Our Places

Eastern Bay Spatial Plan



Scenarios and Development Options Report

Draft version for engagement

October 2024













Scenarios and Development Options Report

Draft 2.1

Note to reader

This is a draft report that will be updated after consultation, allowing for it to be finalised with input from Eastern Bay's people and communities. Community engagement, including landowners and stakeholders, has not occurred yet and this draft aims to support those discussions.

Version	Purpose	Authored	Date completed
Interim Draft 1.0	PLG workshop	Technical Working Group	April 2023
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Draft 2.1	Publish for consultation period	Technical Working Group	October 2024

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1 Introduction

The Scenarios and Development Options report examines how the Eastern Bay of Plenty's ("Eastern Bay") settlement patterns can evolve to meet future needs over the next 30 years. It presents a preferred recommendation for coordinating new residential and business land supply, building on existing plans and projects within the broader sub-regional context.

This report constitutes an essential component of the evidence base supporting Our Places - Eastern Bay Spatial Plan (referred to as "the Spatial Plan" or "Our Places"). Our Places is the combined spatial plan for Kawerau, Whakatāne and Ōpōtiki districts, (referred to as "Eastern Bay or the "sub-region") that will outline the long-term strategy for how the Eastern Bay will grow and evolve over the next 30 years, addressing significant opportunities and challenges we could encounter. It will represent the sub-region's voice on key long-term aspirations of lwi/hapū and the community, detailing the necessary actions to achieve these goals.

To address future housing and business land needs, a long-term spatial plan is essential. The National Policy Statement on Urban Development (2020) (NPS-UD) mandates that planning must support well-functioning urban environments for the welfare of communities and future generations. Councils in the Eastern Bay must evaluate and ensure sufficient capacity for housing and business land. This report outlines the process of evaluating spatial scenarios to provide enough development capacity and guide decision-making for a preferred settlement pattern and development strategy.

This report sets out an initial evidence base which will be added to as more evidence is collected, and following engagement with iwi, community and stakeholders. Other work and engagement activities are underway to enable integrated decision making on housing development, economic development, spatial planning priorities, and infrastructure investments needed to unlock growth areas in the Eastern Bay. An implementation programme will form part of the Spatial Plan once completed.

1.1 Report structure

The Scenarios and Development Options Report is divided into the following four sections:

Context: This section outlines vital details about the sub-region, covering population statistics, environment, transport and coastal infrastructure, land ownership, and economic data. It includes a summary of Tāngata Whenua of the Eastern Bay of Plenty and iwi aspirations. Additionally, it shows the spatial distribution of key development constraints like climate risks and areas needing protection, which helps us with future growth and infrastructure planning.

¹ NPS-UD Part 2.2, Policy 1

Demand for housing and business land: This section summarises projected population and employee growth for the next 30 years and translates this information into housing and business land demand across the three districts. It highlights where supply may fall short in the short, medium and long term, considering factors like immigration trends, ageing population, smaller households, housing types, affordability, and Māori housing needs.

Scenarios and development options: This section outlines the methodology for identifying and creating high-level scenarios and development options for the Eastern Bay. It presents the scenario analysis results and concludes with the emerging preferred recommendation, highlighting development areas suitable for residential and business growth, that align with the Spatial Plan and NPS-UD requirements.

Next steps: This section highlights the next steps in the process which include the public engagement on the emerging preferred recommendation, other workstreams and dependencies and further technical investigations needed to inform the spatial planning process.

1.2 A collaborative approach underpins the Spatial Plan

The Spatial Plan is unique because it is being developed in partnership with Local, Regional and Central Government, along with lwi partners from across the sub-region. This approach recognises that the Eastern Bay community needs to plan and implement together as a sub-region, rather than separate authorities and districts.

The Spatial Plan Technical Working Group authored the draft Scenarios and Development Options Report, incorporating advice from the governance framework (Figure 1) which includes the Project Control Group, Project Governance Group and Friends of Our Places Group.

The Spatial Plan project structure is supported by cross-council technical experts who help to inform the delivery of the project. The Friends of Our Places group represent this work and include key stakeholders and business leaders who offer important industry insight that help to inform our development options.

Eleven Iwi are within the Eastern Bay including: Ngāitai, Te Whānau ā Apanui, Ngāti Porou and Whakatōhea (within Ōpōtiki District); Ngāti Makino, Ngāti Manawa, Ngāti Rangitihi, and Ngāti Whare (within Whakatāne District); Tūhoe (across both Whakatāne and Ōpōtiki), and Ngāti Awa and Ngāti Tūwharetoa ki Kawerau (across both Whakatāne and Kawerau). Iwi authorities are participating in the project at the pace and in ways that fit their capacity and interests. In our decision making, we have considered each Iwi/hapū's historical whakapapa in relation to their respective places of interest.

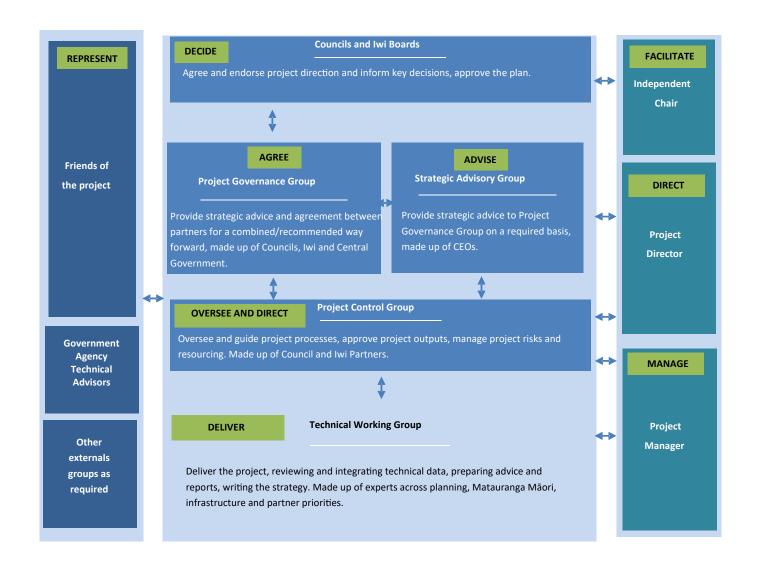


Figure 1: Governance structure

lwi*

Ngāitai

Ngāti Awa

Ngāti Manawa

Ngāti Rangitihi

Ngāti Tūwharetoa ki Kawerau

Ngāti Whare

Te Whānau a Apanui

Whakatōhea

Public stakeholders

Friends of Our Places
People living in the Eastern Bay

Councils

Bay of Plenty Regional Council Kawerau District Council Ōpōtiki District Council Whakatāne District Council

Central Government Agencies

Waka Kotahi

Kāinga Ora

Ministry of Housing and Urban

Development

Ministry of Education

Te Whatu Ora - Health New Zealand

Figure 2: List of groups involved in the Our Places – Eastern Bay Spatial Plan Project

^{*} Iwi authorities involved in the project at the time of this report

1.3 Goals we want to achieve and what could enable them

The Spatial Plan is a 30-year strategy to capture the biggest opportunities for the Eastern Bay to promote community wellbeing.

The Project Governance Group (PGG) developed goals and enablers to provide direction in achieving long term wellbeing outcomes. These align with the Community Outcomes of the various Eastern Bay Council's (including Bay of Plenty Regional Council's) Long-Term Plans and with aspirations of Tangata Whenua, expressed through lwi Environmental Management Plans and communicated via project-related hui.



Figure 3: Goals and enablers for Our Places- Eastern Bay Spatial Plan (NB: draft)

1.4 The role of a spatial plan to achieve the goals

Spatial planning processes help us to make decisions that integrate and balance multiple factors and opinions about the future of the subregion. Spatial planning will guide future development, coordinate and align economic and social aspirations and balance the effects between development and the environment. It will lead to a set of actions that work towards what we want to do together and leverages collaborative methods to tackle transformational opportunities.

- Inputs to the plan provide an understanding of context, people, and place including setting out the overall goals that the plan should work towards and building an understanding of critical spatial development trends and drivers, market demands and needs and the social, economic, cultural and environmental impacts of development. The Scenarios and Development Options Report forms part of this work.
- Plan development process enables collective decisions that integrate a broad range of factors about people, places, and infrastructure, to define an implementation programme to improve wellbeing outcomes.
- Post-plan funding and delivery are approved by individual Councils and agencies on an ongoing basis through Long Term Plans at regional and local levels, and national funding programmes like the National Land Transport Programme.



Figure 4: Processes to develop and implement Our Places- Eastern Bay Spatial Plan

1.5 How this report fits into the spatial planning process

Spatial plans require a sound evidence base to ensure that decisions consider the best available information. This report develops the case for change and outlines the supporting evidence base to address challenges, including how to accommodate residential and business land development in ways that best deliver the goals and enablers.

Scenario analysis in the spatial planning process helps to develop an understanding of how different growth outcomes affect the goals and objectives identified by partners, the community and stakeholders, the possible impact of wider environmental, cultural, economic, and social trends on an area, and potential policy levers and investments required to achieve desirable growth outcomes.

The methodology for the scenario analysis process set out in this report follows a similar process to that used for other spatial plans around New Zealand. Further detail of the process is set out in section 7 – Scenario Methodology of this report.

The Scenarios and Development Options Report is a key input to the Spatial Plan, focusing on land development needs, while recognising that the development of the Spatial Plan and implementation programme will need a broader perspective than what is within the scope of this report. The first step is to select a preferred scenario for the settlement pattern. The next step will be to develop the draft Spatial Plan and the final implementation plan. The implementation plan will be prepared following adoption of the Spatial Plan by the partners, and will contain agreed actions for placemaking, zoning, and infrastructure considerations to advance the chosen scenario.



Figure 5: Relationship between this report and the Spatial Plan

1.5.1 Inputs to the Scenarios and Development Options Report

Inputs considered during the preparation of this report are described in more detail below. These are augmented by the advice and knowledge of the Cross-Council Technical Working Group, PCG and PGG about their communities and interests.

Table 1: Inputs to the Scenario and Development Options Report

Goals to achieve	Requirements to meet	Important plans and strategies	Information about the Eastern Bay
Goals set the direction of the spatial plan and the benefits sought through its implementation.	Rules or policy directives that the Spatial Plan has to deliver on.	Important plans and strategies from national, regional, and local sources considered when preparing the plan.	Opportunities and priorities of places in the Eastern Bay provide information for decision making.
 Tangata Whenua aspirations, plans, and priorities Community priorities Stakeholder priorities and interests 	 Settlement provisions Statutory acknowledgements Legislation (i.e. RMA, LGA, LTA) National Policy Statements Regional Policy Statement and Plan District Plans Environmental performance 	 Iwi authority environmental management plans National Adaptation Plan Emissions Reduction Plan Arataki - NZTA's 30-year plan GPSs Land Transport; Housing and Urban Development Education Network Plans Plans about places Others 	 Culturally significant places Socioeconomics / demographics Urban form and places Three waters infrastructure Transport networks Community facilities and parks Land capability for growth Important environmental places Climate change and natural Hazards Projects and economic opportunities

1.5.2 National Policy Statement on Urban Development

The Eastern Bay includes areas that are Tier 3 urban environments under the National Policy Statement on Urban Development (NPS-UD). A main requirement is to provide sufficient development capacity for housing and business land.

The NPS-UD applies to all local authorities that have all or part of an urban environment in their District, but it has different implementation requirements for different tiers of local authorities, based on the population size and growth rate of their urban environments. The NPS-UD lists the Tier 1 and 2 local authorities, while all other districts that are not listed and include an urban environment² in their district are considered Tier 3 local authorities. Every tier 1, 2, and 3 local authority is required to use evidence-based decision making for urban environments in their region or district.

The Eastern Bay includes a cross-council housing and business land market which is considered an urban environment for the purposes of the NPS-UD. This area includes the urban areas of Whakatāne township, Kawerau district and Ōpōtiki township. This report identifies this area as the central corridor, as demonstrated on Figure 8, Sub-Regional Development Corridors map. This area is the focused urban area for providing housing and business land.

OUR PLACES TECHNICAL WORKING GROUP

² NPS-UD 2020 defines urban environment to mean any area of land (regardless of size, and irrespective of local authority or statistical boundaries) that: is, or is intended to be, predominantly urban in character; and is, or is intended to be, part of a housing and labour market of at least 10,000 people.

Assess demand and development capacity for housing and business in urban environments Provide sufficient development capacity for housing and business land in the short term (3 years), medium term (10 years), and long term (30 years) taking into account the demand, feasiblity, infrastructure availability and competitive margin Monitor and report on development indicators including affordability, consents, business land vacancy, market indicators and infrastructure constraints, and assess the demand for development capacity every three years Implement the required development outcomes through district planning processes

Figure 6: The main NPS-UD requirements for the Eastern Bay

2 Context

2.1 Sub-regional setting

The Eastern Bay sub-region makes up the largest land area of the Bay of Plenty Region totalling 758,900 ha, accounting for approximately 62% of the Bay of Plenty Region area. The Eastern Bay runs along 125 km stretch of coastline, inland has 200,891 ha of native bush, 127,845 ha of Te Urewera total area and 152,713 ha of forestry land across three diverse districts; Kawerau, Whakatāne and Ōpōtiki.

2018 census data predict for 2023 that the Eastern Bay is called home to about 57,000 people. Of this, 33,500 people live in the townships of Kawerau, Ōpōtiki and Whakatāne and approximately 11,650 live in the villages of Awakeri, Matatā, Murupara, Taneatua, Te Teko and Edgecumbe and approximately 11,850 people live more rurally across the sub-region.

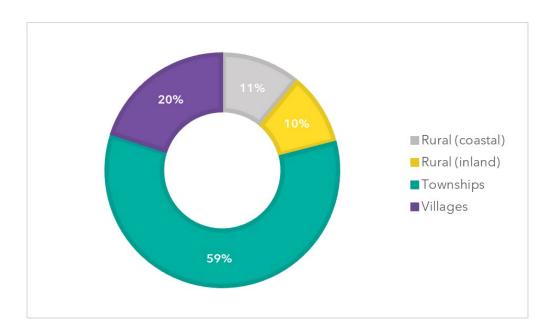


Figure 7: Eastern Bay of Plenty Distribution of Population by Settlement Type, 2018

The Eastern Bay's natural environment influences where people live, work and play. The ranges that lie in the Eastern Bay are the Raukūmara, Huiarau and various ranges within Te Urewera, consisting of a continuing chain of mountains that run the length from Cook Strait to the East Cape. The rivers in the Eastern Bay are aligned north-south in the eastern ranges that exist along major fault lines. The main rivers in the Eastern Bay are Rangitāiki, Whirinaki, Whakatāne, Waimana-Tauranga, Tarawera, Waiōtahe, Waioeka, Otara, Mōtū and Raukōkore. All of these rivers flow through deeply cut valleys before flowing north to reach the low land around Whakatāne, Edgecumbe, Kawerau, and Ōpōtiki, or directly to the sea. The complex land, sea and river environments in the sub-region create risks in the face of a changing climate. Coastal erosion, coastal inundation, ocean acidification, extreme weather events, landslides and temperature increases all become climate change hazards to communities, the natural environment and ecosystems.

Transport infrastructure, primarily state highways and rail are significant in the Eastern Bay, essential to enabling the flow of freight transporting Eastern Bay-made goods and resources and keep people moving between the districts and wider Bay of Plenty Region. State Highways 2, 30 and 35 connect the sub-region internally and provide a connection to external markets and services. The East Coast Main Trunk rail runs parallel to SH 2, connecting the sub-region to the Port of Tauranga, via Kawerau and Murupara, transporting logs, fertiliser, wood pulp, paper and cardboard to the port.

An estimate of more than 33,000 containers per annum are exported from the Eastern Bay, primarily transported by truck on the highway network. The planned Kawerau Container Terminal will see an increase in freight transport via rail, allowing the industry to save money on transport costs and improve the supply chain efficiency. The terminal will be near the largest industrial area in the sub-region, the Putauaki Trust industrial zone.

The sub-region's airport is located 9 km to the west of the Whakatāne township. The airport provides transport connections to Auckland, while also providing a means of travel to tourists who visit the region. There are also two airports located in neighbouring Districts, in Tauranga and Rotorua.

Whakatāne and Ōpōtiki districts combined, include a coastline of 125 kms and include key development aspirations to support thriving boating and aquaculture industries. The Whakatāne Boat Harbour Development recognises that Whakatāne has a thriving boating industry, but needs improved infrastructure for launching, finishing, and supporting the quantity of vessels built in the district. In 2018, Whakatāne District Council (WDC) committed to the creation of additional berthage and marine maintenance facilities in a dedicated boat harbour. This project was supported by Central Government's Provincial Growth Fund, via Kānoa – the Ministry of Business, Innovation and Employment Regional Economic Development and Investment Unit.

The Ōpōtiki Harbour Development Project, which is nearing completion, created a harbour entrance that is navigable to large boats in all but the worst conditions, enabling Ōpōtiki to become a service and processing base for aquaculture and other marine related industries. The upgrade of the wharf will soon be completed in accordance with Ōpōtiki District Council's Harbour-Wharf Masterplan. The purpose of the masterplan is to maximise the benefits for both recreational and commercial users of the new harbour and wharf. The wharf will provide a number of economic and social opportunities: additional boat ramp facilities will support the increase of recreational fishers and mussel boats; it provides recreational value for users of the wharf and build on the other recreational facilities in the town centre; it enhances amenity

along the river and harbour; it provides a location from which charter boats and tourist businesses can operate as it is connected with the town centre.

The aquaculture sector and future aquaculture development in the Eastern Bay is predominately iwi lead and has intergenerational benefits.

Aquaculture has long been recognised for its potential to contribute to the economic, social and cultural wellbeing in the Eastern Bay. Collaborative initiatives from iwi, industry, councils and Government and the research community have been progressing a vision for the region to realise the aquaculture potential. Māori wellbeing is strongly driven by a sense of belonging and connectedness to the land and sea. Whakatōhea were the first in the world to develop an Open Ocean Greenshell Mussel aquaculture farm of such magnitude off the coastline of Ōpōtiki, with their 20-year journey beginning in the late 1990s. Together with the Ōpōtiki Processing Facility, the aquaculture industry is one of the drivers to bring transformational change to its people and the community. Te Whānau-ā-Apanui are progressing developments on several aquaculture ventures, including a mussel hatchery and research hub near Te Kaha and exploring the seaweed industry as a relatively new sector in the Eastern Bay, including an application in process for the largest single seawater consent for aquaculture in New Zealand.

2.2 Sub-regional activity corridors

Three sub-regional activity corridors exist, which are defined by urban population density, economy, and transport connections. Each corridor is expected to have overarching differences and will require different implementation approaches through the Spatial Plan.

Urban Central Corridor: where most urban growth exists and is expected to take place, encompassing the townships of Kawerau, Ōpōtiki, Whakatāne and settlements in between. The area has a large industrial land base and is well connected by SH 2 and rail to the Port of Tauranga.

Coastal Eastern Corridor: extending east from Ōpōtiki township to Pōtikirua, with a focus on Iwi-led housing initiatives and economic development (particularly aquaculture and horticulture related). Anchored by Te Kaha as the main service centre, a string of coastal marae and settlements along SH 35. The Raukumara Forest park and conservation land runs along the southern side.

Rural Southern Corridor: extending from Tāneatua in the north to encompass Minginui and Murupara in the south along Galatea Road, this corridor emphasises lwi-led housing and economic development initiatives (particularly forestry and horticulture related). State Highway 38 connects the southern end of the corridor to Rotorua. Te Urewera sits partially within the corridor.

The general area for these three corridors are shown on Figure 8: Sub-Regional Development Corridors below.

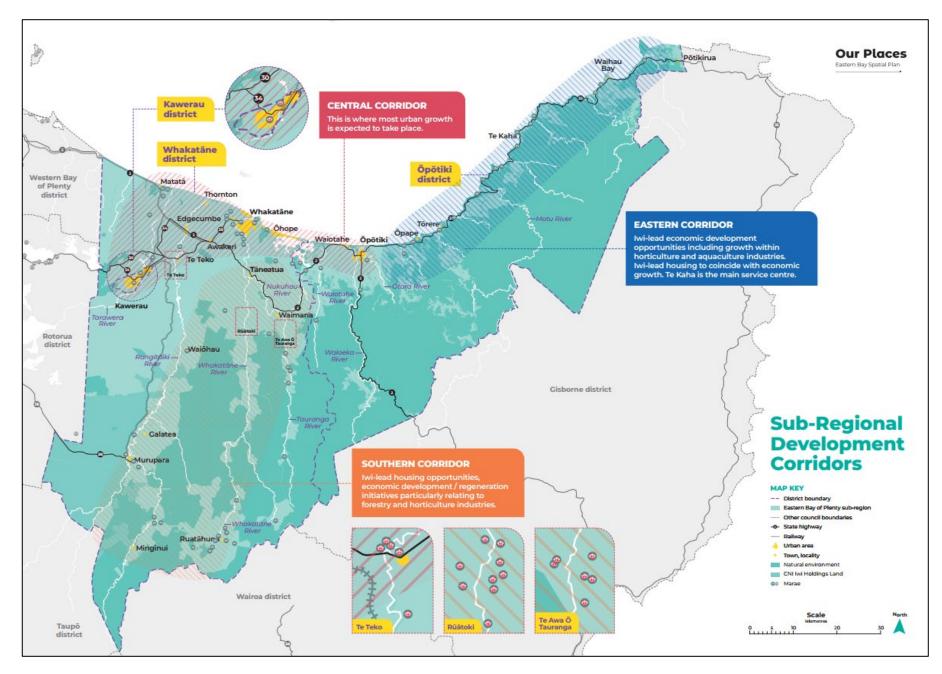


Figure 8: Sub-Regional Development Corridors

2.3 Complex land interests

There is 758,899 ha of land in the Eastern Bay. Several defining land ownership patterns affect how and where development can go. The largest of these include Te Urewera, covering 127,845 ha, Department of Conservation land covers 200,891 ha and plantation forestry land covers 152,713 ha.³

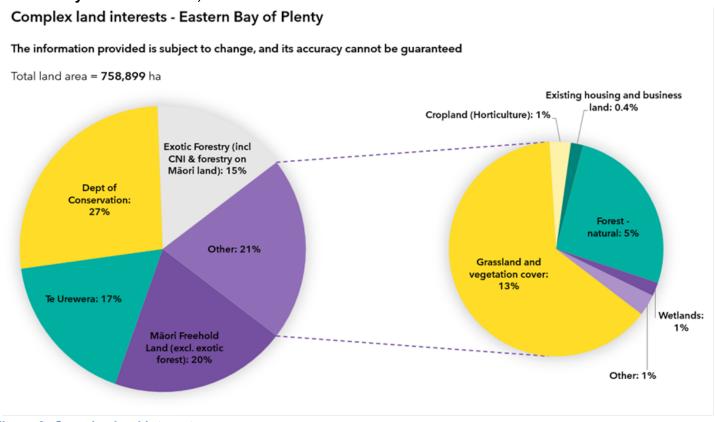


Figure 9: Complex land interests

³. The Eastern Bay of Plenty sub-region includes Whakatāne District, Kawerau District and Ōpōtiki District. The geographic boundaries are as of 1 January 2023. Data sources: Land Information New Zealand, Department of Conservation and Te Puni Kōkiri.

Conservation land is vast across the Eastern Bay, including small urban parcels and large forested areas.

The Department of Conservation administers 26% of land in the Eastern Bay area as a conservation area pursuant to the Conservation Act 1987. Conservation areas include land or foreshore held under the Conservation Act for conservation purposes, that has not been given additional protection. All conservation areas have been set aside for conservation purposes and are protected for their natural and intrinsic resources. Conservation land is non-rateable under the Local Government Rating Act 2002, and not a source of revenue to Local Government. Most of the land within the Ōpōtiki district is covered with indigenous vegetation and provide multiple recreation reserves, which draws people all over the country for cycling, hiking and fishing.

Exotic forestry accounts for large sections of land across the Eastern Bay, with the largest areas in southern Whakatāne and Murupara.

Forestry accounts for 20% of land use by area in the Eastern Bay. Of this 20%, approximately one third is part of the Central North Island Iwi Collective land. Whakatāne District alone contains approximately 20.5% of all Central North Islands exotic forests, and most North Island forestry is within a 100 km radius of both Whakatāne and Kawerau. Kawerau is a key hub for timber processing and transportation, making the Eastern Bay a substantial contributor to the forestry sector.

Māori interests in Eastern Bay includes housing, economic development and protection of the cultural landscape.

Today, 22% of land in the Eastern Bay is Māori freehold land, being 168,987 ha in total.⁴ The majority of this is rural. The dispossession of land through confiscation and associated land use change has led to the loss of Māori owned land and in a lot of cases where land has been given to iwi, this has been in a different location to their traditional rohe. Most iwi in the Eastern Bay have settled their Treaty claims and have their Treaty settlements enacted through legislation. The Eastern Bay remains a rich and diverse cultural landscape - the histories, memories and identities anchored by whakapapa create an inseverable connection to the whenua, rivers, ocean and wider taiao. Expressions of ahi kaa and kaitiakitanga remain evident across the landscape by iwi and hapū who actively protect, preserve and advocate for their lands, waters, people, places, traditions, knowledges, and taonga tuku iho. Culturally significant areas for protection include places and features that hold historical, cultural and/or spiritual significance that have deep levels of meaning and association. They may include urupā, pā, maunga tapu, kainga, turanga waka and places where taonga have been found. These sites may be wāhi tapu (sacred sites) or wāhi tupuna (ancestral sites).

⁴ This does not account for all land owned by Māori or Māori owned trust land as some of this land is held under general freehold title including large parcels of land owned by Ngāti Tūwharetoa ki Kawerau within the Kawerau district.

Tāngata whenua as landowners have varying interests across the sub-region, recognising that Māori housing and business development is intertwined with growth of the Eastern Bay. lwi/hapū/land trust-led economic opportunities, investments and the creation of new employment that fosters economic growth at a sustainable level needs to be centered as a key component of the Spatial Plan. lwi and hapū continue to be well positioned to provide models of economic growth, that prioritise outcomes across markers of wellbeing in a holistic way that shifts from a model of prioritised economic prosperity.

The Māori asset base in the Bay of Plenty totals \$8.6B with diverse portfolios covering agriculture, forestry, horticulture, aquaculture, geothermal, tourism and hospitality. This significant contribution and the capacity for expansion will have a substantial bearing on the direction of economic growth in the Eastern Bay. The development of Māori freehold land is not straightforward. Māori freehold land is characterised by ownership that is generally diverse and dispersed – with succession and title fractionation, large numbers of owners may hold a small interest in individual titles or amalgamated entities (ahu whenua trusts and incorporations)⁵. Some Māori land is unable to be used as collateral to leverage financial support for Māori owners. This can restrict Māori landowners from building the foundations to grow their land to the benefit of themselves, their whānau, and the Māori economy⁶. The tāngata whenua land ownership interests for housing and business development include development on both Māori freehold and general title land. These include large land holdings such as Central North Island Iwi forestry land, large parcels of land in Kawerau owned by Ngāti Tūwharetoa Holdings Ltd, Ngāti Awa licensed land and Pūtauaki Trust industrial land.

⁵ Barriers to the Development of Maori Freehold Land Prepared by Antoine Coffin for the CSG Māori Land Sub-Group 2016, Waikato Regional Council

⁶ Mahi tahi tatou, kaha ake tatou. The Maori economy – obstacles and opportunities. Prepared for Westpac New Zealand by BERL and OpinioNative. October 2021.

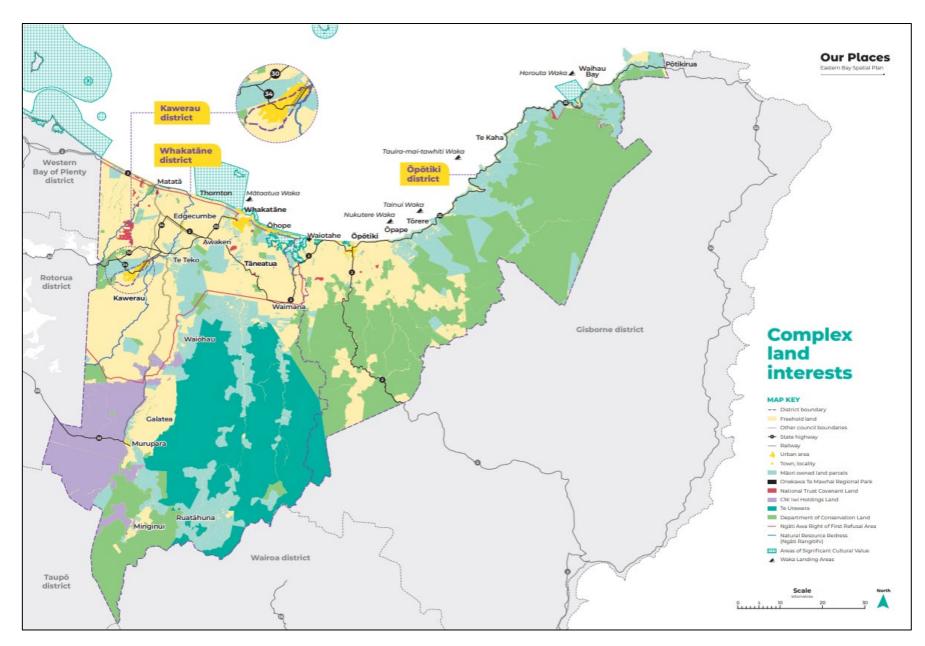


Figure 10: Complex land interests

2.4 Economy and jobs

A sub-regional Economic Development Strategy is being developed alongside the Scenarios and Development Options Report. The report, when completed, will provide strategic direction for economic development opportunities across the sub-region and provide much of the economic information to inform the spatial plan.

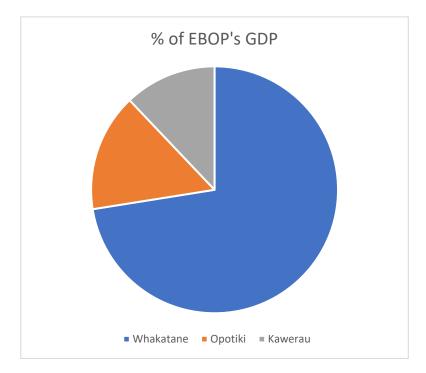
The Eastern Bay of Plenty contributes to the regional and national economies through a significant primary production sector, a manufacturing sector ranging from boutique to large industry, and offers some of the country's most loved domestic tourism destinations. Whakatāne township is the pre-eminent sub-regional service centre, providing a hub for professional and personal services, broader retail offerings, and community facilities to service the sub-region. Ōpōtiki township plays a secondary service centre role, particularly catering to areas eastwards. Kawerau serves as the principal industrial hub of the Eastern Bay, with a predominant focus on manufacturing and processing industries and further development of the Putauaki industrial zone. There are substantial commuter flows between each of the districts indicating a high degree of economic inter-connection.

The Eastern Bay's economic and non-economic statistics present a challenging situation for local and central Government. The sub-region's GDP has lagged the rest of the Bay of Plenty's and New Zealand's average, median incomes are much lower than the national average, and unemployment is substantially higher. When benchmarked nationally, Kawerau and Ōpōtiki are highly deprived districts and most communities in the Whakatāne District are also considered to be deprived. At the same time, it is a sub-region of considerable opportunity which, if realised, has the potential to create thousands of local jobs and improve people's lives.

In 2019, the Government co-invested \$285M of funding from the Provincial Growth Fund (PGF) to support projects to boost the economic potential of the sub-region and unlock new opportunities for local people. Four key catalytic infrastructure projects were identified by the districts which included the Ōpōtiki harbour / aquaculture cluster, high value horticulture on Māori-owned land, the Kawerau-Putauaki Industrial Development and the Whakatāne wharf / tourism cluster.

The economic landscape is characterised by distinct industry clusters: 37% of jobs in Kawerau are related to manufacturing; 31% of jobs in Ōpōtiki district are related to agriculture/forestry/fishing; and Whakatāne district jobs are mainly a mix of agriculture/forestry/fishing, healthcare, training and education and retail. Figure 11 shows each district's contribution to the Eastern Bay GDP. Figure 12 demonstrates the 2023 GDP of the Eastern Bay of Plenty totalled approximately \$3.061B of the \$20.5B for the Bay of Plenty, with primary industries contributing 15% to the regional economy

Across the entire Eastern Bay, Māori-owned land offers significant opportunities for economic growth. This is discussed further in Section 2.5 of this report.



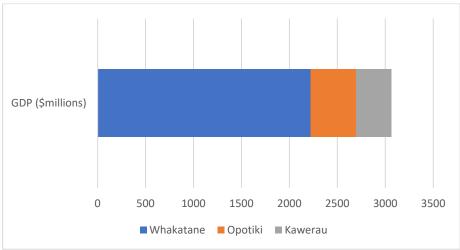


Figure 11: Contribution to Eastern Bay of Plenty's GDP (%)

Figure 12: Contribution to Eastern Bay of Plenty's GDP (% millions)

2.4.1 Eastern Bay of Plenty Economic Development Strategy

The Eastern Bay of Plenty Economic Development Strategy is being prepared in parallel with the Spatial Plan. The Spatial Plan will identify where future growth is anticipated to occur and the Economic Development Strategy will seek to align shared economic development focuses across Eastern Bay of Plenty districts. It will be the framework used to frame economic collaboration, prioritisation, and planning to unlock resilient economic development for the Eastern Bay of Plenty.

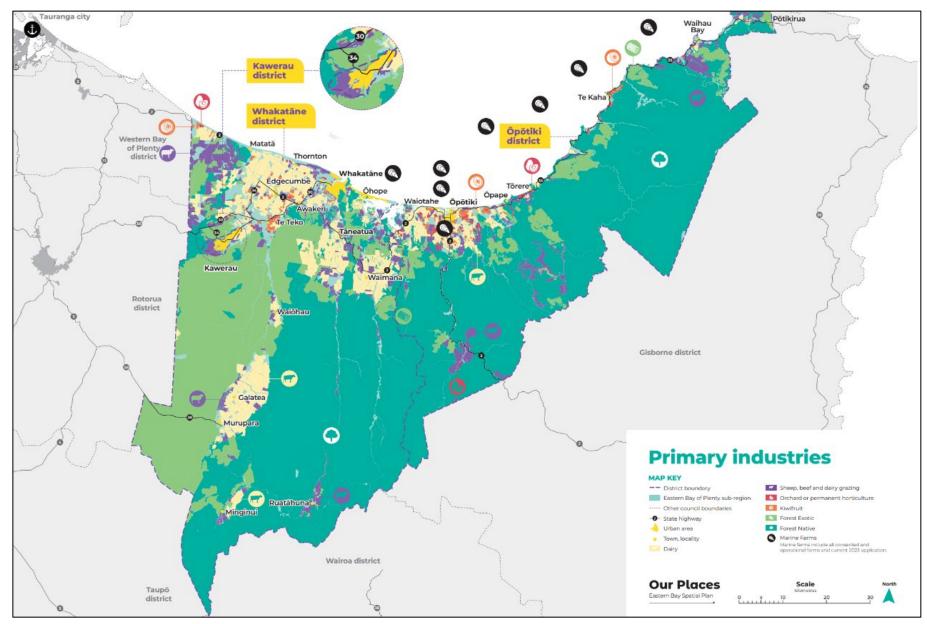


Figure 13: Primary Industries

2.5 Tangata Whenua

lwi in the Eastern Bay are active local investors which opens the potential to enter a time of rapid economic growth through development opportunities across a range of sectors, including aquaculture, kiwifruit, tourism, timber and wood processing, water bottling, dairy processing and renewable energy. With increasing economic activity, housing and business land to keep up with demand is essential to support whanau, hapu and lwi to keep moving forward in their economic aspirations. This section identifies what is currently known and highlights the gaps for future conversations.

Maōri were the first settlers in the Eastern Bay of Plenty, arriving to the shores on a number of waka: Mataatua, Tainui and Te Arawa, during the 1300s. Before arrival of European settlers, Māori had collective kaitiakitanga for their whenua and was primarily shared between hapū and whānau.

Before the signing of Te Tiriti o Waitangi, Māori still held most of the land in New Zealand. Between 1840 and 1900, Māori were alienated from most of their whenua. By around 1920, around 8% of land was held in Māori ownership. Urban migration after the second world war saw many Māori move away from their rohe, where beforehand around 90% of Māori lived on, or near their whenua. Over time, there have not been enough jobs to support Māori to live near their homelands with more than 80% of Māori now living in cities.

The Eastern Bay is unique with its existing Māori population in comparison with other parts of the country. Over 50% of the Eastern Bay's population are Māori and there are eleven lwi, 99 hapū, and 92 marae in the area. Māori make up 61.7% of the population in Kawerau, 46.8% in Whakatāne and 66% in Ōpōtiki. In the entirety of the Eastern Bay, Māori population exceeds just over half of the entire population at 52%. The Eastern Bay is rich in culturally significant places, resources and taonga that our Māori communities affiliate with. This means that Māori-led housing and economic activities are inseparable from the Eastern Bay, and it is crucial that the wider spatial planning work acknowledges that each lwi/hapū have historical whakapapa over their places of interest, and that these are considered in decision-making. Reviewing tangata whenua documentation such as submissions on Long Term Plans and lwi Management Plans helps to identify key themes about land and housing.

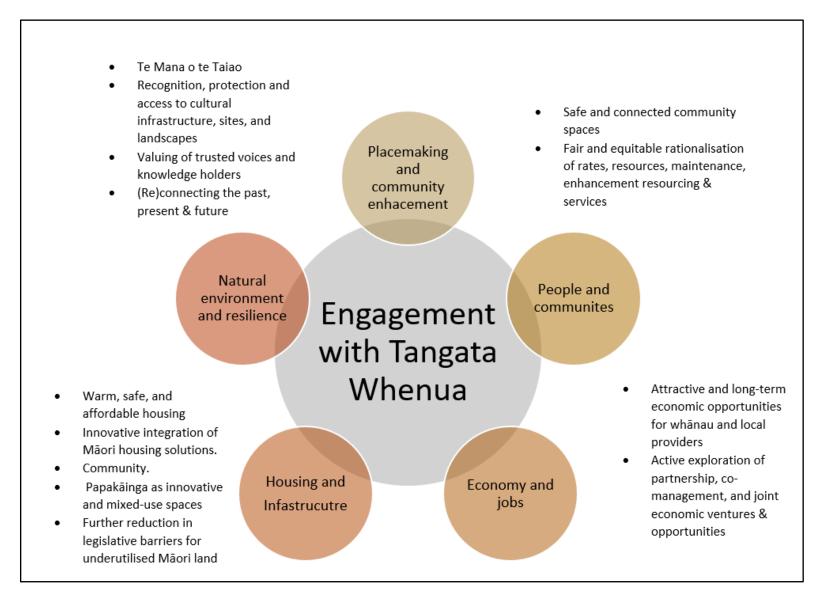


Figure 14: Engagement themes with Tangata Whenua

2.5.1 Treaty Settlements

Treaty Settlement Bills and relevant legislation help to illustrate what is important to lwi in the Eastern Bay of Plenty. Most lwi across the Eastern Bay have settled with the Crown, with settlement packages providing lwi with social, economic and cultural redress, to help enable their social and economic aspirations.

The rohe of eleven lwi lie within the Eastern Bay including: Ngāitai, Te Whānau ā Apanui, Ngāti Porou and Whakatōhea within Ōpōtiki District; Ngāti Makino, Ngāti Manawa, Ngāti Rangitihi, and Ngāti Whare within Whakatāne District; Tūhoe across both Whakatāne and Ōpōtiki, and Ngāti Awa and Ngāti Tūwharetoa across both Whakatāne and Kawerau. There are over 99 hapū, and 92 marae affiliated with these lwi. A full list of lwi in the Eastern Bay, and a summary of lwi settlement information can be found in Appendix A of this report.

The manaakitanga of special places are known in the Eastern Bay and help to illustrate the cultural landscape. Iwi settlements in identified rohe are abundant and intertwined. A large part of all settlements involves cultural redress, which recognise kaitiakitanga of the whenua across the entire sub-region. Cultural redress often includes a statutory acknowledgement which is a formal acknowledgement by the Crown to recognise the historical, cultural and spiritual association lwi has with significant sites and resources. Combined with other sites of significance, the settlement rohe, and statutory acknowledgement areas begin to show what is significant to lwi in a spatial extent. A full list of statutory acknowledgements and summary of each can be found in **Appendix B** of this report.

Iwi in the Eastern Bay are moving into the post treaty settlement phase and are looking to create a positive future for the mana and wellbeing of their people. Economic growth opportunities resulting from this changing phase will help lift the social wellbeing and revitalisation of communities that have been struggling.

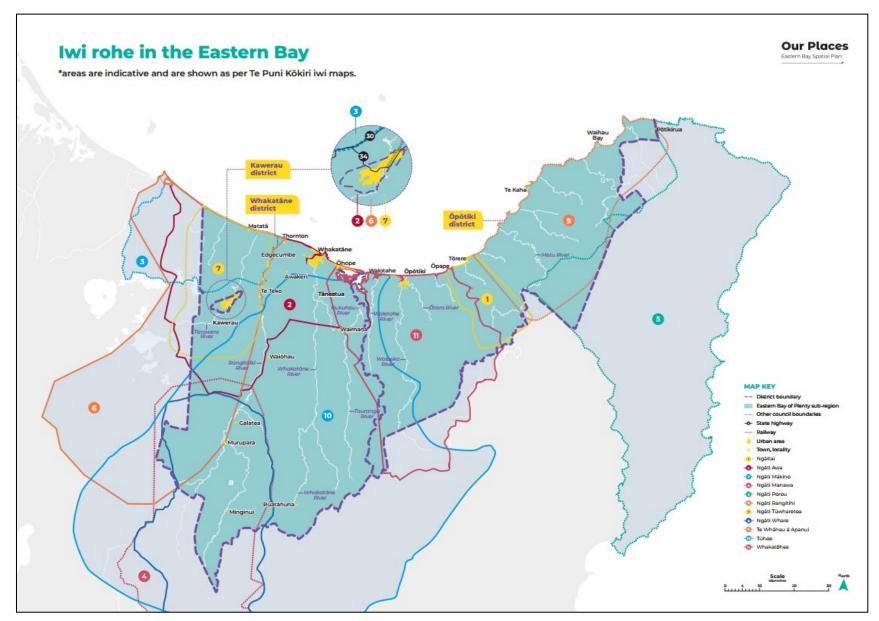


Figure 15: Iwi rohe in the Eastern Bay

2.5.2 Social and housing

Papakāinga, multi-generational housing and marae communities are innovative solutions to community and housing needs. Papakāinga is more than just housing as it can provide communal shared spaces shared gardens and sometimes employment and education opportunities. What is included in a papakāinga is reflected by the support system and needs of whānau.

The development of pāpakainga can offer quality housing solutions for multi-generational needs while offering whānau the opportunity to move home to their whenua. It is recognised that there are barriers to papakāinga development, including planning restrictions and lack of infrastructure, as well as the consent and permission that is often required by various landowners. Further conversations with lwi, hapū and whānau are needed to realise these complexities and provide opportunity in how the Spatial Plan can assist with these processes.

2.5.3 Business and development

Māori land parcels in the Eastern Bay have varying productive land uses including horticulture, exotic forestry, dairy and cropping activities. Māori make a significant contribution to the economy within the Eastern Bay through the ownership of notable assets and the contribution to economic development with a varying list of growing projects.

According to 2021 statistics provided by Te Puni Kōkiri, there are 477 Māori owned businesses in agriculture, forestry and fishing, 459 in construction, 270 in professional, scientific and technical services amongst other sectors such as trades, manufacturing, retail and accommodation across the Bay of Plenty Region. As of 2021, Whakatāne has 384 Māori owned businesses; Ōpōtiki with 123 and Kawerau 153. Some examples of the key economic growth opportunities include the upscaling of the Minginui nursery, Putauaki industrial development in Kawerau, Whakatōhea Mussel Farming and Production Facility in Ōpōtiki and accelerating aquaculture in Te Whānau a Apanui rohe moana, Mahi Haurahi Horticulture Centre Te Kaha, Omataroa Eco Tours, Raukokore/Waihau Bay community water storage project and the Whakatāne Commercial Boat Harbour Development.

Tāngata whenua aspirations are emerging across the sub-region. Extensive work has already been considered and mapped for iwi along the east coast.

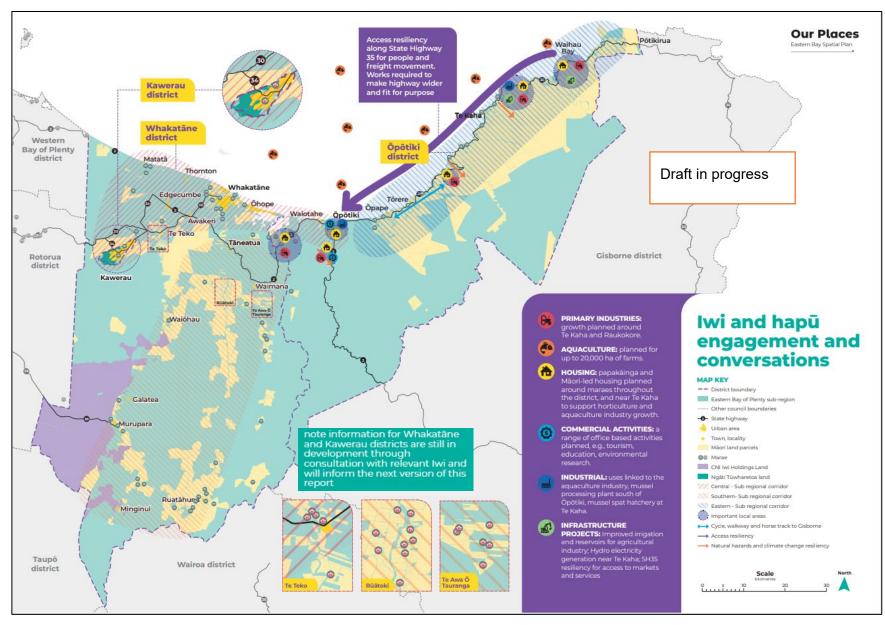


Figure 16: Iwi and Hapu engagement and conversations

2.6 Constraints, protected valued places and resilient growth

2.6.1 **Overview**

The natural environment forms the basis of our urban form and future urban development. Protected areas include outstanding natural features and landscapes, significant natural areas, significant indigenous biodiversity areas, wetlands, parks, reserves and conservation covenants. The Eastern Bay is also at risk from a range of natural hazards including coastal erosion, sea level rise and coastal flooding, groundwater rise, landslides, debris flows, flooding, tsunami, earthquakes, and volcanic eruption.

In addition to protecting and enhancing our natural environment, we need to manage our risk from natural hazards and the effects of climate change, by directing future growth and urban form away from areas. This section provides high-level information on the spatial distribution of key development constraints and areas to protect across the sub-region. These features, in combination, are shown on Figure 22. The mapping of these areas is a key component in the identification of development options, to guide the planning of infrastructure and urban form, as well as identifying cultural and open space areas to protect and enhance.

The identification of these areas has been informed by policy direction at a sub-regional level, hazard assessments, technical studies, plans and reports. The features on the maps within this section 2.6 have been shown for spatial planning purposes only. Site-specific constraints and features to protect are often managed through district planning rules.

2.6.2 Natural Environment

Providing a clear understanding of the features of the land and geographical constraints in the Eastern Bay gives insight as to where we may adapt and grow, while also showing where we are protecting our significant natural and cultural places.

The Eastern Bay has many natural environment areas and landscapes that have important environmental attributes and services. Within the sub-region, there are maunga (mountains), ngahere (forests), geothermal fields and springs, floodplains, wetlands, awa (rivers and streams), coastal dune systems, beaches, estuaries, and harbours. Protecting and preserving these areas will support access to nature, improvements to water quality and allow native flora and fauna to thrive.

The sub-region includes areas of high country with terrain that steadily inclines in a landward direction and then descends again toward Murupara and Rotorua. The steep and forested terrain are often either protected areas or are used for commercial forestry. Steep terrain topography also corresponds with the distribution of annual rainfall. Rainfall is generally greater in the high-country areas of the Raukūmara Ranges than the coastal areas and decreasing again toward Murupara. These catchment areas influence the biodiversity and ecology of waterbodies, and activities on the land in a catchment can impact on water quality and quantity. The rivers in the Eastern Bay are aligned north-south in the eastern ranges that exist along major fault lines. All rivers flow through deeply cut hill country before flowing north to reach the low land around Whakatāne, Kawerau and Ōpōtiki or directly to the sea. The main rivers in the Eastern Bay are Rangitāiki, Whirinaki, Whakatāne, Waimana-Tauranga, Tarawera, Waiōtahe, Waioeka, Ōtara, Mōtū and Raukōkore. Uses of the rivers and streams include municipal and industrial water supply, waste disposal, irrigation, frost protection and hydro-generation. Rivers, streams, groundwater, and wetlands are impacted by a growing population and land use changes.

The groundwater table is influenced by topography and rainfall, and fluctuates over time. In coastal and estuarine environments water levels change in response to tidal cycles, whereas further inland ground water fluctuates in response to rainfall. It is important to consider groundwater in both coastal areas and adjoining major river systems where groundwater interacts with rising sea and or river levels, which will be exacerbated by a changing climate. Generally, low lying areas in the Eastern Bay have higher water tables. These areas include the Rangitaiki Plains, Waiohau, Galatea, Murupara, Tāneatua, Waimana and Ōpōtiki⁷.

The Eastern Bay includes the largest extent of coastline in the region and features several rural coastal settlements. The coastal environment provides amenity, ecological, cultural, spiritual, recreation and economic values for communities. Care is needed when considering the coastal environment for urban development.

2.6.3 Areas to protect

Existing Environmental Protections

The ecological and environmental values of many areas and sites across the sub-region have already been lost or degraded due to previous residential, industrial, and agricultural development. Remaining areas and sites of significance often have multiple values and need to be protected from development. These include outstanding natural features and landscapes, significant natural areas, significant indigenous biodiversity areas, wetlands, parks, reserves, and conservation covenants. Many of these areas have land use and zoning controls which restrict certain activities occurring within a defined area.

⁷ GNS Science: National Water Table Model Interactive Map, 2018: GNS National Water Table interactive map - GNS Science | Te Pū Ao

Historic Heritage Sites and Sites and Areas of Significance to Māori

The protection of historic heritage from inappropriate subdivision, use, and development is a matter of national importance⁸. Coastal historic heritage inventory, buildings, objects, and sites of significance are of value to the community. Urban form decisions will influence the extent to which historic values can be maintained and enhanced. For example, urban renewal at high densities will require replacement of older housing stock which may possess historic values. Large scale redevelopment will also require excavation of sites that may affect archaeological values. Protected sites and areas include sites that have formal protection under the Heritage NZ Act. While this is an important consideration, it is not practicable to map sites and areas of heritage significance for high level spatial planning. This issue should be addressed through more detailed place-specific spatial planning.

Sites and areas of significance to Māori are places and features that hold historical, cultural and/or spiritual significance that have deep levels of meaning and association for mana whenua. They may include urupā, pā, maunga tapu, kainga, turanga waka and places where taonga have been found. These sites may be wāhi tapu (sacred sites) or wāhi tupuna (ancestral sites). The relationship of Māori and their culture and traditions with their ancestral lands, water, sites, waahi tapu and other taonga is a matter of national importance⁹. It is noted that the sites and areas of significance to Māori have not been shown on the areas to protect and of constraint map recognising that this is a matter for further engagement with mana whenua.

2.6.4 Areas with natural hazard susceptibility and other land constraints

The Eastern Bay is susceptible to a range of natural hazards which will influence the future urban form of the sub-region and its infrastructure resilience, for both existing and future infrastructure requirements. The effects of climate change are becoming more apparent with sea level rise, increased flooding and other weather-related events that will present significant challenges to adapt to.

There are areas where change or development can occur, but only with great care and where effects can be mitigated to an acceptable level. This may include low density developments such as rural-residential and papakainga. In practical terms, almost all land will be subject to some contraining features, although the degree of constraint will vary.

⁸ Resource Management Act section 6 (f)

⁹ Resource Management Act section 6(e)

Coastal Environment

The coastal environment as it relates to natural hazards is well understood within the Eastern Bay. A wide range of natural hazards overlap along the coast and result in a high level of risk, particularly areas that are low-lying or below sea-level. Hazards include tsunami risk, coastal flooding and inundation, and erosion. Natural processes are heightened by climate change and can become more significant hazards over time, such as sea-level rise, high ground water, soil salinity as well as greater effects of erosion and inundation.

Flooding

Considering the environment elements in the Eastern Bay include a vast coastal area, ten rivers, both steep and low-lying topography and a changing climate, planning for growth must proactively address flood hazards. Flooding is a known natural hazard risk and is a significant existing and future constraint in the sub-region. Many floodable areas are mapped and there is still more work to do to understand the extent of flooding in some areas. This will inform where and how growth could occur in existing and future areas. As detailed in the District Plans, development where there is flood risk needs to be avoided or mitigated. The main types of flooding are ground water flooding, ponding, overland flowpaths, river and stream flooding onto floodplains, and coastal flooding including both harbour and estuary flooding. Water will naturally follow overland flowpaths and floodplains in an intense rainfall event. These natural flows are an important part of the flood management system, allowing water to flow and recede during and after intense rainfall events.

There are five main river and drainage schemes in the Bay of Plenty, four of which exist within the Eastern Bay. These are the Whakatāne, Öpōtiki, Rangitāiki and Tarawera river and drainage schemes as shown on Figure 18, river and drainage schemes map. River and drainage schemes contain a mix of flood protection and drainage assets such as flood ways, stop banks, drains and erosion controls providing essential services to keep communities safe from the effects of flooding. Without these assets, urban areas would be inundated by floodwaters during extreme events. For example, Te Teko and Edgecumbe urban areas are within the Rangitāiki Floodplain and major urban stop banks run adjacent to the Rangitāiki River as a flood protection measure for these settlements. It is important to recognise that these assets provide for a specific level of service and are still prone to a risk of flood water breaching the defence in a rainfall event that is greater than the defence is designed for (residual risk). Te Teko and Edgecumbe are also located downstream from the Matahina hydro-electric dam. In previous heavy rain events, floodwater has been pre-emptively released from the spill gates of the dam to relieve the water pressure and lessen the impact of flooding upstream and downstream.

¹⁰ Toka Tū Ake: Natural Hazards Portal – storms and floods: https://www.naturalhazardsportal.govt.nz/s/natural-hazard-risk/about-natural-hazard-risk/storms-and-floods

Increased flood risk from a changing climate

Climate change is expected to cause sea level rise as well as bringing much heavier rainfall than what is currently experienced. The carrying capacity of the rivers and streams in addition to the functions of flood mitigation assets will come under pressure over time due to the changing climate and increased weather events. This increases the likely residual risk of flood hazards, being the risk of flooding that remains where a flood management asset is breached due to a rainfall event that's severity is greater than the level of service that asset provides.

Decisions on flood risk management for existing, intensified or new urban areas must take a long-term management perspective, taking a precautionary approach to the risk and uncertainty of future weather events. Decisions must also consider the carrying capacity of the catchment, consequences of flooding, affordability and resilience and vulnerability of communities and infrastructure as well as the risk to life and property. The cost of flood protection is becoming increasingly expensive for communities and councils. This may prompt councils to consider alternative approaches to flood risk management in the future including initiating adaptation processes or initiatives to guide future information gathering and decision-making to manage existing risk to vulnerable communities.

Highly Productive Land

Primary production is a key industry in the Eastern Bay. Parts of the sub-region are classified as containing highly productive soils, which are some of New Zealand's most fertile for food production. The National Policy Statement for Highly Productive Land 2022 (NPS-HPL) has provisions to improve the way that highly productive land (Land Use Capability (LUC) Class 1, 2, or 3) is protected from inappropriate use, development, or subdivision.

Implementation of the NPS-HPL is subject to a regional planning process. The mapping of highly productive land has not yet been notified by the Bay of Plenty Regional Council (as of August 2024). To recognise this important resource and the relevant directions of the NPS-HPL, to manage effects on LUC Class 1, 2 or 3 soils, highly productive land is generally avoided for urban development purposes, unless exceptions apply including those for papakāinga.

Other constraints

A range of other natural hazards need to be considered in the Spatial Plan. Tsunami risk can be managed through evacuation planning and warning systems. Risks from faulting and earthquakes (which include liquefaction) can be managed and mitigated through engineering and construction solutions. Geothermal surface features need to be avoided when planning urban development due to the risks to safety.

There are areas which contain peat soils which form from the build-up of partially rotted plant material in wet environments. As peat shrinks, the depth of fertile topsoil also decreases. Steep land features limit urban development because they are unserviceable and are prone to geotechnical issues.

The Hazardous Activities and Industries List (HAIL) identifies potentially contaminated sites¹¹. The list indicates that such activities and industries are more likely to use or store hazardous substances and therefore there is a greater probability of site contamination occurring than other uses or activities.

2.6.5 Risks from Climate Change

The effects of climate change are becoming more apparent. Decision makers must have regard to the effects of climate change ¹². In the context of spatial planning, locations for future urban growth must be resilient to climate change and natural hazards. At locations where acceptable resilience cannot be achieved, new urban development and infrastructure should be avoided.

The Bay of Plenty Regional Climate Change Risk Assessment 2023 (BOPCCRA) has identified the climate risks to the region and the climate hazards associated with those risks. In addition, a Whakatāne District Climate Change Risk Assessment has recently begun and is expected to be completed in 2025.

The BOPCCRA highlights areas of the Eastern Bay which will need a focused effort to manage risks, including (amongst others):

- The coastal settlements in the Eastern Bay may be exposed to increasing coastal hazards (coastal erosion, sea level rise and coastal flooding, and groundwater rise). This includes Whakatāne township, and places like Matatā and Ōhope, Ōpōtiki township and further along the coastline. There remains a risk to settlements and associated infrastructure such as roads, water supplies, stormwater, on-site wastewater systems and wastewater assets.
- The road and state highway network may face increasing damage and disruption from rainfall related flooding, landslides, coastal erosion, and sea level rise and coastal flooding. Coastal and low-lying areas such as central Whakatāne, Wainui Road from Ōhope to Ōhiwa, coastal parts of SH 2 and SH 35 may become increasingly disrupted from these risks, as will those roads vulnerable to landslides.
- The Matatā and Murupara rail lines may be exposed to increased coastal flooding and landslides, and tree fall in extreme weather.
 Whakatāne Airport may experience increasing disruption due to severe weather and could experience loss of access due to wider flooding of the surrounding roads.

¹¹ HAIL request | Bay of Plenty Regional Council (boprc.govt.nz)

¹² Resource Management Act section 7(i)

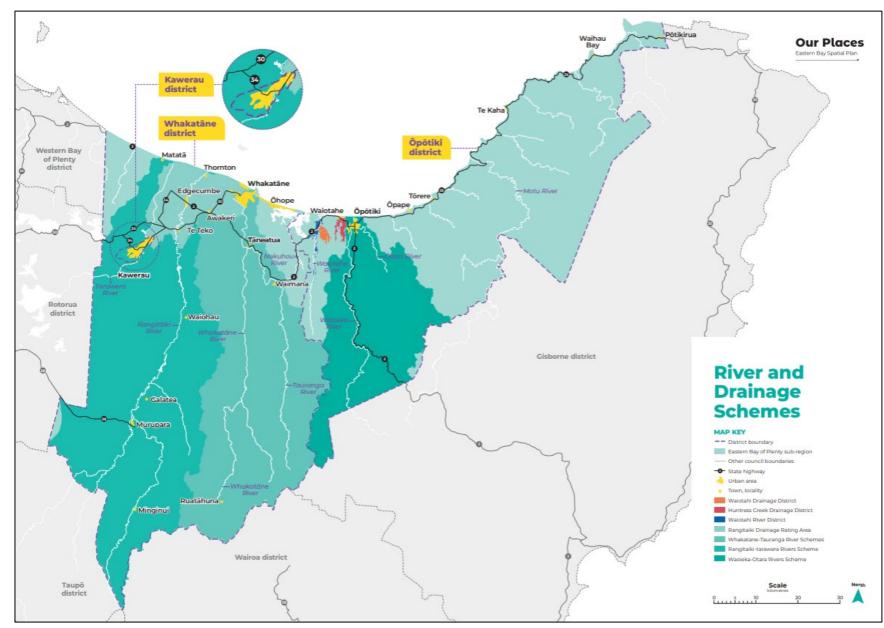


Figure 17: River and Drainage Schemes

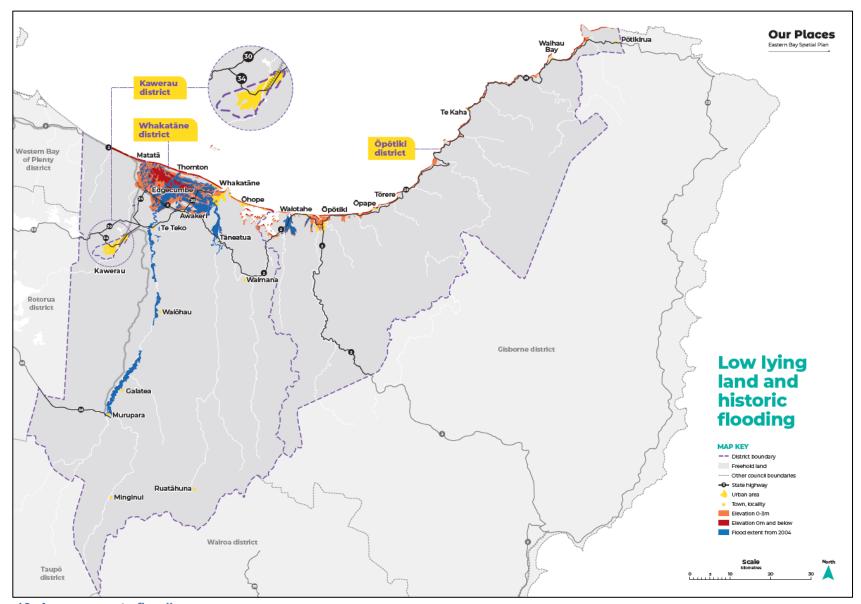


Figure 18: Areas prone to flooding

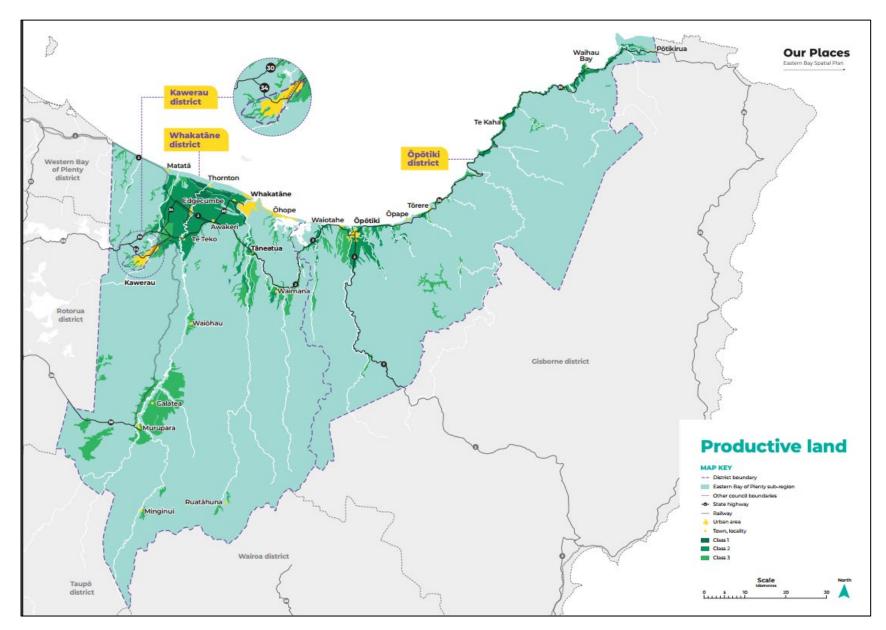


Figure 19: Productive Land

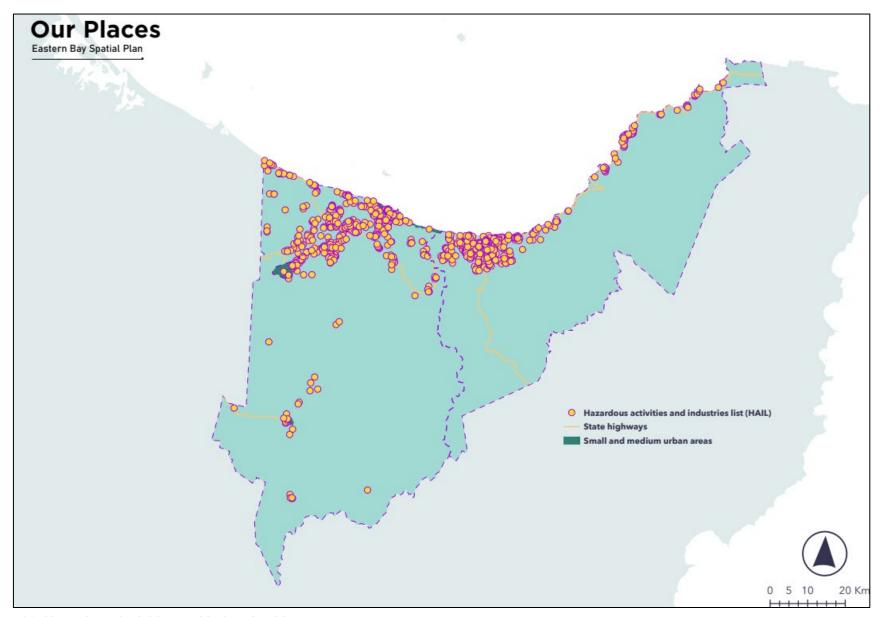


Figure 20: Hazardous Activities and Industries List areas

2.6.6 Implications for the Development Options

By identifying the areas prone to hazards, the highly productive soils we want to safeguard and the places we want to protect, we start to see where resilient growth can occur. Key considerations include:

- Existing natural hazard risk is a significant issue to consider because many communities in Whakatāne and Ōpōtiki districts are located
 adjacent to major river systems (e.g., Edgecumbe, Te Teko, Whakatāne township, and Ōpōtiki township) or are coastal and vulnerable
 to sea level rise and coastal inundation (e.g., Ohope) as well as rainfall related flooding and groundwater rise.
- Avoiding high risk areas for greenfield development is critical when considering options for strategic long-term planning. Areas of higher ground such as Awakeri and Hukutaia are generally preferred when considering natural hazards and climate change;
- Future growth for greenfield areas and for existing settlements should be considered carefully as the carrying capacity of catchments and stormwater management networks is limited, particularly where they are located within or connected to a major floodplain;
- Considering the proximity for new development to rivers will help to ensure safe and resilient growth for communities;
- Pockets of highly productive land are present throughout the sub-region and the NPS-HPL;
- The Hazardous Activities and Industries List (HAIL) is a compilation of activities and industries that are considered likely to cause land contamination. There are HAIL sites throughout the Easter Bay which will need review at a site specific level, to determine if they are compatible with residential development or other uses and if mitigation is required.

The areas to protect and of constraint map (Figure 22) provides a high-level understanding of the spatial constraint areas that create challenges to resilient urban growth. There will be areas which have critical constraints where urban development needs to be avoided and where the risk to people and property is high. There are also areas with natural hazard susceptibility or other land constraints. Growth should be directed away from these areas unless it can be demonstrated that the issues can be managed with risk mitigated to acceptable levels.

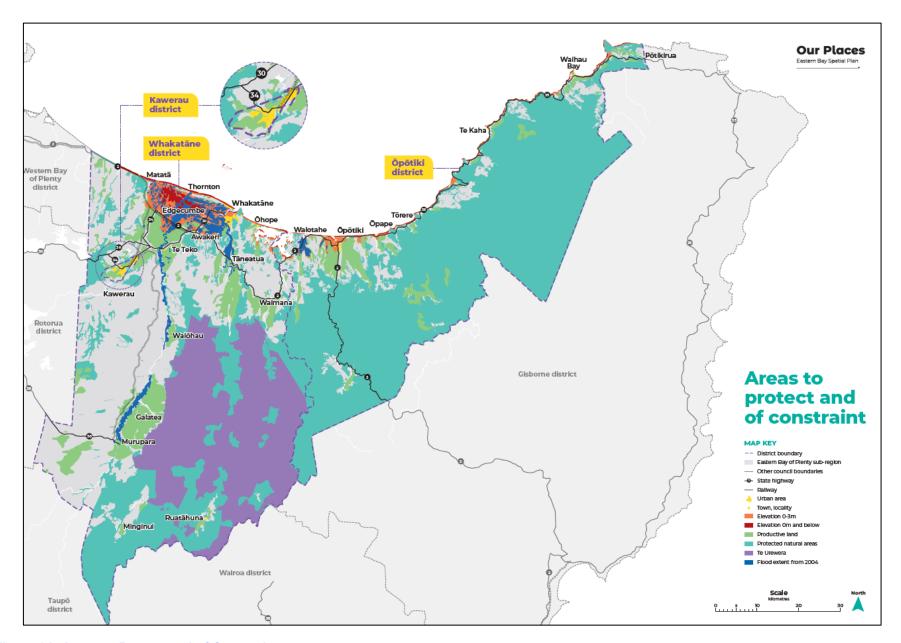


Figure 21: Areas to Protect and of Constraint

3 Demand for housing and business land

Population and employment projections have been prepared to provide an understanding of the scale of future growth that will need to be accommodated in the long-term. The medium (most likely) population projection estimates ¹³ the sub-region's population will increase from 56,500 in 2022 to 68,000 in 2055. This growth in population directly drives demand for housing and business land.

3.1 Deciding how much growth to plan for matters

The NPS-UD, Policy 2 requires Tier 3 local authorities, at all times, provide at least sufficient development capacity to meet expected demand for housing and for business land over the short term, medium term, and long term.

Providing sufficient housing and business land supply means that the goals set for the Spatial Plan are easier to meet and the benefits to the people of Eastern Bay are more likely to be realised. The consequences of not being prepared for growth include lack of developable land to meet demand, and this can restrict supply and make housing and infrastructure less affordable.

¹³ This is the medium population projection as identified within Appendix D – Eastern Bay of Plenty Housing and Business Needs Research (MRCagney). This projection aligns more closely to the Stats NZ high population projection.

Assumptions in growth management		Actual population growth					
		Low	High				
	Low						
		Investment aligns to demand and supplies a suitable	Lack of housing makes housing unaffordable.				
		amount of land to the market for housing and business purposes.	Lack of planning for growth results in significantly higher infrastructure costs.				
Projected population			Poor outcomes, and limited ability to mitigate consequences.				
growth	High						
		Over investment in infrastructure may occur. This can be mitigated by identifying trigger points for investment.	Investment aligns to demand and supplies a suitable amount of land to the market for housing and business purposes.				
		Investment spread over a lower rating base reduces affordability (i.e., higher rates required)	Public facilities and amenities improvements keep pace with demands.				

Figure 22: Comparing consequences of different growth assumptions

3.2 Development capacity is beneficial and there are wider influences on demand

Active monitoring of population changes in the Eastern Bay is necessary to adapt to changes in the pace of growth.

The Eastern Bay connects to the Western Bay of Plenty and Rotorua Districts, as well as with Gisborne District and Tairawhiti District on the East Coast. The development of the Rangiuru Business Park, the possible eastern town at Paengaroa and Rotorua growth nodes, further development of the Ports of Tauranga and Gisborne are all potential influences on the Spatial Plan, as are other nationally or globally driven political and economic factors.

Providing for a sustained pipeline of serviced and zoned land supply is important to ensure housing is available at affordable levels, that new commercial investments are supported because workers moving to the Eastern Bay have good quality homes to live in and there is land that can enable expansion of business activities, and to enable lwi to welcome people back to their lands.

The population of the Eastern Bay had been stagnant or falling from at least the late 1990s through to the early 2010s and projections for future growth were quite reserved. Even as the population started to grow in 2014, it was unknown whether this was temporary or permanent. The populations continued to grow each year, and it appears that the Eastern Bay has entered a new period of growth. Resultantly, some areas of the Eastern Bay face shortfalls of planned housing land due to unexpected growth rates.

Economic development across the Eastern Bay is dependent on sufficient housing for workers. Earlier analysis ¹⁴ identified that a lack of new housing to meet increased demand has the potential to stall overall economic growth across the Eastern Bay and would impact on the successful delivery of the projects and economic growth across the sub-region. Economic developers need certainty around where housing supply will be provided, so they can secure accommodation for their employees and ensure that investors have confidence in local housing availability.

3.3 Population projections for the sub-region

Projections are an indication of the overall trend and not an exact forecast. ¹⁵ To manage uncertainty, a range of potential projections should be applied to ensure that contingencies are considered. Regular monitoring and reporting of population changes throughout Long Term Plans and infrastructure plans will enable adaptable implementation of funding and infrastructure programmes. To inform the projections for land demand, new population projections were produced for the Spatial Plan ¹⁶. Between 2013 and 2023, our total population grew by more than 9,000 people. The growth rate in the three districts from 2013-2023 was: Whakatāne 17%, Kawerau 22%, Ōpōtiki 24%.

Looking ahead at the next thirty years, population growth is expected to continue. Low, medium, and high growth projections have been developed to inform the Spatial Plan with a range of possible population futures. The **medium growth** projection is likely the most realistic as it is well aligned to current growth trends.¹⁷

¹⁴ Eastern Bay of Plenty: Regional Development Report (2019).

¹⁵ Note, this report works with estimates and projections that are subject to change. Statistics NZ is planning to revise its population estimates for 2019-2023 in early 2025 to incorporate both the 2023 Census and post-enumeration survey. Until then, there is not sufficient understanding of how estimates for 2019-2023 were tracking, and therefore the project is working with 2018 date for the time being. Population projections presented in this report will be reviewed after Statistics NZ publishes revised estimates in 2025.

¹⁶ Unless otherwise referenced, data presented in this report section are drawn from the Eastern Bay of Plenty Housing and Business Needs Research, MRCagney (NZ) Ltd, 2023 -attached as Appendix D.

¹⁷ This projection is based on the Stats NZ High population projections for each District.

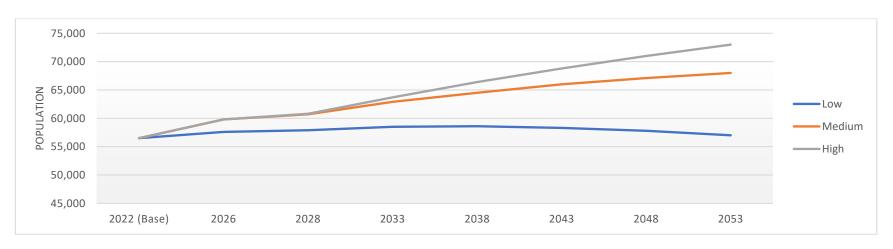


Figure 23: Eastern Bay Population Projections (MRCagney, 2023)

Table 2: Population projections by district over time

	Short	Short Term		n Term	Long Term			
Population Projections	2022 (Base)	2026	2028	2033	2038	2043	2048	2053
Low								
Whakatāne	38,300	38,900	39,100	39,400	39,500	39,400	39,100	38,600
Ōpōtiki	10,400	10,800	10,900	11,100	11,100	11,100	11,100	11,000
Kawerau	7,800	8,000	8,000	8,000	7,900	7,800	7,600	7,400
Total low	56,500	57,600	57,900	58,500	58,600	58,300	57,800	57,000
Medium								
Whakatāne	38,300	40,400	41,000	42,400	43,500	44,500	45,300	46,000
Ōpōtiki	10,400	11,200	11,400	11,900	12,300	12,600	12,800	13,000
Kawerau	7,800	8,300	8,400	8,600	8,800	8,900	9,000	9,000

	Short	Term	Mediun	n Term	Long Term			
Population Projections	2022 (Base)	2026	2028	2033	2038	2043	2048	2053
Total medium	56,500	59,800	60,700	62,900	64,500	66,000	67,100	68,000
High	High							
Whakatāne	38,300	40,400	41,100	42,900	44,500	46,000	47,400	48,700
Ōpōtiki	10,400	11,200	11,400	12,000	12,700	13,300	13,800	14,300
Kawerau	7,800	8,300	8,400	8,800	9,200	9,500	9,800	10,000
Total high	56,500	59,800	60,800	63,700	66,400	68,800	71,000	73,000

3.4 Immigration and natural increase contribute to growth rates

The net migration from 2013-2018 was a large driver of population growth in each of the districts making up around 70% of total growth.

All three districts have had a positive but declining natural increase in population since 1996 (i.e. births within each district have been higher than deaths). Natural increase in population across these districts from 2013-2018 was about 3% of the 2013 population. All three districts had negative net migration from 2001-2013 (more people leaving the district than moving to it) followed by positive net migration from 2013-2018 (more people moving to the district than leaving it).

New Zealand's national immigration settings are an important driver of growth in the Eastern Bay. New Zealand had a record net migration gain of 110,200 in the August 2023 year. Realand's population (\$5.13M in 2022) has a 90 % probability of being between 5.55 and \$6.65M in 2048 and between \$5.62M and \$7.86M in 2073. Migration will continue to be a primary driver of population growth for New Zealand, impacting growth in the Eastern Bay.

¹⁸ https://www.stats.govt.nz/news/net-migration-exceeds-100000/

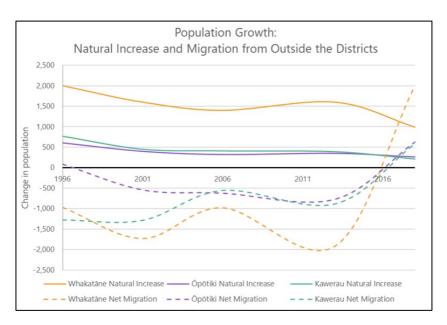


Figure 24 Natural increase and net migration by District (MRCagney, 2023)

3.5 More houses are needed

By 2053, a range of 1,150 to 8,200 households are likely to be required with the most likely (medium) demand being 5,461 (this will be rounded to 5,500 for ease of reporting).

Average household sizes (number of people per house) determine how many housing units are projected to be needed to provide for a given population. These apply not only to growth, but also to existing households. Average household sizes have slowly declined over time in the Eastern Bay and across New Zealand as the population grows older on average.

The current average household size across the sub-region is estimated at 2.7 people per household in Whakatāne and Kawerau, and around 2.9 in Ōpōtiki. Stats NZ has projected how this is expected to change in the future for each territorial authority. In 2042, household sizes are expected to decrease to between 2.5-2.6 across the sub-region. ¹⁹

¹⁹ Stats NZ, Statistical area 2 (SA2) household projections, 2018(base)-2043 retrieved 02/2024

Table 3: New households total demand projected

New households, total demand projected	Short ⁻	Гегт	Med Te	lium rm		Long	Term	
2022-2053 ²⁰	2022 (Base)	2026	2028	2033	2038	2043	2048	2053
Medium								
Whakatāne	0	790	1030	1607	2131	2605	3086	3439
Ōpōtiki	0	300	380	611	843	1065	1268	1400
Kawerau	0	200	240	355	426	516	582	622
Cumulative Total	0	1290	1650	2573	3399	4186	4935	5461

If Ōpōtiki grows as projected, with 2,600 more people over the next 30 years, it will need an additional 1,400 houses. However, considering factors, such as the increasing trend in building and resource consents, we anticipate that up to 2,300 more houses may be required within the same period. This demand far exceeds the currently available residential land, necessitating a large-scale solution for providing safe and affordable housing.

3.5.1 Housing stock needs to meet the needs of an older demographic, and be more affordable

The types of housing required in the Eastern Bay in the future will need to support a growing population and an ageing population.

Our population is ageing overall, with a youthful and growing Māori population proportion. Those aged 65+ years will make up 30% of the population by 2053. The Māori population currently make up just over half of the population and is expected to exceed 60% by 2053. Māori have a very different age profile compared to the general population. The average age of Māori is 26.3 years, with the largest cohort aged 14 years and younger. The largest cohort of non-Māori is aged 55-59 years. This means that the types of housing required in the Eastern Bay in the future will need to support a growing population and an ageing population. While the Māori population is expected to have an older population in the future, their young population is also expected to grow compared to currently.

²⁰ Note, these totals are more than from those in the MRCagney report (Appendix D) because they include new households formed from the reducing household size that are not attributable to growth.

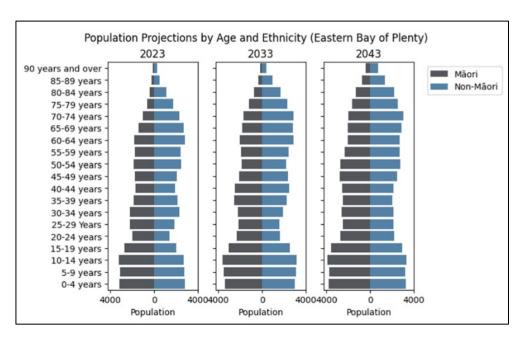


Figure 25: Population projections by age and ethnicity

3.5.2 Housing affordability in Eastern Bay needs to improve, having decreased faster than the national average.

We need to plan for more affordable housing, including providing supply to meet or exceed market demand for housing units and a wider range of typologies. Housing affordability has decreased significantly over the past decade. This is true for home buyers across the whole country, but especially in the Eastern Bay where prices have gone up more than average. In all areas of the Eastern Bay, but especially Kawerau, mortgage serviceability is the least affordable it has been in the last ten years.

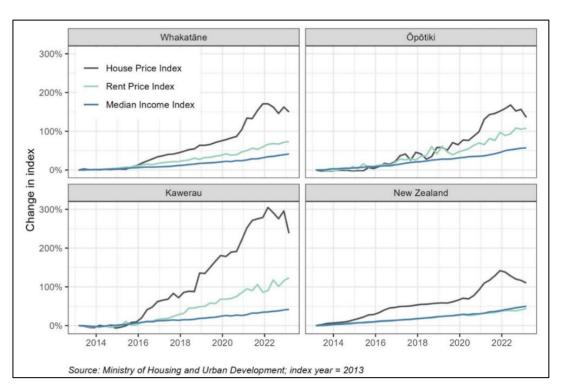


Figure 26: Housing affordability metrics in the Eastern Bay

3.5.3 Māori have different housing needs and experiences

The Māori population is younger than the non-Māori population and this is expected to continue to 2043. The Māori population is nearly 50% of the total population now and that is expected to remain true through to 2043. While the Māori population is expected to have an older population in the future, their young population is also expected to continue to grow. A recent survey²¹ of Māori in the Eastern Bay found that on average, Māori have very different housing experiences than the general population. The survey found that:

- Eastern Bay Māori homes are overcrowded and on average have two more people per household than the general New Zealand population.
- On average, 2.2 generations live within a Māori household
- Nearly half of all Māori in the Eastern Bay rent or board (43.2%)
- 30.3% of Whānau own their own home compared to 64.5% of the general population.
- 25.2% of Māori live with whānau, at the whānau homestead or on whānau land.
- 0.7% of Māori are in emergency housing.
- Māori are 13 times more likely to experience racism when trying to rent or buy a home.

Other research²² shows that Māori households spend about 20% of their expenditure on rent, compared to about 14% for the average household.

Due to the different age profile and cultural practices of Māori, the average household size for Māori families in the Eastern Bay means that many Māori households need larger houses or multiple houses near each other. Many rural and remote communities are predominantly Māori and based around whānau, hapū and marae. A recent survey of housing demands in the Whakatāne District, showed that 28% of the Māori population desired larger homes of 5 to 6 bedrooms²³.

²¹ TIROHANGA ORANGA O MATAATUA: Māori in the Eastern Bay of Plenty Covid-19 survey report by Melanie Cheung, 2020

²² Greenaway R (2022). Homelessness in the Whakatāne District – A Situational Overview.

²³ TIROHANGA ORANGA O MATAATUA: Māori in the Eastern Bay of Plenty Covid-19 survey report by Melanie Cheung, 2020

In summary, tangata whenua need affordable homes and rentals. They also want to be able to build papakainga on their own whenua, particularly near their marae. Papakainga would include homes, communal areas and in some cases, co-location of health and wellbeing, employment and/or education facilities. This is an issue that will require further detailed consideration through engagement with tangata whenua. It is important to recognise the potential contribution that papakainga can make to meeting future housing needs.

3.5.4 Projected housing typology trends by district

It is assumed that by 2053, around 1,000 units of the 5,500 medium household projected demand could be for attached building types. Where these can feasibly locate will need to be carefully considered in the context of natural hazards affecting Whakatāne and Ōpōtiki townships.

Table 4: Projected housing demand for attached types

Housing type	Whakatāne	Ōpōtiki	Kawerau			
Stand-alone detached		tinue to be standalone houses. Over time, there will be more attached housing and districts, but mostly in Whakatāne, as described below.				
Attached	Most new attached housing will be in Whakatāne.	Very few in the short term, but in the medium and long term, some attached housin be developed in Ōpōtiki and Kawerau.				
Apartment	Most apartments in the district will be within the Whakatāne township.					

3.5.5 Land required for housing purposes 2022-2053

The NPS-UD requires local authorities to provide development capacity that meets or exceeds demand and is reasonably expected to be realised. By 2053, the sub-region will need to supply around 400 ha of residential land to meet the medium projection, this could range from a low of 100 ha to a high of around 600 ha based on population growth and realised densities. Higher densities than 14 units per hectare would result in less land required.

Table 5: Projected housing land requirements

Total land required at 14 units per	Short T	erm	Medium Term Long Terr			g Term	erm	
hectare gross density	2022 (Base)	2026	2028	2033	2038	2043	2048	2053
Medium projection residential land required (hectares)								
Whakatāne	0	56	74	115	152	186	220	246
Ōpōtiki	0	21	27	44	60	76	91	100
Kawerau	0	14	17	25	30	37	42	44
Total	0	92	118	184	243	299	352	390

The assumption of 14 units per hectare depends entirely on the type of housing that is delivered and levels of intensification that can be achieved. The development of more intensive housing such as terraced housing, apartments or in-fill housing would significantly reduce the amount of land required.

If the Ōpōtiki district high plus demand figure of 2,300 households is the more accurate projected forecast, this could add another 65 ha of land requirements at 14 units per ha into the long-term timeframe for Ōpōtiki district. For the balance of this report, the base figure of 1400 demand units in Ōpōtiki district will be considered.

3.6 Comparison to residential land supply

Without changes to District Plans and infrastructure to enable more zoned and serviced land, Kawerau can meet demand through the medium term, Ōpōtiki will run out of residential land before 2033, and Whakatāne has a current shortfall.

Based on a review of the current vacant land supply, land zoned for residential development is insufficient. There is a pressing need to enable Hukutaia infrastructure to unlock growth of that area for Ōpōtiki and to identify a large greenfield growth area for demand in Whakatāne and Kawerau which is viewed as a combined demand given the proximity of the two places.

Table 6: Indicative housing supply compared to demand

Total household demand compared to	Short Term	Medium Term	Long Term	Totals	
estimated projected supply	2022- 2026	2027-2033	2034-2053		
Whakatāne					
Supply available	455	175	0	630	
Demand projected	790	817	1832	3439	
Sufficiency (housing units)	-335	-642	-1832	-2809	
Ōpōtiki					
Supply available	116	285	1943	2344	
Demand projected	300	311	789	1400	
Sufficiency (housing units)	-184	-26	1154	944	
Kawerau					
Supply available	37	80	0	117	
Demand projected	200	155	267	622	
Sufficiency (housing units)	-163	-75	-267	-505	

Kawerau – has a projected to provide land for an additional 505 household units by 2053

Short term: Kawerau currently has 37 sections available for development. Previous analysis²⁴ has identified that majority of the housing stock in Kawerau has reached its expected 50-year life span, and that purchasers would be accepting of larger homes on smaller sections through the market, providing for a further opportunity in infill intensification.

Medium term: 104 new lots are proposed on Roy Stoneham Park (which has been rezoned for residential development). This area will be developed over the short to medium term. Kāinga Ora is also redeveloping some existing lots as infill.

Long term: As a small, geographically constrained territorial authority, there is very limited expansion opportunity to supply additional greenfield residential development in Kawerau. Remaining areas of undeveloped residential-zoned land are challenging to develop. Infill, redevelopment of surplus land, and papakāinga present some opportunities over the medium-long term but are not quantified.

Ōpōtiki – dependent on the timing of Hukutaia infrastructure servicing, there may be a projected surplus of available household units by 2053, but there is an immediate shortfall that persists until Hukutaia becomes available to develop (which requires infrastructure funding).

Short term: A further 116 consented lots in Waiōtahe, which will be infrastructure ready, are available for development.

Medium term: Approximately 85 new lots through infill (Kāinga Ora) in the township, and approximately 200 papakāinga dwellings are planned.

Long term: Ōpōtiki District previously identified Hukutaia Growth Area (Hukutaia), which has the capacity to provide 1,943 sections for development. However, development of Hukutaia is subject to infrastructure provision which requires funding. Ōpōtiki supply calculations assume that Hukutaia will be fully zoned in the long term.

Whakatāne – has an overall projected need to provide land for an additional 2809 household units by 2053.

Short term: An assessment undertaken in 2022 shows that Whakatāne District currently has sufficient land zoned for residential development to provide for 345 dwellings.

Medium term: Whakatāne, assumes Plan Change 8 - Making room to grow enables 175 housing sites in the medium term.

²⁴ Veros Property Market Report for Kawerau 2022

Long term: There are no greenfield sources identified and infill / intensification options represent a minor component of supply in the long term and cannot be relied upon to meet housing demand.

Papakāinga, multi-generational housing and marae communities could be a solution to a large portion of housing needs

The development of pāpakainga and Māori led housing opportunities can offer quality housing solutions for multi-generational needs, while offering whānau the opportunity to move home to their whenua. This is particularly important in the Eastern Bay where a comparatively large portion of the population is Māori and there is interest by Māori living outside the Eastern Bay to return home if suitable housing and jobs were available. There are many examples of papakāinga developments by iwi trusts across the sub-region that are underway at present.

In 2023, Whakatāne District Council granted consent for 40 papakāinga dwellings and is processing an application for 57 more. The papakāinga developments which are more than one or two dwellings include:

- Ngāti Awa Social and Health services 15 Golf Links Road 15 dwellings
- Tühoe: 227 Rüātoki Valley Road 10 dwellings
- Tühoe: 267 Rüātoki Valley Road 10 dwellings
- Tühoe: 178a Ngahina Road 4 dwellings
- Kawarehe Trust: 30A Huna Road 57 dwellings (in process)
- Ngāti Manawa: 5 Miro Drive, Murupara 30 dwellings (in process)

Kawahere Trust own various land blocks in Whakatāne. The Trust's current housing project includes a block of land next to Julians Berry Farm (in proximity to Whakatāne town) for the development of 57 dwellings under the Papakāinga provisions in the Whakatāne District Plan. The land is included in the District Council's Plan Change 8 to rezone it to Residential. There are also longer-term aspirations to develop other land nearby along Golf Links Road, Huna Road and possibly near Taiwhakaea Marae at the northern end of Golf Links Road.

Whakatāne lwi Policy Hub comprising of the four iwi - Ngāti Awa, Ngāti Rangitihi, Ngāti Manawa and Ngāti Whare - are collectively working on preparing an iwi spatial plan, which will be an important input for the preparation of the Spatial Plan and may help to clarify scale and intent for iwi-led housing development.

For the lwi further east in Ōpōtiki District, there are ongoing conversations relating to the Eastern Bay Economic Development Strategy workstream and the recent Treaty settlements that have occurred. There are known interests in seeing more than 200 papakāinga units developed in the area.

4 Land required for business purposes

An additional 85 ha or more of business land is projected to be required across the sub-region by 2053

This section outlines the demand for business land in the sub-region (MRCagney report, Appendix D). The total number of employees in the Eastern Bay is projected to grow by 8% over the next 30 years, which equates to an average growth of 0.3% growth per year. This compares to the average growth in population of 0.6% per year. The reason the labour force growth is slower than population growth is because of the ageing population of the Eastern Bay, which makes the share of the working age population smaller over time.

*Assumptions for growth

Industry	Share of employment growth	Density of employees per hectare
Commerce	45%	80
Heavy industry	18%	20
Light industry	13%	35

Figure 27: Business land growth assumption

Average employment growth by district 2022 to 2053

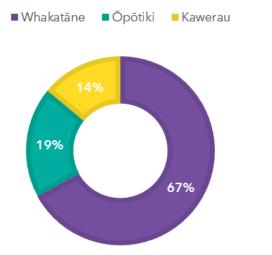
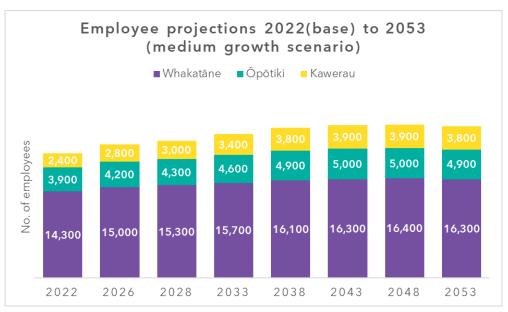


Figure 28: Average employment growth



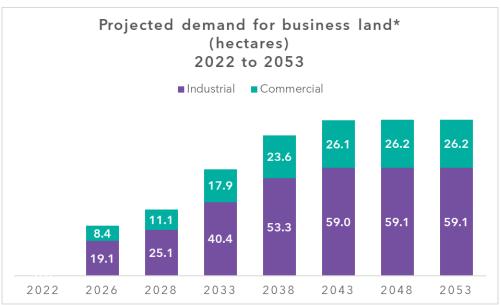


Figure 29: Employee projections

Figure 30: Projected demand for business land

4.1 Demand by district

Commercial land projections have not been separated by district because of how interdependent the economic markets for these three districts are. As a guide for the purposes of this report, it is assumed that the share of employment growth projected provides an indication of where demand for commercial growth may occur and, therefore, the following split forms the basis for decisions being made through this report.

Time period categories used for employee and business land projections

Year	Description
2022-2027	Short-term
2028-2037	Medium-term
2038-2053	Long-term

Figure 31: Time categories for business projections

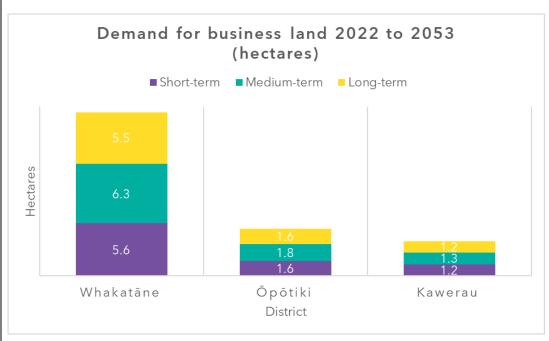


Figure 32: Demand for business land

4.2 Comparison to business land supply

Kawerau (3.5 ha projected demand for commercial land by 2050, large-scale industrial land capacity available)

Kawerau District is considered unlikely to require additional land for business purposes given the industrial land supply being enabled through Pūtauaki Industrial zone and land transfer from Whakatāne District and there are several vacant commercial premises within town, anecdotally. The projected 60 ha industrial sub-regional industrial demand can be accommodated by available land supply in Kawerau.

Kawerau's total land area is 23.58 km² and of this, land zoned for industrial purposes is 3.93 km². Kawerau District currently has 94.9 ha of undeveloped land zoned industrial, with 79.9 ha of this located within the new Pūtauaki Industrial Zone. There is no additional land zoned for future commercial development, although some redevelopment or intensification of existing commercial areas is expected to be possible. A boundary adjustment in 2024 allowed for additional land to be transferred from Whakatāne District to Kawerau District. This will add 287 ha to Kawerau District, including to expand Pūtauaki Industrial Park.

Whakatāne (up to 18 ha projected demand for commercial business land by 2050)

Given the sub-regional service centre role that Whakatāne township plays, it is likely that additional commercial land will be required in all time periods and there may be a shortfall in the township where most of the demand is likely to be situated.

A preliminary business land survey undertaken in 2022 showed 8 ha of light industrial land and 2 ha of commercial land available over the short and medium term (e.g., 2022-2032) throughout the district. This land is considered infrastructure ready due to the location of these sites being near existing infrastructure networks.

- 2 ha commercial zoned land, including 1 ha of available commercial sites within Whakatāne township, mainly through infill/redevelopment, and, therefore, considered less likely to be realised than comparable greenfield sites. There was a small amount of commercial zoned land identified in Tāneatua (0.2 ha), and a further 0.6 ha of commercial zoned land in Murupara.
- 9.3 ha industrial zoned land located close to Whakatāne township is zoned industrial purposes and is available for development.

With a projected forecast demand for around 18 ha of commercial business land and a potential 10 ha supply, there is likely need for up to 10 ha-18 ha more commercial business land. This figure assumes a portion of the identified 2 ha commercial land supply will not redevelop as it is less feasible, and that some of the industrial zoned land could become commercial zoned instead. This is because industrial land should primarily be encouraged to locate at Kawerau in the Pūtauaki Trust industrial development area, freeing up this land for commercial purposes.

A secondary investigation should be undertaken to determine where this demand could be met, to inform the upcoming district plan. This report and process has not undertaken a thorough assessment of where commercial land could take place nearby Whakatāne township or smaller settlement areas in the district.

Öpötiki (5 ha projected demand for business land by 2050, and a growing industrial land demand)

Currently, there is insufficient industrial zoned land available in Ōpōtiki District, and there are several options for where this can be accommodated south of the township and within the Hukutaia Development Area. There is sufficient land already available to meet commercial land needs within Ōpōtiki township through redevelopment or infill.

- More industrial land is needed because of demand expected from current investment into over 10,000 ha of water space planned for aquaculture north of Ōpōtiki township and Te Kaha, as well as the construction of the sea walls that support the marine farming and other commercial vessels.
- The expansion of the mussel processing factory for the sea farms can be accommodated within the industrial zoned land, but there is not sufficient land available for additional, new industrial activities within Ōpōtiki.

• There is undeveloped land adjoining the two existing industrial areas to the south of the township and north of Hukutaia Development Area, however, no land has been zoned. Iwi owned land intended for the mussel spat hatchery along the east coast has been identified but has not been zoned for these purposes.

Overall, there are some options for industrial land expansion but insufficient industrial zoned land available in Ōpōtiki District to meet the needs of businesses over the next 30 years. Ōpōtiki District Council is currently undertaking an investigation into the quantum or industrial land required in this district and where it could go is currently taking place.

5 Summary of residential and business land needs

In all time periods, projected demand for residential land exceeds planned supply across the sub-region. New greenfield development areas are required to supply around 3,300 households in the Whakatāne-Kawerau area by 2053, and unlocking the Hukutaia growth area in Ōpōtiki, with rezoning and infrastructure should be done as soon as possible to meet demand in that area, as well as providing an option for managed retreat from natural hazard risk prone areas.

Infill, papakāinga, and rural residential developments will contribute to the supply. The quantum and timing are unknown, and these sources should be monitored for volume over time and the findings of this report should be updated. Infill in existing townships is constrained by natural hazards. Large scale papakāinga and Māori-led housing should be supported once these opportunities become clearer, particularly when there is possibility of deferring the timing of other large-scale greenfield residential development areas.

There is a lack of commercial business zoned land across the three Districts. There is a likely shortfall of commercial land in Whakatāne township, of around 10 ha-18 ha, with the lower range assuming realisation of redevelopment of existing sites. Ōpōtiki and Kawerau districts are unlikely to need new commercial land supply, as demand is expected to be met within existing commercial zoned areas or through newly established growth areas like Hukutaia.

Industrial development across the sub-region is expected to focus at the Pūtauaki Industrial Zone in Kawerau, with smaller site-specific developments in other locations, related to local opportunities like aquaculture. A cluster of industrial development is likely needed south of Ōpōtiki township, in relation to growth of primary industries in that area.

Infill, Māori-led housing/papakāinga, and rural residential developments will add to the supply. In every time period, there is intent for infill, papakāinga, and rural residential housing to meet parts of the overall housing demand. While recognising that, based on past performance, infill cannot be relied upon to produce a large supply of housing in any area of the sub-region. Infill locations are also subject to natural hazards (less so in Kawerau) which reduces their overall future potential and future District Plans may curtail the scope of infill within Whakatāne and Ōpōtiki townships to reflect improved data on natural hazards.

Papakāinga is expected to be a meaningful contributor to overall housing supply. The quantum and timing are typically unknown to Councils, and as more detail is confirmed, the findings of this report may need to be reconsidered or adaptations made to the Spatial Plan. Papakāinga developments will need to be considered for how they could possibly defer the timing of other development areas identified in the spatial plan.

Rural residential development needs to be directed to defined appropriate locations that balance resilient access, natural hazard exposure, reverse sensitivity impacts, and retention of highly productive lands.

6 Scenarios and development options

This section describes the methodology and process for identifying and developing high-level scenarios and development options, focusing on the residential demand projections. It describes the results of scenario analysis undertaken to inform the preparation of the Spatial Plan.

6.1 Scenario methodology

Scenarios are used to:

- Explore how multiple drivers of change can come together to shape different futures and what this means.
- Help stakeholders envisage and engage with multiple futures.
- Identify a preferred scenario/s that can be used as a desired future/s that the policy can work towards achieving.

The method for developing the scenarios has generally followed the framework from the European Foresight Platform (EFP)²⁵ which states that for scenarios to be effective, they must be plausible, consistent and offer insights into the future. Factors that have been considered in the process of identifying and refining the scenarios are outlined in sections 2 and 3 of this report. The evaluation was informed by a range of information, data, and analysis, including:

- Spatial analysis of the natural and physical resources that constrain or shape growth.
- Drivers/challenges, like the population and employment.
- Planning frameworks established by the District Plans.
- A stocktake of current developments underway, committed or planned proposals.

²⁵ Scenario Method – European Foresight Platform (foresight-platform.eu)

- Spatial analysis of residential and business development capacity.
- Availability of Three Waters infrastructure, social infrastructure, transport, and electricity.

The scenarios explore different ways to respond to the drivers and challenges. A preferred scenario for the settlement pattern and development options for future implementation needs to be identified to provide for the projected growth, while responding to the local context and environmental constraints.

6.2 Scenario and Development Options Process

The process of developing scenarios, assessing the scenarios, defining development options, further analysing and testing the development options, and identifying a preferred scenario for the settlement pattern is set out in Figure 33. A summary of each step in the process is also provided below. The scenarios and development options were evaluated during a series of workshops by subject matter experts from across the council, lwi and other key stakeholders.

Spatial plan

Engagement

DoR - Final

Development options report -draft

1- Long List Scenarios to Test Strategic Fit

Sub-regional scenario options (x5) for strategic fit with Outcomes

Qualitative technical evaluation

2- Medium List of Development Options

List of individual development focus areas favourably considered in the Long List Scenarios

Further technical evaluation resulted in a short list / list of changes to the settlement pattern

3- Settlement Pattern Short List Development Options

(Emerging Preferred Recommendation)

A short list of recommended development focus areas suitable to accommodate development to meet needs of Eastern Bay

4- Three Strategic Scenarios

Strategic scenarios to test the emerging preferred, and to identify other considerations for the spatial plan

- 1. New greenfield areas
- 2. Un-serviced rural residential
- 3. Shift demand out of Eastern Bay

5- Preferred Scenario for the settlement pattern

Developed post-engagement

Changes to the emerging preferred recommendation

Key evidence base for the spatial plan and implementation actions

Figure 33: Scenario and development options process

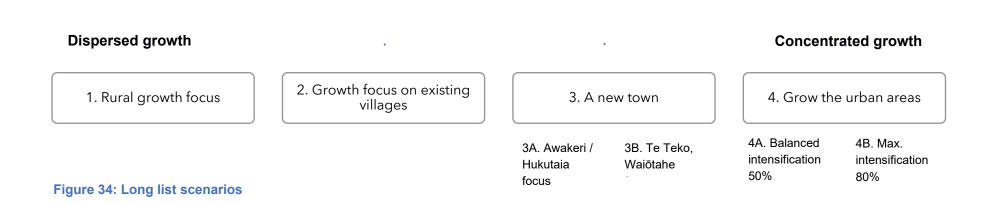
7 Step 1: Long list scenarios to test strategic fit

The development of the long list scenarios ensures a range of integrated factors are considered when making decisions on growth options. The evaluation resulted in a set of possible development options that were considered worthy of additional research.

The long list of scenarios was developed to test spatial configurations of land use changes in a technical process. Workshops were held at Kawerau, Whakatāne and Ōpōtiki District Councils with relevant technical staff in early 2023, followed by a sub-regional transport workshop, to develop and test the scenarios. Constraints mapping (e.g. natural hazards, highly productive land, and natural areas) was used to inform the development of scenarios by applying high level constraints and considering no-go areas. A consistent set of spatial parameters and assumptions were applied to the scenarios to ensure consistency.

The long list scenarios (described in figure 29) span a range of intensification and location options. The evaluation process assessed the land and infrastructure factors, and all scenarios were premised on a 30-year demand for around 4,000 dwelling units with the assumption that papakāinga will take place to meet demand as needed (this figure was later revised when new information became available).

To evaluate scenarios, decision making criteria were developed that reflect the goals from the Outcomes Framework. The evaluation process assessed the strengths and weaknesses of the scenarios and focused on the central corridor (as shown on Figure 8: Sub-Regional Development Corridors) to identify a medium list of plausible development options to take forward for additional review because they had a higher likelihood of meeting the Spatial Plan's goals. Appendix E provides a record of comments from the series workshops in 2023.



7.1 Design principles

The long list scenarios were developed by applying design principles to generate different ways to accommodate projected housing demand across the sub-region and were primarily focused on the urban central corridor as this is where most demand for urban growth and investment is expected. The principles were drawn from a variety of policy sources relevant to the Eastern Bay and each relate to a goal and enabler of the outcomes.

Long list scenario design - locational principles

- Avoid locations where natural hazard risk and effects of climate change cannot be practicably and equitably managed, like areas at risk
 of coastal erosion and cliff instability.
- Avoid / mitigate impact on areas to protect and conserve, like highly productive lands, natural areas, and culturally significant areas.
- First work with locations where there are existing settlements and infrastructure before contemplating new growth areas and infrastructure.

Long list scenario design – *performance* principles

- Enable certainty of a sufficient zoned and serviced land supply for residential and business purposes.
- Placemaking to support community wellbeing outcomes.
- Residential development and economic development are mutually supportive and should be considered at the same time.
- Enable and support lwi/hapū to use their land for their aspirations, to unlock opportunities that development can provide for.
- Consider the changing needs of housing types due to shifts in demographics.
- Define a settlement pattern that supports achievement of net zero greenhouse gas emissions by 2050 and can adapt to the impacts of climate change.

7.2 Long list evaluation factors

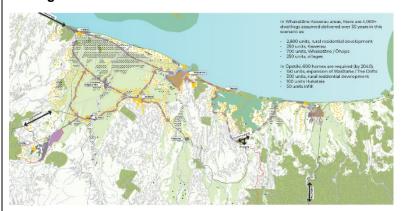
Long list assessment factors were defined based on the Goals and Enablers to focus on strategic fit with policy and overarching natural hazards and other constraints. They were intended as a coarse filter to net out poor performing concepts early, and to result in a medium list of plausible options to consider at a more detailed scale. The strategic fit criteria included the following:

- Well-functioning urban environment: access between housing, jobs, community services, natural spaces and open spaces.
- Public infrastructure: ability to connect to existing or planned three waters infrastructure, transport infrastructure and services.
- Financial: Capital costs of the scenario and operational costs of the scenario.
- Complexity: how straightforward is it to implement the scenario and are there unacceptable technical risks involved in implementing the scenario?
- Adaptability: to uncertainty and change (i.e., rate of demographic change, climate change, economy).

7.3 Long list scenario evaluation

Table 7: Long list scenario evaluation

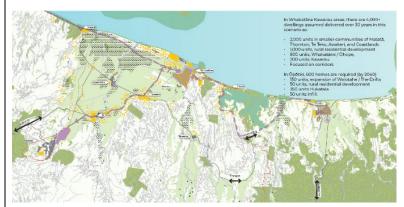
Rural growth focus scenario 1



To provide immediate housing capacity with low effect on public and wastewater requirements, rural residential development is championed across the sub-region.

- Development driven by demand; infrastructure can be provided as required without large upfront capital investments by Council.
- Provides choice of location for new homes.
- Attractive to rural landowners wishing to subdivide, supports economic development in rural areas.
- Mousing typology choice would not improve, growing mismatch with demographics.
- Dispersed growth makes it challenging to plan for the infrastructure needed.
- No efficiency and difficult to offset infrastructure costs through development charges.
- Increased maintenance and operational costs to maintain rural roading network.
- Likely to affect rural economy through reverse sensitivity to agricultural practices and loss of highly productive lands.
- ⊗ Challenging to meet climate change targets.

Growth focused on existing villages scenario 2



Growth focuses on existing villages around Awakeri and Te Teko, with expansion around Coastlands and in Hukutaia. Rural residential development focuses on the coastal areas and hillsides offering expansive views.

- Enables planned growth to be staged; trigger points can be identified for future upgrades.
- Can connect to existing or planned three waters infrastructure in Whakatāne and Ōpōtiki.
- Expands housing choice and allows small centres to develop more services.
- Growth clustered around existing corridors and settlements generates more economies of scale than Scenario 1.
- Adaptable but hard to plan for. Doesn't allow real efficiencies to be gained because growth takes place on many different fronts at the same time.
- Conflicts with natural hazards Te Teko, Edgecumbe, Ohope, and others.
- For Ōpōtiki, it does not provide an alternative sizeable development that can be developed as an alternative to the Town Centre if retreat is required. Reinforces commitment to status quo in Ōpōtiki Town Centre and current flood risk.

A new town (Awakeri, Hukutaia focus) scenario 3a



While there is some infill taking place, most development occurs as structure planned greenfield development areas. Most growth focuses around Awakeri in the west, and to the east in Ōpōtiki it spreads throughout Hukutaia in a developer led staged manner. There is little to no rural residential development under this scenario. It is assumed that papakāinga takes place as part of background growth, where there is demand and suitable land.

- Can plan growth and development can be staged. Low complexity and greater ability to recover costs from developers.
- Public transport likely to be cost effective and attractive for both Awakeri and Hukutaia.
- Good walking/cycling links between Hukutaia to Ōpōtiki and Awakeri / Whakatāne can be developed.
- Awakeri and Hukutaia are both resilient to natural hazard risks and development would be required to meet appropriate standards.
- Significant upfront investment required ahead of new growth areas.
- Risk of over-design and investment risk if growth does not materialise.
- Awakeri sits across two state highways which are key freight routes requiring careful planning for local connectivity.

A new town (Te Teko, Waiōtahe focus) scenario 3b



While there is some infill taking place, most development occurs as structure planned greenfield development areas. Most growth focuses on Te Teko in the west, and to the east in Ōpōtiki most of stage one of Hukutaia is developed but most change occurs at Waiōtahe / The Drifts, including along Paerata Ridge. There is little to no rural residential development under this scenario. Kawerau sees some greenfield growth in the southwest part of town. It is assumed that papakāinga takes place as part of background growth, where there is demand and suitable land.

- Te Teko already has some community infrastructure and can easily link to Kawerau.
- Lower maintenance and operations costs than other scenarios.
- Mode shift to public transport, and some walking/cycling viable.
- Significant upfront investment required ahead of new growth areas.

 Risk of over-design and investment risk if growth does not materialise.
- Expanded growth in Waiōtahe and Paerata challenging from an affordability perspective. Waiōtahe can't sufficiently support future growth.
- Waiōtahe does not deliver a resilient alternative to Ōpōtiki township.
- Te Teko township is protected from the Rangitāiki River by stopbanks that are designed and maintained to contain a 1% AEP event. There are remaining risks associated with stopbank failure and events that exceed the design capacity still exist due to the poor underlying ground conditions.

Grow the urban areas (balanced intensification 50%) scenario 4a



This scenario assumes that a balanced division of new housing takes place between infill and greenfield growth. In Whakatāne area, growth spreads towards Coastlands. In Ōhope there are greenfield growth areas south and enroute to Whakatāne. In Ōpōtiki, there is some growth around Waiōtahe / The Drifts, and rural residential developments into Paerata Ridge. Most growth in Kawerau takes place as greenfield development.

- Whakatāne and Kawerau can plan and upgrade infrastructure as required with a lower complexity approach than some other scenarios.
- Intensification will reduce vehicle kilometres travelled on average and reduce carbon emissions.
- Good local access to places to learn, play and work.
- Difficult to recover capital costs of improved infrastructure. Increased pressure on existing green spaces and community facilities.
- May not meet needs of growing businesses or landowners in eastern Ōpōtiki wishing to subdivide or provide accommodation.
- Unlikely to be feasible due to degree of changes entailed and prior limited uptake of infill / redevelopment.
- Kawerau greenfield development not a viable option for landownership pattern reasons.
- Compounds issues of accessibility to services for existing rural communities in Whakatāne. Risks disenfranchising the rural community.
- Challenging for Öpōtiki wastewater services in the township. Substantial unplanned upgrades would be needed.

Grow the urban areas (intensification 80%) scenario 4b



This scenario assumes that intensification and infill are highly successful, and there is only a small amount of greenfield expansion. In Kawerau, most infill takes place south and east of the town centre. Change in the urban nature of both Whakatāne and Ōhope is extensive. Similarly, in Ōpōtiki there is minor greenfield development around Waiōtahe and extensive infill in town, with some growth of early stages of Hukutaia.

- Can plan and upgrade Town Centre infrastructure as required.
- Maintenance and operation costs lower than other options.
- Public transport becomes more cost effective with partial cost recovery possible.
- Whakatāne large area of town unsuitable for intensification due to flooding risk. Will need new green spaces and facilities to meet demand. Increased stormwater management costs. Car mobility difficult during peak periods.
- Kawerau greenfield development not a viable option for landownership pattern reasons.
- Relies on private market to provide infill housing product at scale where this might not be economically feasible at scale.
- Or mobility difficult during peak periods in Opotiki/Whakatane, will become particularly difficult during busy holiday periods and may impact on Whakatane's attractiveness as a holiday destination.
- Compounds issues of accessibility to services for existing rural communities in WDC. Risks disenfranchising the rural community.

8 Step 2: Medium list of development options

The assessment of the long list scenarios is a defined list of place specific development options. The list of development options is a result of the consistently identified 'good ideas' in the long list scenarios. These provide a set of options for where development could go, which are more likely to be feasible.

A number of locations were assessed for suitability, shown in Figure 31, including:

- Land that could be rezoned for Residential in the future (Greenfields expansion of existing towns/villages).
- Existing zoned Residential land that could be earmarked for higher density living (Infill).
- Land that could be developed in rural locations (Rural residential).

This stage of the process has also included a high-level assessment of infrastructure considerations for the development options in each district and from a sub-regional perspective. Varying degrees of analysis have been undertaken for each option, depending on the information available which varied considerably between locations.

8.1 Medium list assessment factors

The 'Enablers' (described in section 1) have been translated into a set of assessment principles which have been used to differentiate between the development options and understand each options potential performance. These principles provide an analysis of the infrastructural, environmental, social, and cultural constraints to future housing. A development option that is appraised 'good' should have good alignment to the goals and enablers of the draft Outcomes Framework and meet technical considerations around constraints or infrastructure. Figure 35, 'Assessment principles for the medium list development options' explains the scope of the assessment undertaken to determine a rating for each area.

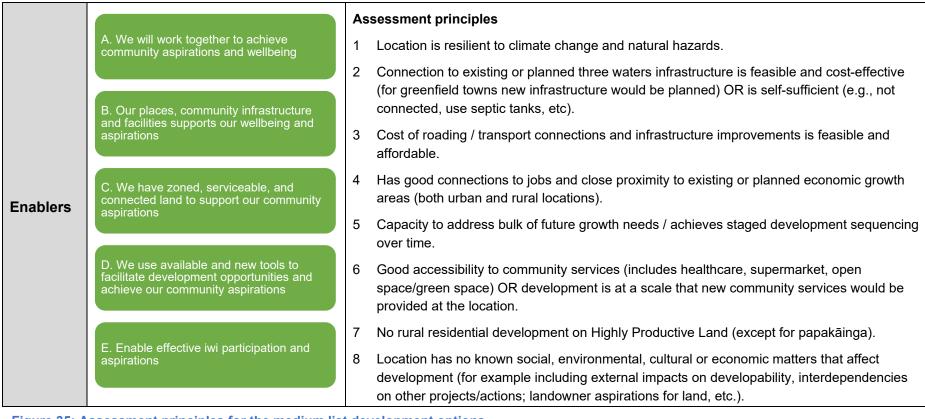


Figure 35: Assessment principles for the medium list development options

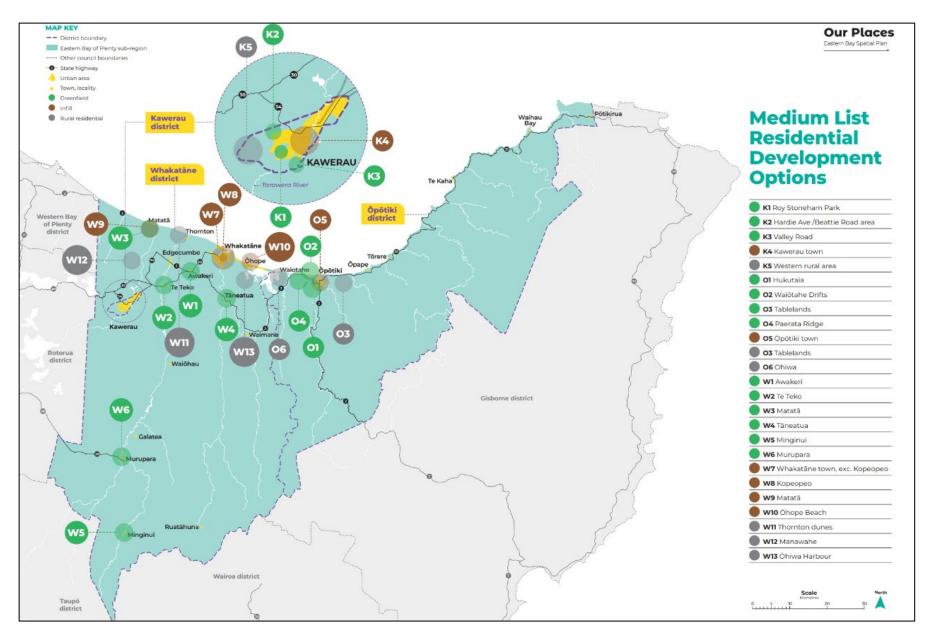


Figure 36: Medium list residential development options

8.2 Medium list – Infrastructure assessment considerations

There is a projected demand for appropriately located and zoned land to provide for the expansion of residential, commercial, and industrial land uses. For some areas, there will be a negligible effect on services and infrastructure. However, the cumulative provision of residential growth over the short, medium, and long term could result in some significant upgrades in the future. The specifics of what and when depend on the priority given to each area, the population growth of those areas, and the activities they support.

A qualitative assessment of the impact of the development options on types of infrastructure throughout the sub-region has been undertaken. The assessment of the options for education, three waters, transport and electricity infrastructure impacts are set out below. Appendix F includes further details.

8.2.1 Education

The proposed development options can largely be catered to by the current schooling network which has significant capacity, but is under pressure in parts. Proposed intensification via the 'new town' options could create issues in the schooling network, that would require property solutions depending on the proposed number of houses and housing typologies.

Table 8: Medium list education facilities considerations

Option area	Туре	Rating	Comments	
Awakeri	Greenfield	Fair	Significant development in Awakeri would put a currently nearly full schooling network under further significant pressure and would likely require a form of property response in the future as housing development came online.	
Hukutaia	Greenfield	Good	kutaia sits within the wider Ōpōtiki schooling network where there is capacity available, and the twork could be balanced using enrolment schemes and property solutions where needed.	
Te Teko	Greenfield	Good	Te Teko sits within the wider Whakatāne schooling network and more specifically is close enough to Edgecumbe where there is capacity currently, that again could be managed most likely with enrolment schemes and property solutions where needed.	
Waiōtahe	Greenfield	Fair	Waiōtahe is rural and sits in between the Whakatāne and Ōpōtiki networks. It is only serviced by one small rural primary school which would need further consideration if intensification was to move forwar here. There is capacity at the neighbouring schools in the wider catchment, but access and feasibility would largely depend on where exactly planned future development would go.	

8.2.2 Three Waters

CKL have been appointed to provide professional advice with respect to three waters services and infrastructure. CKL have undertaken a staged approach to investigation, analysis and evaluation of services and infrastructure. A Stage 1 report included the identification of constraints and implications/opportunities for three waters infrastructure relating to the Long-List scenarios. Stage 1 informed the process undertaken by the technical working group of short-listing the Long-List scenarios, to define a list of place specific development options (i.e. Medium List). A Stage 2 report has included an evaluation of the Medium List development options and this is included in Table 9: Medium list Three Waters considerations. The CKL Three Waters Infrastructure Stage 1 and Stage 2 reports are provided with Appendix G.

Table 9: Medium list Three Waters considerations

Option area	Туре	Rating	Three Waters Infrastructure Evaluation (subject to ongoing and further technical investigations)
Ōpōtiki District			
O1 Hukutaia	Greenfield	Good	Hukataia has several options which can adequately service planned growth and increase resilience.
			Hukataia currently has an adequate supply of water for low growth and further upgrades would support the staged planned growth and benefit Ōpōtiki township (i.e. resilience plus managed retreat). An additional water pipe river crossing to Hukutaia from Stoney Creek Road is being considered to improve water pressures in Hukutaia, Ōpōtiki and Waiotahe.
			Two options are being considered for wastewater. The first option includes a low-pressure system and bulk transfer line, to connect with existing infrastructure to convey to the existing wastewater treatment plant via existing pump stations and rising mains, which will require upgrading to cater for additional loading. Alternatively, a new wastewater treatment plant is being considered that will potentially cater for wastewater from Hukutaia and Waiotahe. This would add resilience, negate an additional river crossing and reduce burden on the existing wastewater treatment plant which offers resilience and contingency.
			The stormwater management system can expand with increasing downstream pond volumes for mitigation purposes. The Ōpōtiki Hukutaia Stormwater Concept design report provides an overview of treatment and attenuation requirements, together with location of upgrades and new infrastructure to guide and accommodate development.
O2 Waiōtahe / The Drifts	Greenfield	Poor	Waiōtahe / The Drifts has limited growth potential without upgrades to infrastructure. There are also limitations from flood/coastal inundation risk.
			Waiōtahe currently has water supplied from Ōpōtiki and is supplied to a reservoir for balancing demand/pressure. Pressure at the entrance to the reservoir is low, as is residual pressure for fire demands, so upgrading of the supply will be required to accommodate growth.
			The area is reticulated, and wastewater is pumped to Ōpōtiki for treatment. To accommodate any growth, one option is to continue to pump wastewater to Ōpōtiki via the existing main, however, upgrades would be required. Alternatively, if Hukutaia Wastewater Treatment Plant goes ahead, wastewater from Waiōtahe

Option area	Туре	Rating	Three Waters Infrastructure Evaluation (subject to ongoing and further technical investigations)
			could be pumped to Hukutaia for treatment, which will free up capacity at Ōpōtiki Wastewater Treatment Plant.
			The stormwater management system includes disposal to ground via a communal soakage park, which would need to be upgraded to accommodate any growth.
O4 Paerata	Greenfield	Poor	Paerata Ridge has limited growth potential without upgrades to infrastructure.
Ridge			Water supply is currently from bore water and reticulation is via a private scheme. There is a possibility of linking to the Ōpōtiki supply, but this is subject to cost investigations.
			Wastewater treatment and disposal is likely to stay on septic tanks, however, there is an option to pump wastewater to Waiōtahe for transfer to Ōpōtiki Wastewater Treatment Plant subject to further cost consideration. If the Hukutaia Wastewater Treatment Plant goes ahead, that could enable reticulating and pumping sewage to the new Hukutaia Wastewater Treatment Plant.
			Stormwater management: The elevation for this area can provide good conveyance opportunities, treatment, and attenuation for stormwater to be provided in lower areas.
O5 Ōpōtiki town	Infill	Fair	Infill development in Ōpōtiki township will need a controlled approach, given the exposure to flood risk in some parts of the township and upgrading of the wastewater treatment plant.
			Water supply and storage would be adequate to cater for infill development, potentially requiring some upgrades which could be catered for in the renewals budget.
			Upgrades are required for the Ōpōtiki Wastewater Treatment Plant, pump stations and reticulation to cater for growth in Hukutaia and Waiotahe, including installation of a new river crossing. However, establishing a new wastewater treatment plant in Hukutaia and diversion of Hukutaia and Waiotahe wastewater away from the existing wastewater treatment plant, would free up capacity and extend the life of the existing assets.
			Key flood resilience projects are underway which include the following:
			Rural-Urban flood protection with southern limit of Duke Street.
			Transfer of flood flows from Otara to Waioeka River floodplain.
			Duke Street Pump Station.
			Tarawa Creek Pump Station upgrade.
			The Bay of Plenty Regional Council Waioeka/Otara River model is currently being updated to provide background for the overall 100-year river strategy.
O4 Paerata Ridge	Rural residential	Fair	Paerata Ridge has limited rural growth potential without upgrades to infrastructure. The area is generally self-sufficient, with private bore water, reticulation/water harvesting and septic tanks. There is an option to

Option area Type Rating		Rating	Three Waters Infrastructure Evaluation (subject to ongoing and further technical investigations)
			pump wastewater to Waiotahe for transfer to Ōpōtiki Wastewater Treatment Plant but the economics of upgrading infrastructure need further consideration.
			Stormwater management would need a catchment wide approach to achieve the best practicable outcomes. Discharge will need on-site management without affecting downstream properties.
O3 Tablelands	Rural residential	Fair	Tablelands is generally self-sufficient with onsite septic wastewater and stormwater management. Water supply would continue to be fed from existing sources i.e. rain tanks (harvesting).
O6 Ohiwa	Rural residential	Fair	Ōhiwa is generally self-sufficient with onsite septic wastewater and stormwater management. Water supply would continue to be fed from existing sources i.e. rain tanks (harvesting).
Whakatāne Dist	rict	•	
W1 Awakeri	Greenfield	Fair	Growth at Awakeri would require consideration of options to address water and wastewater constraints, alongside consideration of stormwater management options for managing the effects of urban development in this rural area.
			Awakeri has water supply and storage constraints (low elevation and low capacity) however, there is the option to link to a proposed primary trunk main from Otumahi water reservoir which will improve pressure and flow and add resilience.
			Wastewater reticulation, treatment and disposal would need further consideration. There are two options which include either reticulating and pumping wastewater to the upgraded treatment plant in Whakatāne (requiring a new pipeline and pump station) or developing a new wastewater treatment plant in Awakeri. Further investigations of costs and land availability would be required.
			A catchment wide stormwater management plan would provide comprehensive guidance as to the best practicable options for managing the effects of urban development in this area.
W4 Tāneatua	Greenfield	Poor	Tāneatua is within a wider area under investigation for flood hazard risk and growth in this location is limited to a small amount of greenfield (to the north of the town) and infill development.
			The water supply (bore) and wastewater treatment (pond) would need upgrading as part of the renewals programme.
			Fluvial river flooding considerations could limit stormwater management options.
W3 Matatā	Greenfield	Fair	Matatā is subjected to the effects of climate change including coastal inundation, however, there is growth potential to the eastern area of Matatā.
			Water supply from Jennings Spring is currently adequate to support growth in the short to medium term and a future connection to the Braemar water supply would support additional growth. Further investigation is required to assess storage requirements for long-term growth.

Option area	Туре	Rating	Three Waters Infrastructure Evaluation (subject to ongoing and further technical investigations)
			Matatā is on septic tanks and the growth potential is largely dependent on the ability to treat and dispose of wastewater. An option for reticulation, treatment, and disposal of wastewater for short term growth is being planned. For additional capacity in the east of Matatā to be realized, further investigation is needed of the availability of land for an extensive land disposal area.
			The growth in the eastern area would benefit from a catchment wide approach to stormwater management which also integrates with urban planning and green infrastructure for resilient outcomes.
W2 Te Teko	Greenfield	Fair	Growth at Te Teko would require consideration of options to address water and wastewater constraints, alongside consideration of stormwater management options for managing the effects of urban development in this rural area. Residential growth relies on engineered stormwater management options to be sympathetic to the Rangitaiki drainage scheme outcomes.
			Water supply is from a bore, water treatment plant and reservoir and is also linked to the Plains scheme i.e. sourced from Johnson or Otumahi systems. Growth at Te Teko would require reticulation and upgrades to the pipeline from Otumahi reservoir to Te Teko and an additional storage reservoir (which is currently planned).
			Te Teko is currently on septic tanks and would require a new wastewater reticulation, treatment plant and disposal area. An alternative option would be to pump wastewater to Kawerau Wastewater Treatment Plan which has capacity.
			A catchment wide Stormwater Management Plan would determine the best practicable options for managing the effects of urban growth and integration with the current residential development. This stormwater management plan will provide comprehensive guidance for development.
W5 Minginui	Greenfield	Good	Minginui has no Council reticulated Three Waters infrastructure. There is an aspiration for an additional 50 dwellings which could be accommodated with the existing infrastructure.
			The bore water supply scheme is managed by Ngāti Whare Trust and is covered by renewal programmes. Similarly with the wastewater treatment system.
W6 Murupara	Greenfield	Fair	There is an aspiration to develop an additional 300 houses at Murupara and existing sections are large providing for infill options.
			Water supply is sourced from a shallow spring, however, with no treatment plant. Upgrades would be needed to accommodate additional dwellings.
			The wastewater treatment (pond) consent needs renewal (2026) and upgrading to cater for any potential growth.
			The area would benefit from a catchment wide Stormwater Management Plan, to determine the best practicable options for managing the effects of urban growth and integration with the current residential development.

Option area	Туре	Rating	Three Waters Infrastructure Evaluation (subject to ongoing and further technical investigations)
W7 Whakatāne town, excluding	Infill	Fair	Whakatāne township, excluding Kopeopeo, has limited infill growth potential due to higher risk profiles to natural hazards.
Kopeopeo			Water supply and storage would be adequate to support low/short term growth, however, investigations are needed to connect to a more resilient supply. The option to expand the wastewater treatment plant in Whakatāne is being considered. This would potentially accept wastewater from Awakeri for ocean discharge.
			Improving resilience of the stormwater system is currently underway, with pump stations being upgraded or assessed for increased design capacity given the climate change risks. Whakatāne River stopbanks are also being raised. The area would benefit from catchment wide modelling which includes climate change considerations to guide planning.
W8 Kopeopeo	Infill	Good	There is potential to accommodate infill development at Kopeopeo because the area does not have the same level of natural hazard risk compared to the rest of the Whakatāne township.
			Water supply and storage would be adequate to support low/short term growth, however, investigations are needed to connect to a more resilient supply such as the proposed primary and secondary mains from Paul Road or Braemar Road.
			The option to expand the wastewater treatment plant in Whakatāne is being considered.
W10 Ōhope Beach	Infill	Fair	Ōhope Beach has limited growth potential and is subject to climate change risks. Already enabled capacity in the district plan allows for some infill and is managed on a case-by-case basis.
			Water supply is currently from a connection from Valley Road reservoirs and Bridger Glade pumping station. A primary trunk main would provide additional supply resilience to reservoirs.
			Wastewater can continue to be pumped to the Whakatāne Wastewater Treatment Plant.
			Resilience of the stormwater management system is impacted by climate change risks. Analysis of the capacity of pipes would be required to support any future connections.
W9 Matatā	Infill	Good	Matatā has some capacity for infill development in the short term before upgrades to infrastructure would be required in the long-term.
			Matatā's water supply is adequate for short term growth with minimal upgrades required. More substantial growth will require connection to an additional source (Braemar) for increased resilience. Water losses are high and a water loss reduction plan is in progress.
			Matatā is currently on septic tanks and could remain as such for infill development in the short term. In the longer-term wastewater reticulation and local treatment/ land disposal is being considered.
			Stormwater management is subject to the effects of climate change including coastal inundation, sea level rise and groundwater interaction. Stormwater is discharged through to the current stormwater system

Option area	Туре	Rating	Three Waters Infrastructure Evaluation (subject to ongoing and further technical investigations)			
			which includes wetlands. Further analysis would be required of pipe and wetland capacity to support any future connections.			
W11 Thornton dunes	Rural residential	Fair	Thornton Dunes has limited growth potential due to current infrastructure capacity. The current water supply is limited by the supply line from the Plains and limited growth could be accommodated. However, the option to increase the pipe size and storage to accommodate supply for any future growth could be considered. The area is currently on septic tanks for wastewater disposal. Significant future growth would require a localised treatment plant and disposal area. Stormwater management would need to have a catchment wide approach to achieve best practicable outcomes. Any further growth would require on-site management of stormwater without effecting downstream properties, and consideration of the effects of discharge to/through the Rangitaiki Drainage scheme.			
W12 Manawahe	Rural residential	Fair	Manawahe is generally self-sufficient. Water supply would continue to be provided from existing sources i.e. rain tanks. Wastewater disposal would continue to be in septic tanks. Stormwater management would need to have a catchment wide approach to achieve best practicable outcomes. Any further growth would require on-site management of stormwater without effecting downstream properties.			
W13 Ohiwa Harbour	Rural residential	Fair	Ohiwa is generally self-sufficient. Water supply would continue to be fed from existing sources i.e. rain tanks. Wastewater disposal would continue to be in septic tanks. Stormwater management is subject to the effects of climate change including coastal inundation, sea level rise and groundwater interaction.			
Kawerau District	:					
K1 Roy Stoneham Park Greenfield Good		Good	Kawerau has adequate infrastructure capacity to accommodate further growth at Roy Stoneham Park. The water supply source and the volume of storage is adequate to accommodate growth and there is a sufficient contingency supply available. However, this is dependent on renewal of water take consents, which in turn may require upgrades to infrastructure to ensure compliance with drinking water standard and additional storage. There is sufficient capacity at the existing wastewater treatment plant and disposal area. There is an of to extend the disposal area (pumice fields) if required. There is adequate stormwater capacity for increased residential development.			

Option area	Туре	Rating	Three Waters Infrastructure Evaluation (subject to ongoing and further technical investigations)
K2 Hardie/Beattie	Greenfield	Good	Kawerau has adequate infrastructure capacity to accommodate further growth at Hardie/Beattie Avenue area.
Ave area			Water supply source and volume of storage is adequate to accommodate growth and there is a sufficient contingency supply available. However, this is dependent on renewal of water take consents, which in turn may require upgrades to infrastructure to ensure compliance with drinking water standards and additional storage.
			There is sufficient capacity at the existing wastewater treatment plant and disposal area. There is an option to extend the disposal area (pumice fields) if required.
			Groundwater issues have been identified in this area and development would need to address this issue in the stormwater design.
K3 Valley Road	Greenfield	Good	The residential zoned area on Valley Road has topographical challenges, although, as above, water source and supply capacity are adequate to support growth. Wastewater treatment can be upsized for local growth and there is existing capacity within the township for stormwater management.
			It is noted that the steep topography of this area would be difficult to develop. This area also contains various archeological sites which are identified and protected by the Kawerau District Plan.
K4 Kawerau	Infill	Good	Kawerau has adequate infrastructure capacity to accommodate further growth.
town			Water supply source and volume of storage is adequate to accommodate growth and there is a sufficient contingency supply available. However, this is dependent on renewal of water take consents, which in turn may require upgrades to infrastructure, to ensure compliance with drinking water standards and additional storage.
			There is sufficient capacity at the existing wastewater treatment plant and disposal area. There is an option to extend the disposal area (pumice fields) if/when required.
			Stormwater design for infill development would need to be cognisant of the existing pipe capacity.
K5 Western	Rural	Fair	The western rural area of Kawerau District is generally self-sufficient.
rural area	residential	esidential	Rural residential water supply would continue to be provided from existing sources i.e. rain tanks.
			Stormwater management to have a catchment wide approach to achieve best practicable outcomes. Stormwater discharge would need on-site management without effecting downstream properties.

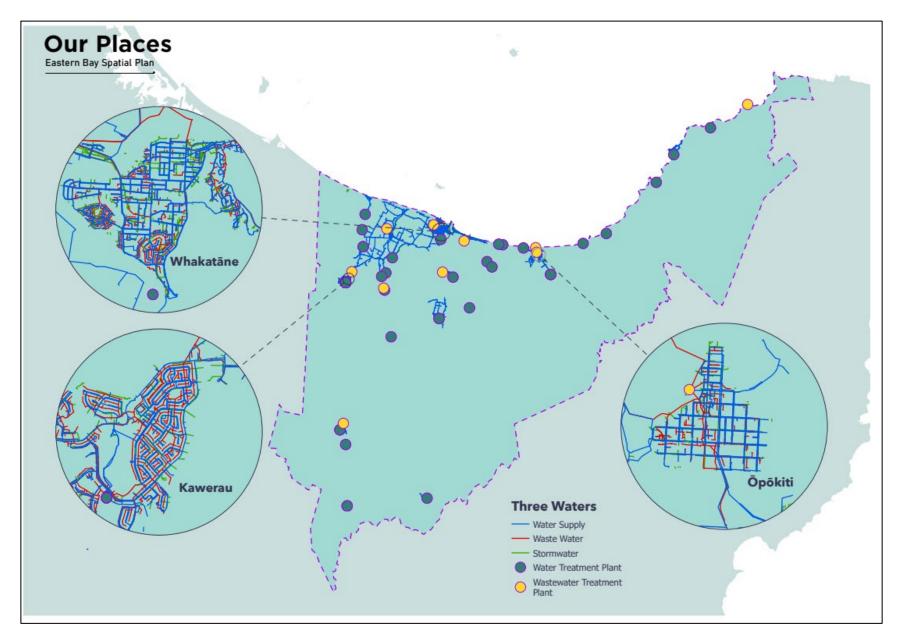


Figure 37: Three Waters infrastructure

8.2.2.1 Transport

A well-functioning Transport system is a key enabler for future growth, providing access to social, recreational, housing and economic opportunities throughout the Eastern Bay. Each development option will impact how we move through the Eastern Bay with significant implications for the resilience, safety, sustainability, and economic development of communities.

8.2.2.2 Transport summary

The impacts on the transport network under each of the development options can be managed through the right investment in infrastructure but there are pros and cons, and differing costs associated with each. Growth in and around existing centres will reduce carbon emissions but without investment in sustainable transport are likely to result in additional congestion on local networks and urban safety issues.

Development of satellite communities will, if not supported by local services and employment, result in more travel and carbon emissions whilst putting people at risk if existing and anticipated safety issues on the network are not addressed. Rural growth is incredibly hard to plan for and would require a more proactive investment strategy and ultimately result in higher capital and maintenance costs or a reduced level of service for rural residents.

Regardless of the development option, significant investment in resilience for intra and inter regional trips will be required with all state highways increasingly prone to closures and with limited detour routes available. The current resilience of the East Coast Main Trunk Line is also questionable and further investigation and investment in this key rail line is necessary. Future congestion and resilience issues into Whakatāne township will likely need to be addressed through investment in a second river crossing, but is unlikely to be affordable without significant Government support. Addressing these key challenges will provide confidence for export-led businesses to invest in the subregion and support employment and economic growth for the Eastern Bay.

Table 10: Medium list transport considerations

Option area	Туре	Rating	Transport comments
Kawerau District			
K1 Roy Stoneham Park	Greenfield	Good	Many trips able to be contained within local area for employment, services and
K2 Hardie/Beattie Ave area	Greenfield	d Good travel distances for many trips enable walking ar	education reducing need for travel and in an area with good safety record. Short travel distances for many trips enable walking and cycling while a larger population
K3 Valley Road	Greenfield	Good	base makes public transport locally and to other centres more viable.
K4 Kawerau town Infill Good (Matatā straits) and SH 30 (F		Reliable journeys for freight by road and rail within the EBOP. State Highway 2 (Matatā straits) and SH 30 (Rotoma) present ongoing reliability issues due to susceptibility to natural hazards and limited alternative routes.	
			Potential improvements required:
			- Safety upgrades intersection SH 30/SH 34

Option area	Туре	Rating	Transport comments
			 Increased traffic through Te Teko and Awakeri may require investment in crossing facilities to reduce severance effects.
			- State highway reliability improvements and/or upgraded detour routes.
K5 Western rural area	Rural residential	Fair	As per above however, opportunity for walking/cycling and PT are diminished, although trips will still be relatively short and within cycling distance to Kawerau.
Ōpōtiki District			
O1 Hukutaia	Greenfield	Good	Many trips able to be contained within local area for employment, services and
O2 Waiōtahe Drifts	Greenfield	Fair	education reducing need for travel. Local safety issues at key state highway intersections (particularly for Waiotahi) would need to be addressed as would
O4 Paerata Ridge	Greenfield	Fair	severance issues through Ōpōtiki township itself. Short travel distances for many trips enable walking and cycling, while a larger population base makes public
O5 Ōpōtiki town	Infill	Good	transport locally and to other centres more viable.
			Likely to be an increase in local flooding issues in Ōpōtiki with existing problem exacerbated by additional infill housing and climate change.
O4 Paerata Ridge	Rural residential	Good	As per above however, public transport viability diminished due to lower population density.
O3 Tablelands	Greenfield	Fair	Too far from Ōpōtiki to support active transport modes and not a large enough
O3 Tablelands	Rural residential	Fair	population base to support local services (education, shops etc) resulting in increased vehicle traffic. Intersections on to state highway and Wainui Road would need to be addressed for safety and capacity while increased traffic will severance
O6 Ohiwa	Rural residential	Fair	issues in Ōpōtiki.
Whakatāne District			
W1 Awakeri	Greenfield	Fair	Dependent on scale of development, many trips able to be contained within local
W4 Tāneatua	Greenfield	Fair	area for employment, services and education reducing need for travel but likely to be dependent on Whakatāne for key services. Local safety issues at key SH 2 intersections would need to be addressed as would severance issues through townships.
			Close enough to Whakatāne support cycling trips with appropriate infrastructure for a large range of trips and opportunities to provide increased recreational opportunities. If scale of development is sufficient, may support good public transport links other centres.

Option area	Туре	Rating	Transport comments
W3 Matatā	Greenfield	Fair	Dependent on scale of development, many trips able to be contained within local
W2 Te Teko	Greenfield	Fair	area for employment, services and education reducing need for travel. Local safety issues at key SH 2 intersections would need to be addressed as would severance issues through townships.
			If scale of development is sufficient may support good public transport links other centres.
W5 Minginui	Greenfield	Fair	Will require a significant increase in scale in order to support local services, otherwise there will be a significant increase in transport demand to Murupara. Limited options for accessible transport options. Resilience of Natures Road may also be an issue.
W6 Murupara	Greenfield	Good	Some local services already exist and increasing population and jobs will enable these to expand and reducing the need for travel out of the centre. Additional population also improves the viability of existing public transport service to Rotorua. Reliable road connections to the north and west, and rail to the north, ensure reliable transport connections for people and freight.
			No significant safety or capacity issues.
W7 Whakatāne town, excluding Kopeopeo	Infill	Good	Most trips able to be contained within local area for employment, services and education, reducing need for travel. Short travel distances for many trips enable
W8 Kopeopeo	Infill	Good	walking and cycling, while a larger population base makes public transport locally and to other centres more viable.
W10 Ohope Beach	Infill	Good	Local network capacity on arterials and across Whakatāne Bridge likely to become an issue without significant uptake in walking and cycling.
			Whakatāne bridge likely to be a significant resilience issue, in particular, given this carries lifeline services, gas, telecommunications and electricity as well as the main transport task. Significant investment required.
			Potential improvements required:
			- Arterial capacity and safety improvements
			- Second river crossing
			 Investment in walking and cycling infrastructure within Whakatāne and to other centres where viable (Awakeri, Tāneatua)
W9 Matatā	Infill	Fair	Increase in transport demand unlikely to be significant enough to warrant major investment. May require some additional facilities to improve safety in local areas.

Option area	Туре	Rating	Transport comments	
W11 Thornton dunes	Rural residential	Fair	Thornton Road is highly susceptible to inundation, sea level rise, and localised flooding as a result of climate change and presents a significant resilience issue for development on this corridor. Too far from main centres to support active transport modes and not a large enough population base to support public transport services. Thornton Road has areas with high-crash rates that will be exasperated by growth in this corridor.	
W12 Manawahe	Rural residential	Fair	enough population base to support public transport services. Some roads no	
W13 Ohiwa Harbour	Rural residential	Fair	designed to cope with increased traffic (particularly heavy vehicles) and additional development may require a significant increase investment to maintain safety reliability to an acceptable level of service.	

8.2.3 Whakatāne and Pekatahi bridges

Whakatāne Bridge - Transport and Utility Services

The Whakatāne Bridge serves as a vital transportation artery into the Whakatāne township, providing essential utilities such as water, telecommunications, gas, and power to residents and businesses. Despite its significance, the bridge has limited capacity for traffic, is susceptible to natural hazards, and lacks alternative routes for utility connections or transportation. These challenges are likely to impact the township's growth and quality of life over time. As the Eastern Bay continues to expand, so too will travel demands. Preliminary modelling predicts a 27%-36% increase in vehicle trips during the AM peak by 2048, resulting in increasing delays during peak periods.

While land use management and various interventions can somewhat alleviate the expected demand, these measures alone are insufficient to maintain acceptable service levels long-term. A major issue lies with the two primary roads connected to the bridge—Landing Road and Hinemoa Street—which experience congestion during busy times, thus impeding traffic flow. Expanding these roads is both costly and challenging and likely to create severance issues whilst transferring congestion problems elsewhere in the network.

Resiliency remains another concern. According to the state highway resilience framework, the Whakatāne Bridge faces an "extreme disruption state" from tsunami hazards and a high seismic risk from earthquakes (events that are low frequency but have severe consequences). While these threats are significant, their infrequency means they might not manifest within many lifetimes. The bridge's vulnerability to flooding from the Whakatāne River, however, poses a more immediate risk, with potentially damaging events occurring once every 100 years or less. Similar bridges have been severely impacted by flooding in recent years.

Plans are underway to further investigate a solution to these constraints and risks. The Bay of Plenty Regional Land Transport Plan 2024-2034 identified investigation into an additional Whakatāne River crossing as the most important transport project in the Eastern Bay.

State Highway 2, Pekatahi Bridge, Whakatāne

Pekatahi Bridge, located on SH 2 between Awakeri and Tāneatua, is a vital freight link for Gisborne, Ōpōtiki, and Tauranga. This single-lane, signal-controlled bridge over the Whakatāne River is nearing the end of its lifespan. Deck replacement work was done in 2016/17, requiring a three-month closure that added 25 km to journeys and increased heavy traffic near Whakatāne schools, causing significant congestion. The bridge frequently closes for maintenance or accidents, always necessitating full route closures due to its single lane. These regular disruptions affect time-sensitive freight like kiwifruit, dairy, and aquaculture, and heighten road network vulnerability. As growth happens, particularly east of the Whakatāne River in areas like Tāneatua, these issues will worsen. Bridge replacement is expected in the next decade.

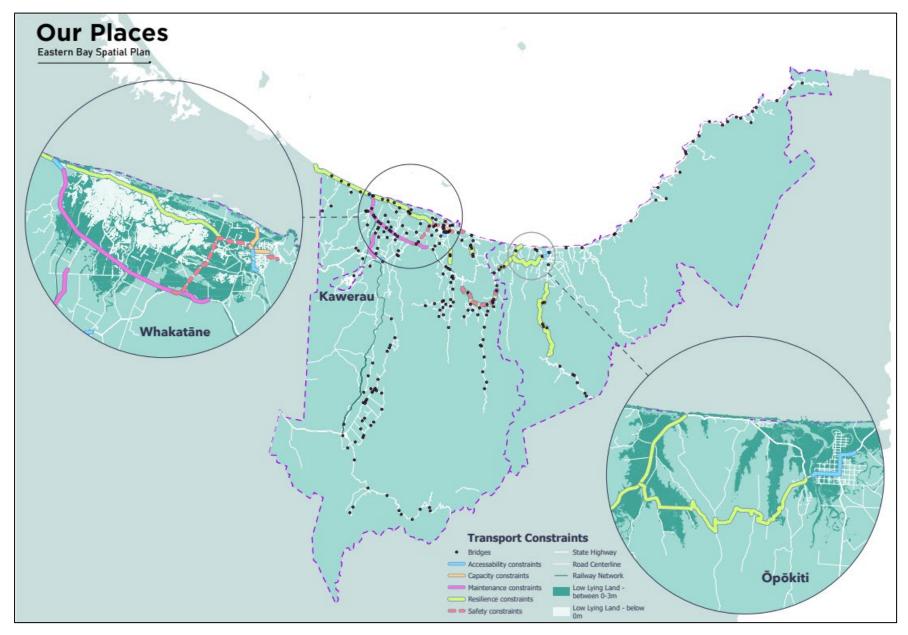


Figure 38: Transport constraints

8.2.4 Energy networks

The Eastern Bay has both large and varied industries that require a large amount of energy resource and electricity infrastructure, including manufacturing, commercial, forestry, horticulture and aquaculture. The region generates electricity energy through both hydro and geothermal resources.

National and regional priorities are developing and facilitating a more reliable security of electricity supply, reducing reliance on non-renewable energy, greater use and development of renewable energy sources, including small and community-scale electricity generation and using energy more efficiently and conservatively. The National Policy Statement (NPS) on renewable electricity generation recognises the national significance of renewable electricity generation and promotes the development, upgrade, maintenance and operation of new and existing generation, so by 2025, 90% of New Zealand's electricity will come from renewable sources.

The Eastern Bay is unique in the geothermal and hydro resource that are utilised for energy production. An important resource to the Eastern Bay is the Kawerau Geothermal System which forms part of the Taupō Volcanic Zone and extends over an area of approximately 35 km² across Kawerau and Whakatāne districts. The land over the Kawerau Geothermal System is used for urban, industrial and rural (mainly pastoral farming) purposes. Northeast of the Kawerau township is a large industrial area currently including the Norske Skog Tasman Mill and Oji Fibre Solutions (pulp and paper production), Asaleo (manufacture of personal hygiene products), and Sequal Lumber (timber drying), all of which are supplied geothermal energy to utilise the heat directly. Other surface land uses include the infrastructure associated with geothermal development, wells, pipelines and geothermal power stations.²⁶

With an increased demand in energy through a growing economy and population, the spatial plan will need to consider the location and functional constraints associated with the development, operation and maintenance of electricity associated infrastructure. The Bay of Plenty region and the wider New Zealand electricity generation transmission and distribution network, is at risk from supply disruptions and energy shortages. This can impact on communities' ability to provide for their social, economic, and cultural wellbeing. ²⁷ An example of networks at risk is the resiliency of the Edgecumbe sub-station. Transpower has identified that the Edgecumbe substation is a vulnerable asset due to its critical service to local power networks and its locational flood risk which requires essential resilience works.²⁸

This report recognises that this section is still a work in progress, and that we need to work closely with our energy provider stakeholders.

²⁶ Kawerau Geothermal System Management Plan 2018.

²⁷ Bay of Plenty Regional Policy Statement.

²⁸ Transpower article on substations requiring resilience work, March 2023.

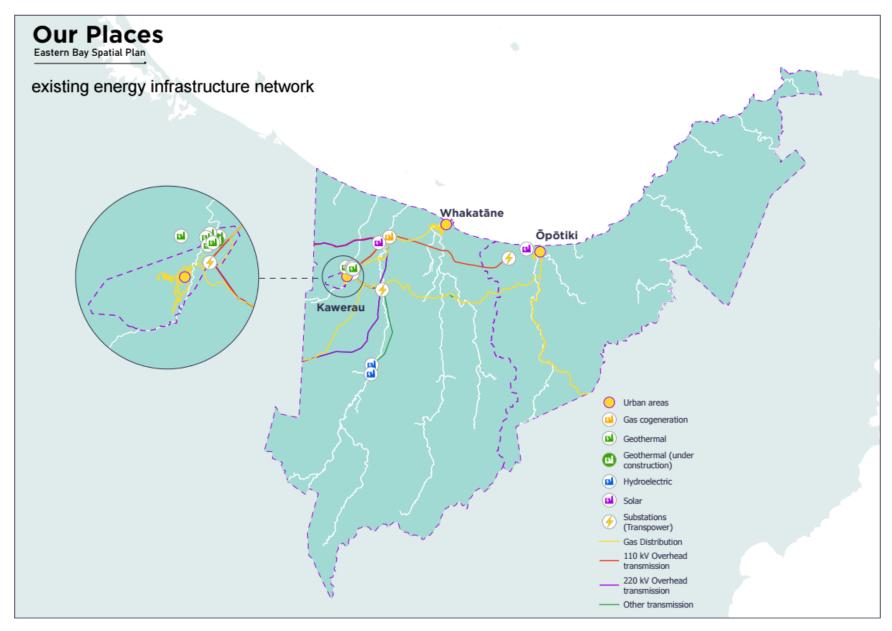


Figure 39: Existing Energy Infrastructure Network

8.3 Medium List - Summary Evaluation

This section outlines the results of the summary analysis for each of the identified medium list residential development. A series of workshops were held with Council technical staff to qualitatively assess the likely performance of each development option considering the infrastructure information available.

Table 11: Development Option Assessment Categories

Suitable for further investigation and planning (or already in development) and no apparent major constraints	
Suitable for further investigations and planning, subject to site conditions that could affect feasibility	
Poor performance likely due to strategic factors, do not consider further	
Critical issue exists, do not consider further	

Table 12: Evaluation of Medium List Development Options

Option	Summary outcome	Reason for rating	
Kawerau District			
K1 Roy Stoneham Park	Under development	Roy Stoneham Park development (104 lot subdivision) will proceed over next 5 years by Kawerau District Council. This development is already underway with a plan change completed.	
K2 Hardie / Beattie Ave area		Area is already zoned Residential and may be developed subject to funding requirements being met. There are some known stormwater ponding issues that require resolution and is dependent on landowner (Ngati Tuwharetoa), and availability of public funding.	
K3 Valley Road		Greenfield area with existing residential and rural lifestyle zoning. However, land remains undeveloped due to many constraints including topographical challenges and many archaeological sites that may be sensitive to change.	

Option	Summary outcome	Reason for rating
K4 Kawerau town infill		There is interest in developing smaller sections and infill housing in Kawerau, however, infill development will be dependent on individual landowners and market demand. There is infrastructure capacity in existing three waters systems to accommodate infill.
K5 Western rural area		Rural residential development would not provide bulk development capacity or contribute to staged development needs. Existing rural activities would likely contribute to reverse sensitivity effects with residential development. The western rural area is iwi-owned land that is being farmed – there are no plans for rural residential development.
Ōpōtiki District		
O1 Hukutaia		Hukutaia has sufficient capacity in the long term. A plan change to rezone the area is underway to open the area for development. Infrastructure investment through private or public funding will allow development to progress.
O2 Waiōtahe/ The Drifts		Waiōtahe has limited capacity in the long term but can meet some of the short-term housing demand. Development is subject to market drivers and landowner willingness to develop. Affordability of infrastructure to service housing is considered less viable compared to other rural areas.
O3 Tablelands – urban		Tablelands is not a viable option for greenfield development due to distance from the Ōpōtiki township. The area also has highly productive horticulture land with Class 2 soils which are to be protected from inappropriate subdivision, use and development.
O4 Paerata Ridge - urban		Paerata Ridge is not a viable option for greenfield development due to topographical constraints and natural hazard risk (landslips). The area also has highly productive horticulture land with Land Use Class 2 soils which are to be protected from inappropriate subdivision, use and development.
O5 Ōpōtiki town infill		Ōpōtiki township has opportunity for infill development however, due to natural hazard risks (flooding) development is constrained. Limited capability for intensive growth within the township and not suitable for large scale intensification and infill.
O3 Tablelands – rural residential		Tablelands is not a viable option for greenfield development due to distance from the Ōpōtiki township. The area also has highly productive horticulture land with Class 2 soils which are to be protected from inappropriate subdivision, use and development. There are many HAIL sites in this area.
O4 Paerata Ridge – rural residential		Paerata Ridge is not a viable option for rural residential development due to topographical constraints and natural hazard risk (landslips). Rural residential growth does not support active modes of transport and may require upgrades to the rural transport network increase operating costs. The area has highly productive horticulture land with Land Use Classification 2 soils which are to be protected from

Option	Summary outcome	Reason for rating
		inappropriate subdivision, use and development. Due to development constraints, it is only an option for supplementary rural residential growth (e.g., low yield) to provide housing location choice.
O6 Ohiwa - rural residential		There is limited capacity for rural residential growth in Ohiwa which could occur on the eastern side of the ridge. However, the population density required to support local services would be too low thereby increasing vehicle traffic on state highway 2. Growth here could lead to upgrades to the rural transport network and increasing overall operating costs.
Whakatāne District		
W1 Awakeri – new urban		Concentrated growth in a single location midway point between Whakatāne and Kawerau supports greater range of local services and reduces travel. It also makes the provision of active modes and public transport more viable.
		Over the long term, a new large scale development area in the Whakatāne district can increase the district's overall resiliency by reducing reliance on Whakatāne township as the main development focus area. Due to a lack of existing infrastructure the challenge will be to funding and ensuring staging of development and provision of infrastructure at the right time and affordably.
W2 Te Teko – new urban		The Te Teko location relies on engineered flood mitigations which would expose large scale development to residual risk from overdesign events. Concentrated growth in a single location close to Kawerau supports greater range of local services and reduces travel. It also makes the provision of active modes and public transport more viable. Due to a lack of existing infrastructure, the challenge will be to ensure the staging of development and provision of infrastructure must be managed well so development does not significantly lag. Existing social issues may also preclude development interest.
W3 Matatā – new urban (east of village)		Matatā has good connections to the Western Bay of Plenty, Kawerau and Whakatāne. There are no Highly Productive Land constraints. A process is already underway to provide wastewater infrastructure. Some land is owned by Māori land trusts which could provide for an opportunity but requires additional discussions.
W7 Whakatāne town infill (excluding Kopeopeo)		Low lying land between Landing/Domain Roads and river cannot be developed due to flood risk and other areas of the township are affected by residual risk. The district plan has been enabling but the market to date has not delivered medium/high density development.
W8 Whakatāne town (Kopeopeo) infill		This area in Whakatāne township is not encumbered by the same flood risk as the rest of the community. There is capacity to intensify and deliver additional dwellings in Kopeopeo, and this is a more affordable infrastructure option. The current district plan settings are enabling, however, development is subject to landowner interest and could not meet the total projected demand.

Option	Summary outcome	Reason for rating
W9 Matatā infill		Matatā has good connections to Western Bay, Kawerau and Whakatāne. There are many large sections that can be intensified and there is no flooding risk. There is a process already underway to provide wastewater infrastructure to support infill and further development (east). The infill would avoid known natural hazards.
W10 Ōhope Beach infill		Ōhope is a high demand residential location due to the environmental amenity of the coastal area. There are substantial constraints from flood hazards and coastal inundation that preclude much development taking place. Appropriate natural hazard protocols need to be applied, and the coastal erosion and inundation data is being updated currently. Where appropriate, additional densities should be enabled for infill and intensification purposes.
		Natural hazard mapping is under review, and there is unlikely to be substantial capacity to infill or intensify in this area. No estimate of household yield is made due to uncertainty of natural hazards.
W11 Thornton dunes rural residential		Roading network will need to be upgraded and new Three Waters infrastructure will be required. Attractive location close to Whakatāne. Some Māori owned land on dunes which has potential to become papakāinga.
W12 Manawahe rural residential		Manawahe is located some distance from the urban areas. Roading upgrades will be needed. Development scale will be limited due to highly productive land constraints. All new dwellings will need to be self-sufficient in terms of Three Waters.
W13 Ōhiwa Harbour rural residential		Some distance from urban areas. Roading upgrades will be needed. Development potential is limited due to overlays and constraints currently in place to protect an environment of significance.
W6 Murupara		There is potential for a small amount of infill development, and for greenfield development to the south of the village, to accommodate the aspiration for 300 dwellings at Murupara. Upgrades to water and wastewater infrastructure would be required to accommodate this.
W4 Tāneatua		There is potential for some growth at Tāneatua. Water and wastewater infrastructure would need to be upgraded to accommodate growth. Further consideration of river flooding is required before determining the appropriate level of development in this area. Fluvial river flooding considerations limit stormwater management options and some flood management work may be required.
W5 Minginui		There are large sections and there is capacity for infill or expansion of the village. Council has no Three Waters infrastructure in the township currently.

9 Step 3: Emerging Preferred Recommendation (Short List Development Options)

Based on the outcome of the medium list of development options assessment, a short list of development options (the emerging preferred recommendation to accommodate future development in the Eastern Bay) has been prepared.

9.1 Residential development focus areas

The NPS-UD (2020) requires Tier 1, 2 and 3 local authorities, at all times, provide at least sufficient development capacity to meet expected demand for housing and business land in the short term (3 years), medium term (10 years), and long term (30 years), taking into account feasibility and infrastructure availability. The Eastern Bay is considered a Tier 3 area.

Based on the assessment of supply and demand in this report, in all time periods projected demand for residential land is projected to exceed planned supply across the sub-region. There is a need for additional commercial business land, and to rezone additional industrial supply around Ōpōtiki township and east along the coast. New greenfield development areas are required to meet the scale of demand. Infill, papakāinga, and rural residential developments will contribute to capacity, but the quantum and timing are currently unknown. Papakāinga and Māori-led housing could become substantial opportunities that defer large investments into new greenfield development locations.

All areas examined have a degree of natural hazard risks which will compound over time, due to climate change. Based on the scenario and option analysis presented in this report, the following areas are expected to be suitable for additional residential growth with ongoing avoidance and management of natural hazards. There are infrastructure and funding requirements associated with all development focus areas. A financial strategy will become an important part of next steps. Most infrastructure requirements noted are unfunded at the time of this report.

Summary of recommended residential and business land supply strategy describes set of actions to meet residential and business land needs in the Eastern Bay.

Table 13: Summary of emerging preferred land supply strategy

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vestment into Awakeri deferred as irly developed) vices in larger master planned eeded, continuing focus around e scale industrial developments.
er n

Ongoing (0-30 years)

Māori-led housing/papakāinga is important to long term capacity and supported in every time period, particularly larger developments could defer some of the larger investment into places like Awakeri.

Appropriate infill in Whakatāne and Ōpōtiki townships that recognises restrictions from natural hazards and climate change risks.

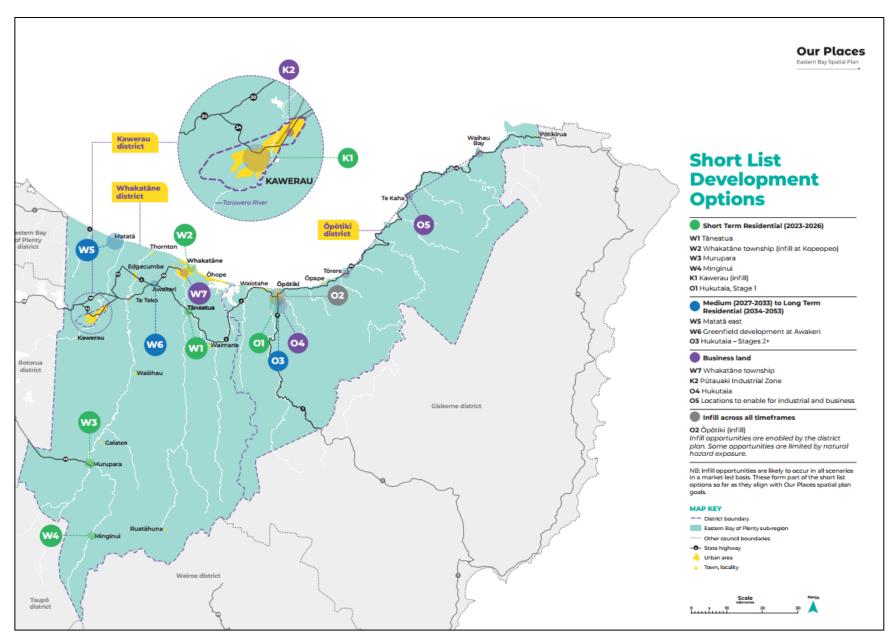


Figure 40: Short List Development Options -Emerging Preferred

9.2 Residential development recommendations – all time periods

The following activities should be undertaken across the short, medium and long-term timeframes.

Table 14: Residential development recommendation actions

Development focus area	Description	Prerequisite infrastructure
Promote appropriate infill of smaller settlements through the Eastern Bay.	Infill and ongoing development at a small scale can be important to the sustainability of small settlements, particularly as demographic changes can lead to smaller households over time.	Little to none, could be manged mainly through renewals programmes.
Appropriate infill of larger settlements through the Eastern Bay.	There are limited opportunities and limitations for infill in Whakatāne and Ōpōtiki townships. Ōpōtiki District Council should address the Otara and Waioeka River flood study outcomes undertaken by BoPRC when available, as this may change defined natural hazards. Similarly, for Whakatāne township, there are areas north of Landing Road / Domain Road where intensification may create higher risk profiles to natural hazards and infill / intensification is not a suitable activity. Other areas may also be similarly affected. It is recommended to limit the areas for infill by means of district plan provisions and selected acceptance of infill consents. These selected consents would take into consideration the effects of climate change and the stopbanks and resiliency works in these communities. Both Ōpōtiki and Whakatāne districts will need to consider other natural hazards, such as coastal erosion where relevant to infill opportunities.	It is recommended to limit the areas for infill by means of district plan provisions and selected acceptance of infill consents. Development of infill options includes various upgrades to water plants, reservoirs and pipelines. This would rely in part on the wastewater treatment plant improvements.
Māori-led housing/papakāinga is important to long term capacity and supported in every period.	Papakāinga is expected to be a meaningful contributor to overall housing supply, particularly in the southern and eastern corridors. The quantum and timing are unknown and as more detail is confirmed the findings of this report may need to be reconsidered or adaptations made to the spatial plan implementation programme.	Varies from private services to fully public services.

Development focus area	Description	Prerequisite infrastructure
Development of unanticipated sites promoted	Facilitate new plan changes promoted by the private sector, where appropriate.	Development of unanticipated sites promoted by private owners would require infrastructure analysis.
by private owners.	This report sets out specifics for urban development. There are one- off sites that may be aligned with the intent of the project which may be brought forward by landowners.	
	Such opportunities need to be considered on their own merit, and in context of whether they create risk to the delivery of the development strategy outlined in this report.	
Review district and regional plans for appropriateness of urban and rural residential development.	District Plans must give effect to regional plans and policies, maintain appropriate control on rural residential development to safeguard economic and environmental outcomes and to improve resiliency to natural hazards. They must require urban density development to take place in defined development areas.	Regulatory activity, little direct infrastructure impact.
	Rural residential development is not supported unless it achieves the following conditions:	
	 Takes places in areas away from unacceptable natural hazards. Avoids highly productive lands. Does not cause reverse sensitivity constraints toward horticultural, agricultural, industrial activities. Does not cause transport infrastructure maintenance and operating costs to rise, or network safety performance to decrease. 	
	For clarity, papakāinga is not considered rural residential development.	

9.3 Residential development recommendations – short term (decade 1)

Table 15: Short term residential capacity (Decade 1)

Development focus area	Description	Prerequisite infrastructure
Tāneatua	Most sections in the township are large with potential for infill.	Sufficient headroom in existing consent for water take to support this level of growth. Most water and wastewater improvements could be done as part of the
	While some land surrounding the existing village is	renewals programme.
	flood-prone, there is the opportunity for a small amount of new housing north of the town that is not flood prone.	New stormwater pipes and a pump station could be required, along with assessment of stormwater management system with potential need to improve.
	A precautionary approach should be taken to ensure that future planning decisions take into account flood risk and requirements resulting from future mitigation options.	May bring forward need to improve Pekatahi Bridge to provide a road link into Whakatāne township.
Hukutaia, Stage 1	The Hukutaia area has been subject to a planning process led by Ōpōtiki District Council, including evaluation of alternative options, finalised in 2021.	All infrastructure is dependent on new Council budgets or external funding. Some infrastructure components could wait until later stages or be staged along with development.
	By 2071, Hukutaia has the potential to become the primary residential area for the Ōpōtiki District.	District Plan change is needed to enable a residential zone for the Hukutaia area.
	Stage 1 is anticipated to deliver up to 400 houses out of a total yield of nearly 2,000 units. ²⁹	Wastewater: options to provide reticulated services connecting to existing ODC Wastewater Treatment Plant, or to develop a new plant for Hukutaia
	Hukutaia is critical for residential land supply in all time periods and should be progressed as soon as possible.	(and Waiotahe) areas. Water: Addition of a new river crossing at Stoney Creek and other will
	Hukutaia has the advantage of being close to Ōpōtiki, not particularly vulnerable to flooding or sea level rise,	improve water pressures (potable and fire water) in Hukutaia, Ōpōtiki and Waiotahe.
	there is adequate land for development over coming decades with only limited high-value horticulture likely to be impacted.	Stormwater: Comprehensive stormwater system concept design undertaken. Overland flowpaths within Hukutaia to provide effective flow paths within and beyond the neighbourhood.

²⁹ Hukutaia Infrastructure: A strategic investment in the future of Ōpōtiki, August 2021

Development focus area	Description	Prerequisite infrastructure	
		Transport: Upgrades to SH 2 intersection, local roads safety improvements, extensions of footpaths and bike paths, walking/cycling bridge over Waioeka River.	
Kawerau infill	Enablement, acceptability, feasibility for infill development should be improved through the pending District Plan review process. The degree to which capacity is enabled and taken up will depend on the outcome of the district plan change and local economic conditions.	Adequate water source/supply is available for infill and further development. There is reportedly ample capacity at the existing WWTP for treatment and disposal to the pumice fields as well as capacity to increase the area of the latter, if/when required. Consents require updating. With respect to stormwater management provisions, it has been reported that there is adequate capacity for increased residential lots within Stoneham Park and the Hardie/Beattie Avenue growth area. In this latter area, groundwater issues have been identified, therefore, any development would need to address this within the development design.	
Ōpōtiki infill	A controlled approach to strategic infill and site/building design in respect of flood risk mitigation is recommended, given the exposure to flood risk in some parts of the township. Further intensification in the future is limited in response to existing and future flood risk. Otherwise, already enabled capacity in the district plan allows for some infill and is managed on a case-by-case basis. Further investigations are underway. • BOPRC Rivers model updates to be provided. • Inclusion of the 100 year river strategy.	Township infill and growth subject to wastewater treatment upgrade and flooding risks unknown (subject to outcome of Waioeka/Otara River Scheme research). Water supply and storage appears adequate for infill options, potentially requiring upgrades which could be catered for in the renewals budget. Upgrades are required for the wastewater treatment plant, pump stations and reticulation to cater for growth in Hukutaia and Waiotahe, including installation of a new river crossing. Key flood resilience projects are underway which include the following that would become a factor. • Rural-Urban flood protection with southern limit of Duke Street • Transfer of flood flows from Otara to Waioeka River floodplain • Duke Street pump station • Tarawa Creek Pump station upgrade	
Whakatāne township, infill at Kopeopeo	Focus for infill development, providing medium to longer term supply. Examine what tools the district council has to facilitate growth here, including working with lwi and Government agencies to prioritise urban papakāinga and affordable housing into this area.	Similar to ongoing infill, making use of existing three waters systems will likely prove more affordable provided there is capacity in the networks.	

Development focus area	Description	Prerequisite infrastructure
Murupara	Aspiration for around 300 houses, existing sections provide for limited infill opportunities due to their size. Most of these are likely to be delivered as greenfield development requiring around 20 ha-30 ha of area depending on local conditions. Development would be located south of the village.	Infrastructure is expected to be delivered through existing infrastructure renewals programmes. Additional planning is required to confirm.
Minginui	Aspirations for 50 additional dwellings, larger lots with minimal Council infrastructure required.	Council has no Three Waters infrastructure in the township currently. The water scheme is operated by Ngāti Whare trust and is sourced by bore.

9.4 Residential development recommendations – medium and long term (decades 1 and 2)

Table 16: Medium to long term residential capacity (Decades 2 and 3)

Development focus area	Description	Enabling activity / infrastructure
Matatā (east)	Majority greenfield expansion, past the eastern end of the existing urban area on higher area of ground away from known natural hazards. The area must be comprehensively planned, within the limits of natural hazards, and to leverage planning already underway with the wastewater treatment plant consent. The proposed wastewater treatment plant has design capacity for an additional 400 residential units including existing dwellings (260 existing, 140 new). Additional capacity can be realised with larger land-based treatment solution. Given existing planning underway at Matatā, it would be a nearer term opportunity than Awakeri. If a larger development becomes feasible, then this would defer the need to start Awakeri until later.	Structure plan for the eastern expansion area, including transport and servicing plans for connections into existing networks. Water supply is adequate to support growth in the short to medium term and a link to an additional supply (from Braemar) could provide supplementary water as/when required to support longer term growth. The growth potential of Matatā is largely dependent on the ability to treat and dispose wastewater. Further growth potential to the east (potential for 1500 houses) would require additional reticulation treatment and an extensive additional area (approx. 70 ha) for land disposal. Eastern area of Matatā would benefit from a catchment wide approach to stormwater management and integration with urban planning to ensure there are multiple uses for greenspaces.

Development focus area	Description	Enabling activity / infrastructure
New greenfield development at Awakeri	Because of the natural hazards in the Central Corridor, it is not feasible to expand Whakatāne township contiguously at scale to meet projected demand. Other existing settlements on the Rangitāiki Plain are similarly constrained aside from Awakeri. It is preferred to expand an existing settlement than to establish a completely new one. Further engagement and feasibility investigations are required to support a decision about one and/or the other. The scale of Awakeri could be 1,600 to over 3,000 dwelling units. The upper range depends on whether Matatā (east) is able to develop to its fuller potential for 1,500 dwelling units, as the balance of the demand could shift to Awakeri. After the 30-year period, Awakeri could continue to expand and become a new town in the Eastern Bay.	Transport: Local safety issues at key SH 2 intersections would need to be addressed as would severance issues through townships. Could support cycling trips with appropriate infrastructure for a large range of trips and opportunities to provide increased recreational opportunities. If scale of development is sufficient may support good public transport links other centres. Water: Growth here will benefit from linkage to the Otumahi water scheme, particularly the proposed primary water supply main enroute to Whakatāne – a sensible option for Awakeri, considering resilience and future proofing and would avoid requirement for upgrading storage at Awakeri. Wastewater: Treatment of wastewater would be accommodated either: a new treatment works and land disposal field – the latter would be extensive (approximately 60 ha or more, pending soil type and disposal type) and availability and cost of land would be a key consideration; or, wastewater could be pumped to Whakatāne for treatment and discharge to ocean (OR a combination of these options i.e. treat at Awakeri, pump to Whakatāne for ocean discharge). Awakeri's current septic tank regime should be upgraded to a full water-borne sewage reticulation system. Stormwater: Catchment wide approach to stormwater management will provide comprehensive guidance to the support of the residential development in the area. Communal devices to include treatment and flow mitigation to protect receiving environments.
Hukutaia – Stages 2+	As the primary growth focus area for Ōpōtiki township and reduce other competing development areas, in order to concentrate development and related infrastructure expenditure, to improve financial performance of the development area for Council's operations and infrastructure investment.	Infrastructure requirements similar to stage 1.

9.5 Commercial development

More commercial zoned land is needed in the sub-region. Currently, Whakatāne has a small amount of available commercial land. Ōpōtiki and Kawerau have no vacant zoned land but are unlikely to need new commercial land supply as demand is expected to be met within existing commercial zoned areas, or through newly established growth areas like Hukutaia and the expanded Pūtauaki industrial park.

Recommended:

- 1 To consider secondary investigations in Whakatāne and Ōpōtiki districts to determine where additional land supply could be provided.
- As part of planning for residential development focus areas, consider increasing supply of commercial land locally to provide for local services and amenities particularly in larger master planning areas like Matatā or Awakeri could provide for.

9.6 Industrial development

There is more than sufficient planned industrial land in the sub-region. Industrial development across the sub-region is expected to be focused at the Pūtauaki industrial zone, with smaller site-specific developments in other locations related to local opportunities, such as aquaculture. A cluster of industrial development is likely needed south of Ōpōtiki township, in relation to the growth of primary industries in that area.

Recommended:

- To continue with the expansion of Pūtauaki industrial zone as the primary industrial growth area in the Eastern Bay.
- To support industrial development in the eastern corridor and around the Ōpōtiki township by proactively enabling zoning changes, where the location is driven by adjacency to primary industry.

10 Step 4: Strategic scenarios

The next step in the scenario process involved testing the emerging preferred short list of development focus areas based on three 30-year strategic scenarios. This was done to compare how well each option performs under different future conditions to ensure the emerging preferred option represents a sound strategy. Scenarios were developed based on several assumptions including:

 The recommendations are focused on large scale housing and business land supply options. Not all housing and business land opportunities are described, particularly where they are a smaller part of the total possible supply.

- Papakāinga and Māori housing should be enabled to meet aspirations, with servicing on a case-by-case basis subject to funding.
 Papakāinga will be supported through the spatial plan and is a critical housing opportunity for Tangata Whenua to return to their rohe.
- Infill development is not a large-scale primary source of housing supply because some townships are already exposed to the effects of climate change and natural hazards, and the number of houses needed to meet demand are not likely to be feasible within the time period. There are opportunities for intensification of villages and some areas of the townships within the constraints posed by natural hazards.
- Some communities are planned to grow in all scenarios because these aspirations have been clearly expressed by project partners
 and some area already in various stages of planning. For example, this would assume Whakatāne District Council's Plan Change 8:
 Making Room to Grow, Kawerau District Council's Stoneham Park, and Ōpōtiki District Council's Hukutaia areas proceed to
 development. By 2050:
 - Kawerau: Infill development, Stoneham Park.
 - Ōpōtiki District: Hukutaia development area supplies around 2,000 dwellings, as well as some commercial uses.
 - Whakatāne district:
 - Minginui, expected to grow by around +50 dwellings
 - Murupara, expected to grow by around +300 dwellings
 - Tāneatua, expected to grow by +250 dwellings
- Industrial expansion will focus at Kawerau Pūtauaki Industrial Development, with site-specific opportunities along the east coast through Ōpōtiki District.

The three strategic scenarios were presented to the Project Governance Group at a workshop held in June 2024 to discuss the risks and opportunities of each scenario. The workshop helped to identify ideas and themes to explore further. General support was provided for the emerging preferred scenario. A series of workshops were also held with Councillors from each individual district council and the Regional Council in July and August 2024.

10.1 Three scenarios to assess changes to the future settlement pattern (30-year horizon)

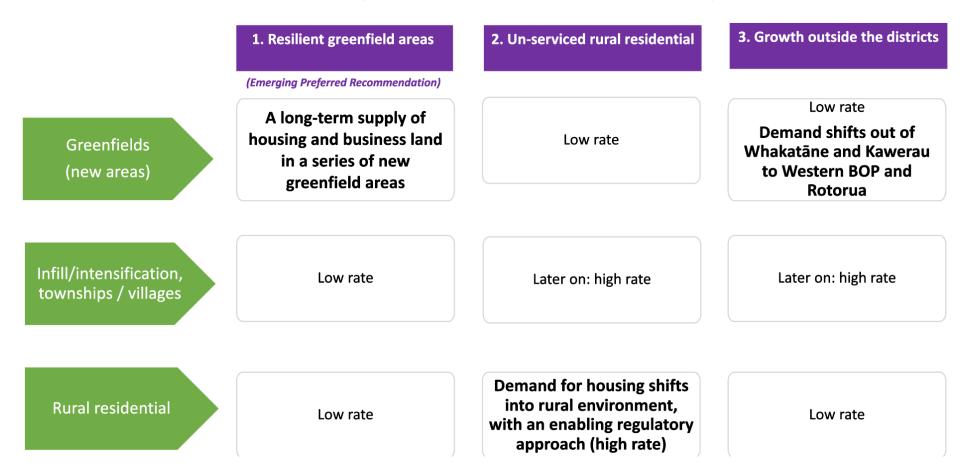


Figure 41: Three scenario options

Scenario 1: by 2055 the following changes would occur

Greenfield residential land has developed at these locations as high-quality extensions of the established communities:

- Awakeri grows by +1600 dwellings.
- Matatā (east of the existing urban area) grows by +1500 dwellings.
- Hukutaia develops adjacent to Ōpōtiki township, up to 2,000 dwelling units.

Residential infill in Kawerau, Whakatāne, Ōpōtiki townships: limited development has happened. This is due to constraints posed by natural hazards and availability of resilient new greenfield residential housing options. The Kopeopeo area around Whakatāne is the primary focus for infill. Rural residential: has taken place at a low rate, strongly limited by District Plan rules

Papakāinga and Māori-led housing: has been supported to meet lwi aspirations

Industrial: Pūtauaki industrial park at Kawerau is the preeminent industrial activity area in the sub-region. Additional areas have developed near to Ōpōtiki township and in relation to aquaculture-/-horticultural activities east of Ōpōtiki township up the coast.

Commercial: A small new area of commercial land has been developed near Whakatāne township. The existing commercial areas of Ōpōtiki township and Kawerau are more vibrant than they were due to redevelopments and infill, but no new development areas are opened.

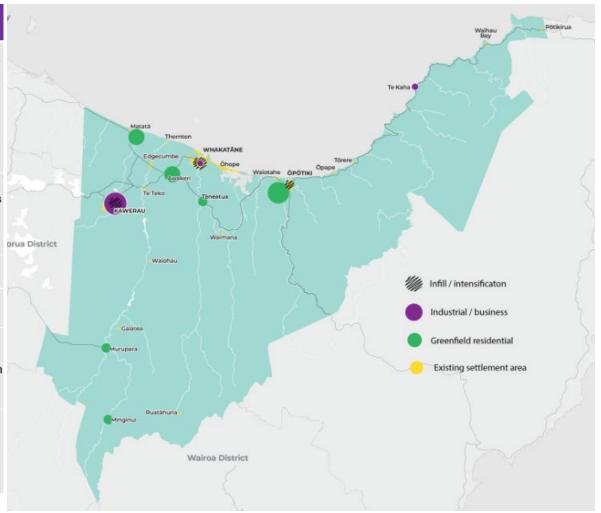


Figure 42: Scenario 1 - Emerging preferred

Key changes to 2055 Do not expand Awakeri Expand Matatā (east), +100-250 dwellings Hukutaia develops Kawerau, Whakatāne, Ōpōtiki townships: high infill rate over time Rural residential development: +2,000 units Papakāinga and Māori-led housing to meet aspirations (improved potential for servicing than in other options)

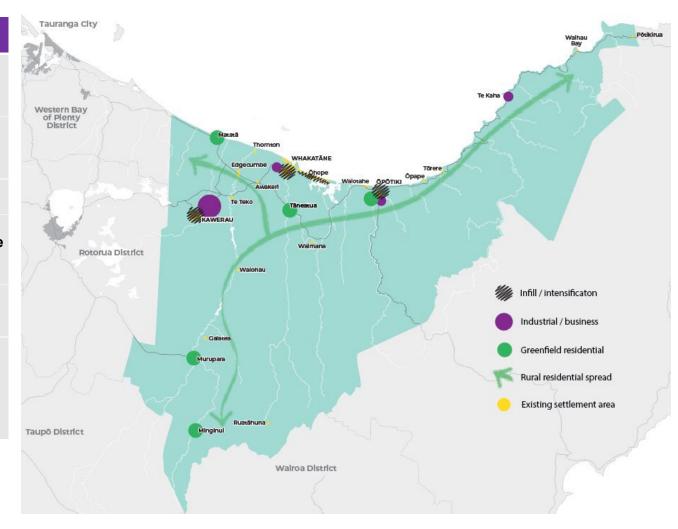


Figure 43: Scenario 2 – Unserviced rural residential

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Key changes to 2055 Tauranga City Do not expand Awakeri Expand Matatā (east), +100-250 dwellings Western Bay of Plenty District Hukutaia develops, faster than expected Kawerau, Whakatāne, Ōpōtiki iotahe ÖPÖTIKI townships: high infill rate over time KAWERAU Rural residential development: low Rotorua District Papakāinga and Māori-led housing to Infill / intensification meet aspirations Industrial / business Galatea Growth of neighbouring districts, Greenfield residential +1,000 dwellings Rural residential spread Existing settlement area Potential Future Growth Areas aupō District in nearby Districts Wairoa District

Figure 44: Scenario 3 - Growth outside of the districts

10.2 Main infrastructure implications of strategic scenarios

In all circumstances enabling new development requires investing into infrastructure. The different options have been considered at a high level from a Three Waters, transport, and community facilities and natural hazards perspective. When the Spatial Plan is developed, the implementation actions will more specifically define infrastructure requirements and work with local communities and landowners at a greater detail than a sub-regional plan is able to.

Table 17: Infrastructure implications of strategic scenarios

Scenario 1 New Greenfield Areas	 New greenfield areas would require investment into three waters services, transportation network changes, and community facilities.
(Preferred option)	 There is already infrastructure planning underway in Matatā for a new wastewater treatment plant and to enable Hukutaia. This makes Matatā a quicker opportunity than a completely new development area around Awakeri which could take longer.
	 The scale of development at Matatā will be limited by the feasible design of the planned wastewater treatment plant and the extent of natural hazards. If a large scale treated effluent disposal field is not secured for the Matatā wastewater treatment plant, then this could limit expansion to around 100-250 new dwelling units. The implication would be that the Awakeri greenfield area would need to be planned to be much larger and need to be done sooner.
Scenario 2 or 3 Substantial infill and intensification of Whakatāne or Ōpōtiki townships	 In scenario 2 and 3, infill and intensification of the townships would take place to the extent natural hazards would permit. Kawerau District has sufficient Three Waters network capacity to accommodate projected population growth, but Whakatāne or Ōpōtiki townships could eventually need to upgrade Three Waters networks depending on the degree of changes.
(Scenario 2 or 3)	 Transport network changes would be required to support intensification of these townships, particularly in Whakatāne which could require investment into urban road improvements and for active modes.
	 Because infill in Whakatāne or Ōpōtiki townships possibly raises exposure to natural hazard risk, there could be additional mitigations required.
Scenario 2 Rural residential	 Transport network level of services would become more costly as more households rely on the smaller rural roads, and public transport services would become less feasible to deliver cost effectively.
	 While the option would mean less costs for Council Three Waters services, costs for on-site water and wastewater systems are placed on builders/homeowners instead of onto Council.
	 With increased reliance on tanked water for rural residential dwellings, this may increase exposure to climate change risks.

10.3 How the scenarios perform against the draft Outcomes Framework Goals

All scenarios come with trade-offs and a need for careful and well-considered implementation to avoid, mitigate and remedy possible effects. On balance of factors, Scenario 1 is considered to have the best alignment with the goals. This is because new urban development areas can be designed to high environmental standards, meeting housing needs locally will support economic development, and Councils can require provision of diverse housing supply to better meet demographic needs in the sub-region. Scenario 2 is likely to erode the rural economic sector over time due to reverse sensitivity, and Scenario 3 would constrain economic development opportunities in the sub-region.

Table 18: Main pros and cons of the scenario options

Goals we want to achieve	Scenario 1. Resilient greenfield areas [preferred option]	Scenario 2. Unserviced rural residential focus	Scenario 3. Growth outside the district
Healthy and healing; mauri o te whenua and awa	Greenfield areas offer the opportunity to design from the ground up. A compact, high-quality design can lead to good environmental performance and improve resilience to climate change and natural hazards.	Environmental impacts from spread out development pattern mean this option would perform worse than Scenario 1.	Less development and less environmental means this option could perform better in the Eastern Bay but would shift impacts into other locations.
Sustainable, diversified economy providing jobs and purpose for our people	Housing needs can be met locally, and this can support economic / employment growth in the Eastern Bay. Greenfield urban development can avoid and manage conflicts between land uses.	Reverse sensitivity impacts from rural residential uses that are broadly spread through the sub-region can erode rurally based economic activities that are a critical part of the Eastern Bay's economy.	Not providing for housing locally would constrain economic growth over the long term and not lead to improved economic opportunities as housing remains a constraining factor.
Connected, thriving, resilient people, communities and places that reflect our history and aspirations	Scenario 1 is the most likely to meet housing needs locally in the Eastern Bay and offer housing choices that better meet demographic needs and offer more affordable options. Councils can most directly influence housing supply outcomes in this scenario. Expanding smaller villages would change their sense of place and character.	New development would spread into the rural areas meaning that community facilities become harder to provide (less efficient). There could be broad scale visual impacts on the rural landscape, and housing types would not meet demographic housing needs or provide more affordable choices.	Housing would become increasingly harder to come by so people would need to move outside of the sub-region because there is no choice. Communities could be less thriving or socially well-connected over time.

11 Step 5: Next steps to prepare a final preferred scenario

Following the draft Scenario and Development Options Report being released for partner, stakeholder and wider community feedback, the project will move into the preparation of the final Scenario and Development Options Report to inform the preparation of the draft Spatial Plan. This would be based on Scenario 1 Resilient Greenfield Areas, with changes and additions stemming from community feedback.

Targeted stakeholder and community engagement on the emerging preferred option for the settlement pattern is planned during October-November 2024. The feedback received from engagement will be reviewed and a final Scenario and Development Options Report will reflect any changes to the emerging preferred recommendation.

Further technical work is underway as part of next steps including:

- A high-level evaluation of the emerging preferred short list options will be undertaken to identify whether the options will be sufficient to accommodate the projected demand for housing and to identify any gaps in the evidence.
- A provisional assumption for Papakäinga will be included and explored further with iwi partners and the Whakatāne Iwi Policy Hub and
 other iwi partners during the preparation of the Spatial Plan. It will be important to recognise the potentially significant contribution that
 Whenua Māori can make to meeting future housing needs and that the spatial planning process should facilitate this alongside other
 growth areas.
- A growth sequencing approach will be incorporated because simultaneous development of all options will be inefficient and unaffordable. Collaborative planning undertaken when developing infrastructure strategies and transport plans will be the mechanism to address and resolve any potential misalignment of investments. Further continued collaborative work to identify and understand appropriate growth sequencing informed by monitoring of population growth will be undertaken and will inform subsequent spatial plan processes. It will also inform the decisions made by other service providers, e.g. Government departments, to understand what the future demand is likely to be, where it is anticipated and when it is planned for.
- A related workstream has been identified to consider future risk management responses for townships protected by flood schemes and wider flood management.

The evaluation of the scenarios and options and the final agreement on a spatial settlement pattern, requires integration with parallel workstreams that are addressing other issues, including programme options for transport:

- Economic Development Strategy for the Eastern Bay.
- Whakatāne lwi Policy Hub working with tangata whenua representatives to identify iwi aspirations.
- Natural hazards and climate change risk assessments.

- Transport Modelling (network demand modelling) and a Transport Systems Programme (programme and new investment pathways to support delivery of the Spatial Plan).
- Whakatāne River Crossings investigation Design of specific investments required for additional Whakatāne access to support growth and improve network resilience.
- Whakatāne District Plan review process key opportunity to implement structure plans / zoning for development focus areas through an efficient process (as compared to many individual ones).
- Bay of Plenty Regional Council catchment flood mapping programmes.
- Regional Land Transport Plan resilient access investigations.
- Three Waters Done Well.
- Regional Infrastructure Fund.
- National Land Transport Programme / Regional Land Transport Programme.

Preparing the funding and financing case:

- Future growth will be dependent on securing appropriate funding for infrastructure. Further work will be undertaken to consider the cost implications related to the servicing and provision of infrastructure. This will provide assurance that the short-listed options and possible funding sources for infrastructure demonstrate the preferred option is technically feasible and affordable. Addressing funding and financing uncertainties for development areas where public capital investment is required as a pre-requisite will be needed. Considering avenues for private capital to enable development capacity that would otherwise not be tenable will also be explored. The role of staging and sequencing between development areas, as well as the use of demand thresholds to trigger investment projects, will be further considered.
- The scope of the work will be limited to an indicative assessment, intended to be preliminary and designed to inform any subsequent detailed analysis and provide decision-making with early insight. The ability to demonstrate that the partnership has actively considered funding of services and infrastructure solutions, will materially contribute to confidence from the community and from Central Government partners, that it is serious about prioritising, phasing and managing the Eastern Bay's infrastructure needs.

Preparation of the Draft Spatial Plan:

- The final Scenario and Development Options Report will be a key evidence base for the preparation of the draft Spatial Plan and associated implementation actions. The Spatial Plan will aim to support quality, well-functioning urban areas by identifying areas appropriate for future development and their related infrastructure requirements. It will set the strategic direction for the spatial elements of the sub-region and actively manage growth through integrated planning, strong partnership and associated implementation of an action plan.
- Consultation on the draft Spatial Plan is expected to take place towards the middle of 2025, before the finalisation of the Spatial Plan in late Autumn 2025. A strong focus on implementation, setting a clear policy direction, supported by local area planning, District Plans and Long-Term Plans will be critical.

Subsequent to the Spatial Plan, it is envisaged that Councils would undertake local area development planning exercises in close collaboration with local communities and relevant iwi to masterplan locations earmarked for change.