

OPERATOR

November 2015 Edition



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Shane Gould and Phil Tuck from Bicheno. Read about them on Page 4.



Tolsh proves winners are gridders. More on the Victorian conference on page 6.

Mick Chapman describing the WWTP at the Wodonga Interest Day. More on Page 16.



Newsletter of the WATER INDUSTRY OPERATORS ASSOCIATION OF AUSTRALIA

FROM THE EO'S DESK

In perhaps one of WIOA's biggest and most important strategic decisions, as part of our asset and investment strategy, the Board has recently approved the purchase of our own office building in Shepparton. Redirecting some of our cash reserves into a property based investment provides a number of benefits. Apart from immediate cash savings from not paying rent each month, the new building has ample office and storage space and will meet the needs of the organisation for many years to come. The office is located at 24 New Dookie Road in Shepparton and we invite all members to call in at any time to say hello.

WIOA has participated in a collaborative relationship with the Australian Water Association since 2001 to produce and distribute two editions annually of our Journal, WaterWorks. The arrangement saw members of WIOA and AWA each receive copies of both Water and WaterWorks. Unfortunately, AWA has changed their publications model and has confirmed that it they are no longer able to produce and distribute our Journal, meaning WIOA members will no longer receive their two editions of Water. WIOA will continue to produce WaterWorks in the future, possibly in a modified format. We plan to investigate the options and advise Members of the new publication arrangements reasonably early in 2016. In the meantime, anyone interested in advertising or contributing articles for future editions of WaterWorks should contact WIOA directly at info@wioa.org.au

As with recent editions of Operator, the amount of material contributed by Members is increasing. Again, a big thank you is extended to the many WIOA Members who have contributed material for this edition – please keep it coming.

In September WIOA successfully staged our biggest annual event, the Victorian Water Industry Conference and Exhibition in Bendigo. In terms of attendance, the industry rolled up in close to record numbers and there was a really positive vibe around the whole event. Once again the exhibition was a sell-out with a large number of companies on a waiting list. After investigating the options available to us, we plan to reorganise the floor plan for 2016 to increase the number of sites from 180 to almost 200. We will then be able to fit in a few more companies and avoid so much disappointment. As usual, there is a complete wrap up on the conference, including all the very deserving award winners, later in this edition.

It is also pleasing to see the level of interest and input from the various State based WIOA Advisory Committees. Interest Days and site tours are planned or have recently been held in Wodonga in Victoria, Gunnedah & Bathurst in NSW, Spreyton (Devonport) in Tasmania and Cairns & Maleny in Queensland. Reports and photos from some of these days are included in this edition. See the calendar on the back page for details of any of the events programmed for November and for the dates already set for 2016. It is really important that Members get behind the State based committees and get along to these events whenever you can.

Congratulations to Goulburn Valley Water for their sample from the Marysville WTP for being judged as winner of the Ixom, Best Tasting Tap Water in Australia at the Interest Day in Gunnedah. In a unique inaugural event, the winners of each of the various State based Taste Test competitions were pitted against one another with both Interest Day attendees and the general public

invited to taste the samples and cast their vote. We look forward to adding the winners from the NT and WA to next year's competition and we hope the opportunity to be judged the "best in Australia" will encourage more water businesses to enter the State based competitions in 2016.

The 2016 conference venues have been finalised. The NSW event will be held in Newcastle from 5-7 April and will be jointly hosted by Hunter Water Corporation and Veolia Water. The technical program for this event is coming together very well with a diverse range of papers coming from a wide cross section of the NSW water industry. The Queensland conference will be held in Rockhampton from 31 May to 2 June and the Victorian event will be in Bendigo again from 30 August to 1 September. To make all these events successful requires input from you - our members.

WIOA has a long history of raising and donating funds to various charities. The Victorian golf day was staged recently with just over \$3000 raised and added to the pool for distribution next year. The Far North Queensland Group held a Charity Bowls Day on the back of a very successful Interest Day in Cairns and this has raised \$800 which has been donated half each to the Community Support Centre Innisfail Inc. and the Tully Support Centre Inc. The generosity of all the members and the supporting corporate sponsors who participate in any of our charity events is greatly appreciated.

The 2016 WIOA AGM and Weekend Seminar will be held at the Parkside Motel in Geelong on Saturday 27 & Sunday 28 February 2016. We look forward to a strong member turnout and we suggest you lock the dates in your diary now.

A reminder to all that for the first time since 2010, the Committee has approved a modest increase in the individual Membership fees for 2016 - \$30 for Individuals and \$242 for Corporate members respectively (GST inclusive). We have sent membership fee invoices to all Members recently and they are due and payable on 1st January 2016. We would appreciate a prompt payment by all members or alternatively, please let us know if for some reason you don't want to remain a Member.

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 I can in 2016.

Until next time, **George Wall**, WIOA Executive Officer

20 YEAR MEMBERS

In 2014, the WIOA Committee approved the annual presentation of a special Membership lapel pin to any individual or corporate member that had maintained their membership for 20 or more consecutive years.

In 2015, there are another three Members who have qualified for the 20 year recognition pin. The recipients of the pin as individuals in 2015 are: Ken Burton, Andrew Edmiston and John Galinovic. Congratulations to you all.



PROFILE OF A MEMBER



Name: Anthony Evans

Position: Assets & Projects Coordinator

Employer & Location: Wannon Water – Warrnambool Office

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

Plumbing apprenticeship aged 15 in 1976 and spent 11 years with the Gas & Fuel Corporation working in South West Victorian locations. The next 11 years I worked for myself and in that time I was contracted, part-time, to Warrnambool Shire until the amalgamations started and it became Hopkins Region Water comprising Warrnambool, Moyne & Corangamite shires. I had the opportunity to become full time at South West Water 16 years ago and we then joined with Glenelg Water & Portland Coast water to become Wannon Water

What do you enjoy most about your job? Being involved with the Operators across our service areas and helping out when I can. I am still involved with the assessment of Operators after training and completion of the Evidence Guides is a fantastic way to see how they are evolving in their workplace. We also live in a part of the world that is on everyone's bucket list when they travel. Getting the opportunity to meet people involved in the industry from all walks of life and different states & countries would have to be up there as well.

What are the major challenges in your current role? I have been managing the CAPEX Projects in the Treatment Services area over the last 4 years and keeping tabs on all of these has been challenging, along with trying to get more value for the money spent. Convincing people that water from the tap isn't really expensive will always be a challenge!

How long have you been a WIOA member? (your involvement) I joined WIOA in 2000 and presented a paper at the Conference in Warrnambool. George gave me some handy hints so I had another go at Geelong in 2003 and was lucky enough to win. I also joined the committee in 2003 and was President in 2009 & 2010. The fact that WIOA has become a key player in the water industry is a reflection of all of our efforts as Committee and members of the organisation and something that I am very proud of.

How do you relax? I love fishing & clay target shooting but as I get older the days are shorter and it's harder to fit in. The kids all left home, came back for the cheap rent, left again and we now have 5 grandkids to keep us on our toes. Archie is 10, keen on the fishing and shooting so that will get me involved a bit more. I am a Life Member of Koroit Football Netball Club and snagged a job in the booth at home games, what more could you want. The ride on mower is a great place get away from it all, no one usually wants to have much to do with it, until you turn 10.

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

I've lived in Koroit all my life, it's not far from the sea and 18Kms from Warrnambool and 14Kms to Port Fairy. It was fairly quiet little place until the blocks of land in these other towns became very expensive and we have just had two 60 lot developments approved. It's funny to think that you don't know ½ of the people in town any more but when the kids move to secondary school or out of the footy & netball and leave town you don't get many opportunities to meet the new arrivals, and that's the only reason I accepted the job selling beer at the footy! Everyone likes to think about living somewhere else but at the end of the day it's a good feeling to drive back in to the town you call home.

QUICK QUESTIONS

Age: 53

Nickname: Rabbit or Sooty, I know who I'm talking to by the name I get called.

Family Status: Married to Maryanne for 35 years. Ben, Kristen & Ebony married to Bianca, Simon & Shaun.... Grandkids, Archie, Charlotte, Evie, Ada & Tex

Pets: 6, no 5 chooks (the fox got one!)

Favourite food: Roast, Maryanne's

Least favourite food: Tripe, Blue Grenadier & anything other than vegies not cooked or seared marginally.

Favourite TV show: Thunderbirds

Worst TV show: Any reality show or live shows where you wait 5 minutes for the winners name to be announced after the envelope is opened.

Favourite Movie: Life of Brian

Favourite Musical artist/s: If I like it I'll listen, definitely not rap

Favourite book: Biggles

Favourite team: Koroit & Geelong Footy Clubs

Ambition in life: To enjoy a long & relaxing retirement watching the grandkids grows up

Hobbies: Clay Target Shooting, fishing and travelling around Australia.

Best Trait: Loyalty

Worst Trait: Stubbornness

Four people to invite to dinner: Maryanne, Ben, Kristen & Ebony with their partners & kids.

VALE - GREG (SLIM) ELLIS

23 JANUARY 1960 - 4 AUGUST 2015



Greg Ellis, better known to most people as Slim, commenced as a Water Attendant and permanent employee of Gunnedah Shire Council on 8 August 2005.

Through hard work, study and a have a go at anything attitude, Slim progressed through the ranks of the water section, firstly progressing to a Water Operator, quickly followed up by Water Operator in Charge and his most recent role as the

Water Quality Officer. Slim had just about undertaken every aspect within the water section at one time or another.

Slim really enjoyed his role as the Water Quality Officer and embraced the opportunity to improve the safety and water quality throughout the Shire. The role was continuing to evolve with many changes being introduced since the development of the Water Quality Assurance Framework in 2014.

Slim became the most qualified Water Operator in the team when he obtained his Certificate IV in Water Operations in 2011. This qualification was no small achievement and involved numerous amounts of study and work outside of normal work hours and was an achievement Slim was very proud of.

Slim was a very popular person, not only in the water section, but also with everyone he came into contact with at Council. He was a great team player and was heavily involved in the Safety and Consultative Committees. He was also often the one entrusted to run the tipping comps and punters club. Slim loved his interaction with his work colleagues and often enjoyed a joke or two with them at the end of the day.

Slim was an active member of many sporting clubs including Gunnedah Rugby League Football Club, Gunnedah Jockey Club and the Lake Keepit Family Fishing Club. Slim never did anything in half measures and so when he was involved he worked very hard to improve each and every club he was with. He was twice voted Club Person of the Year at Gunnedah Rugby League Club.

In recent times Slim's major interest has been fishing at Keepit Dam. He recently purchased a new boat and an on-site caravan at the Gums Caravan Park, enjoying the company of others in the park with his family. He was a keen card player and loved cooking up lamb shanks in a camp oven. His major love was spending time with friends and family, particularly his new grandsons which he adored and they adored him.

Greg's tragic passing is a loss to the whole organisation and Gunnedah community in general and he will be truly missed by all.

HAPPY TIME FOR SA'S HAPPY VALLEY

The first ever event under the WIOA banner in South Australia – the Water Interest Day and taste test was held on Tuesday 21 July 2015 at the TAFE SA, Tonsley Campus. The Water Interest Day provided operators with refresher training on Chlorine and Dangerous Goods Awareness delivered by Bob Arnold from IXOM. This was followed by a session on sampling by Adam Williams from the Australian Water Quality Centre (AWQC). WIOA EO George Wall introduced the structure and framework of the organisation and described what is happening around the country in the operator space.

But the highlight of the day was the inaugural South Australian Water Taste Test where 13 samples from different plants across the state were scrutinised for odour, clarity and taste. It's also a fun way to raise awareness of the quality of South Australia's drinking water and recognise the efforts of local water operators in delivering valuable water services to their communities. Just participating in the taste test is an eye opener as it highlights the variability in the taste of water from the different supplies.



A good turn up for the first WIOA event in SA

Heats were held where the 13 samples submitted from treatment plants across the state were randomly divided into 4 groups for the assembled delegates to try. The four best tasting samples which went on to the Grand Final, as selected by the participants were;

Mount Pleasant WTP, Mannum WTP, Loxton WTP and Happy Valley WTP.

An independent panel then tasted the sample from the four Grand finalists and the winner of the Best Tasting SA Tap Water was the team from AllWater for the sample from the Happy Valley WTP. Happy Valley WTP services metropolitan Adelaide with a capacity to produce up to 850 ML/d. The team from Allwater now have "bragging rights" to the Best Tasting Water in South Australia, for at least the next 12 months.

The day concluded with a tour of the Water Training Facility at TAFE SA's architecturally designed Tonsley Campus focussed on achieving maximum training benefits.



Bob Arnold (C) from Ixom presents the South Australian Water Taste Test trophy to Chris Copley (L) and Neil Crossing from AllWater

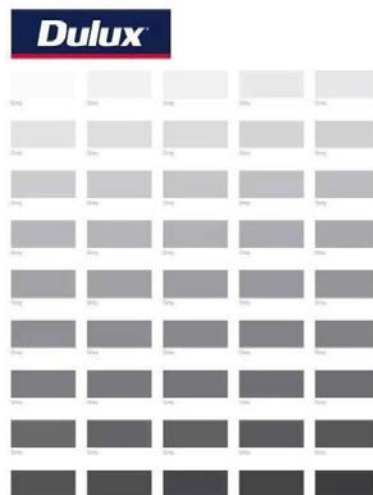
WIOA congratulates all the entrants and acknowledges the hard work of all in the water industry who ensure high quality and safe drinking water is supplied to their communities from the tap every day.

Contributed by **Lena Marchesan** from TAFESA



SA Taste test - Happy operators from the Happy Valley WTP, From left Neil Parker, Jamie Sim, Chris Copley (Plant Supervisor), David Lowe

"THE LIGHTER SIDE"



50 Shades of Grey for Men

TASSIE WATER INTEREST DAY & WATER TASTE TEST

The WIOA Tasmanian Advisory Committee conducted another successful water interest day in Launceston on 5th August 2015. The day incorporated a number of very interesting guest speakers including Shane Gould. I was probably showing my age, as a few other younger members hadn't heard of what Shane has achieved over her career. Congratulations for inviting Shane along.

Bill Holdsworth from Ixom, formally Orica (and before that ICI) gave us an insight into the products IXOM makes for the water industry, together with the amounts of chemicals that each site throughout Australia manufactures.

We then heard from Dallas Barker from SFI who brought over and demonstrated a valve exercising unit. There was a lot of interest in his presentation as we all have old, hard to operate valves throughout Tasmania.

Our thanks are extended to Alister Laidlaw for coming down from North East Water in Wodonga to show us how they use a Drone and camera within their organisation. Alister described the variety of uses they have for the drone including for example, inspecting the roof on water storage reservoirs. The drone does away with the need to climb up and down ladders and having to work at heights. Anything doing away with a safety risk is a good thing. Alister demonstrated the ease of operation and also explained the legal requirements to operate a drone.

Last but not least, Mark McConnon from TasWater explained the dangers of contaminants entering into new pipelines or when pipe breaks occur. Mark outlined the way contaminants can enter our systems and ways we can avoid this. Contamination can occur from incorrect storage of pipes to not disinfecting tools prior to use. Mark also explained ways in which disinfection can be achieved.

The most interesting part of the day was the Taste Test itself where all members and guests were involved in the heats and tasted and voted for the best water from their table. From the heats, it was brought down to the four grand finalists and the pressure was put onto the guest speakers who were given the responsibility of selecting the winner.

And after a bit of a drum roll, the winner was the Waratah WTP and congratulations are extended to everyone at the plant.

I would like to thank WIOA, the guest speakers and the Tamar Yacht club putting on an informative and enjoyable day.

Contributed by **Steve Clarkson** from TasWater



Bill Holdsworth addressing delegates



Allen Munday, David Stacey, Stuart Bain and Michael Eastley celebrate winning the 2015 Ixom Tasmanian Water Taste Test



Tas Taste Test attendees by drone



Milt Nelms (L) and Shane Gould (R) with Tasmanian Advisory Committee members Matt Layton, Chris Hall, Phil Tuck, George Wall and Mark McConnon

2015 VICTORIAN CONFERENCE REPORT

A total of 1,375 people attended the **78th Victorian Water Industry Operations Conference and Exhibition** held at the Exhibition and Events Centre in Bendigo on 2 & 3 September 2015.

Delegates were officially welcomed by Mr John Day, Executive Manager of Operations at North East Water. The conference was opened by Mr Tony Wright, CEO of VicWater who gave an excellent and insightful presentation on the importance of innovation in the water industry.

The keynote presentation was delivered by Dr Melita Stevens from Melbourne Water. Melita took the delegates on a water quality journey, explained Health Based Targets and their importance for the industry and challenged us all to continue performing at the highest possible level.

The event concluded with the official Awards Dinner and presentations, which saw Steve Letcher from Central Highlands Water win the prestigious Wal Whiteside Memorial, 2015 Victorian Operator of the Year award. Ben Marsden from Wannon Water was announced the winner of the IWA Victoria sponsored Young Operator of the Year.

A number of other water operational employees were recognised at this event including David Greaves from Barwon who won the Hepburn Prize for the Best Paper Overall and Peter Tolsher from North East Water who won the Best Paper by an Operator.

Once again the event included a comprehensive exhibition incorporating 185 exhibition sites where companies exhibited the latest in equipment, services and process technologies available to the water industry. Safety Results was awarded the Ron Bergmeier Award for the Best Exhibition Site at this year's event.

The conference hosted the Ixom Victorian Water Taste Test that saw the Goulburn Valley Water entry from the Marysville WTP judged as the best.

Joint conference Hosts, North East Water and Lower Murray Water chose the **Gateway Health** and **Beyond Blue** respectively as the recipients of the WIOA charity donation, and cheques for \$1,500 were provided to each organisation to assist with their good work.



Victorian Young Operator of the Year Ben Marsden (L) from Wannon Water with Peter Quinn (representing IWA Vic)



Winner of the Hepburn Prize, David Greaves (R) congratulated by Barwon Water MD Joe Adamski



Best Operator Paper winner, Peter Tolsher (L) from North East Water with Andrew Head from Nalco



Noel Roulston (L) from Westernport Water, winner of the Best Operator Poster, being congratulated by John Park from the WITC



The Safety Results team, winners of the Ron Bergmeier Award for Best Exhibition Site

2015 VICTORIAN CONFERENCE REPORT

AWARD WINNERS

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

Wal Whiteside, Victorian Operator of the Year – sponsored by AWA

Steve Letcher, Central Highlands Water

Victorian Young Operator of the Year – sponsored by IWA

Ben Marsden, Wannon Water

Hepburn Prize for Best Paper Overall – sponsored by Iwaki Pumps Australia

David Greaves, Barwon Water

Best Paper by an Operator – sponsored by Nalco

1st **Peter Tolsher**, North East Water

2nd **Lincoln Thomson and Gwyn Hatton**, Barwon Water

3rd **Daniel Haworth**, Downer

Best Poster – sponsored by Water Industry Training Centre

1st **Noel Roulston**, Westernport Water

2nd **Justin Bourke**, North East Water

3rd **Leigh Cheshire**, North East Water

WIOA Charity Donation

WIOA donated \$1500 each to Gateway Health and Beyond Blue on behalf of Host corporations, North East Water and Lower Murray Water.

Ron Bergmeier Best Exhibition Display – sponsored by Utility magazine

Safety Results

Ixom Victorian Water Taste Test Winner

Goulburn Valley Water, Marysville WTP

Ixom Victorian Water Taste Test Finalists

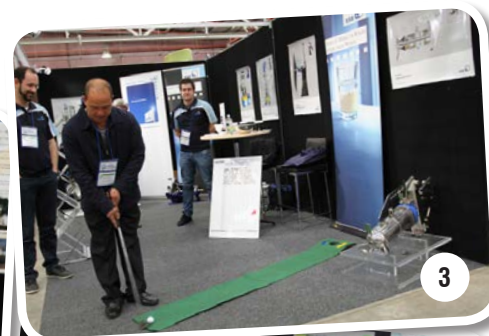
Barwon Water

Gippsland Water

Goulburn Valley Water

Kwatye Prize – sponsored by Thermo Fisher Scientific

Frank Rinaldo, North East Water



1 Tony Wright from VicWater presents the opening address on innovation. 2 Joshua Lamanna delivers his poster. 3 Fun and games at the Victorian conference. 4 WIOA Committee member Heidi Josipovic (R) interviewing GVW's Steven Nash at the Water Taste Test. 5 Conference lunches are a great time to catch up. 6 Attendees enjoy a break in the WIOA lounge area. 7 A very happy Lucky Door Prize winner with Stuart Darby from McBarns (L). 8 Dial Before You Dig sponsored the welcome reception with Jo Varley (R) enjoying some of the tucker. 9 The donuts were a hit at the Global Water site.

2015 VICTORIAN CONFERENCE REPORT

VICTORIAN CONFERENCE FEEDBACK

DELEGATES

Being a first year poster presenter but long time attendee, the experience was a little overwhelming with the amount of viewers for the posters but exceptional experience.

Stuart Evans, Goulburn Valley Water

Fantastic technical presentations! Such a great way to get operators involved and interested in what other parts of the industry are up to.

Kirsty Cameron, Corowa Shire Council

I came to appreciate the breadth of challenges that operators face in their day-to-day work. As a supplier it has given me a better perspective on how we can best serve the industry.

Shane, Armatec

It's great how people in this industry are willing to help each other and pass on information. Highly recommend to all.

Gary Harris, Lower Murray Water

The conference is an excellent and unique event, which allows and encourages industry learnings to be shared in a relaxed atmosphere.

Robert Ticchi, GWM Water

The range of exhibitors and technologies on show was fantastic. We've come away with a list of 5 or 6 products we believe worth pursuing to optimise our treatment processes.

John Dennis, Yarra Valley Water

This was a very good conference and exhibition.

I enjoyed the paper presentations and the variety of subject matter. The presenters no matter how uncomfortable they said they were in standing up there talking to the audience; it was a delight to hear and see their material.

Terry Bevis, Riverina Institute

Yet another very interesting and professional conference! Like a good wine, the conference improves with age!

Steve Hunter, Veolia

EXHIBITORS

The staff on our site were busy almost every minute of every day at the Conference. Delegates are very engaged, and seem to look to this Conference to meet suppliers of value to them. This makes the Conference a very valuable part of our marketing each year.

Marchelle Madden, Fluidquip Australia

Really happy with the excellent contacts we have made through WIOA and the Victorian Conference. This has provided Pelican Products the opportunity to get a much greater understanding of the nature and special requirements of this industry and we look forward to getting more feedback from your members and finding additional methods and products to increase efficiency and safety in the industry.

Malcolm Baird, Pelican Products

The Bendigo show was again an event that is not to be missed by exhibitors and visitors alike.

Roger Head, BF Machinery (BFA)

The insights I have gained from the 78th Annual WIOA Victorian conference in Bendigo far exceed any other conference I have attended to date. Wonderful, insightful and extremely well presented!

James Redmond, Aeramix

This was my first year exhibiting at a WIOA event and I found it to be a very positive experience. Attendees were very open about their experiences and keen to trade ideas explore new methods and products that might assist them on current and future projects. We will definitely be back next year.

Sean Bunyon, Global Water

We had a great time. We were made to feel welcome and the support and advice we received from members was awesome. We will be back.

Michael Wright, Wrighteye Industries

What a great way for water industry operators to get together both for networking and educational purposes - all in one place. Thank you WIOA!

Kristy Rich, Ebro Armaturen

CHILLING OUT IN BENDIGO

My name is Jason Vade from the City of Gold Coast's water directorate and I was lucky enough to visit the WIOA Victorian Conference and Exhibition in Bendigo. After the initial shock of the temperature coming from Queensland (haha), I visited the expo and it was like no other. I was informed that there were around 180 exhibitors, and that exhibition space sold out in a couple of hours. I find this a true credit to everyone involved at WIOA and to all the companies involved.

As an operator, I found the amount of new technology on display overwhelming. I was like a kid in a toy shop. Being able to have everyone under one roof and being able to interact with the products rather than just look at the brochures or information on the internet was priceless. It was also fantastic

to be able to also meet face to face with some of the suppliers I have dealt with for years, and to see first-hand their new innovative products. I can't express how informative I found the conference and exhibition, both the variety of products on display and listening to the presentations from different operators on how they tackled challenging issues.

The hospitality from the staff and members made it so comfortable from the lunches and dinners, to any request. If any operators have one of the WIOA Exhibitions within their reach I can't express enough how much you will get out of the experience.

Once again I can't thank everyone involved enough it was much appreciated.

Contributed by **Jason Vade** from the City of Gold Coast

Editors Note

Jason was a guest of WIOA at the Victorian conference as part of his prize for winning the Queensland Operator of the Year (*Civil/All Rounder*) in 2013. Due to circumstances outside his control, this was the first opportunity Jason had to receive his award, sponsored by **qldwater**.



Jason Vade (L) in 2013

VICTORIAN OPERATOR OF THE YEAR 2015

WIOA congratulates Steve Letcher, Water Treatment Supervisor with Central Highlands Water, for being awarded the Wal Whiteside, AWA Operator of the Year Award.

Steve's nomination, in recognition of his career dedicated to the production of safe drinking water, was judged by the Australian Water Association as the standout. The nomination process focussed on Steve's achievements in improving water treatment system operation, his attention to OH&S and the regulatory requirements associated with drinking water production.

Steve's personal values and how he instils those values into the day to day operations of Water Treatment and the wider business, his leadership and influence amongst colleagues and peers and his mentoring role to new water treatment operators was also acknowledged.

The nomination was put forward by Central Highlands Water as a way to formally recognise Steve for his contribution to the business and a career dedicated to the provision of Safe Drinking Water for our community.

Steve epitomises everything a water business and the community would want in a person responsible for producing

safe drinking water. Steve takes a great deal of pride in his work and he delivers on all tasks that relate to the ongoing improvement to Central Highlands Water drinking water systems.

Steve's expertise gets called upon on a daily basis with treatment plant issue, from the minor to the large. His ability to think on his feet has meant that he has to use his initiative to keep the show on the road. He is always willing to impart his knowledge of water treatment to the wider business and proactively campaigns for water treatment optimisation opportunities.

Steve continually seeks to resolve problems, honing his troubleshooting skills over many years in water treatment, and his mechanical aptitude has meant that his fault finding skills are exemplary. Steve seeks to identify the root cause of issues, he doesn't merely jump to the quick fix and he willingly shares his expertise in this space with the drinking water treatment team.

Having worked at Central Highlands Water for 16 years, 6 of those in the drinking water space, Steve has been responsible for operating and managing the following drinking water plants during that time:

- Landsborough WTP – Electrodialysis Reversal
- Avoca WTP – Clarification/ Filtration and Reverse Osmosis
- Maryborough WTP – Clarification/ Filtration
- Daylesford WTP – Dissolved Air Floatation Filtration
- Lexton WTP – Membrane Filtration
- Dean, Waubra and Learmonth Disinfection Plants
- Six Chlorine Booster Sites.

Central Highlands Water celebrates Steve's success with him and is thrilled that this prestigious industry award has been granted to such a worthy recipient.



VICTORIAN YOUNG OPERATOR OF THE YEAR

Congratulations to Ben Marsden from Wannon Water who was announced as the winner of the Young Victorian Operator of The Year Award at the Bendigo Conference.

Ben is 29 years old and has been employed by Wannon Water for the last 5 years. He has completed a Certificate III in water operations and is now working on completing his Certificate IV.

Ben was appointed into the role of senior operator 18 months ago after showing great leadership qualities as an operator. Since his appointment, Ben has developed into a very competent senior operator taking on the role of staff rostering of 11 staff and the purchasing of all chemicals in the Central district. His ability to fault find and resolve is excellent, he works hard to achieve a high standard and has always received favourable comments from team members and management.

Ben is also a strong leader in OH&S where he has been the representative for the Eastern District team and later Central District. Now in the senior operator role, he is leading by example and providing extremely valuable OHS input on new capital projects.

Ben and a local contractor were recently involved in setting up the new screw press dewatering technology at the Port Fairy Industrial wastewater treatment plant. He played an important

role in achieving a very high OH&S standard by making sure all OH&S requirements were taken into the works and ensuring the safety for future operators. He also optimised the dewatering process to allow Wannon Water to achieve 17% cake solids where the filter belt press were achieving 14% cake solids, gaining an economic efficiency for the business.

In 2013, Ben won the award for Best Operator Poster Paper at the WIOA Conference in Bendigo for his paper based on sand filter operation.

For winning the Young Victorian Operator of The Year award Ben will join the WIOA delegation on their tour to New Zealand in May next year. The trip is valued at \$2000 and is kindly sponsored by the Institute of Water Administration (IWA, Victoria).





The WIST met in Brisbane on the 9th October to review the current activities of the Taskforce, undertake a strategic planning process and consider amendments to the proposed National Certification Framework for Operators of Drinking Water Systems.

Progress on national VET reform

The current Water Industry Advisory Committee (WIAC- as set up by Government Skills Australia) will act as the interim Industry Reference Committee (IRC) for water under the new arrangements for training product development. Guidelines for IRCs are expected to be released by late November and will provide further guidance. John Harris (representing the ASU) is the current WIAC Chair and is also a representative on the WIST, and will act as the conduit between the two groups and the Federal Department of Education.

It is still unknown which organisation will act as the Skills Service Organisation for water under the new training model or whether the industry will have any say on this.

National Water Package progress and issues

The National Water Package NWP15 has been submitted for final endorsement. It is unclear how long the endorsement process will take. Any remaining issues with the package will need to be addressed during implementation.

Review of 2012 Australian Water Association (AWA) Skills business plan, agreement on focus areas and actions

WIST discussed a number of project ideas – to be refined and prioritised at the next available meeting and communicated to industry once finalised.

The successes from the previous AWA business plan were noted, especially the Australian Curriculum Project.

Certification Pilot updates

The Queensland pilot is complete. Six operators were formally certified against the proposed Framework by the Water Industry Operators Association of Australia (WIOA) in June this year. A number of organisations are currently undertaking gap training with the view of pursuing Certification for their operational staff.

National Certification Framework for Operators of Drinking Water Systems review

WIST will continue to act as the 'Certification Framework Owner,' until the role of owner has been formalised. The WIST will however continue to seek an appropriate federal government agency to act as owner.

A number of amendments to the Certification Framework were agreed to. The proposed amendments will be finalised and then sent out for wider industry comment in late 2015.

The WIST also agreed to set specific requirements and conditions around Certifying bodies and that it would appoint Certifying bodies based on them meeting these criteria.

BIG FISH MIGRATING FOR SPAWNING

In March 2015, WIOA held our Weekend Seminar and AGM at Mulwala and on the Sunday morning, the assembled members were fortunate enough to be given a guided tour of the Yarrawonga weir and the fish ladder connecting the Murray River to Lake Mulwala. There were a few smallish fish in the lock the day we visited which was great to see.

The Murray Darling Basin Association provides a weekly report on the weather conditions and water movements within the Murray Darling Basin. The web address for the report is

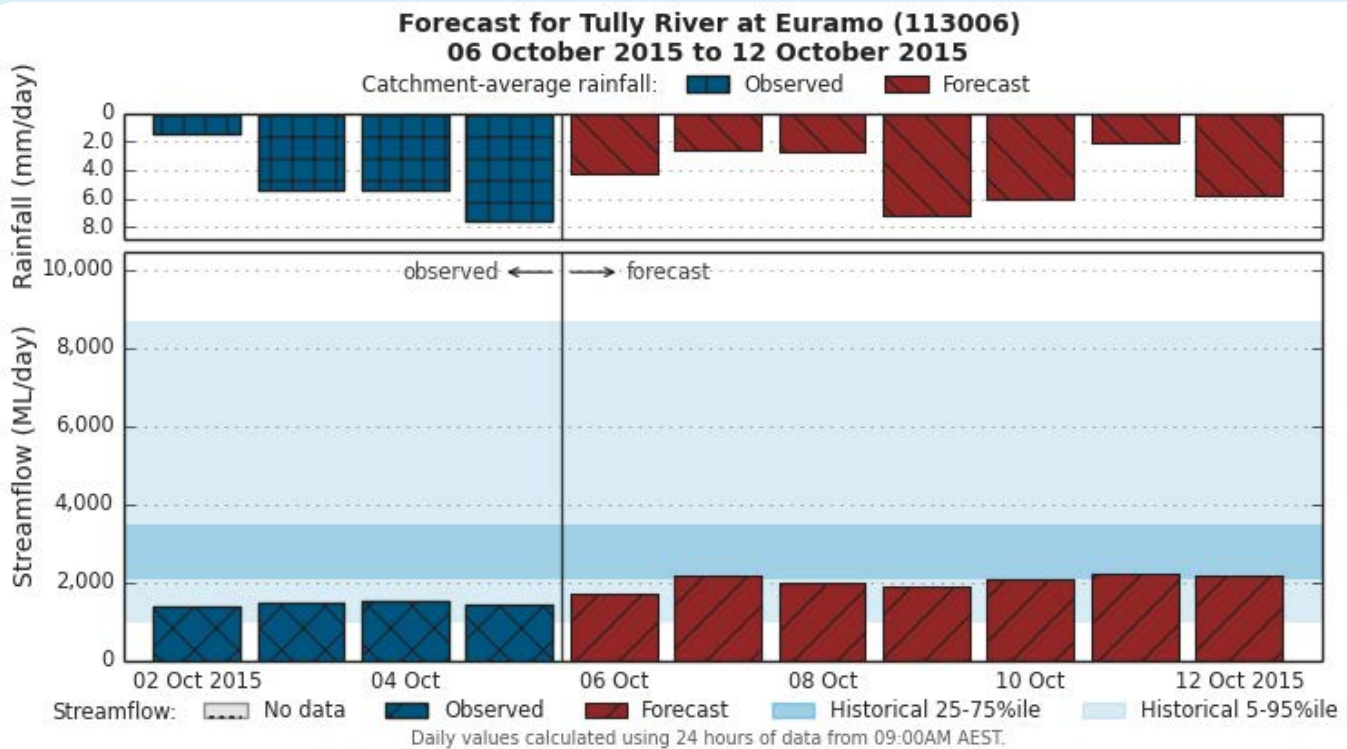
www.mdba.gov.au/river-data/current-information-forecasts/weekly-report

There was an interesting note in the report for the 28 October: "During October, increased numbers of native fish have been observed moving upstream using the fish lock at Yarrawonga weir. Over the month, 165 golden perch, 17 silver perch and 50 Murray cod have travelled upstream, including 11 cod which were over one metre in length. The fish lock, adjoining the weir, is approximately 10 metres long by 3.5 metres wide and 9 metres high. When fish swim into the lock, the entrance is closed and the lock chamber is filled to the upstream pool level. The floor of the lock is then slowly raised so that the fish are able to exit to the upstream weir pool."



Murray cod, including some over a metre long, have been observed moving upstream using the fish lock at Yarrawonga weir (photo courtesy of Luke Cruikshank)

BOM – MAKING THE MOST OF NATURAL STREAM FLOWS



The Bureau of Meteorology now forecasts likely stream flows for the next seven days at more than 100 locations across Australia.

Our new 7-day streamflow forecasts service combines rainfall and streamflow observations with rainfall forecasts to indicate whether rivers are likely to rise or fall in the coming week. It shows whether forecast rain is sufficient to increase flow in the rivers, and how this compares to the normal flow for this time of the year.

The forecasts help everyone using our rivers - especially river and reservoir managers who make decisions about the best use of the country's water, from a water supply, agricultural and environmental perspective.

Together with other planning tools, 7-day streamflow forecasts can be used to:

- reduce water wastage in managed irrigation systems when natural flows are expected;
- achieve environmental outcomes, helping water managers meet high and low flow needs for rivers and wetlands;
- provide additional information for reservoir operations;
- support on-farm water management decisions; and
- help recreational users plan activities such as camping, fishing and boating.

The 7-day streamflow forecasts do not replace flood forecasts. When a flood warning is current, the 7-day streamflow forecast will include a link to the flood warning. Flood forecasts and warnings help keep our emergency services and community informed about hazardous river conditions.

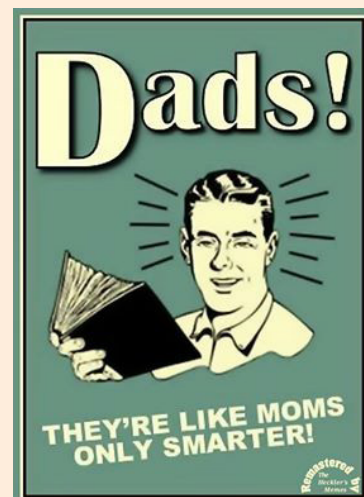
The innovative forecasting methods, tools and analysis behind the 7-day streamflow forecasts service were developed through the Water Information Research and Development Alliance between the Bureau and CSIRO.

3 WAY TIE IN FOOTY TIPPING

A few upsets in the last round of the AFL footy season brought an amazing result in the WIOA AFL footy tipping competition with a three way tie for first place. Congratulations to Andrew Povey (aka: HawkaDog), Manfred Glombowski (aka: VendorScum) and Shawn Charlton who all selected 141 winners for the season. Each of them will receive a WIOA prize pack and we look forward to even more members participating in 2016.



THE LIGHTER SIDE



BIRDS EYE VIEW - Facilities Members Operate – Pimpama Sewage

The Pimpama Sewage and Recycled WTP is a Biological Nutrient Removal and Class A+ Recycled water treatment facility with an initial design average dry weather inflow of 17.0ML/day for the WWTP and 9ML/Day for the RWTP.

The process stream is screening, grit removal, biological nutrient removal, media filtration, membrane filtration, UV disinfection and chlorination. Class A+ water is stored in a 10ML reservoir on-site prior to being pumped into the recycled water network. Waste activated sludge is dewatered on a belt filter press and removed for agricultural use.

The WWTP construction was signed off in September 2008 and RWTP construction signed off in January 2009.

The Pimpama processes

- 1 Odour Control Facility
- 2 Preliminary Treatment Area
- 3 Sludge Handling Area
- 4 Blower Building
- 5 Bioreactor
- 6 Clarifiers
- 7 Media Filters
- 8 Chlorinic Contact Tank
- 9 B Class B.S.
- 10 Chemical Storage
- 11 Admin Building
- 12 Workshop
- 13 Waste Buffer Tank
- 14 Ultra Filtration Building
- 15 U.V. Disinfection
- 16 Tanker Filing Station
- 17 Class A+ P.S.
- 18 Class A+ Storage

CITY OF
GOLDCOAST.





WIOA HITS THE GREENS IN CAMPERDOWN

What a fantastic day it was a couple of weeks back when we, the keen Wannon Water golf tragics, hit the road down to Camperdown to take on "the course in the crater" for the annual WIOA, Dial Before You Dig Charity Golf Day. The bus trip down was a little tense with some of the boys (one in particular) very keen to do well in the event. This tension was eased somewhat when we arrived on course, tucked into a couple of sausages for brunch and got the opportunity to smack around a few marshmallows to find who had the longest drive. A very entertaining start to the day, with the winner, our very own Luke Dunlop, getting the opportunity to wear the marshmallow longest drive hi-vis vest for the day. Well done Luke.

The teams of 3 for the Ambrose competition were then drawn out with some fist pumping and sighs of disgust as the teams were finalised. Then off we went to the first and tenth holes to start the rounds. The course was in magnificent condition thanks to the Camperdown Golf Club and the big guy upstairs didn't let us down either as he turned on a magic day for us all to enjoy. The refreshment cart driven by Marilyn was in high demand throughout the day as the groups weaved their way through the undulating fairways and greens. There were plenty of shouts of excitement heard across the course throughout the day with some groups not even giving a yelp. The "Mulligan" cards were eagerly purchased at the start of the round and played strategically by the teams when skill levels deteriorated beyond a certain level. Congratulations must go to the winning team which included Wannon Water's Phil McLean.

The winners of the day with the score of 66 less 7.3 handicap was the team of Rob Woodhouse, Adam Sobinski and Phil McLean. The Tradies Cup for the best score by one of the event sponsors was won by Wannon Water team of Simon Hermans, Darren Lynch and Joh Harris.

After presentations and a delicious meal for tea, the bus trip home for us was very entertaining with a couple of stops called for, as well as plenty of stories from the day that just kept getting better as the trip went on. A big thanks to John Harris and Anthony Evans for organising the day for us and getting us there and home in one piece....just!! We all have booked the day in again for next year and hopefully the numbers may increase with the stories that were brought back to the offices spreading quickly.

Finally, a big thank you should go to the WIOA team for organising such a great day, the sponsors that make events like this possible, all the golfers that travelled from other Corporations and businesses around the state and also to the Camperdown Golf Club for looking after us so well.

Contributed by **Darren Lynch**, Wannon Water



Marshmallow boy - Luke Dunlop



Wow - nearly in!!



Tradies Cup - Darren Lynch, Simon Hermans & John Harris



Winners overall - Rob Woodhouse, Adam Sobinski & Phil McLean



Marilyn in the PAAS drink cart looked after players in Camperdown

DOUBLE CELEBRATION FOR FRANK - KWATYE PRIZE

Congratulations go to Frank Rinaldo from North East Water in Victoria for being awarded the 2015 Kwatye Prize at the WIOA conference in Bendigo. For the first time ever, an individual has been awarded both the PASS Award and the Kwatye Award in the one year. Frank will use the prize funding to advance the development of a tool he created which allows the easy removal of the tops of sluice valves for repairs to seal leaking cones.

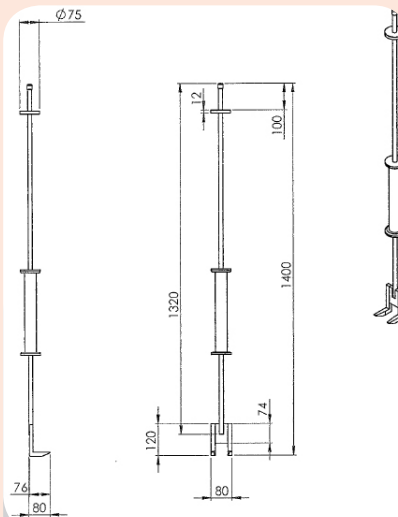
Frank identified a problem with the time and effort it took to remove the top of a sluice valve to access the packing to install new rubber cones to seal any leaks. The issue was that a large hole (approximately 1 m diameter) was required to access the top of the sluice valve to enable enough room to leverage a wedge under it so it could be hit numerous times with a sledge hammer to loosen the top and remove it. This was time consuming and requires a degree of manual labour. After digging up so many sluice valves, Frank thought there must be an easier way to remove the top of them without digging such a large diameter hole. So he developed a tool that could be used to leverage the top off in a narrow space. The tool features a two-pronged tip and a slide hammer-style action to remove the top of the valve. This means that the job can be completed on ground level using a jetter to dig a much smaller hole.

In winning the award Frank will advance the development of this tool beyond a prototype and make the tool and its benefits available to the Australian Water Industry. This will involve detailed design, tooling and manufacturing, testing and offering it at a price that will make it available to all.

ThermoFisher
S C I E N T I F I C



Frank Rinaldo (L) from NEW with Chris Haritou from Thermo Fisher Scientific winner of the Kwatye Prize



Preliminary designs for the tool.



Preliminary designs for the tool.

WASTEWATER INTEREST DAY IN WODONGA

In mid October, around 30 WIOA members from both the corporate and utility worlds made the long trek to Wodonga to attend the Victorian Wastewater Interest Day and participate in a tour of the Wodonga WWTP. The day was hosted by North East Water and was held at their new and very impressive head office. The day started off with the usual "Hello my name is" and "I work for" round table introductions. After this we jumped straight into the real stuff.

John Day was first up with a bit of a spiel about the operations set up at North East Water. I always find it interesting to see how other utilities are operating and structured. Jason Mullins from North East water was next to talk. Jason talked about how North East Water was using Environmental Risk Assessments to make better, more informed decisions on large projects and EPA license agreements. It was interesting to hear how the guys at North East Water were using data and reason to inform stakeholders and make the best decisions for the company.

Next up was Peter Tolsher, with a talk about the work that he and others are doing within North East Water to deal with their wastewater sludges. The phrase "Turning a liability into an asset" stood out to me, as a result of forward thinking in this area. To turn a long story short, North East Water are trying to turn a liability 'sludge' into an asset 'money'. What did not stand out was Tolsher's acting skills, which were on display during a short video and blooper reel.

Just prior to the lunch break Michael Chapman gave a very hands on experienced talk on aeration upgrades at the West Wodonga Treatment Plant which we were to see for ourselves later that day. Peter Tolsher gave a guided tour of North East Water's new head office and Wodonga depot, which are now on the same site. At this point I would like to thank Xylem for putting on a great lunch; you know you are at a WIOA function when during lunch everyone is sitting around eating and watching a sewer pump presentation occur in the middle of the room. At this point in the day all the talks had concluded and everyone headed out to the West Wodonga Treatment

Plant for a site tour. The Treatment Plant is an interesting one, with a mix of old and new after the plant had a large upgrade undertaken in around 2002.

Thanks to WIOA for organising the day and North East Water for being great hosts. For anyone in the future who has an opportunity to attend one of the WIOA interest days, I can thoroughly recommend it. They are short simple days, but I can assure you that you will leave knowing just that little bit more about the industry that we all work in.

Contributed by **Shawn Charlton**, Corowa Shire Council



Peter Tolsher pointing out the intricacies of the Wodonga WWTP



Adrian Rijnbeek from Xylem presents on pump maintenance



All smiles at the wastewater interest day hosted by North East Water in Wodonga

FNQ INTEREST DAY & BAREFOOT BOWLS

On Wednesday 28th October just under 40 operators from the Far North Qld region attended a water interest day and barefoot bowls held at the Cairns Bowls Club. The day included a number of very interesting presentations from operational staff and industry partners. Topics covered included an update on water and wastewater training opportunities by Michelle Hill from *qldwater*, safety in the workplace by keynote speaker Ian Johnson from Paradox Ignited and a couple of interesting presentations; one by Cole Harvey from Aeramix on their recent projects in Croydon, Richmond and Georgetown and the other by Thomas Hampton from Cairns Regional Council entitled "thinking outside the box" which had some very imaginative solutions to everyday issues in the workplace.

George Wall from WIOA and Shane Bandiera from Cassowary Coast RC provided an industry update and talked about some of the challenges facing the industry. It's nice to see George spare some of his valuable time to attend and of course support these events and George put a lot of effort into ensuring the day ran smoothly much to everyone's appreciation.

It was also good to have Michelle Hill in attendance as it gave us an opportunity to have a one on one discussion with her about training initiatives and opportunities for the operators. Michelle has been busy working on this for some time now, and her work is greatly appreciated.

After the Interest Day formalities everyone then had lunch and headed out to the greens at the Cairns Bowls Club for a couple of hours of social bowls. The fixtures were hotly contested with some light hearted sledging between teams and lots of friendly rivalry and laughs throughout the afternoon.

Of course we must applaud the generous supporters of the Day including Cairns Regional Council, Aeramix, WIOA, Xylem, Grundfos, Bilfinger Water technologies, Thermo Fisher Scientific, Pensar, Royce Water Technologies, Automation Group, Reece Civil and Water Treatment Services. As a result of their contribution, the sum of \$800 was raised and will be donated to charity.

For me I found the day very interesting listening to speakers from a range of fields. It was also good to catch up and network with staff from other Councils and industry organisations. The day provides an excellent opportunity for operational staff to talk with one another and get a feel for what each are doing and offering.

Congratulations to the bowls day winners – the Thermo Fisher team of Peter Venville, Loui Macri and Tony Bowater. The runners-up were the Pensar team of Adam Porter, Joe Osbourne and Geoffrey Smart and third place to the Reece Civil team of Ricky O'Loughlen, Kris Brown and Tyler Edgerton. The team of Scott Buckley, Shane Bandiera and Anthony Davis came stone motherless last and probably should have been presented a box of tissues for their efforts. Simon Page won the Grundfos prize for the long bowl across the green. It was good to see Loui Macri from Mareeba SC in the winning team as Loui really enjoys his bowls.

The Interest and Bowls day is a great way to combine work, learning new things and having a few laughs at the same time. Can't thank the guys that organised it enough - see everyone next year.

Contributed by **Morris Hamill**, Mareeba Shire Council.



Loui Macri showing off



The assembled delegates



The winning team - Loui, Tony & Peter with George

Goulburn Valley Water (GVW) officially has Victoria's best tasting drinking water after it was awarded first prize at the 2015 Ixom Victorian Water Taste Test.

Each year at the Annual Victorian Water Industry Operators Association (WIOA) Conference, water corporations from across Victoria battle it out to see who produces the state's best tasting drinking water. GVW's Manager Operations, Mr Steven Nash, said that he knew Goulburn Valley Water's sample would be right up there come judging time.

"We arranged for a water sample to be taken from one of our southern catchment areas and going into the finals we thought our entry would be a good chance in this years' taste test competition."

The winning sample was taken from the new microfiltration plant at Marysville and was judged on aroma, clarity and taste before it was announced as Victoria's top drop. Mr Nash said the real highlight of the competition however is the passion that GVW operators put into continually producing high quality, safe, drinking water.

"Although the competition was tough, the event was a celebration of the fact that some of the best tasting and safest water in the world is produced in the Goulburn Valley by people who have a great passion for their job."

The new \$5 million Marysville Water Treatment Plant has been producing award winning water since June and services the towns of Marysville and Buxton with the capacity to produce up to 2 ML of drinking water per day.



The heats under way at the conference

IXOM VICTORIAN WATER TASTE TEST – PAST WINNERS

2015 Goulburn Valley Water

2014 South Gippsland Water

2013 East Gippsland Water

2012 Coliban Water



The Goulburn Valley Water Team celebrating after winning the Ixom Taste Test award in Bendigo



GVW's Tony Nolan (District Manager, South East), Steve Nash (Manager Operations) and Heath Vine (Marysville WTP Operator)



The "expert" judging panel doing their thing

TECHNICAL TIP - SAMPLING

When it comes to sampling of potable and non-potable systems, it can very easy to get it wrong if you do not follow some basic standard procedures. The bottles of water that you collect onsite contain a very important snap shot in time and are the very first stage of the analytical process.

So, what do we need to do?

1. Are you collecting from the right location? Correct location is important for making the most competent operational decisions based on the results but also historical data is important for trending.
2. Is the sample representative of the source?
Sample points should be flushed for a minimum of 2-5 minutes to clear any stale water.
If sampling from the surface, take from a minimum of 30cm below to avoid surface scums.
3. Are you required to take microbiological samples? If you do, you must sterilise the sample point or sample collection apparatus (i.e. sample rod) immediately prior to collection. Use a flame burner until steam is produced or 10% sodium hypochlorite for a contact time of 2 minutes. Flush for 20-30 seconds prior to collection after using hypochlorite.
4. Confirm you are using the correct sample bottles and they are appropriately labelled. Some samples may require containers that are sterile, dosed with a preservative agent, be collected in glass etc. It is imperative that you use the prescribed container to avoid contamination/integrity risks.
5. Does the sample require an air gap or no air gap? General rule of thumb is if you are collecting a living organism it must have air in the bottle to survive. Chemistry samples may react with air degrading the sample, thus no air in the bottle.
6. The majority of samples are required to be chilled after collection to limit sample degradation. Ice is a superior method to bring the temperature down quicker.

Above all else, sample safely, wear a PFD around any water body and immediately report any hazards.

Contributed by **Adam Williams**, Australian Water Quality Centre



Hypo inside of the sample tap



Hypo the outside of the sample tap



Flaming the Fitting

WIOA LOOK-A-LIKES



David Stacey - TasWater



Ned Kelly - Bushranger

If you know a WIOA member who has a look-a-like send us a picture (with permission) for us to publish.

REDUCING WASTEWATER TREATMENT ENERGY COSTS ASSET HYDROFLUX industrial

Australian dairy ingredient processor Burra Foods recently installed a Hydroflux HyDAF Dissolved Air Flotation (DAF) unit for primary wastewater treatment and successfully halved their energy costs.

The HyDAF system from wastewater treatment specialist Hydroflux Industrial was chosen over several others in the market as capable of increasing the plant's treatment efficiency and reducing operating costs.

According to Burra Foods' Wastewater Treatment Plant Supervisor Daniel Tsivoulidis, they began to see results at the Korumburra site in the South Gippsland region of Victoria just one week after installation.

"Within a week we were already removing so many of the solids in primary treatment that our secondary treatment Sequencing Batch Reactors did not need as much oxygen. We immediately saw a drop in electricity costs.

"With some more fine tuning we saw even more improvements. We reduced our energy costs by almost half and the Sequencing Batch Reactors can now process double the volume of water," he said.

Improving primary treatment also leads to improved secondary treatment performance, smoother processes and other benefits according to Hydroflux Industrial's Director, Mathew Pugh.

"We see this time and time again. Getting the wastewater treatment right at the front end can have an incredibly positive effect for the rest of the plant as well as significant cost savings. It's a worthwhile investment with a fast return as it reduces the cost of operation," Mathew said.

Burra Foods HyDAF unit now removes 60 to 70 per cent of contaminants in a continuous automated process and it has shown savings through reduced energy and chemical demand, as well as a reduction in operational expenses in downstream treatment.

The DAF unit also enabled improved pH fine-tuning and there is less down time now required for washing the microfiltration and reverse osmosis plants that form part of downstream processes.

The Burra Foods site can use up to a million litres of water a day and final treated water is discharged to the environment. Improved primary treatment reduces water variations going into the secondary and tertiary treatment further guaranteeing the high quality of this discharged water.

Hydroflux Industrial is a wastewater treatment specialist in the Australian dairy industry working with clients such as Burra Foods, Parmalat in Sydney and Pactum Dairy in Shepparton.

More information on the Hydroflux range of products and services is available from their website at: www.hydrofluxindustrial.com.au



Hydroflux DAF unit

CLEAN, SAFE TANK WATER TO RURAL HOMES WITHOUT CHEMICALS



Clean safe drinking water is essential for good health, however when you're living on a rural property, clean water from a rainwater tank is not always guaranteed. Contaminated water supplies have been responsible for major outbreaks of severe gastrointestinal illnesses such as gastroenteritis and infections caused by the protozoan parasites *Cryptosporidium* and *Giardia*. Gastrointestinal illnesses can be particularly severe for the very young, the elderly and people with weakened immune systems.

A water supply management plan, which includes Ultraviolet (UV) light water disinfection, can safeguard contaminated tank water supplies to prevent illness amongst your family.

UV-Guard Managing Director, Richard Vallance, said UV water disinfection can be easily implemented with UV-Guard's range of water treatment systems.

"Our SLF-Series can easily be fitted to a rainwater tank to provide not only pathogen free clean water, but also peace of mind knowing that your family is protected from contaminants," Mr Vallance said.

"UV can be used to provide continuous assurance of water quality and requires relatively low maintenance. It also has the advantage of not involving the addition of chemicals or affecting the water's taste."

"Typically the UV disinfection system is installed in pipework delivering water from a tank to a dwelling or selectively to taps used to supply water for drinking and food preparation," Mr Vallance said.

UV-Guard customer, James Galbraith, is based on a beef cattle farm in the Southern Highlands of New South Wales and has installed an SLF system on his rainwater tank that supplies drinking water to his newly built house.

"I first came across UV-Guard when I was reading The Land newspaper and saw one of their advertisements. I have a young family with three children and I felt it was important to protect them from any water borne pathogens that could potentially affect our tank water supply," Mr Galbraith said.

"We didn't want to take any risks with our drinking water, so the decision to install the

UV-Guard system was a no-brainer really. Plus it was very easy to install; I was able to do it all myself. UV-Guard's system was the best choice for our setup as it can be operated on 12V and 24V DC power supplies, which is ideal for us as we rely on our off-grid solar system to power our home," Mr Galbraith said.

The SLF-Series can also be used on livestock water supplies, providing pathogen-free water from dams for troughs.

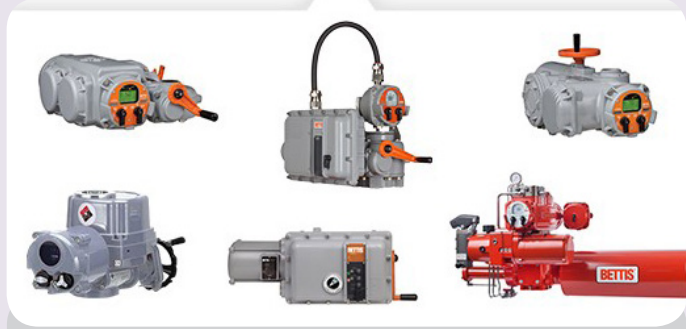
For more information please contact Richard Vallance at UV-Guard on email at richard.vallance@uvguard.com.au

NEW SOFTWARE

Emerson has recently introduced actuator asset control and monitoring software to manage electric actuator assets in the field.

DCMlink enhances plant productivity by unifying all electric actuators on a common platform while allowing plant operators to gain deep insights into asset status and performance. The DCMlink platform will allow, for the first time, Emerson customers to diagnose, configure, and monitor all electric actuators from a central location independent of protocol, actuator or host system. The software extends the useful life of field assets by providing actuator data gathering, condition monitoring, events log and prioritisation of actuator alarms in a unified and consistent user interface. Actuator configuration includes custom characterization, as well as the ability to import and export historical configuration profiles. Whether it is viewing value torque profile, live trending data or actionable alarms straight from the actuator, plant operators will be able to access detailed monitoring and diagnostics data, allowing them to take action before a fault occurs. DCMlink offers advanced control and diagnostics, including torque profile curves, initiating partial stroke test or emergency shut down and alarms in NE-107 format. Current communications support included Modbus, TCP-IP, and Bluetooth.

For more information, go to www.emersonprocess.com/DCMlink



DCMlink products

DEMOUNTABLE FLOOD BARRIERS

AWMA's Demountable Flood Barriers allow property owners to manage their own flood protection.

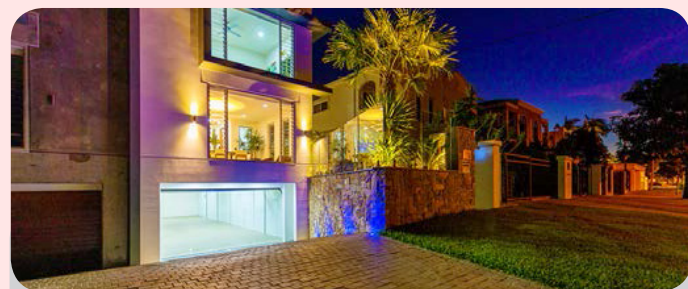
Once the side frames have been installed, the barrier posts and segments (weighing a maximum of 10kg each) can be manually constructed by a single operator at any given time.

AWMA Flood Barriers are suitable for isolating flood and/or storm waters from any low lying areas in and around existing infrastructure. AWMA's design team ensure all products are tailor made to meet the specific site and operational requirements.

AWMA's website provides a platform to present the projects and the innovative solutions developed in conjunction with partners. For more information on the range of AWMA solutions available, visit www.awmawatercontrol.com.au



Flood barriers mounted



Flood barriers demounted

'FLUSHABLE' WIPES CAUSING BLOCKAGES IN SEWAGE SYSTEMS

Michelle Cull from Qld Urban Utilities advises that wet wipes are causing havoc in sewage systems, with utility groups asking people to remember the three P's. Urban Utilities wants residents throughout Queensland to only send the three P's - pee, poo and paper - down the toilet bowl.

"The growing menace is the wet wipe, we estimate one in three people are flushing these down the loo," Michelle said. "We pull around 120 tonnes of wet wipes from the sewage network each year and if you stretched out the wet wipes from end to end they would stretch all the way to New Zealand. "We are asking people to not flush them, but to put them in the bin and that saves us having to screen them out in our sewage treatment plants."

"Even the flushable wipes are a problem as they do not disintegrate like toilet paper does," she said. "They cause problems and blockages in our pipes and they get caught in the equipment at our sewage treatment [plants] and at our pump stations."

The 'Flushable' label is causing confusion. "Many wipes are labelled as flushable, but what we are saying is, just because they say they are flushable does not mean they should be flushed,"

"I have done an experiment where I submerged toilet paper and flushable wipes in three glass jars. The paper broke down in minutes, but the wet wipes are still intact after three months submerged in water."

"The Water Services Association of Australia is looking at



Flushed item experiment

holding an industry forum next year as it has been recognised as a growing problem so we are hoping to bring forward less confusing labelling," Ms Cull said. "It does not have an impact on water bills or water prices but it

does add to the overall operating costs and we want to keep those costs as low as possible."

Adapted from source: www.abc.net.au/news/2014-12-15/queenslands-flushable-problem-toilet-paper-products-cause-sewage-woe/5967654



RESERVOIR ROBOTS AND “SMART BALLS”

Unitywater is adopting CCTV-equipped mini submarines and computer-chipped balls flowing through water mains among the innovative new technologies to save money and improve its operations.

The Submersible Remote Operated Vehicle (ROV) Robot, dubbed “Rove” by Unitywater staff, is a 25 centimetre-wide remote controlled device fitted with a CCTV camera.

From a vantage point underwater, it performs a condition assessment of reservoir interiors, checking for any structural or safety problems.

It means there is no need to divert water supplies while reservoirs are taken off line for human divers to perform a confined-space entry. This improves safety, saves times and comes in at half the cost of a diver and associated stand-by rescue team.

A total of 15 reservoirs and towers have been identified for ROV inspection in 2015/16. The first cabs off the rank are in Narangba, Margate, Peregrine Beach, Bli Bli and Mooloolah Valley.

The SmartBall™ leak detection and condition assessment device is an aluminum alloy ball (about the size of a tennis ball) encased in a foam outer shell, which is disinfected and placed into a sewer or water main to “free swim” with the water flow for up to 12 hours at a time.

The core ball contains instruments including an acoustic sensor and GPS tracker which can detect the sound of leaks to an accuracy of less than two metres, as well as gas pockets which can reduce the capacity and efficiency of the main.

Unitywater recently used the SmartBall device through 8.9 kilometres of pipeline in the Landers Shute-Woombye region, one of the main water pipelines supplying the Sunshine Coast. The journey took three hours and 12 minutes.

The trial resulted in three leaks being detected. These leaks were forward-estimated to lose \$31,000 worth of water on an annual basis, had they remained undetected.

Unitywater has repaired one leak already and is investigating the others.

“The advantages of both of these innovations is that they allow us to monitor our assets from inside the pipe or reservoir, rather than attempting to draw conclusions from indirect, external clues. Plus the data collection is in real time and on the spot,” said Simon Taylor, Executive Manager Infrastructure Planning & Capital Delivery.

“Leaks can be precursors to pipeline failure and the integrity of our reservoirs is critical.

“If we can discover leaks or reservoir defects early, we can take the immediate necessary action to repair them before they become a major problem.

“This helps us better target our maintenance priorities, minimise impacts to customers and reduce the strain on our maintenance crews and repair budgets.

“These are two good examples of using technology to work smarter, streamline the business and save valuable dollars, which ultimately means we make savings that we can pass on to our customers.”

A video showing how the SmartBall works is available at www.youtube.com/watch?v=sfoBAW2FwG8&feature=youtu.be



Close-up images of the SmartBall.



Unitywater Executive Manager Infrastructure Planning & Capital Delivery Simon Taylor and Asset Performance Engineer Keir Anderson with the SmartBall.



Unitywater Asset Renewals Engineer Glenn Stock with the CCTV ROV.

GLOBAL GOALS - WATER AND SANITATION FOR ALL



The UN's unprecedented commitments to end extreme poverty and create a fairer, more sustainable planet must now turn into action to ensure the success of the new Global Goals, including water and sanitation for all.

Global Goal 6 commits nations to delivering basic access to water, sanitation and hygiene to everyone, everywhere by 2030. Its inclusion is a victory for more than 650 million people in the world today without access to clean water and nearly 2.3 billion people without access to safe, private toilets.

These basic services are tied to health, education, gender rights, urbanisation and those most vulnerable to the impacts of climate change.

Paul Nichols, Chief Executive of WaterAid Australia, said: "This is the first time leaders have stood up and promised to deliver water and sanitation to everyone, everywhere. This is our moment to change the world's course and reach those who are the poorest and most vulnerable with water and sanitation. Water, sanitation and good hygiene are essential to health and dignity. To succeed in this goal will require serious political commitment and financing. With this we can transform the lives of hundreds of millions of people."

WaterAid research in the report Essential Element has revealed that 45 low-income nations will not meet the new Global Goal on water and sanitation without new political and financial prioritisation for water, sanitation and hygiene services, including a boost to traditional foreign aid.

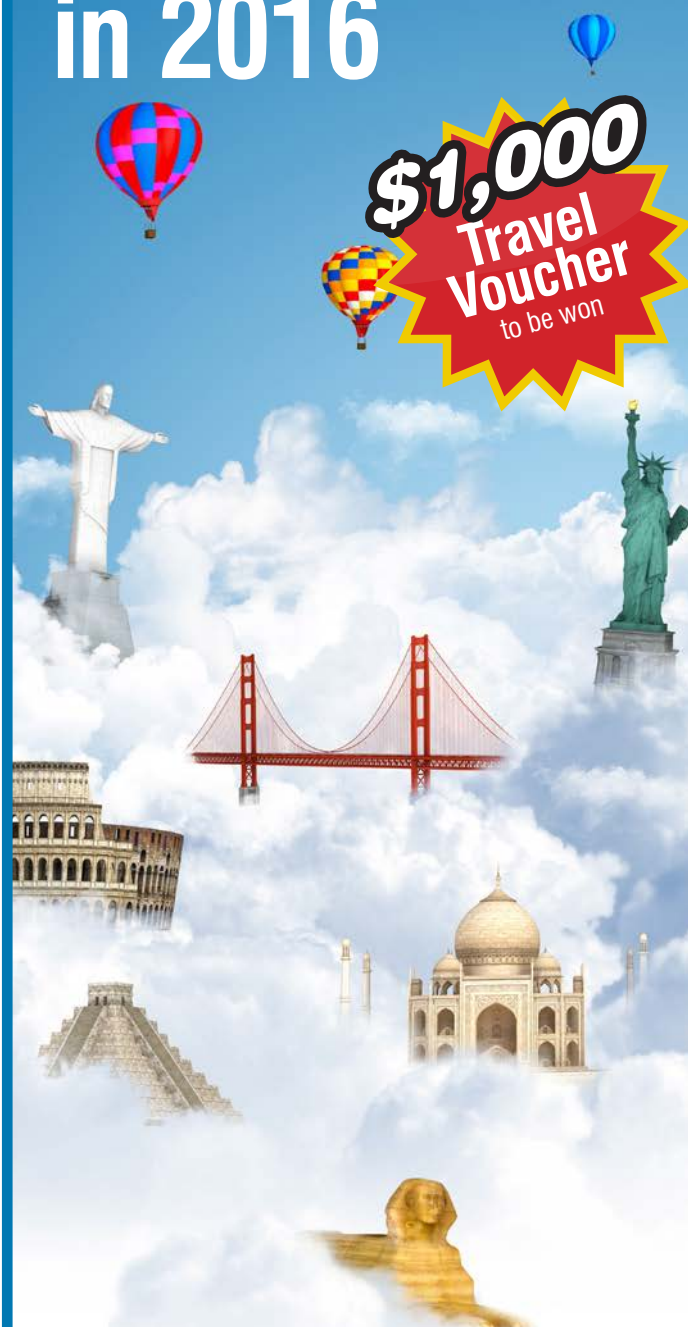
WaterAid is calling on governments to:

- deliver on their promise to achieve the new global goal on water, sanitation and hygiene to ensure everyone everywhere has these essentials by 2030
- ensure that there are indicators to monitor progress for access to drinking water, sanitation and hygiene in homes, schools and healthcare facilities
- ensure donor countries are meeting their commitments on foreign aid and giving sufficient priority to water, sanitation and hygiene programming
- ensure developing countries are prioritising water, sanitation and hygiene programmes at home and finding new and effective ways of mobilising domestic resources

The next step is agreement on indicators for the Goals which will be determined in March 2016. WaterAid is working to ensure that hygiene is given sufficient indicators — such as whether hospitals, clinics and schools have basins and soap for hand washing — to measure progress over the next 15 years.

More information on the Global Goals and the inclusion of the 6 goals related to sustainable management of water and sanitation is available from the WaterAid website at www.wateraid.org/au/news/news/

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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:

James Spratling, Mark Edwards, Arthur Poulos, Kritin Kumaran, Mark Abraham, Steve Lonie, Dean Trevorrow, Ryan Johnston, Rob McKenzie, Barry Coburn, Con Mavrelis, Simon Uren, Nick van Hamond, Rodney Bull, Gary Jordan, Mark McCormack, Russell Wheaton, Andrew Corlass, Brant White, Dallas Barton, Dino Giove, Paul McLeod, Simon Robertson, Tony Davies, Brad McMillan, Stephen Gilmour, Jayson Frawley, Daniel Owe-Young, Adam Moss, Chris Foley, Rob Treble, Steven Hansen, Stephen Knowles, Ryan Petrov, Tony Cowcher, Martin Buhler, David Scarlett, George White, Duane Cordina, Bronwyn Edwards, Keith Nicolle, Richard Senyard, Christopher Wright, Andrew Barton, Sahana Ganesh, Neil Morrison, Beau Bennett, Dale Hyland, Benjamin Carter, Katie Hardy, Jay Lamb, James Dalton, Carmel Kennedy, Greg Woods, Brendan Wall, Umesh Shrestha, Mark Wilson, Chris Telford, Skye Sinclair, Paul Barry, Robert Muller, Shayne Lange, Hugh Stewart, Andrew Barton, Glen Campbell, Hamish Crawford, Tyler Edgerton, Peter Asby, Mitch Baker, Aaron Little, Troy Schultz, Jamie Fiegerbein, Jason Zabell, Ashley Steadman, Kenny Liew, Tony Murphy, Mike Oakey, Joe McPhail, Greg Wake, Teresa Dalby, David Lobegeiger, David Otto, Mark Coleman, Rick Blythe, Darren Clark, Wayne Richards, Simon Nicol, Paul Dicker, Divino Fernandez, Sharon Connor, Dan McIvor, Clinton Andrews, Billy Flanagan, John Bishop, Jonathan Ham, Mark Gwynne, Jack Dobson, Damien Stefani, Geoff Prain, Dirk Caarels, Craig Egan, Sarah Attwater, Kate Bardy, Graham Bowers, Leigh Corbett, Eddie Costenero, Morgan Courtney, Chelsea Harrison, Damien Kelly, Will Kidd, Steve Lahm, Matt Leach, John Martin, Simon McEwan, Coen Mitchell, Kate Pauley, Benny Pilkington, Brendan Raveane, Geof Robinson, John Sacco, Daniel Scalzo, Dylan Scott, Jonathan Smedley, Matthew Stevenson, Brenda Lee, Rizwan Qamar, Tony Nolan, Grant Trewin, Jason Keller, Jackson Wright, Prithi Gajanayaka, Tim Fleming, Jacob Mallon, Len Condran, Karl Harms and Richard Turner, Randall Jones, Jeremy Coleman, Sam Rooney, Travis Dunn, Wade Manuel, Darren Matuku, Garry Ilett, Rose Perrott, Phillip Hood & Phil Sercombe.

New **Utility Corporate Members** include:

NSW National Parks & Wildlife Services and Queensland Urban Utilities.

New **Corporate Members** include:

Mullaly Engineering, LRM Consulting Service, Mini Dredgers, MPA Engineering, Pall Corporation, Unit Process Consulting, Alliance Automation, Stevco Seals & Pumps Victoria & Australia Laboratory Services.

COMING EVENTS

2015

26 November QLD Wastewater Interest Day, Maleny

2016

28 February PASS Award applications close

27 & 28 February WIOA Weekend Seminar & AGM, Parkside Motel, Geelong

2016 CONFERENCE AND EXHIBITION SCHEDULE

6 & 7 April 10th WIOA NSW Water Industry Operations Conference & Exhibition, Newcastle

1 & 2 June 41st WIOA Queensland Water Industry Operations Conference & Exhibition, Rockhampton

30 August & 1 September 79th WIOA Victorian Water Industry Operations Conference & Exhibition, Bendigo

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NEXT EDITION

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