Matatā Wastewater FAQs

Why does Matatā need a wastewater scheme?

Currently, Matatā does not have a reticulated wastewater system and individual properties rely on their existing on-site septic tank system arrangements, which in many cases are failing or unreliable. Environment sampling has confirmed that septic tank failure at Matatā is contributing to public health risks and degradation of the environment, particularly Te Awa o Te Atua (Matatā lagoon).

What are the benefits of the project?

The project will…

- Provide a safe and reliable wastewater system for Matatā that reduces public health and environmental risks.
- Provide a resilient wastewater system that will allow for future growth.
- Manage wastewater in an environmentally and culturally appropriate way that protects and enhances the environmental values of the Matatā Taiao in alignment with the principles of Te Mana o te Wai.
- Share the cost of the new wastewater scheme across the Whakatāne District.

Why is there a co-design approach?

A co-design approach was established from the outset with local Iwi, hapū and Council representatives to ensure a collaborative partnership approach at all stages of planning and decision making.

How will we be consistently engaging with the community and tangata whenua?

It is important we capture the voices of the community through this journey and we will provide multiple opportunities to engage and make this happen. If you have an event or hui that you would like us to come along to, so you can find out more about the project, please let us know. We will also do regular updates through the Matatā Matters Newsletter, social media and our website.

Do you know how much it's going to cost?

Wastewater can be collected, treated and disposed of in numerous ways, and the final system design will heavily influence the scheme's cost. Technical work continues to determine the best treatment system type and how and where Matatā's wastewater will be disposed of. Once the system specifics have been determined, we will determine the scheme's cost as part of the preliminary design phase.

Who will pay for the wastewater scheme?

Projects of this scale are typically funded between existing users connected to a wastewater scheme and those properties directly benefiting because of the scheme. In addition to rate funding, Council has secured external funding from the Ministry of Health ($6.7 million). Different funding and financing models are being worked through at present with the aim of developing an approach that is fair and equitable and spreads costs appropriately over the life of the scheme.

Why don't you manage Matatā's wastewater via existing schemes such as Kawerau or Edgecumbe?

Within the Whakatāne District, Edgecumbe, Murupara, Tāneatua and Whakatāne Wastewater Treatment Plants have resource consents for their operation and associated discharges. These expire in October 2026. Works to improve the treatment and management of wastewater in these communities will be required to meet modern legislative requirements and community and cultural expectations.

Several in-depth studies have been undertaken to assess how/ if we could integrate communities' wastewater for treatment and disposal. These studies considered operational feasibility, cultural and community expectations and environmental, social, and economic outcomes. Several possibilities were considered for the treatment and disposal of Matatā's wastewater, including integration with Edgecumbe and Kawerau. These proposals were rejected based on cost, risk of conveyance of raw wastewater over extended distances (particularly potential septicity and odour), and the inability to meet legislative requirements and cultural expectations around the current discharge to freshwater bodies.

What other options have you considered?

Several desktop studies have been done over numerous years on how to best manage wastewater within the Whakatāne District. At a high level, the options for Matatā's wastewater included integrating into existing schemes vs. developing a stand-alone system with various discharge options, such as land, sea, and freshwater. From a feasibility and cost perspective, it was determined from those studies a stand-alone system with disposal in/ surrounding Matatā would be best. Te Niaotanga o Mataatua o Te Arawa Co-design Group was formed to collaborate and consider options for treatment and disposal on that basis while developing a solution that delivers the best social, economic, cultural, and environmental outcomes for the community.

For those reasons, land disposal of treated wastewater is the preferred approach, though this does not preclude other options should the co-design group consider another method.

Have you found a land disposal site yet?

Initial investigations have identified two potential sites for the land-based application. More detailed investigations are required to confirm the site's suitability and to determine how a land application field would operate.

Are you only considering council-owned land for the disposal field?

All land, whether owned by the Council or private, within 10km of Matatā was considered as part of a robust constraint mapping process. Suitable land was first identified by mapping constraints such as elevation, drainage, soil type, distance to waterways, cultural sites, etc.

Are there any parcels of council-owned land that are suitable?

No current Council-owned land has been identified as suitable for land disposal via the constraints mapping process.

Have you found a site for the wastewater treatment plant yet?

Initial constraints mapping was done as a first step to identify potentially suitable land to locate a wastewater treatment plant. The mapping considers factors such as cultural and environmental features and identifies land parcels that may be suitable based on those factors. Buffer zones are also built into the maps around sensitive areas such as houses, Kura, waterways, etc. Discussions with landowners are underway to determine where we could locate the plant.

Dairy farm operation – Can you still use the land for grazing/dairy?

Fonterra and other dairy companies do not allow treated wastewater irrigation on land that is grazed for milk supply.

What's the design?

It has been determined the best option for Matatā, considering social, economic, cultural, and environmental outcomes, is to have a stand-alone wastewater treatment plant with land-based disposal in the land surrounding Matatā. Specifics about the treatment plant, such as the location and system type and the location of the land application disposal field are still to be determined.

Where will the pipe go?

The location of the pipe will depend on the location of the treatment plant and land disposal field. Work completed as part of the original scheme plan recommended a low-pressure and pumped scheme. This involves a collection chamber and a small pump on each property that discharges to a public network that runs along the streets. The benefit of this system is it allows for greater flexibility in where the pipes run as it's not reliant on gravity. Additionally, the pipes are laid at shallower depths.

Will I have a pipe through my land?

Preliminary design work completed to date is based on a low-pressure system. This type of scheme offers greater flexibility where pipes run, which, in most cases, avoids the need to run parts of the public network across private property.

What have you learnt from the past?

Due to the significant amount of work undertaken on previous projects, two desktop reviews were done early in this project. These review processes reviewed relevant past information, reports, and data to ensure the current technical team could learn from the past and inform future project phases. The two desktop reviews included both technical engineering and environmental science perspectives.

When will you be lodging a consent?

The consent application lodgement is contingent on identifying a preferred option for treatment and disposal.

What will happen to the solids?

The wastewater treatment plant will generate two different solids streams: screenings debris, such as rags and plastics, and biological sludge, called waste activated sludge (WAS). The screenings debris will be contaminated with faecal material, so will be taken away for disposal in an appropriate landfill. The WAS will require further treatment, followed by disposal or reuse. The preferred method for handling the WAS will be worked through with the co-design group.

How are you protecting the interest of the land and water?

Before applying wastewater to land, a high level of treatment will remove a large proportion of nutrients and harmful organisms (pathogens) to ensure the scheme will operate sustainably. In addition, site-specific testing will be undertaken to understand the capacity of the land and determine an appropriate application rate to ensure there is no ponding or runoff. Applying wastewater in a responsible manner that is within the capacity of the land will ensure we operate sustainably and this will protect the interest of the land and the surrounding waterways.

What testing and monitoring have you done?

In the early stages of the environmental monitoring workstream, an Environmental Monitoring Plan (EMP) was developed to form a robust monitoring programme that could describe the existing environment and provide a baseline for future monitoring of the relevant receiving environments.

Surface water quality sites selected for sampling included five sites within or upstream of the Matatā township. Three sites along the Tarawera River (including one Bay of Plenty Regional Council monitoring site), two Bay of Plenty Regional Council monitoring sites in the Matatā Lagoon and a single site which is included in Bay of Plenty Regional Council On-Site Effluent Testing (OSET) programme.

Monthly surface water monitoring at these sites commenced in November 2021, and samples were analysed for a range of parameters, including physicochemical (e.g., dissolved oxygen, pH and conductivity), nutrients (e.g., nitrate-N, ammoniacal-N, dissolved reactive phosphorus, and total nitrogen and phosphorus) and faecal indicator bacteria (e.g., E. coli and Enterococci). In addition, periodic Faecal Source Tracking (FST) analysis was undertaken on three occasions in 2022 and bi-monthly from 2023 onwards to identify the origins of faecal contamination.

Monthly groundwater monitoring started in March 2022 and is done monthly at seven groundwater monitoring sites within the Matatā township. The samples are analysed for a range of parameters, including physicochemical (e.g., dissolved oxygen, pH, and conductivity), nutrients (e.g., nitrate-N, ammoniacal-N and Total Phosphorus), several metals and faecal indicator bacteria (e.g., E. coli and Enterococci).

A baseline surface water report was prepared to analyse water quality and ecological monitoring results for monthly samples taken between November 2021 and January 2023.

A brief summary of key findings is below:

- Clear positive relationships between E. coli and nitrogen-based nutrients have been detected at two sites likely to receive septic tank discharge. These are also sites where human sources of faecal contamination have been confirmed.
- Sources of human faecal contamination have been detected at five of the seven surface water sites submitted for faecal source tracking analysis. Four of the five sites with confirmed human sources of faecal contamination are downstream of the township, and the other is within the township.
- Concentrations of ammoniacal-N, nitrate and total nitrogen have been consistently elevated at sites downstream of the township at one site and, to a lesser extent, at another than at another site downstream.
- Based on the evidence to date, it is reasonable to conclude that human faecal contamination detected at sites within and downstream of the Matatā township is most likely derived from septic tank leakage or discharge.