



# Factsheet: Drinking Water Regulation Report 2024 and Network Environmental Performance Report 2023/24

## Introduction

The Water Services Authority – Taumata Arowai has published two reports to make water sector performance more transparent to support performance uplift over time.

1. **Drinking Water Regulation Report 2024** (DWRR) addresses drinking water supplier performance. It includes data and information for 1 January to 31 December 2024 provided by registered drinking water suppliers and accredited laboratories about the safety and sufficiency of the drinking water they supply.
2. **Network Environmental Performance Report 2023/24** (NEPR) includes data and information for the period 1 July 2023 to 30 June 2024 provided by operators of publicly owned drinking water and wastewater networks, as well as some information about urban stormwater networks.

This is the fourth time the Authority has published the DWRR and the second year the DWRR includes reporting against the Drinking Water Quality Assurance Rules. It is the second time the Authority has published the NEPR.

## Drinking Water Regulation Report 2024

### Key facts and figures

#### *Drinking water safety*

- 220 laboratory notifications of *E. coli* detections in 2024, down 32% from 325 in 2023.
  - 46 laboratory notifications of *E. coli* from 19 council supplies – all except one had the required bacterial treatment barriers in place.
  - In many (particularly rural) supplies, the number of *E. coli* exceedances remain high.
- 381 laboratory notifications of chemical MAV exceedances – slightly up from 2023 (369 notifications).
- 18 suppliers did not notify us at all in 2024 for one or more of their supplies where a MAV was exceeded.
- 565 supplier notifications that drinking water is, or may be, unsafe – 128 fewer than the 693 notifications in 2023.
- 106 temporary consumer advisories active during 2024, and 113 long-term consumer advisories.
- 93 long term advisories that were in place before 2024, and 20 were initiated in 2024. 18 long-term advisories were closed and 21 are now covered by an exemption granted to the Department of Conservation, leaving 74 long-term advisories in place at year end.
- 20 council supplies serving 7,000 people have had long-term advisories in place for three or more years. 16 of these supplies lack one or more critical safety barrier.
- Proportion of supplies that have lodged a drinking water safety plan (DWSP) has increased from 59% of supplies in 2023 to 74% in 2024.

## Schools

- Drinking water quality at many schools that supply their own drinking water is compromised.
- Nationally, about 19% of all schools self-supply their drinking water. These schools are often located in rural or remote locations.
- More than half of laboratory notifications of *E. coli* detections were from self-supplied schools. In 2024, 71 schools reported at least one incidence of *E. coli* in their drinking water, which indicated that faecal bacteria was present, potentially making students and their teachers sick and miss out on vital classroom time. 24 schools had repeat exceedances of *E. coli*.
  - This is a decrease from 2023 – where *E. coli* detections affected 81 different school supplies, and 29 schools had repeat exceedances.
- Self-supplied schools account for nearly half (45%) of temporary consumer advisories – most due to *E. coli* detections.
- Most self-supplied schools have bacterial treatment barriers in place – however many of these barriers are likely not being operated or maintained effectively.
- 81% of self-supplied schools tested for *E. coli* between October and December 2024 – slightly less than 84% in the same period in 2023.
- We received five laboratory notifications of chemical MAV exceedances for self-supplied schools in 2024, an increase from only one in 2023. It is encouraging to see increased awareness of the risk of chemical contamination at self-supplied schools.
- The Ministry of Education has been progressing work to install treatment barriers in 17 self-supplied schools. At the end of 2024, six of the schools had met treatment barrier requirements, and 10 of the remaining 11 had plans for installation of an alternative solution by December 2025.
- 36% of self-supplied schools have lodged a DWSP, an increase from 13% in 2023. Many schools that have not lodged a DWSP are likely to be able to rely on an acceptable solution.
- We received reporting for less than 1% of school supplies required to report on the Rules.

## Source water

- There has been an improvement in source water monitoring performance by councils, with 69% of supplies meeting all or almost rules in this category, compared to 44% of supplies in 2023. These supplies serve approximately 2.8 million people.
- We did not receive any reports for 10% of supplies, an improvement from 2023 when 21% of supplies did not provide reports.
- Most council surface water sources continue to be assessed as being medium or high risk of cyanobacteria.
- *E. coli* continues to be detected in all source waters, including deep bores.
  - Detection rate of *E. coli* in bores > 30 metres deep dropped from 5% (2023) to 1% of samples in 2024.
- Nitrate is an emerging risk in some parts of New Zealand.

- Seven supplies reported at least one source water sample result between 50 – 100% of the MAV, and two supplies reported samples above the MAV. This is an increase from 2023 where no source water samples for registered supplies were above the MAV for nitrate.

### *Supplier performance*

- Significant improvement in council supplier reporting by the due date – increasing from 76% in 2023 to 92% in 2024. Biggest improvement for rural councils – going from 66% in 2023, to 90% in 2024.
- Significant improvement in reporting by the due date by the New Zealand Defence Force – from no supplies in 2023 to 88% of supplies in 2024.
- Councils are improving their performance across all rules categories.
  - Significant improvements in performance against bacterial monitoring rules – over two-thirds (71%) of council supplies meeting all or almost all requirements, compared to less than half (47%) in 2023.
  - Councils need to significantly improve their performance against distribution safety assurance rules – 34% of large council supplies are meeting all or almost all rules in 2024, compared to 22% in 2023.
- In 2024, an additional 119,000 gained access to drinking water from council and government supplies that have the required treatment barriers in place, following action taken by the Authority. By June 2025, this number had increased (by a further 74,000) to 193,000 people to have access to water with a barrier installed.
- As at December 2024, about 289,000 people in New Zealand were served by council or government supplies that lacked one or more critical barriers.

### *Community and private supplies*

- There is also a very low proportion of community and private supplies that have registered with the Authority.
- Only 533 community and private supplies have registered with the Authority – serving 74,000 people. This is an increase from 472 supplies in 2023. Modelling estimates that more than 800,000 people are provided with drinking water by community and private supplies.
- In 2024, we received 40 laboratory notifications of *E. coli* detections, and 11 notifications of chemical MAV exceedances. These numbers could indicate that community and private supplies are not regularly testing for bacterial and chemical contamination.
- We also received 39 laboratory notifications of *E. coli* detections and seven laboratory notifications of chemical MAV exceedances for unregistered community and private supplies.

### *About drinking water suppliers and supplies*

- 547 suppliers that own and operate 1,528 supplies have registered with the Authority and confirmed their registration details with us.
- Serving 4.4 million people – 83% of the population.
- Local and central government are by far the largest providers of drinking water.

# Network Environmental Performance Report 2023/24

## Key facts and figures

This report shines a light on how network operators are performing against some key environmental performance measures and provides insights on best practice and highlights areas for improvement.

The report incorporates more data on drinking water than last year and data collected on wastewater for the first time. We will require more wastewater reporting and intend to start developing measures for stormwater from 2025.

### *About our assets*

- 682 drinking water treatment plants, with 53 000 km of pipes.
  - 1 drinking water treatment plant serves 19 times as many people in urban areas compared to rural areas.
- 328 wastewater treatment plants, with 33 000 km of pipes.
  - 1 wastewater treatment plant serves 22 times as many people in urban compared to rural areas.

## Drinking water network performance

### *Protection of environmental and public health*

- 728,000,000 m<sup>3</sup> of water was reported as supplied to the drinking water network over the 2023/24 year – with 64% coming from surface water (rivers, lakes, creeks and streams), and 36% from groundwater.
- 11% of water take consents were reported to have not met their consent conditions for the rate or volume of water abstracted.
- 106 abstraction points may be non-compliant with the measurement and reporting of water takes amendment regulations – that requires councils to install devices when flow rates of take are above a certain level.

### *Efficiency of services*

- More water was extracted compared to last year. 59% of network operators reported taking a greater volume of water compared to last year – leading to a 12% increase in total volume taken. Rural areas provide a much higher water supply per person.
- Median household water use across New Zealand is 604 litres per connection per day compared to 758 litres per connection per day in 2022/23.
- Water loss is very high in some parts of the country. Of those that did report, 32% of network operators had at least one network with the worst water loss rating of above 8 - indicating an inefficient network with poor maintenance and asset condition.
- Metropolitan urban areas have much higher numbers of households with water meters (80%) compared to 44% in rural or provincial areas.

### *Reliability of services*

- Compared to last year, councils reported that the total length of pipes that have had their condition graded has gone up significantly from 55% to 81%.

- Of the pipes that were graded, we found that 16% of pipes were in poor condition.
- 11% of network operators are operating at below their own reference levels for pressure.

#### *Economic sustainability of services*

- Rural councils are spending more than double per person than large metropolitan councils.

#### *Resiliency of services*

- The number of days where network operators reported water restrictions was up more than three times from 2022-23, which was a particularly wet summer in some regions of New Zealand.
- Sixty-five per cent of network operators reported they have a water conservation programme in place, up from 58% last year.
- This year 92% had assessed their critical assets up from 78% last year.

#### **Wastewater network performance**

- Just 40% of rural and provincial wastewater receive the highest standards of treatment (tertiary) compared to 75% in urban areas.
- 20% of wastewater treatment plants are operating under expired resource consents, and 52% require re consenting in the next decade.
- Wastewater overflows direct into the environment without treatment are a common risk. However, verbal reporting is the most common method of monitoring overflows – used by 80% of network operators. There were much lower levels of real-time or predictive monitoring.