

Zack Newman
Tue, 12 Oct 2024

Followed

Unfollow

Saved

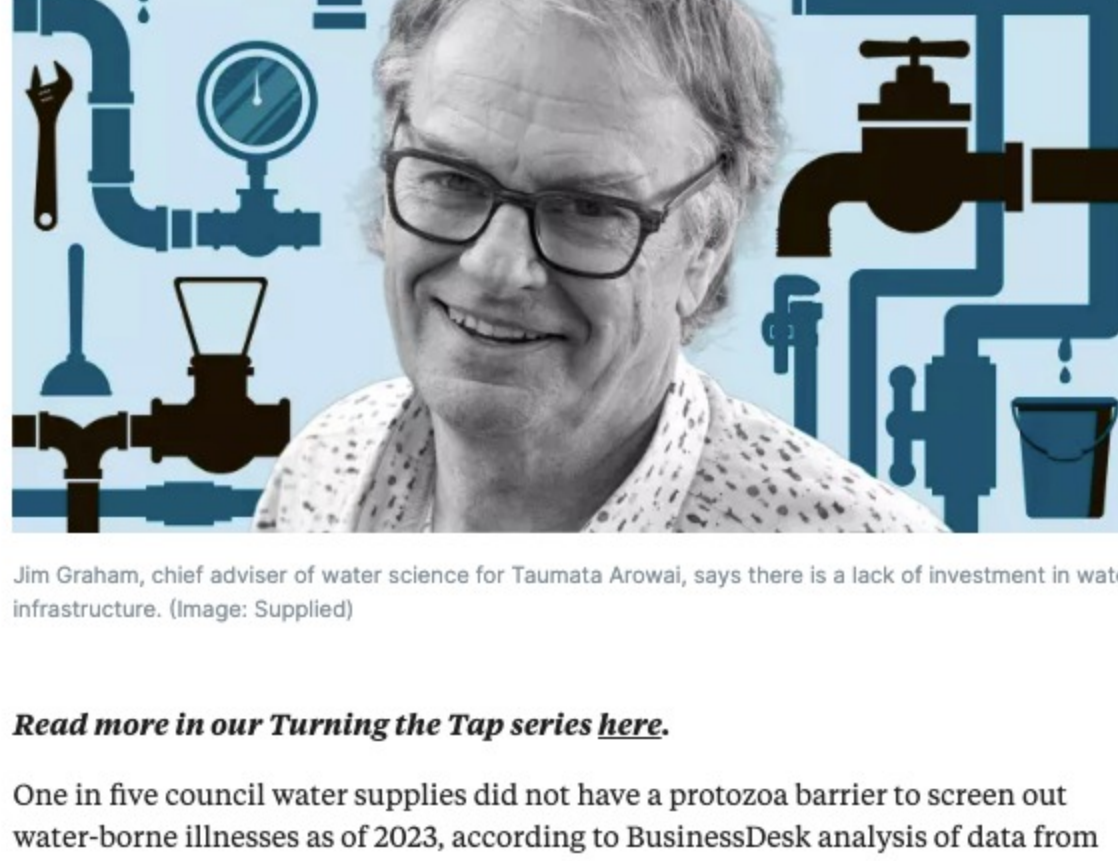
Gift This article

PDF Print

Share

Comments / 2 New

Turning the Tap: The real impact of short-changing water investment



Jim Graham, chief adviser of water science for Taumata Arowai, says there is a lack of investment in water infrastructure. (Image: Supplied)

Read more in our Turning the Tap series here.

One in five council water suppliers did not have a protozoa barrier to screen out water-borne illnesses as of 2023, according to BusinessDesk analysis of data from Taumata Arowai, the government agency charged with regulating new national drinking water standards.

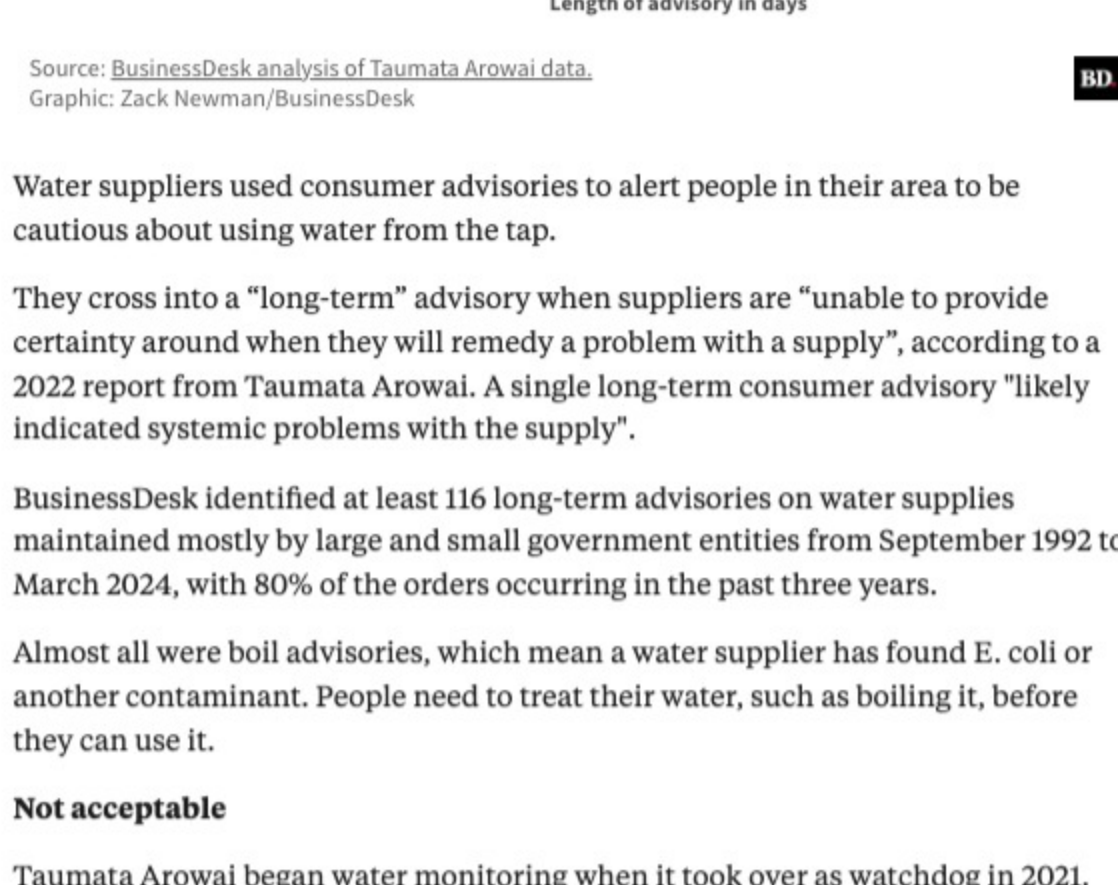
The lack of infrastructure creates vulnerabilities to waterborne illnesses for hundreds of thousands of people.

In the same investigation, BusinessDesk found that more than 90,000 New Zealanders have been affected by long-term water quality problems that have required measures such as boil notices for months and, in some cases, years.

BusinessDesk identified water suppliers and supplies that have relied on alerts for more than a year, multiple instances where water warnings had to be enacted repeatedly, and errors in the way the water watchdog monitored data.

Length of long-term consumer advisories by region and type

Hover over each dot to see more information on the 116 long-term advisories identified by BusinessDesk. Use the pull-down menu on the filter to see take a closer look at each region.



Source: BusinessDesk analysis of Taumata Arowai data.
Graphic: Zack Newman/BusinessDesk

Water suppliers used consumer advisories to alert people in their area to be cautious about using water from the tap.

They cross into a "long-term" advisory when suppliers are "unable to provide certainty around when they will remedy a problem with a supply," according to a 2022 report from Taumata Arowai. A single long-term consumer advisory "likely indicated systemic problems with the supply".

BusinessDesk identified at least 116 long-term advisories on water supplies maintained mostly by large and small government entities from September 1992 to March 2024, with 80% of the orders occurring in the past three years.

Almost all were boil advisories, which mean a water supplier has found E. coli or another contaminant in people's water. To treat the water, such as boiling it, before they can use it.

Not acceptable

Taumata Arowai began water monitoring when it took over as watchdog in 2021. Jim Graham, Taumata Arowai's chief adviser of water science, said long-term advisories typically occur when the water disinfection process fails. If they last months, they are typical symptoms of small communities lacking the funding for

Generally, there's a lack of investment," he said. "And it's not just simply that they haven't spent the money. It's that the money's hard to find to spend."

Water reforms now advancing through Parliament will not only require water providers to meet regulatory standards but also offer improved sources of financing for water entities that show they are ring-fencing their revenues and have a sustainable business plan.

Graham said Taumata Arowai wants to communicate to water suppliers that long-term consumer advisories are "not acceptable" to managing water supplies.

Ricardo Bello-Mendoza, an associate professor at the University of Canterbury who specialises in drinking water and wastewater treatment, said months-long consumer advisories are dangerous.

"If they are too frequent and it's happening for too long, we might then take it for something that is commonplace instead of being an exception, and that can increase the risk of people getting sick if they don't have access to safe water," Bello-Mendoza said.

Lesley Smith, a spokesperson and technical lead for Water NZ, a not-for-profit organisation created to represent the water industry, said long-term advisories could be expected after a natural disaster, such as a slip that could have pushed contaminants into the water supply, a water treatment equipment failure or if a contaminant has entered the groundwater and the supplier needs time to identify the problem.

Smith said advisories were designed for use in emergencies, and it's a problem if they are normalised in a region.

"We wouldn't consider it an acceptable way in New Zealand to manage your water supply by having a long-term consumer advisory to tell people you can't drink this water," she said.

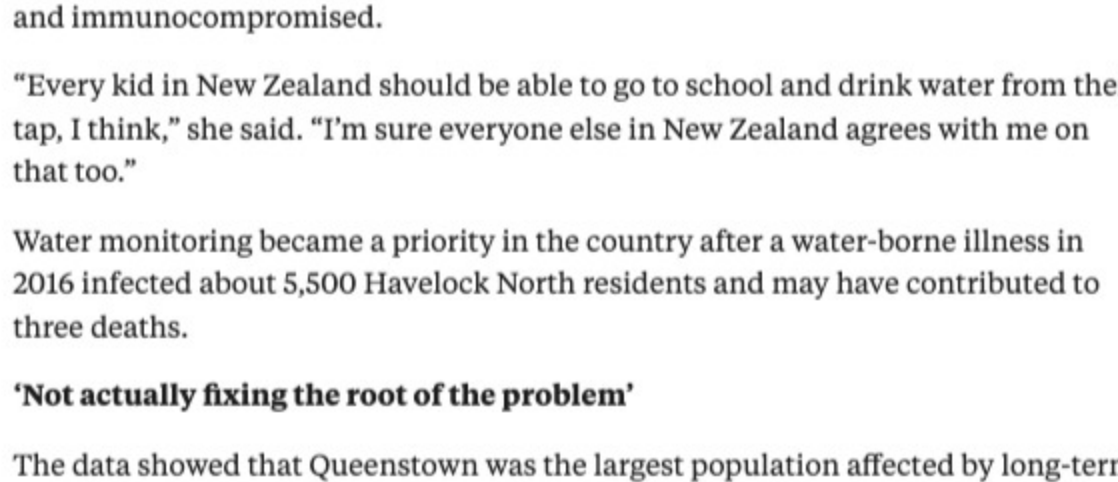
Schools affected

Ten schools across NZ had lasting water issues, most under "do not drink" notices. That means the water is so contaminated that boiling it will not make it safe. People then need to use bottled water for drinking, cooking and possibly washing hands.

Robert van Bentum, the chief adviser of water services at the Ministry of Education, wrote in an email that the long-term advisories were caused by chemical contamination, and the ministry was working to remedy the issues.

"The ministry takes a safety-first approach to ensuring school drinking water is safe," he wrote. "Whenever drinking water is found to be unsafe due to bacteria or chemical contamination, then an alternative drinking water supply is arranged until the issue is resolved."

Van Bentum wrote that four advisories have been fixed, "full upgrades" at three schools were slated to be finished by the end of July 2024, and the agency is working to finalise the scope of fixes for the remaining three schools.



The MCE takes a "safety-first approach to ensuring school drinking water is safe".
(Image: Mark Mitchell)

Smith said it's important to keep the water clean for everyone, but the consequences of consuming contaminated water are more severe for the young, old and immunocompromised.

"Every kid in New Zealand should be able to go to school and drink water from their tap, I think," she said. "I'm sure everyone else in New Zealand agrees with me on that too."

Water monitoring became a priority in the country after a water-borne illness in 2016 infected about 5,800 Hawke's Bay residents and may have contributed to three deaths.

'Not actually fixing the root of the problem'

The data showed that Queenstown was the largest population affected by long-term water quality issues. A boil water notice imposed in September 2023 affected 44,708 people and lasted until December.

However, according to the analysis, most of the advisories were in rural pockets across the country from 2021 to 2024 and affected the water supply of 90,587 people.

In at least three instances, BusinessDesk found repeated long-term consumer advisories issued about the same water source maintained by the same supplier:

- The Glenkerich Rural Water Scheme, operated