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Foreword

It is my pleasure to present the Kaipara Key Urban Areas Spatial Plan, our guide for how we plan for growing the historic towns of Dargaville, Maungatūroto and Kaiwaka.

This is planning of a shape, size and scale never undertaken before in Kaipara District. Thanks to all who have contributed to the collaborative engagement approach of this spatial planning process. For some this has been an ‘eye-opener’ on how to locate where appropriate development could occur and what are the important parts we cherish in each of the towns; it has given us new ways to see our familiar places. With these spatial plans, we now have a solid blueprint for sustainable development in each of these towns, so that we can create space for future jobs, attractive homes, great community facilities and connections like new and exciting walking and cycling trails. Through this, we will grow and nurture our communities with resilience through challenges and opportunities that lie ahead.

This is what has been needed for a long time, and has extra relevance especially as we plan and pursue our recovery from the impact of the COVID 19 pandemic. Kaipara is a safe haven for companies to establish and is set to continue to serve as the Food Bowl for New Zealand.

This document sends a clear signal to our community that Kaipara’s key towns are ready for town centre improvements, have the space available for new commercial and industrial endeavours, and are open to attracting a variety of people to energise our workforce and enliven our historic communities. However, the Council cannot afford to lead development alone. We need to attract commercial enterprises to play a key part in developing quality design in keeping with the Community Design and Te Aranga Design Principles discussed within this document. We will need to encourage our infrastructure partners in the Northland Transportation Alliance (including the New Zealand Transport Agency), Northpower, Chorus and others to assist with aligning their forward investment strategies to enable the right development so that we can prosper here in Kaipara.

The next step will be to convert the intent of this spatial plan into statutory plan changes in the Kaipara District Plan. The Council recognises the importance of these plan changes to legally provide the appropriate conditions for quality development to occur. It also needs to consider alongside the plan changes infrastructure upgrades to key intersections, water supply, wastewater, stormwater and stopbank protection. This aligned infrastructure strategy will all be released early next year to show what needs to happen, when, what the cost is estimated to be and how it is intended to be funded.

This spatial plan is an important first step to how we encourage the towns of the Dargaville, Maungatūroto and Kaiwaka to enter a new chapter in their history and grow to benefit each of these communities and the wider Kaipara District, helping fulfil the promise of abundant wellbeing of ‘Kaipara te Oranganui’.

Nga mihi nui ki a koutou katoa



Dr Jason Smith
Mayor of Kaipara District

TO BE UPDATED...

Mihi

*Whakatōngia te kākano ki a tipu ia ngā
māramatanga.*

*Mā te ako ka mōhio,
mā mōhio ka mārama,
mā te mārama ka mātau,*

mā te mātau ka ora e!

Sow the seed to nurture understanding.

*With learning comes knowledge,
with knowledge comes understanding,
with understanding comes awareness,
with awareness comes wisdom,
with wisdom comes wellness!*

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Part A | Overview of Kaipara District

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Chapter 1 | Introduction

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1 | Kaipara Kickstart Project

The Kaipara Kickstart programme aims to promote economic development projects to diversify and grow the Kaipara economy. It has three streams (Kai, Wharves, and Roads) working together to build economic momentum.

Investments in Kaipara's economic growth and community wellbeing commenced early 2019 through the allocation of a total of \$28.98 million by the Provincial Growth Fund (PGF), New Zealand Transport Agency and Kaipara District Council. The fundamentals of this includes improving the reliability and safety of roads, increasing wharf infrastructure, tourism, and employment opportunities, and in particular the kai business opportunities in horticulture and aquaculture. As a result, the Kaipara KickStart package comprises three interlocked projects – Kai (Growing the Kai in Kaipara), Wharves (Kaipara Moana Activation Plan) and Roads. Overall, the KKS project outcomes look to align with the PGF objectives, being:

- Creating jobs, leading to sustainable economic growth,
- Increasing social inclusion and participation,
- Enabling Māori to realise aspirations in all aspects of the economy,
- Encouraging environmental sustainability and helping New Zealand meet climate change commitments alongside productive use of land, water, and other resources, and
- Improving resilience, particularly of critical infrastructure, and by diversifying our economy.

Kaipara Kai Kaipara currently accounts for 1.2% of NZ's land mass, accommodates 0.5% of the population and contributes to approximately 1.1% of kai (food) production. Research reveals Kaipara is underperforming in comparison to its neighbours in producing agricultural output from its land, and in matching its performance to that of Thames- Coromandel, Waikato, Hauraki and others – it has the potential to inject ~\$20 million to ~\$230 million directly into the regional GDP. In saying this, Kaipara Kai has a strong base on which to build on new opportunities to increase food production in the Kaipara District. In fact, the greatest concentration of high value soils in the Kaipara District is predominantly in the river delta between Poutō-Te Kōpuru to Dargaville- Ruāwai, stretching out to Kaihū - the North Kaipara Agricultural Delta.

Kaipara Wharves The Kaipara Water Transport and Wharves Feasibility Study looks to encourage water-based transportation methods that allow for variations in ways we can connect communities, support and attract residents, tourists and businesses to and within the Kaipara District. The Kaipara Moana Activation Plan aims to develop the biggest harbour in New Zealand, enabling tourism operators and locals to use the wharves to improve their income and employment opportunities. This workstream looks to support increased economic, social and environmental resilience for the district as part of the broader Kaipara Kickstart Programme. It supports the strategic direction for Northland provided by the Tai Tokerau Economic Development Action Plan, the Maori Economic Development Strategy, the district's Long-Term Plan and numerous regional transport planning initiatives. The development of marine facilities and asset management initiatives will form part of the 30-year water transport network delivery programme, bringing back life to the historic primary mode of transport on water.

Roads The Roads project within Kaipara Kickstart seeks to improve safety and resilience of the current road network. Having a reliable and safe network allows for comfort in connectivity between our businesses, marae and the community. Roads are one of the main transportation options to get our food to market and for tourists to enjoy all our district has to offer. Investing in our existing road network will improve safety, resilience, comfort and speed of commutes on unsealed roads.

2 | Overview of the Kaipara District Spatial Plan - Ngā Wawata 2050

The Kaipara District Council wishes to enable sustainable development for the numerous urban, peri-urban, rural and coastal communities which characterise the Kaipara District. This is being pursued through a spatial planning process that complements the work for the Kaipara KickStart programme and the Kaipara Infrastructure Strategy work currently underway through the Long-Term Plan 2021-2031. The district-wide spatial and the already adopted Spatial Plan for Key Urban Areas (Dargaville, Maungatūroto, and Kaiwaka) will flow into a future statutory District Plan review process.

A spatial plan is a holistic approach for the development and management of resources, community social infrastructure and the identification of adequate infrastructure to improve the future social, economic, cultural and environmental well-being of a community. Well-being can be measured through many different indicators, such as Council surveys, health data, environmental monitoring and economic information.

Objectives of the Spatial Plan

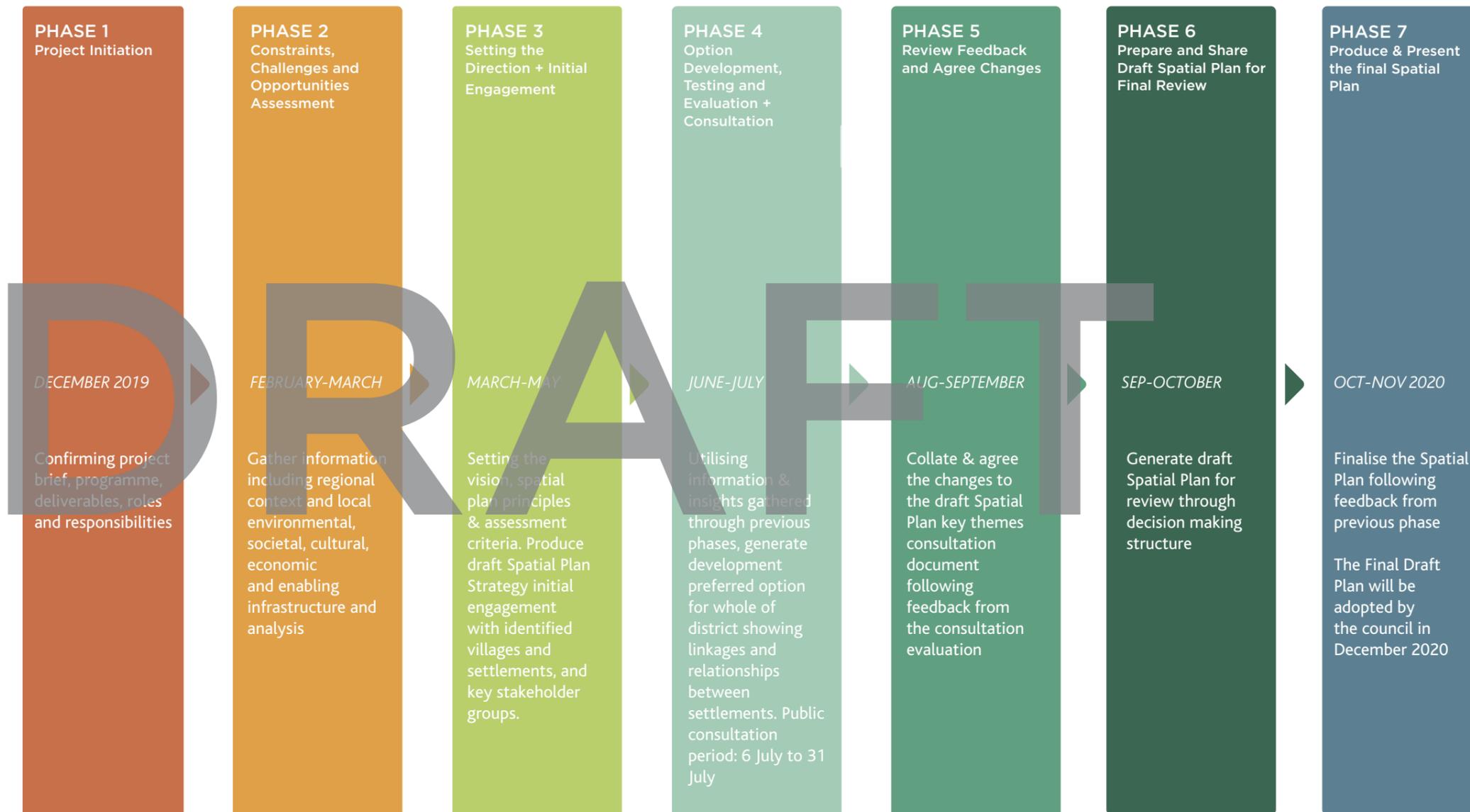
The Kaipara District Spatial Plan - Ngā Wawata 2050 aims to achieve the following objectives:

- *Understanding the dynamics, drivers and infrastructure needed to support connected development and coordinated functions between Kaipara's settlements, villages and towns.*
- *Management of natural resources including the mountains, lakes, wetlands, soils, coastal edges, waterways, native forests and the Kaipara Moana (Harbour) and how people should act when they are in these special places.*
- *Developing a sustainable approach to how all rural and coastal land will be managed for cultural, commercial, conservation and community-based activities.*

2 | Overview of the Kaipara District Spatial Plan - Ngā Wawata 2050

The spatial plan project methodology consisted of seven phases over a period of 9 months; extended to 12 months due to delays imposed by the Covid-19 global pandemic and in order to pursue meaningful and value-add engagement with Mana Whenua, key partner organisations and stakeholders, and the Kaipara District communities inputting into the various towns, villages and settlements high-level 30-Year Plans.

INDICATIVE TIME-LINE

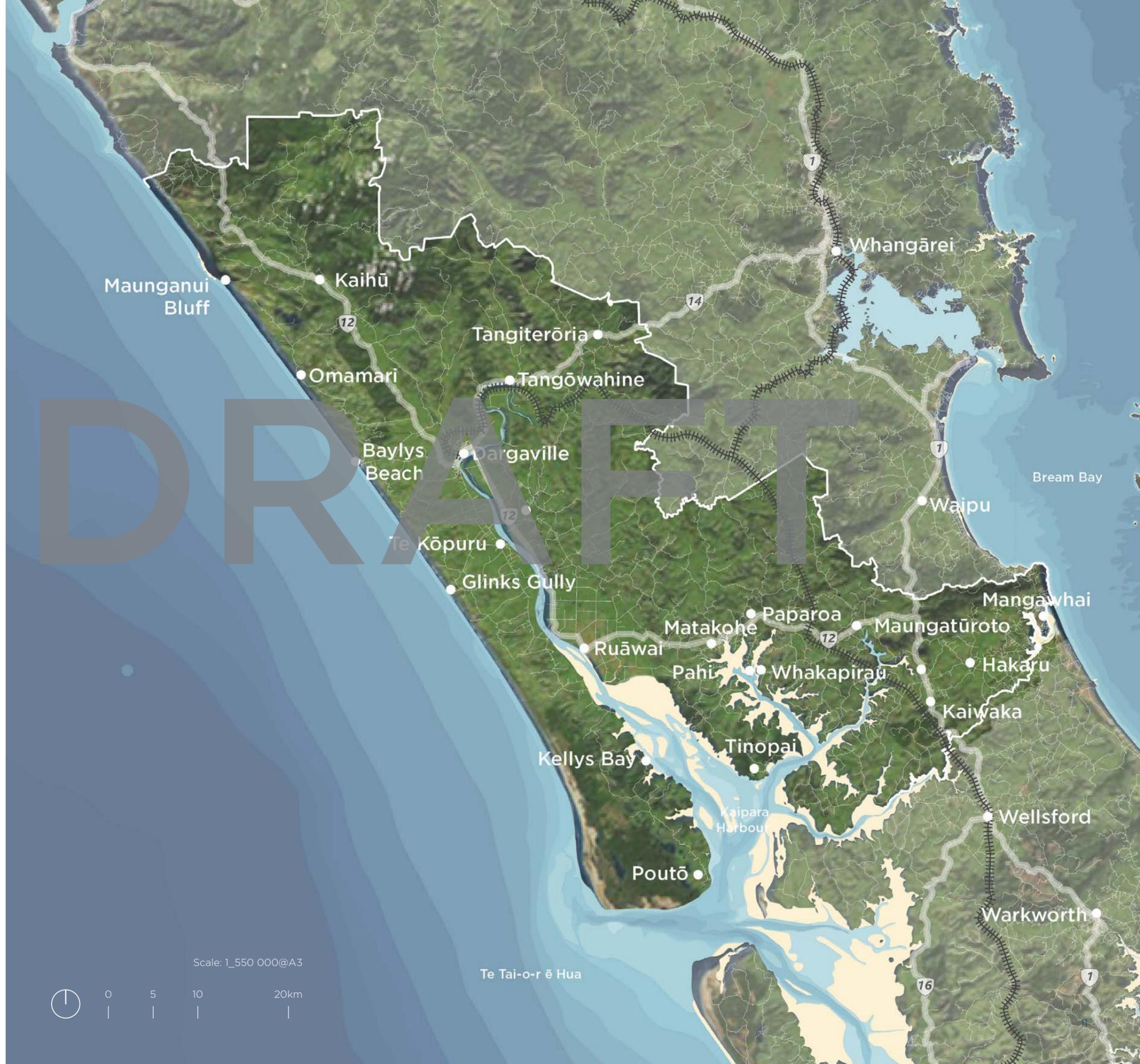


2 | Overview of the Kaipara District Spatial Plan - Ngā Wawata 2050

This map shows the locations of Kaipara's key urban towns, rural towns, villages, and rural and coastal settlements that the spatial plan focuses on. It provides a visual reference to the relationship each place has to each other, the larger centres outside of the district and how the road and rail line infrastructure links them all together. It also gives a clear perspective of how much of the district is rural land and how many of the settlements have a water connection, be it the Kaipara West Coast, the Kaipara Harbour or the expansive rivers networks including the Wairoa, Kaihū, or Kaiwaka rivers.

Legend

-  Centre
-  Rail line
-  Kaipara District Border



Scale: 1_550 000@A3



Te Tai-o-rē Hua

2 | Overview of the Kaipara District Spatial Plan - Ngā Wawata 2050

| A Living Document

- Planning horizon
- Alignment with other plans and documents

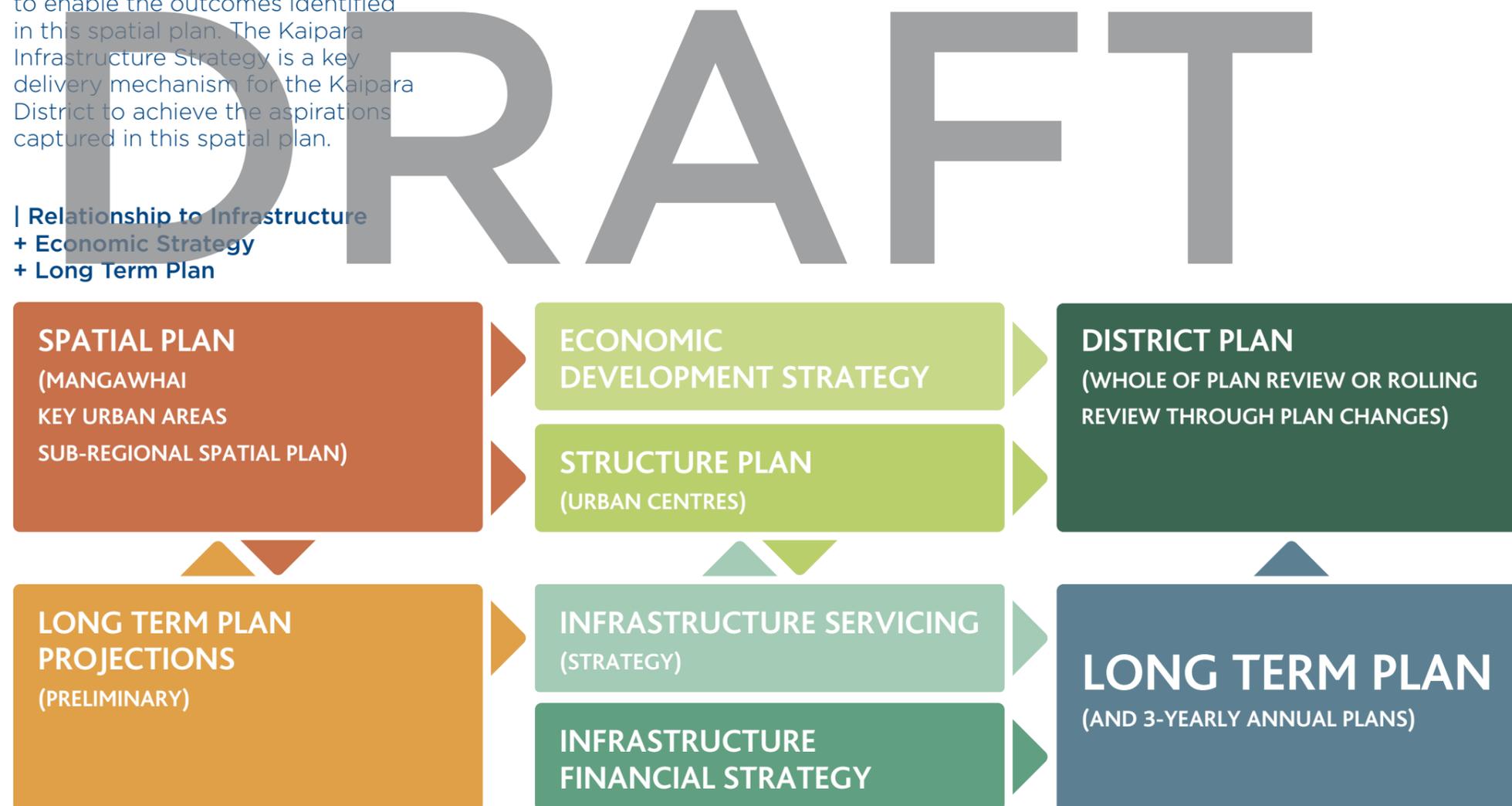
This spatial plan has a 30-year planning horizon to not only align with Council’s 30-year Infrastructure Strategy (2021-2051) but also allow the land-use changes to evolve in a staged and considered manner. This is achieved by balancing growth and economic development in appropriate areas, while protecting other areas for rural production, environmental enhancement, community resilience in the face of climate change, and long-term community well-being.

This spatial plan is intended to be monitored, reviewed, and updated as required to ensure it remains current and continues to provide community and decision-makers with the information required to make informed decisions about Kaipara District’s communities - through the outcomes identified in the spatial plans for the district’s four Key Urban Areas and this district-wide spatial plan.

The relationship and integration of this adopted spatial plan with other planning processes is described in the diagram below. It shows contributing inputs (i.e. the spatial plans followed by neighbourhood or town-specific structure plans) and outputs (i.e. the future district plan review) resulting from this spatial plan process. It shows the alignment and close relationship with infrastructure planning and delivery to enable the key upgrades required to enable the outcomes identified in this spatial plan. The Kaipara Infrastructure Strategy is a key delivery mechanism for the Kaipara District to achieve the aspirations captured in this spatial plan.

| Kaipara District Spatial Planning Workstreams

The Kaipara District spatial planning workstreams diagram to the right, shows the inputs and outputs from the district-wide sub-regional spatial planning process. It also shows the alignment and close relationship with infrastructure planning and delivery to enable the key upgrades required to implement the spatial plan.



3 | Overview of Engagement

| Engagement Overview

A core aspect of the community engagement process includes codesign workshops as part of community meetings. The core steps of the process are:

1. Establish shared Community Values and Aspirations
2. Community Audit
3. Constraints, Challenges and Opportunities
4. Draft Spatial Plan
5. Review and Feedback
6. Refined Spatial Plan

Community workshops were held with the engagement focusing around themes for community aspirations, constraints, heritage, social needs (soft infrastructure), services and transport (hard infrastructure), economic development, and environmental issues.

The rāhui imposed due to Covid 19 halted the 'live' engagement hui for the spatial plan. In order to properly and safely engage with the remaining communities, feedback was gained through interviews conducted via online platforms. The time and effort to partake in the revised engagement format was thoroughly appreciated.

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3 | Engagement Process

1 | Overview of Engagement

The phases of engagement that were undertaken for this spatial plan utilised the 'International Association for Public Participation (IAP2) Spectrum of Participation' method as well as the Speed Planning methodology for workshops (discussed further in Part C).

The following groups were involved in the key decisions regarding the process:

- Project Partners i.e. Tangata Whenua Iwi Authorities, hapū and marae, Northland Regional Council and the Kaipara Harbour Integrated Management Group.
- Key Stakeholders i.e. Community groups, special interest groups and key influences in the community
- Wider Community i.e. Local residents and the wider Kaipara District community.

Engagement Workshops - Speed Planning Methodology

In the 'speed planning' exercise (also often referred to as "World Cafe"), participants were divided evenly into four to six tables. At each table a topic is covered, in which community members discuss issues relating to the topic for ten to fifteen minutes. At the end of each round, participants rotate, until each group has been to every topic. The topics included:

- Values and aspirations
- Economic opportunities
- Infrastructure and services
- Constraints and opportunities
- Environmental needs
- Social needs

The methods of engagement during each of Phases 3 and 5 of the project are outlined below briefly:

• Step 1 - Project Phase 3 (Setting the Direction + Initial Engagement)_

- Key stakeholders were contacted directly for their input whilst the wider public was reached via existing communication channels that Kaipara District Council has with its residents. Feedback was captured and incorporated into 'early insights' and provided with mapped information to assist in understanding the opportunities and constraints associated with the area. The initial engagement was substantially disrupted by the Covid-19 global pandemic and the start of Alert Level 4 lockdown in New Zealand.
- The project team continued engaging through Covid-19 Alert Levels 4 lockdown and subsequent Alert Levels 3 and 2 - due to the lockdown restrictions, these were conducted over Zoom or other virtual meeting platforms or over the phone.

• Step 2 - Project Phase 4 (Option Development, Testing and Evaluation + Consultation)_

- Utilising information and insights gathered through the previous phases - the 'early insights' draft spatial plan was made available for consultation in July 2020. The consultation period ran from 6 July 2020 until 09 August 2020. During this time, events were held as 'drop-in' sessions, in which local residents were welcome to attend at any time to discuss the spatial plan with representatives from the project team and the Kaipara District Council.
- During the consultation period, the 'draft spatial plan' was available online for viewing and with a targeted online survey link available to the public. In total, 27 submissions were received, along with additional written submissions where members of the community and key stakeholders felt they needed to provide additional input.

The primary means of engagement with these groups were through:

- Face to face meetings (in person as allowed or via online platforms)
- Presentations
- Participatory workshops during 'early engagement' held in Paparoa Primary School, Tinopai School, Pāhi Hall, and Kellys Bay Hall.
- Hui with Mana Whenua (visiting different marae)
- Online and printed surveys
- Community open days or drop-in sessions held in July at the Te Kōpuru School Hall (which also involved residents from Glinks Gully and Pouto Point), Kaihū Rugby Club (including residents from Omamari and Maunganui Bluff), Baylys Beach (held at the Northern Wairoa Golf Club), and Hakarū (held at the Hakarū RSA).

The wider project team has benefitted from wider public engagement through the Key Urban Areas Spatial Plan (Dargaville, Maungatūroto and Kaiwaka) and the Kaipara Wharves Feasibility Study project, which covered in many respects some of the same communities including mana whenua and youth engagement undertaken in October 2019. Some of the communities engaged through these other projects included Ruāwai, Paparoa, Tinopai, Poutō Point, Whakapirau and Pāhi. It is noted also that the previous engagement initiatives included various hui with mana whenua as part of both these other projects - with the addition of Kaipara District Council's own 'Rohe Tour' held in 2019.



3 | Engagement Process

2 | Summary of Mana Whenua Feedback

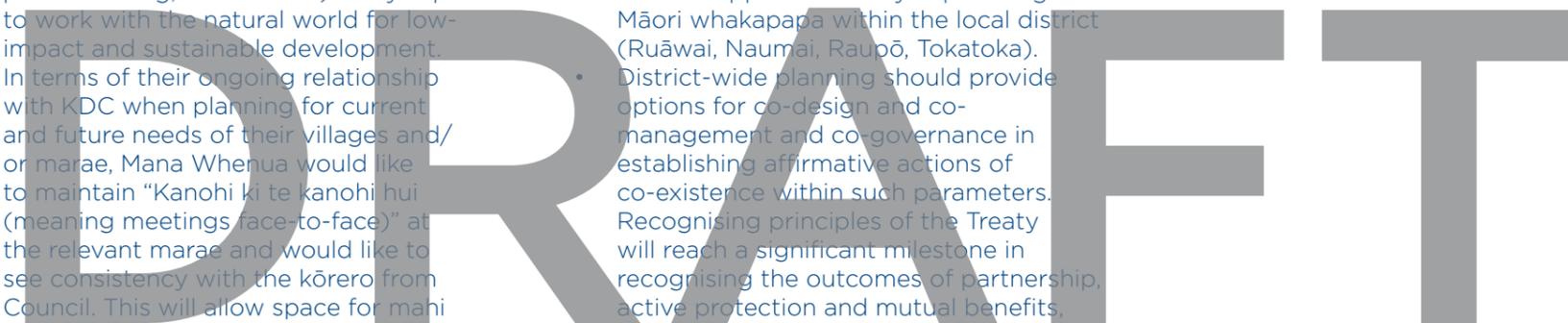
The following Mana Whenua and representatives were engaged:

- *Te Iwi o Te Roroa*
- *Te Uri o Hau Settlement Trust*
- *Ripia Marae*
- *Naumai Marae*
- *Taita Marae*

Mana Whenua provided feedback with the key themes outlined below and further detailed in Part C:

- Mana Whenua supported the general core Māori Values from a physical design perspective with suggestions to amend some meanings to reflect the relationship in shared experiences, partnerships and a sense of belonging through working together. This would allow for authentic engagement to occur as these are the basis of mātauranga Māori. The practicality of mātauranga Māori is that it is lived in everyday life.
- Mana Whenua resonate with the Te Aranga Principles and suggested additional meanings for the principles to better understand Māori culture i.e. Whakapapa (reinstating the traditional names for historical areas), Mana, Taiao (the natural environment), Mauri Tū (environmental health), Mahi toi (creative expression of cultural practices), Ahi Kā (the living presence), and Tohu (the wider cultural landscape). Successful engagement with Māori is understanding the fullness of these principles as the concepts intertwine with the core values and are relevant on any platform i.e. hui, documentation, agreements.

- Mana Whenua see that the Te Aranga Principle – Mana Rangatiratanga (authority) as a means to improve their relationship with the Kaipara District Council. They would like KDC to recognise them as iwi and to engage at a level as partners, as guaranteed under Te Tiriti o Waitangi, the LGA, RMA and the guidelines set out in common law like those in the Environment Court. The iwi would like KDC to recognise their mana rangatiratanga over the natural, physical, spiritual and other taonga/ resources including their knowledge/ mātauranga of the natural world (cycles, plant sourcing, whenua etc). They aspire to work with the natural world for low-impact and sustainable development.
- In terms of their ongoing relationship with KDC when planning for current and future needs of their villages and/ or marae, Mana Whenua would like to maintain “Kanohi ki te kanohi hui (meaning meetings face-to-face)” at the relevant marae and would like to see consistency with the kōrero from Council. This will allow space for mahi tahi (working together) to take place in order to come up with a collaborated plan based on honesty and trust from both sides.
- It must be understood by KDC that Māori believe themselves to be of nature and part of the natural world. Collaboration around planning and design should be the result of both entities’ knowledge, and the overarching principles of sustainability and protection. Mana Whenua feel they should always be included in any planning, especially if it concerns whenua, wai, moana and āngi (land, water, sea and air). Mana Whenua would like to be informed, trained, and invited to workshops to allow them to take control of sharing important information or getting things done with their own people through their own kawa and tikanga procedures - for Māori, by Māori.
- Future development should be balanced with maintaining the uniqueness of the history, character and people within Kaipara’s communities. There is potential in places like Ruāwai, to tell the stories of the land pre-1840 similar to the Tongariro tracks which are governed by Māori and tell a Māori story. There is potential for tourism development to take into account the historical value of natural resources in the area, for example, a tourism trail including glow worm track at Matakōhe, mountain climb at Tokatoka, glow worms at Montgomery Bush. As such, there is great potential for tourism opportunities by capitalising on Māori whakapapa within the local district (Ruāwai, Naumai, Raupō, Tokatoka).
- District-wide planning should provide options for co-design and co-management and co-governance in establishing affirmative actions of co-existence within such parameters. Recognising principles of the Treaty will reach a significant milestone in recognising the outcomes of partnership, active protection and mutual benefits, further honouring the significance of Taita Marae.
- Overall, the current needs of the marae surrounds the need for papakāinga development, infrastructure maintenance, weed and pest control along the awa, in addition to improving the capacity of the marae to deliver work experience, apprenticeships/ internships, workshops in finance, governance, submission writing and funding applications.



3 | Engagement Process

3 | Summary of Project Partners & Key Stakeholders Feedback

The following project partners and key stakeholders were engaged with the following key themes taken from the feedback and further detailed in Part C:

Horticulture New Zealand (HortNZ)

- Horticulture's main concern was around appropriate infrastructure being put in place prior to development (such as flood control works along riverbanks), a planning framework that manages the interface between activities, where they are located (protecting highly productive land), and reverse sensitivity effects.

Fonterra Limited

- Fonterra is mostly concerned about protecting existing industry and agriculture (in line with NRPS) as it is crucial for the economic growth in Kaipara and should be protected from future planning decisions. Fonterra considers that the spatial plan should focus future residential growth away from the site and other established industrial activities to avoid the conflict between incompatible land uses and reverse sensitivity effects.

Northpower Limited

- To support Kaiparas growth over the next 30 years, Northpower suggests that the spatial plan should clearly address all forms of essential infrastructure required to service the rural hinterland, coastal settlements and other functions and services of settlements. Particularly in relation to the requirements of electricity distribution networks and communications / fibre networks. This will help identify and solve any potential effects on Northpower's existing assets within Kaipara as well as plan for capacity upgrades that will be required in the future as a result of development.

- Northpower considers that its electricity distribution network has capacity to meet the needs of the Kaipara District for the next 20 years based on an average electricity load growth of up to 2%. However, beyond this, reinforcement of the network may be required by making land available for additional zone substations and lines.

Aggregate and Quarry Association (AQA)

- Over 500 additional homes will be required to accommodate a population increase of 7% within Kaipara alone, with each requiring an average of 250 tonnes of aggregate (125,000 tonnes overall). Significant quantities of aggregate will also be required for infrastructure growth and maintenance in both Kaipara and adjoining growth areas of Northland and Auckland.
- AQA would like to see attention given to the planning provisions to provide adequate access to quarry resources at workable locations to reduce costs of building and infrastructure development and maintenance. For every 30 kilometres aggregate travels from a quarry, the cost of aggregate doubles. Therefore, quarries need to be located close to their markets to reduce transport costs, congestion and carbon emissions.
- The definition of 'primary production' in the spatial plan needs to align with the NPS which recognises quarrying as a primary production activity. AQA suggests that all relevant policy frameworks should recognise that aggregate extraction and processing activities may need to occur in sensitive areas if there are no suitable and economically feasible alternative sites available.

New Zealand Defence Force (NZDF)

- The New Zealand Defence Force's main concern relates to Poutō Point which is situated within military operations area 106 and opposite military operating area 103. These areas are designated safety areas which become active when live firing or exercises involving high explosives are being undertaken. NZDF is primarily interested in the water transport opportunities and the increase in ferry movements as a result of a new wharf. Although it is expected that the wharf will be small and is to enable "slow tourism" with limited sailings occurring per day, NZDF wishes to be consulted on proposals in this area to depict the level (if any) of impact or undue restrictions on their operations.

Waka Kotahi (New Zealand Transport Agency - NZTA)

- NZTA would like to see transport infrastructure integrated into the vision statements across all settlements in Kaipara.
- Particular regard should be given to development along the State Highways which may affect the function of these networks and result in reverse sensitivity effects. The State Highways are designated for long distance, high volume through traffic which can be compromised if many access points are proposed.
- NZTA noted that upgrades to rail will only be for freight movements and that there are potential noise, vibration and reverse sensitivity effects on residential (or other sensitive activities) activities that expand towards the rail lines.

The Department of Conservation (DOC)

- DOC has highlighted the value of this spatial plan and that future planning is critical to all communities in and around Kaipara to "ensure that New Zealanders gain a wide range of benefits from healthy functioning ecosystems, recreation opportunities, and through living our history".
- DOC has stressed the importance of considering the impacts of increasing growth and tourism on the environment. Although responsibility is a balancing act, caution should be undertaken in a considered fashion.

4 | Design Principles

Design principles help to guide the possible future development of the Kaipara District. The Design principles are organised under three headings, Core Māori Values, Te Aranga Design Principles and Community Design Principles.

1 | Core Māori Values

- **Rāngatiratanga** - Self determination
- **Wairuatanga** - Spirituality
- **Mātauranga** - Māori world view
- **Kaitiakitanga** - Guardianship
- **Kōtahitanga** - Unity
- **Manaakitanga** - Hospitality
- **Whānaungatanga** - Kinship

2 | Te Aranga Design Principles



3 | Community Design Principles

- **Kaitiakitanga / Guardianship / Stewardship** (leaf icon)
- **Engagement** (handshake icon)
- **Diversity** (people icon)
- **Integration of uses** (arrows icon)
- **Connectivity** (network icon)
- **Legibility** (grid icon)
- **Accessibility** (checkmark icon)
- **Resilience + adaptation** (infinity icon)
- **Celebration** (mask icon)
- **Treasured** (heart icon)
- **Safety** (house icon)
- **Revitalisation** (classical building icon)
- **Feasibility + viability** (lightning bolt icon)

4 | Core Māori Values

The key objective of Te Aranga Māori Design values and principles is to enhance the protection, reinstatement, development and articulation of Mana Whenua cultural landscapes and to enable all of us (Mana Whenua, matāwaka, tauiwi and manuhiri) to connect with and to deepen our collective appreciation of 'sense of place'. The following core Māori values have informed the development of the outcome-oriented Te Aranga Māori Design Principles:

- **Rāngatiratanga - self determination**
- **Kaitiakitanga- guardianship**
- **Manaakitanga - hospitality**
- **Wairuatanga - spirituality**
- **Kōtahitanga - unity**
- **Whānaungatanga - kinship**
- **Mātauranga - Māori world view**

While Te Aranga Design Principles are well recognised throughout New Zealand, it is important to note that in keeping with the principle of Mana rāngatiratanga, it should not be assumed that Mana Whenua want to use these principles to inform their contribution to the spatial design process. Whether to use this framework or not, should be confirmed as part of the initial engagement with the relevant iwi authorities.

Through engagement and detailed discussion with Mana Whenua, Te Aranga Design Principles have been adopted for this project. A range of opportunities have been identified and as the spatial plan develops these will be prioritised and refined

with guidance and involvement from Mana Whenua. Te Aranga Design Principles can be implemented in a number of Kaipara District projects such as new bridges, gateways, cycle and walking paths, public squares, parks, facilities such as public toilets, and public buildings such as new libraries.

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4 | Te Aranga Design Principles

Mana Rāngatiratanga

The status of iwi and hapū as Mana Whenua is recognised and respected and appropriately addressed in the design environment.

Attributes:

- Provides a platform for working relationships where Mana Whenua values, world views, tikanga, cultural narratives and visual identity can be appropriately expressed in the design environment.
- High quality treaty based relationships are fundamental to the application of the other Te Aranga principles

Tohu

Mana Whenua sites and cultural landmarks are acknowledged, managed, protected and enhanced, where appropriate, to reinforce a sense of place and identity.

Attributes:

- Acknowledges a Māori world view of the wider significance of tohu / landmarks and their ability to inform the design of specific development sites.
- Supports a process whereby significant sites can be identified, managed, protected and enhanced.
- Celebrates local and wider unique cultural heritage and community characteristics that reinforce a sense of place and identity.

Mauri Tū

Ecology, water and soils are recognised and protected. The quality of wai, whenua, ngahere and hau takiwā are actively monitored, and community wellbeing is enhanced.

Attributes:

- The wider development area and all elements and developments within the site are considered on the basis of protecting, maintaining or enhancing mauri.
- The quality of wai, whenua, ngahere and hau takiwā are actively monitored.
- Community well-being is enhanced.

Ahi Kā

Iwi / hapū have a living and enduring presence that is secure and valued within their rohe - this can be through customary, cultural and commercial dimensions and delivered through kaitiaki roles.

Attributes:

- Mana Whenua live, work and play within their own rohe.
- Acknowledges the post Treaty of Waitangi settlement environment where iwi living presences can include customary, cultural and commercial dimensions.
- Living iwi / hapū presence and associated kaitiaki roles are resumed within urban areas

Whakapapa

Māori names, Tūpuna, narratives and customary practices are celebrated and honoured to enhance the sense of place connections.

Attributes:

- Recognises and celebrates the significance of Mana Whenua ancestral names.
- Recognises ancestral names as entry points for exploring and honouring tūpuna, historical narratives and customary practises associated with development sites and their ability to enhance sense of place connections.

Taiao

The natural environment is protected, revitalised and/or enhanced to levels where Mana Whenua harvesting is possible and native ecosystems restored to clean and acceptable levels.

Attributes:

- Sustains and enhances the natural environment.
- Local flora and fauna which are familiar and significant to Mana Whenua are key natural landscape elements within urban and / or modified areas.
- Natural environments are protected, restored or enhanced to levels where sustainable Mana Whenua harvesting is possible.

Mahi Toi

Iwi / hapū narratives are captured and expressed creatively and appropriately into the design by iwi mandated design / art professionals.

Attributes:

- Ancestral names, local tohu and iwi narratives are creatively reinscribed into the design environment including landscape; architecture; interior design and public art.
- Iwi / hapū mandated design professionals and artists are appropriately engaged in such processes.

4 | Community Design Principles

Kaitiakitanga / Guardianship / Stewardship

Local residents and community groups are encouraged/supported to lead community wide initiatives including but not limited to community planting groups, citizen science programmes, cycle safety events etc.

Engagement

Work with the public throughout the development of the Kaipara Spatial Planning project process to ensure the public understands the complexity, constraints and challenges associated with their community and so that their concerns and aspirations are consistently understood and considered.

Diversity

Work towards developing a healthy, diverse and 'complete' community that allows all members to live, work, play and learn within the community as they choose.

Integration of uses

Ensure that uses are integrated together (rather than separated) to ensure that complemented uses are co-located and the town centre can become an appealing destination that encompasses the economic and social needs of residents and visitors.

Safety

Kaipara centres provide a safe network of paths, facilities and open spaces consistent with the Ministry of Justice's Seven Qualities of Safer Spaces: access; good surveillance and clear sightlines; clear and logical layout; a mix of activity; a sense of ownership; high quality environments; and where necessary, active security measures.

Revitalisation

Recognise the importance of Kaipara centres heritage, conservation and landscapes, improving function and quality of life for local residents, whilst reinforcing the town's distinctive sense of place and community.

Feasibility + viability

The spatial plan provides value for money outlining a wide range of realistic development opportunities and regeneration projects with multiple pathways for implementation.

Connectivity

Connect the Kaipara centres to their landscapes, embracing their distinctive features. A connected network of walkways, cycleways and streets will allow for easy movement into and through the towns and the surrounding landscape.

Legibility

Create a network of streets, parks and civic spaces that are understandable and contribute to the visual character and legibility of the townscape.

Accessibility

Create barrier-free environments that enhance social interaction. Kaipara centres become accessible to as wide a user group as possible, including children, elderly and people with health conditions or impairments.

Resilience + adaptation

Kaipara centres are responsive to and have strategies in place to adapt to unforeseen / unexpected events including issues relating to sea level rise, extreme weather events, changing market conditions, economic contraction and changes in demographic trends.

Celebration

Places and spaces are provided for community and cultural activation including activities such as community events, markets, and cultural and seasonal celebrations.

Treasured

The stories, unique elements and local identity are revealed, maintained and/or enhanced within the design and aesthetics of the townscape.

Chapter 2 | Regional Context

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| Regional Context

The Kaipara District sits between two large population centres, Whangārei as the largest of Northland's centres and Auckland, New Zealand's largest city. This map aims to show the significance of Auckland's economic base and the big and small projects that will influence the Kaipara District over the coming decades. The upgrades to the North Auckland Rail Line (\$94m), addition of a Marsden Industrial area spur train line and road upgrade and additional capacity roading upgrades to State Highway 1 will all make the transport connectivity that much more efficient and attractive. The think-big proposal to transfer some of Ports of Auckland freight activity to Northport is also an exciting proposition for Kaipara businesses, especially those that are export driven.

Legend

-  Kaipara District
-  Main Trunk Rail Line
-  Main Highway connections
-  Metal Poutō Road
-  Cycle Route
-  Twin Coast Discovery
-  Twin Coast Discovery Detours
-  Major Port
-  Airport
-  Industrial Centre



Scale: 1_1200000@A3

1 | Waka Kotahi - The New Zealand Transport Agency (NZTA)

The New Zealand Transport Agency (NZTA) is currently planning a new road alignment between Warkworth and Te Hana which will improve journey time to the Kaipara District from Auckland. Additionally, investigations are being developed surrounding a new State Highway 1 road alignment that will avoid travelling over the Brynderwyn Hills. Options presented to date include veering west at Brynderwyn and aligning close to Maungatūroto. Both of these roading projects could have major influence on population growth in Kaipara, especially in the southern section of the district.

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2 | Aggregate & Quarrying

Quarry Issues in the Kaipara Region

Minerals are an essential resource for people and communities to provide for their social and economic wellbeing. The extraction and processing of minerals promotes the purpose of the Resource Management Act (RMA) 1991. Relevant quarrying and mineral extraction planning regulations are to take into account the competing interests of quarry operators and affected landowners, further satisfying the requirements of section 32 – promoting the purpose of sustainable management in accordance with Part 2 of the RMA. Under the definitions of the National Planning Standards, quarrying falls under Primary Production.

Research shows the Northland region contains a wide variety of mineral commodities and currently produces high quality ceramic clays, limestone for cement and agriculture, and rock and sand aggregates. The following is a list of quarries within the Kaipara District:

- Maungaru Quarry, Dargaville
- Turiwiri Quarry, Dargaville
- Avoca Quarry, Kirikoponi
- Todd's Quarry, Arapohue
- Golden Gully, Tokatoka
- Bickers Quarry, Tokatoka
- Aranga Quarry, Aranga
- Maunganui Bluff - Kaihu - Mangatu Stream area
- Waima River, Donnelly's Crossing

Resource allocation of aggregate is a key issue of which the Kaipara District Council needs to consider when it comes to reviewing plans and processing resource consents. A balance between accessing aggregate and the effects of quarrying on the environment and any restrictions imposed on private property is to be maintained. Aggregate is a fixed and finite resource and there is a lack of knowledge on the location, scale and nature of aggregate resources along with the costs required in obtaining such information. Additionally, on-site and off-site environmental effects are generated through the blasting, excavation, crushing, screening, stockpiling and transport of aggregate.

In the prospect of establishing new quarries in the Kaipara District, it is important to identify and protect cultural sites, landscape, ecological network, types of land environments and significant natural areas of Kaipara. As such, the Council should consider adopting a planning regime of overlays to identify quarry areas to avoid environmental adverse effects and reverse sensitivity effects on quarry operations.

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3 | The Department of Conservation (DOC)

1 | Conservation of land in the Kaipara Region

The Department of Conservation (DoC or The Department) was launched in 1987 as a public service to protect natural and historic heritage whilst providing recreational opportunities on land entrusted to its care under the Conservation Act 1987. The Department's current Strategic Direction aims to sharpen its focus on the broader social and economic context in addition to working towards its commitment to sustainability and the contribution it can make to New Zealand's international obligations on climate change. DoC is responsible for about one third of New Zealand's total land mass, that is 8 million hectares of native forests, tussock lands, alpine areas, wetlands, dune lands, estuaries, lakes and islands. Most of the major ecological areas that have been held for conservation purposes within the Kaipara District accounts for 20,000 hectares - representing 8% of the total land area in the District. Kaipara's Ecological District's uniqueness is home to two nationally important soil sites (Kaipara Soils at Kidd's Open Space covenant at Tatarariki, and unspecified soil types (aeolian sand, alluvium, and peat) at Poutō Point Wildlife Reserve) and three nationally important geological sites and landforms, these include: lignites and dune sands at Baylys Beach; the dammed dune lakes at Kai Iwi; and the extensive dune system at Poutō. Other significant natural features of the Kaipara District include:

- Kaipara Harbour and its estuaries at Poutō
- The dune lakes along the western coast, particularly in the north at Kai Iwi, west of Dargaville, and south at Poutō.
- Poutō dune system and its associated lakes and wetlands
- Two substantial remnants of old-growth forest, Tapu Bush and Pretty Bush, on sand dunes at Poutō.
- The large gumland-wetland complex at Maitahi.

Kaipara's Ecological District in particular is managed largely through collaboration between The Department, KDC, Northland Regional Council (NRC), iwi (tangata whenua), the community and interest groups. The Department works collaboratively with tangata whenua and the community to protect and manage priority ecosystems. The collaborative relationship allows distinctive harbour habitats, natural character and landscape values of Kaipara Harbour to be protected, and its coastal environment to be preserved. Collaborative efforts are also seen between the Department, tangata whenua and the community in identifying sites of special cultural, maritime and historic/archaeological interest such as the Pukekaroro Scenic Reserve - a cultural site of significance to Te Uri o Hau and Ngāti Whātua O Kaipara. This constructive working relationship creates new opportunities for the collaborative management of resources and issues within the harbour catchment. DOC also fosters conservation initiatives to enable sustainable business opportunities on public conservation land that contribute to the well-being and future growth of the community. The following DOC projects are present in the Kaipara Region:

- The West Coast North Island Marine Mammal Sanctuary which extends from Maunganui Bluff south and encompasses the Kaipara Harbour where the Nationally Critical Māui dolphins are sighted.
- Hector's and Maui's Dolphin Threat Management Plan which restricts commercial and recreational set-net and commercial trawl fishing off the west coast of the North Island.
- Living Water partnership - A partnership between DOC and Fonterra which focuses on identifying solutions that will enable farming, freshwater and healthy ecosystems to thrive side-by-side. It supports local iwi, scientists, councils, farmers and communities to work together to find ways to reduce contamination and improve the health of their waterways.

A2.3.2 Conservation Management Strategy 2014-2024

Conservation Management Strategies (CMSs) and Plans are tools which the Department uses to achieve integrated conservation management on land and water. Strategies are regionally focused and are effective for 10 years.

The CMS identifies ten Places in Northland for the purposes of integrated conservation management (Conservation General Policy 2005), requiring particular management direction, of which their boundaries have been determined by an assessment of communities of interest and iwi rohe, conservation values and issues, and management priorities. Three of these Places (Northern Kauri Coast Place, Poutō - Kaipara Place, and Mangakahia-Tutamoe-Tangihua Place) encompass land within the Kaipara District. These Places are sites on public conservation land where conservation work will most effectively contribute to protecting the full range of ecosystems nationally, including the threatened and at-risk species that are found within these ecosystems.

As outlined in Part 2 of the Conservation Management Strategy 2014-2024 (Volume 1), the Department of Conservation has great interest in the Places of Kaipara Harbour and Poutō Peninsula. Particularly Kaipara Harbour for being of national and international ornithologically significance, a place internationally important for the world's smallest and rarest marine dolphin; and a major roosting and breeding area for coastal and estuarine wading birds. Poutō Peninsula has been identified for having outstanding large mosaics of active mobile dunes, consolidated dunes, sand flats, impounded wetlands and dune lakes, alongside patches of coastal scrub and forest.

A2.3.3 Recreation & Tourism in the Kaipara Region on DOC land

The Department plays a key role in steering the recreation and tourism concessions, making important contributions to the regional economy by providing transport routes to and from visitor destinations managed by the Department. The ecological makeup of the Kaipara District comprises significant areas of indigenous forest, shrubland, wetlands, dune lakes and dune lands - areas which are home to a diverse range of plants and animals. The following destinations have been recognised as having new business opportunities in Kaipara:

- Trounson to Tāne Mahuta and Waipoua Forest (proposed Kauri National Park).
- Kaipara Harbour.
- Poutō Lakes.
- New and expanded campgrounds, including freedom camping opportunities.
- Marine recreational park, marine protection on the Tutukaka coast, and other initiatives such as in the Bay of Islands and Kaipara Harbour.

While growth is ongoing in tourism activities within the Kaipara District, the focus is to plan for ways we can manage the added pressures on areas of ecological values through both international and domestic tourism. Upon consultation with DoC, the Kaipara District Spatial Plan Ngā Wawata 2050 — Our aspirations, is recognised as a valuable planning tool and that future planning is critical to all communities in and around Kaipara. It allows the council to consider the impacts of increasing growth and tourism and the adverse effects on the environment and DoC owned land alike. Key programmes which have been planned in response to the infrastructure challenges and external trends affecting the Kaipara District, such as the Auckland to Northland corridor and the Ancient Kauri Coast, will play a major role in increasing tourism. This requires the development of a Tourism Strategy or Destination Management Plan that drives collaboration in conservation of significant sites that may be vulnerable to tourism activities.

Chapter 3 | Planning Context

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1 | Planning Context

Kaipara District’s situation between Auckland and Whangārei, along with its spanning across both west and east coasts, places it in an economically and environmentally strong position to grow and support its communities. In order to promote sustainable growth for the Kaipara District, consistency with national and regional policy documents is fundamental. This facilitates an appropriate planning framework to strike an appropriate balance between growth potential, economic development opportunities, and protection of natural and cultural values. Once adopted, the district-wide spatial plan can be considered when deciding on a resource consent application as providing strategic direction as an ‘other document’ under s104 of the Resource Management Act 1991 (RMA).

This is particularly useful in a transitional period between now, when the spatial plan is confirmed and sets out the future direction for these centres, and when the new planning rules, policies and zones are introduced to the new Kaipara District Plan. In doing so, the outcomes identified in this spatial plan could be enabled concurrently with the promulgation of the new Kaipara District Plan.

| National Directions

National Policy Statements (NPS) are set by the New Zealand central government to provide direction to local government and decision-makers regarding matters of national significance which align in meeting the purpose of the RMA. Local authorities must amend their district plans if an NPS directs so. In producing this spatial plan, extensive consideration was given to the outcomes and objectives of the relevant NPS’s, including in particular:

- **The New Zealand Coastal Policy Statement 2010**
- **National Policy Statement for Freshwater Management 2014 (amended 2017)**
- **National Policy Statement on Urban Development 2020 (replaced by NPS on Urban Development Capacity 2016)**

Furthermore, the spatial plan Spatial Plan has been prepared having regards to proposed NPS’s, including in particular:

- **Proposed National Policy Statement on Indigenous Biodiversity**
- **Proposed National Policy Statement for Highly Productive Land**

The interaction between the three operative and two proposed National Policy Statements will be of interest, in particular the balance to be struck between growth potential, infrastructure provisions efficiencies at regional and district-wide levels, economic development opportunities for rural production economic based districts such as the Kaipara, and protection of natural values.

| Regional Directions

As a regional authority, Northland Regional Council must amend its Regional Policy Statement (RPS) and Regional Plans (air, land, water and coastal plan provisions) to deliver the outcomes prescribed in the various NPS’s.

The Northland Regional Policy Statement (NRPS) identifies those areas of regional significance which must be protected - including ecologically significant areas, sensitive riparian margins and rivers, as well as coastal and rural landscapes. Similarly, the RPS identifies that Northland suffers from poor urban design outcomes. As such, future development of communities in the Kaipara District needs to be enabled through good design. This includes planning for ‘walkable communities’ and ‘complete communities’ principles, resulting in the right balance of local services versus access to these services further afield such as the relationship of the more isolated villages with the nearest key urban centre - Dargaville, Maungatūroto, Kaiwaka or Mangawhai.

The following policies have directed this spatial plan in relation to where development could occur (and subject to further investigation):

- **Policy 5.1.1** Planned and Coordinated Development where subdivision, use and development should be located, designed and built in a planned and coordinated manner which is:
 - Guided by the Regional Form and Development & Regional Urban Design Guidelines,
 - Recognises and addresses cumulative and long term effects,
 - Integrated with development, funding, implementation and operation of transport and infrastructure,
 - Not resulting in incompatible land uses and reverse sensitivity,
 - Not resulting in loss of soil-based primary production on land with highly versatile soils,
 - Maintaining or enhancing sense of place and character of the surrounding environment,
 - Serviced by necessary infrastructure.
- **Policy 5.1.2** Development in the coastal environment which enables people and communities to provide for their wellbeing, where development:
 - Consolidates urban development and avoids sprawling or sporadic patterns of development,
 - Ensures sufficient coastal setbacks to maintain and enhance public access, open space and amenity values and to allow

- for the natural functioning of coastal processes and ecosystems,
- Takes into account the value of immediate land and established activities,
- Ensure adequate infrastructure services are provided to the development,
- And, avoids adverse effects on access to, use and enjoyment of surf breaks of national significance for surfing.
- **Policy 5.1.3** Avoiding the adverse effects of new use(s) and development, including reverse sensitivity effects of new subdivision, use and development (particularly residential) on:
 - Primary production activities,
 - Commercial and industrial activities,
 - Operation, maintenance and upgrading or existing or planned regionally significant infrastructure,
 - And, the use and development of regionally significant mineral resources.

The future development of those settlements outlined in Part B of this spatial plan require further investigation in terms of giving effect to the objectives and policies of the NRPS. However, the general principles and direction of the NRPS has been considered throughout the formulation of this spatial plan. In particular, the zoning suggested for the settlements is proposed on the basis that future use, subdivision and development is appropriately located to:

- Avoid the loss of land for soil-based primary production to industrial and commercial activity,
- Avoid incompatible land uses which result in reverse sensitivity at the interface of residential and commercial/industrial land,
- Create walkable local centres for the settlements to enhance sense of place, and provide for residential intensification where relevant for each community while avoid dispersed and sporadic development..

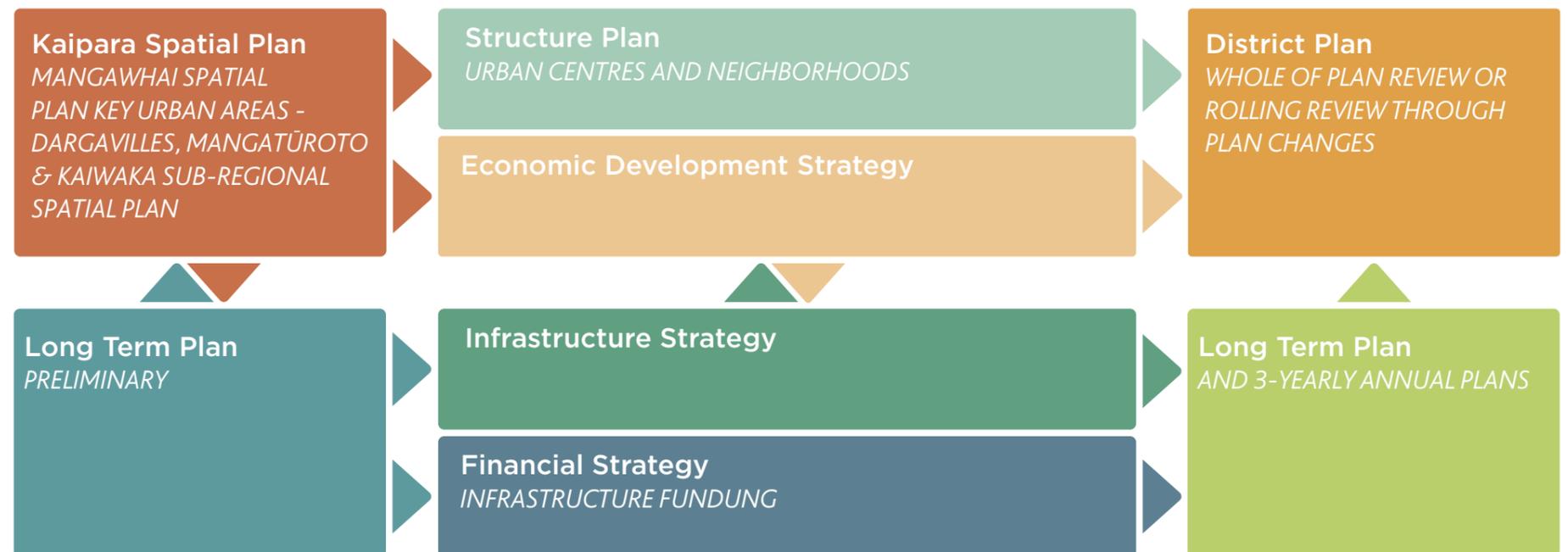
Furthermore, future infrastructure requirements to accommodate the development needs to be investigated to allow the neighbourhoods to be adequately serviced over the next 30 years and is detailed under each settlement listed in Part B.

3 | District Directions

As a local authority, the KDC is legally required to update its own policy documents and district plans to give effect to the NPS. This is achieved through the district plan review and additional by-laws the council deems relevant to fulfill its obligations to the higher order regional and national policy documents. Further - decision makers on plans, policy statements, resource consents and other matters must consider the NPS as part of their process.

This diagram shows all the inputs and outputs for this spatial plan including what documents it will influence in the future or function alongside with.

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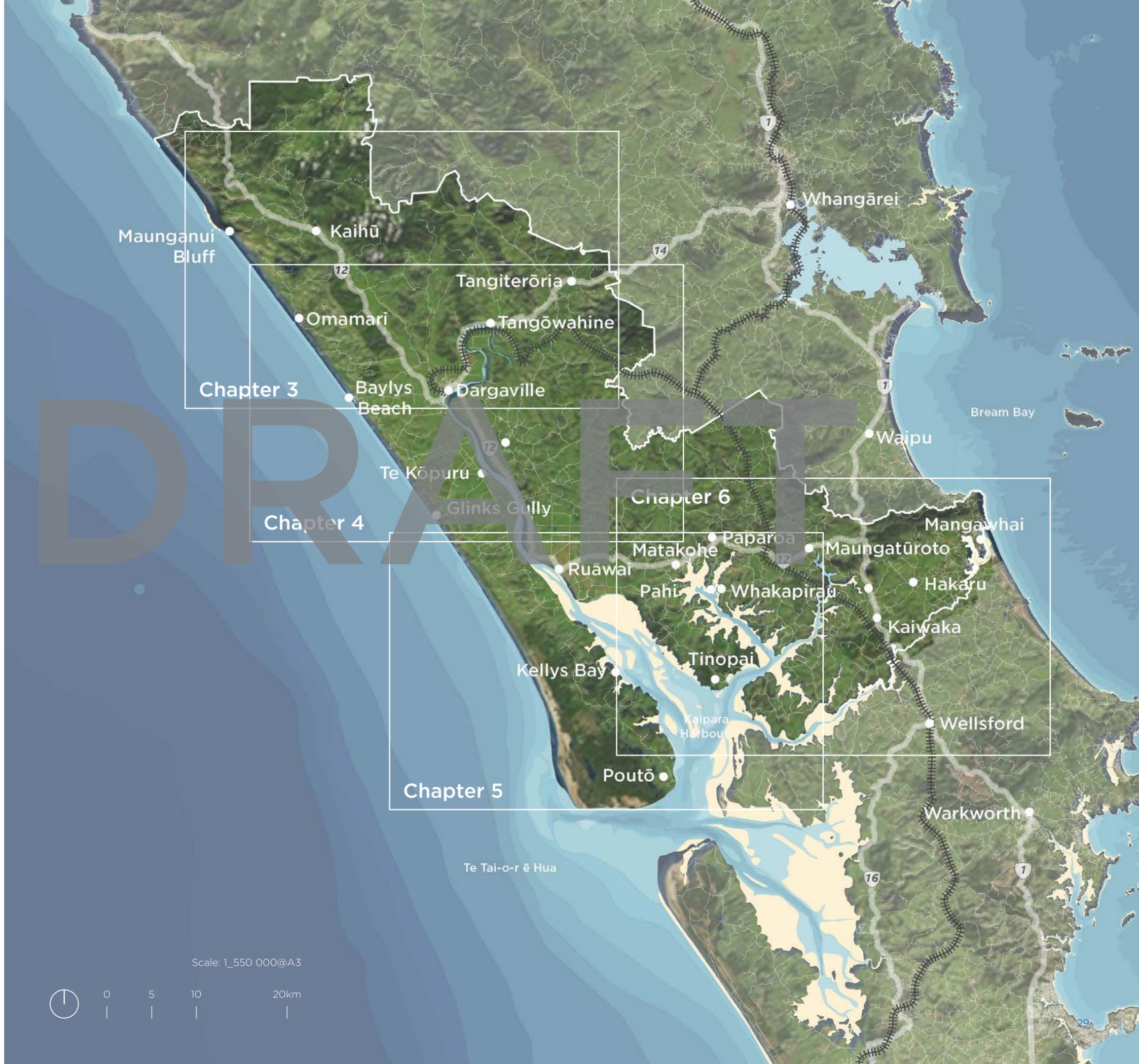


1 | Planning Context

This map displays how the district has been divided into four community districts. The divisions have been made based on the relative location of the villages and settlements to each other and also their relationship to adjacent key urban areas or landscape features. Each area is presented at a scale where the villages, settlements and landscapes that have been involved in this spatial plan are discernable and the research undertaken simply navigated.

Legend

-  Centre
-  Kaipara District Border
-  Main Trunk Rail Line
-  Main Highway connections



Scale: 1_550 000@A3



3.1 | Rural Land Use

Legend

- Rural Land Use
-  Land Use Capability 1, 2 & 3
 -  Land Use Capability 4, 5 & 6
 -  Land Use Capability 7 & 8
-
-  Significant Natural Area
 -  Outstanding Natural Landscape
 -  Outstanding Natural Features
 -  Kaipara District Border

LUC

North Kaipara Agricultural Delta

- 1_Highly suitable for cultivated cropping, vineyards and berry fields, pasture, tree crops or production forestry with minimal physical limitations for arable use. (None in the Kaipara District Area)
- 2_Suitable for many cultivated cropping, vineyards and berry fields, pasture, tree crops or production forestry with slight physical limitations for arable use.
- 3_Suitable for cultivated cropping, vineyards and berry fields, pasture, tree crops or production forestry with moderate physical limitations to arable use.

Forestry and pastoral farming activities in the district

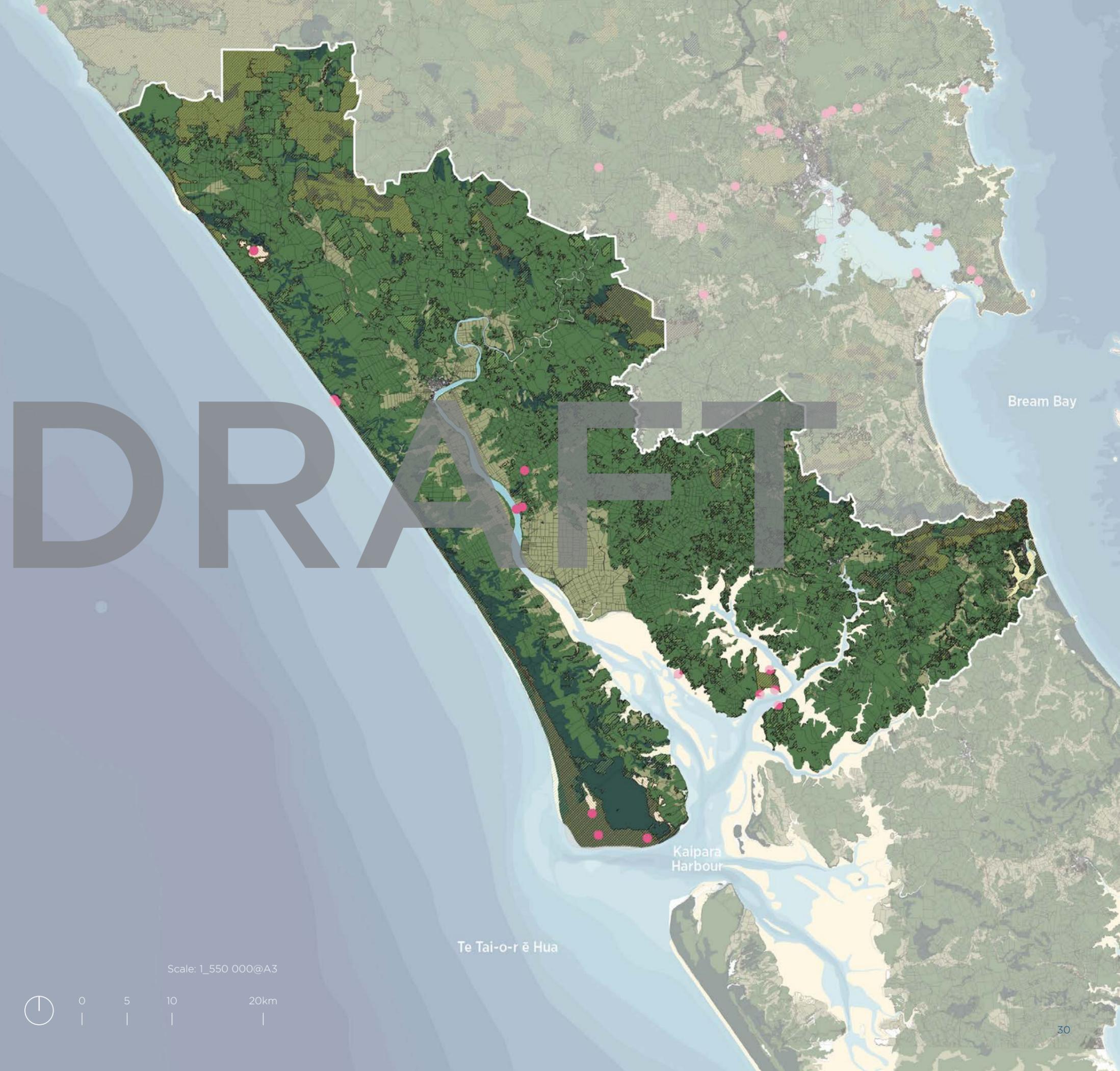
- 4_Suitable for pasture, tree crops, production forestry or for occasional cropping with severe physical limitations to arable use.
- 5_Unsuitable for arable cropping but only negligible to slight limitations to pasture, vineyards, tree crop or production forestry use.
- 6_Suitable for pasture, tree crops or forestry and in some case vineyard, bu unsuitable for arable use.

Secondary Ecological Network

- 7_Suitable for pastoral grazing, tree crop or production forestry use and some cases vineyards and berry fields.

Primary Ecological Network

- 8_Land unsuitable for grazing or production forestry, and is best managed for catchment protection and/ or conservation or biodiversity



Scale: 1_550 000@A3



3.1 | Rural Land Use

Identifying, promoting and preserving a strategically planned green infrastructure network can provide ecological, economic and social benefits. It has also become a priority for the planning and decision-making processes in sectors such as conservation, (land) resource efficiency, agriculture, forestry and urban development.

The Land Use Capability (LUC) classification is a system of arranging different kinds of land according to its capacity to support long-term sustained production after taking into account the physical limitations of the land.

Lower number classes are generally suitable for a larger range of land uses, such as cropping and horticulture, as well as pastoral or forestry. The higher the number, the more limitation there is to use. Class 8 land is generally unsuitable for production, while classes 6 and 7 are generally suitable (to a greater or lesser degree) for pastoral or forestry uses.

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3.2 | Ecological Network

Legend

- Land Use Capability 1, 2 & 3
- Significant Natural Area
- Primary Potential Ecological Network
- Secondary Potential Ecological Network
- Kaipara District Border

Source: LINZ, Māori Land Online, NRC Gis, Northland Regional Council, MFE, IRIS, MFE Landcare Research

The Primary Ecological Network set is based on following Layers

- SLOPE CLASS
- E_ Moderately steep, 21-25°
 - F_ Steep, 26-35°
 - G_ Very steep, >35°

- RAPARIAN ZONE
- 20 Meter offset from river
 - 10 Meter offset from river

- COASTAL FLOOD HAZARD
- Current flood level
 - 50 years flood level
 - 1-00 years flood level

- LUC
- 8_Land unsuitable for grazing or production forestry, and is best managed for catchment protection and/ or conservation or biodiversity

The Secondary Ecological Network set is based on following Layers

- RAPARIAN ZONE
- 50 Meter offset from coast and water bodies

- LUC
- 7_Suitable for pastoral grazing, tree crop or production forestry use and some cases vineyards and berry fields.

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Te Tai-o-r ē Hua

Kaipara Harbour

Bream Bay

3.2 | Ecological Network

An ecological / green infrastructure network that protects and maintains existing healthy ecosystems and restores historic environmental degradation in order to secure the long-term viability of Kaipara District indigenous ecosystems, ecological function and a healthy natural environment are maintained in perpetuity. A regenerative ecological /green infrastructure network will require approximately 20% of the land area of the district.

The network would be composed of indigenous and exotic species and incorporate the key landscape processes and characteristics including wetlands and waterways, flood plains, erosion prone slopes, existing areas of indigenous ecosystems and areas of land with a land use capability rating of 7 and 8.

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3.3 | Land Environments of Kaipara

Land Environments of New Zealand (LENZ) is an environmental classification developed by the Ministry for the Environment and Landcare Research. The classification identifies climatic and land factors and processes and groups them together to identify landscapes that have similar environmental conditions. In doing so, the classification identifies areas with similar potential ecosystem and landscape character that can be used to underpin a range of conservation and resource management issues, including factors that constrain human land uses such as agriculture, horticulture, and forestry.

Legend

-  D1 - once extensive Kahikatea forests
-  A5 - Once extensive Kahikatea forests
-  A6 - Species of Kauri
-  A7 - Young stages vegetation
-  G1 - Pine forest and improved pastures

Source: LINZ, Maori Land Online, NRC Gis



3.3 | Land Environments of Kaipara

A Landscape Management Zone (LMZ) is an area of a site or landscape with similar natural processes and common features and characteristics such as climate, landform, soils, water and vegetation. Because each LMZ has its own characteristics, it has its own constraints and opportunities which lend themselves to different approaches to design, management and maintenance. Organising a site and clustering functions into LMZs that reflect the underlying environmental patterns, helps to organise a site into areas requiring similar types and amounts of management and maintenance. Observing a site and synthesizing the observations and insights with the requirements of the brief to establish LMZ is the first step in creating a property design for a regenerative landscape.

Kaipara District is composed of five Land Environments. The classifications found in Kaipara consist of:

- **Environment A** - Consisting of extensive lowlands generally found in the northern North Island.
- **Environment D** - Encompasses hill country of low-to-moderate elevation in the central and northern regions of the North Island. Environment D1 consists of hills in Northland a warm climate, with high annual and winter solar radiation, low monthly water balance ratios and slight annual rainfall deficits. However, year-to-year variation rainfall results in occasional dry years. The landform is hilly with moderate to steep slopes. Soil parent materials are variable, with older volcanic rocks and greywacke widespread in the north, including on the Coromandel Peninsula while mixtures of greywacke and Tertiary rocks. Soils are generally moderately drained and of low to moderate natural fertility. Environment D1 includes most of the remaining Kauri stands. Other common species include rimu, mountain totara, tawa, taraire, towai, quintinia, tawari, toro, melicytus macrophyllus, alseuosmia macrophylla, dracophyllum latifolium, brachyglottis kirkii, nikau, lianes including the ferns lygodium articulatum and blechnum filiforme, and epiphytes including collospermum hastatum, pittosporum cornifolium and puka. Tanekaha and local hard beech grow on ridges, and silver pine occur in wet depressions. On lower slopes and clay up-lands, Kauri is sparse, with higher fertility being indicated by trees such as kohekohe, puriri, pukatea and kahikatea.
- **Environment G** - Consists of recent soils in the lowlands of the northern two-thirds of the North Island and is dominated by two contrasting landforms. The first consists of narrow alluvial floodplains along rivers and larger streams and the second includes coastal sand dunes that are most extensive along the west coast of the northern North Island. Environment G1 consists of coastal sand dunes with a warm climate with very high annual and winter solar radiation. Average water deficits are low and vapour pressure deficits are moderate, but the low monthly water balance ratio results in droughts in years with below-average rainfall, particularly in the east. The terrain is generally flat to gently sloping. Soils are typically well drained but of low to moderate fertility. Within G1 some mobile dunes still have a patchy cover of spinifex, pingao and other native sand plants, while on others marram has become dominant. On stable sand behind the active dunes, native tauhinu, northern toetoe, muehlenbeckia complexa and bracken compete with introduced kikuyu, buffalo and pampas grasses, blackberry and other introduced plants. Today pine forest and improved pastures have been established on most of this landscape.
- **Environment A5** is widespread and consists of flat sites at low elevation. It once supported extensive Kahikatea forests. On wet ground, pukatea was also common, swamp maire was a characteristic smaller tree and kiekie, suppejack and gahnia xanthocarpa formed impenetrable understoreys. On drier ground matai was co-dominant, and small-leaved trees and shrubs such as milk tree, rohotu and, near Kaitaia, the rare Pittosporum obcordatum were in lower storeys.
- **Environment A6 and A7** have the highest mean elevations of the environments in A, consisting of rolling hills down and gently sloping land at low-to-mid elevation. Both A6 and A7 have warm temperatures, very high solar radiation and low annual water deficits. Minimum winter temperatures are also high, with frosts occurring only infrequently. Although annual water deficits are low, the low monthly water balance ratio makes this environment susceptible to drought in years with lower than average rainfall. Landforms are generally flat to gently rolling, with parent materials that include deeply weathered sandstone and greywacke, older volcanic tephra, alluvium from various sources, peat and older basaltic rocks. Sandstone is the most widespread soil parent material closely followed by greywacke - both are deeply weathered. Area A6 has imperfectly drained soils of very low fertility from sandstone, mudstone and some greywacke. Area A7 has well-drained soils of high fertility from basalt. In Environment A6, Kauri and its associated species grew on infertile soils on hill crests and upper slopes. Mid-slopes supported rimu, miro, totara, northern rata, tawa taraire, kohekohe and nikau. These graded to dominance by kahikatea, matai, puriri, and pukatea on deeper soils on the lower valley floors. Pōhutukawa establishing on steep coastal slopes eventually formed an overstorey to smaller trees including mangeao, taraire and the strictly coastal whau, houpara, parapara, tawapou and karo. Much of Environment A7 is in young stages of vegetation development, including still active dunes where native pingao and spinifex have been largely displaced by marram, lapilli and lava that are initially colonised Pōhutukawa, eventually joined by mangeao, mahoe, puriri and titoki. On the more mature soils, forests graded from totara and matai dominance on well-drained sites to kahikatea on low ground.

Chapter 4 | Functions and Services of Kaipara Settlements

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