



# Weekly Webinar Series

Distribution system rules

17 November 2021

The background is a solid teal color with a repeating pattern of overlapping, curved, arrow-like shapes. These shapes are arranged in a way that creates a sense of movement and depth, with some appearing to point towards the center and others away from it. The overall effect is a dynamic and textured background.

**Welcome**

# Ko wai, ko au, ko tātou

Ko te wai ahau, ko ahau te wai.  
He whakaaturanga tātau nō te wai.  
Ko te ora te wai ko te ora o te  
tangata.  
He taonga te wai me tiaki.  
Ko wai tātou.  
Ko wai tātou.

I am wai, wai is me.  
We are reflections of our wai.  
The health of te wai is the health of te  
tangata.  
Wai is a taonga that must be protected.  
Ko wai tātou.  
We are wai. Wai is us.





# What we will cover today

- **Current state**
  - Ray McMillan, Head of Regulatory – commencement and key messages
- **Topics**
  - Jim Graham, Principal Advisor, Drinking Water – backflow protection, storage facilities, watermains
  - Peter Wood, Regulatory Team Leader, Palmerston North – residual disinfection, disinfection by-products and plumbosolvent metals, microbiological monitoring
- **Pātai / questions**
  - Opportunity to answer any further pātai / questions you might have

# Commencement

# Water Services Act and commencement

- Taumata Arowai became the new water services regulator on **15 November 2021**.
- Drinking water - residual disinfection exemptions will not commence until 1 March 2022.
- Wastewater and stormwater functions will not commence until 15 November 2023, to ensure we can prioritise drinking water regulation.



We marked the occasion with a blessing of the mauri stone, Hine Parawhenuamea, which signifies the handover of mana and responsibility from the Ministry of Health to Taumata Arowai.

# Duty of Care

- Drinking water suppliers have a responsibility to make sure the water they provide is safe. If for any reason you think it might not be, you need to:
  - take immediate action to protect public health
  - keep your consumers informed
  - notify us through an online form on our website ([www.taumataarowai.govt.nz/for-water-suppliers/incident-notifications](http://www.taumataarowai.govt.nz/for-water-suppliers/incident-notifications))
  - **call us 24/7 on (04) 889 8350** if there's an immediate risk of serious illness, injury or death arising from your drinking water supply and the situation can't be immediately controlled.

# Registering drinking water suppliers

- Drinking water supplies registered with the Ministry of Health immediately before 15 November 2021 have been transferred to Hinekōrako – our web-based self-service portal for suppliers and labs to share information with us.
- Within the next three months, suppliers will receive an email from us to check their details and complete the registration process in Hinekōrako. Phased approach starting with large suppliers through to small suppliers.
- Unregistered suppliers have up to **four years** to register and up to **seven years** to meet the requirements of the Act.



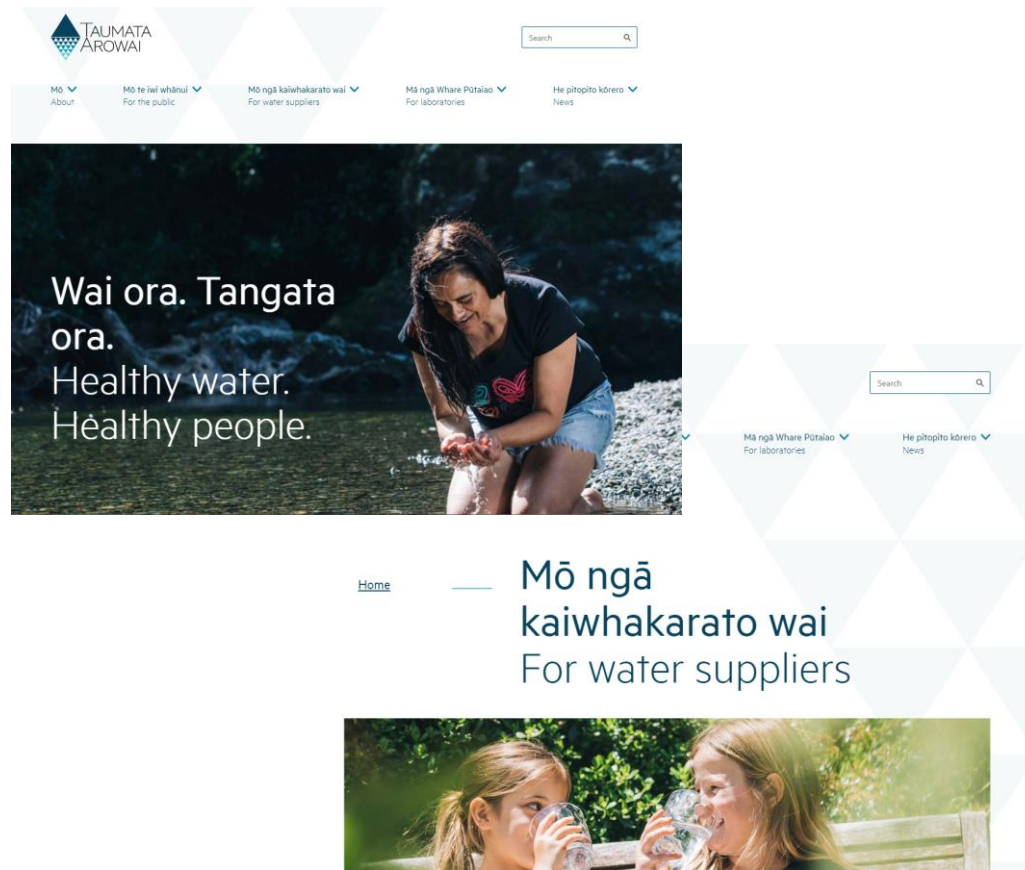
# Public consultation

- Drafts for new Drinking Water Quality Assurance Rules, Drinking Water Standards, Aesthetic Values, and Acceptable Solutions, are available on our website ([taumataarowai.govt.nz/for-water-suppliers](https://taumataarowai.govt.nz/for-water-suppliers)).
- The Water Services Act 2021 places clear obligations on Taumata Arowai to consult on these drafts. We welcome your feedback during public consultation, which is likely to be early in 2022.
- The existing Ministry of Health Drinking-water Standards for New Zealand will apply until the new rules and standards come into effect, which is likely to be **1 July 2022**.



# More information on our website

[taumataarowai.govt.nz](https://taumataarowai.govt.nz)



- Notify Taumata Arowai  
[taumataarowai.govt.nz/incident-notifications](https://taumataarowai.govt.nz/incident-notifications)
- For water suppliers  
[taumataarowai.govt.nz/for-water-suppliers](https://taumataarowai.govt.nz/for-water-suppliers)
- Supplier responsibilities  
[taumataarowai.govt.nz/supplier-responsibilities](https://taumataarowai.govt.nz/supplier-responsibilities)
- For water carriers  
[taumataarowai.govt.nz/supplier-responsibilities/water-carrier-services](https://taumataarowai.govt.nz/supplier-responsibilities/water-carrier-services)
- Operating under the current Drinking Water Standards for New Zealand  
[taumataarowai.govt.nz/for-water-suppliers/current-drinking-water-standards](https://taumataarowai.govt.nz/for-water-suppliers/current-drinking-water-standards)

# Structure of the rules

# Rule type codes and complexity levels

- **Rule type codes**

- G = General rules
- S = Source water rules
- T = Treatment rules
- D = Distribution rules
- WC = Water Carrier Service Rules
- PTE = Planned Temporary Event Drinking Water Supplies Rules

- **Rules complexity levels**

- 1 = simple
- 2 = moderate
- 3 = complex





# Rules modules

|     |     |     |
|-----|-----|-----|
| G   |     |     |
| S 1 | T 1 | D 1 |
| S 2 | T 2 | D 2 |
| S 3 | T 3 | D 3 |
| WC  | PTE |     |



# Rules modules

|     |     |     |
|-----|-----|-----|
| G   |     |     |
| S 1 | T 1 | D 1 |
| S 2 | T 2 | D 2 |
| S 3 | T 3 | D 3 |
| WC  | PTE |     |



# Rules modules

|     |     |     |
|-----|-----|-----|
| G   |     |     |
| S 1 | T 1 | D 1 |
| S 2 | T 2 | D 2 |
| S 3 | T 3 | D 3 |
| WVC | PTE |     |



# Rules modules

|     |     |     |
|-----|-----|-----|
| G   |     |     |
| S 1 | T 1 | D 1 |
| S 2 | T 2 | D 2 |
| S 3 | T 3 | D 3 |
| WVC | PTE |     |





# D3 Distribution System Rules

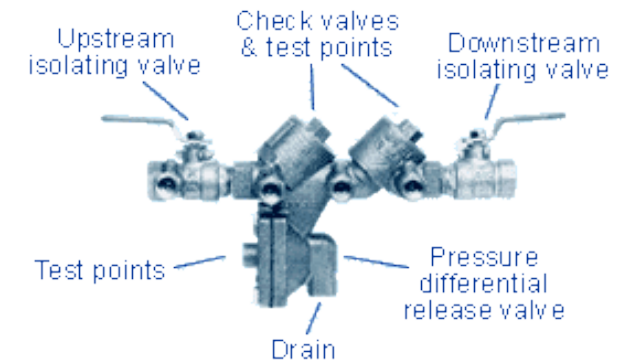
- 5 parts
  - Backflow Protection Rules
  - Storage Facilities Operation, Maintenance and Disinfection Rules
  - New and Repaired Watermains Hygiene Procedures Rules
  - Residual Disinfection, Disinfection By-product and Plumbosolvent Metals Rules
  - Microbiological Monitoring Rules



# Backflow protection

# Backflow Protection Rules

- Prepare and implement a backflow programme
- Periodic surveys of customer premises to identify medium and high-risk sites
- Where backflow requirements at a customer's premises are inadequate.....
- Annual testing of backflow devices
- Water suppliers must maintain a register of backflow devices
- Access to a water network via a standpipe is limited to emergency services, the water supplier or authorised contractors.....for the operation of the water supply



# Storage facilities



# Storage Facilities Operation, Maintenance and Disinfection Rules

- Water storage management plan
- Security and contamination inspections
- Written disinfection procedures for storage facilities
- Cleaning and disinfection of reservoirs (new or drained for maintenance)
- Materials used in reservoirs
- *E. coli* and total coliform testing of reservoirs after maintenance



# Watermains

# New and Repaired Watermains Hygiene Procedures Rules

- Before carrying out repairs to pipes an assessment of the risk of contamination must be undertaken (and recorded)
- Materials must be free of visible contamination and be protected from contamination
- Disinfection of tools
- Disinfection of mains
- SOPs for planned, unplanned and emergency repairs



**Residual disinfection,  
disinfection by-products and  
plumbosolvent metals**

# Sampling Plans

- A sampling plan must be prepared – include a system map showing sampling locations
  - Include response procedures that cover what will be done when a sample result doesn't meet requirements
- Sample sites must be representative of the distribution system
  - Sample sites for disinfection by-products represent peripheral and central locations





# Monitoring Rules

- FACE required to be at least 0.2 mg/L
  - Routine requirement (Table 31)
- Disinfection by-products required to be tested are listed in the rules.
  - The frequency of testing reduces after two years if the disinfection by-products are found to be less than 50% of the MAV (Table 32)
- Plumbosolvent metals required to be tested every six months are listed in the rules (Table 33)



# Micro-biological monitoring

# Sampling for total coliforms and *E. coli*

- A sampling plan must be prepared – include a system map showing sampling locations
- Sample sites must be representative of the distribution system
- A written sampling protocol for collecting samples must be prepared and followed
- Minimum requirements for numbers of samples, maximum intervals, and minimum days of the week have been retained (Table 34)
  - The number of samples is listed per week



# Pātai | Questions?