

24 April 2025

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Re: Consultation on proposed wastewater environmental performance standards

Tēnā koutou Taumata Arowai

Kāpiti Coast District Council (the Council) thanks you for the opportunity to make a submission on the proposed national wastewater performance standards (proposed Standards). We support the goal of national consistency. However, we have serious concerns about certain aspects of the proposal that will undermine its effectiveness.

We will address the key issues in this submission, with specific reference to the impact of the proposed Standards on Council and our Paraparaumu Wastewater Treatment Plant (PWWTP), including:

- 1. **Dilution as the sole measure of Wastewater Treatment Plant (WWTP) performance:** We <u>disagree</u> with using dilution alone to set wastewater standards. Relying only on dilution to set standards oversimplifies the situation. The approach fails to account for the:
 - Quality of the treatment at WWTPs,
 - Quality of effluent at the point of discharge, and
 - Conditions of the receiving environment.

This approach risks discouraging improvements in high-performing treatment plants, such as Council's Paraparaumu WWTP.

- 2. **Exclusion of very low dilution environments:** We <u>disagree</u> with excluding discharges to very low dilution environments from the proposed Standards. The proposed exclusion of these discharges, including from the Paraparaumu WWTP, is unjustified. Despite the high standard of treatment and effluent quality, this exclusion would:
 - Prevent plants like Paraparaumu WWTP benefiting from national standards, forcing them to continue operating under inconsistent and costly regional processes,
 - Undermine the objectives for developing the Standards, and
 - Discourage pursuit of improving overall discharge quality.
- 3. Uncertainty for Councils renewing their Wastewater Discharge Consents: We are currently seeking a new discharge consent from Greater Wellington Regional Council (GWRC). Final standards are expected in August 2025, potentially after GWRC has held a hearing and made substantive decisions on our application. We have requested that GWRC place our application on hold under section 91A of the RMA. In parallel, we strongly urge you to support a national moratorium on the processing of WWTP discharge applications until the final Standards are in effect.

4. We request Taumata Arowai:

- Introduces point-of-discharge standards to include high-performing plants, regardless of dilution.
- Removes or modifies exclusions for very low dilution environments, shifting to a focus on discharge quality to ensure that the intended benefits of the Standards can be realised by all water and local authorities.
- Supports Council's request to the Minister for the Environment to place a moratorium on the processing of resource consent applications, which will prevent unnecessary costs to both regional councils and territorial authorities in the interim.
- Clarifies the proposed section 124 limits and confirm that the proposed 5-year extension will apply to consents that have already expired.
- 5. **Our detailed Submission is provided below.** Our submission is made in reference to circumstances specific to the Paraparaumu WWTP, which will be affected by the proposed exclusion. To support this submission, we include:
 - Background information relating to the reconsenting and performance of the Paraparaumu WWTP (Appendix One), and
 - An assessment of effluent quality from the Paraparaumu WWTP against the proposed standards for low dilution environments (Appendix Two).

Letters to the Ministers for the Environment and Local Government are also attached, for your information.

Specific Comments on the proposed Standards

In discussing the issues outlined above, we have responded to the following questions in the Discussion Document:

- Are the areas for exceptions appropriate to manage the impacts of discharges and do you anticipate implementation challenges?
- How should the exceptions be further defined to ensure there are no unintended consequences?
- Are the treatment limits, and monitoring and reporting requirements proportionate to the potential impacts of the different discharge scenarios?
- What benefits and challenges do you anticipate in implementing the proposed approach? Are there particular matters that could be addressed through guidance material?

1. <u>Using dilution as the sole factor in the national standards</u>

The proposed Standards set limits for specified contaminants or parameters that vary depending on different types of receiving environments. Seven categories of receiving environments are proposed, based on dilution and the type of receiving environment. Dilution is said to be a proxy for the assimilative capacity of the receiving environment.

While we support how the proposed standards make it easy for regulators and operators to determine and apply the relevant standard, we are concerned that the dilution approach oversimplifies effluent management. Setting standards based on dilution alone ignores other relevant factors, such as the:

- Performance of the WWTP,
- Quality of treated effluent at the point of discharge,
- Existing water quality in the receiving environment (up and downstream of discharge), and
- Cumulative impacts on the receiving water body (including catchment-wide issues, ecology, water source protection, cultural and recreational values).

For example, the Paraparaumu WWTP discharge is the main flow in the Mazengarb Drain. Without this discharge, many ecological metrics would drop, including habitat quality. In such cases, the treated effluent may even improve water quality, especially when the discharge quality is higher than the background water in the waterway.

Given these issues, the use of dilution alone could result in the following unintended consequences:

- Low performing WWTP's discharging into high dilution environments are not incentivised to improve effluent treatment.
- WWTP operators who discharge to land may now choose to discharge to surface water because it is easier regardless of the environmental consequences.

Furthermore, this approach does not recognise those water and local authorities who have invested significantly to improve the quality of discharge, beyond the proposed standards for contaminants, regardless of the proposed dilution factor in the receiving environment.

2. Exclusion of WWTP's discharging into very low dilution environments

Council does not agree with how the proposed Standards exclude very low dilution receiving environments. For us, any future discharge consent for the Paraparaumu WWTP, despite its high-quality discharge, would fall outside the scope of national standards and face the current time-consuming, inconsistent, and costly consenting processes.

The current dilution into the Mazengarb Drain is estimated to be only 1.05 at the point of discharge and 2.61 where the Mazengarb Drain enters the Waikanae River. As stated earlier, the discharge supports habitat values and flow in the stream. Appendix One and Two show the Paraparaumu WWTP already meets most of the low dilution standards and has a plan in place to achieve the Total Nitrogen limits.

The Standards are intended to create national consistency and certainty, which is not achieved through excluding discharges to very low dilution environments. For streams with very low dilution potential, we request Taumata Arowai sets point of discharge standards. This will still protect the receiving environment from adverse outcomes while ensuring high-performing plants such as ours are assessed under the national framework rather than continuing through a costly regional consent process.

We understand that 22 WWTPs, including 14 medium or large size WWTPs, would be captured by this exclusion. This equates to approximately 11% of all WWTP's discharging to water and 7% of all WWTPs. These numbers are not insignificant. All excluded WWTP's will continue to face the delays, costs, inconsistencies, and uncertainty related to a regional, bespoke consenting approaches that the proposed Standards seek to avoid. In our case, this equates to an estimated \$1.7 million (including hearing costs) on consenting for a 15-year consent term.

Excluding the Paraparaumu WWTP because of the very low dilution factor ignores the following facts:

- Paraparaumu WWTP discharge meets nearly all Standards for low dilution environments.¹
- The discharge flows into a highly modified and degraded environment.
- The discharge provides vital flow augmentation that supports the ecology of the Mazengarb Drain.

The proposal also excludes discharges to a waterbody that have naturally high levels of a particular parameter (excluding from diffuse discharges). Because the WWTP has discharged to the Mazengarb Drain since the 1990s, and the drain itself has a very low baseflow, it is very difficult to determine the background water quality of the watercourse. However, water quality is understood to be low given the various other contributions in the catchment. This exclusion, which could apply to the Paraparaumu WWTP, may disincentive WWTP operators discharging into already degraded environments, and favour discharges to environments with better water quality and habitat values.

¹ Excluding Total Nitrate, which the Council anticipates complying with after the nitrate removal upgrades are complete.

Furthermore, both exclusions could encourage Council to reroute discharges to more ecologically sensitive areas, such as the Waikanae River or the sea, which would have negative ecological, cultural, recreational and community consequences, in order to fit within the Standards and avoid costly bespoke consenting processes.

3. Council proposes a moratorium on the processing of public WWTP discharge consent applications

Currently as the proposed Standards are drafted, the Paraparaumu WWTP would be excluded from the Standards and therefore be ineligible for the 35-year consent that can be granted under the Standards. Under the efficiency and effectiveness objective of the Standards, this is not an equitable outcome for the community of Kāpiti, and it could be argued, neither for the environment.

In renewing its resource consent for the Paraparaumu WWTP, costs incurred to date and still faced by Council are estimated at \$1.5 to \$2 million. Presently, the discharge consent for the Paraparaumu WWTP is due to go to hearing by the Greater Wellington Regional Council later this year. If granted, the consent will only be for 15 years.

We therefore request that Taumata Arowai support our request to the Minister for the Environment, that a moratorium be placed on the processing of wastewater discharge consents until the Standards are adopted by regulation. Assuming the Standards (if amended) will apply to the Paraparaumu WWTP as requested, a Moratorium would:

- Be more cost effective for Council and our community.
- Treat Council equitably with other water and territorial authorities and not disadvantage Kapiti for having a high-performing WWTP.

4. Clarification on s. 124 limits

The proposal involves limiting s. 124 rights under the RMA to two years, with a 5-year extension from the date that the new standards come into effect. We are unclear whether this limit and extension will apply to consents that have already expired and WWTP's currently operating under s. 124 rights. We therefore request clarification on this before making further comments on the proposed limit.

5. Requested Changes to Standards

To make the Standards inclusive of high performing wastewater treatment plants, including Council's Paraparaumu WWTP, we request the following changes to the proposal:

- Point-of-discharge standards for exception-listed WWTPs: We request that the
 proposed Standards include standards that focus on the quality of discharge at the
 point-of-discharge, regardless of dilution.
- Removal of exclusions for very low dilution environments: We request that the
 exclusions for very low dilution environments and waterbodies with naturally high
 levels of certain parameters be removed. We request setting a specific standard for
 discharges to these environments, closely aligning with low dilution standards.

- Moratorium on Resource Consents: We urge Taumata Arowai to work with the
 Minister for the Environment to issue a moratorium on processing resource consent
 applications under the RMA until the final Standards are released in August 2025.
 This will avoid unnecessary costs to both councils and allow time for the new
 Standards to be implemented.
- Clarification of section.124 limits: We request confirmation that the 5-year extension to RMA section.124 rights apply where current consents have already expired.

Conclusion

We are happy to discuss our recommendations further with you, to ensure the Standards achieve for all water and local authorities the efficiencies sought.

Yours sincerely

Darren Edwards

Chief Executive | Te Tumuaki Rangatira

Appendix One: Overview of the Council's Paraparaumu Wastewater Network

The Kāpiti Coast, a coastal district in the Wellington Region, has a population of about 60,000, projected to grow to 81,000 by 2054. The Council manages 10.9 million litres of wastewater daily, through 354 kilometres of piped network, 153 pump stations and two wastewater treatment plants (WWTP) in Paraparaumu and Otaki.

Paraparaumu WWTP

The Paraparaumu WWTP, serving a population of 44,000 (growing to 66,000 by 2051), is the largest in the district. It first opened in 1980 and has undergone several upgrades, including in 1994 and 2001. The WWTP is currently within an improvements phase. The Council's resource consents to operate the WWTP expired in 2022. In late 2021, Council applied to Greater Wellington Regional Council (GWRC) for replacement consents. A hearing for these consents is scheduled for July 2025².

Mazengarb Drain - The Receiving Environment

The WWTP is a Biological Nutrient Removal (BNR) plant (Modified Johannesburg configuration) with UV disinfection. It and discharges high quality, treated effluent to the Mazengarb Drain. The Mazengarb Drain is a highly modified channel that was created to drain wetlands and now discharges into the Waikanae River estuary. The WWTP discharge, up to 18,600m³/day, is the main source of flow to the Mazengarb Drain, contributing 95-100% of the flow in the stream's upper reaches.

The Mazengarb Drain is significantly degraded due to various factors, including high modification, the WWTP discharges, contributions from a closed landfill, artificial lakes, urban and road runoff, stormwater discharges and excessive waterfowl in the area. While the environment is heavily modified, the stream is part of the Waikanae River catchment, which holds important ecological and cultural values. Therefore, the treated effluent discharged from the WWTP must meet high environmental standards. As such, upgrades over the years and the current improvements are targeted towards ensuring high quality effluent.

Resource Consent Renewal Process

The Council applied to renew discharge consents in December 2021. The Council is currently operating under s.124 of the Resource Management Act 1991 (RMA), which allows continued operation while consents are being processed. The alternatives to the discharge are limited, due to decommissioned sludge lagoons and the plant's location near a closed landfill, which complicates land-based treatment options. The WWTP is 3-4 kilometres from the coast, and no other suitable surface water bodies exist near the WWTP.

The Council has proposed a two-stage approach to the reconsenting process:

² Resource consent application number WGN220191. Notification documents available online at https://haveyoursay.gw.govt.nz/paraparaumu-wwtp.

- Stage 1 involves applying for a medium-term (15-year) consent, with an improvement plan to further enhance effluent quality and reduce the impact of the discharge on the stream.
- **Stage 2** is focused on a long-term (35-year) consent to implement the best practicable option (BPO), following a BPO assessment process.

Current Effluent Quality and Upgrades

The existing discharge from the WWTP already exceeds nearly all standards proposed for discharges to low dilution environments.³ A review conducted by Mott McDonald, commissioned by Greater Wellington Regional Council (GWRC), found that the plant's methodologies, specifically the multi-stage activated sludge process, are one of the current industry best practice conventional treatment technologies.⁴ The treated effluent from the WWTP is expected to be of higher quality than many similar sized plants in New Zealand discharging into freshwater environments.

As part of the stage 1 consent process, the Council has proposed a series of improvements, including:

- Enhancing nitrate removal by upgrading pumps and optimizing recycling processes.
- Implementing an inflow and infiltration (I&I) programme to reduce excess water entering the WWTP (in addition to the highly successful universal water metering programme).
- Increasing riparian planting in partnership with Te Atiawa ki Whakarongotai to improve habitat quality and provide shade to prevent weed growth.
- Proposing additional land treatment methods to enhance the mauri (life force) of the Mazengarb Drain, including a rakahore structure to increase ground contact and polish discharge.

These improvements are expected to further enhance the quality of effluent. We have already upgraded the A-Recycling pumps. We have seen promising reductions in nitrates, and anticipate an annual median of 5.2 mg/L and a 95th percentile of 7.0 mg/L (NPS-FM Attribute Band C). We anticipate further reductions following the next stage of upgrades.

Limited options exist to further reduce nitrate concentration, including diluting the Mazengarb Drain with groundwater, however these would require significant time and investment by the Council. We also question whether any further upgrades would improve the ecosystem health of the Mazengarb Drain, given its highly degraded state. This is emphasised in the water quality and ecology technical review, which states that "it is unlikely that the improvements to the plant will have fundamental change [to] the state of ecosystem health, and the future effects are likely to be the same…". ⁵ Furthermore, we have been advised that any upgrades will not result in national bottom lines for nitrate being achieved in the

³ For parameters that we currently test, excludes nitrates, which we do not currently meet but anticipate meeting following upgrades.

⁴ Mott Macdonald, 2022. Kapiti Coast WTP discharge consent renewal – Wastewater elements review. 5 December 2022.

⁵ Torlesse Environmental Limited, 2023. *Paraparaumu Wastewater Treatment Plant resource consent application (WGN220191): Final technical review – Water quality and ecology* (updated 14/03/2023).

discharge or the Mazengarb Drain, and that only a handful of WWTP's can achieve the national bottom lines for nitrate in the discharge (2.4 mg/L as an annual median).

Challenges and Public Notification

Despite the high quality of the discharge, GWRC decided to publicly notify the resource consent application due to the potential ecological impacts on the Mazengarb Drain likely to be more than minor. The water quality and ecology technical review indicated that the discharge could have a more than minor, but not significant, effect on water quality and ecology in the Mazengarb Drain. While the notification assessment did not consider the mitigation provided by flow augmentation, the technical review noted that removing the discharge would likely worsen the state of aquatic communities in the area, based on commonly accepted scientific measures.⁶

The processing and public notification of the application has led to significant costs for the Council, with an estimated \$1.5 million spent to date, including consultant and processing fees. The Council anticipates spending an additional \$200,000 on the public hearing process and further costs will be incurred for the stage 2 process. These cost estimates do not include capital works and represent a significant portion or our operating budget.

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⁶ Ibid. 5.