

HEARING 17 - Sweep up, Interpretation etc.
STATEMENT BY SUBMITTERS VISION KERIKERI, OUR KERIKERI TRUST,
CARBON NEUTRAL NZ TRUST AND KAPIRO CONSERVATION TRUST

“Infrastructure-ready” statements

We believe that the Interpretation chapter should include some kind of definition – or clarification – of the term ‘existing or planned development infrastructure’ when referring to public infrastructure, particularly wastewater treatment systems and other 3-waters infrastructure that is the responsibility of council or the future Council-Controlled Organisation (CCO for wastewater and drinking water services in Northland due to become operational in July 2027).¹

Several s42 comments refer to infrastructure as being **“infrastructure-ready”** and having **“available capacity to support and enable development ... over the short-term** including through infrastructure upgrades and improvements currently planned and **funded via the 2024-2027 LTP.”** For example -

S42 evidence of M. Lindenberg (Planning) states “the Council’s 3 Waters and transport infrastructure networks are ‘infrastructure-ready’ and have available capacity to support and enable the development of land under the PDP-R option over the short-term, including through infrastructure upgrades and improvements currently planned and funded via the 2024-2027 LTP.”²

CAPACITY ISSUES IN PUBLIC INFRASTRUCTURE SCHEMES IN VARIOUS TOWNS

We are concerned that some types of public infrastructure are at or near capacity in several larger towns in the District where growth is planned, notably Kerikeri, Kaikohe and Kaitaia.

The ten-year LTP identifies various infrastructure issues across the district. Examples -

- LTP (p.71): “The council has been issued with various abatement and infringement notices for long-standing issues at wastewater treatment plant performance and discharges.”
- Planning is underway for upgrades to the Kaitāia and Kaikohe Wastewater Treatment Plants to enable compliance with Resource Management Act requirements (p.84).
- Kaikohe and Kaitaia: Substantial expenditure on WWTPs & networks over 3-4 years.

EXAMPLES OF CAPACITY ISSUES IN KERIKERI

Our analysis below focusses on current capacity issues in Kerikeri, because we have detailed information relating to Kerikeri specifically. Mr Fred Terry (engineer and infrastructure consultant) has provided information about several capacity issues described below:-

- Capacity issues in the wastewater treatment plant (WWTP) in Kerikeri
- Capacity issues with wastewater reticulation pipe from Kerikeri to WWTP
- Capacity issues in the stormwater management infrastructure

¹ <https://www.fndc.govt.nz/Whats-New/current-projects/local-water-done-well>

² S42 evidence of Matthew Lindenberg (Planning NPS-UD), page 11, para. 7.8(a), https://www.fndc.govt.nz/_data/assets/pdf_file/0017/46241/Statement-of-Evidence-of-Matthew-Lindenberg-in-Support-of-Section-42A-report-NPS-UD.pdf

CAPACITY OF KERIKERI WASTEWATER TREATMENT PLANT

Brief history of specifications for Kerikeri WWTP

In 2017 Beca produced an important report on the new WWTP planned for Kerikeri. Beca recommended 3 x 500m³ treatment units, which would provide capacity of about 1500m³ per day (copy attached). Beca reported that this would exceed demand, but not by a great deal.³

However, under Mayor Carter, the Council decided to construct a smaller WWTP comprising only 2 x 500m³ units, giving a capacity of about 1000m³/day.

In the following sections, Mr Terry has compiled information using several different approaches (outlined below), to help provide reliable estimates of the current capacity and inflows at Kerikeri WWTP.

Capacity of Kerikeri WWTP as reported by Beca

A number of capacity figures have been suggested in FNDC reports. However, the only valid figure is the actual limit imposed by the SBR reactors. Two options are stated in the Beca review of 2020⁴ -

- Standard treatment at 1270 m³/d based on 4.8 cycles/day.
- Wet weather treatment at 1594 m³/d based on 6.0 cycles/day.

The above figures are peak capacities to achieve the required standard of treatment.

Unfortunately many previous reports have used these figures in conjunction with the Average Dry Weather Flow (ADWF), a measurement used for resource consent discharge requirements. The ADWF gives a false impression of the spare capacity available - it ignores any day with 1mm or more of rain, being over 70% of days.

(In fact, if one applied Beca's peaking factor to the ADWF, then the plant capacity could have been exceeded on Day 1.⁵)

Capacity limit taking account of the safety factor

The Beca report (2020) assessed the maximum load carrying capacity of key components of the WWTP. They reported that the SBR biological reactors limit the **WWTP capacity to 1,270 m³/d** (standard operation).⁶

Beca's 3-waters assessment (2024) for Kerikeri-Waipapa Spatial Plan also reported that the maximum capacity is 1,270 m³/d in the SBR reactors.⁷

This is the limit for peak use with no safety factor for any interruption, such as a power cut, maintenance work or component failure. Beca indicates that 'no allowance' has yet been made for peaking effects, due to visitors or weather. Further there is minimal allowance for wet weather conditions.

Beca reported that 1.25 "is the lowest peaking factor that could be considered safe".⁸

³ Beca (2017) Kerikeri Wastewater Scheme Review, 30 Oct 2017, copy attached in appendix.

⁴ Beca (2020) 'Kerikeri Wastewater treatment plant capacity review – Final', report to FNDC, 8 October 2020, Table 1 Population and Flow Assumptions, ADWF Day 1 at 696 m³/d and PDWF 2x peaking factor.

⁵ Beca (2020) Final review (as above), Table 1 Population and Flow Assumptions, PDWF Day 1 = 1,392 m³/day.

⁶ Beca (2020) Final review, p.9, Table 3 Residual capacities.

⁷ Beca (2024), Kerikeri-Waipapa 3 Water Capacity & Modelling Assessment dated 18 October 2024, p.22, Table 14, https://www.fndc.govt.nz/_data/assets/pdf_file/0017/43226/Kerikeri-Waipapa-3-Waters-Assessment.pdf

⁸ Beca (2020) Final review, p.12, 2nd line.

This means the average daily inflow to the treatment plant should NOT exceed about 1,016 m³/d, for safety reasons.

Estimated capacity of WWTP based on inflows reported for 2023

This section estimates current capacity of the WWTP, using a different method. It uses the FNDC rating information⁹ to update the average daily inflow to the WWTP reported by Beca for 2023.

Daily inflow reported by Beca for 2023

Beca reported that the average daily flow (ADF) to the WWTP was **846 m³/d for the year 2023.**¹⁰

The two sections below provide an estimate of the additional daily flow (inflow) by adding the following two elements to the ADF reported for 2023 (846 m³/d¹¹) -

- a) New properties connected to the WWTP since 2023, and
- b) New properties consented but not yet built.

a) New properties connected to WWTP since 2023:

Information from setting the rates for 2023-24 and 2025-26 can be used to estimate changes in the number of connections. A detailed analysis of the rating database confirms the following changes in the number of properties connected to the WWTP -

Table 1: Estimate of additional average daily flow due to new properties connected to the WWTP in the period from June 2023 to June 2025

Land Use	New Connections	Unit Daily Flow (litres)	Total inflow m ³
Residential	37	500	18.5
Special Residential	53	250	13.25
Commercial	-4	500	-2
Total change	86	1250	29.75 m³/d

Adding 29.75 m³/d to the previous total of 846 m³/d in 2023 (above) indicates that the average daily inflow (ADF) to the WWTP would be **about 876 m³/d.**

b) Properties consented but not yet built:

We now consider the number of consented properties that have not yet been built. This includes -

- Properties rated with an availability rate, currently 154 properties; plus
- Properties with consent but still shown as single units. A preliminary list is given below, but it is incomplete (e.g. new Kainga Ora properties should be added). Table 2 indicates 293 residential units that have been consented and not yet built.

This indicates about 447 developments (154 + 293) that have an existing right to be connected to the WWTP.

⁹ FNDC Rating Information Database, <https://www.fndc.govt.nz/Services/rates/rating-information-database>

¹⁰ Beca (2024) above, p.22.

¹¹ Beca (2024) above, p. 22.

They are expected to add a further 221.5 m³/d to the average daily inflow (ADF).

Table 2: Estimate of additional average daily flow due to properties consented and shown as single units (not yet built)

Location	Residential units consented	Built/Separate Title (Included as Availability charge in Rates Data)	Properties to be built (Additional units)
57A Hall Road	58	-	58
57C Hall Road	276	83	193
27 Hall Road	20	-	20
377 Kerikeri Road	50	28	22
Total			293

Conclusion:

The calculations above indicate the **WWTP requires a capacity of 1,097 m³/d** to meet the average demand for the existing and consented (not yet built) buildings.

Peaking effect and safety allowance

Beca indicates that 'no allowance' has yet been made for peaking effects, due to visitors or weather. The figures given above allow only 16% peaking which is below that considered safe.¹²

ANALYSIS OF INFLOWS

The WWTP was designed as a closed system, so inflow and outflow volumes should normally be similar. The starting input flow for commissioning the WWTP was described as 'Day 1'-(above) in the Beca reports – that information was supplied to Beca by FNDC. It potentially falls short of the actual inflow value by about 50 m³/d because there was a period within the timeframe for the calculation where the outflows were consistently exceeding the inflows.

Since that was changed, current data reports show average inflows about 150 m³/d more than outflows. While there may be some loss during the treatment, the WWTP was designed as a closed system. There is clearly a discrepancy between inflows and outflows. This seems favourable for meeting resource consent requirements.

The Beca report of 2024 for the Spatial Plan is more recent. It contains higher figures for daily usage, peaking factors and occupation rates.

Analysis of Inflows

The Beca report of 18 October 2024 used a starting input flow [inflows] based on the period 1/1/2022 to 30/6/2024. Analysis of the reports to NRC for that period provides the following table.

¹² Beca (2020) Kerikeri Wastewater treatment plant capacity review dated 8 October 2020-Final, final page.

Inflows	No. of Days	% Recorded Days	Average Inflow m3/d	Average Rainfall mm
Less than 1016	789	88.4	840	3.1
1017 to 1270	77	8.6	1090	16
1271 to 1594	21	2.3	1382	33
Greater than 1594	6	0.7	2487	84.9
Not Recorded	19		-	10.5

Recent inflows June 2025 to September 2025

Inflows	No. of Days	% Recorded Days	Average Inflow m3/d	Average Rainfall mm
Less than 1016	107	87.7	892	3.1
1017 to 1270	12	9.9	1090	22
1271 to 1594	1	0.8	1299	50
Greater than 1594	2	1.6	1698	71.3

Discrepancies in data

There are inexplicable discrepancies in the reported data. Examples –

- About 150m3/day WW is ‘missing’ from outflow reports:
 - The WWTP was designed as a closed system, so total inflows should equal total outflows.
 - However, reported outflows are generally ca. 150m3/day lower than reported outflows.
- Daily back-wash of some 36m3 in the councils water treatment filtration system that is directly injected to the wastewater reticulation system. This is not shown as an additional source of inflow to the treatment plant.

Recent change in NRC consent for WWTP

The NRC consent of 2019 limited WW discharge to 1,000m3/day:

“The volume of treated wastewater discharged to the unnamed tributary of the Kerikeri Inlet (Waitangi Wetlands) shall not exceed **1,000** cubic metres per day, as calculated using the average daily dry weather discharge volume” calculated in accordance with Schedule 1.¹³

The NRC consent was revised in 2024. It increased the volume of WW discharge to 1,350 m3/day in 2024, without explanation. The capacity of the treatment plant was not increased.

“The volume of treated wastewater discharged to the unnamed tributary of the Kerikeri Inlet (Waitangi Wetlands) shall not exceed **1,350** cubic metres per day, as calculated

¹³ NRC consent for discharge of treated wastewater to Waitangi Wetland, AUT.004111.01 - AUT.004111.05, March 2019.

using the average daily dry weather discharge volume” calculated in accordance with Schedule 1.¹⁴

The NRC consent set generous limits on the flow and discharge of pollutants. As a result, the treatment plant meets the NRC consent conditions. However, the main parameter monitored by the consent (Average Dry Weather Flow) ignores any day with 1mm or more of rain, being over 70% of days.

The treatment plant is unable to treat the wastewater completely when inflows are high. The discharge from the plant often contains significant levels of pollutants such as E.coli, nutrients and BOD, although it complies with the consent.

Discharge to wetlands that have high ecological values

The wastewater is discharged into the Waitangi Wetlands Complex – shown in attached map. The Waitangi Wetlands Complex classed by NRC as one of the top 30 wetlands in Northland. It has high ecological values and provides habitat for a number of *at risk* or *threatened* species, including Northland mudfish (further information in attachment).

There are valid concerns about the effects of the wastewater pollutants on the indigenous ecosystems and vulnerable species. Discharging treated human waste to land is culturally and ecologically preferable. Lower-cost alternative technology that supports discharge to land is available here, and widely used in other countries such as Switzerland.¹⁵

CAPACITY IMPLICATIONS FOR FUTURE DWELLINGS

New dwellings proposed in central Kerikeri (s42 proposal PDP-R)

In 2024, the Spatial Plan (HBA report) estimated demand for 3,260 to 4,220 new dwellings in Kerikeri/Waipapa over the next 30 years.

However, the s42 report Hearing 15D proposed a higher number of dwellings in central Kerikeri, based on infill, urban rezoning to allow small lots and units (MDRZ & TCZ zones).

All new dwellings will need reticulated WW -

- s42 urban rezoning will provide “a plan-enabled capacity of 7,788 dwellings, feasible capacity of 6,418 dwellings, and potential development capacity of 5,003 dwellings—well in excess of projected demand.” over 30 years.¹⁶
- Several S42 reports claims that “This capacity is infrastructure-ready, supported by existing networks and planned upgrades in the 2024–2027 Long-Term Plan, and future infrastructure needs are addressed through the 2027 Infrastructure Strategy and the newly established Northland Waters CCO.”¹⁷
- Proposed s42 urban zoning is due to come into effect next year, assuming it is adopted by council in May 2026. This suggests new infill builds could commence next year.

¹⁴ NRC consent for discharge of treated wastewater to Waitangi Wetland, AUT.004111.01 - AUT.004111.05, September 2024.

¹⁵ NRC Combined Report and Decision of Hearing Commissioners on resource consents for the Opononi/Omapere WWTP re: NRC application numbers APP.002667.01.04 and APP.003839.01.03, November 2023. D Tana (2025) Transforming Wastewater Management for small communities in the Far North District of NZ Evaluating Electrocoagulation technology as a Future-Fit solution, report prepared for Carbon Neutral NZ Trust, August 2025, para. 4.1.

¹⁶ S42 report Hearing 15D, para.98, [https://www.fndc.govt.nz/data/assets/pdf_file/0019/46234/S42A-Report-Rezoning-Kerikeri-Waipapa-final .pdf](https://www.fndc.govt.nz/data/assets/pdf_file/0019/46234/S42A-Report-Rezoning-Kerikeri-Waipapa-final.pdf)

¹⁷ S42 report Hearing 15D, para.98.

Potentially 167 - 293 new connections would be needed in the first year that the PDP comes into effect -

- S42 info. above suggests average 167 new dwellings per year (based on potential development capacity 5,003 dwellings divided by 30 years).
- The HBA report indicates perhaps 293 new dwellings per year (based on 880 new dwellings over next 3 years).

Some extra figures that may be of use taken from rates strike

Currently rates are stuck on some 1,580 residences. Using the recent (2024) Beca figures of 2.5 occupants per dwelling and 200 litres/person/day would require 790 m³/d with no provision for commercial, industrial or community or any peaking factor. Doubling the plant capacity as indicated in Spatial plan? reports means capacity would become 2,540 m³/d or 3.2 times the current requirement. This equates to 4,740 max residences again with no provisions. The suggestion that this could cope with over 5,000 new dwellings is nonsense.

Number of dwellings per hectare:

Discrepancy between WWTP capacity basis and proposed future density of dwellings -

- In 2020, FNDC planners said they assumed the WWTP was built on the basis of 13 lots per hectare [information at Arvida hearing].
- However, McDonald's design report (2016) indicated the correct figure was **only 8.5 lots per hectare** of available land, i.e. about 1180 m² average lot size @ average 2.4 persons per household. [find reference for this statement].
- Several recent developments (e.g. Arvida, Inlet Road estate, new retirement development in Cobham Road, Kainga Ora in King Street) have much higher density per hectare.

Notably, the PDP s42 proposal for rezoning says:

- Larger blocks under Medium Density Residential Zone (MDRZ) can achieve **densities of 40–72 dwellings per hectare**.
- General Residential Zone (GRZ) can be **30–36 dwellings per hectare**.

Summary points on Kerikeri WWTP capacity issues

- Reports by Beca have indicated the maximum capacity of the WWTP at normal use is 1270 m³/day.
- Using the peaking factor of 2.5 identified by Beca, average inflow should not exceed 508 m³/day.
- Even in 2023, capacity could not support a peaking factor of 2.5.
- Beca reported that 1.25 "is the lowest peaking factor that could be considered safe".
- Therefore, the **average daily inflow must not exceed about 1,016 m³/day - for safety reasons**.
- It is clear that the treatment capacity of the Kerikeri wastewater treatment plant (WWTP) is exceeded on a number of days.
- Even 3 years ago, capacity was exceeded on some days.
- While it is understandable that capacity would be exceeded during heavy rain (storm events), the capacity is also being exceeded during normal rainfall.

EXAMPLES OF OTHER INFRASTRUCTURE WITH CAPACITY ISSUES

There are many problems with the wastewater and stormwater systems in central Kerikeri.

- A high level of stormwater infiltration enters Kerikeri wastewater reticulation system, and this contributes to the excessive volumes at the WW treatment plant.
- For example, a high level of stormwater infiltration to the ageing wastewater system gravitates down Fairlie Drive intensive residential area to the lowest level pump station. We suspect illegal connections of storm water (roof water) to the sewer, plus surface and ground water entering the sewer system.
- Hillside laid sewer piping is sometimes subject to "ground creep" that physically pulls apart the socketed pipe joints. that allows stormwater entry to the pipes when groundwater rises. This phenomenon is very evident in Mangonui/Cooper Beach area with the sewer pipes.
- The original designed gravity sewer pipe size used throughout Kerikeri was maximum 150mm trunk main PVC pipe - all other feeder pipes were 100mm PVC pipes. The lifting of manhole covers in Amokura Drive even in a moderate rainfall event is the effect of excessive volume and the gravitational head pressure.
- The existing ground pipe capacity could not cater for future development - this would also be true in relation to the size and pumping capacity of most pumping stations. In other words the infrastructure would need almost a complete rebuild.
- To cater for the proposed multi housing density would require extensive redesign of all services, including water and sanitary sewer supply, roading access, parking, educational and recreational areas.
- In the lower part of Amokura Drive - a wastewater pump station serving the area west of Kerikeri Road is at risk of flooding. NRC has noted past incidents of overflow during heavy rainfall, indicating the need for protection works for the pump station, and highlighted "the need for Council action to protect this critical infrastructure".¹⁸

TIMING OF FNDC PLANS FOR EXPANDING CAPACITY

Beca's estimates of timing for expanded WWTP capacity

We consider that Beca's 2024 assessment for the Spatial Plan scenario over-estimates the current capacity of the WWTP. Beca's estimates that the average daily inflow to the WWTP will reach the SBR capacity in the year 2028 – reproduced in Figure 1 below.¹⁹

Beca has therefore recommended expansion of two additional reactors and several other upgrades in the "medium term".²⁰ Our analysis indicates the expansion is needed sooner.

Beca's sensitivity analysis for the Spatial Plan also made separate estimates of future average WWTP demand with 4 persons per household – as per FNDC Engineering Standards. This brings forward the date to 2027 when demand exceeds capacity – please see Figure 12 in Beca's 2024

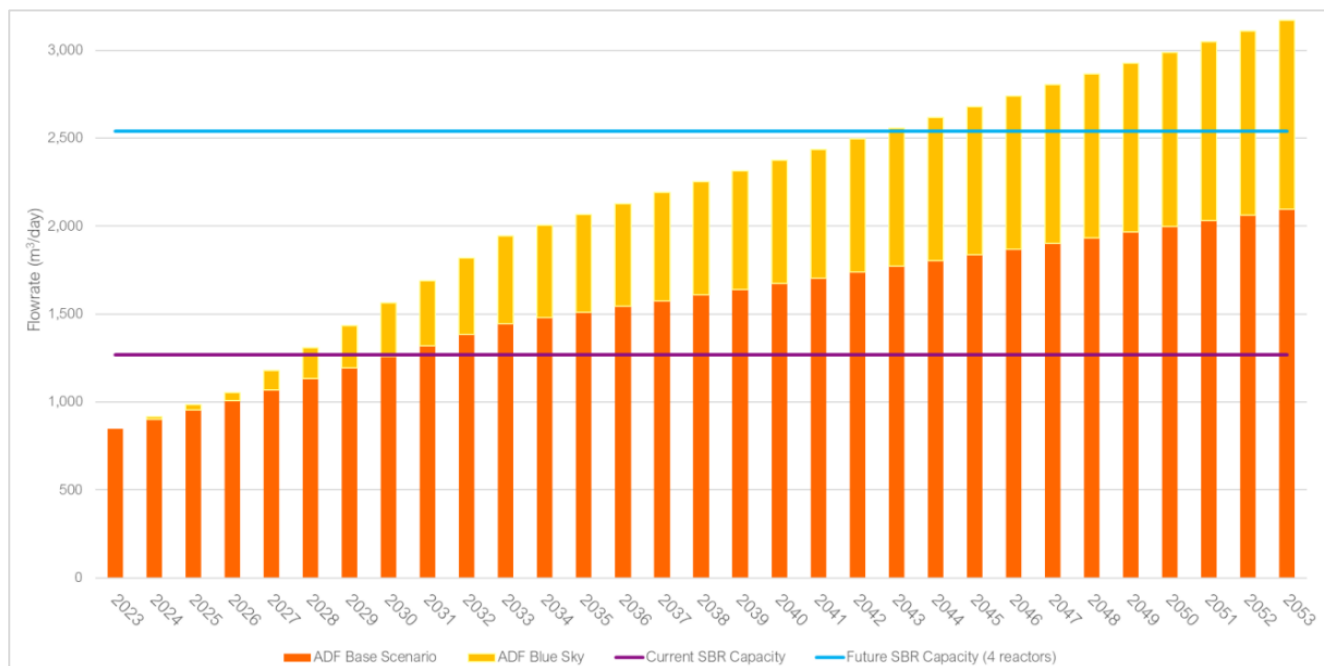
¹⁸ NRC Kerikeri-Waipapa River Working Group meeting minutes, 9 October 2025, p.3.

¹⁹ Beca (2024) Kerikeri-Waipapa 3 Waters Capacity and Modelling Assessment prepared for FNDC, Oct 2024, p.22, https://www.fndc.govt.nz/_data/assets/pdf_file/0017/43226/Kerikeri-Waipapa-3-Waters-Assessment.pdf

²⁰ Beca (2024) above, p.23.

spatial plan report, p.51.²¹ Beca noted that “This level of demand should be considered during the design of pipe and pump station upgrades and for master planning at the WWTP site.”²²

Figure 1: Beca (2024) forecast average daily flow (ADF) - inflow to WWTP



Cost of increasing the capacity of Kerikeri WWTP

Beca estimates a cost of expansion between \$9 million and \$20 million in the “medium-term” (reproduced in Table 3, below).²³ However, Beca’s forecast inflows to the WWTP indicate that expansion will need to be implemented by 2028 (Figure 1 above), or possibly earlier (Figure 12 in Beca report 2024, p.51).

Table 3: Estimated costs for expanding and upgrading the WWTP for Spatial Plan ‘base scenario’ and ‘blue sky scenario’ (Beca report 2024, p.46)

The table below outlines the costs to upgrade the existing WWTP under the base and blue sky scenarios. It is assumed sufficient space is available at the WWTP site and most existing processes will be duplicated to a similar design and performance.

Table 21: Wastewater Treatment Cost Ranges.

Scenario	Indicative Timing	Description	Cost Range	Total
Base	Medium-term	SBRs (3+4), UV disinfection and screw press	\$9 - 20M	\$10 - 22M
	Long-term	Inlet works upgrade	\$1 - 2M	
Blue Sky	Medium-term	Same as Base above	\$9 - 20M	\$18 - 38M
	Long term	SBRs (5+6) Inlet works upgrade	\$9 - 18M	

²¹ Beca (2024) above, Appendix A, p.51, Figure 12 & 13.

²² Beca (2024) above, p.23.

²³ Beca (2024) above, p.46, Table 21 Wastewater treatment cost ranges.

CAPITAL EXPENDITURE - FNDC TEN-YEAR LONG TERM PLAN

As noted above, Beca estimates that the average daily inflow to the WWTP will reach the SBR capacity in the year 2028. However, the treatment capacity of the Kerikeri wastewater treatment plant (WWTP) has been and continues to be exceeded on some days, even during normal rainfall. We calculate that additional capacity is needed urgently.

In any case, substantial expenditure will be needed next year in order to have the infrastructure in place.

Based on past experience, the time taken for planning and designing a new/expanded WWTP will probably take 2-3 years at least, and construction may take another 2 years. Even if the design phase were to start next year, the WWTP expansion is unlikely to be operational by 2029.

FNDC Ten year LTP 2021 – 2031 Capital works programme:

The Ten-year LTP's capital works programme projects indicates \$35.2 million for 'Kerikeri wastewater treatment plant upgrade' in the final three years of the LTP (p.30, p.72).²⁴ If this goes ahead, the upgrade could perhaps be constructed, commissioned and fully operational in 2031 at the earliest.

Table 4: Ten-year LTP expenditure on Kerikeri WW network expansion – in 2028/9 to 2030/31

2027/28	2028/29	2029/30	2030/31	Project name
				New works (Level of service)
-	-	-	-	Discharge consent, Kerikeri
-	-	-	-	District-wide sludge management equipment
-	-	-	-	District-wide health and safety improvements
-	-	-	-	District-wide Scada and telemetry
-	-	-	-	District-wide sludge management programme
-	-	-	-	District-wide sludge treatment facility, Kaikohe
-	-	-	-	East coast WWTP upgrade to consent conditions
-	3,388,582	13,947,204	17,904,057	Expansion of wastewater network Stage 2, Kerikeri
-	-	-	-	Hihi WWTP upgrade

Source: FNDC Ten year LTP 2021-2031, p.72.

FNDC Three-year Long-term Plan 2024-2027:

FNDC Three-year LTP allocates about \$260,000 expenditure for Kerikeri WWTP in the period 2024-2027.²⁵ The figure of \$260,000 is too low to indicate capital expenditure for new reactor units for the treatment plant in the period to 2027.

The LTP mentions a 'future expenditure forecast' for the next 5 years. It suggests potential expenditure of \$6.8 million over 4 years for the WWTP and network scheme expansion (p.72). However, this 'future expenditure forecast' funding applies to the period **after** the current Three-year LTP, so the projected \$6.8m expenditure would not start till after 2027 (and presumably over 4 years?).

²⁴ FNDC Ten year LTP 2021-2031, Funding impact statement, p. 151-152,

https://www.fndc.govt.nz/data/assets/pdf_file/0022/24808/fndc_long_term_plan_2021-31_wv.pdf

²⁵ FNDC Three year LTP 2024-2027, p.146.

https://www.fndc.govt.nz/data/assets/pdf_file/0020/29612/FNDC-Te-Pae-Tata-Three-Year-Long-Term-Plan-2024-27.pdf

PDP INTERPRETATION OR CLARIFICATION OF EXISTING OR PLANNED INFRASTRUCTURE

Development infrastructure: Our community group submissions supported the general NPS-UD definition of *development infrastructure* which just specifies the types of hardware that this term covers, namely council controlled networks for three waters, and also land transport –

“Development infrastructure means the following, to the extent they are controlled by a local authority or council controlled organization (as defined in section 6 of the Local Government Act 2002):

- a. Network infrastructure for water supply, wastewater, or stormwater
- b. Land transport (as defined in section 5 of the Land Transport Management Act 2003)”

Existing or planned development Infrastructure: We are concerned that terms such as “existing or planned” development Infrastructure are used in several provisions, but ‘*existing or planned*’ has not been interpreted or clarified.

New residential and commercial developments in urban zones will need physical connections to council-controlled infrastructure. We are concerned that some **existing** council-controlled infrastructure networks do not have the capacity available now, at this current time, to support additional connections. In short, some *existing* infrastructure does not actually have capacity. So the term ‘existing’ needs further clarification or refinement.

Moreover, **planned** council-controlled infrastructure will not be able to provide extra physical capacity for new connections for a few years or much longer - until capital works for extra capacity have been constructed and have become operational.

However, under the PDP, new developments that are consented will gain the right to connect to the council-controlled networks. Moreover, consents will not be needed for new developments that are a *permitted activity* under the PDP (and comply fully with PDP rules/standards) but they will get new connections as of right, even if the council infrastructure does not have capacity to support that.

Examples of PDP provisions containing the term ‘existing’ or ‘planned’ or similar terms:

- Objectives and policies GRZ-O4, GRZ-P1, MUZ-O3, LIZ-O3 and HIZ-O3: Objectives and Policies supporting land use and subdivision in the various zones where there is sufficient capacity in existing or planned development infrastructure. Terms such as ‘adequacy’ and ‘capacity’ are also used in several general objectives or policies.

Comment: Having *sufficient capacity* in existing infrastructure is a useful phrase.

However, this is undermined by the word “planned” infrastructure – because “planned” does not mean the necessary capacity will be physically available, because the planning, funding and design may take some years to reach fruition. Therefore the actual new capacity might not be constructed and operational for a number of years.

Objectives and policies would be considered during consenting where an activity is discretionary, but will not be considered for new developments that are a permitted activity or restricted discretionary activity.

- SUB-P11, TSL-P4, GRZ-P8, LIZ-P6, HIZ-P7, OSZ-P4, SARZP4, KRT-P6 and MPZ-P4: s42 report refers to policies that promote managing subdivision by ensuring that proposed activities align with the capacity of existing or planned development infrastructure, especially where resource consent is required.

Comment: Merely ensuring that proposed activities “align” with the capacity of planned infrastructure will not ensure that the necessary capacity will be physically available for the new developments.

MUZ-P8, TCZ-P8 refer to the following matters –

“the adequacy and capacity of available or programmed development infrastructure to accommodate the proposed activity, including ... management of three waters infrastructure”

Comment: The reference to ‘adequacy and capacity of available’ development is useful and appropriate. However, the rules/standards do not require this. The policy would only be considered in cases where a new development is a discretionary activity. The policy would not be considered for a development that is a permitted activity or restricted discretionary activity (complies with relevant rules/standards).

We think it may be feasible to build on concepts in several PDP draft rules and standards that attempt to address capacity limitations in council-controlled infrastructure:

Standard MDRZ-S9 for impermeable surface coverage contains a statement for situations where a connection is not available for stormwater, as follows. This could potentially be applied to wastewater and water supply as well –

“2. Where a connection to Council’s reticulated stormwater system is not available the stormwater must be disposed of within the site.” (Note: An engineering site suitability report is required to determine compliance with these standards.)

Rule MDRZ-R2 initially contained the useful following text under matters of discretion, however the s42 report has recommended **deleting** the following –

Text deleted by s42 report: “The extent and effects on the three waters infrastructure, achieved by demonstrating that at the point of connection the infrastructure has the capacity to service the development;”

S42 recommended this substitute text: “Servicing details of the site”

The deleted text was useful. However, its application was limited – it would only apply to restricted discretionary activity. It would not apply to new developments that meet permitted activity rules/standards.

Interpretation or note of clarification

To address these problems, we seek interpretation or a note of clarification relating to ‘*existing or planned*’ development infrastructure, along the following lines –

Note: Where land use, subdivision or development is within an area expected to connect to council-controlled reticulated infrastructure network(s), a physical connection to the network cannot be completed until the relevant network has capacity available. In such cases, the wastewater or stormwater must be disposed of within the site, or by other off-site arrangement agreed with council, until a connection can be made.”

Consequential amendments would also be desirable in the rules and standards of chapters that are relevant to developments likely to be supported by council-controlled infrastructure, particularly three waters networks.