Far North District Council

# Lucklaw Farm

# 690 Rangiputa Road

# Plan Change Three Waters Infrastructure Peer Review

30 September 2025

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Lucklaw farms, 690 Ragiputa Road, Rangiputa, Plan Change Three Waters Infrastructure Peer Review

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# TABLE OF CONTENTS


INTRODUCTION....1

1 GENERAL....2

1.1 SITE AND PROPOSAL....2

1.2 APPLICANT'S SERVICING STATEMENTS....2

2 THREE WATERS SERVICING....4

2.1 WATER SUPPLY....5

2.2 WASTEWATER....5

2.3 STORMWATER....6

3 CHALLENGES OF A PRIVATELY OWNED WASTEWATER TREATMENT PLANT....8

4 OVERALL CONCLUSIONS....9

# INTRODUCTION

This peer review has been prepared at the request of Far North District Council (FNDC) to provide an independent assessment of infrastructure servicing feasibility for a rezoning submission at Lucklaw Farms, 690 Rangiputa Road (the “site”).

The submission, supported by evidence from Marcus Hayden Langman (9 June 2025) on behalf of Lucklaw Farms Limited, seeks to rezone its land between Rangiputa and Puwheke (currently zoned as Rural Production) to a mix of Mixed-use and Residential (Area A), Rural Lifestyle (Area B) and Rural Production (Area C) in the Proposed District Plan. The indicative development proposed within Area A is a general residential zone (9.9ha) and a mixed-use zone for commercial and residential (1.4ha). The indicative development proposed within Area B is 15 lifestyle blocks near Raupo Bay and a lodge and visitor accommodation (3.2 ha). The indicative development proposed within Area C is 15 lifestyle blocks and a coastal lifestyle living zone (8.7ha).

This review is framed against the requirements of the Independent Hearings Panel Final Minute 14 (2 December 2024), which sets the rezoning criteria for infrastructure (three waters) servicing.

**Supporting documents reviewed include:**

- FNDC, District Plan Changes – Infrastructure High Level Review (February 2024)
- FNDC, Engineering Standards for Land Development (May 2023)
- Applicants’ evidence (Langman, June 2025)
- Statement of evidence – Wastewater Treatment (Sole, June 2025)
- Statement of evidence – Hydrology and Water Quality (Blyth, June 2025)
- Applicants’ rebuttal evidence (Langman, September 2025)

**The scope covers:**

- **Water supply** feasibility and connection options.
- **Wastewater** servicing capacity and alignment with FNDC infrastructure plans.
- **Stormwater** management approach, neutrality, and downstream effects.
- **General servicing risks** including staging, affected party approvals, and integration with roading or landform constraints.

**Out of Scope:**

This peer review does not involve independent network modelling or hydraulic capacity testing, consistent with the engagement assumptions. Transport, geotechnical, detailed design, or property/legal matters are excluded unless they materially influence the three waters feasibility.

# 1 GENERAL

## 1.1 SITE AND PROPOSAL

The Lucklaw Farms subject site is located at 690 Rangiputa Road between Rangiputa and Puwheke and is approximately 320 hectares in size. This includes approximately 52 hectares of land owned by Trustees of the Taranaki Trust to the west of the site (Area B). A similar submission was filed by the Trustees of the Taranaki Trust to rezone the land in line with the development plan proposed by Lucklaw Farms, and therefore the area has been included in 'the site' assessed within this infrastructure review to understand the full servicing requirements for the proposed development. The existing use for the site is as per the current District Plan zoned for Rural Production and includes historic pine forest (largely removed), existing dunes and manuka used and managed for honey production. The site is accessed off Motutara Drive and Rangiputa Road.

The rezoning request seeks to change the zoning from Rural Production to a mix of Mixed-use and Residential (Area A), Rural Lifestyle (Area B) and Rural Production (Area C).

The projected development capacity has not been quantified in the applicants' evidence, however the following designations for Areas A, B and C have been provided in the Puwheke Development Area Plan:

**Area A – Mixed Use and Residential**

- General residential zone (9.9ha)
- Mixed-use zone for commercial and residential (1.4ha)

**Area B – Rural Lifestyle**

- 15 lifestyle blocks near Raupo Bay
- Lodge and visitor accommodation (3.2 ha)

**Area C – Rural Production**

- 15 lifestyle blocks
- Coastal lifestyle living zone (8.7ha)

## 1.2 APPLICANT'S SERVICING STATEMENTS

### Key claims from the planning evidence

- There is no existing reticulated potable water network in Rangiputa, and the existing settlement adjacent to the site utilises rainwater collection. Rainwater harvesting would also be proposed for any future development.
- The Statement of Evidence for Wastewater Treatment confirms that the existing Rangiputa WWTP that services the existing settlement does not have sufficient capacity to support the rezoned Residential and Mixed-Use area. A new WWTP would be required to support the additional development proposed in Area A.
- The Statement of Evidence for Wastewater Treatment identifies that future development proposed within Areas B and C could implement on-site wastewater treatment and disposal to ground to service the proposed sites.
- The Statement of Evidence for Hydrology and Water Quality identifies that water sensitive design principles will need to be adopted for the proposed future development to manage stormwater runoff, including but not limited to attenuation and treatment, minimising the impervious footprint of the site,

minimising earthworks and disruption to natural flow paths and utilising swales and open channels to transmit water and enhance the receiving freshwater environment.

**Observation:**

The supporting evidence outlines the proposed servicing strategy for each of the three waters to support development of the site and outlines a clear understanding of current FNDC network limitations in the area, proposing alternative solutions to service the development. The evidence provided is currently high level and lacks engineering detail to confirm viability of the proposed servicing solutions for the site, however this could likely be addressed at the subdivision consent stage following consultation with Council.

# 2 THREE WATERS SERVICING

**Assessment Framework – Minute 14**

Minute 14 of the Independent Hearings Panel (Final, 2 December 2024) sets the framework for assessing rezoning requests in the Proposed FNDC District Plan. It requires applicants to demonstrate that the subdivision and development potential enabled by rezoning can be supported by **adequate three waters servicing**.

Specifically, evidence should address:

1. **Proposed connections**
   Where and how the site would connect to existing water, wastewater, and stormwater infrastructure, demonstrating viability.
2. **Engagement and assumptions**
   Outcomes of discussions with FNDC infrastructure staff, and any assumptions about servicing, sequencing, or capacity, including the impact of other plan-enabled development.
3. **On-site Provision**
   Any infrastructure required on-site to make development feasible, such as storage, pumping, or attenuation devices.
4. **Substantive Demand**
   Where rezoning creates material demand on bulk infrastructure, applicants are expected to engage proactively with FNDC's infrastructure team prior to hearings.

Minute 14 is explicit that detailed design is not expected at the rezoning stage. Instead, the requirement is for a credible, concept-level servicing assessment that gives Council and the Panel confidence that development enabled by rezoning can be adequately serviced.

In practice, this means applicants must "tell the servicing story": identify the connections, acknowledge the demand that rezoning will generate, summarise what has been discussed with infrastructure staff, and show how any constraints or on-site provisions could be managed.

## 2.1 WATER SUPPLY

The site is in Rangiputa, where there is no existing reticulated potable water supply.

The applicants' evidence states that rainwater is collected by the existing properties located within Rangiputa and used for potable water. It is proposed that any future development at the site would also collect and use rainwater for the potable water supply. No further details have been provided to confirm the suitability of rainwater harvesting in the area, volume of rainwater collection required to supply the proposed housing, or infrastructure proposed.

Since there is no reticulated water supply available, the site will need to make alternative provisions for firefighting and fire water supply. The applicants' evidence confirms that there is an existing fire station located in Rangiputa near the site (699 Rangiputa Road), which is a volunteer fire station. The fire station would need to be consulted to confirm it can meet the needs of the proposed development in compliance with the New Zealand Fire Service Firefighting Water Supplies Code of Practice.

**Finding**

On the basis that the existing residential properties in the area are currently collecting rainwater for potable water use, the development may be considered feasible in principle. However, there is no evidence provided to support this, and additional details are required to confirm the suitability of the applicant's claims. Other factors to be considered by the applicant (not limited to) are suitable areas for collection, treatment, storage and water for firefighting requirements. It is also recommended that the applicant consult with the local fire station to confirm they have the capacity to support the future development at the site and identify impacts.

## 2.2 WASTEWATER

The existing households in Rangiputa are currently serviced by the existing Rangiputa WWTP, which is a small two pond system, with a third pond used for soakage for the treated effluent. Wastewater is transferred to the WWTP via a reticulated gravity network. The applicants' Statement of Evidence for Wastewater Treatment confirms that the existing WWTP can treat a flow of approximately 40m$^3$/day before becoming largely ineffective. The consented limit is 100m$^3$/day.

The applicants' Statement of Evidence for Wastewater Treatment outlines two solutions for primary wastewater management across the site. The proposed development within Area A (General Residential and Mixed-Use zones) would require a connection to a reticulated wastewater network to transfer wastewater to a centralised wastewater treatment facility. The proposed development within Areas B and C would utilise on-site wastewater treatment and disposal to ground. There is no other evidence to support the suitability of geological and hydrological characteristics at the locations regarding wastewater treatment, soil conditions, topography or proximity to sensitive areas including the wetland enhancement areas.

For Area A, the submission determines that the average dry weather flow of 131.4m$^3$/day, peak dry weather flow of 256.4m$^3$/day and the peak wet weather flow of 464.4m$^3$/day are anticipated for the General Residential and Mixed-Use zones (determined from FNDC Engineering Standards for wastewater design). The submission proposed to construct a new WWTP that could support the existing catchment and future demands of the proposed development. The submission notes that the treatment plant should be staged to match development growth, and the existing plant could be repurposed to support the new WWTP, however no further information has been provided to support the viability of a new WWTP at the site.

No information has been provided regarding the geological and hydrological characteristics at the site regarding wastewater treatment, soil conditions, topography or proximity to sensitive areas including the wetland enhancement areas and existing coastline. A 100m setback from residential areas has been included in the Puwheke Development Area Plan. Although there is an existing WWTP in the proposed location, the new WWTP will likely require a larger footprint to support the significant increase in peak flows (almost 5 times

greater than existing consented limits of the existing WWTP), which would require additional investigation into the natural environment to confirm the viability of a larger WWTP.

The applicants' evidence has indicated that the developer would fund the new WWTP and, if required, privately hold any new wastewater treatment facility through joint ownership by the developed sites. This would remove requirements on Council to operate and maintain the new asset, however, it does not address the implications of existing wastewater from the Rangiputa community discharging into a privately owned WWTP (if the existing Council owned WWTP is repurposed).

**Finding**

The wastewater servicing strategy for the Lucklaw Farm development proposes two main approaches. For Area A, which includes the General Residential and Mixed-Use zones, a new WWTP is required because the existing Rangiputa WWTP is undersized and cannot accommodate the projected flows from the proposed development. The flows expected for the development have been calculated to be almost 5 times more than the consented flow for the existing WWTP. The new WWTP is expected to be staged in line with development growth, with the possibility of repurposing the existing plant to support the new system. However, the submission lacks detailed information on the design, size, soil suitability, and infrastructure requirements for the new WWTP. Additionally, there is no supporting technical information regarding the suitability of on-site wastewater treatment and disposal for Areas B and C, which are intended for Rural Lifestyle and Rural Production uses.

The developer proposes to fund and privately own the new WWTP through joint ownership by the developed sites. While this approach would relieve the Council of operational and maintenance responsibilities, the submission does not provide clear details on legal, operational, or maintenance arrangements, particularly regarding the transition from Council to private ownership and the management of existing community flows if the current Council-owned WWTP is repurposed. The site is not prioritised for Council infrastructure investment, so all costs for development, operation, and maintenance of new wastewater assets would potentially fall to the developer and future owners.

Consent for a new WWTP will depend on compliance with evolving national and regional standards, including the anticipated national wastewater environmental performance standard. Further detailed investigations, modelling, and enforceable commitments for operation, maintenance, and decommissioning are required at the subdivision consent stage to ensure the Council is not left with unfunded liabilities. Overall, while the proposed wastewater servicing may be considered feasible in principle, it is contingent on robust technical investigations, clear legal arrangements, and ongoing consultation with the Council to address the identified gaps and risks.

## 2.3 STORMWATER

The existing site land use is predominantly low intensity pastoral farming, where any development of the site will increase the impervious area and stormwater runoff to be captured. The applicants' development area plan indicates areas designated for riparian and wetland enhancements across the proposed development. No additional stormwater servicing details have been provided to identify any requirements such as reticulated stormwater network, attenuation and discharge location/outlet configurations.

The applicants' Statement of Evidence for Hydrology and Water Quality focuses on water sensitive design and measures that should be implemented to improve the quality of stormwater runoff and mitigate the effects of the proposed change in land use on the natural environment. This includes the use of the treatment train approach, materials that promote infiltration and reduce potential contaminants in runoff and constructed wetlands to treat catchment runoff. This indicates that the applicant has considered the likely measures required to mitigate the increased runoff from the site, however no details on likely runoff volumes or anticipated flows have been provided at this stage.

The applicants' Statement of Evidence for Hydrology and Water Quality has confirmed that it is likely the runoff from the proposed development will drain across the proposed riparian and wetland areas towards the lake complex to the northeast of the development. This is due to the presence of iron pans, which limit deep groundwater recharge. Consultation with Council will be required to confirm anticipated flows and confirm that discharges into the lake complex are managed to not overload the existing natural environment during large storm events.

**Finding**

The applicant acknowledges the requirement for water sensitive design to improve the water quality and provides some indication of proposed riparian and wetland enhancement areas within the site, although a further detailed concept design has not been advanced at this stage.

Further investigation will be required at the subdivision stage to confirm the requirements around stormwater attenuation to mitigate increased flows, demonstrate that secondary flows can be managed without negative implications on the surrounding environment, and assess outlet capacity to the receiving environment. It is understood that the applicant proposes to continue to direct runoff towards Lake Rotokawau, and detailed modelling will be required to confirm the development's impact on the existing waterway. The applicant appears aware of these obligations.

Stormwater servicing is feasible in principle, if attenuation, secondary flow path management, and safe discharge into the natural environment are addressed at subdivision design. Compliance with FNDC Engineering Standards and Regional Council rules is required, and integrated catchment management planning is recommended to address both quantity and quality controls.

# 3 CHALLENGES OF A PRIVATELY OWNED WASTEWATER TREATMENT PLANT

In addition to identifying whether the wastewater strategy and servicing is feasible from a technical perspective, there are additional challenges that come with privately owning and operating a wastewater treatment plant. Privately owned wastewater treatment plants that service large residential developments can face significant operational, governance, financial and compliance challenges. A key challenge for a privately owned system is the lack of technical expertise required to operate and maintain the plant. This can occur when the residents or communities involved in the private ownership are not aware of their responsibilities or the technical demands of the wastewater systems, or haven't received the required support and training.

There are numerous operational challenges associated with privately owning and operating a wastewater treatment plant. Large-scale treatment plants often use advanced technologies that require specialist knowledge to operate and maintain, and require the ability to handle variable flows due to diverse household waste and seasonal population fluctuations in the summer months. These complexities could lead to overloading or underperformance of the system if it is not operated and maintained appropriately.

As the WWTP size increases with increased development, the plant will consume more energy, particularly during aeration and UV disinfection, which can lead to high operation costs and an increased carbon footprint. Managing sludge volumes and effluent disposal also becomes more complex as the size of the development increases, and disposal via land irrigation or infiltration requires additional monitoring of the soil health, nutrient loading and weather conditions.

The privately owned WWTP will likely face challenges related to governance of the community ownership model and the financial resilience required to manage the infrastructure long-term. There is potential for a lack of accountability and transparency if servicing standards decline or costs increase unexpectedly, and there is the risk of mismanagement leading to governance failure. There are significant regulatory requirements that must be followed for the management of wastewater, and the changing regulatory landscape and stricter standards could impose higher unforeseen compliance costs. The cost of construction, setup and ongoing maintenance could be significant, especially with unexpected repairs or upgrades. If costs are passed onto residents via service charges, these could be contentious or perceived as unfair if not managed transparently.

# 4 OVERALL CONCLUSIONS

Lucklaw Farms is in Rangiputa, which is an area that FNDC is not currently investing in three waters infrastructure for development. The applicant has acknowledged the constraints on the existing three waters infrastructure and is committed to providing funding to construct new infrastructure. In addition, the applicant has suggested to retain ownership of new infrastructure through a joint ownership by the developed sites to reduce FNDC's requirement to support ongoing operation and maintenance costs associated with operating a larger network, which has not been allowed for in the current infrastructure funding for the area.

This reflects an understanding of current system limitations and the importance of ongoing coordination with FNDC to determine a feasible servicing strategy for the site.

**Water Supply**

With no reticulated water supply present in Rangiputa, water servicing using onsite rainwater harvesting for the development appears feasible, as existing properties currently use rainwater collection for potable water supply. Further detailed modelling and consultation will be needed during subdivision consent to confirm rainwater harvesting suitability and storage needs, as well as to ensure adequate fire service support.

**Wastewater**

Wastewater servicing for the future development is proposed through two solutions: a new wastewater treatment plant (WWTP) for Area A, and on-site treatment and ground disposal for Areas B and C. While a staged development approach offers flexibility and there is an existing WWTP indicating likely suitability, the submission lacks essential details about the design, capacity, and requirements of the new plant, especially given the significant increase in flows. Comprehensive investigations and modelling will be required prior to subdivision consent to confirm the viability.

The developer proposes to fund and privately hold the new assets through joint ownership by the developed sites, however clear and enforceable commitments regarding operation, maintenance, and responsibilities post-construction must be established. This includes obligations for decommissioning any existing plant no longer in use and addressing ongoing funding for operations and maintenance as well as impacts from the transfer of the existing WWTP users to the new WWTP. All responsibilities should be secured through legal or financial instruments to prevent unfunded liabilities for the Council.

The ability to secure consent for a new WWTP will depend on compliance with evolving national and regional standards, such as the anticipated national wastewater environmental performance standard and existing regulations like the Resource Management Act.

**Stormwater**

The applicant recognises the need for water-sensitive design and has proposed potential riparian and wetland enhancements, though detailed plans are yet to be developed. Stormwater servicing appears feasible, provided flow attenuation, secondary flow management, and safe discharge of runoff into the receiving environment are addressed during subdivision consent stage. Compliance with FNDC standards and integrated catchment management for both water quantity and quality are likely required to be addressed in more detail.

**Overall Finding**

The overall servicing strategy for Lucklaw Farm is generally aligned but remains high-level and lacks critical technical detail and enforceable commitments. Water supply is proposed via rainwater harvesting, which appears feasible in principle but requires further modelling and confirmation of storage, treatment, and firefighting provisions. Wastewater servicing relies on a new WWTP for Area A and on-site solutions for Areas B and C, however, there is insufficient evidence on design, sizing, environmental suitability, and legal responsibilities for privately owned assets. Stormwater management is based on water-sensitive design and

proposed wetland enhancements, but lacks detailed modelling and confirmation of downstream effects. Rezoning can only be considered feasible if subdivision consent conditions require comprehensive technical investigations, robust legal and operational arrangements, enforceable commitments for ongoing operation and maintenance, and ongoing engagement with Council to address identified gaps and risks.