



Backflow Group
WATER NEW ZEALAND



Backflow Group Newsletter

The Water New Zealand Backflow Group bi-monthly e-Newsletter

Kia ora!

With our national Drinking Water Protection conference and AGM behind us, the committee reconvened on the last day of August to look to the future of drinking water protection under the leadership of newly elected chair Richard Aitken. There is an abundance of work to be done in the arena of backflow prevention, making a busy time for the committee. We are looking forward to getting stuck in and continuing the great work that has been done by our predecessors.

Buried treasure?



One of the main areas of focus for this group is education to ensure that we have trained professionals out there to take care of our drinking water from the source to the last flowing tap. Is this a case of buried treasure or perhaps a possible cause of cross-contamination?

WHAT'S NEW

BURIED TREASURE?

VIEW FROM THE CHAIR

UPCOMING EVENTS

MEETING REPORT

CONFERENCE

NEDS REVIEW

COMMITTEE SPOTLIGHT:
RICHARD AITKEN

View from the Chair

As we head through Spring into Summer it's a good time to reflect on the momentum gathered through our conference held in August, as our attention widens to encompass all facets of Drinking Water Protection. With Backflow Protection being the primary function of our group since its inception, this will still be a strong focus as we embrace the whole water distribution network "from the source to the last flowing tap".

On our immediate horizon are two very important projects, being the National Engineering Design Standards (NEDS) and the Boundary Backflow Code of Practice. The NEDS document is a foundation document for the upcoming entities to utilise, and it is extremely important that Backflow Protection and all correlating references are accurate, meet industry best practice requirements and are interpreted in a correct and factual manner. This is particularly important where standards and legislation are used to achieve outcomes, especially as the understanding of these standards by those implementing them is limited. This technical space, and our advocacy for it, is a key area of expertise of our committee, and we look forward to the final documentation being a robust platform for all to work from.

As reminder to our wider group, and the water and plumbing industries we represent, if you have any queries/questions you would like put forward to the group committee for discussion or resolution, please contact our liaison Katrina at katrina.guy@waternz.co.nz and she will add it to our meeting agenda.

Richard Aitken
Chair, Backflow Group

Upcoming Events

National Backflow & Legionella Convention
Water for Health and Environment

Twin Towns Conference & Function Centre
19th-20th October 2023

- Workshops**
Learn from the experts on Backflow testing (Ashmore TAFE 18th October)
- Guest Speakers**
Presentations from dynamic speakers on Backflow Prevention, Legionella, Trade Waste & the ABCB
- Delegates and Sponsors**
are welcomed to attend

Logos: Legionella Management Advisory Group, BPA Inc., Backflow Prevention ASSOCIATION OF AUSTRALIA (Registration No. 400332438)

Logos: HYDROFLOW (DISTRIBUTORS (AUST) PTY LTD), WATTS®, GOULD INSTRUMENTS (www.gouldinstruments.com.au), DRiD Waste ID BackFlowID

For more information on how to book tickets visit: www.bpaa.org.au

<https://www.bpaa.org.au/event-details/2023-national-backflow-legionella-convention-water-for-health-and-environment>

Group Meeting Report

Backflow Committee meeting 31 August 2023

09:30 – 16:00 at the Hydroflow offices, Penrose, Auckland

- Attendance: **In person:** Richard Aitken, Brian Brown, Wayne Shields, Paul van den Burg, Erica Hobbs, Rob Hill (until 14:28), Hugh Chapman (until 12:03). **Online:** Kevin Healey, Steve Harwood (until 12:10). **Apologies:** Glenn Burr, Master Plumbers representative Jon Lewis, Water NZ liaison Katrina Guy, Water NZ Technical Manager Noel Roberts.
- Chair Richard Aitken announced Brian Brown as Deputy Chair.
- This terms committee and their roles are:
 - Richard Aitken – Chair, Industry Liaison, Training Lead
 - Brian Brown – Deputy Chair, Comms Lead, Conference Lead, Projects
 - Paul van den Burg – Finance, Projects
 - Wayne Shields – Venue Facilitator, Conference, Projects
 - Andrew Booth – Flowback Editor, Comms, Projects
 - Erica Hobbs – Education Lead, Projects
 - Steve Hardwood – Conference, Projects
 - Hugh Chapman – Projects
 - Kevin Healy – Projects
 - Rob Hill – Projects
 - Glenn Burr – Projects
 - Jon Lewis (seconded from Master Plumbers) – Projects
- A very successful conference was held at the Parnell Hotel & Conference Centre 1-2 August.
- Results to date from the post-conference survey are excellent (survey still has a week to go).
- Planning for the next conference has started, led by Brian and assisted by Wayne and Steve.
- Consideration is being made of options for conference. Discussion centered around changing to annual conferences or staying biennial and organising other events in the alternate years, such as:
 - One day symposium on alternate Islands (or on both).
 - Workshop day on alternate Islands (or on both).
 - Combined Australia/NZ conference, here or there.
- Backflow Prevention Association of Australia (BPAA) have their conference coming up soon, 19-20 October 2023 in Tweed Heads, NSW.
- BPAA are very keen to have a combined conference and to develop shared training, especially on topics such as:
 - TMV testing and legionella (done in Australia but not considered in NZ).
 - Small and rural supplies (done in NZ but not considered in Australia).
- World Backflow Day (16 August) was discussed, as BPAA like to coordinate their conference.
- Raising legionella awareness and capability in NZ was identified as an area to develop.

- The committee workplan was identified, and includes:
 - Rejuvenate our group name, identity, mission and function.
 - Re-engage with the wider water industry and increase our visibility.
 - Develop training and education opportunities, locally and with BPAA.
 - Review and make submission on the Draft National Engineering Design Standards.
 - Update the Boundary Backflow Code of Practice, keeping in mind the NEDS review.
 - Facilitate and participate in the Rural and Small Supplies Working Group, set up in August 2023 to look at ‘when is small supply a water supply’.
 - Recommend re-joining AS 2845.2:2010 *Water supply - Backflow preventions devices Registered air gaps and registered break tanks* as tanks are making a significant resurgence in use in NZ, especially residential tanks for rainwater harvesting.
 - Participate in the review of the Building Compliance Handbook, with MBIE and ABC.
 - Review varying requirements of IQP register holders and provide guidance to the register holders on backflow qualifications and competency.
 - Set up a more robust and accessible record-keeping system for the group.
- General discussion was had around:
 - Entities, legislation, regulation, reform – what we have now and what the industry might look like post-election.
 - The role of the network conditions referenced in the Boundary BFP COP – do the network conditions play a role in the individual risk assessment at point of supply by a water supplier.
 - Wayne Shields is doing an article with Kevin Healy on Kevins’ recent experience with backflow and serious illness, to be published as part of the groups Drinking Water Protection education programme.

Our next few meetings are:

- Thursday 28 Sept 2023, 09:30 to 16:00 – an online meeting via Teams, to compile our submission to Water NZ for the above-mentioned NEDS review.
- Thursday 09 Nov 2023 - 09:30 to 16:00 – venue TBC
- Thursday 07 Dec 2023 - 09:30 to 16:00 – Hydroflow Offices / Teams (then Christmas dinner)
- Thursday 08 Feb 2024 - 09:30 to 16:00 – venue TBC

Group members are welcome to attend the committee meetings. If you wish to attend any of the meetings, please contact the Chair at richard@telfordconsulting.co.nz.

Reflections from the 2023 Drinking Water Protection Conference

Delegates came from all corners of the wider water industry, including a delegate from the USA, and a young local student independently attending conference because he was interested in getting into the water industry.

The heartfelt opening words from Ngāti Whatua Orakei set the scene for what has been one of our best conferences to date. With a focus on end-to-end drinking water protection, it was encouraging to see networking between industry groups that may not normally interact. The change in conference focus was an active return to the original Backflow Group mission statement of drinking water protection from the source to the last flowing tap, as drinking water protection is much more than just backflow prevention (which should be the last line of defense).



After calling for abstracts for the first time ever, we had a wide range of presentations and presenters, providing something for everyone. With a mix of theoretical/design/research papers and some nuts-and-bolts papers, topics ranged from the use of metagenomics tools for characterising bacteria in drinking water to legislation/regulation updates to design challenges, training, and identifying the components of a survey program.



With the current environment of changing legislation and regulation, the two main regulators, Taumata Arowai and MBIE, are creating rules that encompass multiple environments, including rural and small water supplies. Having the two main

regulators attending, and presenting, generated healthy conversations about identifying and bridging the gaps where the two sets of rules interface. It was clear from the conversations during presentations, and in the breaks between, that the implementation of these rules comes with a few challenges.

A good example of the rules interfacing is the question 'Where does a water supply stop and sanitary plumbing start for rural properties and small supplies?'. For rural and small supplies, rules created by the drinking water regulator need to be complied with by installers that are not up to date with requirements under the Water Services Act and Drinking Water Quality Assurance Rules, so are supplying and installing non-compliant systems and equipment. Water New Zealand is facilitating a working group with all relevant stakeholders across the

wider water industry to address this knowledge and awareness gap. It is anticipated the outcome will be targeted training roadshow that explains the roles and responsibilities under each set of rules, including training and competency requirements.

While we had representation from a good cross-section of the wider water industry, we have identified there is a need to directly engage with more disciplines within the water industry on a regular basis. One of the many opportunities we are investigating is to engage more practitioners by delivering continuous professional development (CPD) into the plumbing industry. We will continue to engage, and work, with other industry associations to share knowledge and training.

We would like to appreciate the knowledge and experience our Australian counterparts shared with us through their presentations on backflow in Australia and America and touching on the important lesson to be learned around legionella in potable water systems. We look forward to continuing our close working relationship with Australia, including working towards holding a combined Australasian conference in the near future.

Networking opportunities abounded, with delicious, plentiful catering available throughout the event and a well-attended conference dinner. Wayne Shields was the delighted recipient of the Award for Significant Contribution to the Backflow Industry.

The Conference Organising Sub-committee would like to extend our thanks and gratitude to all presenters at the conference. Your efforts contributed to making this our most successful conference ever, which was supported by the strong positive feedback we received. Thank You and we look forward to seeing you at our next conference.

From our Chair, Richard, and the Backflow Group Committee

Water New Zealand and the Backflow Group wish to thank Hydroflow for being the sponsor and supporter of the Drinking Water Protection Conference 2023.



Committee Spotlight – Richard Aitken

Born in Wellington but living most of his life in Christchurch, Richard started his plumbing and drainage journey at age 11, working for his older brother in the school holidays. Enjoying endless summers laying drains and piping houses out this soon evolved into Richard starting his plumbing apprenticeship, much to his parents horror as he was, until then, heading for law school.

After a 12-month stint in Perth leading a team of plumbers, and improving his roofing and lead work skills, Richard returned to Christchurch where he eventually started his own plumbing and drainage business. During this time Richard became a specialist in the hair-dressing salon niche, working around the Canterbury area, undertaking design and installation for multiple shop fitting companies.

Expanding into industrial and commercial maintenance, he was regularly installing backflow prevention devices, but always waiting for the "tester" to arrive to get the Code Compliance Certificate. Growing impatient with the waiting, Richard sought out the course that would change his professional life - The Unitech Backflow Testing Course delivered by Murray Ellis. After passing this course and striking up a good relationship with Murray, he attended the Survey Course and made an enquiry about the backflow industry and the NZWWA Backflow SIG Committee. A successful nomination onto the committee launched Richard into the thick of all things backflow, with original testing unit standards being created, the code of practice being reviewed, and many other projects on the go.

In conjunction with learning the art of politics and diplomacy, Richard took the plunge into conference presentations and then the world of standards and legislation. It was a shock to the Australian/New Zealand standards committees that he sat on, as they were quite comfortable with New Zealand being absent from the meetings and missing out having input - one comment directed straight to him was "we preferred when you weren't here Kiwi". Early in Richards involvement there was a push to reform the testing procedures through AS/NZS 2845, which was refuted by the NZ Backflow SIG and as a result the standard changed to Australian only. In response to the resulting gap in NZ legislation, Richard instigated a committee project and sought out industry stakeholders to participate, which led to the creation of the New Zealand Backflow Testing and Air Gap Verification Industry Standard.

A strong advocate for continuously raising the bar on training and industry best practice, Richard has sought further education in the United States, where the Backflow Industry originates from. Richard is currently working with Water Suppliers and Councils, to assist with creating and implementing Backflow Programs, with a focus on the surveying aspect. Outside of his passionate dedication to raising awareness and competency in backflow prevention, Richard is an avid cyclist and is Dad to Harlem (four legs) and Callum (two legs).

As the Water and Plumbing Industries continue to evolve and reshape, Richard is at the helm of our committee for the fourth time, advocating on behalf of the industries we represent, for higher education and training standards, enforced legislation, and greater visibility on drinking water protection to support better funding and resourcing to achieve drinking water protection from the source to last flowing tap.

