as the Aquatech Innovation Award 2019 in the category of Process Control Technology and Process Automation, GoAigua has helped save billions of litres of water every year, reduce energy consumption by over 15% and mitigate carbon dioxide emissions by thousands of tonnes.

A key benefit of GoAigua is the fact that it has already been deployed in 400 water utilities globally. It is not a prototype, nor is it in development. It is a real platform that is allowing water utilities to enter digital projects more seamlessly and to address some of their key network challenges.

Aqua Analytics is a trusted partner for water utilities embarking on smart water networks, water loss management and pipeline condition assessment projects. The Aqua Analytics team has utilised technology to help towns and cities reduce water network leakage, improve operational efficiency, and deliver superior customer experiences through the design and implementation of smart water solutions.

*Contact the **Aqua Analytics** team.*

Hugh Champan 0410 846 991
hugh@aquaanalytics.com.au
aquaanalytics.com.au & idrica.com

Flow Meter/Controller meets 3-A Sanitary Standards

Bronkhorst presents their new generation of ES-FLOW™ Ultrasonic Flow Meters for low flow rates of water, additives and other liquid substances. The improved flow meters measure volume flow from 2 up to 1500 ml/min with even higher precision, high linearity and low pressure drop, using ultrasound in a small-bore tube.

The instruments are liquid-independent, thanks to the unique measuring principle in which the actual sound velocity is accounted for in the flow calculations. Thanks to the combination of a straight sensor tube with zero dead volume the flow meter is self-draining. The flow meter with orbital TIG-welded flanges is CIP or SIP cleanable, and now meets 3-A sanitary standards for hygienic applications.

Hygienic flow control configuration.

Wetted parts are made of stainless steel, the exterior design is rated to IP66 or IP67. The local user interface is a capacitive touchscreen with a TFT display to operate and readout the instrument.

For remote operation a variety of Ethernet based fieldbuses have been added to the available range of analogue and digital communication options. The on-board PID controller can be used to drive a control valve or pump, enabling users to establish a complete, compact control loop.

Typical applications for the low-flow liquid flow meters and controllers can be found in food, beverage & pharma (e.g. additives, sterilization of packages), medical and chemical (e.g. catalysts, reagents) and other markets which require precision fluid handling and dosing of hydrocarbons, demineralised water, colorants or lubricants.

*Contact **AMS Instrumentation & Calibration.***

03 9017 8225
sales@ams-ic.com.au
ams-ic.com.au

Engineered Anaerobic Lagoons

Anaerobic treatment of wastewater has been a popular and very efficient method of wastewater treatment in many industries such as meatworks, rendering facilities, dairy processing, etc.

Anaerobic lagoons provide an effective method for reduction of COD and BOD in wastewater. Traditional anaerobic lagoons are not aerated, heated, or mixed and many of the existing anaerobic lagoons still in use remain uncovered. These uncovered lagoons are typically covered with a thick blanket of solidified organic matter and fats. This layer remains permeable to emissions of gases that are both odorous and contain greenhouse gases.

Anaerobic lagoons depend on living microorganisms to perform at their best, but these are temperature sensitive. Most anaerobic systems operate in the mesophilic range and produce optimal results in water treatment and biogas production at 35-40 C and heating can significantly improve the reduction of COD & BOD in the lagoon and boost the output of methane.

Anaerobic lagoons provide a very effective means of wastewater treatment.

Capturing the gas produced by the anaerobic process involves retrofitting a cover over an open lagoon or replacing it with an engineered Covered Anaerobic Lagoon [CAL]. A CAL prevents odour emissions from the anaerobic process, captures harmful greenhouse gases and provides an alternative energy source for the plant to reduce the use of coal, natural gas or electricity. Utilising biogas as an alternative energy source for a boiler provides a simple and ready to use alternative to reduce the costs of coal or gas.

Installing a generator unit which combines heat and power [CHP] gives the benefit of reducing plant electricity purchases whilst creating a hot water source which can be used for heating plant water or heating the anaerobic lagoon to improve its efficiency.

Optimising anaerobic water treatment and harvesting biogas provides a great opportunity to reduce a plants carbon footprint and become more sustainable which is an ever-growing requirement in the current global and local market.

*Extract of article authored by **Manfred Beyer**, contact **Hydroflux**.*

hydroflux.com.au

New Danfoss Soft Starter

Danfoss are phasing out their old MCD500 Soft Stater to make way for the new MCD600. With the latest in advanced controls and protection, plus increased intelligence, this soft starter delivers superior performance for fixed-speed applications.

MCD600 Features & Benefits include:

- Flexibility for low speed applications, with jog function
- Inbuilt impeller cleaning assistance with Pump clean functionality
- Easy data access and reduced start-up and upgrade time thanks to integrated USB port
- More reliability, more uptime with expanded motor and controller protections
- Easy connectivity for the soft starter to Ethernet-based networks, such as PROFINET and EtherNet/IP
- Save space and reduce installation costs, thanks to the internal bypass contactors

Important information for MCD500 phase out:

- Final order date: 1 April 2021
- Last day of MCD500 delivery 30 June 2021
- Manufacture of all MCD500 models will cease at the end of June 2021
- Spare parts will be provided for 5 years after 31 June 2021 (lead times may vary, customers may wish to hold spare parts on hand).
- From 1 March 2021, MCD500's will increase in price by 10-15%

*MD600 fact sheet and **Danfoss** website:*

tinyurl.com/3aaytdo4

danfoss.com/en-au/

or contact

mjkaus@mjkautomation.com

CORPORATE MEMBER NEWS

IOT Sensor Connectivity Made Easy

Automation Group is introducing the Senquip ORB; a truly versatile and simple remote monitoring device. It is a sensor gateway that allows you to connect any industrial sensor to the internet, receive alerts via SMS and email before small issues become major problems.

The ORB includes an internal accelerometer with position, speed, tilt, temperature, and pressure sensing. It can be connected to a multitude of external sensors via physical IO, frequency, canbus, modbus, and other protocols.

Powered by longlife battery, rechargable solar, or external supply. The device comes with internal GPS, WIFI/ Cellular connectivity, is IP67 rated and is ideally suited for installation in industrial conditions.

View your live data through the Senquip Portal and set triggers to send email & sms alerts, or send data directly to your MQTT broker or server.

The unit includes an internal scripting engine for onsite intelligence. Units in stock and ready for immediate dispatch and a video explaining the features of the unit is available at:

youtube.com/watch?v=JWZ-iUBohfA

*Contact **Automation Group**.*

sales@automationgroup.com.au

Coming Events

28 February	PASS Award applications close
4 March	***qldwater*** Skills Forum, Brisbane
5 March	Queensland Charity Bowls Day, Yandina
23 March	Committee Nominations close
25 March	WIOA Talks - Women of Water - Diversity & Inclusion Group host
21 April	WIOA Inc. Annual General Meeting, Online
28 April	WIOA Talks - Asset monitoring - Victoria AC host
4-6 May	Ozwater, Adelaide
19 May	WIOA Talks - UV Disinfection - Tasmania AC host
23 June	WIOA Talks - Catchment management & water quality issues - SA AC host
21 July	WIOA Talks - Anammox - Queensland AC host

WIOA Conference & Exhibitions in 2021

We are monitoring the COVID-19 situation and Health Department advice across Australia and are hoping to be able to conduct face-to-face Conferences in 2021.

2 & 3 June	45th Queensland Conference & Exhibition, Toowoomba
4 & 5 August	3rd South Australian Conference & Exhibition, Murray Bridge
1 & 2 September	83rd Victorian Conference & Exhibition, Bendigo
27 & 28 October	14th NSW Conference & Exhibition, Tamworth

New Members

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

New Individual Members

Joshua Allcock, Byron Amm, Wayne Atherton, Matthew Bessell, Shaun Blachford, Jamie Dowling, Kim Fisher, Duane Guyatt, Gary Higginbottom, Troy Jones, William Klarenbeek, Kurt Matchitt, Jamie Planinic, Corey Quinn, Dylan Reinboth, James Ridd, Danny Saunders, Jonathon Schulz, Stephen Scowcroft, Justin Skinner, Eric West, Cameron Young, Stephen Mitchell, Martin Ryan, Rikki Corcoran, Ritesh Shukla, Jun Kit, Sihan Huang, Dugai Brennan, Blake Marchant, Greg Jones, Tim McDonald, Dylan Pascoe, Lynken Dickson, Scott Flemming, Greg Carah, Peter Grant, Brayden Sullivan, Gary Murphy, Stephen Wagner, Daniel Lewis, Kheenen Popp, Dana Quinlan, Andrew Bishop, Paul Drummond, Sandy Manage, Sophie Willis, Craig Piazza, Geoff Schneider, Casey Day, Simon Patterson, Jack Kelley, Jarrod Baskett, Adam Gadd, Tim Weeden, Leon Anderson, Curtis Biggs, William Gilbert, Adam O'Brien, Sarah Weber, Jonathon Uprichard, Simon Regan, Emanuel Andrawos, Troy Hartmann, Steven Herbertson, Phillip Parkes, Rod Grundy, Jordon Ball, Zach Wallis, Nigel Kennett, Damien Molloy, Timothy Sellar, Mark Skelton, Matt Cannard, Ryan Martin, Steven Krohn, Gary Beaumont, Paul Bourchier, Dean Taylor, Mitch Alward, Malcom Jarman, Chris Gripton, Jason Cass, Leighton Schmidt, Adam Buckingham, Lachlan Watts, Paul Meehan, Bradley Barr, Joshua Woodhead, Cooper Pickering, Jaco Opperman, Stephen Ciemcioch, Luke Litchfield, Jamie Betts, Steve Noonan, Daniel Yaxley, Des Calnin, Chris Carter, Tom Clugston, Ash Clugston, Tom Coleman, Simon Colyer, Damien Crouch, Sha Doh, Luke Ezard, Chris Folkes, Jamie Glare, Leigh Herben, Josh Hicks, Keneti Iese, Brayden Ison, Martin Jarrett, Adam Leslie, Branden Love, Rod McKee, Meagan Molloy, Deb Nitschke, Tyler Osborne, Ross Rohde, Brody Stewart, Jordan Taylor, Matt Willias, Ben Williams, Tony Wooster, Craig Collins, Jaidan Comi, Adam Decicco, Mark Grummisch, Michael Halliwell, Jessica Harris, Nathan Hocking, Denis Mullane, Zac Norris, Jordan O'Dwyer, Matt Rask, Kallyun Sanders, Billy Wall, Ethan Wilson, Chris Carr, Lachlan Jones, Renee Sweetman, Terry Atwell, Shane Banks, Timothy Boniface, Mark Burns, Peter Dann, Jacob Dick, Gerard Dorgan, Kerry Engstrom, Peter Esposito, Peter Green, Patrick McNamara, Clayton Miechel, Sam Neilley, Ryan Burns, Michael Giddens, Michael Hatherly, Brenton Houchen, David Huxtable, Naomi James, Michael Johnstone, Paul Jones, Andrew Lanchbery, Ben Lanigan, Danielle O'Neill, James Pither, Claire Portelli, Fergal Rabette, Marissa Schill, Kim Wilson, Dale Yeates, Paul Young, Roger Marshall, Tim Appleton, Matt Pledge, Kalon Marchant, Shaun Johnston, Andrew Drummond, Jane Beverlander, Desmond Martin, Murray Nel, Brendon Williams, Simon Coobula, Chris Gillham, Holly Houston, Brian Doyle, Jonathon Dudson, Peter Cerra, Jack Banyard, Gina Sarno, Jarrod Simpson, Paul Gorman, Todd Chapman, Jason Vade, Denver McMoore, Ben Wilkinson, Darryl Chippindall, John Petherbridge, Matthew Govorko, Mitchell Lyle, Leigh Roberts, Jason Wilkie, Wayne Bonetti, Clint Howarth, Jason Sorensen, Gabe Roberts, Jesse Mawson, William Iro, David Gooding, Kane Chapple, Michell Scazzariello, Phil Birkby, Caitlin Cooper, Melissa Ellis, Clare Gibson, Travis Murphy, Dan Bertoli, Daniel Meyer, Nick Vaccaro, Brad Willis, Roger Moore, Nathan Ogilvie, Kayne Regan, James McCoid, Luke Barry, Ben Gatenby, Gary Weatherburn, Malcolm Sheather, Bradley Byrne, John Weaver, Aryasoma Phani, Shashank Suthar, Joel Shepperd, Damien Bird, James Pedersen, Jack Winnel, Mitchell Fahey, Colin Hurley, Shawn McCulla, Hoang Ho, Francis Kelly, Luke Summers, Joshua Freer, Chris Martin, Manjula Liyanage, Lara Odell, Shajo Shaji, Michael Burrows, Kirk Atkinson, Rob Biddle, Allan Boyd, Peter Brown, Barry Buchanan, Josh Collier, Sean Doyle, Kris Filipov, David Hamilton, David Harbour, Alan Hodge, Arnold Jahnecke, Adam Moss, Rohan Russell, Peter Skelton, Ollie Sloan, Adam Tozer, Kerry Turley, Sammy Vesty, Michael Winn, Peter Wojdylo, John Wright, Jake Flyn, Shannon Drake & Adam McNeill.

New Utility Corporate Members

Douglas Shire Council.

New Corporate Members

Innoflow Australia, Kennards Hire & Metrohm ANZ.

WIOA Committee

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0429 701 237

Vice President
Mark Samblebe
0400 126 141

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