

Frequently asked questions

27 June 2024: Publication of three water system reports

Is the water in New Zealand safe to drink?

The good news is that most people in New Zealand are regularly receiving safe drinking water. For some drinking water supplies there is room for improvement to ensure key risks are being appropriately managed. While most council supplies have protozoa barriers, bacterial barriers and/or residual disinfection where required, some don't. A multi-barrier treatment approach is the single most effective way to prevent people getting sick from their drinking water.

However, there is still much work to do. The reports indicate drinking water suppliers' compliance with the minimum requirements of the Drinking Water Quality Assurance Rules was variable and needs to improve to provide ongoing assurance to the public that suppliers are taking an effective multi-barrier approach to drinking water safety.

What is the state of New Zealand's drinking water, wastewater and stormwater?

Around 4.4 million people, or 84% of the population, drinks water from registered suppliers that are undertaking a base level of monitoring and reporting on their supplies.

The quality of the data (particularly for drinking water network performance) and completeness of reporting provided needs to improve so we better understand whether risks are being appropriately managed, and that sector performance is improving over time. We are concerned that network operators do not generally hold good information about their networks. This will likely impact their ability to properly manage those networks.

We currently have limited information on wastewater and stormwater networks, particularly when compared to drinking water networks. We will build a comprehensive picture of the entire water system over time as regular information provided by drinking water suppliers and other network operators is available.

Why is there limited information on wastewater and stormwater networks?

Our statutory role in relation to the environmental performance of public drinking water, wastewater and stormwater networks began on 4 October 2023. We will phase in these future reporting and monitoring requirements over the coming years.

For the 2023/24 reporting period, we did not require mandatory reporting against wastewater and stormwater measures. Network operators will need to start recording data for the first phase of wastewater measures from 1 July 2024 for inclusion in the next Network Environmental Performance Report.

What are you doing about the data quality issues you've identified in the reports?

We have identified the quality of the data (particularly for drinking water network performance) and completeness of reporting provided needs to improve. We acknowledge the challenges within the sector and the significant capacity constraints that network operators face in providing good data. For the next Network Environmental Performance Report, we have asked network operators to prioritise resourcing the collection of data.

We recognise we have a role to play in supporting the sector to undertake this continuous improvement. We have reviewed our data collecting and reporting processes ahead of this year's reporting to better support network operators to provide more complete and accurate data.

Are you concerned about the high number of long-term boil water notices and how does this compare internationally?

While consumer advisories can be effective safety measures over short time frames, for example in response to extreme weather events, long-term consumer advisories/boil water notices likely indicate systemic problems with the supply and indicate that a supplier is regularly failing to supply safe drinking water.

The long-term consumer advisories reported include 53 that were in place before 2023 and we were made aware of an additional 59 in 2023. Twenty-three long-term consumer advisories were resolved leaving 89 long-term advisories in effect at year end.

There isn't any specific time threshold associated with a long-term consumer advisory. The term is used to refer to advisories that remain in place for more than a transient period while steps are taken to address the underlying safety issue, depending on the circumstances affecting each supply.

We are concerned by the high number of consumer advisories issued in New Zealand compared to other countries like England and Scotland, where the numbers of consumer advisories issued is exceptionally low.

Our current focus is ensuring suppliers are issuing consumer advisories appropriately and that these suppliers work to ensure issues are being addressed, whether that is committing to an appropriate drinking water treatment option or ensuring improvements are planned and funded to resolve underlying supply issues.

How widespread is the issue of ageing water infrastructure?

Ageing infrastructure is a significant challenge across the country. Many networks are under stress, dealing with issues such as population growth, urbanisation and climate change. Coupled with systemic underinvestment in the sector, ageing infrastructure is causing budgetary pressure, loss of revenue (where volumetric charging is used), and potentially increased health risks to communities.

While the situation and nature of networks differs across the country, our Network Environmental Performance Report shows the weighted average age of pipework is currently reported at 32 years old and spans a range between five and 100 years. Pipe age does not necessarily provide a good understanding of when assets need to be replaced. The pipe material, size, location underground, operating pressures and the chemical properties of the water can all affect the lifespan of the network.

It's critical for operators to assess and monitor the condition or quality of various parts of a drinking water, wastewater or stormwater network. This will inform proactive plans for network maintenance, repair and replacement.

What do the reports tell us about water leaks?

While we have richer information on the state of our networks and drinking water quality than has ever been available before, the quality and completeness of the data provided to us is widely uneven. What the data does tell us is well known – reported water loss is very high but the full extent of it is unclear.

As a first step, we'd like to see network operators prioritise identifying and managing water loss across their networks. This is critical to the supply of safe drinking water and minimising adverse environmental impacts as well as saving money.

Why do drinking water suppliers need to comply with legislation and rules?

As the water services regulator for Aotearoa New Zealand, we help to develop Drinking Water Standards (standards) and are responsible for making Drinking Water Quality Assurance Rules (rules), Aesthetic Values, and Acceptable Solutions.

Collectively, these set minimum requirements for drinking water suppliers and help ensure communities receive safe drinking water. Drinking water suppliers must also consider how they manage specific risks and hazards for their supply which have been identified through drinking water safety planning.

The rules are proportionate and modular. They are not 'one size fits all'. Instead, they take into account the size of the population being served, complexity of a supply, and level of risk for a supply.

The standards and rules are necessary because of the risk of waterborne illness. The Drinking Water Regulation Report shows a high number of *E. coli* notifications were received for registered supplies. This is especially concerning given it indicates the presence of bacteria that have the potential to cause widespread illness. These supplies can also be at risk of significant damage from catastrophic weather events related to climate change as we saw with Cyclone Gabrielle in February 2023.

What is the multi-barrier approach to safe drinking water?

A multi-barrier treatment approach is a key principle of safe drinking water.

Water can be found in a range of places, including lakes, rivers, streams, and underground. But if you drink water straight from these sources there's a risk that it could be contaminated with bacteria, viruses, or other things, that could make you sick.

The purpose of treatment is to make this water safe to drink. However, no single barrier is effective against all types of contamination or risks. So, drinking water suppliers must use a *range* of processes, procedures and tools to protect and treat water, to make it safe and keep it safe as it travels to the people who drink it.

This approach means that there's always a range of safeguards (or multiple barriers) in place to help ensure hazards and risks that might affect drinking water are addressed appropriately and the water stays safe.

Additionally, while drinking water suppliers are responsible for managing any risks to their supplies, things can unexpectedly go wrong. For example, a piece of equipment could fail despite maintenance.

Having multiple barriers (safeguards) in place means that if one fails, others are there as back-ups to help prevent, or reduce, the chance of public health being impacted.

Find out more about the multi-barrier approach at: taumataarowai.govt.nz/multi-barrier

Is more performance data available?

We're committed to taking an open and transparent approach, so we plan to make the data that's informed New Zealand's Network Environmental Performance Report 2022/23 (NEPR) and Drinking Water Regulation Report 2023 (DWRR) publicly available for those who want to examine the detail.

However, we have been made aware there are some issues with the raw data that informed the NEPR. We have removed the raw data file from our website while we look into the issue.

More detailed data relating to the DWRR will be published later this year.