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Drinking Water Regulation Report 2021



Ko wai, Ko au, Ko tātou

Ko te wai ahau, ko ahau te wai.
He whakaaturanga tātou 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.

Presented to the House of Representatives pursuant to section 137 of the Water Services Act 2021.

email info@taumataarowai.govt.nz

call +64 4 889 8350

mail - Level 2, 10 Brandon Street,
PO Box 628, Wellington 6140, New
Zealand

Drinking Water Regulation Report 2021

Date July 2022

ISSN: 2815-8849 (Print)

ISSN: 2815-8857 (Online)

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Executive summary

Taumata Arowai is the new water services regulator for Aotearoa New Zealand.

Our core function is to ensure drinking water suppliers continue to provide safe and sufficient drinking water to people and communities throughout Aotearoa. Commencing from 2023, we will also have an oversight role to protect the environment from the impacts of wastewater and stormwater.

This is the first Drinking Water Regulation Annual Report for Taumata Arowai. Responsibility for drinking water regulation transferred to us from Manatū Hauora/Ministry of Health on 15 November 2021. The legislative requirement for Taumata Arowai to report on compliance relates in this instance to just six weeks, from 15 November 2021 until 31 December 2021. Over that timeframe, we received 207 notifications from 127 supplies, as well as laboratories testing these supplies – this was the first time notifications had been gathered from across Aotearoa in real time. These notifications informed us of 27 boil water notices and 38 risks to drinking water safety at unregistered supplies.

Our predecessor in drinking water regulation, Ministry of Health, would report on compliance across a July to June year. We will report across a calendar year – January to December – so the information aligns with the calendar year used by the general public, and to inform planning cycles in March.

For reference, and to create a benchmark going forward, we have included a summary of key details from Ministry of Health’s last drinking water regulation annual report covering the period July 2020 to June 2021.

Our next Drinking Water Regulation Annual Report will cover the full 2022 calendar year, which will include the introduction of new Drinking Water Standards, Aesthetic Values and Drinking Water Quality Assurance Rules. Over the next four years, we will continue to develop reporting systems on the safety of drinking water, compliance and capability of suppliers, source water risk management, the performance of Taumata Arowai, and the effectiveness of the Water Services Act 2021.

These reporting systems will reflect the varying size and complexity of supplies, from small community suppliers to the Water Services Entities which will be established in 2024. The insights will provide transparency across the water sector.

We have taken the opportunity in our first report as the drinking water regulator to introduce and articulate the Te Ao Māori principles on which we have built our organisation, our risk-based approach to monitoring compliance, and the legislative environment within which we operate.

Drinking water is of interest to a very wide audience, from regulated suppliers to New Zealanders curious about the safety of the water they consume. To make this report more accessible we have used the following plain language conventions:

- “The Act” means the [Water Services Act 2021](#) unless the sentence is clearly referencing a different Act of Parliament
- “Drinking Water Standards” means the *Drinking-water Standards for New Zealand 2005 (revised 2018)*
- “We”, “Our”, “Us” all refer to Taumata Arowai, New Zealand’s drinking water regulator
- “You” and “your” generally means the reader, and in particular the consumer of drinking water in Aotearoa New Zealand
- A glossary for Te Reo Māori terms and technical terms is included with the document

Statement from the Board

Taumata Arowai is a young organisation, established in the midst of water services reform, and it is fair to say that Taumata Arowai still has a long journey ahead.

The work to date has been focused on building a foundation of strong principles and relationships. Our work with Te Puna, the Māori Advisory Group at Taumata Arowai, has been integral to this, allowing us to establish a clear vision as the regulator of water services in Aotearoa, based on Te Mana o te Wai.

Te Mana o te Wai requires us to give effect to two sets of values.

The first set of values most New Zealanders are relatively familiar with: good governance, stewardship, and the care and respect for water.

The second set of values, which are derived from a Te Ao Māori perspective, are centred on applying a long-term water-centric approach, including respecting the way that whanau, iwi and hapū Māori wish to govern the use of water and land. It is critical for Taumata Arowai to weave these values into its regulatory approach.

This Annual Drinking Water Report is the first produced by Taumata Arowai. This report is our starting point for future reports, which will evolve over time, as we develop reporting systems to reflect the varying scale and complexity of supplies, focusing on the areas of greatest risk.

Over the period covered in this report we have been building a foundation from which we can continue to grow, ensuring New Zealanders understand the regulatory role of Taumata Arowai and that Taumata Arowai has the tools it needs to deliver on its obligations.

With water services delivery reforms underway, we know the coming year will be a time of significant challenge and change. Taumata Arowai will be up to meeting the challenges to ensure all New Zealanders have access to safe drinking water every day

In future reports we will cover Drinking Water Quality Assurance Rules, insights from suppliers' regular monitoring reporting, annual assurance reporting, drinking water safety plans, risk assessments and investigations. We will be held to account for the commitments contained here and will be holding our Chief Executive to account for delivering those commitments.

Statement from Te Puna

The principle of Te Mana o te Wai reflects the importance of the health and wellbeing of water. It is about lifting the standard for how we care for water, recognising that the priority is ensuring the health of the water itself.

The Board is responsible for the governance of Taumata Arowai and Te Puna is integral to the success of that governance.

Te Puna and the Board have a formal agreement, that sets out our shared expectations to work as partners to make sure all New Zealanders have safe drinking water. To ensure this happens, two dual members have been appointed to the Board and Te Puna to act as a bridge between the partners.

This approach to the governance of Taumata Arowai has the added advantage, of giving effect to the principles of Te Tiriti o Waitangi.

- Rangatiratanga – delivering and monitoring regulations in ways that enhance Māori self-determination and mana motuhake.
- Equity – ensuring equitable access to clean, healthy drinking water for Māori.
- Protection – using fair processes, consulting, and where appropriate, making decisions with people whose interests are to be protected.
- Partnership – on-going engagement with whānau, hapū and iwi Māori communities to govern, design, deliver and monitor services that seek to improve access to clean, healthy drinking water.

Since Taumata Arowai was established on 1 March 2021, we have worked hard to ensure the principles of Te Mana o te Wai and Te Tiriti o Waitangi are embedded in the very fabric of Taumata Arowai. This work will continue – healthy water makes for healthy people.

Statement from the Chief Executive

Taumata Arowai was established as a new Crown entity on 1 March 2021. Our formation was the result of the Government's reform of the three waters sector following the Havelock North drinking water contamination in 2016.

This report marks the initial transition of drinking water regulation from the Ministry of Health to Taumata Arowai. This has given us the opportunity to shift reporting from a government financial year (June-July) to a calendar year, being more relevant for the general public.

Being a new organisation, we are still learning what is required to effectively regulate drinking water under the new Water Services Act 2021 and bring registered and unregistered suppliers into the regulatory fold.

Over the next four years the Drinking Water Regulation Annual Report will continue to evolve, to reflect the needs of the Three Waters Reform Programme and of communities we serve.

The team and I are looking forward to working with you over the next three years as we:

- Get to know the sector and ask what the sector needs from us.
- Work with the sector and whānau, hapū and iwi Māori to ensure the concept of Te Mana o te Wai is understood and is being incorporated to deliver safe drinking water in a way that meets the needs of communities throughout Aotearoa.
- Share more information to increase everyone's awareness of both the quality, and the value of our water and water services.
- Build our regulatory system and toolkit in a way that enables us to become a balanced regulator that delivers on our vision of ensuring that everyone has access to safe water every day.

I believe we have a unique opportunity to do things differently. A key objective and a requirement of the Water Services Act 2021 is for Taumata Arowai to give effect to Te Mana o te Wai, to the extent it applies to our functions and duties. This obligation also applies to all drinking water suppliers who operate under the Act.

Drinking water suppliers can embed Te Mana o te Wai into their protocols. This can be done through drinking water safety plans and source water risk management plans, and in policies, processes and procedures.

Te Mana o te Wai connects different regulatory regimes through a common vision and set of principles. Its application will vary from place to place and community to community, in accordance with local responses to the principles it embodies. Embedding Te Mana o te Wai will require a close relationship between Taumata Arowai, mana whenua and kaitiaki who are best placed to advise on the tikanga and mātauranga which underpin Te Mana o te Wai interests.

I am proud of the work done to date, and excited for what we can achieve working together with the wider water sector.

Te Mana o te Wai is a concept for all New Zealanders

New Zealanders have a special relationship with water, particularly valuing the fresh water that flows in our rivers, lakes and aquifers. Wai in all its forms is also a taonga of particular significance to tangata whenua. As they do with all natural resources, Māori have a direct whakapapa relationship with wai, including awa (rivers), roto (lakes) and repo (wetlands).

Te Mana o te Wai has deep roots in Te Ao Māori and is not a new concept. More recently it has been recognised in mainstream planning documents including the National Policy Statement for Freshwater Management (NPSFM)¹ established under the Resource Management Act 1991 (RMA), and subsequently the Taumata Arowai – Water Services Regulator Act 2020 and the Water Services Act 2021 (the Act) [Taumata Arowai legislation]. Te Mana o te Wai will continue to be a fundamental concept across all parts of the natural resource management system (including the planned new regional water services entities) and Aotearoa as a whole.

Te Mana o te Wai requires us to provide for and protect the health and mauri of water as the first priority, followed secondly by providing for the human health needs of people (such as drinking water) and thirdly providing for other uses so long as these do not degrade the mauri of the wai.

For Taumata Arowai, giving effect to Te Mana o te Wai will ensure water suppliers are providing safe drinking water, consistent with our vision of safe drinking water every day for everyone.

Te Mana o te Wai is underpinned by six key principles:

- a) Mana whakahaere: the power, authority, and obligations of tangata whenua to make decisions that maintain, protect, and sustain the health and well-being of, and their relationship with, freshwater
- b) Kaitiakitanga: the obligation of tangata whenua to preserve, restore, enhance, and sustainably use freshwater for the benefit of present and future generations
- c) Manaakitanga: the process by which tangata whenua show respect, generosity, and care for freshwater and for others
- d) Governance: the responsibility of those with authority for making decisions about freshwater to do so in a way that prioritises the health and well-being of freshwater now and into the future
- e) Stewardship: the obligation of all New Zealanders to manage freshwater in a way that ensures it sustains present and future generations
- f) Care and respect: the responsibility of all New Zealanders to care for freshwater in providing for the health of the nation.

¹ Ministry for the Environment (2020). [National policy statement for freshwater management | Ministry for the Environment](#).

A key objective for all persons exercising functions, powers, or duties under the Act 2021, including both Taumata Arowai and water suppliers, is to give effect to Te Mana o te Wai in the performance of those functions, powers and duties. Taumata Arowai will provide guidance and support for suppliers and the sector as we implement the new regulatory regime.

The requirement to give effect to Te Mana o te Wai in the Act will also apply to the four regional Water Services Entities proposed under the Water Services Entities Bill 2022.

Embedding Te Mana o te Wai will require Taumata Arowai to build effective, positive and enduring relationships with mana whenua and kaitiaki who will determine tikanga and mātauranga which underpin Te Mana o te Wai within their rohe. Taumata Arowai will also listen to local communities to understand their needs with respect to water. Those relationships and connectivity are critical to the success of embedding Te Mana o te Wai as we expect them to shape the way suppliers engage with mana whenua, iwi, hapū, papakāinga and local communities. We are developing a baseline knowledge and understanding about water, to weave together what is important to our communities and the science underpinning regulation.

A new report from a new regulator

As the new regulator, Taumata Arowai is taking a new approach to provide greater transparency of performance across the water sector.

The Act requires Taumata Arowai to report beyond compliance, into the safety of drinking water, capability of the sector, management of source water risk, performance of Taumata Arowai, and effectiveness of the Act.

Over the next four years the Drinking Water Regulation Annual Report will continue to evolve, providing insights to inform improvements over time. This will include making data more accessible through maps and dashboards and providing deeper analysis into the meaning behind the statistics.

More about the evolution of this Report, and how this aligns with other Taumata Arowai reports is provided in the section titled: *Our Reporting Roadmap*.

Who supplies drinking water?

There are a variety of ways drinking water is supplied in Aotearoa. All water suppliers - regardless of their size, or if they are registered or not - have a duty of care to provide safe drinking water to the people they serve.

We have developed Hinekōrako, our online regulatory and intelligence system, to combine a self-service portal, the public register of drinking water supplies, registration management, and ongoing reporting from suppliers. This section focuses on the drinking water suppliers: organisations or individuals who own drinking water supplies.

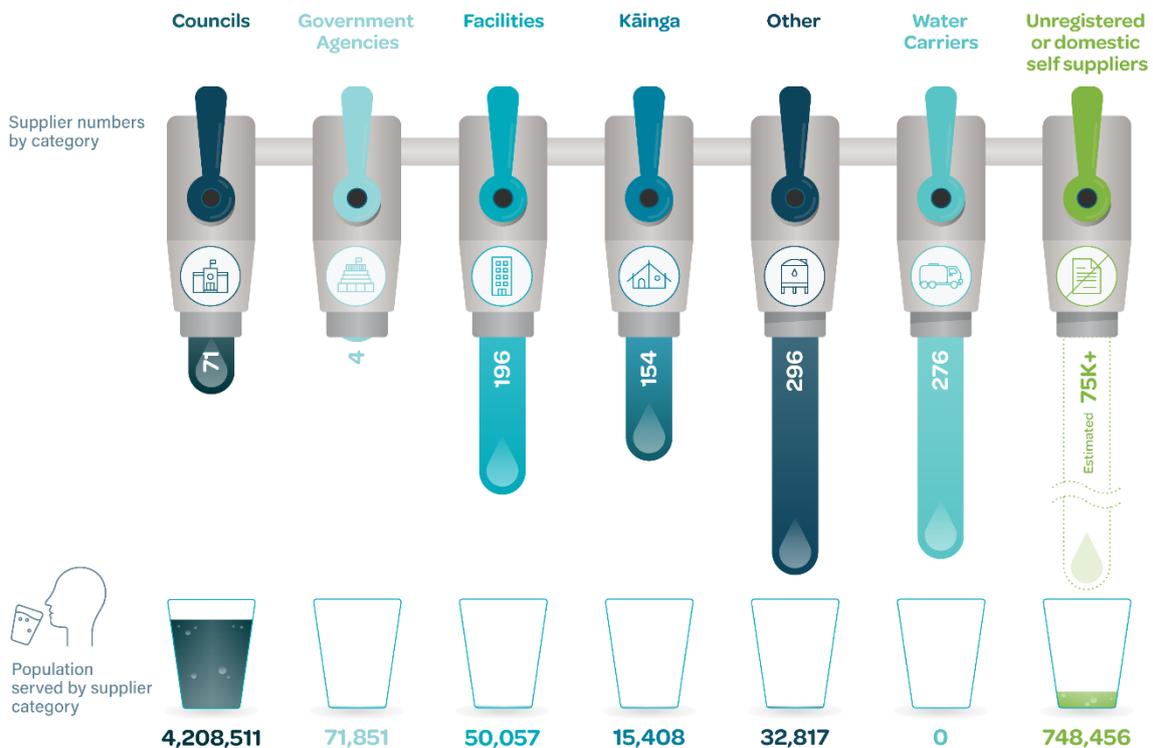
Hinekōrako - This name was gifted to Taumata Arowai for our online regulatory and intelligence system by Te Atiawa. Hinekōrako is the personification of the lunar rainbow.

By the numbers – registered water supplies

The Act requires drinking water supplies and suppliers who own, manage and operate them to be registered. There are 997 registered drinking water suppliers who own, manage and operate 1,975 supplies which serve 85.4% of New Zealanders (4,378,644 people). Drinking water supplies include the water sources, treatment plants and distribution zones. These statistics were taken from Hinekōrako on 15 June 2022 during the preparation of this report, reflecting the current understanding of registered suppliers and supplies.

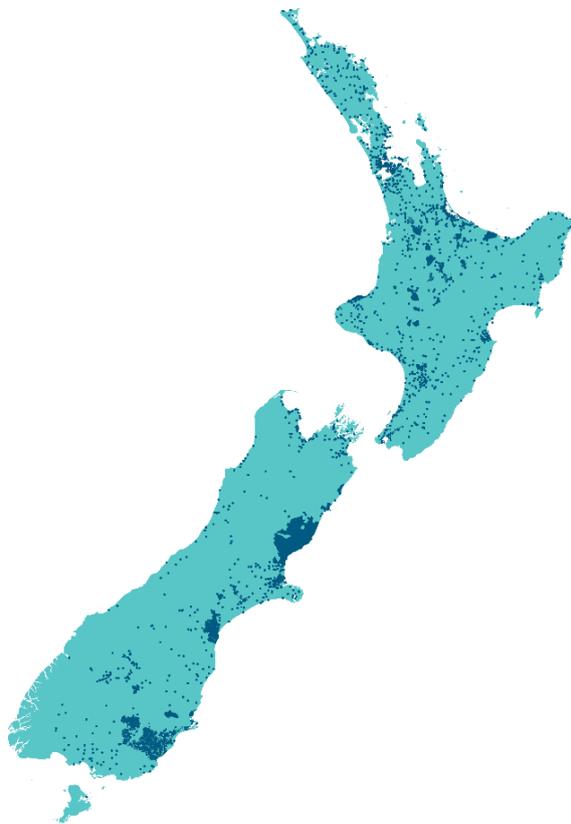
Figure 1 - Numbers of suppliers and population served

Who's filling your cup?



- **Council:** Local and Regional Councils or Council-Controlled Organisations (COOs) such as Watercare and Wellington Water..
- **Government agencies:** This includes schools (Te Tāhuhu o te Mātauranga/Ministry of Education), campsites and huts (Te Papa Atawhai/Department of Conservation), prisons (Ara Poutama Aotearoa/Department of Corrections) and Defence facilities (Te Ope Kātua o Aotearoa/New Zealand Defence Force).
- **Facilities:** Such as universities, private schools, hospitals, airports, and ski fields.
- **Kāinga:** This group includes iwi entities, kura kaupapa Māori, kōhanga reo, marae, papakāinga, and Māori communities.
- **Other:** This category includes mixed-use rural supplies, residential and other private or communities supplies not owned by councils.
- **Water carriers:** Operators who transport drinking water to homes and events without reticulation. Water carriers do not record the population served by water carriers.
- **Unregistered or domestic self supply:** New Zealanders who do not drink water from a registered supply either drink water from an unregistered drinking water supply or their own stand-alone domestic dwelling supply like a roof water supply (known as “domestic self-supplies”).

Our initial analysis indicates there could be more than 75,000 unregistered supplies. Water suppliers not currently registered have until 15 November 2025 to register and 15 November 2028 to fully comply with the Act. Stand-alone domestic dwellings with their own water supply, which do not supply water to anyone else, are not considered as water suppliers.



Most New Zealanders drink water from large council supplies (our 10 largest supplies serve 2.8 million New Zealanders). However, most supplies that councils own, manage and operate are actually much smaller. There are only a handful of large supplies not owned by council or government (Only 16 of the 956 supplies not owned by council or government serve more than 500 people). There are many supplies which serve small communities (Half of all supplies combine to serve just one percent of New Zealanders). These numbers highlight the need for a proportionate regulatory system that reflects the scale, complexity and risk of these different supplies.

We do not currently have a full understanding of the geographic areas of council drinking water supplies but are working with councils to collect this data.

Figure 2 – Our current understanding showing shaded areas of council distribution zones and the location of all drinking water treatment plants

Supplies and suppliers – what we know

As part of the transfer of drinking water regulator responsibilities, Taumata Arowai received the existing drinking water register from the Ministry of Health. Taumata Arowai has proactively engaged with waters suppliers throughout the transition. We have contacted suppliers by email and phone to inform them of the transition. We have partnered with Water New Zealand and other key sector organisations and held webinars to engage with different supplier groups.

When Taumata Arowai became the regulator, all council and government suppliers were invited to verify details for their registered supplies. By 31 March 2022, 504 of 532 supplies had been verified. The public register of verified drinking water suppliers is now available online:

<https://hinekorako.taumataarowai.govt.nz/publicregister/supplies/>

We had a team dedicated to contacting private and community suppliers to confirm their contact details. This work has revealed some of the challenges in contacting smaller supplies, many of whom had not previously been actively regulated. Another team has been working to engage with Kāinga suppliers to explain our role, understand the whakapapa of their water supply, and support their transition to Hinekōrako. There are registered Kainga in every region of Aotearoa, however we are aware that there are also unregistered Kāinga supplies.

Throughout 2022, we will make reasonable effort to find and engage with all registered suppliers and to better understand the circumstances around unregistered supplies. However, in accordance with our *Compliance, Monitoring, and Enforcement Strategy*, we need to apply resources according to the scale, complexity, and risk posed by these supplies, many of which will be serving relatively few people. Our aim is to verify all registered supplies with a high level of complexity, where there is a risk to a larger population.

How safe is our drinking water?

Ministry of Health's Annual Report on Drinking-water Quality 2020/21

The *Annual Report on Drinking-water Quality 2020/21*² is the last drinking water report to be published by the Ministry of Health, providing a useful baseline for compliance rates of water supplies with the current Drinking Water Standards³.

That report only covered supplies serving more than 100 people, excluding self-supplied buildings. Those supplies provided water to 4,201,701 people in total.

The percentage of all New Zealanders drinking water from compliant supplies has remained relatively static over the past three years (62% in 2018/19; 64% in 2019/20; 64% in 2020/21).

Due to the July to June reporting timeframe used, and the fact much of the collection was usually done after that 12-month period, the Ministry of Health had limited data on compliance or safety for water supplies between 1 July 2021 and 14 November 2021 – the day before responsibility for drinking water transferred to Taumata Arowai.

The Ministry of Health's *Annual Report on Drinking-water Quality 2020/21* analysed compliance levels for the bacterial, chemical, and protozoal components of the Drinking Water Standards.

This Drinking Water Regulation Report has used data included in the *Drinking Water Quality Annual Report 2020/21*, but focuses on the health outcomes and reasons that supplies have not been able to meet the Drinking Water Standards and provide safe drinking water. This analysis uses current population data from Hinekōrako and Statistics NZ⁴ and examines physical supplies, rather than the suppliers who own them, to provide a more detailed understanding.

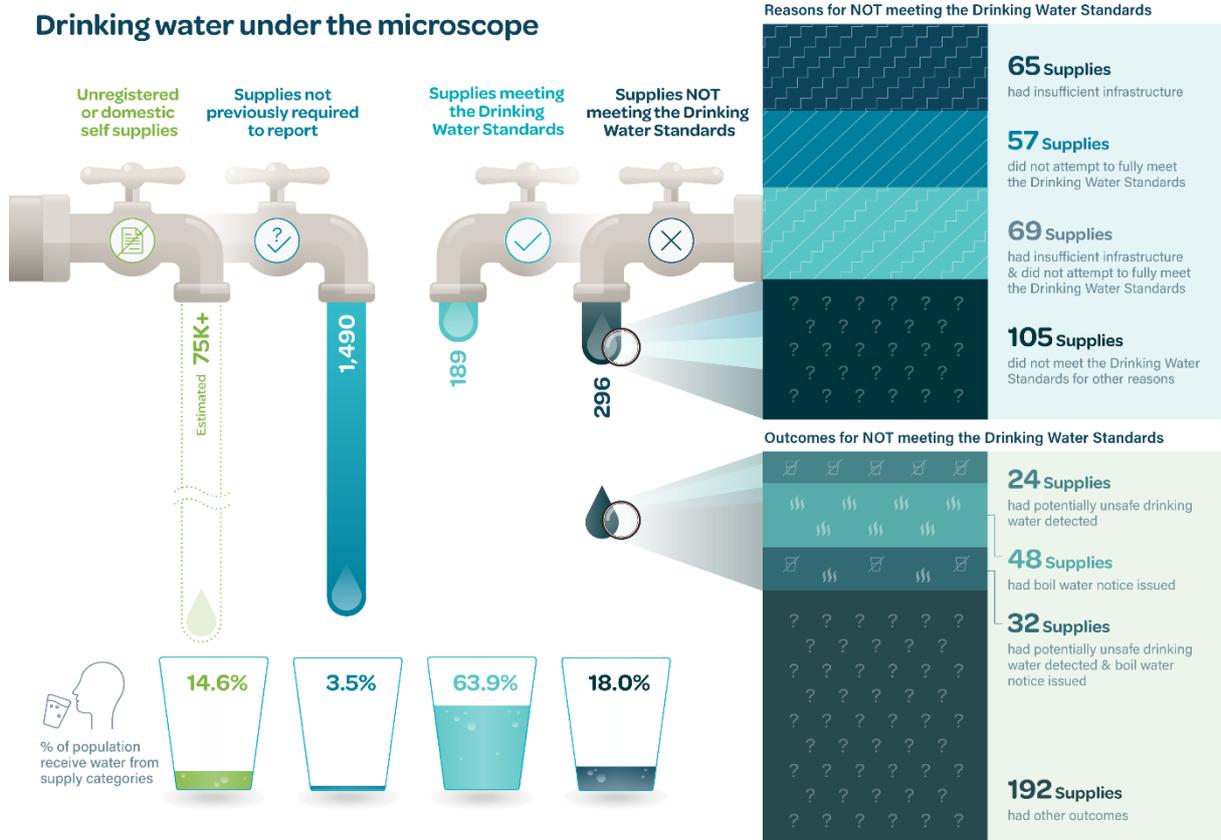
Future Drinking Water Regulation Annual Reports will go beyond reporting on compliance statistics to provide the transparency needed to lift the performance of the water sector.

² Ministry of Health, 2018, [Annual Report on Drinking-water Quality 2020–2021 | Ministry of Health NZ](#)

³ Ministry of Health, 2018, [Drinking-water Standards for New Zealand 2005 \(revised 2018\)](#).

⁴ Statistics NZ, 2022, [Estimated population of NZ | Stats NZ](#)

Figure 3 – Our Current Understanding of Suppliers’ Compliance Rates



Of the 485 supplies included in the Ministry of Health’s Annual Report on Drinking-water Quality 2020/21, 296 did not meet the Drinking Water Standards. These included:

- 42 supplies where bacteria were detected which could cause immediate illness.
- 17 supplies where chemicals were detected which could cause illness over time.
- 80 supplies that issued notices telling people to boil or not use their water. This occurs when monitoring indicates that water may not be safe to drink.
- 126 supplies where suppliers had not attempted one or more of their compliance requirements or had not attempted monitoring to take one or more of their samples. This indicated the suppliers may not have had sufficient people with the right skills to make sure they provided safe drinking water.
- 134 supplies with insufficient infrastructure to treat water to make it safe to drink. Planning, designing, and implementing this infrastructure will require investment from suppliers and could take years to complete.

This data begins to provide some understanding of the barriers for suppliers to provide safe drinking water. This information will help inform appropriate regulatory interventions.

Although the majority of New Zealanders drink water from larger supplies, smaller supplies have always reported lower levels of compliance. We do not currently know the compliance rates of supplies serving 100 people or fewer or self-supplied buildings.

These issues are not limited to specific types of suppliers or regions. In 2020/21, 47 local councils had one or more supplies that did not meet the Drinking Water Standards. Only 2 of the 15 supplies managed by central government agencies (Ministry of Education, New Zealand Defence Force and Department of Conservation) met the Drinking Water Standards. Of the remaining 74 registered community, kāinga, and facility supplies, 51 were not compliant with the Drinking Water Standards.

Notifications to Taumata Arowai

Under the Act, Taumata Arowai must be notified if a drinking water supplier considers their drinking water is, or may be, unsafe or non-compliant with Drinking Water Standards.

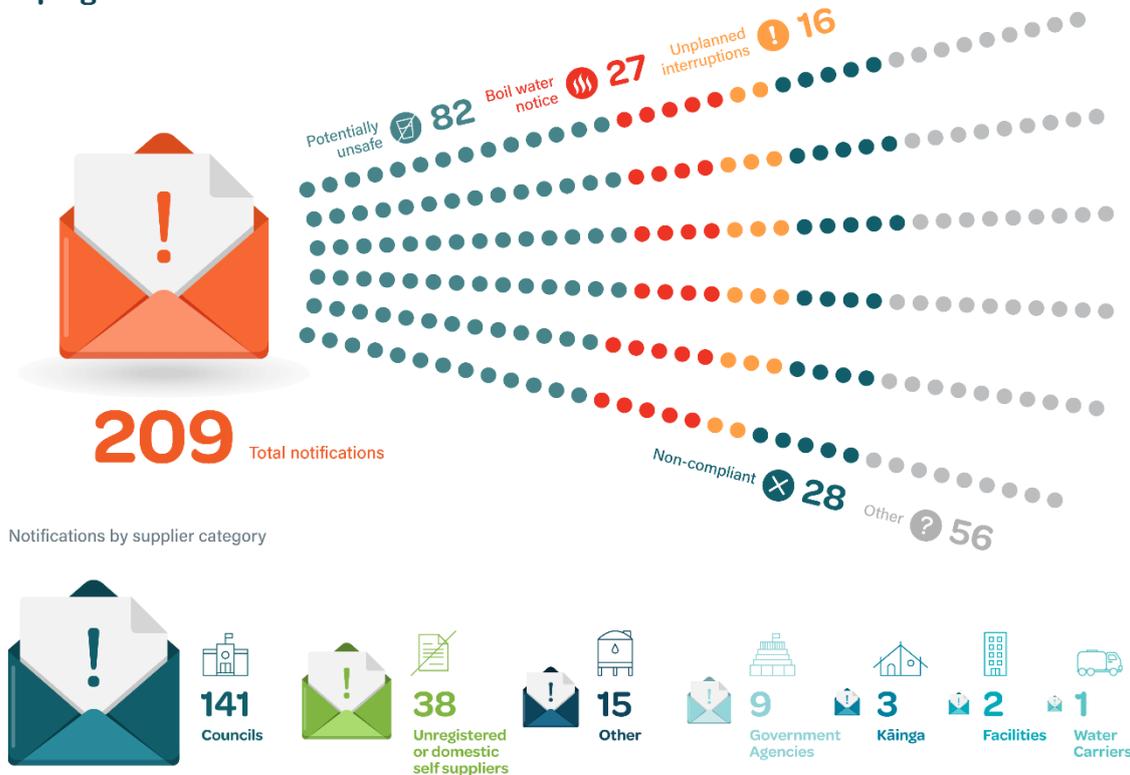
From the day Taumata Arowai became the regulator on 15 November 2021 until the end of the calendar year on 31 December 2021, we received 209 notifications from 127 supplies, including 27 boil water notices. We received notifications from across the country, including from 31 councils.

This was the first time notifications had been gathered from across Aotearoa, from both registered and unregistered supplies in real time. Not all notifications indicate that there is unsafe drinking water – we also receive notifications for planned and unplanned interruptions or precautionary notices. This level of engagement between water suppliers and the regulator is an important part of an effective regulatory system.

These notifications provide continual, up-to-date information about issues with drinking water throughout Aotearoa. Notifications are required from both suppliers and the laboratories testing water quality. The laboratory results provide an additional level of assurance that Taumata Arowai will be informed if drinking water is unsafe. Laboratories notified us of 38 issues with unregistered supplies. While notifications reveal where supplies may be providing unsafe drinking water, they also indicate suppliers who are taking steps to monitor the safety of their supply. Notifications cannot, of course, identify suppliers who are not testing their supplies.

Figure 4 –Notifications received between 15 November and 31 December 2021

Keeping us informed



How we will report on drinking water from now on

New Drinking Water Standards will be introduced in the second half of 2022. These will be supported by a reporting approach which will provide Taumata Arowai with valuable data and insights to guide our work and inform the public on the rates of compliance and the overall safety of our drinking water. Suppliers will regularly report their monitoring results to Taumata Arowai, in accordance with legislative requirements. Over the coming years we will also be supporting research to better understand how many New Zealanders are getting sick from drinking their water, and what interventions will reduce this number.

Compared to previous requirements, the Act imposes uniform obligations across all drinking water supplies that provide water to more than one household. In particular, the responsibility for drinking water suppliers to identify and manage the risks associated with their drinking water (including source water risks) is more clearly articulated. Also, a default obligation to use residual disinfection in all reticulated drinking water supplies is established. The underlying requirement to consider and apply Te Mana o te Wai is another significant change.

It is possible we will see a drop in reported compliance rates in the coming years, due to the introduction of new standards and rules, the need for suppliers to take responsibility for the safety of their water, and the inclusion of all water supplies in our report. We also anticipate that it will take some suppliers time to be able to accurately report on the safety of their water. This is especially true for those serving 100 people or fewer, who did not have reporting requirements under the

previous regulatory regime. Information we receive about the performance of the sector will inform our regulatory interventions. In future we will report on the impact of these interventions to lift the performance of the sector.

How suppliers protect and care for drinking water quality

Every drinking water supplier has a duty of care to provide safe water - whether they serve a small community or a major city, whether they are registered or not. Water suppliers should understand the risks to their supply and what they need to do to make sure the water they supply is safe to drink.

The treatment of drinking water is an important step making it microbiologically safe. It can also improve drinking water aesthetic values like taste, smell, and appearance. Bacteria and protozoa in drinking water can cause serious illness and can be especially dangerous for infants, older people, or those with weakened immune systems. Some chemicals in drinking water may not present an immediate risk but can cause harm over time.

There are a number of methods that can be used to remove contaminants and make water safe to drink. Common treatment processes include:

- Filtration to remove particles such as clay, silt, sand, protozoa, and some bacteria from the water. When the water is filtered, these particles are trapped and cannot pass into the water supply. Removing particles through filtration can be necessary for further treatment to be effective.
- Chlorination to kill bacteria and viruses. Chlorination also has a residual effect, meaning that it continues to protect water in the pipes between the treatment plant and tap. Monitoring chlorine residual levels in distribution networks can also help to identify other problems, as the depletion of chlorine can indicate bacterial activity or other issues.
- Ultraviolet (UV) light to disinfect water. UV light at a specific wavelength destroys protozoa and bacteria by damaging their DNA. It is also effective against most viruses.

Water suppliers must monitor the quality of their drinking water by testing water samples. The types of treatments and number of monitoring requirements are currently defined in the Drinking Water Standards, according to the scale and risk of the supply, determined by the source water type and the population served. The Drinking Water Standards will remain in place until 14 November 2022 when new Drinking Water Standards and Drinking Water Quality Assurance Rules come into effect.

Compliance with the Drinking Water Standards is only one of the responsibilities for suppliers to assure the safety of the water they supply. Suppliers must also understand the hazards and risks of their drinking water supply, including risks to source water, and take a proactive risk management approach. This involves preparing and implementing a Drinking Water Safety Plan, to identify the hazards and risks to the supply, manage these risks to provide safe drinking water, and identify what they will do if the water becomes unsafe. A Drinking Water Safety Plan should be proportionate to the scale, complexity, and risk of the supply. A Drinking Water Safety Plan also includes a specific Source Water Risk Management Plan.

This represents the need for a more holistic perspective of drinking water and the environment. Under the Act, all registered supplies must submit a Drinking Water Safety Plan or adopt an acceptable solution by 15 November 2022.

How are source water risks managed?

The Havelock North Drinking Water Contamination Inquiry identified source water protection as a key component of systemic failure across the drinking water system.

In taking a multi-barrier approach, protecting the source water provides the first, and most significant, barrier against drinking water contamination and illness.

Figure 5 – Water sources of registered drinking water supplies



This approach includes identifying and understanding the risks to drinking water sources and then addressing and managing these risks appropriately.

The Act sets out requirements regarding source water information sharing and source water risk management plans (SWRMPs) for Taumata Arowai, regional councils, local authorities, and drinking water suppliers. Specifically, the Act outlines in sections 43 – 46 the legislative framework for how:

- local authorities will contribute information for SWRMPs in accordance with compliance rules⁵
- Taumata Arowai will collect source water quality monitoring information from suppliers and annually report monitoring results to regional councils⁶
- Taumata Arowai will provide local authorities with information on drinking water abstraction points for verification, while drinking water suppliers and local authorities share information on known risks and hazards⁷

Regional councils publish and provide Taumata Arowai with information on source water quality and quantity in their region annually. At least every three years, regional councils also assess and report on the effectiveness of interventions to manage source water risks or hazards. Taumata Arowai may make rules to set the format and content of these reports⁸.

Drinking water suppliers are required to prepare and provide SWRMPs as part of their broader drinking water safety plans. SWRMPs encourage suppliers to identify and respond to the risks posed to source water.

⁵ Water Services Act 2021, [s43\(4\)\(a\)](#).

⁶ Water Services Act 2021, [s44\(3\)](#).

⁷ Water Services Act 2021, [s45](#).

⁸ Water Services Act 2021, [s46](#).

Taumata Arowai currently has limited information on how risks and hazards to source water are being managed. Regional councils use regional plans to specify how drinking water sources should be protected when granting consents and considering appropriate conditions. The approach to identify and manage these risks varies. One example of variation is that newer plans tend to take a more explicit approach to managing or limiting certain activities by a water source. The first tranche of source water risk management plans from registered supplies, is due to be submitted to Taumata Arowai before 15 November 2022.

Some suppliers have experience identifying and monitoring risks to source water. However, for many suppliers this will be new. Taumata Arowai will need to clearly communicate good practice and over time support water suppliers to undertake better risk assessment and management of source water. SWRMPs will evolve as local authorities and drinking water suppliers become familiar with the process and the information available to inform their plans.

The Act is part of a broader framework that enables risks to source water to be properly identified, managed, and monitored. This framework includes the Resource Management Act 1991, regulations made under that Act, and the National Policy Statement for Freshwater Management (NPS-FM). For example, when preparing a SWRMP, suppliers must consider values identified in accordance with the (NPS-FM) for the sources of their drinking water supply.

Proposed changes to the National Environmental Standards for Sources of Human Drinking Water (NES-DW) will also play an important role as regulations made under the Resource Management Act 1991. These are administered by the Manatū Mō Te Taiao/Ministry for the Environment (MfE). These amendments are designed to standardise how source water areas are defined for the purposes of the Resource Management Act 1991 (and any replacement legislation), with a focus on making sure local authorities make consenting decisions in a consistent way. Once these changes are finalised (anticipated to be in late-2022), Taumata Arowai will need to work closely with MfE as supplies will likely need to be registered before source water risk management areas can be mapped.

All suppliers that have a source should consider how they can manage risks to source water, however we recognise that it will take time to finalise SWRMP as these reforms progress. We will work with suppliers to provide them guidance on how to practically meet their obligations during this time.

Relationships with suppliers, regional councils and other government agencies will be crucial to ensuring the source water risk management framework is successful. The relationships local authorities and suppliers have with whānau, hapū, and iwi Māori will be essential to the quality of the information being used to inform supplier SWRMPs.

As kaitiaki of the water sources in their rohe, Māori have an interest in the risks and hazards, contaminants, and other land uses or activities that impact the mauri of their water sources.

The capability of the Water Services Sector

The current state of workforce capability

Building workforce capability is more than training or understanding rules. A holistic and integrated approach ensures an organisation's people capability requirements are met for both the short and long term. Capability for drinking water suppliers includes the mechanisms, means and learning that provides the capacity and ability of suppliers (individuals, organisations, kāinga and communities) to provide access to safe and sufficient drinking water, in line with the regulatory regime.

In 2021, a Deloitte study to support the Three Waters Reform decisions showed that a material investment in the water sector of \$185b will lead to an increase in gross domestic product of between \$14b to \$23b in Net Present Value terms over 30 years and an additional 5,849 to 9,260 full time jobs. Both provincial and rural areas were estimated to benefit more than metropolitan areas in relative terms.⁹ This capacity forecast included roles across all facets of the industry, and all parts of Aotearoa.

Workforce demands will increase due to factors including:

- the establishment of four new water entities;
- the expansion of the scope of regulation to include all supplies for more than one dwelling; and
- the infrastructure investment required.

The capability need across the wider industry is urgent. There are unfilled existing roles and future workforce demands across all areas of the drinking water industry.

In 2020, the *National Performance Review*¹⁰ reported that there were 236 vacancies across the large water suppliers (councils and Watercare and Wellington Water) for the 2019/20 financial year. Looking into the future, the need is probably even greater.

“From operators to engineers, planners to modellers, from mātauranga Māori practitioners to climate scientists, we need skilled people to tackle today’s technologies and to prepare us for the transformation ahead”. (Blythe, G; Water NZ, April 2022).¹¹

⁹ Deloitte, 2021, [Industry Development Study & Economic Impact Assessment, commissioned by the Department of Internal Affairs.](#)

¹⁰ Water New Zealand, 2020/2021, [National Performance Review.](#)

¹¹ Water New Zealand, 2022, [Water March/April 2022.](#)

To grow the industry, several challenges need to be overcome. For example, the engineering industry has poor retention rates for women with over a quarter of women leaving the profession in the first five years of employment.¹² Compared to non-Māori and males, fewer Māori and women are employed, and they are overrepresented in the lowest earning occupations. Low remuneration rates and invisibility of career pathways are noted as impacting recruitment, retention, and career growth.¹³

The role of Taumata Arowai in lifting capability

The Taumata Arowai – Water Services Act 2020 establishes a role for Taumata Arowai to build and maintain:

- the capability of drinking water suppliers and across the wider industry
- the capability of drinking water suppliers to fulfil their regulatory responsibilities

A core activity for Taumata Arowai is to support drinking water suppliers to understand their duty of care, how to give effect to Te Mana o te Wai, and how to meet regulatory responsibilities.

Developing the drinking water services sector's capability more broadly (by promoting collaboration, education, and training) is also one of the operating principles for Taumata Arowai.

Taumata Arowai must work with others to improve the capability of drinking water suppliers and the wider industry. In setting up the new water entities, the National Transition Unit (within the Department of Internal Affairs), will have a leadership role to identify the people and skills requirements. We will provide guidance to assist registered and unregistered drinking water suppliers to understand what the transition to the new regime means and to ensure that regulatory training is embedded in the career pathways for the sector.

We have participated in the development of *Ko Wai Tātou*, the Workforce Development Strategy released in March 2022, and will continue to participate in its implementation.¹⁴ This strategy signals and signifies the importance of a coordinated and aligned industry strategy to strengthen workforce and skills development.

We are currently engaging widely – with the water services sector, other Government agencies, Te Tiriti partners, kāinga and industry bodies. This engagement will help us decide how we, as the regulator, can best influence and lift capability across the drinking water suppliers and the wider industry over the longer term. This work will also consider how we can measure our performance in terms of lifting capability in the sector.

¹² Ko Wai Tātou: We are Water, 2022, [Ko Wai Tātou. We are water. Three Waters Workforce Development Strategy](#)

¹³ Water New Zealand, WSP Opus, 2019, [Water Industry Aotearoa Elevating the Need for Diversity.](#)

¹⁴ Ko Wai Tātou: We are Water, 2022, [Ko Wai Tātou. We are water. Three Waters Workforce Development Strategy.](#)

Over time, the authorisations framework will play an important role to build capability across the water services sector

The Act provides for the establishment of an authorisations framework to improve the professional capability of drinking water suppliers¹⁵. In this context, ‘authorisations’ means that only people with particular skills, qualifications, or experience can do certain work in relation to drinking water supplies or wastewater networks.

In late 2022, Taumata Arowai will begin policy work to develop this authorisations framework. It will be crucial to engage with existing providers, industry organisations (such as Water New Zealand), as well as whānau, hapū and iwi Māori.

¹⁵ Water Services Act 2021, Part 2 Subpart 10.

Reporting on the Performance of Taumata Arowai

An important component of reporting on drinking water regulation is analysis of how Taumata Arowai has performed its functions. This includes the extent to which Taumata Arowai has achieved objectives and targets set out in its drinking water compliance, monitoring, and enforcement strategy.

As Taumata Arowai assumed the role of water services regulator only on 15 November 2021, this report consequently relates to a small portion (about six weeks) of the first year of operation for Taumata Arowai. This means we are unable to provide substantial information in this first drinking water compliance annual report.

Also, as we are a new entity, key parts of the legislative and strategic framework are still being developed. In particular, the first drinking water Compliance, Monitoring and Enforcement Strategy is not expected to be in place until July 2022.

As a Crown entity, Taumata Arowai is required to develop a Statement of Intent (SOI) and a Statement of Performance Expectations (SPE), both of which share an enduring performance framework. The first of these documents will be tabled in Parliament and available from July 2022.

Following this, Taumata Arowai will report each year on its performance against measures established in its SPE. The Taumata Arowai performance framework includes a range of Key Result Areas and performance measures that assess whether the actions of Taumata Arowai are resulting in the improvement of the water services sector.

As the framework to assess our performance is not yet in place for the period of this Drinking Water Regulation Report, this section of the report focuses on our planned approach to our regulatory role.

Taumata Arowai is taking a balanced regulatory approach. This means we will adopt a mix of responsive and proactive regulatory activities to:

- incentivise desirable behaviour change in the drinking water sector
- disincentivise behaviours that do not support effective risk management or increase the likelihood of harm to consumers from unsafe drinking water
- disincentivise behaviours that do not provide sufficient drinking water

Our regulatory interventions will be proportionate and directed to address the risk and nature of the behaviours of regulated parties. Our decision to intervene will be based on the need to:

- protect people and communities from a serious risk to their health due to the quality or quantity of drinking water being supplied
- support the water services sector to improve its performance and environmental outcomes

Where deemed necessary, however, we will take a strong and clear regulatory response if water suppliers engage in unacceptable conduct or do not take their duties and responsibilities seriously. Further information about our approach will be found in our Compliance, Monitoring and Enforcement Strategy appended to the Statement of Intent 2022-2025.¹⁶

The priorities for Taumata Arowai over the 2022/23 year

Summarised from our Statement of Performance Expectations:

Completing the transfer of previously registered supplies

Before 15 November 2022, we expect to have confirmed the details for the registered supplies that provide 85% of New Zealand's population with its drinking water.

By mid-March 2022, all 67 territorial local authorities (councils) and other major water suppliers (Department of Defence, Department of Corrections and /Department of Conservation, amongst others) had started using Hinekōrako and were in the process of confirming the details of their supplies.

We continue to send out invitations to smaller previously-registered suppliers and all known drinking water carriers.

We are also engaging with the drinking water suppliers and water carriers to ensure they understand they must have a drinking water safety plan or a general exemption in place. Guidance and resources are readily available on our website and are cited in our communications.

Understanding the needs of unregistered supplies

To achieve the registration of all drinking water supplies by 15 November 2025, we need to understand their circumstances and find a pathway to registration that works for different types and sizes of water suppliers.

We continue to work with those within the sector such as Water New Zealand, Fonterra, Federated Farmers whānau, hapū and iwi Māori organisations, and regional and district councils to understand the needs of the owners and operators of unregistered drinking water supplies.

Most of these supplies are small, private and/or rural and include Māori drinking water suppliers who are a combination of mixed iwi entities, kura kaupapa Māori, kōhanga reo, marae, papakāinga, and densely populated Māori communities.

¹⁶ [Our strategy and performance | Taumata Arowai](#)

What we learn will inform how we will gather the unregistered supplies into groups with common features and the approach we will take with each group to create a tailored registration process that will run from 2023 to 15 November 2025. Our aim is to find acceptable solutions that will enable these suppliers to meet regulatory requirements by 15 November 2028.

Building business systems for registration and data management

We are customising business systems to support our regulatory and data collection activities. We have already implemented Hinekōrako, our online regulatory and intelligence system, and will continue to build this system over the coming years.

Preparing for wastewater and stormwater responsibilities

In late 2023, we will take on new responsibilities for wastewater and stormwater.

Although these responsibilities do not start within the 2022/23 financial year, we are engaging with the water services sector, whānau, hapū and iwi Māori, regional councils, network operators, the Public Health Agency (to be established within Ministry of Health) and Ministry for the Environment (MfE) to inform our preparation for the oversight role we will have.

Over the next year, the focus is on developing our approach to our wastewater provisions, including how we plan to stage the introduction of those provisions.

Building our capability and capacity to act as a responsible Te Tiriti partner

We will continue to build the capacity and capability needed to act as a responsible Te Tiriti o Waitangi partner, and ensure Māori interests are considered by ensuring we engaging meaningfully and genuinely to understand these interests.

We have begun engaging with registered Māori water suppliers and iwi organisations. We are establishing a new team, Te Rōpū Ārahi, to support our engagement and continue to build capability on upholding Te Tiriti o Waitangi.

Aligning our regulatory settings to the wider regulatory environment

We continue to work closely with the Three Waters programme teams and the National Transition Unit to ensure regulatory alignment with other parts of the programme, including any required legislative changes and our authorisation framework. Other policy developments that will impact the regulatory environment for drinking water include health reforms, the establishment of an economic regulator for drinking water, and changes to the Building Code in relation to plumbing requirements.

How the Act is meeting its purpose

The Act was designed to provide a drinking water regulatory framework consistent with internationally accepted best practice. The Act also incorporates the recommendations from the [Havelock North Drinking Water Inquiry](#).¹⁷ The Act replaced Part 2A of the Health Act 1956 with standalone legislation and comprehensively reforms the regulation of drinking water by providing the regulator with new functions relating to wastewater and stormwater.

The Act will be progressively implemented. Transitional provisions stagger the registration of drinking water supplies and timing of requirements to prepare drinking water safety plans or comply with an acceptable solution between November 2022 and November 2028. Secondary legislative instruments will provide the detail for compliance with the Act's higher-level framework.

The main purpose of the Act is to ensure drinking water suppliers provide safe drinking water to consumers.

Key features of the Act that contribute to this are:

- a regulatory framework consistent with international best practice
- a drinking water safety planning approach, requiring drinking water suppliers to take responsibility for identifying and appropriately managing drinking water-related risks
- consistent application of legislative requirements to all drinking water suppliers who are not domestic self-suppliers
- a source water risk management framework designed to integrate effectively with the Resource Management Act 1991 and instruments made under it, including adoption of the concept of Te Mana o te Wai
- mechanisms that enable regulation that is proportionate to the scale, complexity, and risk profile of each drinking water supply.

The Act largely came into force on 15 November 2021 and consequently, operated for approximately six weeks of this reporting period. No meaningful comments can be made about the extent to which the Act met its main purpose over such a short timeframe.

Future reporting on achieving the purpose of the Act

Data on the performance of the water sector will help assess whether the Act is achieving its main purpose. A broader aspect of reporting reflects Government expectations for regulatory stewardship. Relevant considerations include:

- the extent to which Taumata Arowai is achieving objectives and targets set out in its drinking water compliance, monitoring, and enforcement strategy

¹⁷ [DIA - Government Inquiry into Havelock North Drinking Water](#)

- whether drinking water suppliers have access to simple, timely information about their regulatory obligations and opportunities to engage with Taumata Arowai
- how effectively Taumata Arowai is working with other regulatory and policy agencies
- whether the Act is being applied in a proportionate, fair, and reasonable way that achieves its main purpose, while minimising costs and adverse impacts on competition, property rights, and the individual autonomy and responsibility of drinking water suppliers and other regulated people.

Our reporting roadmap

This report will evolve significantly through to 2025 as Taumata Arowai establishes its regulatory approach and responds to the Three Waters Service Delivery Reform Programme.

Reporting on the drinking water sector's performance

Taumata Arowai will expand our reporting approach to enable efficient and effective sharing of data between water suppliers, laboratories, the regulator and the public. We will make sure that we have the information we need from water suppliers to inform a risk-based approach to regulation and provide consumers with transparency about the state of their drinking water.

Over the next four years in order to provide greater transparency and understanding of the performance across the water sector, we will combine data from historic compliance, current notifications, regular monitoring reporting, annual assurance reporting, drinking water safety plans, source water quality, risk assessments, investigations, and audits. Our future reports will be supported by maps, dashboards, and datasets to make these insights more accessible.

Eventually Taumata Arowai will shift to assessing how suppliers are actively managing the risks associated with their supplies. We will also begin to explore how the water sector is giving effect to Te Mana o te Wai, respecting the special relationship New Zealanders have with water, and working with Mana Whenua to care for and protect water. By understanding the issues faced by water supplies, we can engage the water sector to lift performance, so they can provide safe water, every day, for everyone.

As these reports evolve over the coming years, and our understanding of mātauranga Māori grows we look to see how a more holistic understanding around drinking water will be integrated into our reporting. To do this we are working to grow our internal capability to give effect to Te Mana o te Wai and understand mātauranga Māori to meaningfully inform our work. This additional capability will ensure we uphold the authenticity of the whakapapa of Taumata Arowai and realise the aspirations of Taumata Arowai to be an honourable Te Tiriti partner. Mātauranga Māori will require us to look at our insights through different perspectives and help to find meaningful ways to share these insights with all New Zealanders.

Reporting on Network Environmental Performance

We are developing Network Environmental Performance Reports, as required under section 147 of the Act. These reports will focus on the impact of drinking water, wastewater, and stormwater networks on the environment. We have been working with Water New Zealand to build upon their work on the National Performance Review of the water sector. Councils and Government water supplies will be required to annually report on the environmental performance of drinking water networks starting from 1 July 2022 to 30 June 2023. Our Network Environmental Performance reporting for wastewater and stormwater will be phased in over the next few years.

Feedback on our reports

We will continue to consider the effectiveness of these reports in providing accessible and holistic information about our work and water services in Aotearoa.

We will work with partners and the water sector to make sure this report and other information we provide is delivering useful insight. If you have feedback or suggestions on how we might improve our reporting, please contact info@taumataarowai.govt.nz.

Glossary of terms

Ko ngā kupu Māori

Te Reo Māori terms

Te Reo Māori term	English meaning	Source
Aotearoa	Used as the Māori name for New Zealand.	aotearoa - Te Aka Māori Dictionary (maoridictionary.co.nz)
Hinekōrako	The personification of the lunar rainbow. This name was gifted to Taumata Arowai for our Regulatory and Intelligence system by Te Atiawa.	hinekōrako - Te Aka Māori Dictionary (maoridictionary.co.nz)
hangarau	Technology	hangarau - Te Aka Māori Dictionary (maoridictionary.co.nz)
Hapū	Section of a large kinship group and the primary political unit in traditional Māori society.	hapū - Te Aka Māori Dictionary (maoridictionary.co.nz)
Iwi	Extended kinship group, tribe.	iwi - Te Aka Māori Dictionary (maoridictionary.co.nz)
Kaupapa	Topic, policy, matter for discussion, plan, scheme, proposal, purpose, proposal, subject, programme, theme, issue, initiative.	kaupapa - Te Aka Māori Dictionary (maoridictionary.co.nz)
Kaitiakitanga	Guardianship, stewardship, trusteeship.	kaitiakitanga - Te Aka Māori Dictionary (maoridictionary.co.nz)
Mana	Prestige, authority, control, power, influence, status, spiritual power, charisma.	mana - Te Aka Māori Dictionary (maoridictionary.co.nz)
Mana whenua	Territorial rights, power from the land.	mana whenua - Te Aka Māori Dictionary (maoridictionary.co.nz)
Marae	Community meeting place or surrounds.	marae - Te Aka Māori Dictionary (maoridictionary.co.nz)
Mātauranga	Knowledge, wisdom, understanding.	mātauranga - Te Aka Māori Dictionary (maoridictionary.co.nz)
Mauri	Life principle, life force, vital essence, special nature.	mauri - Te Aka Māori Dictionary (maoridictionary.co.nz)

Ngā Kaihautū o Puni Arowai (KOPA)	Leaders/Leadership of (Taumata) Arowai. Kaihautū – leader. Puni – company of people.	Our Leadership team Taumata Arowai
Papakāinga	Home base, village, communal Māori land.	papakāinga - Te Aka Māori Dictionary (maoridictionary.co.nz)
Tangata Tāngata	Person, human being. People, human beings.	tangata - Te Aka Māori Dictionary (maoridictionary.co.nz)
Taiao	Natural world, environment.	taiao - Te Aka Māori Dictionary (maoridictionary.co.nz)
Taonga	Treasure, anything prized.	taonga - Te Aka Māori Dictionary (maoridictionary.co.nz)
Taumata Arowai	Taumata is a term associated with a summit, symposium or congress. Aro means to give attention to, to focus on, or be in the presence of. Wai is water.	Who we are Taumata Arowai This name was gifted to us by Hon Nanaia Mahuta
Te Mana o te Wai	A concept that refers to the fundamental importance of water and recognises that protecting the health of freshwater protects the health and well-being of the wider environment.	National Policy Statement for Freshwater Management 2020 (environment.govt.nz)
Tikanga	The customary system of values and practices that have developed over time and are deeply embedded in the social context.	tikanga - Te Aka Māori Dictionary (maoridictionary.co.nz)
Te Tiriti o Waitangi	The Te Reo Māori version of The Treaty of Waitangi.	Meaning of the Treaty Waitangi Tribunal
Wai	Water.	wai - Te Aka Māori Dictionary (maoridictionary.co.nz)
Whānau	Extended family, family group, a familiar term of address to a number of people.	whānau - Te Aka Māori Dictionary (maoridictionary.co.nz)

Ko ngā kupu Hangarau

Technical terms

	Technical terms	Meaning	Source
Acceptable Solution	Prescribed requirements which a water supplier can adopt to meet some of the legislative requirements set out in the Water Services Act 2021.		Water Services Act 2021
Aesthetic Values	Aesthetic values may, without limitation, specify or provide for minimum or maximum values for substances and other characteristics that relate to the acceptability of drinking water to consumers (such as appearance, taste, or odour).		Water Services Act 2021
Compliance	A drinking water supply is in compliance when it has met all the compliance criteria requirements.		Drinking-water Standards for New Zealand 2005 (Revised 2018)
Cyanotoxin determinands	A toxin secreted by certain cyanobacteria.		Drinking-water Standards for New Zealand 2005 (Revised 2018)
Determinands	A constituent or property of a sample of water that is determined or estimated.		Drinking-water Standards for New Zealand 2005 (Revised 2018)
Drinking water suppliers	A person who supplies drinking water through a drinking water supply to more than one standalone domestic dwelling (Refer to the Water Services Act 2021, s8 for a full definition).		Water Services Act 2021
Incident	An incident is a response to information contained in, or relevant to, a notification. An incident may be raised, for example, when a notification is given a high level of priority.		Taumata Arowai glossary
Inorganic determinands	A chemical consisting of elements other than carbon.		Drinking-water Standards for New Zealand 2005 (Revised 2018)
Laboratories	A scientific facility equipped to provided water quality tests		Dictionary derived

Microbiological determinands	Studies or tests relating to living organisms that are too small to be visible with the naked eye, includes bacteria, viruses, protozoa and algae, collectively known as microbes.	Drinking-water Standards for New Zealand 2005 (Revised 2018)
Monitoring	Sampling and analysis of a drinking water supply to test for compliance with the Drinking water Standards for New Zealand 2005 (Revised 2018), or for process control, by detecting changes in the concentrations of its constituent determinands or deviations of these from target values.	Water Services Act 2021
Non-compliant	When a drinking water supply has not met all the compliance rules.	Dictionary derived
Organic determinands	Substances containing carbon that are covalently bonded to other elements, which are commonly from living plants and animals.	Drinking-water Standards for New Zealand 2005 (Revised 2018)
Radiological determinands	In water quality analysis, radioactive substances, factors, or elements in the drinking water that are determinable.	Drinking-water Standards for New Zealand 2005 (Revised 2018)
Registered water supplies	A drinking water supply registered in accordance with the requirements of subpart 7 of Part 2	Water Services Act 2021, Subpart 2 - Interpretation
Rules	Requirements that drinking water suppliers must meet to demonstrate that they are not exceeding the maximum acceptable values (MAVs) for microbiological determinands, organic determinands, inorganic determinands, cyanotoxin determinands and radiological determinands that are set out in the New Zealand Drinking water Standards 2005 (Revised 2018).	Drinking-water Standards for New Zealand 2005 (Revised 2018)
Temporary drinking water supply (planned event)	Short term events where people gather and where a water supply is required for the duration of an event which continues for less than 30 days.	Water Services Act 2021, section 33

Unsafe drinking water	<p>Drinking water that is likely to cause a serious risk of death, injury, or illness, whether immediately or over time, and whether or not the serious risk is caused by the</p> <ul style="list-style-type: none"> • consumption or use of drinking water, or • other causes together with the consumption or use of drinking water. <p>The assessment of serious risk must take into account, among other factors, compliance with drinking water standards.</p>	Water Services Act 2021, section 7(ii)
Unregistered water supplies	A drinking water supply not registered in accordance with the requirements of subpart 7 of Part 2 of the Water Services Act 2021. Supplies that were not required to be registered under the Health Act 1956, or any other legislation.	Health Act 1956 Water Services Act 2021
Verification method	Prescribed requirements which a water supplier can adopt to meet some of the legislative requirements set out in the Water Services Act 2021.	Water Services Act 2021
Water carriers	A drinking water supplier that transports drinking water (other than by reticulation) for the purpose of supplying it to consumers or another drinking water supplier.	Water Services Act 2021
Water services sector	The water services sector refers to any organisation or agents involved with the regulation, provision or management of water supply, trunk sewers, local reticulation, sewage treatment and stormwater assets.	Definition taken from various sources, including Water NZ and DIA.
Water supplier/s	<p>(a) A person who supplies drinking water through a drinking water supply; and</p> <p>(b) includes a person who ought reasonably to know that the water they are supplying is or will be used as drinking water; and</p> <p>(c) includes the owner and the operator of a drinking water supply; and</p> <p>(d) includes a person described in paragraph (a), (b), or (c) who supplies drinking water to another drinking water supplier; but</p> <p>(e) does not include a domestic self-supplier.</p>	Water Services Act 2021, section 8
Water supply/supplies	The infrastructure and processes used to abstract, store, treat, transmit, or transport drinking water for supply to consumers or another drinking water supplier.	Water Services Act 2021, section 9

