Bactosure

Case Study

Wairoa District Council – Restoring Rural Water Testing with Bactosure





Background

Until late 2024, Wairoa District Council operated its own IANZ-accredited laboratory for drinking water testing. The local lab enabled fast turnaround times, local expertise, and direct control over water quality assurance across the district. However, in November 2024, a change in the laboratory accreditation criteria forced the council to shut down its lab—despite its strong performance and experienced staff. The result was an immediate reliance on distant external laboratories for all mandatory microbiological testing.

The Challenge

Following the lab's closure, Wairoa District Council faced a range of new problems:

1 Courier Pressure

Samples had to be collected late in the day and rushed to courier depots by 4:30pm to meet the 24-hour compliance window. Missing the truck meant the sample would be rejected or invalid.

2 Logistical Uncertainty

On multiple occasions, staff waited at courier depots until 6:00pm, or resorted to delivering samples by motorbike to avoid compliance breaches.

3 Sample Integrity Risks

Samples stored in chilli bins were exposed to temperature extremes, including near-freezing during cold snaps. Saturday deliveries were often missed or mishandled.

4 Travel Burden

With the nearest IANZ-accredited labs now in Gisborne or Hastings—over 100km away—testing became time-consuming and costly.

The Solution

In March 2025, Wairoa District Council partnered with **Bactosure** to re-establish localised microbiological testing using Bactosure's **accredited on-site testing platform**. The system was installed at council facilities and can now be operated directly by council staff without needing to send samples off-site.

The Benefits

1 Fast, Compliant Results

Bactosure delivers microbiological test results for E. coli and total coliforms in **as little as 16 hours**—up to 6 times faster than traditional lab turnaround times. This allows Wairoa to act swiftly in response to potential contamination events and maintain Water Services Act compliance without delays.

2 No More Courier Stress

Samples are now tested on-site, eliminating the need for urgent courier drop-offs or lengthy travel. Staff no longer have to wait at depots, worry about missed trucks, or race against the 24-hour deadline.

3 Automatic SMS Alerts for Positives

When a positive ***E. coli*** result is detected in treated drinking water, the system sends an **automated SMS alert** to designated council staff—enabling immediate awareness and investigation without needing to check a portal or wait for a lab report.

4 Built-In Digital Traceability

All sampling information (GPS location, time, sample collector ID) is recorded digitally via Bactosure's online system and encoded on RFID sample bags. This provides **end-to-end traceability** and helps prevent errors such as sample swaps, incomplete metadata, or late submissions.

5 No Upfront Capital Required

Bactosure operates on a **subscription model.** This meant Wairoa could re-establish testing capability without purchasing expensive equipment or taking on large setup costs. The council pays only for the tests it needs and retains the flexibility to scale up or down as required.

6 Ease of Use for Field Staff

The system requires **minimal training**, with most staff fully capable after a 10-minute induction. This makes it ideal for rural councils like Wairoa, where highly specialised lab personnel are no longer available locally.

Conclusion

Wairoa District Council's partnership with Bactosure restored local testing capacity after the closure of their IANZ-accredited laboratory, without compromising compliance or accuracy. The council now benefits from faster turnaround times, operational resilience, and greater confidence in sample traceability—all while reducing reliance on external labs and couriers. By embracing on-site testing, Wairoa is leading the way for other rural councils navigating post-reform challenges in drinking water compliance.

Contact Bactosure to find out more about how Bactosure can help your Municipal water

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