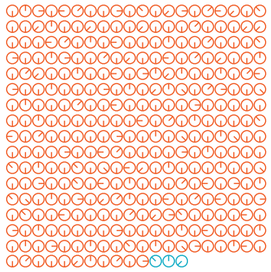
Case for Change

Upgrading New Zealand's public wastewater infrastructure is one of the biggest challenges facing the country. The Water Services Authority—Taumata Arowai (the Authority), on behalf of the Minister of Local Government, is consulting on a set of proposed national wastewater environmental performance standards ('wastewater standards') to address this infrastructure challenge.

A Our current system

Across New Zealand, there are:

334 Publicly owned wastewater plants



KEY: Council/CCO operated
DOC/NZ Defence operated

67 Territorial authorities operate one or more wastewater treatment plants

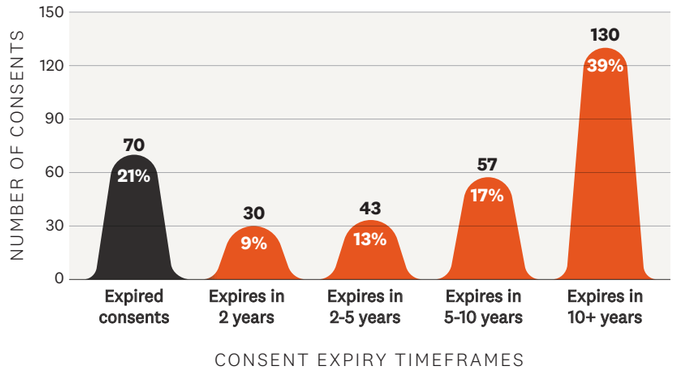
Around half of New Zealand's wastewater treatment plants serve communities of less than 1,000 people.

B A bow wave of consents is coming

Over the next 10 years, approximately 60% of consents for wastewater treatment plants will come up for renewal.

Expired consents make up around 20% of these consents. Plants operate on expired consents for an average of 5 years, with some plants for over 2 decades. This delay has significant impact on the environment and increases risk to public health.

FIGURE 1. Water Services Authority Database of Wastewater Resource Consents (2025)



C Resource consenting of treatment plants is costly, time consuming, and sets the wrong incentives for infrastructure renewal

Wastewater treatment requirements are normally determined plant by plant by the resource consent process, notwithstanding the strong similarities in infrastructure, receiving environment, and community aspirations across plants.

This approach is costly, time consuming, and sets the wrong incentives for infrastructure owners, including:

- ✗ Uncertainty for wastewater infrastructure planning and funding.
- ✗ Increases in consent process time and cost.
- ✗ High uncertainty and time taken to engage with community about what 'good' treatment looks like.
- ✗ Significant variations in wastewater infrastructure design and operation.

The 'plant-by-plant' approach does not incentivise standardised plant design and procurement, economies of scale, operator and training capability, or benchmarking of performance.

This approach is an outlier compared to other infrastructure sectors, and significantly increases the overall costs to councils and their ratepayers.

The effects-based consenting process is complex, costly, and varies greatly. This has led to three main issues:

1 Significant costs associated with determining the treatment requirements for a plant. This drives cost in many other areas, such as plant design, community consultation, and planning and funding arrangements.

2 Treatment requirements and consent conditions vary significantly across the country, which also impacts compliance.

3 Wastewater system performance lacks transparency and accountability. There is an absence of performance benchmarking which is standard practice in other comparable infrastructure sectors.

These costs can come from:

- Engaging technical specialists to assess environmental effects and required plant upgrades.
- Stakeholder consultation with those who have high interest in wastewater management.
- Repeated consent processes driven by short-term consents.

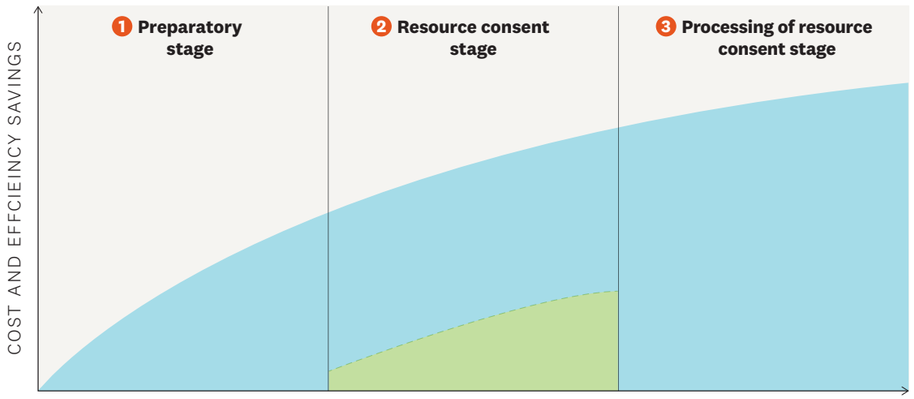
D Wastewater system performance also lacks transparency

- Monitoring and reporting on the performance of wastewater treatment plants and networks is highly variable.
- Information about the performance of wastewater networks is difficult to access and often not publicly available.
- Public health and environment risks are not transparently reported to communities.
- Many consent conditions are difficult to comply with or enforce.

E Opportunities and benefits of a national wastewater standard

- ✓ Setting standards before consent renewals can save time and money, and simplify infrastructure design and procurement.
- ✓ Proposed wastewater standards will make plant design, procurement, and operations more cost-efficient.
- ✓ National standards will allow performance benchmarking similar to other comparable infrastructure sectors.
- ✓ Councils will better understand their pipe networks, focus improvements where they are most effective.
- ✓ Standardisation of plant design will create multiple opportunities for save costs for councils and rate payers.
- ✓ Standards will bring certainty for planning, funding and consenting of treatment plants.
- ✓ National standards will promote transparent, consistent monitoring, reporting, compliance, and enforcement.
- ✓ Standards will create an infrastructure pipeline and directly address the upcoming bow wave of consents.

THREE STAGES OF THE CONSENTING PROCESS



Examples of **Stage 1** activities that will become **less onerous**:

- Feasibility assessments of options
- Plant design
- Stakeholder engagement planning
- Baseline environmental monitoring and assessments

Examples of **Stage 2** activities that will become **less onerous**:

- Environmental effects assessment
- Geotechnical assessment
- Hydrogeological assessment
- Stakeholder consultation

Examples of **Stage 2** activities that will **no longer be required**:

- Hydrodynamic modelling
- Water quality effects assessment
- Aquatic ecology assessment

Examples of **Stage 3** activities that will become more **streamlined**:

- Notifications
- Submissions
- Hearings (if any)

Overflows

Overflows occur in almost all networks, especially in older, poorly maintained ones when blockages or heavy rainfall overwhelm them. Overflows release untreated wastewater into the environment, risking public health and environmental degradation. With New Zealand's fast ageing wastewater networks and increasing impact of climate change, overflows will significantly increase in the future.

Current issues with overflows include:

- ⚠ Limited or poor monitoring of overflows and reporting to communities.
- ⚠ Varying levels of network knowledge; some councils don't know where or why overflows happen.
- ⚠ No standard definition of an overflow event nationwide; councils measure them differently.
- ⚠ Few councils use network modelling.

Improving network knowledge and infrastructure can significantly reduce overflows, as well as protect public health and the environment.

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