

Annual Report on Drinking- water Quality 2018–2019

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Key findings

This report discusses compliance among all 490 registered networked drinking-water supplies that served populations of more than 100 people (the supplies) from 1 July 2018 to 30 June 2019 (the reporting period), representing 4,077,000 people (the report population), against the drinking-water requirements of the Health Act 1956 (the Act) and the Drinking-water Standards for New Zealand 2005 (Revised 2018) (the Standards). It also discusses changes to the Act and the Standards that occurred during this reporting period and other work undertaken by the Ministry of Health to improve drinking water for New Zealand.

During the reporting period, the Ministry of Health prepared and submitted the Health (Drinking Water) Amendment Bill to Cabinet. The Health (Drinking Water) Amendment Act 2019 received the Royal assent on 31 July 2019 and entered into force on 1 August 2019. The amendments that Act introduces are just a small part of the government response to the Havelock North Drinking Water Inquiry, and will improve the effectiveness and efficiency of the current framework while Government considers advice and makes further decisions on the future regime for drinking water.

Changes to the Act include removal of a prescribed three-year consultation period, strengthened requirements for suppliers to comply with the Standards, changes to the definition of “all practicable steps”, removal of examples of source protection (to be replaced with Ministry guidelines), a requirement for suppliers to ensure water safety plans (WSPs) are implemented in accordance with the agreed timetable and to manage and control critical points identified in their WSPs, and changes to the appointment criteria of drinking-water assessors.

In December 2018, Hon Dr David Clark, Minister of Health, made a number of urgent and minor changes to the Standards, issuing the current Standards to supersede the Drinking-water Standards for New Zealand 2005 (Revised 2008). The current Standards came into force on 1 March 2019. The changes include a requirement to monitor total coliforms, a requirement to carry out enumeration testing for *Escherichia coli* (*E. coli*) and total coliforms, changes to the protozoal log removal Standard, and other minor and editorial changes.

The Act groups drinking-water supplies into size categories according to the population they serve: large (more than 10,000 people), medium (5,001–10,000 people), minor (501–5,000 people) and small (101–500 people).

During the reporting period:

- 97.1 percent of the report population (3,960,000 people in 405 supplies) received drinking water that complied with all the legislative requirements under the Act covered in this report
- 98.9 percent (4,033,000 people in 473 supplies) received drinking water from a supply with a WSP for which implementation had commenced
- 99.9 percent (4,074,000 people in 475 supplies) received an adequate supply of water with appropriate notification of any interruptions

- 100 percent (4,075,000 people in 479 supplies) received drinking water from a supply for which appropriate source protection activities took place
- 99.7 percent (4,066,000 people in 444 supplies) received drinking water that met all the monitoring requirements in the Standards
- 100 percent (4,076,000 people in 481 supplies) received drinking water from a supplier that recorded and investigated all complaints
- 99.3 percent (4,049,000 people in 470 supplies) received drinking water from a supplier that took adequate remedial action when required.

Achievement against the Standards was generally highest among the large supplies, and decreased progressively through supplies in medium, minor and small categories.

For overall achievement of the Standards, a supply must meet the bacteriological, protozoal and chemical requirements, which include adherence to the prescribed sampling and monitoring schedule. In the reporting period, 76.2 percent of the report population (3,107,000 people) received drinking water from supplies that achieved all the Standards.

During the reporting period, 95.3 percent of the report population (3,885,000 people) received drinking water that achieved the bacteriological Standards: an increase of 3.7 percent compared with the previous period. Achievement of the protozoal Standards increased by 3.9 percent, from 74.8 percent to 78.7 percent (3,209,000 people received drinking water that achieved the protozoal Standards). Achievement of the chemical Standards decreased by 1.4 percent, from 98.9 percent to 97.5 percent (3,975,000 people received drinking water that achieved the chemical Standards).

1 Introduction

This report meets the requirement under the Health Act 1956 (the Act) for the Director-General of Health to prepare and publish a report on drinking water each year, which includes information about the quality of drinking water, including whether that drinking water is potable; and the compliance or non-compliance of drinking-water suppliers with the Act and the *Drinking-water Standards for New Zealand 2005 (Revised 2018)* (the Standards).

This report discusses drinking-water compliance for all 490 registered networked drinking-water supplies that served populations of more than 100 people (the supplies) from 1 July 2018 to 30 June 2019 (the reporting period), representing 4,077,000 people (the report population). It also discusses changes to the Act and the Standards that occurred during this reporting period and other work undertaken by the Ministry of Health to improve drinking water for New Zealand.

The Act groups drinking-water supplies into size categories according to population they serve: large, medium, minor and small (Table 1). Community supplies serving less than 101 people and self-supplies are not included in this report, as the Ministry of Health does not gather this information.

Table 1: Supply type, number of supplies and total population served

Supply type	Total no. of supplies	Total population served	Percentage of total population
Large (more than 10,000 people)	42	3,462,000	70.4
Medium (5001–10,000 people)	26	179,000	3.6
Minor (501–5000 people)	191	378,000	7.7
Small (101–500 people)	231	58,000	1.2
Other*	Unknown	840,000	17.1
Total	490	4,917,000	100

*These supplies consist mostly of self-suppliers (rain-water tanks and bores) and very small community supplies

The remainder of this report covers:

- a summary of changes to drinking-water regulations (section 2)
- information on methods (section 3)
- reporting on suppliers' compliance with the Act (section 3)
- reporting on suppliers' achievement of the Standards (section 4).

The Act aims to protect public health by ensuring that communities receive a safe, wholesome and adequate supply of drinking water. The Act uses risk management concepts to promote

proactive measures, including water safety plans (WSPs) and appropriate monitoring of drinking-water quality.

The focus of drinking-water safety is risk management. The Act requires all supplies serving 501 or more people to have a WSP, which helps suppliers identify, manage and minimise risks. The Standards prescribe the maximum acceptable values of micro-organisms and chemicals that may be present in drinking water.

Appendix 1 provides details of each individual supply and its achievement against the Standards and the requirements of the Act.

2 Changes to Drinking-water Regulations

2.1 Amendments to the Health Act 1956

During the reporting period, the Ministry of Health prepared and submitted the Health (Drinking Water) Amendment Bill to Cabinet. The Health (Drinking Water) Amendment Act 2019 came into force on 1 August 2019 and amended the Health Act 1956 (the Act). As it came into force after this reporting period, the changes it introduced do not impact the compliance reporting in this report. However, we provide a simple summary of the changes it brought in here, so the reader will have a better understanding of work being undertaken to improve the regulatory regime for drinking water in New Zealand.

The new amendments are just a small part of the government response to the Havelock North Drinking Water Inquiry, and will improve the effectiveness and efficiency of the current framework while Government considers advice and makes further decisions on the future regime for drinking water.

2.1.1 Simple summary of main changes

The Health (Drinking Water) Amendment Act introduced changes in the following areas.

Consultation period: The Minister can now make changes to the *Drinking-water Standards for New Zealand 2005 (Revised 2018)* (the Standards) without having to go through a prescribed three-year consultation period plus a two-year notice period for changes that are other than minor or urgent. Appropriate consultation is still required.

Compliance with the Standards: Suppliers must now comply with the Standards. Previously, they only had to take all practicable steps to comply. A supplier that is prosecuted for non-compliance will still have a legal defence if they can demonstrate that they had taken all practicable steps. So, while the legal rights of suppliers are retained, the substantive duty has been altered in favour of mandatory compliance with the Standards.

Definitions: The definition of "all practicable steps" has been redrawn. The six considerations that make up the test of whether a step is practicable under the circumstances now have equal weighting. Previously, two of the considerations (the 'availability' and 'affordability' of steps) were given precedence over others, including the protection of public health. Now, where a supplier

elects to rely on unaffordability as the reason why a particular step is not practicable, they are required to provide clear evidence and justification to the assessor.

Source protection: Examples of steps that constitute a supplier contributing to the protection of the source of their water have been removed from the Act. In their place, the Ministry has published guidance on their website:

<https://www.health.govt.nz/our-work/environmental-health/drinking-water/drinking-water-legislation#section69u>

This guidance will assist suppliers and public health unit staff on how to interpret the remaining duty.

Water safety plans (WSPs): Suppliers must implement WSPs in accordance with the agreed timetable, and must manage and control the critical points identified in their WSPs. A supplier's implementation of the provisions of its approved WSP that relate to the Standards must be to the satisfaction of the assessor.

Appointment of drinking-water assessors: the specified process for appointment of drinking-water assessors has been amended to remove the requirement for assessors/agencies to be accredited, and the Act now clarifies that "individuals" are appointed as assessors.

2.2 Amendments to the Standards

Under the Act, suppliers are required to comply with the Standards. As well as specifying the maximum allowable concentrations of contaminants in drinking water, the Standards specify criteria for demonstrating compliance (including sampling frequencies and testing procedures).

In December 2018, Hon Dr David Clark, Minister of Health, made a number of urgent and minor changes to the Standards, issuing the current Standards to supersede the *Drinking-water Standards for New Zealand 2005 (Revised 2008)*. The current Standards came into force on 1 March 2019. They are available on the website of the Ministry of Health:

<https://www.health.govt.nz/publication/drinking-water-standards-new-zealand-2005-revised-2018>

The changes are briefly summarised below. Please note this is only a summary of the changes; anyone using the Standards should take the time to read them in their entirety.

2.2.1 Requirement to monitor total coliforms

The Standards now require suppliers to monitor total coliforms.¹ A high total coliform reading does not necessarily pose a risk to human health, as the subset of faecal coliforms, and

¹ Coliforms are a broad class of bacteria found in our environment, not all of which present a risk to public health. *Total coliforms* include bacteria that are found in the soil, in water that has been influenced by surface water, and in human or animal waste. *Faecal coliforms* are the subset of the total coliforms that are present in the gut and faeces of animals, and may be disease-causing.

specifically *Escherichia coli* (*E. coli*), is recognised as the primary indicator that a supply may be contaminated with pathogens. However, total coliforms are a useful indicator of drinking-water quality, and monitoring them may detect abnormalities and changes in quality over time. Monitoring of total coliforms may warn a supplier that water quality is changing such that further testing and assessment is appropriate. The Standards now require monitoring of total coliforms, but do not include maximum values for total coliforms, as advice on responding to changes in total coliforms will be included in the Ministry's Drinking-water Guidelines. Suppliers' WSPs will specify actions to take in response to particular findings of total coliforms.

2.2.2 Requirement to carry out enumeration testing for *Escherichia coli* and total coliforms

Under the previous Standards, for routine monitoring of supplies, it was sufficient to carry out a presence/absence test to determine if *E. coli* was present. If present, the Standards required water suppliers to carry out an enumeration test to quantify the result and more accurately assess the level of risk. However, this creates a risk of delay of one to two days in supplier response to a microbiological contamination event that constitutes a significant and readily avoidable risk to public health. A programme of routine enumeration tests shortens the time required for re-testing and therefore improve the timeliness of response to contamination. This will significantly reduce risk to public health.

Exceptions for emergency response are permitted in the Standards; the requirement for enumeration testing could be waived following, for example, an earthquake if access to, or functionality of, laboratories is affected.

2.2.3 Clarification of protozoal log removal Standard to reflect scientific evidence of risk

The default protozoal log removal requirement for surface water source water has been changed to require at least 3-log inactivation/removal instead of relying on ambiguous qualitative catchment descriptors. There is no change to the maximum acceptable value in supplied drinking water.

Currently, suppliers are expected to conduct a catchment risk assessment and establish an appropriate log reduction for each raw water source. Conducting an individual risk assessment is expensive and onerous.

Advice from Massey University and the results of investigations by water suppliers indicate that the presence of protozoa is low in New Zealand raw waters, and a default 3-log reduction will manage the risk to public health in drinking-water suppliers.

This change provides greater clarity to suppliers, reduces the cost of source-specific risk assessments and will not increase risk to the public.

2.2.4 Removal of duplicated requirements for tankered drinking-water carriers

The prescriptive requirements for tankered drinking-water carriers have been removed from the Standards, as they are mandated through Part 2A of the Act. The supporting technical advice and points of clarification have been moved from the Standards to the Guidelines. This will put a more appropriate emphasis on the WSP procedures that carriers are currently required to implement. It does not reduce or alter the obligations of tankered drinking-water carriers.

2.2.5 Removal of duplicated requirements for record-keeping

Section 13 of the previous Standards, which set detailed reporting requirements, duplicated the requirements for record-keeping in Part 2A of the Act. The duplicated sections have been removed and the supporting technical advice and points of clarification moved from the Standards to the Guidelines, to allow for the provision of advice that complements existing statutory duties in the Act. This does not reduce or alter the substantive monitoring and record-keeping duties.

2.2.6 Editorial changes

Typographical errors, sections that required clarification and sections that needed streamlining have been dealt with. The passive voice has been replaced with the active voice (directive language) to emphasise the duties of suppliers.

2.3 New Water Safety Planning Framework

The Government's inquiry into Havelock North Drinking Water resulted in the *Report of the Havelock North Drinking Water Inquiry: Stage 2* (the Stage 2 Report), published in 2017. This made a number of recommendations in relation to drinking-water safety planning, including review of the Ministry of Health's water safety planning framework. The Ministry accordingly commissioned experts to review and revise this framework and supporting guidelines.

The Ministry published its new Drinking-water Safety Plan Framework in December 2018 and a *Handbook for Preparing a Water Safety Plan* in May 2019.

A WSP is essential to the good management of a drinking-water supply. The Act requires certain drinking-water suppliers to have and implement a WSP. While the Act describes the statutory requirements for a WSP and incorporates the principles of public health risk management in

those requirements, the new framework aligns New Zealand more closely with current international best practice and World Health Organization guidance.

The New Zealand framework outlines specific requirements that the Ministry of Health expects water suppliers to meet when formulating a WSP. The framework consists of 10 components and a number of sub-components. A list of criteria (specific requirements) accompanies each of the sub-components.

The handbook provides specific guidance for suppliers on how to meet the criteria set out in the framework. For each of the 10 components of the framework, it sets out what the WSP should contain and the supplier's relevant responsibilities. It provides greater detail about the required content of the WSP, including examples.

The Ministry expects it will be five years before every WSP is approved in the new framework. The Act allows assessors to approve WSPs for up to five years, and approvals cannot be rescinded. Most suppliers have approved WSPs in place that will require renewal at some point in the next five years. Renewing WSPs under the new framework may require significant work on the part of suppliers; the Ministry has advised suppliers to anticipate a 6–12-month development timeframe, and to consider taking steps towards preparing a new WSP as soon as possible.

The Ministry provided some leniency for suppliers whose WSPs were due for renewal during 2019, in acknowledgement of the short timeframe to respond to the new framework. During this reporting period, no WSPs were approved that met all of the requirements of the new framework.

The framework is published on the Ministry's website at:

<https://www.health.govt.nz/publication/new-zealand-drinking-water-safety-plan-framework>

The handbook is published on the Ministry's website at:

<https://www.health.govt.nz/publication/handbook-preparing-water-safety-plan>

3 Methods

The Ministry of Health obtained information on drinking-water quality from drinking-water suppliers and drinking-water assessors. Compliance data was extracted from the Ministry of Health's drinking-water database, Drinking-Water Online (DWO).

The following caveats apply for the purposes of data interpretation.

The report includes all registered networked drinking-water supplies that served more than 100 people during the reporting period, based on the information contained in DWO as at 30 June 2018.

A supply may have one or more distribution zones. A distribution zone is part of the drinking-water supply network within which all consumers receive drinking-water of identical quality. It is possible for distribution zones within a single supply to exhibit different rates of achievement against the Standards.

The population statistics in this report are calculated from the supply populations as recorded in DWO. These figures are estimates, reassessed from time to time by each supplier.

Population figures in this report are rounded to the nearest thousand, except when they are less than 10,000, when they are rounded to the nearest hundred.

Compliance against the requirements of the Health Act 1956 (the Act) is assessed for a whole supply based on information collected by questionnaires completed by suppliers. Information about achievement against the Standards is entered into the database by drinking-water suppliers, laboratories and drinking-water assessors.

Data quality assurance was built into the data collection and analysis stages of report preparation. In addition, assessors and suppliers were given the opportunity to review the assessment of individual suppliers' compliance with the Act and achievement against the Standards, with the exception of the requirements for monitoring and remedial action. Prior to data collection, assessors were given training in the use of the annual compliance component of DWO.

4 Compliance with the Health Act 1956

4.1 Introduction

This section discusses the extent to which drinking-water suppliers met the requirements of the Health Act 1956 (the Act) during the reporting period. Briefly, the requirements of the Act are as follows.

- **Water safety plans (WSPs):** Every supplier, with the exception of small suppliers, must implement an approved WSP, and review it within five years of approval.
- Compliance with the *Drinking-water Standards for New Zealand 2005 (Revised 2018)* (the Standards): Every supplier has a duty to comply with the Standards.
- **Provision of drinking water:** Every supplier must take all practicable steps to ensure it provides an adequate supply of drinking-water to each point of supply. Interruptions may occur for planned maintenance, for improvements or for emergency repairs. However, if an interruption is likely to exceed eight hours, the supplier must have prior approval from the medical officer of health, and must have taken all practicable steps to warn affected people. If a supply is interrupted in an emergency, the supplier has 24 hours to inform the medical officer of health.
- **Source protection:** Every supplier must take reasonable steps to protect its water sources from contamination and pollution.
- **Monitoring:** Every supplier must monitor the drinking-water it supplies, to check whether it meets the Standards.
- **Record-keeping:** Every supplier, with the exception of small suppliers, must keep records of its drinking-water supplies, containing sufficient information to enable a drinking-water assessor to ascertain whether the supplier is meeting the requirements of the Act.
- **Complaints:** Every supplier must record and investigate complaints about its supply.
- **Remedial actions:** Every supplier must take appropriate remedial action to correct problems if its supply does not meet the Standards.

4.2 Overall compliance with the Health Act 1956

The Act places specific duties on suppliers that are key to protecting the safety of supplies. During the reporting period, 97.1 percent of the population received drinking water from fully compliant suppliers. This is a 5.9 percent increase since the previous reporting period.

Table 2 shows the proportion of the population that received drinking water from fully complying suppliers for each requirement during the current and previous reporting periods.

Table 2: Compliance with the Act in previous and current reporting periods

Requirement	2017/18	2018/19	Difference
Monitoring	99.7%	99.7%	0.0%
Water safety plans	99.3%	98.3%	1.0%
Provision of drinking water	93.1%	99.9%	6.8%
Source protection	99.9%	100%	0.1%
Records	99.5%	99.0%	-0.5%
Complaints	99.9%	100%	0.1%
Remedial action	99.1%	99.3%	0.2%
Compliance with all requirements	91.1%	97.1%	5.9%

Note: The 2017/18 and 2018/19 columns show percentages of the reported population served. The difference column is 2018/19 minus 2017/18 values. Original values and calculations were performed on actual values, then rounded to one decimal place.

4.3 Comparison by size category

The four supply size categories used in this report are large (more than 10,000 people), medium (5,001–10,000 people), minor (501–5,000 people) and small (101–500 people). Large supplies accounted for 3,462,000 people in 42 supplies. Medium supplies accounted for 179,000 people in 26 supplies. Minor supplies accounted for 378,000 people in 191 supplies. Small supplies accounted for 58,000 people in 231 supplies.

Overall, compliance with the Act was highest among large supplies: 99 percent of the large-supply population received drinking water from suppliers that met all their legislative requirements. The equivalent figures were 87.8 percent, 87 percent and 78.7 percent of populations served by medium, minor and small supplies, respectively.

Table 3: Compliance with the Act, by supply size

Requirement	Large	Medium	Minor	Small
Monitoring	100%	100%	99.4%	84.5%
Water safety plans	100%	92.4%	91.9%	N/A
Provision of drinking water	100%	100%	100%	94.4%
Source protection	100%	100%	100%	96.7%
Records	99.0%	100%	99.0%	N/A
Complaints	100%	100%	100%	97.2%
Remedial action	100%	95.4%	95.0%	94.6%
Compliance with all requirements	99.0%	87.8%	87.0%	78.7%

Notes:

All percentages are for the reported population served in each size band, rounded to one decimal place.

Small supplies do not have a statutory duty to keep records; nor are they required to prepare a WSP unless directed by a medical officer of health.

4.4 Water safety plans

Water safety plans are a key part of the drinking-water safety system: they are fundamental to a supplier's ability to produce safe drinking water and confidence that the drinking water is safe. Preparing a WSP requires a drinking-water supplier to assess the whole of its water supply chain, from raw water through the treatment processes to the pipe network that carries the drinking water out into the community. During this assessment, a supplier must identify all hazards and hazardous events that may pose a risk to the supply of safe drinking water, and ensure adequate preventive measures are in place to manage those risks. The WSP should state the remedial action the supplier needs to take should contamination occur.

All large, medium and minor supplies must have a WSP. In the reporting period, a total of 17 supplies, serving 44,300 people, did not.

Small supplies are not required to have a WSP unless a medical officer of health requires them to, but they may elect to have one. It is encouraging to see that, in the reporting period, 34,500 people received drinking water from 135 small supplies with an implemented WSP.

Overall, WSPs for supplies serving 98.3 percent of the report population (377 supplies) were being implemented in the reporting period.

The rate of development and implementation of WSPs decreased with reducing supply size. All large supplies now meet the requirement, and 24 of the 26 medium supplies do so. The two that were not served 13,700 people; Thames District Council had an approved plan for the Thames supply but failed to implement it, and Central Otago District Council had an expired plan for the Alexandra supply. 176 of the 191 minor supplies are implementing a WSP. Of the 15 minor supplies not doing so (collectively serving 31,700 people), seven had an approved plan that they were yet to implement, one was drafting a plan, six had expired plans and one had not started a plan.

4.5 Duties

This part of the report covers the remaining legislative requirements under the Act.

4.5.1 Monitoring

The Act requires all supplies covered by this report to monitor their drinking-water quality in accordance with the requirements of the Standards, since monitoring is a key verification

component in managing drinking-water supplies. Monitoring allows a drinking-water supplier to determine whether its drinking-water quality meets that specified by the Standards, and can indicate when remedial action is required.

Overall, supplies serving 99.7 percent of the report population (4,066,000 people) met the monitoring requirements during the reporting period.

Compliance increased with the size of the population served by a supply. Monitoring requirements in the reporting period were met for 100 percent of the population served by large supplies, 100 percent served by medium supplies, 99.4 percent served by minor supplies (2 supplies did not comply) and 84.5 percent served by small supplies (44 supplies did not comply).

4.5.2 Provision of drinking water

Unsanitary conditions can arise when a community is without drinking water; consumers seek other, possibly unsafe, sources of water. To avoid such eventualities, drinking-water suppliers are required to take all practicable steps to ensure an adequate supply of drinking water and, in the event of an interruption, planned or otherwise, to take appropriate action.

Overall, supplies serving 99.9 percent of the report population (4,074,000 people) met this requirement during the reporting period. 15 small supplies serving 3,300 people failed to meet the provision-of-drinking-water requirements.

4.5.3 Source protection

Protecting the quality of source waters is one of the most important components of the multi-barrier approach to drinking-water supply management. Protection of source waters reduces the contaminants that a water treatment system has to deal with, reducing the consequences for public health in the event of treatment failure.

Overall, supplies serving 99.95 percent of the report population (4,075,000 people) met the requirement to take reasonable steps to contribute to the protection of their water sources during the reporting period. Eleven small supplies, collectively serving 1,900 people, failed to meet the source-protection requirements.

4.5.4 Records

Record-keeping assists suppliers and assessors to determine whether a supply meets the requirements of the Act and achieves the Standards. It also helps people unfamiliar with a supply understand the way the supply should be operated and what operational parameters are typical. In the event of a waterborne disease outbreak or any other incident resulting from system failure, well-kept records may assist authorities to understand what has gone wrong and how to prevent the problem in the future.

Overall, supplies supplying 99 percent of the report population (4,037,000 people) sufficiently maintained their records during the reporting period. All medium supplies met the record-keeping requirements. One large and three minor supplies did not. The one large supply was the Waikanae/Paraparaumu/Raumati supply, managed by Kāpiti Coast District Council. Kāpiti Coast District Council was also responsible for two minor supplies that did not meet this requirement – Hautere and Paekākāriki.

4.5.5 Complaints

Complaints about drinking-water quality most often relate to the aesthetic properties of the water (taste, odour and appearance). Drinking-water suppliers need to investigate complaints, because they may inform the supplier of a problem about which they may not otherwise be aware. Consumer concerns about the aesthetic properties of water, if sufficiently severe, may lead to the consumer seeking another source of drinking water. While the alternative source may not have the aesthetic problems associated with the original drinking-water supply, it may contain health-significant contaminants that cannot be detected by human senses.

Overall, in the reporting period, drinking-water suppliers investigated complaints they received about the drinking water supplied to 99.96 percent of the report population (4,075,000 people).

All large, medium and minor supplies met this requirement. Nine small supplies, collectively serving 1,600 people, did not.

4.5.6 Remedial action

The Act requires drinking-water suppliers to take all practicable steps to carry out appropriate remedial action if drinking water is contaminated. Prompt action is required when the contaminants are microbiological, because pathogens can cause acute illness. Drinking-water suppliers must seek to remedy any faults they have identified in their system that may adversely affect the safety of the supply.

Necessary remedial action in response to transgressions was taken in supplies serving 99.3 percent of the report population (4,049,000 people) in the reporting period.

Water suppliers did not take prompt remedial action in 20 supplies, consisting of 1 medium supply (serving 8,200 people) 10 minor supplies (collectively serving 16,800 people) and 9 small supplies (collectively serving 3,200 people).

The medium-sized supplier that did not meet this requirement was Western Bay of Plenty District Council for the Te Puke supply.

4.6 Public health significance of not meeting the requirements of the Health Act 1956

The significance on public health of not meeting the requirements of the Act varies between the different requirements of the Act and on how the supplier failed to meet the requirements.

The requirement to prepare and implement WSPs is of the highest public health significance, as the WSP is the document in which the supplier identifies all of the risks to their supply and how they are managing those risks, as well as other important aspects of their water supply.

The requirement to protect source water ensures that the highest-quality source water is being used to provide drinking water. Any subsequent failure in treatment is less likely to cause illness if the source water is of the highest quality.

The requirement on the supplier to take adequate remedial action once a problem has been identified is of immediate public health significance.

A failure to meet the monitoring requirements may have only minor public health significance; for example, where a supplier fails to monitor on sufficient days of the week, or misses the collection of a single water sample. However, failure of a supplier to monitor at all could have major public health consequences.

Failure to provide an adequate supply of drinking water may have minor public health significance; for example, where planned repairs take longer than expected but affected consumers are well informed. However, if interruptions to supply are protracted or not well communicated and vulnerable consumers are affected, the impact could be significant.

Failure to keep good records and failure to adequately manage complaints may not have a direct public health impact; however, such failures are an indication that a supplier does not have good quality systems in place. Such suppliers may miss picking up on important changes in the supply through customer complaints.

5 Meeting the Drinking-water Standards for New Zealand 2005 (Revised 2018)

5.1 Introduction

Suppliers must meet the *Drinking-water Standards for New Zealand 2005 (Revised 2018)* (the Standards). The Standards have three main components:

- the water **quality Standards**, which specify the maximum acceptable values (MAVs) of a range of microbiological, chemical and radiological properties of drinking water (determinands). The MAVs are set at a level below which there is no significant risk to a consumer over a lifetime of drinking-water consumption
- the **compliance criteria** and **reporting requirements**, which define the checks needed to demonstrate a drinking-water supply is not exceeding the water quality standards. The stringency of these checks reflects the level of risk that the drinking-water supply poses
- the **remedial actions**, which a supplier must take in the event of a transgression. A transgression occurs when the MAV or some operational requirement of the drinking-water supply is exceeded.

In order to meet the Standards, over a 12-month period a supplier must:

- achieve the water quality standards over 95 percent of the time, and
- monitor the drinking water in accordance with the compliance criteria, and
- in the event of a transgression, take remedial actions to protect public health and to prevent the reoccurrence of the transgression.

The Ministry of Health introduced changes to the Standards on 1 March 2019, part way through the compliance monitoring period (see section 2.2). Therefore, in the reporting period, suppliers were assessed against both the old standards (from monitoring undertaken prior to 1 March 2019) and the new Standards (from monitoring undertaken after that date). Overall compliance to both sets of Standards for the 12-month period is presented below.

The Standards are the same for all supplies, because their purpose is to protect people's health. The compliance criteria depend on a number of factors; primarily, the size of the population served by a supply and the nature of the determinand. The criteria balance risks to public health

and costs. To manage public health risks, the more people served by a supply the more monitoring is required, to provide greater certainty that the drinking water meets the water quality standards.

This report presents an assessment of the quality of drinking water in terms of suppliers' achievement of the microbiological and chemical Standards.

Microbiological achievement of a Standard is based on the detection of indicator organisms, combined with assessment of barriers to contamination, rather than measurement of the concentrations of micro-organisms in the drinking water. Microbiological achievement is based on two main microbiological reference organisms, *Escherichia coli* (*E. coli*) and *Cryptosporidium*. **Bacteriological achievement** is determined primarily using *E. coli* monitoring; no *E. coli* should be detected in drinking-water distribution zones. **Protozoal achievement** is based on monitoring the effectiveness of the treatment processes used to remove or inactivate *Cryptosporidium*.

Where a supply meets the chemical Standards, its water, based on current knowledge, is able to be drunk over a lifetime with no adverse health effects. For most chemical determinands an occasional exceedance of the MAV in the Standards is not a significant risk to public health. **Chemical achievement** is assessed for those supplies that have been identified as containing chemicals that require monitoring (known as Priority 2 determinands). A drinking-water supply achieves the chemical requirements of the Standards if it has no Priority 2 determinands, or if it has been adequately monitored and any Priority 2 determinands present are shown to be within acceptable levels.

5.2 Overall achievement of the Standards

Every supplier has a duty to meet the Standards. For overall achievement against the Standards, a supply must meet the bacteriological, protozoal and chemical Standards. It is possible to fail to meet the Standards for technical reasons, such as inadequate sampling, or for reasons that represent a public health concern, such as exceeding the MAV for bacteria in the supply. In the reporting period:

- of the 4,077,000 people receiving drinking water from 490 supplies serving 101 or more people, 76.2 percent (3,107,000 people) received drinking water that fully met **all Standards**
- 95.3 percent (3,885,000 people) received drinking water that fully met the **bacteriological Standards**
- 78.7 percent (3,209,000 people) received drinking water that fully met the **protozoal Standards**
- 97.5 percent (3,975,000 people) received water that fully met the **chemical Standards**.

Table 4 shows the proportion of the population that received drinking water that achieved the Standards during the current and previous reporting periods.

Table 4: Achievement of the Standards in previous and current reporting periods

Standards	2017/18	2018/19	Difference
Bacteriological	91.6%	95.3%	3.7%
Protozoal	74.8%	78.7%	3.9%
Chemical	98.9%	97.5%	-1.4%
Overall	72.6%	76.2%	3.6%

Note: The 2017/18 and 2018/19 columns show percentages of the reported population served. The difference column is 2018/19 minus 2017/18 values. Original values and calculations were performed on actual values, then rounded to one decimal place.

5.3 Comparison by size category

Tables 5, 6, 7 and 8 show achievement of Standards for each size category. Larger supplies demonstrated a higher level of achievement than smaller supplies.

Table 5: Achievement of Standards: large supplies

Standard	Population	Percentage	Supplies
Bacteriological achievement	3,409,000	98.5%	38
Protozoal achievement	2,897,000	83.7%	32
Chemical achievement	3,399,000	98.2%	39
Overall	2,816,000	81.3%	27

Table 6: Achievement of Standards: medium supplies

Standard	Population	Percentage	Supplies
Bacteriological achievement	137,000	76.2%	19
Protozoal achievement	106,000	58.9%	15
Chemical achievement	179,000	100%	26
Overall	97,000	54.3%	14

Table 7: Achievement of Standards: minor supplies

Standard	Population	Percentage	Supplies
Bacteriological achievement	303,000	80.2%	151
Protozoal achievement	187,000	49.5%	88
Chemical achievement	340,000	90.0%	172
Overall	176,000	46.6%	81

Table 8: Achievement of Standards: small supplies

Standard	Population	Percentage	Supplies
Bacteriological achievement	36,800	63.4%	140
Protozoal achievement	17,800	30.7%	69
Chemical achievement	56,700	97.8%	227
Overall	16,300	28.1%	62

Note: For tables 5, 6, 7 and 8, the 'Population' and 'Percentage' columns are for the reported population served. 'Population' is the sum of the populations served for all distribution zones (with their treatment plants) by supplies of the size band specified. Therefore, if a supply has multiple zones, the population contributed here may be all, some or none of the supply population as a whole. Populations are rounded to the nearest thousand, or nearest hundred for small supplies. Percentages are rounded to one decimal place. 'Supplies' is a count of supplies that met the relevant Standard in full.

5.4 Meeting the bacteriological Standards

Exceedance of a microbiological MAV is of greater immediate concern than exceedance of a chemical MAV, because of the timescales over which adverse effects are likely to be experienced. Pathogens can cause acute illness following a single contamination event. Those most at risk of infection are infants and young children, the immune suppressed, the sick and the elderly. Immediate remedial action is of paramount importance in response to microbiological exceedances.

During the reporting period, 95.3 percent (3,885,000 people) of the report population were supplied with drinking water that met the bacteriological Standards.

Bacteriological Standards were achieved for supplies providing water to 98.5 percent of people in large supplies, 76.2 percent in medium supplies, 80.2 percent in minor supplies and 63.4 percent in small supplies. This may reflect the increasing cost per capita of effective bacteriological treatment as supply population size decreases.

A total of four large supplies (Cambridge, Feilding, Waikanai/Paraparaumu/Raumati and Richmond/Waimea Industrial) failed to meet the bacteriological Standards during the current reporting period.

In the reporting period:

- 2.5 percent (104,000 people) of the report population received drinking water that was inadequately monitored
- 0.2 percent (9,600 people) of the report population received drinking water that was not monitored
- 0.9 percent (37,500 people) of the report population received drinking water with an excessive number of *E. coli* transgressions

- 0.3 percent (11,300 people) of the report population received drinking water from a supply in which transgressions occurred that were not followed up by appropriate corrective actions.

Where monitoring is inadequate or absent, the population will lack confidence that the drinking-water supplier understands the quality of the drinking water, is aware of any changes in water quality and knows the water is safe to drink.

5.5 Public health significance of bacteriological transgressions

Excessive transgressions, and/or a failure to follow up on transgressions with immediate corrective action, can put public health at risk.

The presence of *E. coli* in water indicates that the water has been contaminated with faeces and inadequately treated, or may result from contamination of the water during post-treatment distribution to the community. In either case, the presence of *E. coli* means that other faecal pathogens could be present in the water that pose a threat to public health. Although the presence of these pathogenic organisms is not monitored, their presence must be assumed; consequently, any detection of *E. coli* in the water must be regarded as a potential risk to public health.

In addition, detection of *E. coli* shows that there has been a failure in the barriers a supply maintains between contaminants and the community. Consequently, suppliers must immediately investigate all *E. coli* transgressions and implement remedial action. Depending on the result of the investigation, they may need to modify the supply's water safety plan.

During the reporting period, suppliers analysed approximately 89,276 *E. coli* monitoring samples; 117 (0.1 percent of samples) tested positive for *E. coli*. During the previous reporting period, suppliers analysed approximately 87,962 monitoring samples; 192 (0.2 percent) tested positive for *E. coli*.

5.6 Meeting the protozoal Standards

During the reporting period, 78.7 percent (3,209,000) of the report population were supplied with drinking water that fully achieved the protozoal Standards (see Table 9). This is an increase of 3.9 percent on the achievement rate for the previous reporting period, when 74.8 percent of people received water that fully achieved the protozoal Standards.

Table 9: Achievement against the protozoal Standards in previous and current reporting periods

Type of supplier	2017/18	2018/19	Difference
Large	79.8%	83.7%	3.9%
Medium	65.7%	58.9%	-6.8%
Minor	43.4%	49.5%	6.1%
Small	30.5%	30.7%	0.2%
Overall	74.8%	78.7%	3.9%

Note: The 2017/18 and 2018/19 columns show percentages of the reported population served. The difference column is 2018/19 minus 2017/18 values. Original values and calculations were performed on actual values, then rounded to one decimal place.

The 10 large supplies that failed to achieve the protozoal Standards were: Whangarei, Cambridge, Hastings Urban, Waikanae/Paraparaumu/Raumati, Ashburton, Christchurch Central, Northwest Christchurch, Rolleston, Queenstown and Wanaka. In the previous reporting period, 14 large supplies failed to achieve the protozoal Standards: Cambridge, Te Awamutu and Pirongia, Hastings Urban, Napier, Gisborne City, Feilding, Levin, Blenheim, Ashburton, Christchurch Central, Northwest Christchurch, Timaru City, Queenstown and Wanaka.

All failures to achieve the protozoal Standards arose from failures in providing or monitoring appropriate plant processes, since protozoa are not monitored directly.

Non-achievement of the protozoal Standards does not necessarily mean that pathogenic protozoa (*Giardia* spp. and *Cryptosporidium* spp.) were present in the drinking water. Achievement of these standards is based on the likelihood that the treatment processes in operation will adequately protect the community if pathogenic protozoa are present in the source water. To achieve this, the supplier must meet one of two requirements. They must either use groundwater meeting the secure bore water criteria of the Standards or have treatment processes in operation that can remove or inactivate an adequate percentage of any protozoa present in the raw source water. The supplier must be able to show that it is operating the treatment processes sufficiently well to meet the target percentage protozoal removal or inactivation.

The reason that a number of large supplies, including Christchurch Central and Napier, failed to comply with the protozoal Standards this year, when they had done so previously, was the loss of secure bore water status.

5.7 Public health significance of protozoal transgressions

The majority of protozoa are fresh water organisms of no public health significance. However, two groups of protozoa can cause adverse health reactions:

- enteric protozoa that live in the gut of humans and other animals, such as some species of *Cryptosporidium* and *Giardia*
- free living organisms that are opportunistic pathogens in humans and may cause serious illness, such as *Naegleria fowleri* and some species of *Acanthamoeba*.

Cryptosporidium has been identified as one of the most significant waterborne human pathogens in developed countries, responsible for a large number of disease outbreaks.

Protozoa can cause illness in people when present in very low numbers; therefore, the presence of any of these organisms in the drinking-water supply can put public health at risk.

5.8 Meeting the chemical Standards

Chemical determinands do not have to be monitored in all supplies, but are assigned as Priority 2 determinands to specific supply components (treatment plants or distribution zones) where treatment or water characteristics indicate levels of chemicals may approach MAVs. Chemicals used for disinfection or other treatment processes are not usually assigned as Priority 2 determinands, because resultant water concentrations of those chemicals generally do not approach MAVs. Nevertheless, they may require monitoring as part of assessing achievement against bacteriological or protozoal Standards. That type of monitoring is external to the assessment of Priority 2 determinands in this chemical achievement section of the report.

For a supply to achieve the chemical Standards, it needs to achieve the Standard for all chemical determinands assigned to the supply's distribution zones, as well as for all chemical determinands assigned to any treatment plant supplying water to those zones. (Distribution zones are parts of the drinking-water supply network within which all consumers receive drinking water of identical quality.)

During the reporting period, 97.5 percent (3,975,000 people) of the report population was supplied with drinking water that met the chemical Standards (see Table 1010); 2.5 percent (102,000 people) received water that did not meet the chemical Standards. Table 10 presents a comparison of chemical achievement between reporting periods.

Table 10: Achievement against the chemical Standards in previous and current reporting periods

Type of supplier	2017/18	2018/19	Difference
Large	100%	98.2%	-1.8%
Medium	95.1%	100%	4.9%
Minor	91.3%	90.0%	-1.3%
Small	97.8%	97.8%	0.0%
Overall	98.9%	97.5%	-1.4%

Note: The 2017/18 and 2018/19 columns show percentages of the reported population served. The difference column is 2018/19 minus 2017/18 values. Original values and calculations were performed on actual values, then rounded to one decimal place.

Note that the high level of chemical achievement for small supplies arises by default, because Priority 2 determinands are usually assigned only to zones with populations exceeding 500.

During the reporting period, 90 supplies, supplying 67.4 percent (2,749,000 people) of the report population, were assigned one or more chemical determinands. The chemical Standards were achieved for water supplied to 97.5 percent (2,680,000) of that population, and not achieved for 2.5 percent (68,700 people).

Fluoride was the most commonly assigned determinand, in terms of population served. Fluoride was assigned to supplies for 2,445,000 people; there was a 99.2 percent achievement of the chemical Standards for this determinand. The concentration of naturally occurring fluoride in drinking-water sources is low in New Zealand, and does not need to be monitored; however, all fluoridated water supplies must monitor and control the level of fluoride added to the drinking water.

The next most commonly assigned chemical determinand was disinfection by-products, assigned to supplies for 211,000 people; there was a 65.7 percent achievement of the chemical Standards for this determinand. Nitrate was assigned to supplies for 53,900 people (100 percent achievement), arsenic to supplies for 34,900 people (73.9 percent achievement) and lead to supplies for 17,900 people (92.2 percent achievement).

Three large supplies failed to meet the chemical Standards. Bream Bay, serving 14,800 people, failed to meet the Standards because a disinfection by-product exceeded the MAV. Auckland failed for their HBC/Waiwera distribution zone serving 35,300 people because disinfection-by products exceeded the MAV, and Tokoroa, serving 13,300 people, failed because its fluoride sampling was inadequate.

5.9 Public health significance of chemical transgressions

In New Zealand, an adult body weight of 70 kilograms and a consumption of two litres of water per day over a lifetime is used to calculate the MAV for chemical determinands. Short-term exceedances of the MAV rarely pose a public health risk.

Supplies exceeded MAVs for the following chemical determinands: disinfection by-products (trihalomethanes, haloacetic acids and dichloroacetic acid), arsenic, copper, fluoride, lead and nickel. Specifically, 13 supplies had exceedances for disinfection by-products, seven supplies had exceedances for arsenic, one supply had exceedance for copper, four supplies had exceedances for fluoride, two supplies had exceedances for lead and one supply had exceedances for nickel.

The Ministry of Health encourages action to reduce the concentration of disinfection by-products, but disinfection itself must not be compromised. The risk posed by a disinfection by-product is considerably less than the risk posed by a pathogenic micro-organism in water that has not been disinfected.

5.10 Monitoring

Four supplies, serving 17,600 people, failed to meet the chemical Standards due to inadequate monitoring. Without monitoring information, water suppliers cannot make well-informed decisions about actions they can take to meet the Standards, and the health significance of concentrations of chemicals assigned to a distribution zone cannot be readily assessed.

Appendix 1: Water Supply Compliance

This appendix provides information on each water supply and whether it complied with the relevant sections of the Health Act 1956 (the Act) and the relevant Standards within the *Drinking-water Standards for New Zealand 2005 (Revised 2018)* (the Standards). It groups supplies by health district within New Zealand, listed in north-to-south order. Within each health district, suppliers and supplies are listed alphabetically.

For all supplies, this appendix provides information about the supply's source water (that is, where the water comes from), its routine disinfection processes (that is, what steps the supplier takes to make the water safe to drink) and any boil-water notices put in place during the year (a supplier issues a boil-water notice to tell residents they must boil their water before drinking it due to the risk of contamination).

If the supply has complied with the Act and meets the Standards, the appendix gives no further detail.

The Health Act 1956

Supplies are assessed against the following sections of the Act for the previous year. Where a supply failed to meet the requirements of the Act, the appendix provides an explanation.

Section	Requirement	Description of the supplier's duties under this section
69S	Adequate provision of water	The supplier must take all practicable steps to ensure an adequate supply of drinking water is provided to each point of supply
69U	Source protection	The supplier must take reasonable steps to protect the water from contamination
69Y	Monitoring frequency in accordance with the Standards	The supplier must monitor the drinking water to check whether it meets the Standards or presents a public health risk
69Z	Water safety plan	The supplier is required to prepare and implement a water safety plan (WSP) and have it approved by a drinking-water assessor, with the exception of small suppliers. The supplier must review its WSP at least every five years
69ZD	Adequate records	The supplier must keep records containing sufficient information to allow a drinking-water assessor to assess whether it complies with the Act
69ZE	Investigation of complaints	The supplier must record and investigate all complaints about the water it provides

Section	Requirement	Description of the supplier's duties under this section
69ZF	Appropriate remedial actions following monitoring transgression	If the supply does not meet Standards, the supplier must take appropriate steps to correct the problem

The Standards

If a supply failed to meet the bacterial, protozoal or chemical Standards, the appendix provides additional information about why it did so. More information may be available from suppliers themselves.

Northland

Supplier: Carrington Farms Jade LP

Carrington Estate Population: 120

Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**

The water supply uses surface water and is treated by UV and chlorinated.

Supplier: Doubtless Bay Water Supply Co

Doubtless Bay Population: 2,000

Health Act: **complied** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**

The water supply uses mixed sources and is treated by UV and chlorinated.

Doubtless Bay failed the bacteriological Standards because sampling was inadequate, and failed the protozoal Standards because there were calibration issues.

Supplier: Far North District Council

Kaikohe Population: 4,200

Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**

The water supply uses mixed sources and is treated by UV and chlorinated.

Kaitiāia Population: 5,400

Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**

The water supply uses surface water and is treated by UV and chlorinated.

Kawakawa/Moerewa Population: 3,500

Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**

The water supply uses groundwater and is chlorinated.

Kerikeri Population: 6,700

Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**

The water supply uses surface water and is treated by UV and chlorinated.

Okaihau Population: 800

Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**

The water supply uses groundwater and is treated by UV and chlorinated.

Omanaia Population: 180

Health Act: **not compliant** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**

The water supply uses surface water and parts of the supply are treated by UV. A permanent boil-water notice was in place during the reporting period.

Omanaia did not take any *Escherichia coli* (*E. coli*) samples for bacterial testing. It therefore failed to comply with the Health Act (section 69Y).

Omanaia failed the bacteriological Standards because sampling was inadequate, and failed the protozoal Standards because compliance was not attempted.

Omapere Population: 900

Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **not met**

The water supply uses surface water and is chlorinated.

Omapere failed the chemical Standards because a disinfection by-product produced as part of the disinfection process exceeded the maximum acceptable value (MAV).

Paihia Population: 4,000

Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**

The water supply uses surface water and is treated by UV and chlorinated.

Rāwene	Population: 600
Health Act: complied Standards: Bacterial met Protozoal met Chemical met	
The water supply uses surface water and is chlorinated.	

Supplier: Hukerenui Community

Hukerenui	Population: 250
Health Act: not compliant Standards: Bacterial not met Protozoal not met Chemical met	
The water supply uses surface water and parts of the supply are treated by UV. A permanent boil-water notice was in place during the reporting period.	
Hukerenui did not take any <i>E. coli</i> samples in some parts of the supply for bacterial testing. It therefore failed to comply with the Health Act (section 69Y).	
Hukerenui failed the bacteriological Standards because sampling was inadequate. It failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance.	

Supplier: Kaipara District Council

Dargaville	Population: 4,683
Health Act: complied Standards: Bacterial met Protozoal met Chemical met	
The water supply uses surface water and is treated by UV and chlorinated.	

Kaihū-Dargaville	Population: 324
Health Act: not compliant Standards: Bacterial not met Protozoal not met Chemical met	
The water supply uses surface water, without disinfection. A permanent boil-water notice was in place during the reporting period.	
Kaihū-Dargaville failed to provide adequate safe drinking water and it did not take any <i>E. coli</i> samples in some parts of the supply for bacterial testing. It therefore failed to comply with the Health Act (sections 69S and 69Y).	
Kaihū-Dargaville failed the bacteriological Standards because sampling was inadequate. It failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance.	

Mangawhai Heads	Population: 200
Health Act: complied Standards: Bacterial met Protozoal met Chemical met	
The water supply uses groundwater and is treated by UV and chlorinated.	

Maungaturoto	Population: 980
Health Act: complied Standards: Bacterial met Protozoal met Chemical met	
The water supply uses surface water and is treated by UV and chlorinated.	

Ruawai	Population: 426
Health Act: complied Standards: Bacterial met Protozoal met Chemical met	
The water supply uses groundwater and is chlorinated.	

Supplier: Ngāti Rēhia Wai Trust

Ngāti Rēhia Wai Trust	Population: 120
Health Act: not compliant Standards: Bacterial not met Protozoal not met Chemical met	
The water supply uses groundwater and is treated by UV and chlorinated.	
Ngāti Rēhia Wai Trust did not take reasonable steps to protect source water from contamination and it did not take any <i>E. coli</i> samples in some parts of the supply for bacterial testing. It therefore failed to comply with the Health Act (sections 69U and 69Y).	
Ngāti Rēhia Wai Trust failed the bacteriological Standards because sampling was inadequate, and failed the protozoal Standards because there were gaps in monitoring.	

Supplier: Pakanae Community Water Supply

Pakanae Population: 160

Health Act: **complied** Standards: Bacterial **not met** Protozoal **met** Chemical **met**

The water supply uses surface water and is treated by UV.

Pakanae failed the bacteriological Standards because *E. coli* was detected in 4.2 percent of monitoring samples.

Supplier: Russell Township-Commercial

Russell Township-Commercial Population: 200

Health Act: **not compliant** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**

The water supply uses groundwater and is treated by UV.

Russell Township-Commercial did not take any *E. coli* samples in some parts of the supply for bacterial testing. It therefore failed to comply with the Health Act (section 69Y).

Russell Township-Commercial failed the bacteriological Standards because sampling was inadequate. It failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance.

Supplier: Waimā Hapū Community

Waimā Hapū Community Population: 200

Health Act: **not compliant** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**

The water supply uses surface water and is treated by UV. A permanent boil-water notice was in place during the reporting period.

Waimā Hapū Community failed to provide adequate safe drinking water and it did not take any *E. coli* samples for bacterial testing. It therefore failed to comply with the Health Act (sections 69S and 69Y).

Waimā Hapū Community failed the bacteriological Standards because sampling was inadequate. It failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance.

Supplier: Whangarei District Council

Bream Bay Population: 14,800

Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **not met**

The water supply uses surface water and is treated by UV and chlorinated.

Bream Bay failed the chemical Standards because a disinfection by-product produced as part of the disinfection process exceeded the MAV.

Maungakaramea Population: 200

Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**

The water supply uses groundwater and is treated by UV and chlorinated.

Whāngārei Population: 56,530

Health Act: **complied** Standards: Bacterial **met** Protozoal **not met** Chemical **met**

The water supply uses mixed sources and is treated by UV and chlorinated.

Whāngārei failed the protozoal Standards because some process measurements exceeded limits.

Supplier: Whangaroa Health Services Trust

Kaeo Hospital

Population: 134

Health Act: **not compliant** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**

The water supply uses surface water and is treated by UV and chlorinated.

Kaeo Hospital did not take any *E. coli* samples in some parts of the supply for bacterial testing. It therefore failed to comply with the Health Act (section 69Y).

Kaeo Hospital failed the bacteriological Standards because sampling was inadequate. It failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance.

Supplier: Whirinaki Water Board

Whirinaki

Population: 400

Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**

The water supply uses surface water and is treated by UV.

North, West, Central and South Auckland

Supplier: Auckland Council

Āwhitu Regional Park Population: 250

Health Act: **not compliant** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**

The water supply uses groundwater and is treated by UV and chlorinated.

Āwhitu Regional Park did not take any *E. coli* samples in some parts of the supply for bacterial testing. It therefore failed to comply with the Health Act (section 69Y).

Āwhitu Regional Park failed the bacteriological Standards because sampling was inadequate, and failed the protozoal Standards because compliance was not attempted.

Matiatia Wharf Population: 800

Health Act: **not compliant** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**

The water supply uses groundwater and is treated by UV and chlorinated.

Matiatia Wharf did not take any *E. coli* samples in some parts of the supply for bacterial testing and it did not have an implemented WSP. It therefore failed to comply with the Health Act (sections 69Y and 69Z).

Matiatia Wharf failed the bacteriological Standards because sampling was inadequate, and failed the protozoal Standards because compliance was not attempted.

Supplier: Beachlands Network Ltd

Beachlands Networks Population: 200

Health Act: **complied** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**

The water supply uses groundwater and is treated by UV and chlorinated.

Beachlands Networks failed the bacteriological Standards because sampling was inadequate, and failed the protozoal Standards because there were calibration issues.

Supplier: BP Oil NZ Ltd, Bombay

Bombay Motorway Services Population: 200

Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**

The water supply uses groundwater and is chlorinated.

Supplier: Glenbrook Irrigation Company

Waiuku, Glenbrook Beach Road Population: 200

Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**

The water supply uses groundwater and is chlorinated.

Supplier: Haranui Whānau

Haranui Whanau Population: 200

Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**

The water supply uses groundwater and is treated by UV.

Supplier: Kingseat Foundation

Kingseat Community Population: 400

Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**

The water supply uses groundwater and is chlorinated.

Supplier: Pine Harbour Holdings Ltd

Pine Harbour	Population: 150
Health Act: complied Standards: Bacterial met Protozoal met Chemical met	
The water supply uses groundwater and is treated by UV and chlorinated.	

Supplier: Southpark Utilities Ltd

Kensington Park	Population: 450
Health Act: not compliant Standards: Bacterial not met Protozoal not met Chemical met	
The water supply uses groundwater and is chlorinated.	
Kensington Park did not take any total coliform samples in the supply for bacterial testing and it did not take all appropriate actions to protect public health after an issue was discovered. It therefore failed to comply with the Health Act (sections 69Y and 69ZF).	
Kensington Park failed the bacteriological Standards because <i>E. coli</i> was detected in 8.3 percent of monitoring samples, it took inadequate actions to address that issue and sampling was inadequate. It failed the protozoal Standards because there were gaps in monitoring.	

Supplier: Veolia Water, Papakura

Burnside Road	Population: 352
Health Act: complied Standards: Bacterial met Protozoal met Chemical met	
The water supply uses surface water and is chlorinated. The water is fluoridated.	
Papakura	Population: 48,513
Health Act: complied Standards: Bacterial met Protozoal met Chemical met	
The water supply uses surface water and is chlorinated. The water is fluoridated.	

Supplier: Village Fields Water Company

Village Fields Subdivision	Population: 152
Health Act: not compliant Standards: Bacterial not met Protozoal not met Chemical met	
The water supply uses groundwater and is treated by UV.	
Village Fields Subdivision failed to provide adequate safe drinking water, it did not take reasonable steps to protect source water from contamination, it did not take any <i>E. coli</i> samples for bacterial testing and it failed to adequately investigate complaints. It therefore failed to comply with the Health Act (sections 69S, 69U, 69Y and 69ZE).	
Village Fields Subdivision failed the bacteriological Standards because sampling was inadequate, and failed the protozoal Standards because compliance was not attempted.	

Supplier: Watercare Services Ltd

Auckland	Population: 1,373,739
Health Act: complied Standards: Bacterial met Protozoal met Chemical not met	
The water supply uses mixed sources and is chlorinated. The water is fluoridated.	
Auckland failed the chemical Standards for 35,272 people in the HBC/Waiwera distribution zone because a disinfection by-product produced as part of the disinfection process exceeded the MAV, while fluoride met the chemical Standards.	
Bombay	Population: 609
Health Act: complied Standards: Bacterial met Protozoal met Chemical met	
The water supply uses groundwater and is treated by UV and chlorinated.	

Helensville/Parakai				Population: 4,579
Health Act: complied	Standards: Bacterial met	Protozoal met	Chemical not met	
The water supply uses surface water and is chlorinated.				
Helensville/Parakai failed the chemical Standards because a disinfection by-product produced as part of the disinfection process exceeded the MAV.				
Huia Village				Population: 597
Health Act: complied	Standards: Bacterial met	Protozoal met	Chemical met	
The water supply uses surface water and is chlorinated.				
Muriwai				Population: 563
Health Act: complied	Standards: Bacterial met	Protozoal met	Chemical met	
The water supply uses groundwater and is treated by UV and chlorinated.				
Snells/Algies				Population: 4,664
Health Act: complied	Standards: Bacterial met	Protozoal met	Chemical met	
The water supply uses groundwater and is treated by UV and chlorinated.				
Waiuku				Population: 8,697
Health Act: complied	Standards: Bacterial met	Protozoal met	Chemical met	
The water supply uses groundwater and is treated by UV and chlorinated.				
Warkworth				Population: 4,111
Health Act: complied	Standards: Bacterial met	Protozoal met	Chemical met	
The water supply uses groundwater and is treated by UV and chlorinated.				
Wellsford/Te Hana				Population: 2,114
Health Act: complied	Standards: Bacterial met	Protozoal met	Chemical not met	
The water supply uses surface water and is treated by UV and chlorinated.				
Wellsford/Te Hana failed the chemical Standards because a disinfection by-product produced as part of the disinfection process exceeded the MAV.				

Waikato

Supplier: Department of Conservation (Whakapapa V)

Whakapapa Village	Population: 200
Health Act: complied Standards: Bacterial met Protozoal not met Chemical met	
The water supply uses surface water and is treated by UV and chlorinated.	
Whakapapa Village failed the protozoal Standards because there were gaps in monitoring.	

Supplier: Fonterra Waitoa

Waitoa	Population: 500
Health Act: not compliant Standards: Bacterial met Protozoal not met Chemical not met	
The water supply uses surface water and is chlorinated.	
Waitoa did not take all appropriate actions to protect public health after an issue was discovered. It therefore failed to comply with the Health Act (section 69ZF).	
Waitoa failed the protozoal Standards because there were gaps in monitoring and record-keeping was inadequate. It failed the chemical Standards because a disinfection by-product produced as part of the disinfection process exceeded the MAV and it took inadequate actions to address that issue.	

Supplier: Hahei Beach Water Supply Association

Hahei, Pa Road	Population: 200
Health Act: not compliant Standards: Bacterial not met Protozoal not met Chemical met	
The water supply uses groundwater, without disinfection. A permanent boil-water notice was in place during the reporting period.	
Hahei, Pa Road failed to provide adequate safe drinking water and it did not take any <i>E. coli</i> samples in some parts of the supply for bacterial testing. It therefore failed to comply with the Health Act (sections 69S and 69Y).	
Hahei, Pa Road failed the bacteriological Standards because sampling was inadequate. It failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance.	

Supplier: Hamilton City Council

Hamilton	Population: 169,325
Health Act: complied Standards: Bacterial met Protozoal met Chemical met	
The water supply uses surface water and is treated by UV and chlorinated. The water is fluoridated.	

Supplier: Hauraki District Council

Kaimanawa	Population: 204
Health Act: complied Standards: Bacterial not met Protozoal not met Chemical met	
The water supply uses surface water and is chlorinated. A permanent boil-water notice was in place during the reporting period.	
Kaimanawa failed the bacteriological Standards because <i>E. coli</i> was detected in 1.5 percent of monitoring samples. It failed the protozoal Standards because the infrastructure available was inadequate.	

Kerepehi	Population: 2,552
Health Act: complied Standards: Bacterial met Protozoal met Chemical met	
The water supply uses surface water and is treated by UV and chlorinated.	

Paeroa	Population: 4,887
Health Act: complied Standards: Bacterial met Protozoal met Chemical met	
The water supply uses surface water and is chlorinated.	

Waihi	Population: 4,927
Health Act: complied Standards: Bacterial met Protozoal met Chemical met	
The water supply uses surface water and is chlorinated.	

Waitakaruru Population: 2,076
Health Act: [complied](#) Standards: Bacterial [met](#) Protozoal [not met](#) Chemical [met](#)
The water supply uses surface water and is treated by UV and chlorinated.
Waitakaruru failed the protozoal Standards because turbidity levels at times were too high.

Supplier: Land Information New Zealand

Tokanui Population: 250
Health Act: [complied](#) Standards: Bacterial [not met](#) Protozoal [met](#) Chemical [met](#)
The water supply uses surface water and is treated by UV and chlorinated.
Tokanui failed the bacteriological Standards because *E. coli* was detected in 5.0 percent of monitoring samples.

Supplier: Matamata Piako District Council

Matamata Population: 6,943
Health Act: [complied](#) Standards: Bacterial [not met](#) Protozoal [not met](#) Chemical [met](#)
The water supply uses mixed sources. It is chlorinated and parts of the supply are treated by UV. A temporary boil-water notice was issued during the reporting period.
Matamata failed the bacteriological Standards because sampling was inadequate. It failed the protozoal Standards because turbidity levels at times were too high, some process measurements exceeded limits and the infrastructure available was inadequate.

Morrinsville Population: 6,603
Health Act: [complied](#) Standards: Bacterial [not met](#) Protozoal [not met](#) Chemical [met](#)
The water supply uses mixed sources and is chlorinated.
Morrinsville failed the bacteriological Standards because sampling was inadequate. It failed the protozoal Standards because turbidity levels at times were too high, there were gaps in monitoring and the infrastructure available was inadequate.

Tahuna Population: 120
Health Act: [complied](#) Standards: Bacterial [met](#) Protozoal [not met](#) Chemical [met](#)
The water supply uses groundwater and is treated by UV and chlorinated.
Tahuna failed the protozoal Standards because there were gaps in monitoring and record-keeping was inadequate.

Te Aroha Population: 3,768
Health Act: [complied](#) Standards: Bacterial [met](#) Protozoal [not met](#) Chemical [met](#)
The water supply uses surface water and is chlorinated.
Te Aroha failed the protozoal Standards because turbidity levels at times were too high.

Supplier: Ōtorohanga District Council

Arohena Population: 260

Health Act: **complied** Standards: Bacterial **met** Protozoal **not met** Chemical **met**

The water supply uses surface water and is chlorinated. A temporary boil-water notice was issued during the reporting period.

Arohena failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance.

Kāwhia Population: 390

Health Act: **complied** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**

The water supply uses surface water and is treated by UV and chlorinated.

Kāwhia failed the bacteriological Standards because sampling was inadequate, and failed the protozoal Standards because there were gaps in monitoring.

Ōtorohanga Population: 3,050

Health Act: **complied** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**

The water supply uses surface water and is chlorinated.

Ōtorohanga failed the bacteriological Standards because sampling was inadequate. It failed the protozoal Standards because turbidity levels at times were too high and there were gaps in monitoring.

Tihiroa Population: 400

Health Act: **complied** Standards: Bacterial **met** Protozoal **not met** Chemical **met**

The water supply uses surface water and is chlorinated. A temporary boil-water notice was issued during the reporting period.

Tihiroa failed the protozoal Standards because there were gaps in monitoring and compliance was not attempted.

Supplier: Piriaka Community Group Inc

Piriaka Population: 120

Health Act: **not compliant** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**

The water supply uses surface water, without disinfection.

Piriaka did not take any *E. coli* samples in some parts of the supply for bacterial testing. It therefore failed to comply with the Health Act (section 69Y).

Piriaka failed the bacteriological Standards because sampling was inadequate. It failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance.

Supplier: Puhue School Board of Trustees

Puhue School Population: 170

Health Act: **not compliant** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**

The water supply uses groundwater and is treated by UV.

Puhue School did not take any *E. coli* samples in some parts of the supply for bacterial testing. It therefore failed to comply with the Health Act (section 69Y).

Puhue School failed the bacteriological Standards because sampling was inadequate, and failed the protozoal Standards because there were gaps in monitoring.

Supplier: Ruapehu District Council

National Park Population: 240

Health Act: [complied](#) Standards: Bacterial [met](#) Protozoal [not met](#) Chemical [met](#)

The water supply uses surface water and is treated by UV and chlorinated.

National Park failed the protozoal Standards because turbidity levels at times were too high and some process measurements exceeded limits.

Ohakune Population: 1,500

Health Act: [complied](#) Standards: Bacterial [met](#) Protozoal [not met](#) Chemical [met](#)

The water supply uses surface water and is treated by UV and chlorinated.

Ohakune failed the protozoal Standards because the infrastructure available was inadequate.

Ōhura Population: 160

Health Act: [complied](#) Standards: Bacterial [met](#) Protozoal [not met](#) Chemical [met](#)

The water supply uses surface water and is chlorinated.

Ōhura failed the protozoal Standards because turbidity levels at times were too high and the infrastructure available was inadequate.

Owhango Population: 200

Health Act: [complied](#) Standards: Bacterial [met](#) Protozoal [not met](#) Chemical [met](#)

The water supply uses surface water and is chlorinated. A temporary boil-water notice was issued during the reporting period.

Owhango failed the protozoal Standards because turbidity levels at times were too high and the infrastructure available was inadequate.

Raetihi Population: 749

Health Act: [complied](#) Standards: Bacterial [met](#) Protozoal [met](#) Chemical [met](#)

The water supply uses surface water and is treated by UV and chlorinated.

Taumarunui Population: 4,870

Health Act: [complied](#) Standards: Bacterial [met](#) Protozoal [not met](#) Chemical [met](#)

The water supply uses surface water and is treated by UV and chlorinated.

Taumarunui failed the protozoal Standards because turbidity levels at times were too high, some process measurements exceeded limits and record-keeping was inadequate.

Supplier: South Waikato District Council

Arapuni Population: 300

Health Act: [complied](#) Standards: Bacterial [met](#) Protozoal [not met](#) Chemical [met](#)

The water supply uses groundwater and is treated by UV and chlorinated.

Arapuni failed the protozoal Standards because turbidity levels at times were too high.

Putāruru Population: 4,116

Health Act: [complied](#) Standards: Bacterial [met](#) Protozoal [not met](#) Chemical [met](#)

The water supply uses mixed sources and is treated by UV and chlorinated.

Putāruru failed the protozoal Standards because disinfectant levels were not always adequate and turbidity levels at times were too high.

Tīrau Population: 700

Health Act: [complied](#) Standards: Bacterial [met](#) Protozoal [met](#) Chemical [met](#)

The water supply uses surface water and is treated by UV and chlorinated.

Tokoroa Population: 13,300

Health Act: [complied](#) Standards: Bacterial [met](#) Protozoal [met](#) Chemical [not met](#)

The water supply uses groundwater and is treated by UV and chlorinated. The water is fluoridated.

Tokoroa failed the chemical Standards because fluoride sampling was inadequate.

Supplier: Taharua Ironsands Ltd

Taharua Village Population: 300

Health Act: **complied** Standards: Bacterial **met** Protozoal **not met** Chemical **met**

The water supply uses groundwater and is chlorinated.

Taharua Village failed the protozoal Standards because there were gaps in monitoring and the infrastructure available was inadequate.

Supplier: Tatua Co-operative Dairy Co Ltd

Tatua Co-operative Dairy Co Ltd Population: 331

Health Act: **complied** Standards: Bacterial **not met** Protozoal **met** Chemical **met**

The water supply uses groundwater, without disinfection.

Tatua Co-operative Dairy Co Ltd failed the bacteriological Standards for 216 people because sampling was inadequate.

Supplier: Te Aputa Water Supply Society Inc

Te Puru – Aputa Ave Population: 200

Health Act: **not compliant** Standards: Bacterial **met** Protozoal **met** Chemical **met**

The water supply uses surface water and is treated by UV.

Te Puru – Aputa Ave failed to provide adequate safe drinking water. It therefore failed to comply with the Health Act (section 69S).

Supplier: Thames Coromandel District Council

Coromandel Population: 1,718

Health Act: **not compliant** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**

The water supply uses surface water and is treated by UV and chlorinated.

Coromandel did not have an implemented WSP. It therefore failed to comply with the Health Act (section 69Z).

Coromandel failed the bacteriological Standards. It failed the protozoal Standards because turbidity levels at times were too high and the infrastructure available was inadequate.

Matarangi Population: 317

Health Act: **complied** Standards: Bacterial **met** Protozoal **not met** Chemical **met**

The water supply uses surface water and is chlorinated.

Matarangi failed the protozoal Standards because turbidity levels at times were too high.

Matatoki Population: 150

Health Act: **not compliant** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**

The water supply uses surface water, without disinfection. A permanent boil-water notice was in place during the reporting period.

Matatoki did not take any *E. coli* samples for bacterial testing. It therefore failed to comply with the Health Act (section 69Y).

Matatoki failed the bacteriological Standards because sampling was inadequate. It failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance.

Onemana	Population: 116
Health Act: complied Standards: Bacterial met Protozoal not met Chemical met	
The water supply uses groundwater and is chlorinated.	
Onemana failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance.	
Pāuanui	Population: 750
Health Act: not compliant Standards: Bacterial not met Protozoal not met Chemical met	
The water supply uses surface water and is treated by UV and chlorinated.	
Pāuanui did not have an implemented WSP. It therefore failed to comply with the Health Act (section 69Z).	
Pāuanui failed the bacteriological Standards for 732 people because sampling was inadequate. It failed the protozoal Standards because there were gaps in monitoring, record-keeping was inadequate and the infrastructure available was inadequate.	
Pūriri	Population: 150
Health Act: not compliant Standards: Bacterial not met Protozoal not met Chemical met	
The water supply uses surface water, without disinfection. A permanent boil-water notice was in place during the reporting period.	
Pūriri did not take any <i>E. coli</i> samples for bacterial testing. It therefore failed to comply with the Health Act (section 69Y).	
Pūriri failed the bacteriological Standards because sampling was inadequate. It failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance.	
Tairua	Population: 1,314
Health Act: not compliant Standards: Bacterial not met Protozoal not met Chemical met	
The water supply uses surface water and is treated by UV and chlorinated.	
Tairua did not have an implemented WSP. It therefore failed to comply with the Health Act (section 69Z).	
Tairua failed the bacteriological Standards. It failed the protozoal Standards because turbidity levels at times were too high and the infrastructure available was inadequate.	
Thames	Population: 7,657
Health Act: not compliant Standards: Bacterial not met Protozoal not met Chemical met	
The water supply uses surface water and is treated by UV and chlorinated. The water is fluoridated.	
Thames did not have an implemented WSP. It therefore failed to comply with the Health Act (section 69Z).	
Thames failed the bacteriological Standards because sampling was inadequate. It failed the protozoal Standards because turbidity levels at times were too high.	
Thames Valley	Population: 200
Health Act: not compliant Standards: Bacterial not met Protozoal not met Chemical met	
The water supply uses surface water, without disinfection. A permanent boil-water notice was in place during the reporting period.	
Thames Valley did not take any <i>E. coli</i> samples for bacterial testing. It therefore failed to comply with the Health Act (section 69Y).	
Thames Valley failed the bacteriological Standards because sampling was inadequate. It failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance.	

Whangamatā Population: 3,674Health Act: **not compliant** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**

The water supply uses groundwater and is chlorinated.

Whangamatā did not have an implemented WSP. It therefore failed to comply with the Health Act (section 69Z).

Whangamatā failed the bacteriological Standards because sampling was inadequate. It failed the protozoal Standards because there were gaps in monitoring and the infrastructure available was inadequate.

Whitianga Population: 4,550Health Act: **not compliant** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**

The water supply uses surface water and is chlorinated.

Whitianga did not have an implemented WSP. It therefore failed to comply with the Health Act (section 69Z).

Whitianga failed the bacteriological Standards because sampling was inadequate. It failed the protozoal Standards because turbidity levels at times were too high and there were gaps in monitoring.

Supplier: Waikato District Council**Huntly** Population: 7,340Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**

The water supply uses surface water and is treated by UV and chlorinated. The water is fluoridated.

Ngāruawāhia Population: 6,879Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**

The water supply uses surface water and is chlorinated. The water is fluoridated.

North Western District, Waikato District Council Population: 115Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**

The water supply uses surface water and is treated by UV and chlorinated. The water is fluoridated.

Pōkeno Population: 519Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**

The water supply uses surface water and is chlorinated. The water is fluoridated.

Raglan Population: 2,750Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**

The water supply uses surface water and is treated by UV and chlorinated.

Southern Districts, Waikato District Council Population: 5,466Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**

The water supply uses surface water and is treated by UV and chlorinated. The water is fluoridated.

Te Kauwhata Population: 2,149Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**

The water supply uses surface water and is treated by UV and chlorinated. The water is fluoridated.

Tūākau Population: 3,942Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**

The water supply uses surface water and is chlorinated. The water is fluoridated.

Supplier: Waikato Regional Airport**Hamilton Airport, East Side Terminal** Population: 400Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**

The water supply uses surface water and is chlorinated.

Hamilton Airport, West Side Aviation Area Population: 350Health Act: **complied** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**

The water supply uses groundwater and is chlorinated.

Hamilton Airport, West Side Aviation Area failed the bacteriological Standards because sampling was inadequate. It failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance.

Supplier: Waipā District Council

Cambridge Population: 20,903

Health Act: **complied** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**

The water supply uses surface water. It is chlorinated and parts of the supply are treated by UV.

Cambridge failed the bacteriological Standards for 70 people because sampling was inadequate. It failed the protozoal Standards for 70 people because the infrastructure available was inadequate.

Kihikihi Population: 2,000

Health Act: **complied** Standards: Bacterial **not met** Protozoal **met** Chemical **met**

The water supply uses groundwater and is chlorinated.

Kihikihi failed the bacteriological Standards because *E. coli* was detected in 2.9 percent of monitoring samples.

Pukerimu Rural Population: 3,387

Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**

The water supply uses surface water and is chlorinated.

Te Awamutu and Pirongia Population: 10,665

Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**

The water supply uses surface water and is treated by UV and chlorinated.

Supplier: Waitomo District Council

Benneydale Population: 280

Health Act: **complied** Standards: Bacterial **met** Protozoal **not met** Chemical **met**

The water supply uses surface water and is treated by UV and chlorinated.

Benneydale failed the protozoal Standards because there were gaps in monitoring and record-keeping was inadequate.

Mōkau, Waitomo Population: 200

Health Act: **complied** Standards: Bacterial **met** Protozoal **not met** Chemical **met**

The water supply uses surface water and is treated by UV and chlorinated.

Mokau, Waitomo failed the protozoal Standards because there were gaps in monitoring and record-keeping was inadequate.

Piopio Population: 500

Health Act: **complied** Standards: Bacterial **met** Protozoal **not met** Chemical **met**

The water supply uses surface water and is chlorinated.

Piopio failed the protozoal Standards because there were gaps in monitoring.

Te Kūiti Population: 4,612

Health Act: **complied** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**

The water supply uses surface water and is treated by UV and chlorinated.

Te Kūiti failed the bacteriological Standards because sampling was inadequate. It failed the protozoal Standards because turbidity levels at times were too high and record-keeping was inadequate.

Supplier: Waitomo Holdings Ltd

Waitomo Caves Population: 500

Health Act: **not compliant** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**

The water supply uses surface water and is chlorinated.

Waitomo Caves did not take all appropriate actions to protect public health after an issue was discovered. It therefore failed to comply with the Health Act (section 69ZF).

Waitomo Caves failed the bacteriological Standards because *E. coli* was detected in 1.0 percent of monitoring samples and it took inadequate actions to address that issue. It failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance.

Tauranga

Supplier: Otamarakau School

Otamarakau Population: 111

Health Act: **not compliant** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**

The water supply uses groundwater, without disinfection.

Otamarakau did not take any *E. coli* samples in some parts of the supply for bacterial testing. It therefore failed to comply with the Health Act (section 69Y).

Otamarakau failed the bacteriological Standards because sampling was inadequate. It failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance.

Supplier: Tauranga City Council

Tauranga Population: 103,783

Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**

The water supply uses surface water and is chlorinated.

Supplier: Western Bay of Plenty District Council

Athenree Population: 5,125

Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**

The water supply uses groundwater and is chlorinated.

Katikati Population: 5,700

Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**

The water supply uses groundwater and is chlorinated.

Omokoroa Minden Population: 6,450

Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**

The water supply uses groundwater and is chlorinated.

Pongakawa Population: 4,600

Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**

The water supply uses groundwater and is chlorinated.

Te Puke Population: 8,260

Health Act: **not compliant** Standards: Bacterial **not met** Protozoal **met** Chemical **met**

The water supply uses groundwater and is chlorinated.

Te Puke did not take all appropriate actions to protect public health after an issue was discovered. It therefore failed to comply with the Health Act (section 69ZF).

Te Puke failed the bacteriological Standards because *E. coli* was detected in 0.7 percent of monitoring samples, it took inadequate actions to address that issue and sampling was inadequate.

Te Puke Bush Population: 200

Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**

The water supply uses surface water and is treated by UV and chlorinated.

Eastern Bay of Plenty

Supplier: Bryans Beach Water Society

Bryans Beach Population: 200

Health Act: **not compliant** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**

The water supply uses groundwater and is chlorinated.

Bryans Beach did not take any *E. coli* samples in some parts of the supply for bacterial testing. It therefore failed to comply with the Health Act (section 69Y).

Bryans Beach failed the bacteriological Standards because sampling was inadequate. It failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance.

Supplier: Hinekopurangi Trust

Ruatāhuna Village Population: 300

Health Act: **not compliant** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**

The water supply uses surface water, without disinfection.

Ruatāhuna Village did not take any *E. coli* samples for bacterial testing. It therefore failed to comply with the Health Act (section 69Y).

Ruatāhuna Village failed the bacteriological Standards because sampling was inadequate. It failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance.

Supplier: Kawerau District Council

Kawerau Population: 7,721

Health Act: **complied** Standards: Bacterial **met** Protozoal **not met** Chemical **met**

The water supply uses surface water and is treated by UV.

Kawerau failed the protozoal Standards because disinfectant levels were not always adequate.

Supplier: Kutarere Community Water Supply

Kutarere Population: 300

Health Act: **not compliant** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**

The water supply uses groundwater, without disinfection.

Kutarere did not take any *E. coli* samples for bacterial testing. It therefore failed to comply with the Health Act (section 69Y).

Kutarere failed the bacteriological Standards because sampling was inadequate. It failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance.

Supplier: Omaio Waterline Committee

Omaio Population: 180

Health Act: **not compliant** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**

The water supply uses surface water, without disinfection. A permanent boil-water notice was in place during the reporting period.

Omaio did not take reasonable steps to protect source water from contamination and it did not take any *E. coli* samples for bacterial testing. It therefore failed to comply with the Health Act (sections 69U and 69Y).

Omaio failed the bacteriological Standards because sampling was inadequate. It failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance.

Supplier: Ōpōtiki District Council

Ōpōtiki Population: 4,530

Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**

The water supply uses groundwater and is chlorinated.

Te Kaha Population: 150
 Health Act: **complied** Standards: Bacterial **met** Protozoal **not met** Chemical **met**
 The water supply uses surface water and is treated by UV and chlorinated.
 Te Kaha failed the protozoal Standards because compliance was not attempted.

Supplier: Waiohau Waioira Inc

Waiohau Population: 250
 Health Act: **not compliant** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**
 The water supply uses groundwater and is treated by UV.
 Waiohau did not take any *E. coli* samples for bacterial testing. It therefore failed to comply with the Health Act (section 69Y).
 Waiohau failed the bacteriological Standards because sampling was inadequate. It failed the protozoal Standards because there were gaps in monitoring and compliance was not attempted.

Supplier: Whakatāne District Council

Matatā Population: 690
 Health Act: **complied** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**
 The water supply uses surface water and is treated by UV and chlorinated.
 Matata failed the bacteriological Standards because sampling was inadequate. It failed the protozoal Standards because disinfectant levels were not always adequate.

Murupara Population: 1,674
 Health Act: **complied** Standards: Bacterial **met** Protozoal **not met** Chemical **met**
 The water supply uses groundwater, without disinfection.
 Murupara failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance.

Otumahi Population: 2,841
 Health Act: **not compliant** Standards: Bacterial **met** Protozoal **met** Chemical **met**
 The water supply uses groundwater. It is chlorinated and parts of the supply are treated by UV.
 Otumahi did not have an implemented WSP. It therefore failed to comply with the Health Act (section 69Z).

Rangitaiki Plains Population: 2,897
 Health Act: **complied** Standards: Bacterial **not met** Protozoal **not met** Chemical **not met**
 The water supply uses mixed sources and is chlorinated.
 Rangitaiki Plains failed the bacteriological Standards because sampling was inadequate. It failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance. It failed the chemical Standards because arsenic exceeded the MAV.

Rūātoki Population: 560
 Health Act: **complied** Standards: Bacterial **met** Protozoal **not met** Chemical **met**
 The water supply uses groundwater and is treated by UV and chlorinated.
 Rūātoki failed the protozoal Standards because disinfectant levels were not always adequate and turbidity levels at times were too high.

Tāneatua Population: 790
 Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**
 The water supply uses groundwater and is treated by UV and chlorinated.

Te Mahoe Population: 120
 Health Act: **complied** Standards: Bacterial **met** Protozoal **not met** Chemical **met**
 The water supply uses groundwater and is chlorinated.

Te Mahoe failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance.

Waimana Population: 160

Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**

The water supply uses groundwater and is treated by UV and chlorinated.

Whakatāne Population: 21,020

Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**

The water supply uses surface water and is treated by UV and chlorinated. The water is fluoridated.

Supplier: Whanarua Bay Water Supply

Whanarua Bay Population: 200

Health Act: **not compliant** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**

The water supply uses surface water, without disinfection. A permanent boil-water notice was in place during the reporting period.

Whanarua Bay did not take any *E. coli* samples for bacterial testing. It therefore failed to comply with the Health Act (section 69Y).

Whanarua Bay failed the bacteriological Standards because sampling was inadequate. It failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance.

Rotorua and Taupō

Supplier: Brunswick Stage Three/Four Ltd

Brunswick 4 Population: 110

Health Act: [complied](#) Standards: Bacterial [not met](#) Protozoal [met](#) Chemical [met](#)

The water supply uses groundwater, without disinfection. A temporary boil-water notice was issued during the reporting period.

Brunswick 4 failed the bacteriological Standards because *E. coli* was detected in 3.8 percent of monitoring samples.

Supplier: Kaingaroa Forest Village Papakāinga Trust

Kaingaroa Population: 400

Health Act: [complied](#) Standards: Bacterial [not met](#) Protozoal [not met](#) Chemical [not met](#)

The water supply uses groundwater and is chlorinated.

Kaingaroa failed the bacteriological Standards because sampling was inadequate. It failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance. It failed the chemical Standards because copper and lead sampling was inadequate.

Supplier: Kinloch Park Residents Association

Kinloch Park Population: 140

Health Act: [complied](#) Standards: Bacterial [not met](#) Protozoal [not met](#) Chemical [met](#)

The water supply uses groundwater, without disinfection.

Kinloch Park failed the bacteriological Standards because sampling was inadequate, and failed the protozoal Standards because compliance was not attempted.

Supplier: Rotorua Lakes Council

Hamurana/Kaharoa Population: 1,700

Health Act: [complied](#) Standards: Bacterial [met](#) Protozoal [met](#) Chemical [met](#)

The water supply uses surface water and is treated by UV and chlorinated.

Mamaku Population: 868

Health Act: [complied](#) Standards: Bacterial [met](#) Protozoal [not met](#) Chemical [met](#)

The water supply uses surface water and is treated by UV and chlorinated.

Mamaku failed the protozoal Standards because the infrastructure available was inadequate.

Ngongotahā Population: 4,826

Health Act: [complied](#) Standards: Bacterial [met](#) Protozoal [met](#) Chemical [met](#)

The water supply uses surface water and is treated by UV and chlorinated.

Reporoa Population: 1,060

Health Act: [complied](#) Standards: Bacterial [met](#) Protozoal [met](#) Chemical [met](#)

The water supply uses surface water and is treated by UV and chlorinated.

Rotoiti Population: 880

Health Act: [complied](#) Standards: Bacterial [met](#) Protozoal [met](#) Chemical [met](#)

The water supply uses surface water and is treated by UV and chlorinated.

Rotomā Population: 340

Health Act: [complied](#) Standards: Bacterial [met](#) Protozoal [met](#) Chemical [met](#)

The water supply uses surface water and is treated by UV and chlorinated.

Rotorua Central Population: 42,500

Health Act: [complied](#) Standards: Bacterial [met](#) Protozoal [met](#) Chemical [met](#)

The water supply uses surface water and is treated by UV and chlorinated.

Rotorua East Population: 10,330
 Health Act: [complied](#) Standards: Bacterial [met](#) Protozoal [met](#) Chemical [met](#)
 The water supply uses surface water and is treated by UV and chlorinated.

Supplier: Taupō District Council

Acacia Bay Population: 2,381
 Health Act: [complied](#) Standards: Bacterial [met](#) Protozoal [not met](#) Chemical [not met](#)
 The water supply uses surface water and is chlorinated.

Acacia Bay failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance. It failed the chemical Standards for 1,512 people because arsenic exceeded the MAV.

Atiamuri Village Population: 134
 Health Act: [complied](#) Standards: Bacterial [met](#) Protozoal [met](#) Chemical [met](#)
 The water supply uses groundwater and is chlorinated.

Bonshaw Park Population: 152
 Health Act: [complied](#) Standards: Bacterial [met](#) Protozoal [met](#) Chemical [met](#)
 The water supply uses groundwater and is chlorinated.

Centennial Drive Population: 200
 Health Act: [complied](#) Standards: Bacterial [not met](#) Protozoal [not met](#) Chemical [not met](#)
 The water supply uses surface water and is chlorinated.

Centennial Drive failed the bacteriological Standards because sampling was inadequate. It failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance. It failed the chemical Standards because arsenic exceeded the MAV.

Hatepe Village Population: 174
 Health Act: [complied](#) Standards: Bacterial [met](#) Protozoal [not met](#) Chemical [not met](#)
 The water supply uses surface water and is chlorinated.

Hatepe Village failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance. It failed the chemical Standards because arsenic exceeded the MAV.

Kinloch Population: 1,696
 Health Act: [complied](#) Standards: Bacterial [not met](#) Protozoal [not met](#) Chemical [not met](#)
 The water supply uses surface water and is chlorinated.

Kinloch failed the bacteriological Standards for 1,604 people because *E. coli* was detected in 1.3 percent of monitoring samples. It failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance. It failed the chemical Standards because arsenic exceeded the MAV.

Mangakino Population: 1,312
 Health Act: [complied](#) Standards: Bacterial [met](#) Protozoal [met](#) Chemical [met](#)
 The water supply uses surface water and is treated by UV and chlorinated.

Motuoapa	Population: 739
Health Act: complied Standards: Bacterial met Protozoal not met Chemical not met	
The water supply uses surface water and is chlorinated.	
Motuoapa failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance. It failed the chemical Standards because arsenic exceeded the MAV.	
Omori/Kuratau/Pūkawa	Population: 1,883
Health Act: complied Standards: Bacterial met Protozoal not met Chemical not met	
The water supply uses surface water and is chlorinated.	
Omori/Kuratau/Pūkawa failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance. It failed the chemical Standards because arsenic exceeded the MAV.	
River Rd Reporoa	Population: 197
Health Act: complied Standards: Bacterial not met Protozoal not met Chemical met	
The water supply uses surface water and is chlorinated.	
River Rd Reporoa failed the bacteriological Standards. It failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance.	
Taupō – Lake Terrace	Population: 23,810
Health Act: complied Standards: Bacterial met Protozoal met Chemical met	
The water supply uses surface water and is chlorinated. The water is fluoridated.	
Tirohanga Valley Community	Population: 327
Health Act: complied Standards: Bacterial met Protozoal not met Chemical met	
The water supply uses surface water and is chlorinated.	
Tirohanga Valley Community failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance.	
Tūrangi	Population: 3,938
Health Act: complied Standards: Bacterial met Protozoal met Chemical met	
The water supply uses surface water and is treated by UV and chlorinated. The water is fluoridated.	
Whakamaru	Population: 116
Health Act: complied Standards: Bacterial met Protozoal not met Chemical met	
The water supply uses groundwater and is chlorinated.	
Whakamaru failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance.	
Whareroa	Population: 313
Health Act: complied Standards: Bacterial met Protozoal not met Chemical met	
The water supply uses groundwater and is chlorinated.	
Whareroa failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance.	

Gisborne

Supplier: Gisborne District Council

Gisborne City Population: 30,600

Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**

The water supply uses surface water and is chlorinated. The water is fluoridated.

Te Karaka Population: 491

Health Act: **not compliant** Standards: Bacterial **met** Protozoal **not met** Chemical **met**

The water supply uses surface water and is treated by UV and chlorinated.

Te Karaka failed to provide adequate safe drinking water. It therefore failed to comply with the Health Act (section 69S).

Te Karaka failed the protozoal Standards because there were gaps in monitoring and the infrastructure available was inadequate.

Whatatutu Population: 200

Health Act: **complied** Standards: Bacterial **met** Protozoal **not met** Chemical **met**

The water supply uses surface water and is treated by UV and chlorinated.

Whatatutu failed the protozoal Standards because disinfectant levels were not always adequate.

Supplier: Mangahauini Inc

Enihau Population: 130

Health Act: **not compliant** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**

The water supply uses surface water, without disinfection. A permanent boil-water notice was in place during the reporting period.

Enihau failed to provide adequate safe drinking water, it did not take reasonable steps to protect source water from contamination, it did not take any *E. coli* samples for bacterial testing and it failed to adequately investigate complaints. It therefore failed to comply with the Health Act (sections 69S, 69U, 69Y and 69ZE).

Enihau failed the bacteriological Standards because sampling was inadequate. It failed the protozoal Standards because the infrastructure available was inadequate.

Supplier: Ngāti Porou Hauora

Te Puia Springs Population: 300

Health Act: **complied** Standards: Bacterial **met** Protozoal **not met** Chemical **met**

The water supply uses surface water and is treated by UV and chlorinated.

Te Puia Springs failed the protozoal Standards because there were gaps in monitoring, there were calibration issues and the infrastructure available was inadequate.

Taranaki

Supplier: Cold Creek Community Water Supply Ltd

Cold Creek (Pīhama)				Population: 350
Health Act: complied	Standards: Bacterial met	Protozoal met	Chemical met	
The water supply uses groundwater and is chlorinated.				

Supplier: New Plymouth District Council

Inglewood				Population: 3,983
Health Act: complied	Standards: Bacterial met	Protozoal met	Chemical met	
The water supply uses surface water and is chlorinated.				

New Plymouth				Population: 59,072
Health Act: complied	Standards: Bacterial met	Protozoal met	Chemical met	
The water supply uses surface water and is chlorinated.				

Ōakura				Population: 1,625
Health Act: complied	Standards: Bacterial met	Protozoal met	Chemical met	
The water supply uses groundwater and is chlorinated.				

Ōkato				Population: 530
Health Act: complied	Standards: Bacterial met	Protozoal met	Chemical met	
The water supply uses surface water and is treated by UV and chlorinated.				

Supplier: South Taranaki District Council

Eltham				Population: 1,980
Health Act: complied	Standards: Bacterial met	Protozoal met	Chemical met	
The water supply uses surface water and is chlorinated.				

Hāwera				Population: 9,710
Health Act: complied	Standards: Bacterial met	Protozoal met	Chemical met	
The water supply uses surface water and is chlorinated. The water is fluoridated.				

Inaha				Population: 495
Health Act: complied	Standards: Bacterial met	Protozoal met	Chemical met	
The water supply uses surface water and is chlorinated.				

Ōpunake				Population: 1,370
Health Act: complied	Standards: Bacterial met	Protozoal met	Chemical met	
The water supply uses surface water and is chlorinated.				

Pātea				Population: 1,150
Health Act: complied	Standards: Bacterial met	Protozoal met	Chemical met	
The water supply uses groundwater, without disinfection.				

Rāhotu				Population: 115
Health Act: complied	Standards: Bacterial met	Protozoal met	Chemical met	
The water supply uses surface water and is chlorinated.				

Waimate West				Population: 2,880
Health Act: complied	Standards: Bacterial met	Protozoal met	Chemical met	
The water supply uses surface water and is chlorinated.				

Waverley				Population: 950
Health Act: complied	Standards: Bacterial met	Protozoal met	Chemical met	
The water supply uses groundwater, without disinfection.				

Supplier: Stratford District Council

Midhirst Population: 200

Health Act: [complied](#) Standards: Bacterial [met](#) Protozoal [met](#) Chemical [met](#)

The water supply uses surface water and is treated by UV and chlorinated.

Stratford Population: 6,773

Health Act: [complied](#) Standards: Bacterial [met](#) Protozoal [met](#) Chemical [met](#)

The water supply uses surface water and is chlorinated. The water is fluoridated.

Hawke's Bay

Supplier: Central Hawkes Bay District Council

Pōrangahau Population: 160

Health Act: **complied** Standards: Bacterial **met** Protozoal **not met** Chemical **met**

The water supply uses groundwater and is chlorinated.

Porangahau failed the protozoal Standards because the infrastructure available was inadequate.

Takapau Population: 570

Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**

The water supply uses groundwater and is chlorinated.

Waipawa Population: 2,355

Health Act: **complied** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**

The water supply uses groundwater and is treated by UV and chlorinated.

Waipawa failed the bacteriological Standards because sampling was inadequate. It failed the protozoal Standards because some process measurements exceeded limits, there were gaps in monitoring and record-keeping was inadequate.

Waipukurau Population: 3,666

Health Act: **not compliant** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**

The water supply uses groundwater and is treated by UV and chlorinated.

Waipukurau did not take all appropriate actions to protect public health after an issue was discovered. It therefore failed to comply with the Health Act (section 69ZF).

Waipukurau failed the bacteriological Standards because actions following an issue were inadequate and sampling was inadequate. It failed the protozoal Standards because there were gaps in monitoring and record-keeping was inadequate.

Supplier: Farm Road Water Supply Ltd

Farm Road Population: 120

Health Act: **not compliant** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**

The water supply uses surface water, without disinfection.

Farm Road did not take reasonable steps to protect source water from contamination, it did not take any *E. coli* samples in some parts of the supply for bacterial testing and it failed to adequately investigate complaints. It therefore failed to comply with the Health Act (sections 69U, 69Y and 69ZE).

Farm Road failed the bacteriological Standards because sampling was inadequate. It failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance.

Supplier: Hastings District Council

Clive Population: 560

Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**

The water supply uses groundwater and is chlorinated.

Hastings Urban Population: 64,764

Health Act: **complied** Standards: Bacterial **met** Protozoal **not met** Chemical **met**

The water supply uses groundwater. It is chlorinated and parts of the supply are treated by UV.

Hastings Urban failed the protozoal Standards because there were calibration issues and the infrastructure available was inadequate.

Haumoana/Te Awanga Population: 1,900

Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**

The water supply uses groundwater and is chlorinated.

Ōmāhu Population: 126

Health Act: **complied** Standards: Bacterial **met** Protozoal **not met** Chemical **met**

The water supply uses groundwater and is treated by UV and chlorinated.

Ōmāhu failed the protozoal Standards because there were calibration issues.

Waimārama Population: 260

Health Act: **complied** Standards: Bacterial **met** Protozoal **not met** Chemical **met**

The water supply uses surface water and is treated by UV and chlorinated.

Waimārama failed the protozoal Standards because the infrastructure available was inadequate.

Whakatū Population: 337

Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**

The water supply uses groundwater and is chlorinated.

Whirinaki, Hawkes Bay Population: 800

Health Act: **complied** Standards: Bacterial **met** Protozoal **not met** Chemical **met**

The water supply uses groundwater and is treated by UV and chlorinated.

Whirinaki, Hawkes Bay failed the protozoal Standards because the infrastructure available was inadequate.

Supplier: Napier City Council

Napier Population: 57,660

Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**

The water supply uses groundwater and is chlorinated.

Supplier: Ngāti Pāhauwera Inc Soc

Raupunga Population: 250

Health Act: **not compliant** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**

The water supply uses surface water and is chlorinated.

Raupunga failed to provide adequate safe drinking water, it did not take reasonable steps to protect source water from contamination, it did not take any *E. coli* samples in some parts of the supply for bacterial testing and it failed to adequately investigate complaints. It therefore failed to comply with the Health Act (sections 69S, 69U, 69Y and 69ZE).

Raupunga failed the bacteriological Standards because *E. coli* was detected in 50.0 percent of monitoring samples and sampling was inadequate. It failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance.

Supplier: Wairoa District Council

Tuai Village Population: 300

Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**

The water supply uses surface water and is treated by UV.

Wairoa Population: 4,650

Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**

The water supply uses surface water and is treated by UV and chlorinated.

Whanganui, Rangitīkei and Southern Ruapehu

Supplier: Ministry of Defence, Waiōuru

Waiōuru Population: 2,800

Health Act: **not compliant** Standards: Bacterial **met** Protozoal **not met** Chemical **not met**

The water supply uses surface water and is chlorinated.

Waiōuru did not have an implemented WSP and it did not take all appropriate actions to protect public health after an issue was discovered. It therefore failed to comply with the Health Act (sections 69Z and 69ZF).

Waiōuru failed the protozoal Standards because turbidity levels at times were too high, there were gaps in monitoring and record-keeping was inadequate. It failed the chemical Standards because a disinfection by-product produced as part of the disinfection process exceeded the MAV and it took inadequate actions to address that issue.

Supplier: Rangitīkei District Council

Bulls Population: 1,419

Health Act: **complied** Standards: Bacterial **met** Protozoal **not met** Chemical **met**

The water supply uses groundwater and is treated by UV and chlorinated.

Bulls failed the protozoal Standards because turbidity levels at times were too high.

Huntermville Population: 480

Health Act: **complied** Standards: Bacterial **met** Protozoal **not met** Chemical **met**

The water supply uses surface water and is treated by UV and chlorinated.

Huntermville failed the protozoal Standards because turbidity levels at times were too high.

Mangaweka Population: 150

Health Act: **complied** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**

The water supply uses surface water and is treated by UV and chlorinated.

Mangaweka failed the bacteriological Standards because sampling was inadequate. It failed the protozoal Standards because turbidity levels at times were too high.

Marton Population: 4,764

Health Act: **complied** Standards: Bacterial **met** Protozoal **not met** Chemical **not met**

The water supply uses mixed sources. It is chlorinated and parts of the supply are treated by UV.

Marton failed the protozoal Standards because turbidity levels at times were too high and record-keeping was inadequate. It failed the chemical Standards because a disinfection by-product produced as part of the disinfection process exceeded the MAV.

Rātana Population: 337

Health Act: **complied** Standards: Bacterial **met** Protozoal **not met** Chemical **met**

The water supply uses groundwater and is chlorinated.

Rātana failed the protozoal Standards because the infrastructure available was inadequate.

Taihape Population: 1,584

Health Act: **complied** Standards: Bacterial **met** Protozoal **not met** Chemical **met**

The water supply uses surface water and is treated by UV and chlorinated.

Taihape failed the protozoal Standards because turbidity levels at times were too high.

Supplier: Whanganui District Council

Brunswick-Westmere Population: 450

Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**

The water supply uses groundwater and is chlorinated.

Fordell Population: 350

Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**

The water supply uses groundwater and is chlorinated.

Maxwell				Population: 200
Health Act: complied	Standards: Bacterial met	Protozoal met	Chemical met	
The water supply uses groundwater and is chlorinated.				
Mōwhānau Beach				Population: 300
Health Act: complied	Standards: Bacterial met	Protozoal met	Chemical met	
The water supply uses groundwater and is chlorinated.				
Whanganui				Population: 39,025
Health Act: complied	Standards: Bacterial met	Protozoal met	Chemical met	
The water supply uses groundwater. It is chlorinated and parts of the supply are treated with ozone.				

Manawatū

Supplier: Brandlines Ltd

Longburn, Brandlines Population: 150

Health Act: **not compliant** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**

The water supply uses groundwater, without disinfection.

Longburn, Brandlines failed to provide adequate safe drinking water, it did not take reasonable steps to protect source water from contamination, it did not take any *E. coli* samples for bacterial testing and it failed to adequately investigate complaints. It therefore failed to comply with the Health Act (sections 69S, 69U, 69Y and 69ZE).

Longburn, Brandlines failed the bacteriological Standards because sampling was inadequate, and failed the protozoal Standards because compliance was not attempted.

Supplier: Horowhenua District Council

Foxton Population: 2,700

Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**

The water supply uses groundwater and is chlorinated.

Foxton Beach Population: 1,900

Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**

The water supply uses groundwater and is chlorinated.

Levin Population: 20,000

Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**

The water supply uses surface water and is treated by UV and chlorinated.

Shannon Population: 1,436

Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**

The water supply uses surface water and is chlorinated.

Tokomaru Population: 550

Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **not met**

The water supply uses surface water and is treated by UV and chlorinated.

Tokomaru failed the chemical Standards because a disinfection by-product produced as part of the disinfection process exceeded the MAV.

Supplier: Kiwitea Rural Scheme

Kiwitea Rural Population: 230

Health Act: **not compliant** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**

The water supply uses surface water and is chlorinated.

Kiwitea Rural did not take any *E. coli* samples in some parts of the supply for bacterial testing. It therefore failed to comply with the Health Act (section 69Y).

Kiwitea Rural failed the bacteriological Standards because sampling was inadequate. It failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance.

Supplier: Longburn Adventist College

Longburn Adventist College Population: 300

Health Act: **not compliant** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**

The water supply uses groundwater and is treated by UV.

Longburn Adventist College did not take any *E. coli* samples in some parts of the supply for bacterial testing and it did not take all appropriate actions to protect public health after an issue was discovered. It therefore failed to comply with the Health Act (sections 69Y and 69ZF).

Longburn Adventist College failed the bacteriological Standards because *E. coli* was detected in 9.1 percent of monitoring samples, it took inadequate actions to address that issue and sampling was inadequate. It failed the protozoal Standards because compliance was not attempted.

Supplier: Manawatu District Council

Feilding Population: 15,419

Health Act: **complied** Standards: Bacterial **not met** Protozoal **met** Chemical **met**

The water supply uses mixed sources. It is chlorinated and parts of the supply are treated by UV. The water is fluoridated. Feilding failed the bacteriological Standards.

Halcombe-Stanway Population: 328

Health Act: **complied** Standards: Bacterial **met** Protozoal **not met** Chemical **met**

The water supply uses surface water and is chlorinated.

Halcombe-Stanway failed the protozoal Standards because the infrastructure available was inadequate.

Himatangi Beach Population: 423

Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**

The water supply uses groundwater and is chlorinated.

Rongotea Population: 163

Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**

The water supply uses groundwater and is chlorinated.

Sanson Population: 462

Health Act: **complied** Standards: Bacterial **met** Protozoal **not met** Chemical **met**

The water supply uses surface water and is chlorinated.

Sanson failed the protozoal Standards because the infrastructure available was inadequate.

Waituna West Population: 226

Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**

The water supply uses groundwater and is chlorinated.

Supplier: Massey University

Massey University Population: 9,000

Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**

The water supply uses groundwater and is chlorinated.

Supplier: Ministry of Defence, Ohakea

Ohakea Population: 800

Health Act: **not compliant** Standards: Bacterial **met** Protozoal **met** Chemical **met**

The water supply uses surface water and is treated by UV and chlorinated.

Ohakea did not have an implemented WSP. It therefore failed to comply with the Health Act (section 69Z).

Supplier: New Zealand Defence Force

Linton Military Camp Population: 3,500

Health Act: **not compliant** Standards: Bacterial **met** Protozoal **not met** Chemical **met**

The water supply uses groundwater and is chlorinated. The water is fluoridated.

Linton Military Camp did not have an implemented WSP. It therefore failed to comply with the Health Act (section 69Z).

Linton Military Camp failed the protozoal Standards because the infrastructure available was inadequate.

Supplier: Palmerston North City Council

Ashhurst Population: 2,800

Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**

The water supply uses groundwater and is chlorinated. The water is fluoridated.

Bunnythorpe Population: 493

Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**

The water supply uses groundwater and is chlorinated. The water is fluoridated.

Longburn Population: 350

Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**

The water supply uses groundwater and is chlorinated. The water is fluoridated.

Palmerston North City Population: 72,284

Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**

The water supply uses mixed sources and is chlorinated. The water is fluoridated.

Supplier: Pleckville Rurual Water Supply Committee

Pleckville Population: 200

Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**

The water supply uses surface water, without disinfection.

Supplier: Tararua District Council

Dannevirke Population: 6,000

Health Act: **complied** Standards: Bacterial **met** Protozoal **not met** Chemical **met**

The water supply uses surface water and is treated by UV and chlorinated.

Dannevirke failed the protozoal Standards because turbidity levels at times were too high and the infrastructure available was inadequate.

Eketāhuna	Population: 456
Health Act: complied Standards: Bacterial met Protozoal not met Chemical met	
The water supply uses surface water and is treated by UV and chlorinated.	
Eketahuna failed the protozoal Standards because disinfectant levels were not always adequate, turbidity levels at times were too high and the infrastructure available was inadequate.	
Norsewood	Population: 200
Health Act: complied Standards: Bacterial met Protozoal not met Chemical met	
The water supply uses groundwater and is chlorinated.	
Norsewood failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance.	
Pahiatua	Population: 2,700
Health Act: not compliant Standards: Bacterial met Protozoal not met Chemical met	
The water supply uses surface water and is treated by UV and chlorinated.	
Pahiatua did not have an implemented WSP. It therefore failed to comply with the Health Act (section 69Z).	
Pahiatua failed the protozoal Standards because the infrastructure available was inadequate.	
Pongaroa	Population: 200
Health Act: complied Standards: Bacterial not met Protozoal not met Chemical met	
The water supply uses surface water and is treated by UV and chlorinated. A temporary boil-water notice was issued during the reporting period.	
Pongaroa failed the bacteriological Standards because <i>E. coli</i> was detected in 2.3 percent of monitoring samples. It failed the protozoal Standards because record-keeping was inadequate.	
Woodville	Population: 1,500
Health Act: complied Standards: Bacterial met Protozoal not met Chemical met	
The water supply uses surface water and is treated by UV and chlorinated.	
Woodville failed the protozoal Standards because turbidity levels at times were too high.	

Wellington and Hutt

Supplier: Greater Wellington Water

Wellington Region Bulk Water Population: 350,000

Health Act: [complied](#) Standards: Bacterial [met](#) Protozoal [met](#) Chemical [met](#)

The water supply uses mixed sources. It is chlorinated and parts of the supply are treated by UV. The water is fluoridated.

Supplier: Hutt City Council

Lower Hutt Population: 103,862

Health Act: [complied](#) Standards: Bacterial [met](#) Protozoal [met](#) Chemical [met](#)

The water supply uses mixed sources. It is chlorinated and parts of the supply are treated by UV. The water is fluoridated.

Supplier: Kāpiti Coast District Council

Hautere Population: 700

Health Act: [not compliant](#) Standards: Bacterial [not met](#) Protozoal [not met](#) Chemical [met](#)

The water supply uses groundwater and is treated by UV and chlorinated.

Hautere failed to keep adequate records. It therefore failed to comply with the Health Act (section 69ZD).

Hautere failed the bacteriological Standards because sampling was inadequate. It failed the protozoal Standards because turbidity levels at times were too high.

Ōtaki Population: 5,700

Health Act: [complied](#) Standards: Bacterial [not met](#) Protozoal [not met](#) Chemical [met](#)

The water supply uses groundwater and is treated by UV and chlorinated.

Ōtaki failed the bacteriological Standards because sampling was inadequate. It failed the protozoal Standards because turbidity levels at times were too high.

Paekākāriki Population: 1,665

Health Act: [not compliant](#) Standards: Bacterial [not met](#) Protozoal [not met](#) Chemical [met](#)

The water supply uses surface water and is treated by UV and chlorinated.

Paekākāriki failed to keep adequate records. It therefore failed to comply with the Health Act (section 69ZD).

Paekākāriki failed the bacteriological Standards because sampling was inadequate, and failed the protozoal Standards because record-keeping was inadequate.

Waikanae/Paraparaumu/Raumati Population: 35,800

Health Act: [not compliant](#) Standards: Bacterial [not met](#) Protozoal [not met](#) Chemical [met](#)

The water supply uses surface water and is treated by UV and chlorinated. The water is fluoridated.

Waikanae/Paraparaumu/Raumati failed to keep adequate records. It therefore failed to comply with the Health Act (section 69ZD).

Waikanae/Paraparaumu/Raumati failed the bacteriological Standards, and failed the protozoal Standards because record-keeping was inadequate.

Supplier: Porirua City Council

Judgeford Population: 175

Health Act: [complied](#) Standards: Bacterial [met](#) Protozoal [met](#) Chemical [met](#)

The water supply uses surface water and is chlorinated. The water is fluoridated.

Porirua Population: 54,830

Health Act: [complied](#) Standards: Bacterial [met](#) Protozoal [met](#) Chemical [met](#)

The water supply uses surface water and is chlorinated. The water is fluoridated.

Supplier: Upper Hutt City Council

Upper Hutt Population: 39,927

Health Act: [complied](#) Standards: Bacterial [met](#) Protozoal [met](#) Chemical [met](#)

The water supply uses surface water and is chlorinated. The water is fluoridated.

Supplier: Wellington City Council

Wellington City Population: 210,637

Health Act: [complied](#) Standards: Bacterial [met](#) Protozoal [met](#) Chemical [met](#)

The water supply uses mixed sources. It is chlorinated and parts of the supply are treated by UV. The water is fluoridated.

Wairarapa

Supplier: Carterton District Council

Carterton Population: 4,200

Health Act: [complied](#) Standards: Bacterial [not met](#) Protozoal [not met](#) Chemical [met](#)

The water supply uses mixed sources and is treated by UV and chlorinated.

Carterton failed the bacteriological Standards because sampling was inadequate. It failed the protozoal Standards because turbidity levels at times were too high and there were calibration issues.

Supplier: Fernridge Waters Supply Association Inc

Fernridge Population: 320

Health Act: [not compliant](#) Standards: Bacterial [not met](#) Protozoal [met](#) Chemical [met](#)

The water supply uses groundwater and is treated by UV.

Fernridge did not take all appropriate actions to protect public health after an issue was discovered. It therefore failed to comply with the Health Act (section 69ZF).

Fernridge failed the bacteriological Standards because *E. coli* was detected in 5.0 percent of monitoring samples and it took inadequate actions to address that issue.

Supplier: Masterton District Council

Masterton Population: 19,000

Health Act: [complied](#) Standards: Bacterial [met](#) Protozoal [met](#) Chemical [met](#)

The water supply uses surface water and is chlorinated. The water is fluoridated.

Tīnui Population: 120

Health Act: [complied](#) Standards: Bacterial [met](#) Protozoal [met](#) Chemical [met](#)

The water supply uses groundwater and is treated by UV and chlorinated.

Wainuioru Rural Population: 184

Health Act: [not compliant](#) Standards: Bacterial [not met](#) Protozoal [not met](#) Chemical [met](#)

The water supply uses groundwater, without disinfection. A permanent boil-water notice was in place during the reporting period.

Wainuioru Rural failed to provide adequate safe drinking water. It therefore failed to comply with the Health Act (section 69S).

Wainuioru Rural failed the bacteriological Standards because sampling was inadequate. It failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance.

Supplier: Opaki Water Supply Association

Opaki Population: 1,500

Health Act: [complied](#) Standards: Bacterial [not met](#) Protozoal [not met](#) Chemical [met](#)

The water supply uses groundwater and is treated by UV.

Opaki failed the bacteriological Standards because sampling was inadequate, and failed the protozoal Standards because there were calibration issues.

Supplier: South Wairarapa District Council

Featherston Population: 2,580

Health Act: **complied** Standards: Bacterial **not met** Protozoal **not met** Chemical **not met**

The water supply uses mixed sources. It is chlorinated and parts of the supply are treated by UV.

Featherston failed the bacteriological Standards because sampling was inadequate. It failed the protozoal Standards because turbidity levels at times were too high, record-keeping was inadequate and there were calibration issues. It failed the chemical Standards because a disinfection by-product produced as part of the disinfection process sampling was inadequate.

Greytown Population: 1,952

Health Act: **not compliant** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**

The water supply uses groundwater. It is chlorinated and parts of the supply are treated by UV.

Greytown did not take all appropriate actions to protect public health after an issue was discovered. It therefore failed to comply with the Health Act (section 69ZF).

Greytown failed the bacteriological Standards because sampling was inadequate. It failed the protozoal Standards because turbidity levels at times were too high, record-keeping was inadequate, there were calibration issues and the infrastructure available was inadequate.

Martinborough Population: 1,505

Health Act: **not compliant** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**

The water supply uses groundwater and is treated by UV. A temporary boil-water notice was issued during the reporting period.

Martinborough did not take all appropriate actions to protect public health after an issue was discovered. It therefore failed to comply with the Health Act (section 69ZF).

Martinborough failed the bacteriological Standards because *E. coli* was detected in 9.5 percent of monitoring samples and sampling was inadequate. It failed the protozoal Standards because remedial actions were inadequate and some process measurements exceeded limits.

Nelson

Supplier: Appleby Hills Residents Association Inc

Appleby Hills	Population: 250
Health Act: complied	Standards: Bacterial met Protozoal met Chemical met
The water supply uses groundwater, without disinfection.	

Supplier: Central Tākaka Water Board

Central Tākaka	Population: 125
Health Act: complied	Standards: Bacterial not met Protozoal not met Chemical met
The water supply uses groundwater, without disinfection.	
Central Tākaka failed the bacteriological Standards because sampling was inadequate. It failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance.	

Supplier: Department of Conservation (St Arnaud)

Lake Rotoiti	Population: 200
Health Act: complied	Standards: Bacterial met Protozoal met Chemical met
The water supply uses surface water and is treated by UV.	

Supplier: Glenwood Water Company

Glenwood	Population: 150
Health Act: complied	Standards: Bacterial not met Protozoal met Chemical met
The water supply uses surface water and is treated by UV.	
Glenwood failed the bacteriological Standards because sampling was inadequate.	

Supplier: Lower Moutere Water Scheme Ltd

Lower Moutere Water Scheme 1	Population: 450
Health Act: not compliant	Standards: Bacterial not met Protozoal not met Chemical met
The water supply uses groundwater and is treated by UV.	
Lower Moutere Water Scheme 1 did not take any <i>E. coli</i> samples in some parts of the supply for bacterial testing. It therefore failed to comply with the Health Act (section 69Y).	
Lower Moutere Water Scheme 1 failed the bacteriological Standards because sampling was inadequate, and failed the protozoal Standards because there were gaps in monitoring.	

Supplier: Nelson City Council

Nelson	Population: 49,740
Health Act: complied	Standards: Bacterial met Protozoal met Chemical met
The water supply uses surface water and is chlorinated.	

Supplier: Tasman District Council

Collingwood Population: 450

Health Act: **complied** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**

The water supply uses groundwater and is chlorinated.

Collingwood failed the bacteriological Standards. It failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance.

Dovedale Rural Population: 450

Health Act: **complied** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**

The water supply uses surface water and is chlorinated. A permanent boil-water notice was in place during the reporting period.

Dovedale Rural failed the bacteriological Standards because *E. coli* was detected in 18.4 percent of monitoring samples. It failed the protozoal Standards because disinfectant levels were not always adequate, turbidity levels at times were too high, some process measurements exceeded limits and the infrastructure available was inadequate.

Eighty Eight Valley Rural Population: 200

Health Act: **complied** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**

The water supply uses surface water and is chlorinated.

Eighty Eight Valley Rural failed the bacteriological Standards. It failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance.

Hope/Brightwater Population: 2,730

Health Act: **complied** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**

The water supply uses groundwater and is chlorinated.

Hope/Brightwater failed the bacteriological Standards. It failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance.

Kaiteriteri Population: 300

Health Act: **complied** Standards: Bacterial **met** Protozoal **not met** Chemical **met**

The water supply uses groundwater and is treated by UV.

Kaiteriteri failed the protozoal Standards because compliance was not attempted.

Motueka Population: 1,200

Health Act: **complied** Standards: Bacterial **met** Protozoal **not met** Chemical **met**

The water supply uses groundwater, without disinfection.

Motueka failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance.

Murchison Population: 490

Health Act: **complied** Standards: Bacterial **met** Protozoal **not met** Chemical **met**

The water supply uses groundwater and is treated by UV and chlorinated.

Murchison failed the protozoal Standards because some process measurements exceeded limits.

Pōhara Population: 150

Health Act: **complied** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**

The water supply uses surface water and is chlorinated.

Pōhara failed the bacteriological Standards because *E. coli* was detected in 1.3 percent of monitoring samples. It failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance.

Redwood Valley 1	Population: 180
Health Act: complied Standards: Bacterial met Protozoal not met Chemical met	
The water supply uses groundwater and is chlorinated.	
Redwood Valley 1 failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance.	
Redwood Valley 2	Population: 370
Health Act: complied Standards: Bacterial met Protozoal not met Chemical met	
The water supply uses groundwater and is chlorinated.	
Redwood Valley 2 failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance.	
Richmond/Waimea Industrial	Population: 12,300
Health Act: complied Standards: Bacterial not met Protozoal met Chemical met	
The water supply uses groundwater and is treated by UV.	
Richmond/Waimea Industrial failed the bacteriological Standards for 1,800 people because <i>E. coli</i> was detected in 1.2 percent of monitoring samples.	
Tapawera	Population: 400
Health Act: complied Standards: Bacterial met Protozoal not met Chemical met	
The water supply uses groundwater and is treated by UV and chlorinated.	
Tapawera failed the protozoal Standards because some process measurements exceeded limits.	
Waimea Māpua Ruby Bay	Population: 2,500
Health Act: complied Standards: Bacterial met Protozoal not met Chemical met	
The water supply uses groundwater and is chlorinated.	
Waimea Māpua Ruby Bay failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance.	
Wakefield	Population: 1,500
Health Act: complied Standards: Bacterial met Protozoal not met Chemical met	
The water supply uses groundwater and is chlorinated.	
Wakefield failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance.	

Marlborough

Supplier: Edgewater Estate Ltd

Edgewater Subdivision Population: 200

Health Act: **not compliant** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**

The water supply uses groundwater, without disinfection.

Edgewater Subdivision did not take any *E. coli* samples in some parts of the supply for bacterial testing. It therefore failed to comply with the Health Act (section 69Y).

Edgewater Subdivision failed the bacteriological Standards because sampling was inadequate. It failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance.

Supplier: Flaxbourne Water Scheme Inc

Ward Population: 250

Health Act: **not compliant** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**

The water supply uses groundwater, without disinfection. A permanent boil-water notice was in place during the reporting period.

Ward failed to provide adequate safe drinking water, it did not take reasonable steps to protect source water from contamination, it did not take any *E. coli* samples in some parts of the supply for bacterial testing, it failed to adequately investigate complaints and it did not take all appropriate actions to protect public health after an issue was discovered. It therefore failed to comply with the Health Act (sections 69S, 69U, 69Y, 69ZE and 69ZF).

Ward failed the bacteriological Standards because *E. coli* was detected in 25.0 percent of monitoring samples, it took inadequate actions to address that issue and sampling was inadequate. It failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance.

Supplier: Marlborough District Council

Awatere Population: 1,333

Health Act: **not compliant** Standards: Bacterial **not met** Protozoal **not met** Chemical **not met**

The water supply uses surface water and is chlorinated. A permanent boil-water notice was in place during the reporting period.

Awatere did not take any water samples in some parts of the supply for chemical testing and it did not take all appropriate actions to protect public health after an issue was discovered. It therefore failed to comply with the Health Act (sections 69Y and 69ZF).

Awatere failed the bacteriological Standards for 333 people because *E. coli* was detected in 1.4 percent of monitoring samples and it took inadequate actions to address that issue. It failed the protozoal Standards because the infrastructure available was inadequate. It failed the chemical Standards for 1,000 people because lead and nickel sampling was not undertaken.

Blenheim Population: 24,028

Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**

The water supply uses groundwater and is treated by UV.

Havelock Population: 618

Health Act: **complied** Standards: Bacterial **met** Protozoal **not met** Chemical **met**

The water supply uses groundwater and is chlorinated.

Havelock failed the protozoal Standards because the infrastructure available was inadequate.

Picton/Waikawa Population: 4,185

Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**

The water supply uses mixed sources and is treated by UV and chlorinated.

Renwick Population: 1,884Health Act: **complied** Standards: Bacterial **met** Protozoal **not met** Chemical **met**

The water supply uses groundwater and is chlorinated.

Renwick failed the protozoal Standards because the infrastructure available was inadequate.

Riverlands Industrial Population: 740Health Act: **complied** Standards: Bacterial **met** Protozoal **not met** Chemical **met**

The water supply uses groundwater, without disinfection.

Riverlands Industrial failed the protozoal Standards because the infrastructure available was inadequate.

Wairau Valley Township Population: 160Health Act: **complied** Standards: Bacterial **met** Protozoal **not met** Chemical **met**

The water supply uses groundwater and is chlorinated.

Wairau Valley Township failed the protozoal Standards because the infrastructure available was inadequate.

Supplier: Ministry of Defence, Woodbourne**Woodbourne RNZAF Base** Population: 1,500Health Act: **not compliant** Standards: Bacterial **met** Protozoal **not met** Chemical **met**

The water supply uses groundwater and is treated by UV and chlorinated. The water is fluoridated.

Woodbourne RNZAF Base did not have an implemented WSP and it failed to keep adequate records. It therefore failed to comply with the Health Act (sections 69Z and 69ZD).

Woodbourne RNZAF Base failed the protozoal Standards because record-keeping was inadequate.

Supplier: Okiwi Bay Ratepayers Association Inc**Ōkiwi Bay** Population: 160Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**

The water supply uses surface water and is treated by UV.

Supplier: Rarangi North Water Supply Inc**Rārangi** Population: 160Health Act: **not compliant** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**

The water supply uses groundwater and is treated by UV.

Rārangi did not take any *E. coli* samples in some parts of the supply for bacterial testing. It therefore failed to comply with the Health Act (section 69Y).

Rārangi failed the bacteriological Standards because sampling was inadequate. It failed the protozoal Standards because there were gaps in monitoring and compliance was not attempted.

West Coast

Supplier: Buller District Council

Little Wanganui Population: 150

Health Act: **not compliant** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**

The water supply uses surface water, without disinfection. A permanent boil-water notice was in place during the reporting period.

Little Wanganui did not take any *E. coli* samples in some parts of the supply for bacterial testing. It therefore failed to comply with the Health Act (section 69Y).

Little Wanganui failed the bacteriological Standards because *E. coli* was detected in 100 percent of monitoring samples and sampling was inadequate. It failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance.

Punakaiki Population: 230

Health Act: **complied** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**

The water supply uses surface water and is treated by UV.

Punakaiki failed the bacteriological Standards, and failed the protozoal Standards because record-keeping was inadequate.

Reefton Population: 951

Health Act: **complied** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**

The water supply uses groundwater and is treated by UV. A temporary boil-water notice was issued during the reporting period.

Reefton failed the bacteriological Standards because *E. coli* was detected in 1.6 percent of monitoring samples and sampling was inadequate. It failed the protozoal Standards because some process measurements exceeded limits and the infrastructure available was inadequate.

Waimangaroa Population: 300

Health Act: **not compliant** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**

The water supply uses surface water, without disinfection. A permanent boil-water notice was in place during the reporting period.

Waimangaroa did not take any *E. coli* samples in some parts of the supply for bacterial testing. It therefore failed to comply with the Health Act (section 69Y).

Waimangaroa failed the bacteriological Standards because *E. coli* was detected in 100 percent of monitoring samples and sampling was inadequate. It failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance.

Westport Population: 4,974

Health Act: **complied** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**

The water supply uses surface water and is treated by UV and chlorinated.

Westport failed the bacteriological Standards. It failed the protozoal Standards because turbidity levels at times were too high and record-keeping was inadequate.

Supplier: Grey District Council

Blackball Population: 280

Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**

The water supply uses surface water and is treated by UV and chlorinated.

Greymouth Population: 8,320

Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**

The water supply uses groundwater and is treated by UV and chlorinated.

Rūnanga Population: 1,090
Health Act: **complied** Standards: Bacterial **not met** Protozoal **met** Chemical **met**
The water supply uses groundwater and is treated by UV and chlorinated.
Rūnanga failed the bacteriological Standards for 80 people because *E. coli* was detected in 0.3 percent of monitoring samples.

Supplier: Ngakawau – Hector Water Society Inc

Hector/Ngākawau Population: 219
Health Act: **not compliant** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**
The water supply uses surface water, without disinfection. A permanent boil-water notice was in place during the reporting period.
Hector/Ngākawau did not take any *E. coli* samples for bacterial testing. It therefore failed to comply with the Health Act (section 69Y).
Hector/Ngākawau failed the bacteriological Standards because sampling was inadequate. It failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance.

Supplier: Westland District Council

Fox Glacier Population: 252
Health Act: **complied** Standards: Bacterial **met** Protozoal **not met** Chemical **met**
The water supply uses surface water and is chlorinated.
Fox Glacier failed the protozoal Standards because the infrastructure available was inadequate.

Franz Josef Population: 2,611
Health Act: **complied** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**
The water supply uses surface water and is treated by UV and chlorinated.
Franz Josef failed the bacteriological Standards because *E. coli* was detected in 0.6 percent of monitoring samples. It failed the protozoal Standards because record-keeping was inadequate.

Harihari Population: 348
Health Act: **complied** Standards: Bacterial **met** Protozoal **not met** Chemical **met**
The water supply uses groundwater and is treated by UV.
Harihari failed the protozoal Standards because record-keeping was inadequate.

Hokitika Population: 3,447
Health Act: **complied** Standards: Bacterial **met** Protozoal **not met** Chemical **met**
The water supply uses surface water and is chlorinated.
Hokitika failed the protozoal Standards because record-keeping was inadequate.

Kumara Population: 318
Health Act: **complied** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**
The water supply uses surface water and is treated by UV.
Kumara failed the bacteriological Standards because *E. coli* was detected in 1.4 percent of monitoring samples. It failed the protozoal Standards because record-keeping was inadequate.

Ross Population: 291
Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**
The water supply uses surface water and is chlorinated.

Whataroa Population: 405
Health Act: **complied** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**
The water supply uses groundwater and is treated by UV.
Whataroa failed the bacteriological Standards because *E. coli* was detected in 1.4 percent of monitoring samples. It failed the protozoal Standards because record-keeping was inadequate.

Canterbury

Supplier: Ashburton District Council

Ashburton Population: 18,500

Health Act: [complied](#) Standards: Bacterial [met](#) Protozoal [not met](#) Chemical [met](#)

The water supply uses groundwater and is chlorinated.

Ashburton failed the protozoal Standards because the infrastructure available was inadequate.

Chertsey Population: 230

Health Act: [complied](#) Standards: Bacterial [met](#) Protozoal [not met](#) Chemical [met](#)

The water supply uses groundwater and is chlorinated.

Chertsey failed the protozoal Standards because the infrastructure available was inadequate.

Fairton Population: 210

Health Act: [complied](#) Standards: Bacterial [met](#) Protozoal [met](#) Chemical [met](#)

The water supply uses groundwater and is chlorinated.

Hakatere Upper Population: 110

Health Act: [complied](#) Standards: Bacterial [met](#) Protozoal [not met](#) Chemical [met](#)

The water supply uses groundwater and is treated by UV and chlorinated.

Hakatere Upper failed the protozoal Standards because the infrastructure available was inadequate.

Hinds Population: 340

Health Act: [complied](#) Standards: Bacterial [met](#) Protozoal [not met](#) Chemical [met](#)

The water supply uses groundwater and is chlorinated.

Hinds failed the protozoal Standards because the infrastructure available was inadequate.

Mayfield Population: 160

Health Act: [complied](#) Standards: Bacterial [met](#) Protozoal [not met](#) Chemical [met](#)

The water supply uses groundwater and is chlorinated.

Mayfield failed the protozoal Standards because the infrastructure available was inadequate.

Methven Population: 1,700

Health Act: [complied](#) Standards: Bacterial [met](#) Protozoal [not met](#) Chemical [met](#)

The water supply uses surface water and is treated by UV and chlorinated. The water is fluoridated. A temporary boil-water notice was issued during the reporting period.

Methven failed the protozoal Standards because disinfectant levels were not always adequate, turbidity levels at times were too high and the infrastructure available was inadequate.

Methven/Springfield Population: 178

Health Act: [complied](#) Standards: Bacterial [met](#) Protozoal [not met](#) Chemical [met](#)

The water supply uses surface water and is treated by UV and chlorinated. A temporary boil-water notice was issued during the reporting period.

Methven/Springfield failed the protozoal Standards because disinfectant levels were not always adequate, turbidity levels at times were too high, there were calibration issues and the infrastructure available was inadequate.

Mt Somers Population: 260

Health Act: [complied](#) Standards: Bacterial [met](#) Protozoal [not met](#) Chemical [met](#)

The water supply uses surface water and is treated by UV and chlorinated. A temporary boil-water notice was issued during the reporting period.

Mt Somers failed the protozoal Standards because disinfectant levels were not always adequate, turbidity levels at times were too high and the infrastructure available was inadequate.

Rakaia Population: 1,100

Health Act: [complied](#) Standards: Bacterial [met](#) Protozoal [met](#) Chemical [met](#)

The water supply uses groundwater and is chlorinated.

Supplier: Chatham Islands Council

Waitangi, Chatham Islands Population: 125

Health Act: **complied** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**

The water supply uses groundwater and is chlorinated.

Waitangi, Chatham Islands failed the bacteriological Standards because sampling was inadequate. It failed the protozoal Standards because the infrastructure available was inadequate.

Supplier: Christchurch City Council

Akaroa Population: 1,350

Health Act: **complied** Standards: Bacterial **met** Protozoal **not met** Chemical **met**

The water supply uses surface water and is chlorinated.

Akaroa failed the protozoal Standards because record-keeping was inadequate.

Birdlings Flat Population: 150

Health Act: **complied** Standards: Bacterial **met** Protozoal **not met** Chemical **met**

The water supply uses groundwater and is treated by UV.

Birdlings Flat failed the protozoal Standards because there were gaps in monitoring.

Brooklands/Kainga Population: 1,600

Health Act: **not compliant** Standards: Bacterial **met** Protozoal **not met** Chemical **met**

The water supply uses groundwater and is chlorinated.

Brooklands/Kainga did not take all appropriate actions to protect public health after an issue was discovered. It therefore failed to comply with the Health Act (section 69ZF).

Brooklands/Kainga failed the protozoal Standards because the infrastructure available was inadequate.

Christchurch Central Population: 255,500

Health Act: **complied** Standards: Bacterial **met** Protozoal **not met** Chemical **met**

The water supply uses groundwater and is chlorinated.

Christchurch Central failed the protozoal Standards because the infrastructure available was inadequate.

Duvauchelle Population: 250

Health Act: **complied** Standards: Bacterial **met** Protozoal **not met** Chemical **met**

The water supply uses surface water and is treated by UV and chlorinated.

Duvauchelle failed the protozoal Standards because turbidity levels at times were too high and the infrastructure available was inadequate.

Little River Population: 240

Health Act: **complied** Standards: Bacterial **met** Protozoal **not met** Chemical **met**

The water supply uses surface water and is treated by UV.

Little River failed the protozoal Standards because turbidity levels at times were too high, record-keeping was inadequate and the infrastructure available was inadequate.

Lyttelton Population: 4,450

Health Act: **complied** Standards: Bacterial **met** Protozoal **not met** Chemical **met**

The water supply uses groundwater and is chlorinated.

Lyttelton failed the protozoal Standards because the infrastructure available was inadequate.

Northwest Christchurch Population: 80,000Health Act: **complied** Standards: Bacterial **met** Protozoal **not met** Chemical **met**

The water supply uses groundwater and is chlorinated.

Northwest Christchurch failed the protozoal Standards because the infrastructure available was inadequate.

Takamatua Population: 150Health Act: **complied** Standards: Bacterial **met** Protozoal **not met** Chemical **met**

The water supply uses surface water and is chlorinated.

Takamatua failed the protozoal Standards because record-keeping was inadequate.

Wainui Population: 200Health Act: **complied** Standards: Bacterial **met** Protozoal **not met** Chemical **met**

The water supply uses groundwater and is chlorinated.

Wainui failed the protozoal Standards because the infrastructure available was inadequate.

Supplier: Christchurch International Airport**Christchurch International Airport** Population: 6,100Health Act: **complied** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**

The water supply uses groundwater, without disinfection.

Christchurch International Airport failed the bacteriological Standards for 100 people because sampling was inadequate. It failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance.

Supplier: Defence Department, Burnham**Burnham Military Camp** Population: 1,700Health Act: **complied** Standards: Bacterial **met** Protozoal **not met** Chemical **not met**

The water supply uses groundwater and is chlorinated. The water is fluoridated.

Burnham Military Camp failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance. It failed the chemical Standards because fluoride exceeded the MAV, while nitrate (as NO₃) met the chemical Standards.**Supplier: Dorie School****Dorie School** Population: 110Health Act: **not complied** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**

The water supply uses groundwater and is treated by UV.

Dorie School did not take any *E. coli* samples in some parts of the supply for bacterial testing. It therefore failed to comply with the Health Act (section 69Y).

Dorie School failed the bacteriological Standards because sampling was inadequate. It failed the protozoal Standards because there were gaps in monitoring, record-keeping was inadequate and compliance was not attempted.

Supplier: Highbank Water Society**Highbank Society Water Supply** Population: 220Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**

The water supply uses groundwater and is treated by UV.

Supplier: Hurunui District Council**Amberley** Population: 1,921Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**

The water supply uses groundwater and is chlorinated.

Amuri Plains Rural Water Sup.	Population: 699
Health Act: complied Standards: Bacterial met Protozoal not met Chemical met	
The water supply uses groundwater and is treated by UV and chlorinated.	
Amuri Plains Rural Water Sup. failed the protozoal Standards because the infrastructure available was inadequate.	
Ashley Rural	Population: 5,832
Health Act: complied Standards: Bacterial met Protozoal not met Chemical met	
The water supply uses groundwater. It is chlorinated and parts of the supply are treated by UV.	
Ashley Rural failed the protozoal Standards for 5,430 people because the infrastructure available was inadequate.	
Balmoral Rural	Population: 273
Health Act: complied Standards: Bacterial not met Protozoal not met Chemical met	
The water supply uses surface water and is chlorinated. A temporary boil-water notice was issued during the reporting period.	
Balmoral Rural failed the bacteriological Standards because <i>E. coli</i> was detected in 1.5 percent of monitoring samples. It failed the protozoal Standards because compliance was not attempted.	
Broomfield	Population: 565
Health Act: complied Standards: Bacterial met Protozoal met Chemical met	
The water supply uses groundwater and is chlorinated.	
Cheviot	Population: 888
Health Act: complied Standards: Bacterial met Protozoal not met Chemical met	
The water supply uses groundwater and is chlorinated.	
Cheviot failed the protozoal Standards because compliance was not attempted.	
Culverden	Population: 366
Health Act: complied Standards: Bacterial met Protozoal met Chemical met	
The water supply uses groundwater and is chlorinated.	
Hanmer	Population: 948
Health Act: complied Standards: Bacterial met Protozoal not met Chemical met	
The water supply uses surface water and is treated by UV and chlorinated.	
Hanmer failed the protozoal Standards because turbidity levels at times were too high.	
Hawarden	Population: 753
Health Act: complied Standards: Bacterial met Protozoal not met Chemical met	
The water supply uses groundwater and is treated by UV and chlorinated.	
Hawarden failed the protozoal Standards because the infrastructure available was inadequate.	
Kaiwara	Population: 129
Health Act: complied Standards: Bacterial met Protozoal not met Chemical met	
The water supply uses surface water and is chlorinated. A permanent boil-water notice was in place during the reporting period.	
Kaiwara failed the protozoal Standards because compliance was not attempted.	

Lower Waitohi	Population: 315
Health Act: complied Standards: Bacterial met Protozoal not met Chemical met	
The water supply uses surface water and is chlorinated. A permanent boil-water notice was in place during the reporting period.	
Lower Waitohi failed the protozoal Standards because compliance was not attempted.	
Motunau, Greta, Scargill	Population: 681
Health Act: complied Standards: Bacterial met Protozoal not met Chemical met	
The water supply uses groundwater and is chlorinated. A permanent boil-water notice was in place during the reporting period.	
Motunau, Greta, Scargill failed the protozoal Standards because compliance was not attempted.	
Parnassus Rural	Population: 210
Health Act: complied Standards: Bacterial met Protozoal not met Chemical met	
The water supply uses groundwater and is chlorinated. A permanent boil-water notice was in place during the reporting period.	
Parnassus Rural failed the protozoal Standards because compliance was not attempted.	
Waiau Rural	Population: 435
Health Act: complied Standards: Bacterial met Protozoal not met Chemical met	
The water supply uses surface water and is chlorinated. A permanent boil-water notice was in place during the reporting period.	
Waiau Rural failed the protozoal Standards because compliance was not attempted.	
Waiau Township	Population: 255
Health Act: complied Standards: Bacterial met Protozoal met Chemical met	
The water supply uses surface water and is chlorinated.	
Waipara Township	Population: 285
Health Act: complied Standards: Bacterial met Protozoal not met Chemical met	
The water supply uses groundwater and is chlorinated.	
Waipara Township failed the protozoal Standards because compliance was not attempted.	
Waitohi Upper	Population: 513
Health Act: complied Standards: Bacterial met Protozoal not met Chemical met	
The water supply uses surface water and is chlorinated.	
Waitohi Upper failed the protozoal Standards because compliance was not attempted.	

Supplier: Kaikōura District Council

Fernleigh Rural Water Supply	Population: 150
Health Act: complied Standards: Bacterial not met Protozoal not met Chemical met	
The water supply uses groundwater and is chlorinated. A temporary boil-water notice was issued during the reporting period.	
Fernleigh Rural Water Supply failed the bacteriological Standards because <i>E. coli</i> was detected in 4.3 percent of monitoring samples and sampling was inadequate. It failed the protozoal Standards because the infrastructure available was inadequate.	

Kaikōura Population: 2,500Health Act: **complied** Standards: Bacterial **met** Protozoal **not met** Chemical **met**

The water supply uses groundwater and is chlorinated. A temporary boil-water notice was issued during the reporting period.

Kaikōura failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance.

Kaikōura East Coast Rural Population: 150Health Act: **complied** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**

The water supply uses groundwater, without disinfection. A permanent boil-water notice was in place during the reporting period.

Kaikōura East Coast Rural failed the bacteriological Standards because sampling was inadequate. It failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance.

Kincaid Rural Water Supply Population: 120Health Act: **complied** Standards: Bacterial **met** Protozoal **not met** Chemical **met**

The water supply uses surface water and is treated by UV and chlorinated.

Kincaid Rural Water Supply failed the protozoal Standards because record-keeping was inadequate and there were calibration issues.

Oaro Population: 400Health Act: **complied** Standards: Bacterial **met** Protozoal **not met** Chemical **met**

The water supply uses groundwater and is treated by UV.

Oaro failed the protozoal Standards because record-keeping was inadequate and there were calibration issues.

Ocean Ridge Population: 500Health Act: **complied** Standards: Bacterial **met** Protozoal **not met** Chemical **met**

The water supply uses groundwater and is treated by UV and chlorinated.

Ocean Ridge failed the protozoal Standards because record-keeping was inadequate, there were calibration issues and compliance was not attempted.

Supplier: Living Springs Trust**Living Springs** Population: 180Health Act: **not compliant** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**

The water supply uses surface water and is treated by UV.

Living Springs did not take any *E. coli* samples in some parts of the supply for bacterial testing. It therefore failed to comply with the Health Act (section 69Y).

Living Springs failed the bacteriological Standards because sampling was inadequate. It failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance.

Supplier: Lyndhurst Water Scheme Co-Operative Ltd**Lyndhurst** Population: 250Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**

The water supply uses groundwater, without disinfection.

Supplier: Okains Bay Water Committee

Okains Bay Population: 105

Health Act: **not compliant** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**

The water supply uses surface water, without disinfection. A permanent boil-water notice was in place during the reporting period.

Okains Bay failed to provide adequate safe drinking water, it did not take reasonable steps to protect source water from contamination, it did not take any *E. coli* samples for bacterial testing and it failed to adequately investigate complaints. It therefore failed to comply with the Health Act (sections 69S, 69U, 69Y and 69ZE).

Okains Bay failed the bacteriological Standards because sampling was inadequate. It failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance.

Supplier: Selwyn District Council

Arthurs Pass Population: 350

Health Act: **complied** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**

The water supply uses surface water and is treated by UV. A temporary boil-water notice was issued during the reporting period.

Arthurs Pass failed the bacteriological Standards because *E. coli* was detected in 1.5 percent of monitoring samples. It failed the protozoal Standards because compliance was not attempted.

Castle Hill Population: 299

Health Act: **complied** Standards: Bacterial **met** Protozoal **not met** Chemical **met**

The water supply uses surface water and is chlorinated.

Castle Hill failed the protozoal Standards because compliance was not attempted.

Claremont Population: 170

Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**

The water supply uses groundwater, without disinfection.

Darfield Population: 3,520

Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**

The water supply uses groundwater, without disinfection.

Dunsandel & Sherwood Estate Population: 480

Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**

The water supply uses groundwater and is treated by UV.

Edendale, Sandy Knolls Population: 180

Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**

The water supply uses groundwater and is treated by UV. A temporary boil-water notice was issued during the reporting period.

Johnson Rd, West Melton Population: 160

Health Act: **complied** Standards: Bacterial **met** Protozoal **not met** Chemical **met**

The water supply uses groundwater and is treated by UV.

Johnson Rd, West Melton failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance.

Kirwee Population: 1,207

Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**

The water supply uses groundwater and is treated by UV. A temporary boil-water notice was issued during the reporting period.

Lake Coleridge				Population: 148
Health Act: complied	Standards: Bacterial met	Protozoal not met	Chemical met	
The water supply uses surface water and is treated by UV.				
Lake Coleridge failed the protozoal Standards because turbidity levels at times were too high.				
Leeston				Population: 2,350
Health Act: complied	Standards: Bacterial met	Protozoal met	Chemical met	
The water supply uses groundwater, without disinfection.				
Lincoln				Population: 5,400
Health Act: complied	Standards: Bacterial met	Protozoal met	Chemical met	
The water supply uses groundwater, without disinfection.				
Malvern Hills RWS				Population: 1,592
Health Act: complied	Standards: Bacterial met	Protozoal not met	Chemical met	
The water supply uses surface water and is treated by UV and chlorinated.				
Malvern Hills RWS failed the protozoal Standards for 1,409 people because record-keeping was inadequate.				
Prebbleton				Population: 3,906
Health Act: complied	Standards: Bacterial met	Protozoal met	Chemical met	
The water supply uses groundwater, without disinfection.				
Rakaia Huts				Population: 313
Health Act: complied	Standards: Bacterial met	Protozoal met	Chemical met	
The water supply uses groundwater, without disinfection.				
Rolleston				Population: 15,047
Health Act: complied	Standards: Bacterial met	Protozoal not met	Chemical met	
The water supply uses groundwater and is treated by UV.				
Rolleston failed the protozoal Standards because turbidity levels at times were too high.				
Selwyn RWS				Population: 1,160
Health Act: complied	Standards: Bacterial met	Protozoal not met	Chemical met	
The water supply uses surface water. It is chlorinated and parts of the supply are treated by UV.				
Selwyn RWS failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance.				
Sheffield/Waddington				Population: 585
Health Act: complied	Standards: Bacterial met	Protozoal not met	Chemical met	
The water supply uses surface water and is treated by UV and chlorinated.				
Sheffield/Waddington failed the protozoal Standards because the infrastructure available was inadequate.				
Southbridge				Population: 992
Health Act: complied	Standards: Bacterial met	Protozoal not met	Chemical met	
The water supply uses groundwater, without disinfection.				
Southbridge failed the protozoal Standards because the infrastructure available was inadequate.				
Springfield				Population: 520
Health Act: complied	Standards: Bacterial met	Protozoal not met	Chemical met	
The water supply uses surface water and is treated by UV and chlorinated.				
Springfield failed the protozoal Standards because turbidity levels at times were too high, there were gaps in monitoring and there were calibration issues.				
Springston				Population: 510
Health Act: complied	Standards: Bacterial met	Protozoal met	Chemical met	
The water supply uses groundwater, without disinfection.				
Tai Tapu				Population: 606
Health Act: complied	Standards: Bacterial met	Protozoal met	Chemical met	
The water supply uses groundwater, without disinfection.				

West Melton Population: 1,800
 Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**
 The water supply uses groundwater and is treated by UV.

Supplier: Southpark Utilities Ltd

Waterloo Business Park, Christchurch Population: 1,000
 Health Act: **not compliant** Standards: Bacterial **met** Protozoal **met** Chemical **met**
 The water supply uses groundwater and is treated by UV.
 Waterloo Business Park, Christchurch did not take all appropriate actions to protect public health after an issue was discovered. It therefore failed to comply with the Health Act (section 69ZF).

Supplier: The Store – Kekerengu

Kekerengu Population: 325
 Health Act: **not compliant** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**
 The water supply uses surface water, without disinfection.
 Kekerengu did not take any *E. coli* samples for bacterial testing and it failed to adequately investigate complaints. It therefore failed to comply with the Health Act (sections 69Y and 69ZE).
 Kekerengu failed the bacteriological Standards because sampling was inadequate. It failed the protozoal Standards because record-keeping was inadequate, there were calibration issues and compliance was not attempted.

Supplier: Waimakariri District Council

Cust Population: 330
 Health Act: **complied** Standards: Bacterial **not met** Protozoal **met** Chemical **met**
 The water supply uses groundwater, without disinfection.
 Cust failed the bacteriological Standards because sampling was inadequate.

Garrymere Population: 105
 Health Act: **complied** Standards: Bacterial **met** Protozoal **not met** Chemical **met**
 The water supply uses groundwater and is chlorinated.
 Garrymere failed the protozoal Standards because the infrastructure available was inadequate.

Kaiapoi Population: 12,630
 Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**
 The water supply uses groundwater, without disinfection.

Mandeville Population: 2,353
 Health Act: **complied** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**
 The water supply uses groundwater and is treated by UV and chlorinated.
 Mandeville failed the bacteriological Standards because sampling was inadequate. It failed the protozoal Standards because turbidity levels at times were too high.

Ohoka Population: 280
 Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**
 The water supply uses groundwater and is chlorinated.

Oxford Rural No. 1 Population: 828
 Health Act: **complied** Standards: Bacterial **met** Protozoal **not met** Chemical **met**
 The water supply uses mixed sources and parts of the supply are chlorinated. A permanent boil-water notice was in place during the reporting period.
 Oxford Rural No1 failed the protozoal Standards because the infrastructure available was inadequate.

Oxford Urban – Rural No. 2 Population: 2,993
 Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**
 The water supply uses groundwater, without disinfection.

Pegasus				Population: 4,005
Health Act: complied	Standards: Bacterial met	Protozoal met	Chemical met	
The water supply uses groundwater and is chlorinated.				
Poyntzs Road, Eyrewell				Population: 215
Health Act: complied	Standards: Bacterial met	Protozoal not met	Chemical met	
The water supply uses groundwater and is chlorinated.				
Poyntzs Road, Eyrewell failed the protozoal Standards because the infrastructure available was inadequate.				
Rangiora				Population: 17,880
Health Act: complied	Standards: Bacterial met	Protozoal met	Chemical met	
The water supply uses groundwater, without disinfection.				
Waikuku				Population: 1,150
Health Act: complied	Standards: Bacterial met	Protozoal not met	Chemical met	
The water supply uses groundwater and parts of the supply are treated by UV.				
Waikuku failed the protozoal Standards because the infrastructure available was inadequate.				
West Eyreton				Population: 613
Health Act: complied	Standards: Bacterial not met	Protozoal met	Chemical met	
The water supply uses groundwater and is chlorinated.				
West Eyreton failed the bacteriological Standards because sampling was inadequate.				
Woodend				Population: 3,320
Health Act: complied	Standards: Bacterial met	Protozoal met	Chemical met	
The water supply uses groundwater, without disinfection.				

South Canterbury

Supplier: Arowhenua Rūnanga

Arowhenua Population: 215

Health Act: [complied](#) Standards: Bacterial [not met](#) Protozoal [not met](#) Chemical [met](#)

The water supply uses groundwater, without disinfection.

Arowhenua failed the bacteriological Standards because sampling was inadequate, and failed the protozoal Standards because there were gaps in monitoring.

Supplier: Department of Conservation Aoraki Mt Cook

Mt Cook Population: 350

Health Act: [complied](#) Standards: Bacterial [met](#) Protozoal [met](#) Chemical [met](#)

The water supply uses surface water and is treated by UV.

Supplier: Hakataramea Water Scheme Inc

Hakataramea Valley Rural Population: 165

Health Act: [complied](#) Standards: Bacterial [not met](#) Protozoal [not met](#) Chemical [met](#)

The water supply uses surface water and is chlorinated. A permanent boil-water notice was in place during the reporting period.

Hakataramea Valley Rural failed the bacteriological Standards because *E. coli* was detected in 3.0 percent of monitoring samples and sampling was inadequate. It failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance.

Supplier: Mackenzie District Council

Albury Rural Population: 125

Health Act: [complied](#) Standards: Bacterial [met](#) Protozoal [not met](#) Chemical [met](#)

The water supply uses surface water and is chlorinated.

Albury Rural failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance.

Allandale Population: 150

Health Act: [complied](#) Standards: Bacterial [met](#) Protozoal [not met](#) Chemical [met](#)

The water supply uses surface water and is chlorinated.

Allandale failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance.

Fairlie Population: 1,000

Health Act: [complied](#) Standards: Bacterial [met](#) Protozoal [not met](#) Chemical [met](#)

The water supply uses surface water and is chlorinated.

Fairlie failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance.

Tekapo Population: 500

Health Act: [complied](#) Standards: Bacterial [met](#) Protozoal [not met](#) Chemical [met](#)

The water supply uses surface water and is treated by UV and chlorinated.

Tekapo failed the protozoal Standards because record-keeping was inadequate.

Twizel Population: 1,300

Health Act: [complied](#) Standards: Bacterial [met](#) Protozoal [not met](#) Chemical [met](#)

The water supply uses surface water and is treated by UV and chlorinated.

Twizel failed the protozoal Standards because record-keeping was inadequate.

Supplier: Timaru District Council

Downlands Population: 4,550

Health Act: [complied](#) Standards: Bacterial [not met](#) Protozoal [not met](#) Chemical [met](#)

The water supply uses surface water and is chlorinated. A temporary boil-water notice was issued during the reporting period.

Downlands failed the bacteriological Standards for 350 people because *E. coli* was detected in 0.3 percent of monitoring samples and sampling was inadequate. It failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance.

Geraldine Population: 2,121

Health Act: [complied](#) Standards: Bacterial [met](#) Protozoal [met](#) Chemical [met](#)

The water supply uses groundwater and is treated by UV.

Hadlow Population: 312

Health Act: [complied](#) Standards: Bacterial [met](#) Protozoal [met](#) Chemical [met](#)

The water supply uses surface water and is treated with ozone and chlorinated.

Pareora Population: 450

Health Act: [complied](#) Standards: Bacterial [not met](#) Protozoal [not met](#) Chemical [met](#)

The water supply uses surface water and is treated by UV and chlorinated.

Pareora failed the bacteriological Standards. It failed the protozoal Standards because there were gaps in monitoring and the infrastructure available was inadequate.

Peel Forest Population: 130

Health Act: [complied](#) Standards: Bacterial [met](#) Protozoal [met](#) Chemical [met](#)

The water supply uses surface water and is treated by UV and chlorinated.

Pleasant Point Population: 1,200

Health Act: [complied](#) Standards: Bacterial [met](#) Protozoal [met](#) Chemical [met](#)

The water supply uses groundwater and is treated by UV.

Seadown Population: 895

Health Act: [complied](#) Standards: Bacterial [met](#) Protozoal [met](#) Chemical [met](#)

The water supply uses groundwater and is treated by UV and chlorinated.

St Andrews Population: 280

Health Act: [complied](#) Standards: Bacterial [met](#) Protozoal [not met](#) Chemical [met](#)

The water supply uses groundwater and is chlorinated.

St Andrews failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance.

Te Moana Scheme Population: 1,650

Health Act: [complied](#) Standards: Bacterial [met](#) Protozoal [not met](#) Chemical [met](#)

The water supply uses mixed sources and parts of the supply are treated by UV and chlorinated. A temporary boil-water notice was issued during the reporting period.

Te Moana Scheme failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance.

Temuka Population: 4,620

Health Act: [complied](#) Standards: Bacterial [met](#) Protozoal [met](#) Chemical [met](#)

The water supply uses groundwater and is treated by UV and chlorinated.

Timaru City Population: 26,832

Health Act: [complied](#) Standards: Bacterial [met](#) Protozoal [met](#) Chemical [met](#)

The water supply uses surface water and is treated with ozone and chlorinated.

Supplier: Waimate District Council

Cannington/Motukaika Rural Population: 120

Health Act: **complied** Standards: Bacterial **met** Protozoal **not met** Chemical **met**

The water supply uses surface water and is chlorinated. A permanent boil-water notice was in place during the reporting period.

Cannington/Motukaika Rural failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance.

Hook/Waituna Rural Population: 1,350

Health Act: **complied** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**

The water supply uses surface water and is chlorinated. A temporary boil-water notice was issued during the reporting period.

Hook/Waituna Rural failed the bacteriological Standards because *E. coli* was detected in 1.2 percent of monitoring samples. It failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance.

Lower Waihao Rural Population: 600

Health Act: **complied** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**

The water supply uses groundwater and is chlorinated.

Lower Waihao Rural failed the bacteriological Standards because sampling was inadequate. It failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance.

Otaio/Makikihi Rural Population: 430

Health Act: **complied** Standards: Bacterial **met** Protozoal **not met** Chemical **met**

The water supply uses groundwater and is chlorinated.

Otaio/Makikihi Rural failed the protozoal Standards because the infrastructure available was inadequate.

Waihaorunga Rural Population: 141

Health Act: **not compliant** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**

The water supply uses surface water and is chlorinated. A permanent boil-water notice was in place during the reporting period.

Waihaorunga Rural did not take all appropriate actions to protect public health after an issue was discovered. It therefore failed to comply with the Health Act (section 69ZF).

Waihaorunga Rural failed the bacteriological Standards because *E. coli* was detected in 1.8 percent of monitoring samples and it took inadequate actions to address that issue. It failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance.

Waikākahi Rural Population: 360

Health Act: **complied** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**

The water supply uses surface water and is chlorinated. A permanent boil-water notice was in place during the reporting period.

Waikākahi Rural failed the bacteriological Standards because *E. coli* was detected in 0.9 percent of monitoring samples. It failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance.

Waimate Population: 3,000

Health Act: **complied** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**

The water supply uses groundwater and is chlorinated.

Waimate failed the bacteriological Standards because sampling was inadequate. It failed the protozoal Standards because the infrastructure available was inadequate.

Otago

Supplier: Camphill Estate Utilities Society

Camphill Estate Population: 132

Health Act: **complied** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**

The water supply uses groundwater, without disinfection.

Camphill Estate failed the bacteriological Standards because sampling was inadequate, and failed the protozoal Standards because compliance was not attempted.

Supplier: Cardrona Water Co Ltd

Cardrona Township Population: 300

Health Act: **not compliant** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**

The water supply uses groundwater and is treated by UV and chlorinated.

Cardrona Township failed to provide adequate safe drinking water, it did not take reasonable steps to protect source water from contamination and it did not take all appropriate actions to protect public health after an issue was discovered. It therefore failed to comply with the Health Act (sections 69S, 69U and 69ZF).

Cardrona Township failed the bacteriological Standards because *E. coli* was detected in 2.8 percent of monitoring samples, it took inadequate actions to address that issue and sampling was inadequate. It failed the protozoal Standards because compliance was not attempted.

Supplier: Central Otago District Council

Alexandra Population: 6,000

Health Act: **not compliant** Standards: Bacterial **met** Protozoal **not met** Chemical **met**

The water supply uses groundwater and is chlorinated.

Alexandra did not have an implemented WSP. It therefore failed to comply with the Health Act (section 69Z).

Alexandra failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance.

Clyde Population: 2,200

Health Act: **complied** Standards: Bacterial **met** Protozoal **not met** Chemical **met**

The water supply uses groundwater and is chlorinated.

Clyde failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance.

Cromwell Population: 8,000

Health Act: **complied** Standards: Bacterial **met** Protozoal **not met** Chemical **met**

The water supply uses groundwater and is chlorinated.

Cromwell failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance.

Naseby Population: 420

Health Act: **complied** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**

The water supply uses surface water and is chlorinated.

Naseby failed the bacteriological Standards because sampling was inadequate. It failed the protozoal Standards because turbidity levels at times were too high and the infrastructure available was inadequate.

Ōmakau/Ophir Population: 400Health Act: **complied** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**

The water supply uses surface water and is chlorinated. A temporary boil-water notice was issued during the reporting period.

Ōmakau/Ophir failed the bacteriological Standards because sampling was inadequate. It failed the protozoal Standards because turbidity levels at times were too high and the infrastructure available was inadequate.

Pātearoa Population: 260Health Act: **complied** Standards: Bacterial **met** Protozoal **not met** Chemical **met**

The water supply uses surface water and is chlorinated.

Pātearoa failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance.

Pisa Village Population: 250Health Act: **complied** Standards: Bacterial **met** Protozoal **not met** Chemical **met**

The water supply uses groundwater and is chlorinated.

Pisa Village failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance.

Ranfurly Population: 950Health Act: **complied** Standards: Bacterial **met** Protozoal **not met** Chemical **met**

The water supply uses surface water and is chlorinated.

Ranfurly failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance.

Roxburgh Population: 790Health Act: **complied** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**

The water supply uses groundwater and is treated by UV and chlorinated.

Roxburgh failed the bacteriological Standards because sampling was inadequate. It failed the protozoal Standards because turbidity levels at times were too high and the infrastructure available was inadequate.

Supplier: Closeburn Water Company**Closeburn** Population: 150Health Act: **not compliant** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**

The water supply uses surface water, without disinfection.

Closeburn did not take reasonable steps to protect source water from contamination, it did not take any *E. coli* samples for bacterial testing and it failed to adequately investigate complaints. It therefore failed to comply with the Health Act (sections 69U, 69Y and 69ZE).

Closeburn failed the bacteriological Standards because sampling was inadequate. It failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance.

Supplier: Clutha District Council**Balclutha** Population: 3,918Health Act: **complied** Standards: Bacterial **met** Protozoal **not met** Chemical **not met**

The water supply uses surface water and is treated by UV and chlorinated. The water is fluoridated.

Balclutha failed the protozoal Standards because record-keeping was inadequate. It failed the chemical Standards because fluoride exceeded the MAV.

Clydevale-Pomahaka Rural Population: 778Health Act: **complied** Standards: Bacterial **met** Protozoal **not met** Chemical **met**

The water supply uses groundwater and is chlorinated.

Clydevale-Pomahaka Rural failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance.

Glenkenich Rural Population: 705Health Act: **not compliant** Standards: Bacterial **met** Protozoal **not met** Chemical **not met**

The water supply uses surface water and is chlorinated. A temporary boil-water notice was issued during the reporting period.

Glenkenich Rural did not take all appropriate actions to protect public health after an issue was discovered. It therefore failed to comply with the Health Act (section 69ZF).

Glenkenich Rural failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance. It failed the chemical Standards because some by-products produced as part of the disinfection process exceeded the MAV and it took inadequate actions to address that issue.

Kaitangata Population: 812Health Act: **complied** Standards: Bacterial **met** Protozoal **not met** Chemical **met**

The water supply uses surface water and is chlorinated. The water is fluoridated.

Kaitangata failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance.

Lawrence Population: 417Health Act: **complied** Standards: Bacterial **met** Protozoal **not met** Chemical **met**

The water supply uses surface water and is treated by UV and chlorinated.

Lawrence failed the protozoal Standards because record-keeping was inadequate and compliance was not attempted.

Milton Population: 2,529Health Act: **not compliant** Standards: Bacterial **met** Protozoal **not met** Chemical **not met**

The water supply uses surface water and is chlorinated. The water is fluoridated.

Milton did not take all appropriate actions to protect public health after an issue was discovered. It therefore failed to comply with the Health Act (section 69ZF).

Milton failed the protozoal Standards because record-keeping was inadequate. It failed the chemical Standards for 1,929 people because a disinfection by-product produced as part of the disinfection process exceeded the MAV and it took inadequate actions to address that issue, while fluoride met the chemical Standards.

Moa Flat Population: 534Health Act: **complied** Standards: Bacterial **met** Protozoal **not met** Chemical **met**

The water supply uses surface water and is chlorinated.

Moa Flat failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance.

North Bruce Rural Population: 928Health Act: **not compliant** Standards: Bacterial **not met** Protozoal **not met** Chemical **not met**

The water supply uses surface water and is chlorinated. A temporary boil-water notice was issued during the reporting period.

North Bruce Rural did not take all appropriate actions to protect public health after an issue was discovered. It therefore failed to comply with the Health Act (section 69ZF).

North Bruce Rural failed the bacteriological Standards because *E. coli* was detected in 1.9 percent of monitoring samples. It failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance. It failed the chemical Standards for 658 people because some by-products produced as part of the disinfection process exceeded the MAV and it took inadequate actions to address that issue.

Ōwaka Population: 303Health Act: **complied** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**

The water supply uses groundwater and is chlorinated.

Ōwaka failed the bacteriological Standards because *E. coli* was detected in 1.1 percent of monitoring samples. It failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance.**Richardson Rural** Population: 1,003Health Act: **complied** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**

The water supply uses surface water and is chlorinated. A temporary boil-water notice was issued during the reporting period.

Richardson Rural failed the bacteriological Standards for 222 people because *E. coli* was detected in 0.4% of monitoring samples. It failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance.**Stirling** Population: 737Health Act: **complied** Standards: Bacterial **met** Protozoal **not met** Chemical **met**

The water supply uses surface water and is chlorinated. A temporary boil-water notice was issued during the reporting period.

Stirling failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance.

Tapanui Population: 726Health Act: **not compliant** Standards: Bacterial **met** Protozoal **not met** Chemical **not met**

The water supply uses surface water and is chlorinated. The water is fluoridated.

Tapanui did not take all appropriate actions to protect public health after an issue was discovered. It therefore failed to comply with the Health Act (section 69ZF).

Tapanui failed the protozoal Standards because record-keeping was inadequate. It failed the chemical Standards because fluoride exceeded the MAV and it took inadequate actions to address that issue.

Tuapeka West Population: 283Health Act: **complied** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**

The water supply uses surface water and is chlorinated. A temporary boil-water notice was issued during the reporting period.

Tuapeka West failed the bacteriological Standards because *E. coli* was detected in 5.8 percent of monitoring samples. It failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance.**Waitahuna Rural** Population: 922Health Act: **complied** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**

The water supply uses surface water and is chlorinated. A temporary boil-water notice was issued during the reporting period.

Waitahuna Rural failed the bacteriological Standards for 675 people because *E. coli* was detected in 1.1 percent of monitoring samples. It failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance.**Supplier: Dunedin City Council****Dunedin City** Population: 112,515Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**

The water supply uses surface water. It is chlorinated and parts of the supply are treated by UV. The water is fluoridated.

Outram Population: 750Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**

The water supply uses surface water and is treated by UV and chlorinated.

Waikouaiti Population: 1,642Health Act: **not compliant** Standards: Bacterial **met** Protozoal **met** Chemical **met**

The water supply uses surface water and is chlorinated.

Waikouaiti did not have an implemented WSP. It therefore failed to comply with the Health Act (section 69Z).

West Taieri Population: 450

Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**

The water supply uses surface water and is chlorinated.

Supplier: Earnsclough Domestic Water Co Ltd

Earnsclough Water Scheme Population: 120

Health Act: **not compliant** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**

The water supply uses groundwater, without disinfection.

Earnsclough Water Scheme did not take any *E. coli* samples in some parts of the supply for bacterial testing. It therefore failed to comply with the Health Act (section 69Y).

Earnsclough Water Scheme failed the bacteriological Standards because sampling was inadequate, and failed the protozoal Standards because compliance was not attempted.

Supplier: Last Chance Community Scheme

Last Chance Population: 120

Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**

The water supply uses groundwater, without disinfection.

Supplier: Long Gully Rural Water Scheme

Alexandra, Long Gully Population: 172

Health Act: **not compliant** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**

The water supply uses groundwater, without disinfection.

Alexandra, Long Gully did not take any *E. coli* samples for bacterial testing. It therefore failed to comply with the Health Act (section 69Y).

Alexandra, Long Gully failed the bacteriological Standards because sampling was inadequate, and failed the protozoal Standards because compliance was not attempted.

Supplier: Maheno Water Committee

Maheno Population: 152

Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**

The water supply uses groundwater and is treated by UV and chlorinated. A temporary boil-water notice was issued during the reporting period.

Supplier: Millers Flat Water Company Ltd

Millers Flat Population: 180

Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**

The water supply uses groundwater and is treated by UV.

Supplier: Pisa Moorings Utilities Society

Pisa Moorings Population: 130

Health Act: **not compliant** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**

The water supply uses groundwater, without disinfection.

Pisa Moorings did not take any *E. coli* samples in some parts of the supply for bacterial testing. It therefore failed to comply with the Health Act (section 69Y).

Pisa Moorings failed the bacteriological Standards because sampling was inadequate. It failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance.

Supplier: Waitaki District Council

Awamoko Population: 399

Health Act: **not compliant** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**

The water supply uses surface water and is chlorinated.

Awamoko did not take all appropriate actions to protect public health after an issue was discovered. It therefore failed to comply with the Health Act (section 69ZF).

Awamoko failed the bacteriological Standards because actions following an issue were inadequate. It failed the protozoal Standards because compliance was not attempted.

Kauru Hill Population: 197

Health Act: **not compliant** Standards: Bacterial **met** Protozoal **not met** Chemical **met**

The water supply uses surface water and is chlorinated. A temporary boil-water notice was issued during the reporting period.

Kauru Hill failed to provide adequate safe drinking water. It therefore failed to comply with the Health Act (section 69S).

Kauru Hill failed the protozoal Standards because compliance was not attempted.

Kurow Population: 330

Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**

The water supply uses groundwater and is treated by UV and chlorinated.

Lower Waitaki, Rural Population: 778

Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**

The water supply uses groundwater and is treated by UV and chlorinated.

Ōamaru Population: 15,561

Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**

The water supply uses surface water and is treated with ozone and chlorinated.

Ōmarama Population: 270

Health Act: **complied** Standards: Bacterial **met** Protozoal **not met** Chemical **met**

The water supply uses groundwater and is chlorinated.

Ōmarama failed the protozoal Standards because compliance was not attempted.

Ōtemātātā Population: 195

Health Act: **complied** Standards: Bacterial **met** Protozoal **not met** Chemical **met**

The water supply uses groundwater and is treated by UV and chlorinated.

Ōtemātātā failed the protozoal Standards because turbidity levels at times were too high.

Tokarahi/Livingstone Population: 573

Health Act: **not compliant** Standards: Bacterial **met** Protozoal **not met** Chemical **met**

The water supply uses surface water and is chlorinated.

Tokarahi/Livingstone did not have an implemented WSP. It therefore failed to comply with the Health Act (section 69Z).

Tokarahi/Livingstone failed the protozoal Standards because compliance was not attempted.

Waihemo Population: 1,357

Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**

The water supply uses groundwater and is treated by UV and chlorinated.

Windsor Population: 137

Health Act: **not compliant** Standards: Bacterial **met** Protozoal **not met** Chemical **met**

The water supply uses surface water and is chlorinated.

Windsor failed to provide adequate safe drinking water. It therefore failed to comply with the Health Act (section 69S).

Windsor failed the protozoal Standards because compliance was not attempted.

Southland

Supplier: Gore District Council

Gore Population: 7,480

Health Act: [complied](#) Standards: Bacterial [not met](#) Protozoal [not met](#) Chemical [met](#)

The water supply uses groundwater and is chlorinated.

Gore failed the bacteriological Standards because *E. coli* was detected in 0.3 percent of monitoring samples. It failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance.

Mataura Population: 1,790

Health Act: [complied](#) Standards: Bacterial [met](#) Protozoal [not met](#) Chemical [met](#)

The water supply uses surface water and is chlorinated.

Mataura failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance.

Otama Population: 300

Health Act: [complied](#) Standards: Bacterial [not met](#) Protozoal [not met](#) Chemical [met](#)

The water supply uses groundwater and is chlorinated.

Otama failed the bacteriological Standards because *E. coli* was detected in 1.4 percent of monitoring samples. It failed the protozoal Standards because of inadequate treatment facilities and no attempt at compliance.

Supplier: Invercargill City Council

Invercargill Population: 50,456

Health Act: [complied](#) Standards: Bacterial [met](#) Protozoal [met](#) Chemical [met](#)

The water supply uses surface water and is treated by UV and chlorinated. The water is fluoridated.

Supplier: Jacks Point Ltd

Jacks Point Population: 669

Health Act: [complied](#) Standards: Bacterial [met](#) Protozoal [not met](#) Chemical [met](#)

The water supply uses surface water and is treated by UV and chlorinated.

Jacks Point failed the protozoal Standards because there were gaps in monitoring.

Supplier: Milford Sound Infrastructure Ltd

Milford Sound Population: 850

Health Act: [complied](#) Standards: Bacterial [not met](#) Protozoal [not met](#) Chemical [met](#)

The water supply uses surface water and is treated by UV. A temporary boil-water notice was issued during the reporting period.

Milford Sound failed the bacteriological Standards because sampling was inadequate. It failed the protozoal Standards because turbidity levels at times were too high.

Supplier: Queenstown Lakes District Council

Arrowtown Population: 4,366

Health Act: [complied](#) Standards: Bacterial [met](#) Protozoal [not met](#) Chemical [met](#)

The water supply uses groundwater and is treated by UV and chlorinated.

Arrowtown failed the protozoal Standards because turbidity levels at times were too high.

Arthurs Point Population: 1,631Health Act: **complied** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**

The water supply uses groundwater and is treated by UV and chlorinated.

Arthurs Point failed the bacteriological Standards because sampling was inadequate. It failed the protozoal Standards because turbidity levels at times were too high.

Glenorchy Population: 1,232Health Act: **complied** Standards: Bacterial **met** Protozoal **not met** Chemical **met**

The water supply uses groundwater and is chlorinated.

Glenorchy failed the protozoal Standards because compliance was not attempted.

Hāwea Population: 3,767Health Act: **complied** Standards: Bacterial **met** Protozoal **not met** Chemical **met**

The water supply uses groundwater and is treated by UV and chlorinated.

Hāwea failed the protozoal Standards because turbidity levels at times were too high.

Lake Hayes Population: 3,743Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**

The water supply uses groundwater and is treated by UV and chlorinated.

Luggate Population: 855Health Act: **complied** Standards: Bacterial **met** Protozoal **not met** Chemical **met**

The water supply uses groundwater and is chlorinated.

Luggate failed the protozoal Standards because compliance was not attempted.

Queenstown Population: 25,271Health Act: **complied** Standards: Bacterial **met** Protozoal **not met** Chemical **met**

The water supply uses surface water. It is chlorinated and parts of the supply are treated by UV.

Queenstown failed the protozoal Standards because turbidity levels at times were too high and compliance was not attempted.

Wānaka Population: 13,633Health Act: **complied** Standards: Bacterial **met** Protozoal **not met** Chemical **met**

The water supply uses surface water and is chlorinated.

Wānaka failed the protozoal Standards because compliance was not attempted.

Wanaka Airport Population: 150Health Act: **complied** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**

The water supply uses groundwater and is chlorinated.

Wanaka Airport failed the bacteriological Standards because sampling was inadequate, and failed the protozoal Standards because compliance was not attempted.

Supplier: Southland District Council**Eastern Bush/Ōtahu Flat RWS** Population: 180Health Act: **complied** Standards: Bacterial **not met** Protozoal **not met** Chemical **met**

The water supply uses surface water and is chlorinated. A permanent boil-water notice was in place during the reporting period.

Eastern Bush/Ōtahu Flat RWS failed the bacteriological Standards. It failed the protozoal Standards because turbidity levels at times were too high and compliance was not attempted.

Edendale/Wyndham Population: 1,152Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**

The water supply uses groundwater and is treated by UV and chlorinated.

Lumsden/Balfour Population: 1,061Health Act: **complied** Standards: Bacterial **met** Protozoal **met** Chemical **met**

The water supply uses groundwater and is treated by UV and chlorinated.

Manapōuri				Population: 228
Health Act: complied	Standards: Bacterial met	Protozoal met	Chemical met	
The water supply uses surface water and is treated by UV and chlorinated.				
Mossburn				Population: 201
Health Act: complied	Standards: Bacterial met	Protozoal met	Chemical met	
The water supply uses groundwater and is treated by UV and chlorinated.				
Ōhai/Nightcaps				Population: 667
Health Act: complied	Standards: Bacterial met	Protozoal met	Chemical met	
The water supply uses surface water and is chlorinated.				
Ōtautau				Population: 798
Health Act: complied	Standards: Bacterial met	Protozoal met	Chemical met	
The water supply uses groundwater and is treated by UV and chlorinated.				
Riverton				Population: 1,506
Health Act: not compliant	Standards: Bacterial met	Protozoal met	Chemical met	
The water supply uses groundwater and is chlorinated.				
Riverton did not have an implemented WSP. It therefore failed to comply with the Health Act (section 69Z).				
Te Anau				Population: 2,628
Health Act: complied	Standards: Bacterial met	Protozoal met	Chemical met	
The water supply uses groundwater and is treated by UV and chlorinated.				
Tūātapere				Population: 561
Health Act: complied	Standards: Bacterial met	Protozoal met	Chemical met	
The water supply uses groundwater and is treated by UV and chlorinated.				
Winton				Population: 2,436
Health Act: complied	Standards: Bacterial met	Protozoal met	Chemical met	
The water supply uses groundwater and is treated by UV and chlorinated.				