

Council Briefing Agenda

Date: Wednesday, 9 April, 2025

Time: 9:00 am

Location: Civic Centre, Te Iwitahi, 9 Rust Avenue

Elected Members: His Worship the Mayor Vince Cocurullo
Cr Gavin Benney
Cr Nicholas Connop
Cr Ken Couper
Cr Jayne Golightly
Cr Phil Halse
Cr Deborah Harding
Cr Patrick Holmes
Cr Scott McKenzie
Cr Marie Olsen
Cr Carol Peters
Cr Simon Reid
Cr Phoenix Ruka
Cr Paul Yovich

For any queries regarding this meeting please contact the Whangarei District Council on (09) 430-4200.

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1. **Apologies / Kore Tae Mai**
 2. **Reports / Ngā Ripōata**
 - 2.1 Water Services Authority - Taumata Arowai - Proposed Wastewater Standards 3
 - 2.2 Declassification of Gomez Dam 17
 3. **Closure of Meeting / Te katinga o te Hui**

2.1 Water Services Authority - Taumata Arowai - Proposed Wastewater Standards

Meeting:	Council Briefing
Date of meeting:	9 April 2025
Reporting officer:	Simon Charles (Manager – Wastewater)

1 Purpose / Te Kaupapa

To brief Council on the Proposed Wastewater Standards that have been distributed by the Water Services Authority for consultation and how these may impact upon wastewater management in the Whangarei District.

2 Background / Horopaki

The Proposed Wastewater Standards were released by Taumata Arowai (TA) on Tuesday evening 25 February as drafts for consultation.

See the link here for the actual documentation itself –

<https://korero.taumataarowai.govt.nz/regulatory/wastewater-standards/>

Consultation closes on the 24 April 2025. Initial evaluation of the standards is discussed within this briefing and the implications for Whangarei District's wastewater plants and networks are outlined.

2.1 The purpose of the proposed standards

The proposed standards aim to improve cost and time efficiencies for consenting and upgrading wastewater treatment plants, better manage risks associated with network overflows, and balance the costs of upgrading infrastructure with public health and environmental outcomes.

They are designed to protect environmental and public health outcomes, drive down cost and time for councils and communities, enable improved certainty for infrastructure planning and funding, provide clear expectations about treatment quality, enable performance benchmarking, ensure transparency of information, improve understanding, and establish a clearer compliance regime.

2.2 Overview of Proposed standard

The standards cover discharges to water, discharges to land, beneficial reuse of biosolidsⁱ, and network overflows and bypasses and the key points to be considered for each of these is covered under Section 2.3.

The proposed standards seem to be largely effects based, associated with the sensitivity of receiving environment and expected dilution ratios (disposal to water) being key drivers.

A more detailed explanation of each of these is included in the attached documents.

2.3 Key points

For discharges to **water**, the standards categorize waterbodies by sensitivity and set contaminant limits, with monitoring and reporting requirements. The proposed standards apply when there is sufficient dilution rates in the receiving environment.

The reuse of **biosolids** is addressed through a grading system to determine reuse safety, with associated monitoring and reporting requirements.

Network overflows and bypasses will require consents and monitoring, focusing on high-risk areas and public reporting.

For discharges to **land**, the standards require site-specific risk assessments, detailed capability ratings, and set treatment requirements for contaminants, aiming for 35-year consents to support long-term planning. Exceptions include rapid infiltration basins, sites with unacceptable health risks, poor soil health, and areas with cultural or historical significance.

2.4 When will standard be in place?

The standards would be launched in August this year subject to the Bill being passed. The new standards would apply when the existing consents expire. The programme from Taumata Arowai is provided below.



3 Discussion / Whakawhiti kōrero

3.1 What do proposed standards mean for our existing WWTPs?

An exercise of comparing proposed standards to existing consented standards at each of our WWTPs has been done. Analysis can be seen in Attachment1.

A summary of findings for each plant as follows:

Discharge to Water		
Treatment Plant	Proposed versus existing consent limits	Comments
Hikurangi (Old Consent - expired. Consent renewal underway)	Tighter limits	Category assessed as River – low dilution. Will likely require significant investment to upgrade the existing plant to comply or an alternative discharge.
Ngunguru (Old Consent - expires 2035)	More lenient limits	No limits proposed. Categorised as Small WWTP.
Portland (New Consent - expires 2054)	More lenient limits	No limits proposed. Categorised as Small WWTP.
Ruakaka Consent for Ocean Outfall expires 2027)	More lenient limit	Ocean outfall generally has no discharge quality limit requirements. The current outfall consent requires a <u>high quality</u> treatment process, this level of treatment would not be needed for the proposed standards.
Tutukaka (New Consent - expires 2054)	More lenient limits	No limits proposed. Categorised as Small WWTP.
Waiotira (Old Consent - expires 2030)	More lenient limits	No limits proposed. Categorised as Small WWTP.
Whangarei (New Consent - expires 2045)	Tighter limit: Total Nitrogen More lenient limit: Total Phosphorous	Difficult to determine if this falls into estuary category as the creek discharges into a River (Hatea) before the harbour. Some modifications to the process may be needed to lower Nitrogen.
Discharge to land		
Oakura (Old Consent - expired. Consent renewal underway)	n/a	Categorised as Class 5. Proposed standards do not apply . Retain existing.
Ruakaka (Old Consent - expires 2046)	More lenient limit: Total Nitrogen Tighter limit: Total Phosphorous	Categorised as Class 1.
Waipu (Old Consent - expires 2030)	Tighter limits	Categorised as Class 1.

3.2 Next steps

Staff have reviewed the standards and are developing a submission on the Standards to be submitted by 24 April 2025.

4 Financial/budget considerations / Ngā pānga pūtea/tahua

Where tighter limits are proposed then this will inevitably require an increased level of capex – WWTP upgrades – and consequential operational spend in order to meet requirements.

This may be offset to a degree by plants with more lenient – or no limits – where compliance and future consenting costs may be lower.

It is too early to provide more specific financial implications at this stage but that assuming the Standards go ahead as planned we will be incorporating any capex and opex effects within our 2027-37 Long Term Plan / In House Business Unit waters plan (if separate to the rest of Council LTP).

5 Significance and engagement / Te Hira me te Arawhiti

The decisions or matters of this Agenda do not trigger the significance criteria outlined in Council's Significance and Engagement Policy, and the public will be informed via agenda publication on the website or Council News or Facebook or any other channel you currently use to inform customers – please also advise Communications.

6 Attachments / Ngā Tāpiritanga

1. Detailed Analysis Document

ⁱ Biosolids are the solid waste that is generated through the wastewater treatment process. The biosolids from the Kioreroa Rd plant are currently disposed of to the Puwera Landfill.

Detailed Discussion on the proposed Standards

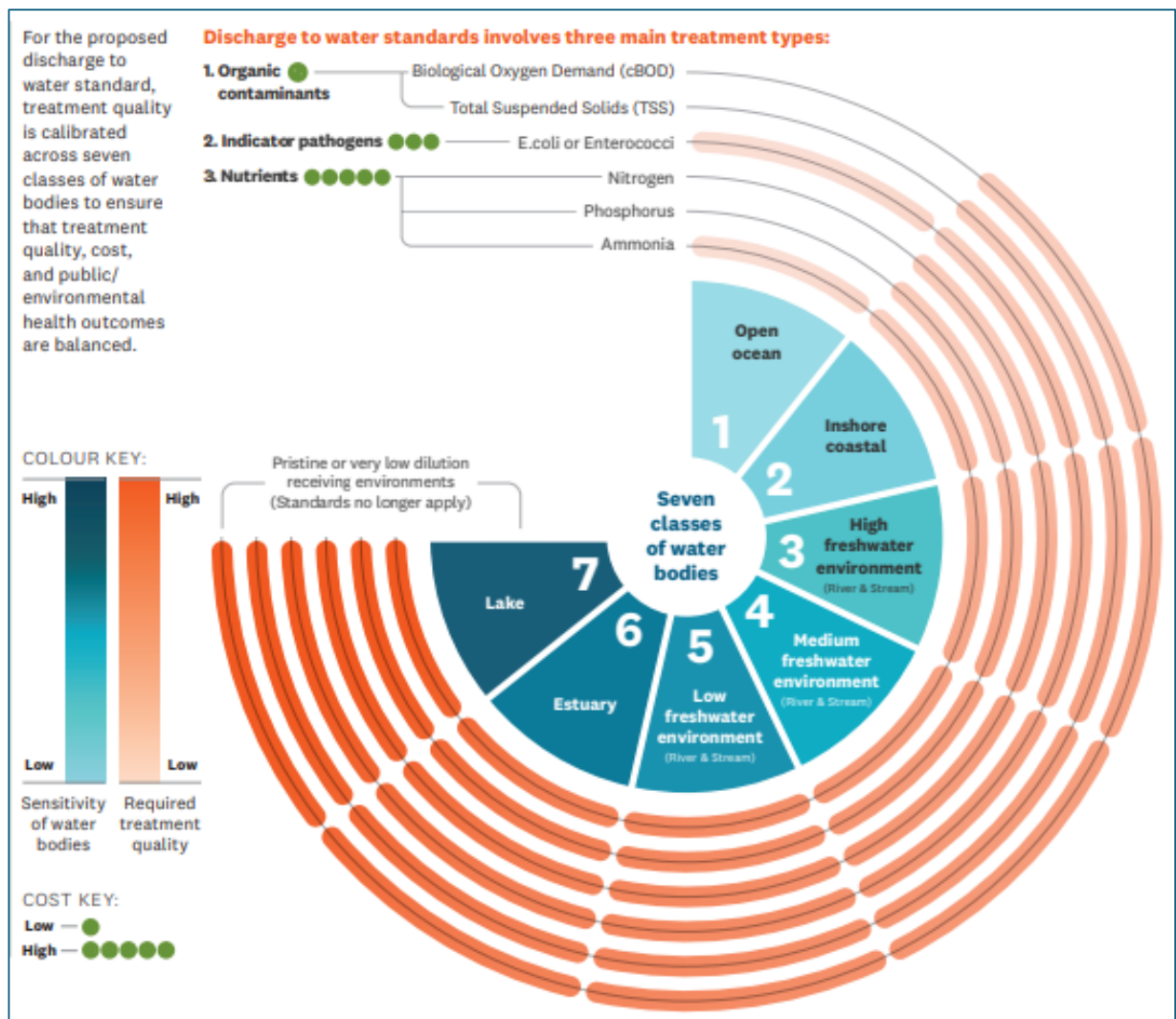
Discharge to water

This proposed standard categorises waterbodies (e.g. lakes, rivers, ocean) based on their sensitivity. It lists 7 distinct type of water discharges as follows –

- Lakes
- River or stream with high sensitivity
- River or stream with moderate sensitivity
- River or stream with low sensitivity
- Estuaries
- In-shore coastal waters
- Open ocean

It proposes maximum contaminant requirements at the discharge point for key contaminants as follows– cBOD5, TSS, TN, TP, Ammonia, E. coli and Enterococci (relevant for marine or estuarine environments).

The proposed standards stipulate increasing levels of treatment for the more sensitive receiving environments, which are summarised in the figure shown below.



The table below outlines the key contaminant loadings as proposed by TA.

Contaminant/measure	Measurement approach	Lakes and wetlands	Rivers and streams (low dilution)	Rivers and streams (moderate dilution)	Rivers and streams (high dilution)	Estuaries	Low energy coastal	Open ocean
Carbonaceous Biochemical Oxygen Demand (cBOD ₅)	Annual median	15 mg/L	10 mg/L	15 mg/L	20 mg/L	20 mg/L	50 mg/L	Not applicable
Total Suspended Solids (TSS)	Annual median	15 mg/L	10 mg/L	15 mg/L	30 mg/L	25 mg/L	50 mg/L	Not applicable
Total Nitrogen	Annual median	10 mgN/L	5 mgN/L	10 mgN/L	35 mgN/L	10 mgN/L	10 mgN/L	Not applicable
Total Phosphorus	Annual median	3 mgP/L	1 mgP/L	3 mgP/L	10 mgP/L	10 mgP/L	10 mgP/L	Not applicable
Ammoniacal-nitrogen (ammonia)	Annual 90th percentile	3 mgN/L	1 mgN/L	3 mgN/L	25 mgN/L	15 mgN/L	20 mgN/L	50 mgN/L
<i>E. coli</i>	Annual 90th percentile	6,500 cfu/100mL	1,300 cfu/100mL	6,500 cfu/100mL	32,500 cfu/100mL	Not applicable	Not applicable	Not applicable
Enterococci	Annual 90th percentile	Not applicable	Not applicable	Not applicable	Not applicable	2,000 cfu/100mL	4,000 cfu/100mL	40,000 cfu/100mL

It also proposes requirements for monitoring to ensure treatment requirements are met, and reporting to regional councils, the public and TA.

Like the land discharges, 35-year consents are the focus.

Consenting requirements

The proposed consenting process to be followed is as follows:

- Categorise the receiving environment
 - Determination of relevant receiving environment for discharge.
- Understand treatment and monitoring requirements
 - Discharge to water proposed numerical standard > 1000 Population Equivalent (table).
 - Existing small wastewater treatment plants WWTPs: cBOD <85kg/d (<1000 PE). No nutrient treatment is proposed as part of the small plant standard.
 - **Exceptions** and **site-specific** assessment needed for:
 - Pristine waters;
 - Very low dilution receiving environment;
 - Directly to an aquifer;
 - To natural wetlands;
 - Close to drinking water abstraction points;
 - Where naturally high levels of contaminants exist;
 - Site-specific: Quantitative Risk Management Assessment (QMRA) to determine pathogen limits for shellfish consumption;
 - Site-specific: Periphyton (slime and algae) in hard bottom streams.
- Implement through consent conditions.

Biosolids reuse

This proposed Standard sets out an approach for grading biosolids and how specific grades of biosolids can be safely used. Proposed grading considers stabilisation grade and contaminant grade.

Grading would determine the activity status – ‘permitted’, ‘controlled’, or ‘restricted discretionary’ under the RMA.

- Rate of reuse is low in NZ compared with Australia and Europe and much goes to landfill, attracting high landfill charges.
- Approach will be based on WaterNZ beneficial use of biosolids and other organic materials on land (Good practice guideline) due to be published in 2025. It is intended that this guide will:
 - Set out a grading system for processing biosolids;
 - Require additional management where biosolids have a lower grade;
 - Impose monitoring and reporting requirements to reflect the grade of biosolids.

	Contaminant grade 1	Contaminant grade 2
Stabilisation Grade A	Permitted activity (provided all activity standards are met)	Restricted discretionary activity (provided all activity standards are met)
Stabilisation Grade B	Controlled activity (provided all activity standards are met)	

Wastewater overflows and bypasses

This proposed standard would require all existing controlled overflow points and treatment plant bypasses to have a consent under the RMA. It sets specific requirements for monitoring and reporting of overflows from the network or treatment plant bypass, based on the risk to public health and how often an overflow occurs. The discussion document also proposes that all wastewater networks would be required to have a wastewater risk management plan.

Monitoring requirements would depend on the type of overflow point but that monitoring would be required at all engineered overflow points (typically found at pump stations or storage tanks) that are classified as high risk, new overflow points and pump station and uncontrolled (i.e. burst pipe or manhole cover) overflow points where overflows happen often.

There doesn't seem to be any specific reference to setting target network overflow containment standards but that may become apparent later on.

Consenting requirements

- Must be consented as a controlled activity. We are currently working towards obtaining our network discharge consent
- As a minimum, operators would be required to have telemetric monitoring for:
 - All engineered overflow points or discharge points that are classified as high risk in wastewater risk management plans. [WDC mostly compliant as far as

- engineered overflows goes; further work needed to define high risk discharge points];
- All new constructed overflow points and pump stations [WDC has approx. 150 existing wastewater pump stations – does not include LPS pumping units]; and
 - All uncontrolled discharge points (using manhole sensors) where there are high frequency overflows.
- Staged implementation based on priority standardised reporting of overflow events – available to public
 - Benchmarking to be used to set future standards

Discharge to land

The proposed Standards require a site-specific risk assessment that enables councils to determine at an early stage in the consenting process if land is suitable for discharging treated wastewater as per the extracted figure below.

A more detailed assessment of suitable sites in regard to public health, environmental and social criteria would then categorise the site into 1 of 4 possible risk categories.

A 3rd stage in-greater-depth assessment would then categorise sites to give it one of 4 site capability ratings.

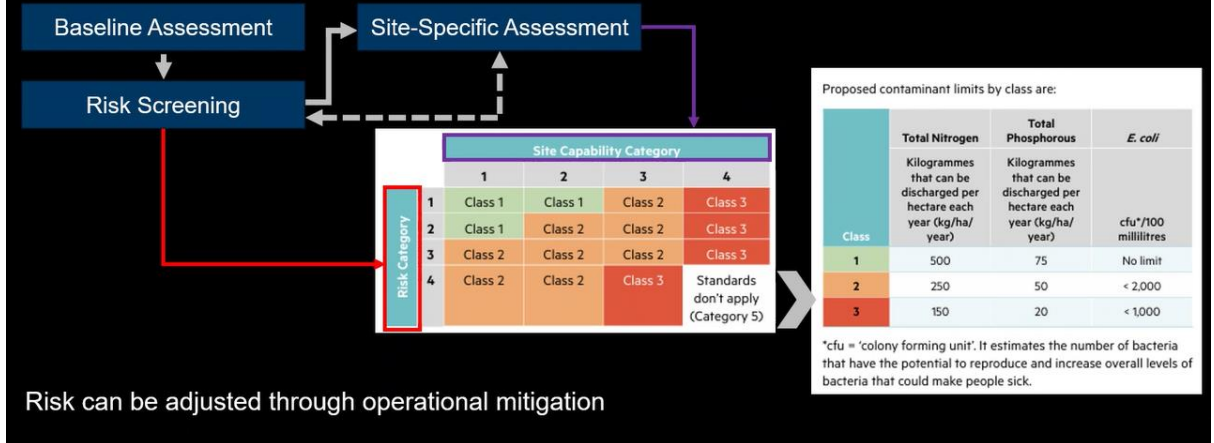
Combining these 2 assessments into a matrix-style risk assessment, the overall class of the site would then be determined, as per the extracted figure shown below.

It then sets treatment requirements for contaminants TP, TN and EColi, based on the class shown.

The process is targeted at obtaining 35-year consents to help give local councils the certainty they need to do long-term wastewater management and investment planning.

Consistent monitoring and reporting requirements are also proposed as part of this standard as are requirements for a management and operations plan.

Discharge to land – Proposed approach and limits for low-rate systems



- Exceptions and site-specific assessments. Standards would not apply for:
 - Rapid infiltration basins;
 - Sites where there is an unacceptable risk to human health;
 - Land with poor soil health (or unsuitable soils), or where runoff, erosion and reduced infiltration efficiency may occur (e.g. no surface irrigation on slopes >10°);
 - Irrigation of crops for human consumption;
 - Irrigation of areas used for recreation or for livestock grazing;
 - Land that is geologically unstable (e.g. slip or subsidence risk, underlying geology unsuitable);
 - Sites within drinking water source protection zones (Zone 1 or 2);
 - Areas with wāhi tapu, tūpuna, other sites on NZ Heritage List

Additional Considerations

- Regional Councils can set additional limits (over and above proposed standards) for Emerging Contaminants or metals in certain circumstances.
- Some Iwi are reluctant to approve Consents longer than 20 years. The Water Authority has done work in this area. Intention is that it will be 35 year consent period.

When will standard be in place?

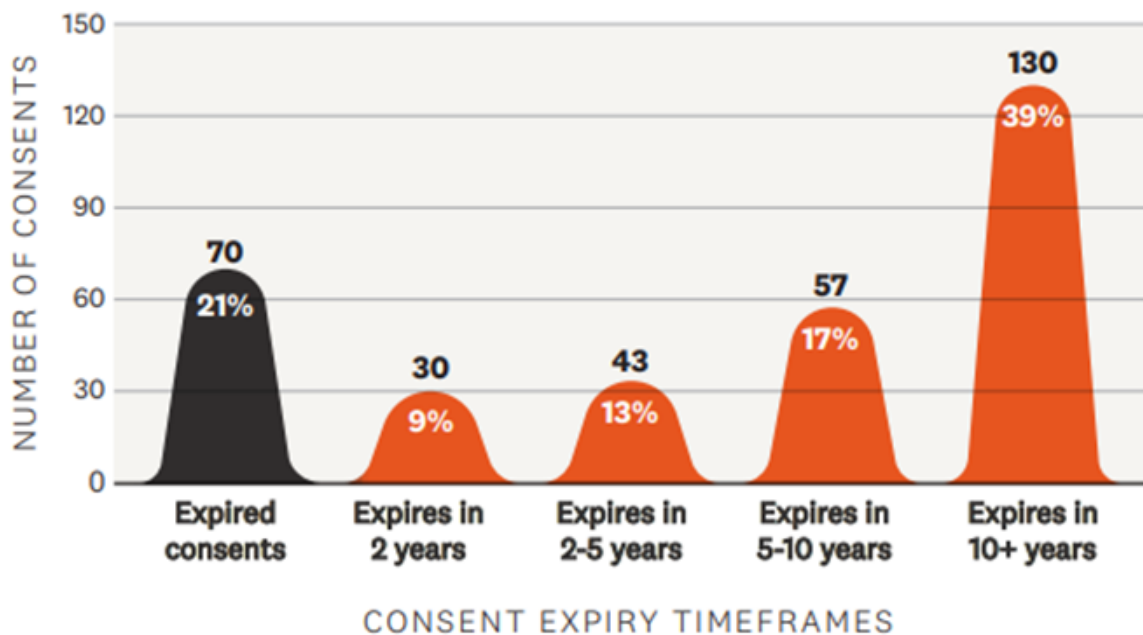


Discussion / Whakawhiti kōrero

It is clearly stated that the provisions of the standards apply to public networks and systems only so any private sector discharges (e.g. meat works etc) are not covered by these provisions.

Clearly as the following figure from the TA site shows, 60% of municipal treatment plants require reconsenting in the next 10 years. Whangarei has recently renewed the consents for the majority of plants. It is not known if Councils will be directed to modify active consents to meet the new standards.

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



The TA site suggests that territorial authorities could save up to 40% in consenting costs under the proposed standards.

The basic premise of the Standards is that **less sensitive receiving environments** warrant lower levels of treatment and therefore greater simplicity in consenting and lower costs.

There is little in the reviewed documentation about stating a formal requirement or need for consideration of iwi cultural considerations in the development of treatment plant solutions.

Posted on the site is a 79-page TA report that looks at 6 NZ case studies where consideration of iwi cultural perspectives were incorporated in the development of these treatment plants. This seems unconnected to the Information Sheets, There is also a slot reserved on the site for a forthcoming "Info sheet: How iwi/Māori values have informed proposed standards."

Saying that, there is full acknowledgement that there are specific Treaty settlement obligations for the Waikato-Waipā River catchment and the Whanganui River

catchment given river accords and river legal status in these locations and that TA are either about to commence or are in an engagement process with these iwi on these.

What do proposed standards mean for our existing WWTPs?

The exercise of comparing proposed standards to existing consented standards at each of our WWTPs has been done. Analysis can be seen in Attachment1: [9](#) [WWTP consent requirements update March 2025.xlsx](#) [Refer to column L – where text colour is red, this means the limits are tighter than currently consented, otherwise more lenient].

As per the preceding discussion, the proposed standards seem to be largely effects based, associated with the sensitivity of receiving environment and expected dilution ratios (disposal to water) being key drivers.

Summary of findings for each plant as follows:

Whangarei (New Consent - expires 2045)

- Difficult to determine if this falls into estuary category as the creek discharges into a River (Hatea) before the harbour.
- **Tighter limit:** Total Nitrogen - 30 day rolling avg. For low flows Proposed limit = 150kg/d. Current consent limit = 280kg/d
- **More lenient limit:** Total Phosphorous - 30 day rolling avg. For high flows Proposed limit = 1000kg/d. Current consent limit = 100kg/d

Ruakaka (Old Consent - expires 2046. Consent for Ocean Outfall expires 2027)

- **More lenient limit:** Total Nitrogen - median. Proposed limit = 34 mg/L (calculated). Current consent limit = 10 mg/L
- **Tighter limit:** Total Phosphorous - median. Proposed limit = 5 mg/L (calculated). Current consent limit = none
- **More lenient limits:** Ocean outfall generally has no discharge quality limit requirements

Hikurangi (Old Consent - expired. Consent renewal underway)

- Category assessed as River – low dilution.
- **Tighter limit:** Total Nitrogen - median. Proposed limit = 3.5 mg/L (calculated). Current consent limit = none
- **Tighter limit:** Total Phosphorous - median. Proposed limit = 0.7 mg/L (calculated). Current consent limit = none
- **Tighter limit:** Ammoniacal Nitrogen - median. Proposed limit = 0.7 mg/L (calculated). Current consent limit = none

Ngunguru (Old Consent - expires 2035)

- Categorised as Small WWTP.
- **More lenient limits:** no limits proposed.

Waipu (Old Consent - expires 2030)

- Categorised as Class 1.
- **Tighter limit:** Total Nitrogen - median. Proposed limit = .55 mg/L (calculated). Current consent limit = none [Calculated value may not be relevant as disposal area is small due to Rapid Infiltration Basin disposal process].

- **Tighter limit:** Total Phosphorous - median. Proposed limit = 0.08 mg/L (calculated). Current consent limit = none [Calculated value may not be relevant as disposal area is small due to Rapid Infiltration Basin disposal process].

Oakura (Old Consent - expired. Consent renewal underway)

- Categorised as Class 5. Proposed standards do not apply. Retain existing.

Tutukaka (New Consent - expires 2054)

- Categorised as Small WWTP.
- **More lenient limits:** no limits proposed.

Portland (New Consent - expires 2054)

- Categorised as Small WWTP.
- **More lenient limits:** no limits proposed.

Waioira (Old Consent - expires 2030)

- Categorised as Small WWTP.
- **More lenient limits:** no limits proposed.

Discharge to Water		
Treatment Plant	Proposed versus existing consent limits	Comments
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Whangarei (New Consent - expires 2045)	Tighter limit: Total Nitrogen More lenient limit: Total Phosphorous	Difficult to determine if this falls into estuary category as the creek discharges into a River (Hatea) before the harbour. Some modifications to the process may be needed to lower Nitrogen.
Discharge to land		
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Ruakaka (Old Consent - expires 2046)	More lenient limit: Total Nitrogen Tighter limit: Total Phosphorous	Categorised as Class 1.
Waipu (Old Consent - expires 2030)	Tighter limits	Categorised as Class 1.

2.2 Declassification of Gomez Dam

Meeting:	Council Briefing
Date of meeting:	9 April 2025
Reporting officer:	Andrew Venmore (Water Services Manager)

1 Purpose / Te Kaupapa

Provide an overview of the current status of the Gomez Dam and to present options that have been investigated for its future management.

2 Background / Horopaki

The Gomez Dam is the smallest of Council's 4 large dams and was originally constructed to support the water supply needs of Hikurangi, at a time when the area was serviced by a dedicated water treatment plant. However, following the integration of Hikurangi into Whangārei's town supply network, the treatment plant was decommissioned and the dam ceased to be used for water supply purposes.

The Dam has been largely unused since the early 2000s, the only exception being when Fonterra removed water from it by truck to supplement their supply during the 2010 drought. However, it has still required regular inspections and maintenance. During one of the regular inspections, it was noticed that a hole had developed in the downstream face of the dam. Investigations could not determine the cause of the hole and as a safety precaution the dam was drained. The dam has remained largely drained since that time with only a small amount of water lying remaining behind the dam wall.

While the dam was ultimately deemed safe there was the potential for the land to be used for other activities that could require water, as such the decision was made to leave the dam empty and only undertake minimal maintenance.

New dam safety regulations required that all large dams be re-classified in 2024. The classification reflects the potential impact of the dam failing on the downstream community. In order to classify the dam a model of the downstream river in a dam beak scenario was constructed. This model indicated that the dam needed to be re-classified as a High Potential Impact Dam.

3 Discussion / Whakawhiti kōrero

A High Potential Impact dam needs a lot more work undertaken in accordance with the current dam safety guidelines. In particular, it will need a Dam Safety Assurance programme which will in turn require more frequent inspection and maintenance as well as having to comply with more stringent design criteria. Both Whau Valley and Wilsons dam are High Potential Impact dams. The development of a Dam Safety Assurance programme is likely to cost in the region of \$100,000 to produce and the implementation will be more expensive than the current arrangement.

Given the impending requirement to develop a Dam Safety Assurance Programme and the increasing costs of maintenance staff consider that it is a good time to remove the dam

altogether. Consultants have considered options for removal of the Dam and also done a high-level cost estimate. They were asked to develop an approach that would mean the structure would no longer be classified as a dam and consequently ongoing costs would be a minimum. The recommended solution was to remove the majority of the dam structure leaving only the low-level outlet in place. The estimated cost of this is between \$340,000 and \$515,000.

Next Steps

1. Undertake a design for the dam removal
2. Liaise with interested parties (Hapu, reserve users, Fonterra)
3. Confirm with Council preferred option
4. Apply for resource consent
5. Tender contract for removal
6. Remove Dam
7. Consider future of Gomez Road Reserve

3.1 Financial/budget considerations / Ngā pānga pūtea/tahua

Within the current Long-Term Plan \$800,000 has been allocated to decommissioning of all old assets (where applicable). This covers multiple project, but it is anticipated this should be sufficient to cover this project. It is anticipated that the works will be approved under delegated authority unless they lay outside the councils procurement policy or require budget in excess of that approved through the LTP.