HAWKE'S BAY REGIONAL COUNCIL

TE KAUNIHERA Ā-ROHE O TE MATAU-A-MĀUI

Meeting of the Hawke's Bay Regional Council

Date: 25 June 2025

Time: 11.00am

Venue: Council Chamber
Hawke's Bay Regional Council
159 Dalton Street
NAPIER

Attachments Excluded From Agenda

available online only

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Ngā Kaupapahere Whakaiti Tāke Kaunihera, Tārewa Hoki

Rates Remission and Postponement Policies



Adopted 25 June 2025

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Notes:

Review of these policies

Hawke's Bay Regional Council (HBRC) intends to review these policies regularly to ensure that the conditions and criteria on which the policies are based continue to be relevant and appropriate.

Delegated authority

The approval of applications relating to the policies contained in this document will be undertaken in accordance with Hawke's Bay Regional Council's Delegation Policy[1].

[1] Available on request

Māori Freehold Land Policy

Introduction

Māori freehold land is defined in the Local Government (Rating) Act 2002 as land whose beneficial ownership has been determined by a freehold order issued by the Māori Land Court. Only land that is the subject of such an order may qualify for remission under this policy. Whether rates are remitted in any individual case will depend on the individual circumstances of each application.

This policy has been formulated for the purpose of:

- ensuring the fair and equitable collection of rates from all sectors of the community by recognising that certain Māori-owned lands have particular conditions, features, ownership structures or other circumstances that make it appropriate to provide relief from rates
- meeting the requirements of sections 102 and 108, having considered the matters in schedule 11 of the Local Government Act 2002, to have a policy on the remission and postponement of rates on Māori freehold land.

This policy does not provide for the postponement of rates as the Regional Council considers that postponing the requirement to pay rates would not support the objectives set out below. The Regional Council has specific policies for the postponement of rates in certain circumstances.

Objectives

The objectives of this policy are to:

- support the use of land by the owners for traditional purposes
- recognise and support the relationship of Māori culture and traditions relating to ancestral land
- avoid of further alienation of Māori freehold land
- facilitate the desire of the owners to develop the land for economic use
- recognise and take account of the presence of wahi tapu that may affect the use of the land for other purposes
- recognise and take account of the importance of land in providing economic and infrastructure support for marae and associated papakāinga housing
- recognise and take account of the importance of the land for community goals relating to:
  - the preservation of the natural character of the coastal environment
  - the protection of outstanding natural features
  - the protection of significant indigenous natural vegetation and fauna
- recognise the level of community services provided to the land and its occupiers
- recognise matters related to the physical accessibility of the land
- support the principles set out in the Preamble to Te Ture Whenua Māori Act 1993.

Conditions and criteria

- Remission will apply to 100% of rates charged on a rating unit.
- Application for a remission under this policy must be made by the person(s) liable for rates for the land (such as owners or trustees), or a person appointed by the Māori Land Court, or other authorised agent of the owners of the land.
- The application is to be made in writing at least 14 days before the due date of payment. Applications made after this cut-off date will apply from the beginning of the following rating year unless extenuating circumstances can be demonstrated, where the Chief Executive may grant an exemption for late application.
- The applicant must include the following information in their applications:
  - details of the rating unit or units involved
  - documentation that shows that the land qualifies as land whose beneficial ownership has been determined by a freehold order issued by the Māori Land Court
  - details showing how a remission of rates is consistent with the objectives of this policy.
- No application under this policy will be backdated. However, where a new lessee/occupier takes over a block with existing rate arrears that would not be recoverable based on previous use, the arrears of rates may be written off where the new lessee assumes payment of current and future rates from the commencement of use or occupation.

Rates Remission Policies

Introduction

To allow rate relief where it is considered fair and reasonable to do so, the Regional Council has resolved to adopt policies under sections 102(3)(a) and 109 of the Local Government Act 2002 specifying the circumstances under which rates will be considered for remission. There are various types of remission, and circumstances under which a remission will be considered. A remission will not be granted where an entity has qualified under the Local Government (Rating) Act 2002 (LGRA) for partial non rating under Part 2 of schedule 1.

The conditions and criteria are set out below.

1. Remission of Rates in Special Circumstances

Objective

To provide for the possibility of a rates remission in circumstances that have not been specifically addressed in other parts of the Regional Council's rating policy.

Conditions and criteria

- HBRC may remit all or part of the rates assessed in relation to a particular rating unit in special or unforeseen circumstances where it considers it just and equitable to do so.
- The approval of the remission must not set a precedent that unfairly disadvantages other ratepayers.
- A remission under this policy will apply for one year only. Applicants must reapply annually.
- No application under this policy will be backdated.
- All applications must be received in writing detailing the rating unit(s) involved and any other relevant information supporting the applicant's eligibility for the remission.

Except where there are extenuating circumstances, the application for a rates remission must be made at least 14 days before the due date of payment. Where extenuating circumstances can be demonstrated, the Chief Executive may grant an exemption for late application.

2. Remission of Penalties on Rates

Objective

To enable the Regional Council to act fairly and reasonably when a rates payment has not been received by the due date.

Conditions and criteria

Upon receipt of an application from the ratepayer either in written or email format, or if identified by the Regional Council, a penalty may be remitted where at least one of the conditions listed below are met.

- A full payment of outstanding rates due (excluding a penalty amount) has been made prior to the application being received by the Regional Council, and if the ratepayer has previously paid all rates by the due date within the last three years.
- Where a ratepayer has rate arrears, that on entering and adhering to a payment plan, the additional penalties will be remitted at an agreed time.
- Where payment has been late due to an unforeseen disruption to the normal activities or business of the ratepayer, such as a serious illness, case of death, injury, accident of family member, or family circumstances.
- The late payment was caused by matters outside of the ratepayer's control.
- It is demonstrated that the penalty has been added because of an error by the Regional Council.
- Where it is considered just and equitable to do so. Each application will be considered on its merits.

Matters that will be taken into consideration by the Regional Council under above include:

- the ratepayer's payment history
- the ratepayer entering into an agreement with the Regional Council for the payment of rates
- matters controlled by the ratepayer may include: electronic payment errors, failure to update mailing, or direct debit arrangement
- matters out of the control of the ratepayer may include change of ownership, or bank errors.

Where there is a deliberate non-payment, remission will not be granted.

3. Remission of Rates on Properties affected by Natural Calamity

Objective

To help ratepayers experiencing extreme financial hardship due to natural calamity which affects their ability to pay rates.

Conditions and criteria

- Applicable where erosion, subsidence, submersion, or other natural calamity as a result of a recognised major event has affected the use or occupation of any rating unit. This does not apply to erosion, subsidence, submersion etc, that may have occurred without a recognised major event.
- The Regional Council will, at its discretion, resolve when an event is a recognised major event for the purposes of this Policy.
- The Regional Council may, at its discretion, remit all or part of any rate assessed on any rating unit so affected by natural calamity.
- Except where there are extenuating circumstances, applications must be made in writing at least 14 days prior to the due date of payment, detailing the rating unit(s) involved. Where extenuating circumstances can be demonstrated, the Chief Executive may grant an exemption for late application.
- The Regional Council may require financial or other records to be provided as part of the remission approval process.
- Remissions approved under this policy do not set a precedent and will be applied only for each specific event and only to properties affected by the event.

4. Hardship Remission resulting from changes to the Rating Policy

Objective

To assist ratepayers experiencing extreme financial hardship due to changes to the rating system to achieve a more equitable distribution of rates. This is only for the first year of implementation of a rating change following a Revenue & Financing Policy review, to aid ratepayers with budgeting.

Conditions and criteria

This policy only applies for the first year of implementation of a rating change following a Revenue & Financing Policy review, where the Regional Council determines to make significant changes to the rating system, including uniform charges, differentials, or the number of targeted rates.

This policy does not apply to annual changes in rates requirements, including changes to targeted rates as a result of changes to service levels (including the imposition of a targeted rate on a property receiving a service that was not previously provided or charged for), or to an inflationary adjustment of uniform charges.

- The approval of the remission must not set a precedent that unfairly disadvantages other ratepayers.
- A remission under this policy will apply for one year only.
- Except where there are extenuating circumstances, applications must be made in writing at least 14 days prior to the due date of payment, detailing the rating unit(s) involved. Where extenuating circumstances can be demonstrated, the Chief Executive may grant an exemption for late application.
- The Regional Council may require financial or other records to be provided as part of the remission approval process.
- The remission will be set at half of the difference between the property rates for that year, and the rates payable if the changes to the rating system had not been applied. The Regional Council will use the relevant parts of the previous year's rating system (such as uniform charges, differentials) but will use the current year's rates requirement.

5. Remission for Uniform Annual General Charges and Related Targeted Rates

Objectives

- To provide relief to ratepayers who occupy several near adjacent rating units, but which do not meet the criteria for contiguity under section 20 of the Local Government Act (Rating) 2002.
- To provide relief for developers in the instances of subdivision development in urban areas.

Remissions in addition to the Local Government (Rating) Act 2002

Section 20 of the Local Government (Rating) Act 2002, stipulates that there shall be one property for the purposes of assessing a rate, where two or more separately rateable properties are:

- occupied by the same ratepayer (owner or person with right to occupy by virtue of lease for more than 12 months); and
- used jointly as a single property (for the same purpose); and
- contiguous but separated only by a road, railway-line, drain, water race, river or stream, they shall be

deemed to be one property for the purposes of any uniform annual general charges (UAGC).

Where a property meets the requirements of the conditions and criteria below, the UAGC and other related targeted rates assessed on the second and subsequent assessments will be remitted.

Conditions and criteria

- Where farming or horticultural operations conducted on separate blocks of land are so far apart as to indicate that there is no possible contiguity between them, all charges may be assessed on each; however, factors such as distance, stock rotation, stock driving, etc., property size and the number of properties affected, will be taken into account in determining whether remission should apply.
    - **Without dwellings -** Where a single operation is operated over a number of separate rating units, or blocks of separate rating units within close proximity, the 'flagship' (major rating unit) may be assessed a full charge, and the associated rating units may receive a 100% reduction.
    - **With dwellings -** Where a single operation is operated over a number of separate rating units, or blocks of separate rating units within close proximity, a charge may be assessed against each rating unit with a habitable dwelling and the associated units may receive a 100% reduction.
    - Where a single operation is operated over a number of separate blocks of contiguous rating units that contain dwellings, one full charge may apply to each block of such rating units.
- Miscellaneous:
    - If a rating unit is of a size which would not enable a dwelling to be erected and where no dwelling exists, a 100% reduction in charge may apply.
- Where an additional dwelling is provided to an employee and the ratepayer provides evidence to the satisfaction of the Regional Council that it is essential they must reside on the rating unit for the ongoing operation of the business, then the additional UAGC and related targeted rates will be remitted.
- Remission of the charge may apply to a subdivision for the period if the individual lots continue to be in the ownership of the developer.
- The application in the form of a statutory declaration is to be made in writing at least 14 days before the due date of payment detailing the rating unit(s) involved and any other relevant information supporting the applicant's eligibility for the remission.

Rate Postponement Policies

Introduction

These polices are prepared under sections 102(3)(b) and 110 of the Local Government Act 2002.

1. Postponement in Cases of Financial Hardship or Natural Disaster

Objectives

- To assist ratepayers experiencing short-term extreme financial hardship that affects their ability to pay rates.
- To assist ratepayers whose property has been subject to a natural disaster to the extent that the ratepayer is unable to pay rates.

Conditions and criteria

The financial hardship must be caused by circumstances beyond the ratepayer's control. The postponement of rates in cases of financial hardship is a last resort to assist residents who own the property to which the postponement application applies.

Criteria for the postponement of rates for ratepayers in cases of hardship

- The applicant can illustrate a postponement of rates will help them overcome their short-term extreme financial hardship.
- The applicant has no access to other funds to pay the rates due.

Criteria for the postponement of rates for ratepayers in cases of natural disaster

- The applicant is unable to pay their rates bill because of a natural disaster or severe weather event that has severely impacted on their ability to pay rates but a postponement will help enable them to pay in the future.

Other conditions

Applications must be made in writing, at least 14 days prior to the due date of payment, detailing the rating unit(s) involved. Where extenuating circumstances can be demonstrated, the Chief Executive may grant an exemption for late application.

Approval of rates postponement is for one year only. The applicant must reapply annually for the continuation of a rates postponement.

Te Kaupapahere Moniwhiwhi, Ahumoni Hoki

Revenue and Financing Policy



Adopted 25 June 2025

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Policy purpose and overview

The Revenue and Financing Policy describes how Hawke's Bay Regional Council (the Regional Council) intends to fund its expenditure. It outlines the sources of funding that the Regional Council intends to use, for each activity.

The policy is set out as follows:

- Introduction
- Section A: Summary of Funding Sources
- Section B: Two-Step Approach
- Appendix: Step One Funding Needs Assessment and Step Two outcomes

Introduction

This policy has been prepared in accordance with Sections 101(3), 102(2)(a), 102(3A) and 103 of the Local Government Act 2002.

This policy outlines the choices the Regional Council has made in deciding the appropriate sources of funding for operating and capital expenditure from those sources listed in the Local Government Act 2002 (LGA). The policy also shows how the Regional Council complied with section 101(3) of the LGA which sets out a number of factors it must consider when making these decisions.

The outcome of balancing all those factors requires judgement over many facets of the Regional Council's functions including, but not limited to, legal requirements, transparency, accountability, affordability, efficiency, social, and intergenerational equity, as well as providing for the financial sustainability of the activities undertaken.

When making funding policy the Regional Council must work through the process and matters set out in section 101(3) of the LGA including to have regard to section 101(1): Obligation to act prudently and in the interests of the community. The requirements of section 101(3) analysis is a two-step process which is set out in Section B.

The Regional Council is also required to comply with section 100T of the Biosecurity Act 1993 when deciding the extent to which it should fund the implementation of its Regional Pest Management Plan from a general rate, a targeted rate, or a combination of both, as set and assessed under the Local Government (Rating) Act 2002.

The funding sources and mechanisms will be used to finance the Regional Council's operating and capital expenditure.

Guiding principles

In developing this Revenue and Financing Policy, the principles applied included:

- Clear and fair – so ratepayers can understand how the source of funding was chosen and who it applies to.
- Simple – for a rates invoice that is easy for ratepayers to understand, as well as administratively efficient for staff to implement. This saves costs for the community and reduces the risk of errors.
- Consistent – a policy that treats like for like to give the community confidence they are being treated fairly.
- Flexible – a fit for purpose policy that is robust enough to avoid regular amendment but flexible enough to adapt to future changes.
- Overall impact – the council considers the overall impact on the current and future social, economic, environmental, and cultural wellbeing of the community and community outcomes.

Other guiding principles

In addition to the matters above, Section 102(3A) of the LGA requires that the Revenue and Financing Policy also supports the principles set out in the Preamble to Te Ture Whenua Māori Act 1993, including:

- the special relationship between the Māori people and the Crown
- the spirit of the exchange of kāwanatanga for the protection of rangatiratanga embodied in the Treaty of Waitangi be reaffirmed
- recognition that land is a taonga tuku iho of special significance to Māori people
- promotion of the retention of that land in the hands of its owners, their whānau, and their hapū, and to protect wāhi tapu (sacred sites)
- facilitation the occupation, development, and utilisation of that land for the benefit of its owners, their whānau, and their hapū.

Available funding sources

The sources of funding applied under this policy are limited to those set out under section 103 (2) of the LGA 2022.

The Regional Council has determined the funding sources for operating and capital expenditure after considering the rationale below.

Funding source	Rationale
Fees and user charges	Fees and user charges can be applied where the users of a service can be identified and charged according to their use of the service (and those that do not pay are denied access to the service). This is based on the user-pays principle where the user pays for the benefits received. Fees are also appropriate where an individual's action or inaction creates the need for an activity (cost causation). For example, the cost of obtaining a resource consent is met by the property owner.
General rates	The general rate is used when the whole region benefits from an activity or individuals or groups cannot be identified to recover the cost. Activities can be 100% or part funded by the general rate.
Targeted rates	Targeted rates are used when groups of ratepayers benefit from an activity at a different level from ratepayers in the remainder of the region.
Investment income	The Regional Council has a range of property, equity, and cash investments that provide a source of income not related to any specific function or activity. The Regional Council's investment assets include its 100% shareholding in the Hawke's Bay Regional Investment Company Limited (HBRIC) (HBRIC owns 55% of Napier Port Holding Ltd); Napier and Wellington leasehold property investments; forestry assets and managed funds.
Borrowing	Local authorities may borrow New Zealand currency to finance their lawful functions. Borrowing is a useful method of funding the costs of a project where the benefits will accrue into the future, for example, funding the capital costs of a flood control scheme, major building project or intergenerational environmental projects. The Regional Council will periodically borrow for such purposes. Short-term borrowings may be used to smooth one-off large operational expenditure. Borrowing is generally repaid from funds collected from general or targeted rates.
Reserves	Local authorities have traditionally, and to varying degrees, developed reserve funds. Reserve funds have been used to allocate funds for special purposes such as asset replacement, future capital works, flood, and drainage schemes, and for emergencies and contingencies. The Regional Council has some reserves which help in the financial management of activities. Consideration of the appropriate reserves and reserve levels is addressed as part of the Long-Term Plan and Investment Policy.
Grants and subsidies	Grants and subsidies are generally only appropriate for funding the operating or capital costs of the particular activity that the grant or subsidy is intended to pay for. For example, NZTA Waka Kotahi transport subsidies can only be used to fund transport projects.
Other sources	Other sources of funding include proceeds from asset sales, and unexpected or unanticipated revenue such as vested assets and bequests.

Section A

Summary of funding sources

In the summary table below, percentages are indicative. Once rates are assessed and collected the actual percentage may differ slightly.

Activity	Fees & user charges	Grants, subsidies & other	Targeted rate	General rate
Governance and Partnerships Group				
Community Representation & Leadership, including Tāngata Whenua Partnerships				100%
Community Sustainability Environmental education, corporate sustainability, and climate action				100%
Sustainable Homes, including Clean Heat			90%	10%
Regional Economic Development			100%	
Policy and Regulation Group				
Policy & Planning				100%
Regulatory Implementation				100%
Freshwater Farm Plans				100% for Council's contribution and administration
Resource Consents	90% from consent applicants			10% of recoverable costs 100% of non-recoverable consents costs
Compliance	90% from consent holders			10% of recoverable costs 100% of non-recoverable compliance costs
Pollution Response				100% after the recovery of fines and penalties
Maritime Safety Harbour Operations	100% Napier Port/ other users			
Maritime Safety Education and recreational users				100% after other income
Integrated Catchment Management Group				
Environmental Science & Information				
State of the Environment (SOE) Reporting				100%
Research and Grants				100%
Land Research and Monitoring			25%	75%
Air Quality				100%
Marine and Coast				100%
Water Quantity	35% from consent holders			65%

Activity	Fees & user charges	Grants, subsidies & other	Targeted rate	General rate
Water Quality	15% from consent holders		20%	65%
Water Information Services	90% from consent holders			10%
Sustainable Land Management			25%	75%
Soil Conservation Nursery	100%			
Erosion Control Scheme/Land for Life				100% for Council's share of costs
Biodiversity				100%
Primary Production Pests			100%	
Asset Management Group				
Flood Protection & Control Works				
Flood protection schemes			70%	30%
Drainage & pumping			90%	10%
River & stream maintenance				100%
Mangarau Stream flood resilience			100%	
Initial capital to build Category 2 flood schemes			0-70%	30-100%
Initial costs for Category 2 general works				100%
Flood Risk Assessment and Warning				100%
River investigations, enquiries & subsidised work				100% certain works are recovered on a proportional basis
Coastal Hazards			60%	40%
Westshore Beach Renourishment				100%
Regional Water Security		100%		
Open Spaces				100%
Regional Parks				100%
Hawke's Bay Trails				100% after grants & subsidies
Forestry		100% funded by harvest revenue		
Emergency Management Group				
Hawkes Bay CDEM			100%	
HBRC Emergency Management				100%
Transport Group				
Transport Planning & Road Safety				100% after grants & subsidies
Passenger Transport & Total Mobility			100% after fees & user charges, and grants & subsidies	

Section B

Two-step approach

In developing this policy, the Regional Council used a two-step approach as required by section 101(3) of the Local Government Act 2002 (the Act).

Step One

The first step is to consider for each activity, the five matters in s101(3)(a) of the Act. These are summarised in the table below and applied in the *Appendix: Step One Funding Needs Assessment and Step Two outcomes*.

1. Community outcomes	The Regional Council must identify which of its community outcomes[1], each activity primarily contributes to. HBRC's community outcomes are: • Healthy environment • Prosperous community • Resilient community.
2. Distribution of benefit	The Regional Council must consider who benefits and by how much. It may be the community as a whole, any identifiable part of the community, and/or individuals. For example, individuals who take up the service are the primary beneficiaries from the Clean Heat programme, while parts of the community (those in the airshed) benefit from clear air, and the community as a whole benefit to a lesser degree from reduced emissions.
3. Period of benefit	The Regional Council must identify the period in or over which those benefits are expected to occur. In doing this, the Regional Council has identified an annual benefit matching the period of expenditure or ongoing benefits that will last for future generations.
4. Whose acts create a need	The Regional Council must consider if there are contributors – individuals or groups – who, through their action, or inaction, contribute to the need to undertake the activity. For example, polluters create a need for the Regional Council to clean up the mess or make rules about how it is to be reduced or cleaned up.
5. Costs and benefits of funding activity distinctly	The Regional Council must consider the costs and benefits, including consequences for transparency and accountability, of funding an activity separately. For example, consider whether user charges or targeted rates or a combination of these pays for this, or whether the activity should be funded by the general rate.[2]

Step Two

The Regional Council then considered the overall impact of any allocation of liability for revenue needs on the current and future social, economic, environmental, and cultural wellbeing of the community, as required under section 101(3)(b) of the Act.

The Regional Council particularly considered the rating impact and the amount of fees and user charges to be recovered and made the following major refinements from the initial tools selected in step one of the process. Note all changes are noted in the last column of the table in the *Appendix: Step One Funding Needs Assessment and Step Two outcomes*.

[1] The outcomes that a local authority aims to achieve in order to promote the social, economic, environmental, and cultural wellbeing of its district or region in the present and for the future (section 5 of the Local Government Act 2002).

[2] In the funding needs assessment in Appendix 1, the Regional Council sometimes summarises this requirement in terms of need for separate funding. Where it says there is no need for separate funding for an activity this means that the cost/benefit analysis of separate funding does not strongly indicate separate over general funding.

General rate

The Regional Council considered the merits of both land value and capital value (CV) for the general rate. Having considered the overall impacts on all ratepayers, the Regional Council concluded capital value is a better tool based on the taxation principles of equity/affordability and benefit/impact and is therefore its preferred method. Higher CV properties are generally better able to bear the costs of a proportionally higher general rate, and, through the higher value of improvements, CV recognises multiple impacts of a single property.

The Regional Council considers that recovering the general rate on capital value creates a more resilient rates base better able to respond to rate changes. Capital value also better reflects the principles set out in the Preamble to Te Ture Whenua Māori Act 1993 than land value because land that is undeveloped will generally pay less than a developed property under capital value.

The Regional Council also considered the impacts of various types and locations of properties and concluded that a general rate differential is not appropriate.

Rates equalisation

The city and district councils within Hawke's Bay revalue their properties at different times, on a three-yearly rotating basis. Each year QV provides information to allow the Regional Council to calculate rates on equalised values. The Regional Council uses this information to adjust the rate so that each rating unit would be paying a similar amount of rates, as if all properties were valued on the same date.

Uniform annual general charge

The uniform annual general charge (UAGC) is part of the general rate and is a fixed amount charged to all separately used or inhabited parts of a rating unit. Its effect is to reduce some rating impact on high value properties and increase rating impact on lower value properties. The Regional Council considers that a UAGC is an appropriate rating tool particularly for a CV-based general rate.

The Regional Council considers it appropriate that all properties should contribute a fixed amount towards the general rate. As the Local Government (Rating) Act 2002 limits the amount of all fixed rates (UAGC and uniform targeted rates) to 30% of total rates, the Regional Council concluded that the UAGC will be set annually as a levelling tool.

Fees and user charges

The Regional Council has applied fees and user charges to recover part or all of the costs for the following activities:

- Resource Consents
- Compliance
- Maritime Safety – Harbour Operations
- Environmental Science and Information
- Water Information Services
- Soil Conservation Nursery
- Passenger Transport

Appendix: Step One Funding Needs Assessment and Step Two outcomes

Step One							Step Two
Activity (sub-activity)	**Community outcome**	**Distribution of benefits**	**Period of benefit**	**Whose acts create a need**	**Costs and benefits of funding activity distinctly**	**Overall rationale for funding** (Percentages are indicative)	**What was further refined**
Governance and Partnerships Group							
Community Representation and Leadership, and **Tāngata Whenua Partnerships**	Healthy Environment	The community as a whole benefit from democratic representation, transparent, and legally compliant Council processes, and the quality of decisions enabled by a Treaty-based partnership approach with tangata whenua.	There is an annual benefit matching the period of expenditure.	No specific, separately identifiable group causes a need.	There is no particular need to fund this activity separately. Council reports on the financial and service performance for this activity in its quarterly and annual report/s.	As there are region-wide and whole community benefits the general rate is considered the most appropriate funding source. *100% general rate.*	No change from step one.
Community Sustainability (environmental education, corporate sustainability, climate action)	Healthy Environment	The community as a whole benefits from a coordinated programme to drive climate action to reduce the regions and its own carbon footprint, including environmental education.	There is an annual benefit matching the period of expenditure.	No specific, separately identifiable group causes a need.	There is no particular need to fund this activity separately. Council reports on the financial and service performance for this activity in its quarterly and annual report/s.	As there are region-wide and whole community benefits the general rate is considered the most appropriate funding source. *100% general rate.*	No change from step one.
Community Sustainability (Sustainable Homes programme, including Clean Heat)	Resilient Community	Individuals who take up the service are the primary beneficiaries. Parts of the community benefit from less air pollution. The community as a whole benefits to a lesser degree from reduced emissions.	There are ongoing benefits from cleaner and more sustainable homes.	No specific, separately identifiable group causes a need.	There are benefits from funding this activity separately as separate funding enables Council to target those who benefit either from improvements to their property or from residing in a healthy airshed.	Individuals benefit from services that improve their property and those in the airshed benefit from cleaner air, therefore targeted rates are considered the most appropriate funding source. *90% targeted rate and 10% general rate.*	Urban footprint by valuation roll. Targeted rate based on land value.

Step One							Step Two
Activity (sub-activity)	**Community outcome**	**Distribution of benefits**	**Period of benefit**	**Whose acts create a need**	**Costs and benefits of funding activity distinctly**	**Overall rationale for funding** (Percentages are indicative)	**What was further refined**
Regional Economic Development	Prosperous Community	The broader business community are the primary beneficiaries of regional economic development. The community as a whole benefits to a lesser extent.	There is an annual benefit matching the period of expenditure.	No specific, separately identifiable group causes a need.	There are benefits from funding this activity separately as separate funding enables Council to apply revenue requirements that are consistent with the levels of benefit that different ratepayer categories receive. Separate funding also supports accountability and transparency to the ratepayers who fund the activity.	Businesses greatly benefit from the united approach to regional economic development. Residents benefit from the enhanced lifestyles with modern amenities, things to see and do, accessibility and a greater sense of security which is vital for health and wellbeing. Therefore, differentiated targeted rate is considered the most appropriate funding source.	Differential targeted rate defined: Residential & Lifestyle is 30% of total yield based on fixed charge per SUIP. Commercial & Industrial is 75% of allocation of 70% total yield based on capital value. All other usage is 25% of allocation of 70% of yield based on capital value.
Policy and Regulation Group							
Policy and Planning, and Regulatory Implementation	Healthy Environment	The community as a whole benefits.	There are ongoing benefits.	No specific, separately identifiable group causes a need. Everyone uses the region's natural resources to some extent.	There is no particular need to fund this activity separately. Council reports on the financial and service performance for this activity in its quarterly and annual report/s.	As there are region-wide and whole community benefits the general rate is considered the most appropriate funding source. *100% general rate.*	No change from step one.

Step One							Step Two
Activity (sub-activity)	**Community outcome**	**Distribution of benefits**	**Period of benefit**	**Whose acts create a need**	**Costs and benefits of funding activity distinctly**	**Overall rationale for funding** (Percentages are indicative)	**What was further refined**
Resource Consents	Healthy Environment	Consent applicants are the primary beneficiaries. The community as a whole benefits to a lesser degree from environmental outcomes from implementing the Regional Plan via consenting. The community as a whole benefits from the advisory services provided.	There are ongoing benefits.	Consent applicants create a need to process and issue consents.	There are benefits from funding this activity separately to target those who benefit or create the need.	Council considers that those who benefit or contribute to the need for the activity should contribute to the recovery of those costs. When recovery is not possible, then the general rate is considered the most appropriate funding source after an allowance for any fees. *90% funded by consent applicants.* *10% of recoverable consent processing costs funded by general rates.* *100% of non-recoverable consent administration funded by general rates.*	No change from step one.
Compliance	Healthy Environment	Consent holders are the primary beneficiaries. The community as a whole benefits to a lesser degree from environmental outcomes from implementing the Regional Plan via compliance activities.	There is an annual benefit matching the period of expenditure.	Non-compliant consent holders who form part of the high priority monitoring schedule.	There are benefits from funding this activity separately to target those who benefit or create the need.	Council considers that those who benefit or contribute to the need for the activity should contribute to the recovery of those costs. When recovery is not possible, then the General Rate is considered the most appropriate funding source. *90% funded by consent holders.* *10% of recoverable compliance activity costs funded by general rates.* *100% of non-recoverable compliance costs funded by general rates.*	No change from step one.

Step One							Step Two
Activity (sub-activity)	**Community outcome**	**Distribution of benefits**	**Period of benefit**	**Whose acts create a need**	**Costs and benefits of funding activity distinctly**	**Overall rationale for funding** (Percentages are indicative)	**What was further refined**
Pollution Response	Healthy Environment	The community as a whole benefits from having a 24/7 response capability.	There is an annual benefit matching the period of expenditure.	Polluters create the need for pollution response. Generally, polluters can only be identified after a pollution event and sometimes the liable party cannot be identified.	There are benefits from funding this activity separately to target those who benefit or create the need.	As there are region-wide and whole community benefits the general rate is considered the most appropriate funding source. However, where a liable party can be identified, they should contribute to the recovery of those costs. *100% general rate after the recovery of fines and penalties where possible.*	No change from step one.
Maritime Safety (harbour operations)	Resilient Community	Napier Port Limited is the primary beneficiary of Harbourmaster activities to support safe commercial shipping in the Napier harbour. Other users (commercial and non-commercial) also benefit from harbour operations.	There is an annual benefit matching the period of expenditure.	Napier Port and other users create the need for the harbour-related activities.	There are benefits from funding this activity separately to target those who benefit or create the need.	Council considers that there is a distinct benefit for Napier Port and other users from the Harbourmaster services at the port and harbour, therefore those users should fund those costs using fees and user charges. *100% fees and user charges.*	No change from step one.
Maritime Safety (education and recreation users)	Resilient Community	The community as a whole benefits. Recreational boat and water users benefit from navigational aids, education programmes, and the enforcement of maritime safety regulations.	There is an annual benefit matching the period of expenditure.	No specific, separately identifiable group causes a need.	There is no particular need to fund this activity separately.	As there are region-wide and whole community benefits from maritime education and safety the General Rate is considered the most appropriate funding source. *100% general rate after offsetting other income.*	No change from step one.

Step One							Step Two
Activity (sub-activity)	**Community outcome**	**Distribution of benefits**	**Period of benefit**	**Whose acts create a need**	**Costs and benefits of funding activity distinctly**	**Overall rationale for funding** (Percentages are indicative)	**What was further refined**
Integrated Catchment Management Group							
Environmental Information and Science	Healthy Environment	The community as a whole benefits from monitoring and analysis of environmental information and research, and research and investigations on matters relevant to policy development. This contributes to the evidence base needed for regional plan development. There is also a distinct benefit for consent holders because the information gathered, and science activities are needed to issue consents.	There is an annual benefit matching the period of expenditure and some ongoing benefits from having data available and science knowledge.	Everyone uses the region's natural resources to some extent. Consent holders contribute to the need for this activity as consented activities, such as water takes and discharges, drive the need for Council to collect environmental information and undertake science activities. Landowners contribute to the need for this activity as diffuse sources are drivers of the state of environment.	There are benefits from funding this activity separately to target those who benefit or create the need.	As there are region-wide and whole community benefits the General Rate is considered the most appropriate funding source with a portion of the costs funded by a targeted rate to recognise diffuse sources, and consent holders who have a distinct benefit and contribute to the need. *65-75% general rate, 20% targeted rate and 15- 35% fees and user charges.*	No change from step one for water quantity science. Water quality science: 65% general rate, 20% targeted rate (non-urban footprint by valuation roll based on land value) and 15% fees & user charges.
Environment Information (Water Information Services)	Healthy Environment	Water-take consent holders are the primary beneficiaries from the provision of an accurate and reliable telemetry network. The community as a whole benefits to a lesser degree from rainfall, flood modelling, and forecasting.	There is an annual benefit matching the period of expenditure and some ongoing benefits from having data available.	Water consent holders create a need.	There are benefits from funding this activity separately to target those who benefit or create the need.	Council considers that those who benefit or contribute to the need for the activity should contribute to the recovery of those costs with the balance funded from the general rate. *90% fees and user charges and 10% general rate.*	No change from step one.
Sustainable Land Management (includes rural partnerships & water efficiency)	Healthy Environment	The community as a whole benefits from reduced environmental pressures from good management practices and compliance with regulations. Parts of the community receive a greater benefit due	There are ongoing benefits.	No specific, separately identifiable group causes a need.	There is no particular need to fund this activity separately.	As there are region-wide and whole community benefits the general rate is considered the most appropriate funding source with a portion of the costs funded by a targeted rate. *75% general rate and 25% targeted rate on land value by*	No change from step one.

Step One							Step Two
Activity (sub-activity)	**Community outcome**	**Distribution of benefits**	**Period of benefit**	**Whose acts create a need**	**Costs and benefits of funding activity distinctly**	**Overall rationale for funding** (Percentages are indicative)	**What was further refined**
		to improved livelihood from their property and the surrounding area.				*non-urban valuation roll footprint.*	
Sustainable Land Management (Soil Conservation Nursery)	Healthy Environment	Recipients of plants from the nursery are the beneficiaries.	There is an annual benefit matching the period of expenditure.	No specific, separately identifiable group causes a need.	There are benefits from funding this activity separately to target those who benefit to fully fund annual costs.	Council considers that those who benefit should contribute to the recovery of those costs, so fees and user charges are considered the most appropriate funding source. *Fees and user charges and recoveries from other Council activities fund 100% of costs.*	No change from step one.
Sustainable Land Management (Erosion Control Scheme, Land for Life).	Healthy Environment	The community as a whole benefits from reduced erosion leading to improved water quality in streams, rivers, and the coast, as well as improved biodiversity and carbon sequestration from large-scale tree planting. Benefits to individuals from the Erosion Control Scheme are funded directly by the individual.	There are ongoing benefits.	No specific, separately identifiable group causes a need. The need is driven by past events and climate change.	There is no particular need to fund this activity separately.	As there are region-wide and whole community benefits the general rate is considered the most appropriate funding source after the recovery of charges to individuals. *100% general rate for Council's share of costs.*	No change from step one.
Biodiversity (including animal & plant pest control that contribute to biodiversity outcomes)	Healthy Environment	The community as a whole benefits from the protection and restoration of native species and ecosystems including the reduced spread of possums. Biodiversity contributes to the region's natural character and ecosystem services. Parts of the community receive a greater benefit from	There are ongoing benefits.	No specific, separately identifiable group causes a need.	There is no particular need to fund this activity separately assuming the current owner-occupied model, however, if the delivery model for possum control management changes there may be a need	As there are region-wide and whole community benefits the general rate is considered the most appropriate funding source. *100% general rate.*	No change from step one.

Step One							Step Two
Activity (sub-activity)	**Community outcome**	**Distribution of benefits**	**Period of benefit**	**Whose acts create a need**	**Costs and benefits of funding activity distinctly**	**Overall rationale for funding** (Percentages are indicative)	**What was further refined**
		reduced spread of unwanted pest damage.			to target specific beneficiaries.		
Primary Production Pests	Prosperous Community	Parts of the community (primary producers) benefit from reduced loss to pasture, crops, trees and shrubs and sustained/increased production.	There is an annual benefit matching the period of expenditure.	High value productive land uses drive the need for this activity.	There are benefits from funding this activity separately to target those who benefit or create the need.	Council considers that those who benefit or contribute the need for the activity should contribute to the recovery of those costs using targeted rates. *100% targeted rate on land value by non-urban valuation roll footprint.*	No change from step one.
				Asset Management Group			
Flood Protection & Control Works	Resilient Community	Property owners and residents in flood schemes are the primary beneficiaries from maintaining flood schemes to agreed levels of protection. The community as a whole benefits to a lesser degree from economic and social resilience from protected arterial transport routes and utilities. Districts are interwoven so regardless of where flooding occurs it has a regional economic and social impact.	There are intergenerational benefits due to significant infrastructure.	No specific, separately identifiable group causes a need.	There are benefits from funding this activity separately to target those who benefit. Separate funding also supports accountability and transparency to the ratepayers who fund the activity.	Council considers that those who benefit should contribute to the costs via targeted rates on the flood scheme area with the balance of costs met via the general rate. *70% targeted rate and 30% general rate for all schemes.*	Differential targeted rates on capital value using the following rating factors: Upper Tukituki – 4 Heretaunga Plains – 2 Makara – 3 Maraetotara - has no differentials Wairoa – 2 Whirinaki (Other) – 2 Whirinaki (Industrial) - has no differentials Pōrangahau – 2
Mangarau Stream flood resilience	Resilient Community	Hastings District Council rating area 1 and the differential are used to apportion cost relative to a property's land use and perceived impact. These ratepayers are considered	There are intergenerational benefits due to significant infrastructure.	Natural disaster exacerbated by climate change that everyone has contributed to.	There are benefits from funding this activity separately to target those who benefit. Separate funding also supports accountability and	Council considers that those who benefit should contribute to the costs via targeted rates on the flood scheme area. *100% targeted rate for Hastings District Council's Differential Rating Area One.*	Differential targeted rates on land value using HDC's proportion basis: Residential – 1 Residential Clive – 0.81

Step One							Step Two
Activity (sub-activity)	**Community outcome**	**Distribution of benefits**	**Period of benefit**	**Whose acts create a need**	**Costs and benefits of funding activity distinctly**	**Overall rationale for funding** (Percentages are indicative)	**What was further refined**
		primary beneficiaries from the construction of flood mitigation agreed as part of the cost-share agreement with the Crown to support recovery from Cyclone Gabrielle.			transparency to the ratepayers who fund the activity.		Residential non-urban – 0.76 Hort/farming – 0.68 CBD commercial – 3 Other commercial – 2.75 Commercial non-urban – 2.35
Initial capital to build category 2 flood schemes	Resilient Community	Property owners and residents in Category 2 flood schemes are the primary beneficiaries from the construction of flood mitigation agreed as part of the cost-share agreement with the Crown to support recovery from Cyclone Gabrielle. All ratepayers in the region benefit from the co-funded flood mitigation which enables affected property owners to rebuild rather than funding Category 3 property rights purchase.	There are intergenerational benefits due to significant infrastructure.	Natural disaster exacerbated by climate change that everyone has contributed to.	There are benefits from funding the initial capital to build Category 2 flood schemes separately to target those who benefit.	*70% targeted rate and 30% general rate for Whirinaki (Industrial), Heretaunga Plains (Ohiti Rd /Omāhu, Waiohiki and Pākōwhai) - except for Whirinaki (Other) and Pōrangahau at 100% general rate.*	Differential targeted rates on capital value using the following rating factors: Whirinaki (Other) – 2 Whirinaki (Industrial) has no differentials Heretaunga Plains -2 Pōrangahau – 2
Initial costs for category 2 general works	Resilient Community	The community as a whole benefit from the agreed infrastructure repairs, upgrades and planning across a range of assets, area, and schemes.	There are intergenerational benefits.	Natural disaster exacerbated by climate change that everyone has contributed to.	There is no particular need to fund this activity separately.	As there are region-wide and whole community benefits the general rate is considered the most appropriate funding source. *100% general rate.* Future operational and capital expenditure will be funded through the rating for the particular activity.	No change from step one.

Step One							Step Two
Activity (sub-activity)	**Community outcome**	**Distribution of benefits**	**Period of benefit**	**Whose acts create a need**	**Costs and benefits of funding activity distinctly**	**Overall rationale for funding** (Percentages are indicative)	**What was further refined**
Drainage and pumping schemes	Prosperous Community	Property owners within the drainage scheme areas are the primary beneficiaries. These property owners benefit as the scheme allows land to be used more intensely or for a higher value use. The community as a whole benefits to a lesser degree from economic activity generated from productive land use.	There are intergenerational benefits.	No specific, separately identifiable group causes a need.	There are benefits from funding this activity separately to target those who benefit. Separate funding also supports accountability and transparency to the ratepayers who fund the activity. Separate funding is useful to demonstrate the benefits from drainage are less regional than flood protection.	Council considers that those who benefit should contribute to the costs via targeted rates on the drainage scheme area with the balance of costs met via the general rate. *Capital value reflects intensification.* *90% targeted rates and 10% general rate.*	Differential targeted rates on capital value except Raupare Enhancement Scheme (by Area), and Opoho Scheme (fixed charge).

Step One							Step Two
Activity (sub-activity)	**Community outcome**	**Distribution of benefits**	**Period of benefit**	**Whose acts create a need**	**Costs and benefits of funding activity distinctly**	**Overall rationale for funding** (Percentages are indicative)	**What was further refined**
River and stream maintenance	Resilient Community	The community as a whole stands to benefit. Benefits arise from a mix of planned and reactive interventions across the region. Proximate properties get some direct benefit which could range from high to low but difficult to quantify.	There are minor intergenerational benefits with small capital expenditure.	Some exacerbators but frequency and effect on total cost is low and difficult to identify individuals.	Separate funding for this activity is not sensible as it is too difficult to quantify direct benefit and could be cost prohibitive to charge those direct beneficiaries.	As there are region-wide and whole community benefits the general rate is considered the most appropriate funding source. *100% general rate.*	No change from step one.
River investigations enquiries & subsidised work	Resilient Community	The community as a whole stands to benefit from the advisory service, investigation of community-raised issues and subsidised work proposals. Parts of the community and individuals benefit from subsidised works.	There is an annual benefit matching the period of expenditure.	No specific, separately identifiable group causes a need.	There are benefits from funding this activity separately to recover the costs from those who directly benefit. This is work not specific to an individual scheme.	As there are region-wide and whole community benefits the general rate is considered the most appropriate funding source. When beneficiaries of subsidised works can be separately identified, the costs are partially recovered via fees and user charges. *100% general rate. Certain works are recovered on a proportional basis.*	No change from step one.
Flood Risk Assessment and Warning	Resilient Community	The community as a whole benefits from hazard information for land use planning purposes and advice on rainfall and water flows during flood conditions. Information is collected from a comprehensive network of recorders across the region that supports modelling.	There are intergenerational benefits.	No specific, separately identifiable group causes a need.	There is no particular need to fund this activity separately. This is work is not specific to an individual scheme.	As there are region-wide and whole community benefits the general rate is considered the most appropriate funding source. *100% general rate.*	No change from step one.

Step One							Step Two
Activity (sub-activity)	**Community outcome**	**Distribution of benefits**	**Period of benefit**	**Whose acts create a need**	**Costs and benefits of funding activity distinctly**	**Overall rationale for funding** (Percentages are indicative)	**What was further refined**
Coastal Hazards	Resilient Community	The community as a whole benefits from better understanding of causes and effects of coastal hazards.	There is an annual benefit matching the period of expenditure and some ongoing benefits from coastal hazard knowledge.	No specific, separately identifiable group causes a need.	There are benefits from funding this activity separately to target those who benefit. Separate funding supports accountability and transparency to the ratepayers who fund the activity. It also makes sense given the potential growth in scope in the future, which is subject to a future Council decision on whether to implement the Clifton to Tangoio Coastal Hazards Strategy.	Council considers that those who benefit should contribute to the costs via targeted rates with the balance of costs met via the general rate. *60% targeted rate (Napier & Hastings ratepayers) and* *40% general rate* *(Total expenditure evenly split between NCC, HDC and HBRC)*	No change from step one.
Coastal Hazards (Westshore beach renourishment)	Resilient Community	The community as a whole and properties within Westshore and the Napier area are beneficiaries from beach renourishment of the park and reserve.	There are ongoing benefits.	No specific, separately identifiable group causes a need.	There is no particular need to fund this activity separately. However, with the proposed growth in scope of coastal hazards implementation it makes sense to consider Westshore Beach Renourishment as a separate activity which may require separate funding in the future to target those who have a distinct benefit.	Council considers that the general rate is the most appropriate funding source at the moment and should be reviewed as part of the Clifton to Tangoio Strategy implementation when all cells will be analysed. *100% general rate (Total expenditure 50:50 split with NCC)*	No change from step one.

Step One							Step Two
Activity (sub-activity)	**Community outcome**	**Distribution of benefits**	**Period of benefit**	**Whose acts create a need**	**Costs and benefits of funding activity distinctly**	**Overall rationale for funding** (Percentages are indicative)	**What was further refined**
Regional Water Security	Resilient Community	As many Hawke's Bay freshwater resources are already under pressure and with the increasing effects of climate change, the community as a whole benefits from investigations into delivery models for water storage and demand management solutions.	There are intergenerational benefits.	Everyone uses the region's freshwater resources to some extent.	There is no particular need to fund this activity separately. However, there is significant government funding attached to the current activities and with the possible growth in scope and some projects potentially commercialised in the future it makes sense to consider Water Security as a separate activity which may require separate funding to target those who have a distinct benefit.	As there are region-wide and whole community benefits the general rate is considered the most appropriate funding source. *100% general rate.*	No change from step one.
Open Spaces	Healthy Environment	The community as a whole benefits from provision of regional parks and cycleways spread across the region and available for use by all members of the Hawke's Bay community.	There are intergenerational benefits.	No specific, separately identifiable group causes a need.	There is no particular need to fund this activity separately. Council reports on the financial and service performance for this activity in its quarterly and annual report/s.	As there are region-wide and whole community benefits the general rate is considered the most appropriate funding source. *100% general rate.*	No change from step one.
Open Spaces (Forestry)	Healthy Environment	The community as a whole benefits from HBRC's management of forestry blocks held primarily for soil conservation and environmental enhancement reasons.	There are intergenerational benefits.	No specific, separately identifiable group causes a need.	There are benefits from funding this activity separately to transparently show costs are fully funded via harvest revenue.	Council considers that full cost recovery via harvest revenues is the most appropriate funding source. *100% funded by harvest revenue*	No change from step one.

Step One							Step Two
Activity (sub-activity)	**Community outcome**	**Distribution of benefits**	**Period of benefit**	**Whose acts create a need**	**Costs and benefits of funding activity distinctly**	**Overall rationale for funding** (Percentages are indicative)	**What was further refined**
Emergency Management Group							
Hawke's Bay Civil Defense Emergency Management (CDEM)	Resilient Community	The community as a whole benefits from hazard knowledge and preparedness for and coordination of regional or localised emergency events.	There is an annual benefit matching the period of expenditure with some ongoing benefit from knowledge gained.	No specific, separately identifiable group causes a need.	There are benefits from identifying the rate separately to signal it is funded on behalf of the city and district councils.	Despite region-wide and whole community benefits, a region-wide targeted rate is considered the most appropriate funding source due to a need to identify the rate separately. *100% targeted rate.*	Fixed charge per SUIP.
HBRC Emergency Management	Resilient Community	The community as a whole benefits from HBRC's capability and capacity to respond and manage its staff and assets for regional or localised emergency events.	There is an annual benefit matching the period of expenditure.	No specific, separately identifiable group causes a need	There is no particular need to fund this activity separately. Council reports on the financial and service performance for this activity in its quarterly and annual report/s.	As there are region-wide and whole community benefits from the general rate is considered the most appropriate funding source. *100% general rate.*	No change from step one.
Transport Group							
Transport Planning & Road Safety	Resilient Community	The community as a whole benefits from planning for the region's transport needs and from road safety activities.	There is an annual benefit matching the period of expenditure.	No specific, separately identifiable, group causes a need.	There is no particular need to fund this activity separately. Council reports on the financial and service performance for this activity in its quarterly and annual report/s.	As there are region-wide and whole community benefits the General Rate is considered the most appropriate funding source for the balance of costs after grants and subsidies. *100% general rate after grants and subsidies.*	No change from step one.

Step One							Step Two
Activity (sub-activity)	**Community outcome**	**Distribution of benefits**	**Period of benefit**	**Whose acts create a need**	**Costs and benefits of funding activity distinctly**	**Overall rationale for funding** (Percentages are indicative)	**What was further refined**
Passenger Transport (including Total Mobility)	Prosperous Community	Individuals who use and communities who can access public transport services are the primary beneficiaries. The community as a whole benefits to a lesser degree from less congestion on roads and reduced emissions.	There is an annual benefit matching the period of expenditure.	No specific, separately identifiable, group causes a need.	There are benefits from funding this activity separately to target those who benefit.	Council considers that those who benefit should contribute to the costs therefore a Targeted Rate for those areas served by passenger transport services is considered the most appropriate funding source after allowing for fees and user charges and government subsidies. *100% targeted rate after fees and user charges, and grants and subsidies.*	Targeted rate defined (after user charges, and grants & subsidies): 17.5% capital value charge for commercial and industrial ratepayers by valuation roll within an urban footprint. 72.5% SUIP charge for all others by valuation roll within the same urban footprint. 10% Indirect charge based on CV to all rateable units within Napier, Hastings, and Central Hawke's Bay districts.

Hawkes Bay Regional Council

Fees and User Charges Schedule 2025-26

HBRC may fix charges relating to its functions and responsibilities under legislation such as the Local Government Act 2002, the Maritime Transport Act 1994, and the Resource management Act 1991 (RMA). An outline of the charges applicable from 1 July 2025 to 30 June 2026 is provided below. Refer to the Fees and User Charges section of the Three-Year Plan 2024-2027 at **hbrc.govt.nz, search: #LTP**, for further detail and policy related to these charges.

A. Charges relating to Resource Consent applications

Table 1: Charges payable for processing resource consent applications

Item	Initial fixed fee - payable upon lodgment (excl GST)	Additional charge - payable subsequent to processing
– Land use application for bore permit – Land use for bore field where 3 or more bores are to be drilled for the same purpose on the same site (or in close proximity – Land use consent for gravel extraction – Other consent applications	$1,000 $1,500 $1,000 $2,000	Actual and reasonable costs[1]
Other changes or cancellations of consent conditions	$750	
Review of conditions as per RMA s128 1a, 1c or 2	$1,500	
Transfer a consent to another site	$1,500	
Extensions to lapse dates	$1,000	
Transfer of resource consent (1 only, with transfer form completed and signed) to a new owner/occupier	$200	Actual and reasonable costs[1] for non-standard process
Transfer of resource consent (2 or more, with transfer form completed and signed) to a new owner/occupier, or change of name	$250	
Certificate of compliance/deemed permitted activity		
Bore sealing	no charge	N/A
Issuing a notice under s87BA or BB stating whether an activity is a permitted activity	$1,500	Actual & reasonable costs[1] (likely to be lodged as a consent)
Certificate of compliance	$1,500	Actual and reasonable costs[1]

Table 2: Charges for resource consent applications requiring notification or a hearing

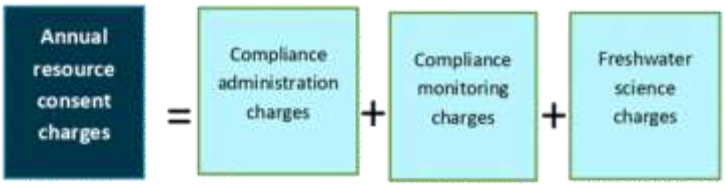
Application type	Type of fixed fee (excl GST)			Additional charge – payable subsequent to processing
	Initial fixed fee: payable upon application	Fixed fee: payable upon notification	Fixed fee: payable 5 days before hearing	
Individual resource consent application (including applications for ancillary activities)	(per Table 1)	$5,000	$10,000	Based on actual and reasonable costs[1]
Application processed as part of a catchment-wide replacement process	(per Table 1)	$1,500	$2,000	Based on actual and reasonable costs[2]
Request for independent commissioner under section 100A	**Fixed fee payable on requesting a commissioner (excl GST)**			**Additional charge – payable subsequent to processing**
Fixed fee payable on requesting an independent commissioner	$3,000 per commissioner			Based on actual and reasonable costs[1] including additional cost incurred as a result of using an independent commissioner

Note 1: Actual and reasonable costs include time spent by staff in receiving, processing, and deciding on the applications, hearing costs, and any external disbursements (which shall include any external expert advice and/or planning from consultants at cost). Staff costs shall be calculated by multiplying the actual hours involved in receiving, processing, and granting a consent by the hourly rates for the staff involved and adding any actual disbursements (as in Table 15); plus adding any hearing costs and any costs of consultants and commissioned reports; and then subtracting the fixed charge that was paid in advance. The total calculated amount shall then, if necessary, be adjusted to reflect HBRC's actual and reasonable costs having regard to the factors referred to in section 36(4) of the RMA and any relevant discounts. (This does not apply to applications which are not subject to additional charges or refunds)

Note 2: Where an activity requires multiple ancillary consents, and the application will be processed in a bundle, HBRC may require payment of only one initial fixed fee (deposit). The deposit shall be equal to the highest deposit required for any of the applications required, as per Table 1.

B. Charges to holders of resource consents for administration, compliance and impact monitoring

Annual consent monitoring and admin charges are made up of the following:



Not all the charges in the diagram above are applicable to all resource consents.

Compliance administration

Table 3: Charges for compliance administration

	Annual charge 2025-26 (excl GST)
Annual consent administration fee	$85
Annual water measuring device admin charge (for first meter) PLUS, each additional water measuring device	$230 $55
Annual water measuring device admin charge – non-exercised consent	$45

Compliance monitoring

Table 4: Charges for compliance monitoring

	Charge 2025-26 (excl GST)
On-site wastewater treatment – non-accredited – annual monitoring fee	$400
Low flows annual monitoring fee	$250
Issuing of abatement notice	$187
Late submission of data and information returns	$187
Monitoring of consents which require annual inspection, and/or information return, and/or sampling undertaken	Actual and reasonable costs[3]
Monitoring of National Environmental Standards for Plantation Forestry permitted activities	
Additional monitoring as a result or non-compliance with consent conditions	

Note 3: Actual and reasonable costs shall be calculated by multiplying the actual staff hours taken to perform the activity, by the hourly rates for the staff involved and adding any actual disbursements (as per rates in Table 15).

Freshwater science charges

Discharges to water or land, and water take consent holders are charged for the costs of performing science investigations and monitoring to manage and inform on effects, or potential effects, on the region's freshwater resources. These charges are authorised by section 36 of the Resource Management Act 1991.

Water Takes:

Freshwater quantity science charges are levied against consents to take ground water, surface water, and stream depleter takes. The charge is based on maximum consented weekly volume of take, not actual use. Where a maximum weekly take condition is not specified in the consent, a **deemed weekly volume** will be calculated by conversion of the consented maximum daily, 28 day, monthly, or annual take. Refer to the Three-Year Plan 2024-2027 for exemptions and adjustments to the annual freshwater science charges schedule.

Table 5: Charges to consent holders for Freshwater Quantity Science: WATER TAKE CONSENTS

	Annual variable charge rate 2025-26 (excl GST)	
	$	Units
Minimum charge	$240.00	per consent
Volume up to 100,000 m^3	$0.052	per m^3 deemed weekly volume
Volume from 100,000 to 1,000,000 m^3	$0.039	
Volume from 1 million to 2 million m^3	$0.019	
Volume above 2 million m^3	$0.005	

Discharges to water or land consents – basis for charges:

Freshwater quality science charges are levied against consents to discharge to freshwater, or to discharge to land in a manner that may enter water, as set out in Table 6. Charges are levied against each consent based on:

- the receiving body of the discharge (land or water), and
- the scale of consented activity (not actual discharges) as defined in Table 7.

Some activities are not scaled, though the Regional Council may apply a scale factor to charges if outliers become apparent.

Table 6: Charges to consent holders for Freshwater Quality Science: DISCHARGE CONSENTS

Annual fixed charge 2025-26 (excl GST)			
Primary purpose: Drainage, sewage, stormwater & wastewater			
Discharge to:		Water	Land
Small	1	$393	$197
	2	$786	$393
	3	$1,180	$590
Medium	4	$1,573	$786
	5	$1,966	$983
	6	$2,359	$1,180
Large	7	$2,752	$1,376
	8	$3,146	$1,573
	9	$3,529	$1,769
Activities not scaled:			
Discharge to:		Water	Land
Solid Waste		$1,573	$786
Other		$786	$393

Table 7: Definition of discharge consent scale of activity

Primary purpose of discharge	Small			Medium			Large		
	1	2	3	4	5	6	7	8	9
Drainage	Max discharge rate: < 10 l/s	Max discharge rate: 10 - 25 l/s	Max discharge rate: 26 - 75 l/s	Max discharge rate: 76 - 200 l/s	Max discharge rate: 201 - 1,000 l/s	Max discharge rate: 1,001 - 5,000 l/s	Max discharge rate: 5,001 - 10,000 l/s	Max discharge rate: 10,001-20,000 l/s	Max discharge rate: > 20,000 l/s
Sewage	Max discharge: 2-5 m^3/day	Max discharge: 6-10 m^3/day	Max discharge: 11-50 m^3/day	Max discharge: 51-100 m^3/day	Max discharge: 101-200 m^3/day	Max discharge: 201-500 m^3/day	Max discharge: 501-1,000 m^3/day	Max discharge: 1,001-2,000 m^3/day	Max discharge: > 2,000 m^3/day
Stormwater	Catchment area: < 1 ha	Catchment area: 1 to 5 ha	Catchment area: 6 to 10 ha	Catchment area: 11 to 20 ha	Catchment area: 21 to 40 ha	Catchment area: 41 to 60 ha	Catchment area: 61 to 80 ha	Catchment area: 81 to 100 ha	Catchment area: > 100 ha
Wastewater	*Dairy & Piggery operations:* Herd size < 100 cow equiv. *All other operations:* Max discharge < 15 m^3/day	*Dairy & Piggery operations:* Herd size 100-400 cow equiv. *All other operations:* Max discharge 16-50 m^3/day	*Dairy & Piggery operations:* Herd size 401-700 cow equiv. *All other operations:* Max discharge 51-250 m^3/day	*Dairy & Piggery operations:* Herd size 701-1,000 cow equiv. *All other operations:* Max discharge 251-1,000 m^3/day	*Dairy & Piggery operations:* Herd size 1,001-1,300 cow equiv. *All other operations:* Max discharge 1,001-2,000 m^3/day	*Dairy & Piggery operations:* Herd size 1,301-1,600 cow equiv. *All other operations:* Max discharge 2,001-5,000 m^3/day	*Dairy & Piggery operations:* Herd size 1,601-2,000 cow equiv. *All other operations:* Max discharge 5,001-10,000 m^3/day	*Dairy & Piggery operations:* Herd size 2,001 to 3,000 cow equiv. *All other operations:* Max discharge 10,001-20,000 m^3/day	*Dairy & Piggery operations:* Herd size >3,000 cow equiv. *All other operations:* Max discharge > 20,000 m^3/day
Solid waste and other	No scale applied. HBRC may apply scale factor to 'non-scaled' discharge consents if outliers become apparent.								

Note: Sheep, goats, and pigs are converted to cow equivalents using the following conversions: 6.5 sheep = 1 cow equiv, 8.13 goats = 1 cow equiv, 3.75 pigs = 1 cow equiv.

C. Charges relating to contaminated site management

Table 8: Charges relating to contaminated site management

	Charge 2025-26 (excl GST)
Where a party requests information about the 'contaminated site' status of a property	Actual and reasonable costs[4]
Where a party requests HBRC review and comment on contaminated site investigation and remediation reports	
Where a party requests more extensive involvement of HBRC staff	

Note 4: Actual and reasonable costs shall be calculated by multiplying the actual staff hours taken to perform the activity, by the hourly rates for the staff involved and adding any actual disbursements (as per rates in Table 15).

D. Charges for gravel extraction

Gravel extraction may be undertaken with permissions issued under the HBRC resource consents, or via individual resource consents. The charge for receiving and processing an individual consent application for extraction of gravel from rivers are as set out in Table 1. Each party taking gravel will be required to pay compliance monitoring and administration charges based on the volume of gravel extracted, the source of the gravel, and its quality, as set out in Table 9 or 10.

Table 9: Charges for gravel extraction under HBRC resource consents

Fee for issuing permissions to extract gravel under HBRC resource consents:	Charge 2025-26 (excl GST)
0-50 cubic metres	$80
Greater than 50 cubic metres	$120
Extraction charge for compliance monitoring, environmental mitigation and administration:	**Charge per m^3 extracted 2025-26 (excl GST)**
Upper Tukituki	$0.80
HPFCS rivers including lower and middle Tukituki	$1.20
Inferior grade	$0.40

Table 10: Charges for gravel extraction via individual resource consents based on $ per cubic metre extracted per annum

Extraction charge for river state, cultural and environmental monitoring: *(State of Environment monitoring charge s35 of RMA)*	Charge per m^3 extracted 2025-26 (excl GST)
Upper Tukituki	$0.80
Ngaruroro, Tūtaekurī, lower and middle Tukituki Rivers and their tributaries	$1.20
All other rivers	$0.80
Inferior grade	$0.40

E. Building Act charges for dams

Table 11: Charges for Building Act applications

Activity	Deposit 2025-26 (excl GST)
Building consent for dams – Project Information Memorandum (PIM)	$500
Certificate of acceptance – Dam valued up to $20,000 – Dam valued between $20,000 and $100,000 – Dam valued over $100,000	$500 $2,000 $4,000
Amendment to compliance schedule	$1,000
MBIE levy For building work value greater than $65,000 (incl. GST) *(effective from 1 July 2024)*	$1.75 incl. GST for every $1,000 incl. GST (or part of $1,000) of the estimated value of the building work
BRANZ levy for building work value greater than $20,000	0.1% of the contract value (above $20,000) of the estimated value of the building work

F. Maritime transport & navigation charges

Table 12: Tier 1 Marine oil response charges

	Charge 2025-26 (excl GST)
Review or approval of a Tier 1 marine oil spill response plan, including an initial audit	Actual and reasonable costs[5]
Attendance at Tier 1 plan site visit, exercise, or audit	

Note 5: Actual and reasonable costs shall be calculated by multiplying the actual staff hours taken to perform the activity, by the hourly rates for the staff involved and adding any actual disbursements (as per rates in Table 15).

Table 13: Navigation and safety charges

	Charge 2025-26 (excl GST)
Responding to maritime incidents	Actual and reasonable costs[6]
Anchorage Levy Fee for commercial vessels greater than 40 metres in length overall, anchoring within the Hawke's Bay regional waters	$1 per metre of length overall per day/part of a day
Hire boat licence	Actual and reasonable costs[6]
Pilot Exemption Certificate Examination/Revalidation	$600
Pilotage assessment fee	$250
Fee for issuing permits	$150
Temporary reservations, suspensions or exemptions under the Navigation Safety Bylaw	$150
Personal watercraft (jet ski) registration	$100 per craft

Note 6: Actual and reasonable costs shall be calculated by multiplying the actual staff hours taken to perform the activity, by the hourly rates for the staff involved and adding any actual disbursements (as per rates in Table 15).

Charges for Napier Port

An annual fixed charge will be levied to Napier Port Holdings Limited, based on 70% of the budgeted annual costs for the maritime safety regulation of port and harbour operations.

Charges for Napier City Council

An annual fixed charge will be levied to Napier City Council, based on 23% of the budgeted annual costs for the maritime safety regulation of port and harbour operations.

G. Charges for the preparation of, or change to a regional plan

Table 14: Charges for preparation or changes to a regional plan

	Deposit (excl GST)	Additional charge 2025/26 – payable subsequent to processing
Application for the preparation of, or change to, a regional plan	$ 40,000	Actual and reasonable costs

H. Charges for the response to official information requests

The first hour of time spent actioning a request for information shall be provided free of charge. HBRC reserves its rights under section 13 of the Local Government Official Information and Meetings Act 1987 (LGOIMA) to charge for the provision of information above one hour. These charges will be in line with the guidelines provided by the Ministry of Justice.

At the time of publication of this schedule these charges (including GST) were:

- Staff time spent actioning any request, after the first hour:
  - an initial charge of $38 for the first chargeable half hour or part thereof; and
  - then $38 for each additional half hour or part thereof.
- Photocopying or printing on standard A4 or foolscap paper:
  - 20c for each page after the first 20 pages
- All other charges incurred should be fixed at an amount which recovers up to the actual costs involved.

HBRC may also choose to require a deposit to be paid in advance.

I. Other charges

Table 15: Charge rates for the purpose of calculating actual costs

Item	Per hour 2025-26 (excl GST)
Executive officers	$224
Policy and planning advisors	$163
Project management and engineers	$163
Environmental scientists	$163
Resource consent processing and compliance monitoring officers	$163
Resource consent administration officers	$117
Harbourmaster	$300
Other staff not listed above	$107
Disbursement costs shall be charged at the rates set out below:	
Accommodation	- Actual cost but not exceeding $200 per night
Public notification	- Actual advertising costs
Photocopying	- 25c per A4 page B&W - 50c per A4 page colour - 50c per A3 page B&W - $1 per A2 page B&W
External laboratory testing	- Actual cost
Consultant fees	- Actual cost

Table 16: Administration charges for leasehold property changes

Item	Amount 2025-26 (excl GST)
Consent to transfer administration fee	$50
Freeholding valuation fee (refundable to applicant if freehold transaction proceeds in the allocated time)	$600

J. Charges by the Crown

The Regional Council is responsible for collecting the following Crown fees, rents, and royalties in addition to its charges:

- in the Coastal Marine Area:
  - restricted coastal activity application fees as specified
  - extraction of sand and gravel - $1.51 excluding GST per cubic metre royalty
- rent for the occupation of land from the Crown
- geothermal royalties

K. Due dates for payment

Charges payable in advance for consent applications are due on the filing of an application.

Charges for receiving, processing, and issuing permissions to extract gravel under the HBRC resource consents, are payable to HBRC in advance.

Charges for gravel extraction under individual consents are due and payable to HBRC monthly, on the same day as extraction declarations.

Charges payable for photocopying of less than $20 are due on collection of the copies.

All other charges will be due and payable on the 20th of the month following date of the invoice.

L. Cost of debt recovery

All debt collection costs incurred by HBRC in relation to the activities covered in this schedule shall be borne as a debt by the party whose actions caused the initial charge.

-ends-


Our resilience-focused
Mahere ā-Tau
Annual Plan
2025-26
HAWKES BAY
REGIONAL COUNCIL
TE KAUNIHERA Ā-ROHE O TE MATAU-A-MĀUI
hbrc.govt.nz



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He kupu nā te Toihau me te Kaiwhakahaere Matua

Message from the Chair and Chief Executive

The Annual Plan 2025-26 is a pivotal step forward in building long-term resilience for Hawke's Bay. This plan focuses on securing the region's future by prioritising three critical areas: reducing flood risk and strengthening our flood protection infrastructure, advancing solutions for regional water security, and supporting sustainable land use that safeguards our environment and economy.

These priorities are essential to ensure Hawke's Bay is prepared for the challenges of a changing climate, while enabling our communities to thrive.

We extend our sincere thanks to everyone who contributed feedback through our consultation process. Your voices have been instrumental in shaping this plan. It's clear that affordability remains a key concern for many, and your feedback helped guide our decisions.

In response, the Regional Council has taken a disciplined and strategic approach—sharpening our focus and making some difficult but necessary trade-offs to limit the impact on ratepayers. We have successfully reduced the average rates increase to 9.9%, a significant drop from the originally forecast 18.3% for 2025-26.

This Annual Plan reflects a balance between immediate action and long-term investment. While the costs of delivering critical services and resilience-building work continue to rise, we remain committed to prudent financial management and transparent decision-making.

Together, with your continued engagement, we can build a stronger, safer, and more climate-resilient Hawke's Bay — not only for today, but for generations to come.



Ngā mihi nui

Hinewai Ormsby
Chair Hawke's Bay Regional Council

Our team continues to focus on delivering improved regional resilience whilst reducing operating costs across the organisation. We are working closely with communities across the region to deliver major flood infrastructure in Wairoa, Whirinaki, Waiohiki, Pākōwhai, Ōhiti Road - Omāhu, and Pōrangahau.

This Annual Plan also includes rate funding for flood resilience work for Mangarau Stream in Havelock North being delivered by Hastings District Council.

Our flood resilience programme also includes region-wide improvements to existing schemes and installing more resilient telemetry. The programme is significant for Hawke's Bay, and we need to complete the work at pace to secure the Crown's co-funding. We thank the different communities for their continued involvement and acknowledge the challenging conversations.

As well as building resilience for too much water, we are preparing for not enough water. We are working on exploring options for water storage and aquifer recharge.

We continue to work with landowners to keep soil on our hills, manage pests, and enhance biodiversity.

We know that further investment is going to be needed to strengthen long-term water security and to manage the threat of flooding. We will be engaging with our community on these bigger conversations and costs.

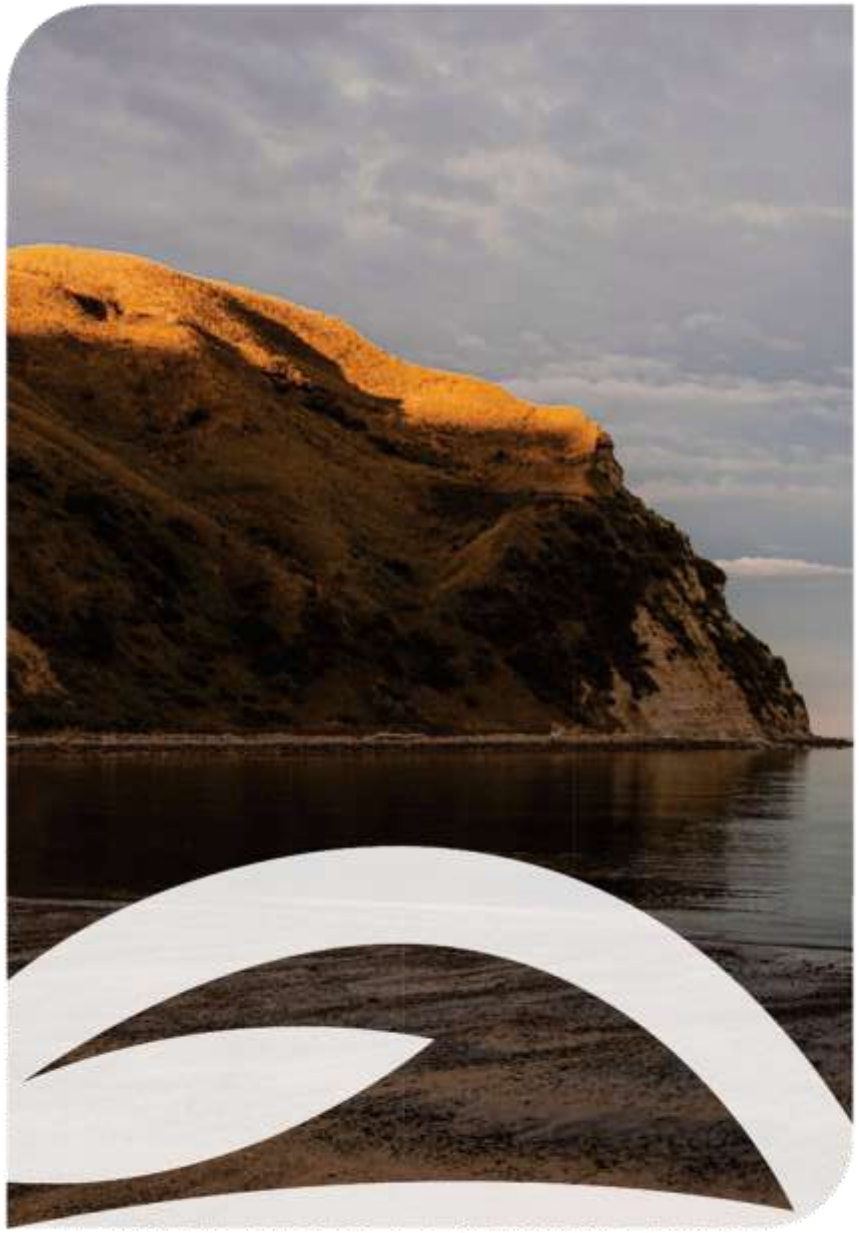
See our Engagement Hub on our website **hbrc.govt.nz, search: eengagementhub** for more information.

Your knowledge and ideas are critical to our planning.



Ngā mihi nui

Dr Nic Peet
Chief Executive Hawke's Bay Regional Council



He kupu nā ngā
Toihau Kōmiti Māori

Message from the Māori Committee Co-Chairs

E ngā mana, e ngā reo, e ngā karangatanga maha o Te Matau-a-Māui, tēnā koutou katoa.

The 2024-25 year has been another significant chapter of rebuilding and renewal. Through every challenge, the strength, unity, and resilience of our iwi, hapū and marae have guided our rohe forward. We acknowledge the enduring mana of these communities and their leadership in ensuring recovery is measured not only in repaired assets but also in the restoring the mauri of te taiao.

The Council's Annual Plan responds directly to priorities voiced in our takiwā: stronger flood resilience, secure and equitable access to wai, and a ki uta ki tai catchment-management approach. Flood resilience mahi continues to advance in Wairoa, Whirinaki, Waiohiki, Pākōwhai, Ōhiti Road-Omāhu, and Pōrangahau and we acknowledge the enduring impacts both whenua and whānau carry. Improved flood-forecasting technology and a community-led review of the Heretaunga and Upper Tukituki schemes provide opportunities to recognise and embed local knowledge and mātauranga at place.

Throughout the year, the Māori Committee has ensured that Te Ao Māori and Mātauranga Māori continue to inform and strengthen outcomes. There has been a considered focus on the continued elevation of participation, and Māori voices in decision making through supporting the development of Te Kapehu - a guidance tool for HBRC to engage appropriately and meaningfully with Mātauranga Māori, support for the retention of Māori Constituencies for the 2025 local elections, and keeping critical takiwā issues visible and acted upon.

Significant mahi lies ahead. Legislative reform, fiscal constraints, and the accelerating impacts of climate change will test our collective resolve. We recognise the differences in the whakaaro we bring, but acknowledge we are all here at the same table.

We continue to advocate for Te Tiriti o Waitangi, meaningful and authentic engagement with iwi, hapū, and marae, and decisions that honour both whenua and wai while safeguarding opportunities for our tamariki and mokopuna.

Ngā mihi nui





Mike Paku and Katarina Kawana

Ngā Toihau - Kōmiti Māori
Māori Committee Co-Chairs

Part 1

Kupu whakataki
Introduction

Role of a regional council

As a regional council we are primarily responsible for the integrated management of the natural and physical resources for Hawke's Bay. This includes land, water, air, soil, biodiversity, and built structures such as stopbanks.

We plan, budget, and report on our work in groups of activities. We have the following six groups of activities.



Planting day at Waitangi Regional Park

Governance & Partnerships

We support our elected members and tāngata whenua representatives in their governance roles and promote community sustainability through climate action, environmental education, and corporate sustainability. We also support regional development.

Policy & Regulation

We carry out policy planning and implementation, compliance monitoring, pollution response, and issue consents. We are also responsible for maritime safety.

Integrated Catchment Management

We provide science and environmental information, catchment management, and biodiversity and biosecurity work.

Asset Management

We carry out flood protection and control works, and flood assessment and warning. We also manage the Regional Water Security Programme and coastal hazards work.

We own and manage various regional parks and maintain cycle ways that are on our stopbanks. Some of these form part of the Hawke's Bay Trails.

Emergency Management

We are the administering authority for the Hawke's Bay Civil Defence Emergency Management Group (HBCDEM) on behalf of the region's councils. We also maintain emergency response capability to support the CDEM Group. Additionally, we operate a 24-hour CDEM and HBRC duty management service to respond to urgent public enquiries and complaints.

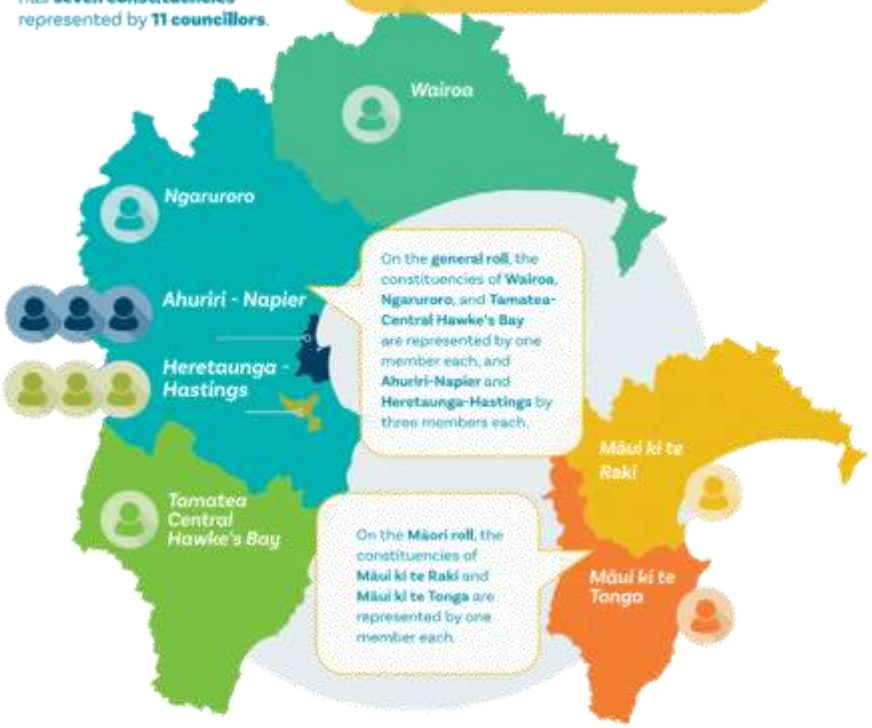
Transport

We undertake regional transport planning and coordinate road safety education across Hawke's Bay. We also contract public bus and Total Mobility taxi services.

How is council made up?

Elected members are responsible for setting the strategic direction and adopting all major policies to enable the Regional Council to achieve its vision for a healthy environment and a resilient and prosperous community.

The Hawke's Bay region has **seven constituencies** represented by **11 councillors**.



Every three years, you get the chance to vote for people you want to represent you and your community. The next local elections are being held from **9 September to 11 October 2025**. We are also required to hold a poll at the 2025 elections to ask voters whether or not they support keeping our Māori constituencies - Māui ki te Raki and Māui ke te Tonga. The results of this poll will come into force at the 2028 election.

Your councillors



Hinewai Ormsby
Chair
Ahuriri - Napier
Cr.Hinewai.Ormsby@hbrc.govt.nz



Will Foley
Deputy Chair - Tamatea/ Central Hawke's Bay
Cr.Will.Foley@hbrc.govt.nz



Di Roadley
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Martin Williams
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Thompson Hokianga
Māui ki te Tonga Māori Constituency
Cr.Thompson.Hokianga@hbrc.govt.nz



Charles Lambert
Māui ki te Raki Māori Constituency
Cr.Charles.Lambert@hbrc.govt.nz

For more information and contact details go to **hbrc.govt.nz**, *search:* **#councillors**

Vision, purpose and priorities

Our vision

We want a healthy environment, and a resilient and prosperous community.

Our purpose

We work with our community to protect and manage the region's precious taonga of rivers, lakes, soils, air, coast and biodiversity for health, wellbeing, and connectivity.



Our key strategic priorities

Flood risk

- Rivers
- Surface
- Coastal

Water security

- Water conservation
- Water storage
- Aquifer recharge
- Water regulation

Land management

- Erosion control and soil conservation
- Biodiversity and biosecurity

Financial affordability and discipline



About this plan

This Annual Plan revises our plan for 2025-26, Year 2 in our Three-Year Plan 2024-2027. Our Three-Year Plan was adopted on 10 July 2024.

Community consultation

We undertook community consultation from 31 March to 2 May 2025 on this Annual Plan.

We are required to consult with our community if we are proposing significant or material differences in our annual plan from what we forecast in our long term plan (Three-Year Plan 2024-2027).

The key differences were a reduced average rates increase and setting up a new targeted rate for flood resilience work for Mangarau Stream, in Havelock North (more information on page 16).

We invited general feedback on the plan and sought feedback on options for the following:

- the timeframe to collect a new targeted rate for flood resilience work for Mangarau Stream
- the method for two targeted rates:
  - Passenger Transport rate
  - Upper Tukituki Flood Resilience Scheme rate.

At the same time we also consulted on the:

- Draft Regional Public Transport Plan 2025-2035
- Rates Remission and Postponement Policies
- Revenue and Financing Policy, including changes required to implement the new rate for Mangarau Stream and to amend how we rate for Passenger Transport and the Upper Tukituki Flood Resilience Scheme.

Your feedback

Annual Plan 2025-26

We received 99 submissions on the combined consultation. Of those, 64 provided specific feedback on the Annual Plan.

The Regional Council held deliberations on the Annual Plan on 28 May 2025. No submitters presented their views at a hearing.

In line with the majority of submissions, Council voted in favour of its preferred options for the Annual Plan questions, as outlined on the following pages. Council also decided to go ahead with proposed changes to the:

- Rates Remission and Postponement Policies
- Revenue and Financing Policy.

Key differences from our Three-Year Plan

Reduced average rates increase

This Annual Plan has an average rates increase of 9.9%. Our Three-Year Plan forecast an average rates increase of 18.3% for 2025-26.

Some Hastings district ratepayers will be paying an additional targeted rate for Mangarau Stream flood resilience (see the following page).

Council went through a thorough process to identify operational cost reductions and made some tough calls to reduce average rate increases.

See the Financial overview on page 19 for how we have been able to reduce costs.

Our planning and reporting cycle

We produce annual plans in the years between long term plans to update information and budgets from our long term plan forecast, highlight any key variances, and set the rates for the year ahead.

A long term plan describes the community outcomes we aim to achieve, the activities we're undertaking to achieve those, and the cost of doing that work.

A long term plan is usually 10-years, and we review it every three years. Our current long term plan is three-year enabled by temporary legislation following Cyclone Gabrielle in 2023 for the worst affected councils. This reflects the high level of uncertainty following the cyclone.

Planning cycle



Our Three-Year Plan 2024-2027 is available online at **hbrc.govt.nz, search: #3yearplan**





Te Awa Mokotūāraro (Clive River)

Key differences from our Three-Year Plan continued

A new targeted rate

We have set up a new targeted rate for three years to collect funding for flood resilience work for Mangarau Stream, in Havelock North, following Cyclone Gabrielle.

This impacts about 27,000 ratepayers in the Hastings district.

Why?

We are borrowing $2.49 million to secure Crown funding of $7.51 million for Hastings District Council (HDC) to undertake the work so that Category 2C properties bordering the Mangarau Stream can be recategorised to Category 1.

We do not have a rating scheme for this as Regional Council does not own or manage Mangarau Stream related assets so we need to set up a special targeted rate to repay this loan plus the interest incurred.

HDC owns the associated assets and is responsible for the management of streams in Havelock North. However, as the flood mitigation component of the Crowns' regional recovery package sits with the Regional Council we have agreed to collect the local portion and pass it on to them.

As it's HDC's asset, we will rate the same ratepayers HDC would rate; in line with HDC's Revenue and Financing Policy. HDC will rate for ongoing maintenance.

This resilience work is part of HDC's broader Havelock North dams and streams programme.

Amended two targeted rates

We have changed how we rate for Passenger Transport and the Upper Tukituki Flood Resilience Scheme.

Council consulted on the proposed amendments following some key changes Council made in February 2024 to how we set our rates. We received lots of feedback on some of those changes and when Council adopted its Three-Year Plan 2024-2027 in July 2024 it said it would revisit the Passenger Transport rate and the Upper Tukituki Flood Resilience Scheme rate.

We have changed the Passenger Transport rate by:

1. splitting the rate to include an indirect rate of 10% for the Total Mobility Service to be charged to all ratepayers in Napier, Hastings, and Central Hawke's Bay.

   This means ratepayers who have had access to the service, but haven't previously been rated, will now be rated. This will be calculated using capital value.

2. adjusting how we collect the rest (90%) and rated as the direct rate.

   We're introducing a fixed charge (for 72.5%) per SUIP* for non-commercial/industrial/utilities ratepayers (eg residential, lifestyle) to standardise the amount paid, reducing the range paid by these ratepayers for access to the same service. The remaining 17.5% is charged by capital value to commercial/industrial properties in the footprint.

   *A SUIP is a separately used or inhabited part of a rating unit.

3. removing five rating areas (valuation rolls) from paying the direct Passenger Transport rate.

   Council decided that areas that were less developed and populated should be exluded. Areas will be rated once they reach 50% urbanisation.

We have changed the Upper Tukituki flood Resilience Scheme rate by:

1. splitting the rate to include an indirect rate of 10%, to be charged to all ratepayers in Central Hawke's Bay, and parts of the Hastings district within the scheme's footprint.

   This recognises that the whole Central Hawke's Bay district, plus parts of Hastings, benefit from this scheme.

2. adjusting how we collect the rest (90%) and rated as the direct rate.

   For a fairer allocation of costs, we are increasing the proportion we collect from properties in the low band* and adjusting the proportion for the Hastings district to match Central Hawke's Bay district for the same banding levels.

   *Properties within the scheme are assessed as high, medium, or low to reflect the benefit they receive from the scheme.

Policy changes

As consulted on we have made some consequential changes to the Revenue and Financing Policy and Rates Remission and Postponement Policies.

Revenue and Financing Policy - we have added a new targeted rate for the flood resilience work for Mangarau Stream and amended how we set the targeted rates for Passenger Transport and the Upper Tukituki Flood Resilience Scheme. We also amended wording related to the Uniform Annual General Charge (UAGC), and the Sustainable Land Management and Regional Economic Development activities to better reflect how we set rates now.

Rates Remission and Postponement Policies - we have removed two policies that are no longer needed and adjusted the wording for one to ensure it remains relevant over time.



Public bus stop in Hastings

Part 2

Ngā kōrero pūtea

Financial information

Financial overview

Year 2 of our Three-Year Plan 2024-2027 forecast an average rates increase of 18.3%, which we have brought down to 9.9% (plus a new Mangarau Stream targeted rate for Hastings differential rating area one ratepayers).

While we continue to have significant increases in costs relating to past decisions, economic conditions, and impacts following Cyclone Gabrielle in 2023, we were able to make several cost reductions and fund some of our work differently to lessen the impact on ratepayers.

This year's rates includes $3.6 million remaining impact of the deferred rates increase from when Council resolved to have a covid-related, zero-rate increase in 2020-21 and a step-change in activity in our Long Term Plan 2021-2031.

Since we adopted our Three-Year Plan on 10 July 2024, we have faced $2.5 million in additional and increased costs through better information and new work. About $1.7 million of this is for new flood resilience work including implementation of recommendations from independent reviews and engagement on reimagining flood resilience in our two major schemes, Heretaunga Plains and Upper Tukituki. We also face increased insurance and depreciation costs of around $300,000 following the revaluation of our infrastructure assets.

To reduce costs we made $4 million of rate savings through cutting operational costs and staff numbers, and an additional $2.5 million of rate savings by funding some work through alternate sources of funding.

Operational cost reductions were made in corporate areas, including fleet, sponsorship, travel, and training, in Integrated Catchment Management including biodiversity and biosecurity, and in Public Transport to match co-funding from NZTA Waka Kotahi.

We are selling $1.8 million of low-risk carbon credits for critical one-off work such as implementing the recommendations from the independent reviews on Cyclone Gabrielle and on general rate activities such as biodiversity. Council believes it makes sense in the short term to use carbon credits gained though our forestry plantings to help mitigate the impact of climate change. The aim is to phase out the use of carbon credits to get back to full rate funding within two years. We will also use the $700,000 carry-forward of the special dividend from our investment company HBRIC that was not used in 2024-25.

To check the rates for your individual property, go to **hbrc.govt.nz, search: #findrates**

2025-26 funding sources

The graphs below show the various sources of funding the Regional Council will use in the upcoming year to deliver our activities.

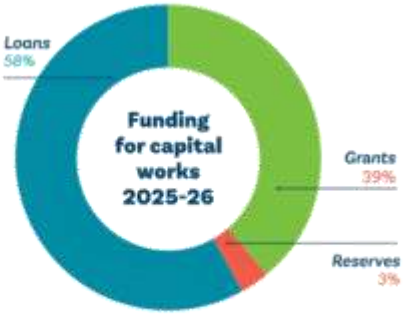
Funding for operating expenditure generally comes from rates, investment returns, grants and subsidies, and fees and charges.

Fees and charges are calculated each year based on the cost of service delivery. They include hourly rates, consent fees, water monitoring charges, compliance monitoring, navigation, and zone-based water science charges.

The Fees and Charges Schedule is available on our website **hbrc.govt.nz, search: #annualplans**

Our capital expenditure has significant funding from grants and loans because of the North Island Weather Event (NIWE) flood resilience programme.





2025-26 operating expenditure

The graph below reflects the planned operating spend for the 2025-26 financial year by group of activities, compared to the spend forecast in Year 2 of our Three-Year Plan (3YP). The groups of activities are explained in detail in our 3YP, and the changes are in line with the consultation carried out earlier this year.

Corporate Overhead includes costs associated with managing investments and collecting rates which are already funded by the General Rate. Other corporate costs are allocated across the other groups of activities.

The key decreases from the 3YP are in Integrated Catchment Management, principally biosecurity and biodiversity, Transport to reflect lower than requested co-funding from NZTA Waka Kotahi, and corporate costs that are allocated across all activities.

The main increase since the 3YP is in the Asset Management group of activities for new flood resilience work. This includes implementation of recommendations from independent reviews following Cyclone Gabrielle and other recent weather events, and engagement on reimagining flood resilience in our two major flood resilience schemes, Heretaunga Plains and Upper Tukituki.

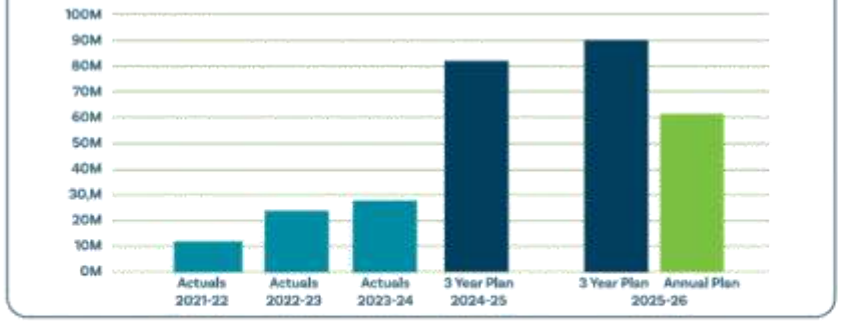
2025-26 capital expenditure

Total capital expenditure for the year is lower than Year 2 of the 3YP as we firm up timing on the NIWE flood resilience programme. As can be seen in the bottom graph the amount of capital expenditure in the years following Cyclone Gabrielle are significant compared to earlier years. This is a comprehensive multi-year and multi-million-dollar construction programme, and the largest we have ever undertaken.

Expenditure by activity



Capital expenditure



Prospective financial statements

Prospective statement of comprehensive revenue and expense

	Note	Annual Report 2023-24 $000	3YP Yr1 2024-25 $000	3YP Yr2 2025-26 $000	Annual Plan 2025-26 $000
REVENUE					
Revenue from activities	1	9,310	10,761	9,587	9,369
Rates revenue	2	40,982	47,497	56,198	55,121
Subsidies and grants	3	151,329	69,759	75,844	51,609
Other revenue	3	16,696	17,105	15,387	15,660
Fair value gains on investments	7	8,673	4,179	4,080	4,080
Total Operating Revenue		**226,990**	**149,301**	**161,097**	**133,839**
EXPENDITURE					
Expenditure on activities	1	(210,784)	(83,705)	(80,218)	(77,765)
Finance costs		(6,032)	(5,449)	(6,063)	(6,848)
Depreciation and amortisation expense	5	(4,667)	(4,450)	(4,255)	(3,905)
Fair value losses		(2,053)	-	-	-
Impairment		-	(20)	-	(20)
Total Operating Expenditure		**(223,536)**	**(93,624)**	**(90,536)**	**(88,128)**
OPERATING SURPLUS					
Operating Surplus / (Deficit) before Income Tax		**3,454**	**55,677**	**70,561**	**45,711**
OTHER COMPREHENSIVE REVENUE AND EXPENSE					
Other Comprehensive Revenue and Expense					
Gain/(loss) on other financial assets	7	4,069	1,434	1,471	1,224
Gain/(loss) on revalued intangible asset		2,144	-	-	-
Gain/(loss) on revalued property, plant and equipment assets		456	-	-	-
Gain/(loss) on revalued infrastructure assets		214,711	-	-	-
Total Other Comprehensive Revenue and Expense		**221,380**	**1,434**	**1,471**	**1,224**
TOTAL COMPREHENSIVE REVENUE AND EXPENSE		**224,835**	**57,111**	**72,031**	**46,935**

The accompanying notes form part of these prospective financial statements.

Prospective statement of changes in net assets/equity

	Annual Report 2023-24 $000	3YP Yr1 2024-25 $000	3YP Yr2 2025-26 $000	Annual Plan 2025-26 $000
Net Assets / Equity at the Start of the Year	682,662	676,351	730,558	963,043
Total comprehensive revenue and expenditure	224,835	57,111	72,031	46,935
Reserves	-	(2,905)	(2,975)	2,870
Net Assets / Equity at the End of the year	**907,497**	**730,558**	**799,614**	**1,010,052**

Attachment 4 Item 6

Prospective statement of financial position

	Note	Annual Report 2023-24 $000	3YP Yr1 2024-25 $000	3YP Yr2 2025-26 $000	Annual Plan 2025-26 $000
ASSETS					
Non-Current Assets					
Property, plant and equipment		37,967	36,842	35,891	43,274
Infrastructure assets		435,885	302,622	389,100	558,017
Investment property		66,697	66,243	67,550	69,385
Intangible assets		10,868	11,473	11,156	18,207
Forestry assets	7(b)	11,318	12,070	12,403	10,159
Prepayments		168	42	-	168
Other financial assets		140,026	143,107	144,060	148,360
Investment in council-controlled organisations		351,869	335,948	337,172	374,231
Total Non-Current Assets		**1,054,798**	**908,347**	**997,333**	1,216,901
Current Assets					
Inventories		777	821	821	674
Trade & other receivables		23,961	18,968	18,984	68,543
Derivative financial instruments		1,909	2,243	2,234	2,734
Other financial assets		2,083	3,081	3,025	318
Cash and cash equivalents		62,276	26,185	22,831	9,244
Total Current Assets		**91,006**	**51,298**	**47,896**	74,913
TOTAL ASSETS		**1,145,804**	**959,646**	**1,045,230**	1,291,814
NET ASSETS / EQUITY					
Accumulated funds		271,287	317,607	387,900	369,777
Fair value reserves		506,415	286,739	288,210	509,513
Other reserves	8	129,794	126,212	123,503	130,538
TOTAL NET ASSETS / EQUITY		**907,497**	**730,558**	**799,613**	1,009,828
LIABILITIES					
Non-Current Liabilities					
Borrowings	4(a)	99,600	150,915	144,792	182,213
ACC leasehold financing liabilities		29,574	29,274	29,279	29,280
Provisions for other liabilities and charges		19	-	-	-
Employee benefit liabilities		433	426	431	433
Total Non-Current Liabilities		**129,627**	**180,615**	**174,502**	211,925
Current Liabilities					
Borrowings	4(a)	30,563	4,650	27,250	39,289
ACC Leasehold financing liabilities		3,421	1,500	1,630	1,702
Employee benefit liabilities		2,505	2,574	2,590	2,014
Trade and other payables		55,736	29,629	29,525	27,591
Funds held on Behalf		16,456	10,120	10,120	500
Total Current Liabilities		**108,682**	**48,472**	**71,115**	71,060
TOTAL LIABILITIES		**238,308**	**229,088**	**245,617**	282,986
TOTAL NET ASSETS / EQUITY & LIABILITIES		**1,145,804**	**959,646**	**1,045,230**	1,291,814

The accompanying notes form part of these financial statements.

Prospective cash flow statement

	Note	Annual Report 2023-24 $000	3YP Yr1 2024-25 $000	3YP Yr2 2025-26 $000	Annual Plan 2025-26 $000
CASH FLOW FROM OPERATING ACTIVITIES					
Cash was provided from:					
Receipts from customers		10,915	13,132	12,035	11,770
Rates received		40,701	47,518	56,218	58,143
Dividends received		7,206	10,505	8,625	8,625
Interest received		5,483	4,228	4,315	4,315
Grants received		150,668	69,407	75,797	8,224
Other revenue		4,845	352	47	369
Total		219,817	145,142	157,037	86,442
Cash was applied to:					
Payments to suppliers		207,849	85,612	43,101	38,077
Payments to and on behalf of employees		36,096	40,525	41,626	40,892
Interest expense		6,032	4,771	5,385	5,670
Funds held on behalf		3,164	-	-	-
Total		**253,141**	**130,908**	**90,112**	84,639
Net Cash Flows from Operating Activities		**(33,325)**	**14,234**	**66,926**	1,803
CASH FLOWS FROM INVESTING ACTIVITIES					
Cash was provided from:					
Disposal of property, plant and equipment		808	-	-	-
Disposal of investment properties		2,494	-	-	-
Disposal of financial assets		2,360	2,597	2,711	4,488
Total		**5,662**	**2,597**	**2,711**	4,488
Cash was applied to:					
Purchase of property, plant & equipment		4,513	2,214	1,795	6,287
Construction of infrastructure assets		23,583	79,863	87,672	83,884
Community lending		3,682	-	-	-
Forestry assets development		128	-	-	-
Leasehold liability		998	-	-	-
Total		**32,904**	**82,077**	**89,467**	90,171
Net Cash Flows from Investing Activities		**(27,242)**	**(79,480)**	**(86,756)**	(85,683)
CASH FLOWS FROM FINANCING ACTIVITIES					
Cash was provided from:					
Loans drawn		123,870	55,998	21,128	93,379
Cash was applied to:					
Loans repaid		95,200	(30,563)	(4,650)	9,474
Net Cash Flows from Financing Activities		**28,670**	**86,561**	**25,778**	83,905
Net Increase / (Decrease) in Cash & Cash Equivalents		**(31,895)**	**21,315**	**5,947**	(1,976)
Opening cash & cash equivalents		94,171	65,996	87,311	11,220
Closing Cash & Cash Equivalents		**62,275**	**87,311**	**93,258**	9,244

Notes to the financials

Note 1: Activity revenue and expenditure

	Note	Annual Report 2023-24 $000	3YP Yr1 2024-25 $000	3YP Yr2 2025-26 $000	Annual Plan 2025-26 $000
REVENUE					
Groups of activity					
Governance and Partnerships		(205)	-	-	-
Policy and Regulation		2,145	3,299	3,360	3,356
Integrated Catchment Management		3,203	2,589	2,637	2,431
Asset Management		1,819	4,245	2,808	3,803
Emergency Management		1,469	120	121	60
Transport		478	350	500	492
Corporate Overhead		402	159	162	308
TOTAL REVENUE FROM ACTIVITIES		**9,310**	**10,761**	**9,587**	**9,369**
EXPENDITURE					
Groups of activity					
Governance and Partnerships		7,396	7,275	5,418	5,594
Policy and Regulation		89,020	12,259	12,743	12,302
Integrated Catchment Management		29,718	26,801	28,286	28,359
Asset Management		28,966	27,034	22,860	24,537
Emergency Management		7,522	5,414	4,750	5,059
Regional Recovery Agency		43,385	-	-	-
Transport		10,045	10,965	12,642	11,406
Corporate Overhead		5,431	3,875	3,837	4,061
TOTAL EXPENDITURE BY ACTIVITES		**221,483**	**93,623**	**90,536**	**88,128**
Less finance costs - interest on borrowings		5,071	4,771	5,385	5,760
Less finance costs - fees associated with the transfer of Napier leasehold cashflows to ACC		961	678	678	678
Total Finance Costs		**6,032**	**5,449**	**6,063**	**6,438**
Less depreciation and amortisation expense	5	4,667	4,450	4,255	3,905
Less impairment expense			20		20
TOTAL EXPENDITURE ON ACTIVITIES		**210,784**	**83,705**	**80,218**	**77,765**

Note 2: Rates revenue

	Annual Report 2023-24 $000	3YP Yr1 2024-25 $000	3YP Yr2 2025-26 $000	Annual Plan 2025-26 $000
General funding rates				
Uniform Annual General Charge	4,337	7,035	8,750	6,327
General Rate	8,612	18,691	23,327	22,398
Total General Funding Rates	**12,949**	**25,726**	**32,077**	**28,725**
Targeted rates				
Coastal Hazards	180	222	222	224
CDEM Emergency Management	2,892	3,496	3,864	3,666
Subsidised Public Transport	3,091	4,576	5,355	4,826
Sustainable Homes - Clean Heat	624	584	608	608
Regional Economic Development	2,334	1,431	666	675
Regional Cyclone Recovery	4,937	-	-	-
Primary Production Pests	2,687	714	726	769
Sustainable Land Management Strategy	1,000	963	1,022	1,109
Water Quality		635	689	584
Land Monitoring, Research, and Investigations Science	162	295	260	373
Heretaunga Plains Flood Control Scheme	4,041	3,853	4,660	4,515
Maraetotara Flood Maintenance Scheme	16	16	17	17
Upper Makara Stream Catchment Scheme	140	113	117	112
Upper Tukituki Flood Control Scheme	1,017	1,206	1,273	1,214
Whirinaki Industrial & Other	22	6	30	109
Drainage & Pumping Schemes	4,730	4,587	4,288	4,298
Mangarau Stream	-	-	-	902
Total Targeted Rates	**27,872**	**22,647**	**23,797**	**24,117**
Rates Remissions	(420)	(1,205)	(5)	(200)
Penalties	581	330	330	482
TOTAL RATES REVENUE	**40,982**	**47,497**	**56,198**	**53,171**

Note 3: Other revenue

	Annual Report 2023-24 $000	3YP Yr1 2024-25 $000	3YP Yr2 2025-26 $000	Annual Plan 2025-26 $000
Subsidies and grants				
Grants	107,881	14,291	9,747	20,152
Grants - Flood Resilience Programme	-	55,468	66,097	31,457
New Zealand Government - Sediment & Debris	42,787	-	-	-
National Emergency Management Agency - Welfare	661	-	-	-
TOTAL SUBSIDIES AND GRANTS	**151,329**	**69,759**	**75,844**	**51,609**
Other revenue				
Dividend revenue	8,081	10,505	8,625	8,625
Leasehold rents	2,588	2,366	2,441	2,544
Interest revenue	6,149	4,228	4,315	4,315
Other income	417	5	5	176
Forestry income	390	-	-	-
TOTAL OTHER REVENUE	**16,696**	**17,105**	**15,387**	**15,660**

Note 4(a) - External debt and interest expense

	Annual Report 2023-24 $000	3YP Yr1 2024-25 $000	3YP Yr2 2025-26 $000	Annual Plan 2025-26 $000
Loan Requirements				
Opening Balance	101,493	130,130	155,565	139,571
New Borrowing	123,870	55,998	21,127	109,155
Repayments	(95,200)	(30,563)	(4,650)	(27,250)
TOTAL LOAN BALANCES	**130,163**	**155,565**	**172,042**	**221,476**
Interest Expense	5,071	4,771	5,385	5,670

New borrowings reflect an increased budgeted debt as a result of flood protection rebuild expenditure following Cyclone Gabrielle.

Note 4(b) - Internal debt & interest expense

	Annual Report 2023-24 $000	3YP Yr1 2024-25 $000	3YP Yr2 2025-26 $000	Annual Plan 2025-26 $000
LOAN REQUIREMENTS				
New Borrowings				
Governance and Partnerships	3,655	100	100	100
Policy and Regulation	-	840	840	840
Integrated Catchment Management	4,666	2,179	2,636	2,233
Asset Management	9,260	24,107	19,847	14,704
Emergency Management	-	-	-	692
Transport	-	-	-	-
Corporate Overhead	10,442	5,045	1,604	1,170
Total New Borrowings	**28,024**	**32,270**	**25,027**	**19,578**
Principal Repayments				
Governance and Partnerships	3,376	5,618	4,867	3,576
Policy and Regulation	20	20	168	84
Integrated Catchment Management	1,530	3,527	3,816	1,944
Asset Management	287	948	4,502	2,368
Emergency Management	482	1,373	1,373	785
Transport	14	27	27	14
Corporate Overhead	841	2,156	2,348	729
Total Principal Repayments	**6,550**	**13,669**	**17,101**	**9,474**
Total Loan Movement	**21,474**	**18,601**	**7,926**	**10,105**
Loan Balances				
Governance and Partnerships	24,003	20,192	15,425	16,716
Policy and Regulation	10	830	1,502	1,586
Integrated Catchment Management	17,218	15,770	14,590	15,959
Asset Management	11,231	29,323	44,671	41,864
Emergency Management	9,156	11,878	10,505	11,745
Transport	64	37	10	23
Corporate Overhead	28,402	31,926	31,180	32,367
Loan Balances	90,083	109,956	117,883	120,060
Loan Interest Expense				
Governance and Partnerships	1,219	1,165	1,045	938
Policy and Regulation	1	19	57	57
Integrated Catchment Management	764	819	846	845
Asset Management	157	761	1,361	1,356
Emergency Management	495	596	565	646
Transport	4	3	2	2
Corporate Overhead	1,143	1,408	1,508	1,426
Total Loan Interest Expense	**3,784**	**4,771**	**5,385**	**5,670**

NOTE 5 - Depreciation and amortisation

	Annual Report 2023-24 $000	3YP Yr1 2024-25 $000	3YP Yr2 2025-26 $000	Annual Plan 2025-26 $000
Capital Additions and Disposals of Property, Plant & Equipment				
Land and Buildings	460	-	-	303
Vehicles, Plant and Equipment	-	1,958	1,845	2,448
Hydrology Equipment	962	387	391	3,838
Intangible Assets	-	305	-	(1,065)
Total Capital Expenditure on Property, Plant & Equipment	**1,421**	**2,650**	**2,236**	**5,525**
Depreciation on Property, Plant and Equipment				
Land and Buildings	543	685	697	628
Vehicles, Plant and Equipment	2,024	1,915	1,894	1,708
Hydrology Equipment	566	533	596	399
Intangible Assets	575	601	316	210
Property, Plant & Equipment Asset Depreciation	**3,707**	**3,734**	**3,503**	**2,945**
Depreciation on Infrastructure Assets				
Infrastructure Assets	960	716	752	960
Infrastructure Asset Depreciation	**960**	**716**	**752**	**960**
Total Depreciation & Amortisation	**4,667**	**4,450**	**4,254**	**3,905**

NOTE 6 & 7 - Reserve movements and fair value gains

	Annual Report 2023-24 $000	3YP Yr1 2024-25 $000	3YP Yr2 2025-26 $000	Annual Plan 2025-26 $000
Note 6: Funding from Reserves				
Project Scheme Reserves	1,193	2,663	1,476	295
Tangoio Soil Conservation Forestry Reserve	(143)	718	(110)	(108)
Asset Replacement Reserve	1,802	(2,939)	(2,763)	(421)
Infrastructure Asset Depreciation Reserve	99	(728)	(915)	(947)
Future Investment Fund	1,561	(1,637)	(1,677)	1,672
Long-Term Investment Fund	236	(1,778)	(1,671)	805
Council Disaster Damage Reserves	68	(541)	-	-
Scheme Disaster Damage Reserves	(3,874)	(621)	(542)	(544)
Other Reserves	703	(10)	(10)	(111)
Total Net Funding from Reserves	**1,645**	**(4,873)**	**(6,213)**	**846**
Note 7a: Fair Value Gains From Investments				
Investment Property at beginning of year	67,195	64,755	66,243	66,079
Movement during the year	(298)	-	-	-
Fair value gains	(199)	1,488	1,307	1,307
Investment Property at end of year	**66,697**	**66,243**	**67,550**	**67,386**
Note 7b: Fair Value Gains from Forestry Assets				
Forestry Assets at beginning of year	11,745	11,745	12,070	9,959
Additions	129	(325)	-	-
Movement during the year	**129**	**(325)**	**-**	**-**
Fair value gains	(556)	325	333	330
Forestry Assets at end of year	**11,318**	**12,070**	**12,403**	**10,289**
Other fair value gains	7,375	3,800	3,910	3,449
Total Fair value gains and losses (included in statement of comprehensive revenue and expense)	**6,620**	**5,613**	**5,550**	**5,303**

Note 8 - Council reserve funds annual plan 2025 to 2026

	Infrastructure Asset Renewal	Wairoa Rivers & Streams	Special Schemes	Asset Replacement	Regional Disaster Damage	Scheme Disaster Damage	Te Awa o Mokotūāraro (Clive River) Dredging Reserve	Tangoio Soil Conservation Reserve	Maungaharuru Tangitu	Long Term Investment Fund
Note Number	1	2	3	4	5	6	7	8	9	10
At 1 July 2025	3,570	1,102	(1,056)	7,779	(5,392)	868	1,797	2,295	551	51,475
Deposits in year	999	-	1,149	2,795	-	43	346	-	-	1,300
Withdrawals in year	(2,293)	-	(854)	(3,056)	-	(586)	-	(109)	(1)	(495)
Net Movement	(1,294)	-	295	(321)	-	(543)	346	(109)	(1)	805
At 30 June 2026	2,277	1,102	(760)	7,458	(5,392)	(100)	2,143	2,186	550	52,280

	Sale of Land Non-Investment Fund	Rabbit	Ngati Pahauwera Initiatives	Port IPO Future Investment Fund	Enforcement Revenue Reserve Fund	Total Other Reserves	Fair Value Reserves
Note Number	11	12	13	14	15		
At 1 July 2025	813	151	83	65,666	494	129,662	507,289
Deposits in year	-	-	-	1,677	-	8,210	1,324
Withdrawals in year	-	(10)	-	-	-	(7,363)	-
Net Movement	-	(10)	-	1,677	-	846	1,324
At 30 June 2026	813	141	83	67,344	494	130,538	508,613

Purpose of reserve funds

1. Infrastructure asset renewal - a reserve established to fund the renewal of scheme infrastructure assets as required by the Local Government Act 2002.
2. Wairoa rivers and streams - a reserve established to fund flood mitigation and recovery work within the Wairoa district.
3. Special flood and drainage scheme - reserves established for each scheme to account for rating balances that arise each year as a consequence of the actual income and expenditure incurred in any one year.
4. Asset replacement - a reserve established to fund the replacement of operating property, plant and equipment which are not scheme based.
5. Regional disaster damage - a reserve established to provide funding for the cost of responding to and managing an event; cost of reinstatement of any uninsured assets (e.g., pathways on top of stopbanks); any difference between the deductible and the threshold for eligibility for central government assistance (government covers 60% of the loss in the event of a disaster); to fund the policy excess of $1.5 million included in the policy with private insurers to cover 40% of the loss up to $24 million in the event of a disaster; and the possibility of the cost of reinstating the level of service provided by the asset being considerably more than the optimised replacement value.
6. Scheme disaster damage - reserves established to meet each scheme's share of Local Authority Protection Programme (LAPP) insurance excess and other costs to restore scheme assets that are not recoverable from other sources.
7. Te Awa o Mokotūāraro (Clive river) dredging - a reserve established to meet the expenditure of dredging requirements on Te Awa o Mokotūāraro (Clive River).
8. Tangoio soil conservation - a reserve established to separate the revenues and expenses associated with the Tangoio Soil Conservation Reserve as this reserve is managed and overseen by the Regional Council on behalf of the Crown.
9. Maungaharuru Tangitū - a reserve established as a catchments fund in accordance with the Maungaharuru-Tangitū Claims Settlement Act.
10. Long-term Investment Fund - a reserve established to hold the proceeds of endowment leasehold land sales to be reinvested in accordance with HBRC's policy on 'Evaluation of Investment Opportunities' approved on 30 April 2008. Formerly the Sale of Land Investment Fund.
11. Sale of land non-investment fund - a reserve established to hold transfers from the Long-term Investment Fund to be invested in accordance with HBRC's policy on 'Open Space Investment' approved on 25 June 2008 and HBRC's Investment Policy set out in the 2009/19 10-Year Plan.
12. Rabbit - a reserve established to fund costs expected to be incurred with growing rabbit populations.
13. Ngāti Pāhauwera - a reserve established to ring-fence funding for Ngāti Pāhauwera rivers initiatives. For the clean up of the Mohaka, Waikari and Waihua Rivers and their catchments.
14. Port IPO Future Investment Fund - a reserve established to hold the proceeds of the Napier Port IPO.
15. Enforcement Revenue Reserve Fund - a reserve established to hold enforcement revenue for future environmental protection and restoration activities, and managing diversion scheme funds.



Prospective Funding Impact Statement

Prospective funding impact statement: whole of council

	Annual Report 2023-24 $000	3YP Yr1 2024-25 $000	3YP Yr2 2025-26 $000	Annual Plan 2025-26 $000
Sources of operating funding				
General rates & uniform annual general charges	13,110	24,851	32,402	29,005
Targeted rates	27,872	22,647	23,797	24,117
Subsidies & grants for operating purposes	138,448	11,084	9,747	8,758
Fees & charges	10,235	10,761	9,587	9,369
Fines, infringement fees & other receipts	2,858	2,371	2,447	2,720
Interest and dividends from investments	13,749	14,733	12,940	12,940
Total operating funding	**206,273**	**86,447**	**90,920**	**86,908**
Applications of operating funding				
Payments to staff & suppliers	210,871	87,378	83,193	81,309
Finance costs	5,071	5,449	6,741	6,348
Internal charges & overheads applied	181	(3,673)	(3,673)	(3,454)
Total applications of operating funding	**216,123**	**89,154**	**86,260**	**84,203**
Surplus / (deficit) of operating funding	**(9,850)**	**(2,707)**	**4,660**	**2,705**
Sources of capital funding				
Subsidies & grants for Capital Expenditure	12,220	58,675	66,097	42,851
Increase / (decrease) in debt	28,670	25,435	16,476	81,905
Gross proceeds from sale of assets	808	-	-	-
Total sources of capital funding	**41,698**	**84,110**	**82,573**	**124,757**
Applications of capital funding				
Capital expenditure:				
- to improve the level of service	25,167	79,508	85,360	128,768
- to replace existing assets	2,603	2,569	4,106	4,742
Increase / (decrease) in reserves	4078	1,506	63	(1,976)
Increase / (decrease) of investments	-	(2,180)	(2,296)	(4,072)
Total application of capital funding	**31,848**	**81,403**	**87,233**	**127,462**
Surplus / (deficit) of capital funding	**9,850**	**2,707**	**(4,660)**	**(2,705)**
Funding balance	-	-	-	-

Annual Plan Disclosure Statement

The purpose of this statement is to disclose the Council's planned financial performance in relation to various benchmarks to enable the assessment of whether the council is prudently managing its revenue, expenses, assets, liabilities, and general financial dealings.
The Council is required to include this statement in its annual plan in accordance with the Local Government (Financial Reporting and Prudence) Regulations 2014 (the regulations). Refer to the regulations for more information, including definitions of some of the terms used in this statement.

Benchmark	Planned 2025/26	Achieved
Rates Affordability Benchmark		
Total rates revenue will not exceed 60% of total revenue	39.69%	YES
Annual rate increase will not exceed 8% of operating expenditure	6.38%	YES

For this benchmark, -
a) the council's planned rates income for the year must not exceed 60% of total income, and
b) the council's planned rates increase for the year must not exceed 8% of operating expenditure

Debt Affordability Benchmark		
Debt / Total revenue not exceed 175%	165.48%	YES
Interest / Annual rates income not exceed 20%	10.67%	YES

For this benchmark, the council's planned borrowing is compared with debt to total revenue ratio not exceeding 150% and total interest expense on external public debt not exceeding 20% of total annual rates income

Balanced Budget Benchmark		
Equal or greater than 100%	147.24%	YES

For this benchmark, the council's planned revenue (excluding development contributions, vested assets, financial contributions, gains on derivative financial instruments, and revaluations of property, plant or equipment) is presented as a proportion of its planned operating expenses (excluding losses on derivative financial instruments and revaluations of property, plant or equipment).
The council meets the balanced budget benchmark if its operating revenue equals or is greater than its operating expenses

Essential Services Benchmark		
Equal or greater than 100%	8663.32%	YES

For this benchmark, the council's planned capital expenditure on network services is presented as a proportion of expected depreciation on network services.
The council meets the essential services benchmark if its planned capital expenditure on network services equals or is greater than expected depreciation on network services
(NB Council only has one network service and that covers the flood and drainage schemes)

Capital expenditure on flood protection and control works are funded by a combination of depreciation, reserve funding and borrowing for new assets. Not all infrastructure assets are depreciated as items such as stop banks do not drop in value. Capital expenditure post Cyclone Gabrielle is significantly higher then normal and hence we have a very high Essential Services Benchmark

Debt Servicing Benchmark		
Equal or less than 10%	4.24%	YES

For this benchmark, the council's planned borrowing costs are presented as a proportion of planned revenue (excluding development contributions, financial contributions, vested assets, gains on derivative financial instruments and revaluation of property, plant and equipment)
Because Statistics New Zealand projects that council's population will grow as fast as the national population growth rate, it meets the debt servicing benchmark if councils' planned borrowing costs equal or are less than 10% of its planned revenue.

Part 3

Te tauākī pāpātanga ā-pūtea penapena tāke kaunihera

Rates funding impact statement

Your rates explained

This Rates Funding Impact Statement sets out the impact of Hawke's Bay Regional Council's (HBRC) Revenue and Financing Policy on ratepayers.

The Revenue and Financing Policy clearly identifies beneficiaries of HBRC activities and how they will pay for the cost of those activities. The policy follows guiding principles which include being clear and fair, administratively efficient, consistent, and flexible.

Public benefit is funded through a combination of investment income and general rates. Private benefit is funded through targeted rates and/or direct charges.

The Rates Funding Impact Statement specifies the level of rates that apply to each group of beneficiaries within each of the Regional Council activities funded, either fully or partially, by rates.

All the rates and levels of rates included in this Rates Funding Impact Statement are GST inclusive.

Due dates for payment of rates

The rates for the 2025-26 financial year are due and payable on 20 September 2025. Pursuant to Section 57 of the Local Government (Rating) Act 2002, a penalty charge of 10% will be imposed on any outstanding current rates at 21 September 2025. A further 10% will be charged on total rates, including penalties outstanding on 1 July 2026.

Definition of 'Separately used or inhabited part of a rating unit' (SUIP)

When a fixed amount is set for each property, whether it be a Uniform Annual General Charge (UAGC) for general rates or a Uniform Targeted Rate (UTR) for targeted rates, then a fixed amount is charged for each separately used or inhabited part of a rating unit. This includes any portion inhabited or used by the owner or a person other than the owner, and who has the right to use or inhabit that portion by virtue of a tenancy, lease, licence, or other agreement.

This definition includes separately used parts, whether or not actually occupied at any particular time, which are used by the owner for rental (or other form of occupation) on an occasional or long-term basis by someone other than the owner. For the purpose of this definition, vacant land and vacant premises offered or intended for use or habitation by a person other than the owner and usually used as such are defined as 'used'.

For the avoidance of doubt, a rating unit that has a single use or occupation is treated as having one separately used or inhabited part. Units in a rest home, retail shops in a shopping complex, and additional farmhouses are considered individual SUIPs and are therefore charged with separate UAGCs and UTRs. Where two or more rating units are contiguously joined, owned by the same ratepayer, and used for the same purpose or a farm property with separately titled paddocks, then additional UAGCs or UTRs will not be payable. HBRC's intention is that this mix of rating basis better reflects the benefits delivered to the general community while addressing some of the rate level volatility experienced by those ratepayers in the community whose land values have increased by more than the average.

HBRC directly collects rates for all rating units contained within its boundaries and where specific rates are set across District/City boundaries on a value basis, then the rates are set on Estimate of Projected Valuation (equalisation) which recognises annual movement of values across the region for each territorial authority.

Section 21 of the Local Government (Rating) Act 2002 (LGRA) requires that Uniform Annual General Charges and Targeted Rates set on a uniform basis are not to exceed 30% of the total revenue from all rates sought by Hawke's Bay Regional Council for the budgeted year. The rates making up this category amount to 26.4% of the Regional Council's total rates in 2025-26 and are therefore within the limits prescribed by the Act.

Inspection and objection to HBRC's Rating Information Database

The Rating Information Database (RID) is available for inspection at HBRC offices at **159 Dalton Street, Napier** and on the Regional Council's website **hbrc.govt.nz, search: #rates**
Ratepayers have the right to inspect the RID records and can object to their rating liability on the grounds set out in the Local Government (Rating) Act 2002.

Sample rates

Comparison of rates on specific urban properties (GST inclusive)

Description of rates	Rating basis	Napier Hill		Napier South		Taradale		Havelock North	
		2024-25	2025-26	2024-25	2025-26	2024-25	2025-26	2024-25	2025-26
Details for comparison									
Capital Value	CV	890,000	890,000	620,000	620,000	670,000	670,000	1,350,000	1,350,000
Land Value	LV	520,000	520,000	380,000	380,000	360,000	360,000	600,000	600,000
Area (Hectares)	Area	0.075	0.075	0.062	0.062	0.046	0.046	0.035	0.035
Rates	Basis	$	$	$	$	$	$	$	$
General Rate	CV	208.97	296.55	145.58	206.58	157.32	223.24	311.31	424.98
Uniform Annual General Charge	Fixed	125.95	94.36	125.95	94.36	125.95	94.36	125.95	94.36
General funded rates		**334.92**	**390.91**	**271.53**	**300.94**	**283.27**	**317.60**	**437.26**	**519.34**
Coastal Hazards	Fixed	3.98	3.99	3.98	3.99	3.98	3.99	3.98	3.99
CDEM Emergency Management	Fixed	52.62	54.71	52.62	54.71	52.62	54.71	52.62	54.71
Subsidised Public Transport Direct	[CV] Fixed	93.98	82.69	65.47	82.69	70.75	82.69	140.00	82.69
Subsidised Public Transport Indirect	CV	-	6.76	-	4.71	-	5.09	-	9.72
Sustainable Homes - Clean Heat	LV	13.57	14.61	9.92	10.68	9.40	10.12	15.48	15.54
Regional Economic Development	Fixed	7.68	3.59	7.68	3.59	7.68	3.59	7.68	3.59
HPFCS Direct	CV	-	-	54.06	60.33	58.42	65.19	-	-
HPFCS Indirect	CV	19.05	21.18	13.27	14.76	14.34	15.95	28.35	30.98
Mangarau Streams	LV	-	-	-	-	-	-	-	34.62
Karamū & Tributaries	CV	-	-	-	-	-	-	91.80	88.29
Napier Meeanee Puketapu	CV	-	-	52.27	49.23	56.48	58.20	-	-
Targeted Rates		**190.88**	**187.53**	**259.27**	**284.67**	**273.67**	**294.52**	**339.91**	**323.52**
TOTAL RATES		**525.80**	**578.44**	**530.80**	**585.62**	**556.94**	**612.12**	**777.17**	**842.86**
Dollar increase/(decrease)			**$52.64**		**$54.82**		**$55.18**		**$65.69**
Percentage increase/(decrease)			**10.01%**		**10.33%**		**9.91%**		**8.45%**

Comparison of rates on specific urban properties (GST inclusive)

Description of rates	Rating basis	Flaxmere		Hastings		Wairoa		Central HB	
		2024-25	2025-26	2024-25	2025-26	2024-25	2025-26	2024-25	2025-26
Details for comparison									
Capital Value	CV	520,000	520,000	810,000	810,000	385,000	385,000	640,000	590,000
Land Value	LV	285,000	285,000	470,000	470,000	145,000	109,000	210,000	180,000
Area (Hectares)	Area	0.089	0.089	0.076	0.076	0.114	0.114	0.264	0.264
Rates	Basis	$	$	$	$	$	$	$	$
General Rate	CV	119.91	163.70	186.79	254.99	92.17	132.94	166.34	201.19
Uniform Annual General Charge	Fixed	125.95	94.36	125.95	94.36	125.95	94.36	125.95	94.36
General funded rates		**245.86**	**258.06**	**312.74**	**349.35**	**218.12**	**227.30**	**292.29**	**295.55**
Coastal Hazards	Fixed	3.98	3.99	3.98	3.99	-	-	-	-
CDEM Emergency Management	Fixed	52.62	54.71	52.62	54.71	52.62	54.71	52.62	54.71
Subsidised Public Transport Direct	[CV] Fixed	53.92	82.69	84.00	82.69	-	-	-	-
Subsidised Public Transport Indirect	CV	-	3.74	-	5.83	-	-	-	4.60
Sustainable Homes - Clean Heat	LV	7.35	7.38	12.13	12.17	-	-	-	-
Regional Economic Development	Fixed	7.68	3.59	7.68	3.59	7.68	3.59	7.68	3.59
HPFCS Direct	CV	44.56	47.79	69.42	74.44	-	-	-	-
HPFCS Indirect	CV	10.92	11.70	17.01	18.23	-	-	-	-
Mangarau Streams	LV	-	16.44	-	27.12	-	-	-	-
UTTFCS Direct	CV	-	-	-	-	-	-	10.30	63.90
UTTFCS Indirect	CV	-	-	-	-	-	-	-	9.09
Karamū & Tributaries	CV	35.36	34.01	55.08	52.97	-	-	-	-
Targeted Rates		**216.39**	**266.03**	**301.92**	**335.73**	**60.30**	**58.30**	**70.6**	**135.89**
TOTAL RATES		**462.25**	**524.09**	**614.66**	**685.08**	**278.42**	**285.60**	**362.89**	**431.44**
Dollar increase/(decrease)			**$61.84**		**$70.42**		**$7.18**		**$68.55**
Percentage increase/(decrease)			**13.38%**		**11.46%**		**2.58%**		**18.89%**

Note: The above rates are indicative based on the values of sample properties chosen. The change in rates will vary between properties based on property values and, in the case of properties in the Central Hawkes Bay and Wairoa Districts, the amount of the increase in property values following the 2024 revaluation, relative to other properties.
Note: [ ] indicates 2024-25 rating basis which has changed due to the Revenue and Financing Policy Review.

Comparison of rates on specific commercial / industrial properties (GST inclusive)

Description of rates	Rating basis	Hastings Retail		Hastings Industrial		Napier Retail		CHB		Wairoa	
		2024-25	2025-26	2024-25	2025-26	2024-25	2025-26	2024-25	2025-26	2024-25	2025-26
Details for comparison											
Capital Value	CV	2,760,000	2,760,000	3,720,000	3,720,000	1,180,000	1,180,000	690,000	590,000	445,000	385,000
Land Value	LV	580,000	580,000	1,200,000	1,200,000	660,000	660,000	405,000	405,000	175,000	155,000
Area (Hectares)	Area	0.101	0.101	0.431	0.431	0.067	0.067	0.581	0.581	0.110	0.110
Rates	Basis	$	$	$	$	$	$	$	$	$	$
General Rate	CV	636.46	868.85	857.83	1,171.06	277.06	393.18	179.33	201.19	106.53	192.94
Uniform Annual General Charge	Fixed	251.90	188.72	125.95	94.36	377.85	283.08	125.95	94.36	125.95	94.36
General funded rates		**888.36**	**1,057.57**	**983.78**	**1,265.42**	**654.91**	**676.26**	**305.28**	**295.55**	**232.48**	**287.30**
Coastal Hazards	Fixed	7.97	7.98	3.98	3.99	11.95	11.97	-	-	-	-
CDEM Emergency Management	Fixed	105.23	109.41	52.62	54.71	157.85	164.12	52.62	54.71	52.62	54.71
Subsidised Public Transport Direct	CV	286.21	323.20	385.76	435.61	124.61	146.20	-	-	-	-
Subsidised Public Transport Indirect	CV	-	19.87	-	26.78	-	8.97	-	4.60	-	-
Sustainable Homes - Clean Heat	LV	14.96	15.02	30.96	31.08	17.23	18.55	-	-	-	-
Regional Economic Development	CV	264.41	119.78	356.38	161.45	116.05	54.16	74.45	27.73	44.23	18.33
HPFCS Direct	CV	236.53	253.64	318.80	341.87	102.90	114.81	-	-	-	-
HPFCS Indirect	CV	57.96	62.10	78.12	83.70	25.25	28.08	-	-	-	-
Mangarau Streams	LV	-	100.94	-	190.32	-	-	-	-	-	-
UTTFCS Direct	CV	-	-	-	-	-	-	470.93	217.24	-	-
UTTFCS Indirect	CV	-	-	-	-	-	-	-	9.09	-	-
Karamū & Tributaries	CV	187.68	180.50	252.96	243.29	-	-	-	-	-	-
Napier, Meeanee, Puketapu	CV	-	-	-	-	398.01	374.89	-	-	-	-
Targeted rates		**1,160.95**	**1,191.84**	**1,479.58**	**1,572.80**	**952.85**	**921.75**	**598.00**	**313.37**	**96.85**	**73.04**
TOTAL RATES		**2,049.31**	**2,249.41**	**2,463.36**	**2,838.22**	**1,607.76**	**1,598.01**	**903.28**	**608.92**	**329.33**	**360.34**
Dollar increase/(decrease)			**$200.10**		**$374.86**		**($9.75)**		**($294.36)**		**($28.99)**
Percentage increase/(decrease)			**9.76%**		**15.22%**		**(0.61%)**		**(32.59%)**		**(8.80%)**

Comparison of rural rates in three districts (GST inclusive)

Description of rates	Rating basis	Hastings		CHB		Wairoa	
		2024-25	2025-26	2024-25	2025-26	2024-25	2025-26
Details for comparison							
Capital Value	CV	1,530,000	1,170,000	1,370,000	1,230,000	810,000	725,000
Land Value	LV	930,000	930,000	1,320,000	1,180,000	480,000	360,000
Area (Hectares)	Area	5.264	5.264	44.317	44.317	20.145	20.149
Rates	Basis	$	$	$	$	$	$
General Rate	CV	352.82	368.32	356.06	419.43	183.91	250.34
Uniform Annual General Charge	Fixed	125.95	94.36	125.95	94.36	125.95	94.36
General funded rates		**478.77**	**462.68**	**482.01**	**513.79**	**319.86**	**344.70**
Coastal Hazards	Fixed	3.98	3.99	-	-	-	-
CDEM Emergency Management	Fixed	52.62	54.71	52.62	54.71	52.62	54.71
Regional Economic Development	CV	22.49	8.54	22.74	9.72	12.39	5.80
Subsidised Public Transport Indirect	CV	-	8.42	-	9.59	-	-
Primary Production Pest	LV	34.69	38.87	56.63	55.58	18.91	17.32
Sustainable Land Management	LV	46.87	56.08	76.43	80.24	25.49	24.98
Water Quality	LV	30.88	29.48	50.42	42.24	16.80	13.14
Land Research and Science Monitoring	LV	14.32	18.79	23.36	26.90	7.82	8.35
HPFCS Direct	CV	131.12	107.52	-	-	-	-
HPFCS Indirect	CV	32.13	26.33	-	-	-	-
UTTFCS Direct	CV	-		1,124.79	586.50	-	-
UTTFCS Indirect	CV	-	-	-	18.94	-	-
Tūtaekurī-Waimate Moteo	CV	692.63	489.18	-	-	-	-
Paeroa	CV	-	-	-	-	100.29	119.95
Targeted rates		**1,061.73**	**841.90**	**1,406.99**	**884.42**	**234.32**	**244.25**
TOTAL RATES		**1,540.50**	**1,304.58**	**1,889.00**	**1,398.21**	**554.18**	**588.95**
Dollar increase/(decrease)			**($235.92)**		**($490.79)**		**$34.77**
Percentage increase/(decrease)			**(15.31%)**		**(25.98%)**		**6.27%**

Note: The above rates are indicative based on the values of sample properties chosen. The change in rates will vary between properties based on property values and, in the case of properties in the Central Hawkes Bay and Wairoa Districts, the amount of the increase in property values following the 2024 revaluation, relative to other properties.

Details of rates calculated within each distict and city

General Rates and Uniform Annual General Rates

Rate type	Districts	Rates set on	Units of charge	Calculation factor	Estimated rates revenue 2025-26	Rates revenue 2024-25
General Rate				Cents in $		
	Napier City	Capital Value		0.03332	8,090,878	5,631,341
	Hastings District	Capital Value		0.03148	15,728,742	9,905,938
	Central HB District	Capital Value		0.03410	2,989,799	2,406,461
	Wairoa District	Capital Value		0.03453	1,335,460	969,812
	Taupō District	Capital Value		0.02914	36,206	29,666
	Rangitīkei District	Capital Value		0.03177	7,833	4,801
					26,078,918	**18,948,020**
Uniform Annual General Charge			SUIPs	Per SUIP $		
	Napier City	Fixed Amount	29,132	94.36	2,748,988	3,634,268
	Hastings District	Fixed Amount	35,537	94.36	3,353,465	4,421,024
	Central HB District	Fixed Amount	7,319	94.36	690,809	910,189
	Wairoa District	Fixed Amount	5,069	94.36	478,303	658,097
	Taupō District	Fixed Amount	54	94.36	5,096	6,801
	Rangitīkei District	Fixed Amount	1	94.36	94	126
			77,111		**7,276,554**	**9,630,504**

Details of rates calculated within each district and city

Rate type	Districts	Rates set on	Units of charge	Calculation factor	Estimated rates revenue 2025-26	Rates revenue 2024-25
Coastal Hazards			SUIPs	Per SUIP $		
	Napier City	Fixed Amount	29,132	3.99	116,199	114,948
	Hastings District	Fixed Amount	35,537	3.99	141,750	139,832
			64,669		**257,949**	**254,780**
CDEM Emergency Management			SUIPs	Per SUIP $		
	Napier City	Fixed Amount	29,132	54.71	1,593,650	1,518,206
	Hastings District	Fixed Amount	35,537	54.71	1,944,079	1,846,819
	Wairoa District	Fixed Amount	5,069	54.71	277,283	274,938
	Central HB District	Fixed Amount	7,319	54.71	400,361	380,229
			77,056		**4,215,373**	**4,020,173**
Subsidised Public Transport - Direct				Cents in $		
Commercial / Industrial	Napier City	Capital Value		0.01239	462,553	N/A
	Hastings District	Capital Value		0.01171	528,900	N/A
					991,454	-
			SUIPs	Per SUIP $		
All Others - excluding utilities	Napier City	Fixed Amount	25,318	82.69	2,093,590	N/A
	Hastings District	Fixed Amount	24,356	82.69	2,013,952	N/A
			49,673		**4,107,452**	-
	24/25 Rate	Capital Value				5,262,465

Details of rates calculated within each district and city (continued)

Rate type	Districts	Rates set on	Units of charge	Calculation factor	Estimated rates revenue 2025-26	Rates revenue 2024-25
Subsidised Public Transport - Indirect				Cents in $		
Indirect Charge	Napier City	Capital Value		0.00076	184,756	N/A
	Hastings District	Capital Value		0.00072	313,517	N/A
	Central HB District	Capital Value		0.00078	68,272	N/A
					566,545	-
Sustainable Homes - Clean Heat				Cents in $		
	Napier City	Land Value		0.00281	303,601	280,802
	Hastings District	Land Value		0.00259	395,024	390,913
					698,625	**671,715**
Regional Economic Development				Cents in $		
Residential / Lifestyle Properties	Napier City	Fixed Amount	25,826	3.59	92,724	196,982
	Hastings District	Fixed Amount	29,213	3.59	104,885	222,456
	Wairoa District	Fixed Amount	3,985	3.59	14,309	30,667
	Central HB District	Fixed Amount	5,792	3.59	20,795	43,703
	Taupō District	Fixed Amount	4	3.59	14	31
	Rangitīkei District	Fixed Amount	0	3.59	-	-
			64,820		**232,728**	**493,838**
				Cents in $		
Commercial / Industrial Properties	Napier City	Capital Value		0.00459	173,506	365,006
	Hastings District	Capital Value		0.00434	217,666	464,801
	Wairoa District	Capital Value		0.00476	4,085	9,001
	Central HB District	Capital Value		0.00470	11,988	25,348
	Taupō District	Capital Value		0.00468	30	61
	Rangitīkei District	Capital Value		0.00000	-	-
					407,274	**864,217**
				Cents in $		
All Other Properties - excluding utilities	Napier City	Capital Value		0.00077	3,829	7,760
	Hastings District	Capital Value		0.00073	80,828	161,566
	Wairoa District	Capital Value		0.00080	13,885	34,344
	Central HB District	Capital Value		0.00079	36,168	82,016
	Taupō District	Capital Value		0.00079	855	1,618
	Rangitīkei District	Capital Value		0.00079	194	369
					135,758	**288,072**
Primary Production Pools				Cents in $		
	Napier City	Land Value		0.00453	29,244	24,497
	Hastings District	Land Value		0.00418	525,540	464,585
	Wairoa District	Land Value		0.00481	100,605	104,480
	Central HB District	Land Value		0.00471	223,666	223,349
	Taupō District	Land Value		0.00475	4,027	3,192
	Rangitīkei District	Land Value		0.00475	974	772
					884,056	**820,875**

Details of rates calculated within each district and city (continued)

Rate type	Districts	Rates set on	Units of charge	Calculation factor	Estimated rates revenue 2025-26	Rates revenue 2024-25
Sustainable Land Management Strategy				Cents in $		
	Napier City	Land Value		0.00653	42,204	33,053
	Hastings District	Land Value		0.00603	758,431	626,850
	Wairoa District	Land Value		0.00694	145,188	140,972
	Central HB District	Land Value		0.00680	322,784	301,358
	Taupō District	Land Value		0.00685	5,811	4,306
	Rangitikei District	Land Value		0.00685	1,405	1,042
					1,275,823	**1,107,579**
Water Quality				Cents in $		
	Napier City	Land Value		0.00344	22,213	21,790
	Hastings District	Land Value		0.00317	399,187	413,245
	Wairoa District	Land Value		0.00365	76,417	92,934
	Central HB District	Land Value		0.00358	169,891	198,667
	Taupō District	Land Value		0.00361	3,059	2,839
	Rangitikei District	Land Value		0.00361	740	687
					671,506	**730,161**
Land Monitoring, Research, and Investigations Science				Cents in $		
	Napier City	Land Value		0.00219	14,129	10,116
	Hastings District	Land Value		0.00202	253,906	191,845
	Wairoa District	Land Value		0.00232	48,606	43,144
	Central HB District	Land Value		0.00228	108,061	92,230
	Taupō District	Land Value		0.00229	1,945	1,318
	Rangitikei District	Land Value		0.00229	470	319
					427,117	**338,971**

Flood control schemes

Heretaunga Plains Flood Control Scheme				Cents in $		
	Napier City	Capital Value	Direct	0.00973	1,809,242	1,432,089
	Napier City	Capital Value	Indirect	0.00238	577,668	512,171
	Hastings District	Capital Value	Direct	0.00919	2,025,244	1,865,057
	Hastings District	Capital Value	Indirect	0.00225	979,969	900,891
					5,192,122	**4,710,208**
Maraetotara Flood Maintenance Scheme				Cents in $		
	Hastings District	Capital Value		0.00495	19,557	18,689
Mangarau Stream				Cents in $		
	Hastings District	Land Value	Residential	0.00577	593,368	N/A
	Hastings District	Land Value	Residential Clive	0.00467	13,080	N/A
	Hastings District	Land Value	Res Non-Urban	0.00438	71,444	N/A
	Hastings District	Land Value	Hort/Farming	0.00392	147,489	N/A
	Hastings District	Land Value	Comm CBD	0.01730	120,302	N/A
	Hastings District	Land Value	Comm Other	0.01586	98,529	N/A
	Hastings District	Land Value	Comm Non Urban	0.01355	75,636	N/A
					1,059,749	-

Details of rates calculated within each district and city (continued)

Rate type	Districts	Rates set on	Units of charge	Calculation factor	Estimated rates revenue 2025-26	Rates revenue 2024-25
Upper Makara Stream Catchment Scheme				Cents in $		
	Central HB District	Capital Value	High	0.63511	90,878	92,215
	Central HB District	Capital Value	Medium	0.10369	24,035	24,095
	Central HB District	Capital Value	Low	0.00518	5,379	5,426
	Hastings	Capital Value	Medium	0.09575	7,901	7,568
	Hastings	Capital Value	Low	0.00479	142	136
					128,335	**129,440**
Upper Tukituki Flood Control Scheme - Direct				Cents in $		
Direct	Central HB District	Capital Value	High	0.09747	247,261	539,263
	Central HB District	Capital Value	Medium	0.01682	490,513	752,405
	Central HB District	Capital Value	Low	0.01083	589,607	93,690
	Hastings District	Capital Value	Medium	0.03400	2,840	427
	Hastings District	Capital Value	Low	0.01000	16,749	1,183
					1,256,169	**1,386,968**
Upper Tukituki Flood Control Scheme - Indirect				Cents in $		
Indirect	Central HB District	Capital Value		0.00154	135,002	N/A
	Hastings District	Capital Value		0.00142	4,573	N/A
					139,574	-
Whirinaki Industrial				Cents in $		
	Hastings District	Capital Value		0.22542	125,851	6,750

Drainage schemes

Brookfields Awatoto				Cents in $		
	Napier City	Capital Value		0.08583	236,432	202,851
Clive & Muddy Creek				Cents in $		
	Hastings District	Capital Value		0.02512	356,712	316,136
Haumoana				Cents in $		
	Hastings District	Capital Value		0.02894	186,831	178,392
Karamū Drainage & Enhancement				Cents in $		
	Hastings District	Capital Value		0.00654	1,592,919	1,605,657
Napier, Meeanee, Puketapu				Cents in $		
	Napier City	Capital Value	Urban	0.00794	1,152,568	1,211,800
	Napier City	Capital Value	Industrial	0.03177	305,223	318,979
	Hastings District	Capital Value	Rural	0.00750	18,470	21,104
					1,476,261	**1,551,875**
Ohuia Whakaki Drainage Scheme				Cents in $		
	Wairoa District	Capital Value	A	0.98303	126,967	102,960
	Wairoa District	Capital Value	B	0.31695	3,896	3,184
					129,862	**106,145**

Details of rates calculated within each district and city (continued)

Rate type	Districts	Rates set on	Units of charge	Calculation factor	Estimated rates revenue 2025-26	Rates revenue 2024-25
Opoho Drainage Scheme				Per Sulp $		
	Wairoa District	Fixed Amount	A	24,686.45	24,686	37,128
	Wairoa District	Fixed Amount	B	9,205.75	9,206	13,845
	Wairoa District	Fixed Amount	C	3,682.30	3,682	5,538
					37,575	**56,512**
Pākōwhai				Cents in $		
	Hastings District	Capital Value		0.06212	216,457	198,326
Paeroa Drainage Scheme Special Rating Area				Cents in $		
	Wairoa District	Capital Value	A	0.07143	25,940	24,287
	Wairoa District	Capital Value	B	0.01361	4,757	4,993
					30,697	**29,279**
Poukawa Drainage Special				Cents in $		
	Hastings District	Capital Value		0.06295	26,238	28,363
Pyrtings				Cents in $		
	Hastings District	Capital Value		0.10878	180,175	160,593
Raupare Enhancement				Cents per Hectares		
	Hastings District	Area	1,239	1118.58818	13,856	13,718
Raupare Twyford				Cents in $		
	Hastings District	Capital Value		0.00964	181,406	190,935
Tūtaekuri Waimate Moteo				Cents in $		
	Hastings District	Capital Value		0.04181	276,325	208,706
Sustainable Homes Financial Assistance						
Voluntary targeted rate to repay financial assistance to insulate homes and provide clean heat, solar heating, Photovoltaic cells, HRV, domestic water storage and septic tank replacement		$10 per $100		$10	$10 per $100	
Erosion Control Financial Assistance						
Voluntary targeted rate to repay financial assistance to fund erosion control		$10 per $100		$10	$10 per $100	

Explanation of rating methods

General Rates	Activities Funded	Types of land to be rated (Local Government (Rating) Act, schedule 2)	Basis of rating (Local Government (Rating) Act (LRA), schedule 3)
General Rate	General rate funds the remaining cost of the council activities, excluding that portion funded by targeted rates and the UAGC.	All rateable rating units within the region.	Capital Value
Uniform Annual General Charge (UAGC)	The UAGC is set on a fixed cost per separately used or inhabited part of a rating unit (SUIP). This is calculated as a percentage of the total rates up to a maximum of 30%.	All rateable rating units within the region.	UAGC (refer to note 1)
Targeted Rates	**Activities Funded**	**Types of land to be rated (Local Government (Rating) Act, schedule 2)**	**Basis of rating (Local Government (Rating) Act (LRA), schedule 3)**
Coastal Hazards	To fund development of the CDPlan to Tangoio Coastal Hazards Strategy.	All rateable units within Napier and Hastings.	UTR (refer to note 1)
Hawke's Bay Civil Defence Emergency Management (CDEM)	Funding of the CDEM Group Office to manage the provision of effective CDEM consistent with the CDEM Act 2002.	All rating units in the region except for Rangitikei and Taupō districts.	UTR (refer to note 1)
Erosion Control – Financial Assistance	Repayment of financial assistance to ratepayers to fund riparian fencing, planting, and maintenance of planted areas for highly-erodible land unsuitable for commercial forestry.	Those ratepayers who have opted for financial assistance to be repaid over 10 years with interest as a fixed amount through a Targeted Differential rate.	Extent of provision of any service to the rating unit
Subsidised Public Transport Direct	Public passenger transport, including Total Mobility.	The direct commercial and industrial rating units based within a designated valuation roll footprint. The direct portion for all other rateable units, excluding utilities, based within a designated valuation roll footprint. Council considers QV codes in determining categorisation. Yearly review of map footprint for direct to be completed for >50% urbanisation.	Capital Value UTR (refer to note 1)
Subsidised Public Transport Indirect	Public passenger transport, including Total Mobility.	This indirect rate is calculated on all rateable units in Napier, Hastings, and Central Hawke's Bay districts to reflect the availability of the Total Mobility Scheme.	Capital Value
Sustainable Homes – Clean Heat	Management of the scheme to encourage the replacement of open fire or wood burners with more efficient forms of heating, and where necessary, the installing of insulation.	Rating units in Napier and Hastings within a designated valuation roll footprint.	Land Value
Sustainable Homes – Financial Assistance	Repayment of financial assistance to ratepayers to insulate homes, replace open fires or non-compliant wood burners, solar heating, photovoltaic cells, domestic water storage, double glazing, and septic tank replacement.	Those ratepayers who have opted for financial assistance to be repaid over 10 years with interest as a fixed amount through a voluntary targeted differential rate.	Extent of provision of any service to the rating unit
Regional Economic Development	To fund regional economic development in the Hawke's Bay region.	Residential and Lifestyle rating units based on a fixed amount per SUIP. All other rateable units, excluding utilities, based on a variable capital value calculation. Council considers QV codes in determining categorisation.	Differential UTR by usage category (refer to note 1) Capital Value
Primary Production Pests	Pest management – rabbits, rook, and primary production pest plants. Rated on all rateable rural land in the region.	Non-urban properties by valuation roll	Land Value
Sustainable Land Management	Rural partnerships and water efficiency. All productive rateable rural land in the region.	Non-urban properties by valuation roll	Land Value
Water Quality	Water Quality – Fresh Water Science. Rated on all rateable rural land in the region.	Non-urban properties by valuation roll	Land Value
Land Monitoring, Research, and Investigations Science	State of the Environment monitoring and investigation for healthy ecosystems and sustaining land for productive use. Rated on all rateable rural land in the region.	Non-urban properties by valuation roll	Land Value

Note 1: A uniform Annual General Charge (UAGC) or Uniform Targeted Rate (UTR) is set on each separately used or inhabited part of a rating unit. 'It includes any portion inhabited or used by the owner or a person other than the owner, and who has the right to use or inhabit that portion by virtue of a tenancy, lease, license, or other agreement. This definition includes separately used parts, whether or not actually occupied at any particular time, which are used by the owner for rental (or other form of occupation) on an occasional or long-term basis by someone other than the owner.

Explanation of rating methods - types of rates / activities funded

Flood Protection and Control Schemes

Flood Protection and Control Schemes	Rating Factor	Types of land to be rated (Local Government (Rating) Act, schedule 3)	Basis of rating (Local Government (Rating) Act (2002), schedule 3)
Meeanee Plains Flood Control Scheme (MPFCS)			
Napier City & Hastings District	Direct	Properties receive direct benefit from reduced risk of flooding and rivers changing their course. Rating units receiving direct benefit within Napier City and Hastings District from flood control measures.	Capital Value
Napier City & Hastings District	Indirect	Properties receive indirect benefit as a result of their proximity to areas of increased economic activity, increased social/recreational/cultural infrastructure, and increased opportunity for employment, service industry, and investment. All rating units within Napier City and Hastings District.	Capital Value
Mangaroa Stream			
Hastings District		Flood resilience work for Mangaroa Stream completed by Hastings District Council. Hastings District Council rating area 1 utilising differential categories based on land use and location.	Land Value
Maraetotara & Flood Maintenance Scheme			
Hastings District		This scheme reduces the risks of the Maraetotara River flooding Te Awanga township, roading, and communication links. The rating scheme has only one rating class covering an area of 54 hectares. Rates are levied for the scheme's maintenance activities only. The scheme was established to protect a 1/100-year flood event, although land on the right bank will still be flooded when the river is high. The scheme keeps the Maraetotara River flows within the stopbanks, floodwalls, and natural high ground, and a flood-gated outlet from the lagoon through stopbanks to the river.	Capital Value
Upper Makaroa Diversion Catchment Scheme			
Central Hawke's Bay District	High	This scheme in Central Hawke's Bay reduces number of floods impeding the road network in the Makara valley and community assets around Elsthorpe. Direct Benefit - valley floor in the upstream, flood plains of the Makara Stream, Makara Pass, and Makara Pass downstream of Kahahawai Road	Capital Value
Central Hawke's Bay District and Hastings District	Medium	This scheme in Central Hawke's Bay reduces number of floods impeding the road network in the Makara valley and community assets around Elsthorpe. Direct Benefit - the flood plain of the Makara Stream from the Elsthorpe township to the outlet of the catchment, floodplain of the Silver Range Stream from the Makara Stream, to the bridge on the Kahuranaki Road, and Makara floodplain northwards and Makara a soil and topographic boundary on the eastern side of the Kahuranaki Road.	Capital Value
Central Hawke's Bay District and Hastings District	Low	This scheme in Central Hawke's Bay reduces number of floods impeding the road network in the Makara valley and community assets around Elsthorpe. An area not in the classes above but receiving indirect benefit from all the works carried out on the scheme through the protection of communication assets including roads, telecommunications networks, the support of amenities, services, and facilities in the area, and the general economic stability of the community. Contains the balance of the catchment.	Capital Value
Upper Tukituki Flood Control Scheme (UTFCS) Zones			
Central Hawke's Bay District	High	Land adjacent to stopbanked reaches, and lower land at risk of inundation adjacent to non-stopbanked reaches, of Tukituki and Waipawa rivers and receiving a high direct benefit from reduced risk of flooding and rivers changing their course as a result of stopbanks and river control works.	Capital Value
Hastings District & Central Hawke's Bay District	Medium	Land receiving an intermediate level of direct benefit from reduced risk of flooding and rivers changing their course as a result of stopbanks and river control works.	Capital Value
Hastings District & Central Hawke's Bay District	Low	Land receiving a lower level of direct benefit from reduced risk of flooding and rivers changing their course as a result of stopbanks and river control works.	Capital Value

Explanation of rating methods - types of rates / activities funded

Flood Protection and Control Schemes

Targeted rates	Rating Factor	Types of land to be rated (Local Government (Rating) Act, schedule 3)	Basis of rating (Local Government (Rating) Act (2002), schedule 3)
Upper Tukituki Flood Control Scheme (UTFCS) Indirect			
Hastings District & Central Hawke's Bay District	Indirect	An indirect rate for all rating units within Central Hawke's Bay and those in Hastings District within the direct UTFCS designated flood scheme area.	Capital Value
Whirinaki Industrial			
Hastings District		Land receiving a lower level of direct benefit from reduced risk of flooding and rivers changing their course as a result of stopbanks and river control works.	Capital Value

Drainage and Pumping Schemes

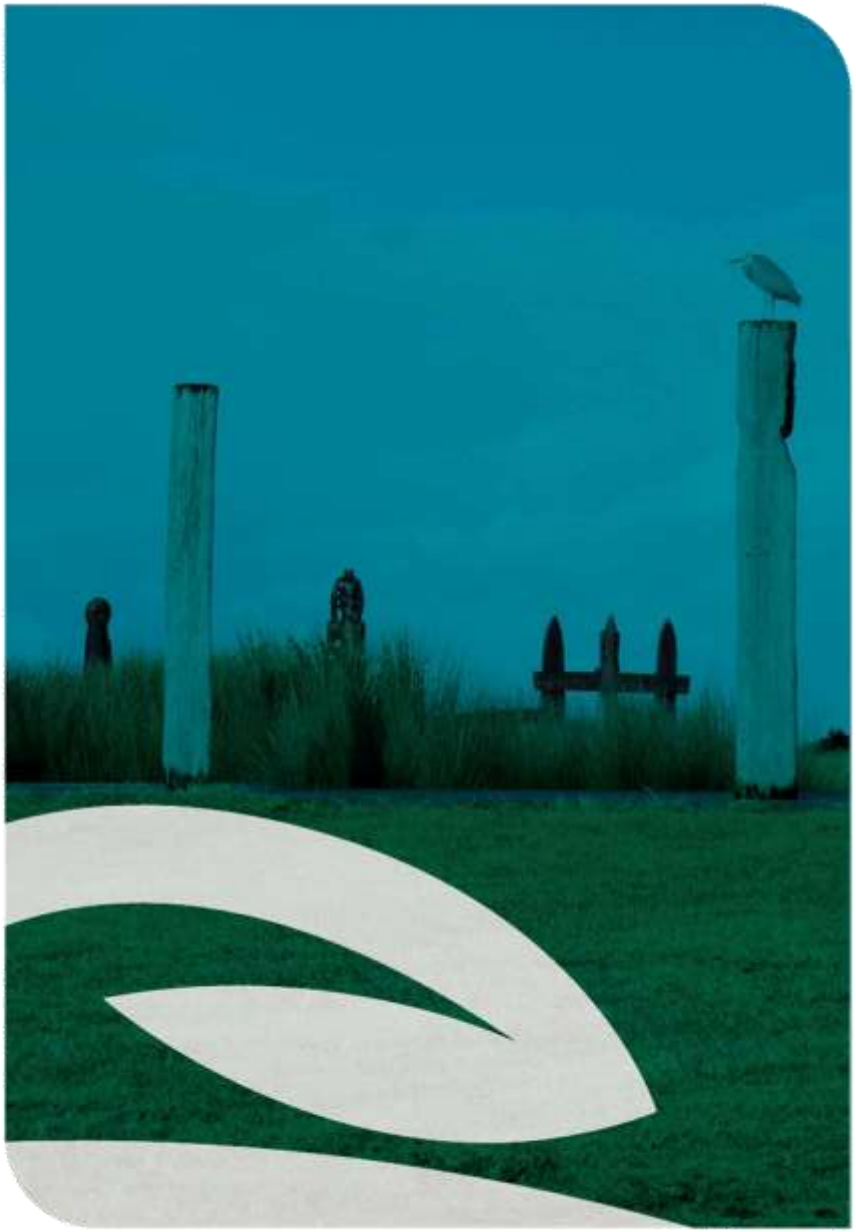
Targeted rates	Rating Factor	Types of land to be rated (Local Government (Rating) Act, schedule 3)	Basis of rating (Local Government (Rating) Act (2002), schedule 3)
Brookfields Awatoto			
Napier City	D7	Rateable land situated in Napier within the Brookfields Awatoto drainage area which the council considers receives direct benefit of drain and stream maintenance works.	Capital Value
Clive & Muddy Creek			
Hastings District	D8	Rateable land situated in the Hastings District within the Clive Muddy Creek drainage area which the council considers receives benefit of drain and stream maintenance works.	Capital Value
Maintenance			
Hastings District	D4	Rateable land situated in the Hastings District within the Maintenance drainage area which the council considers receives direct benefit of drain and stream maintenance works.	Capital Value
Karamu Drainage & Enhancement			
Hastings District		This scheme covers properties in Havelock North, being properties in the Karamu catchment, which do not contribute to the Heretaunga Plains Flood Control Scheme Streams & Drains. The scheme involves maintenance of the completed enhancement works in the Karamū Stream.	Capital Value
Napier, Meeanee, Poraiti			
Hastings District	D5	Rateable land situated in the Hastings District which the council considers received direct benefit of drain maintenance works within the drain catchment areas of Meeanee, Napier, Puketapu, and Dartmoor but excluding Napier CBD and the Brookfields Awatoto drainage area within Napier City.	Capital Value
Napier City	D5	Rateable land situated in Napier City on the right bank of the Tūtaekurī River within the drain catchment area of Omarunui, which the council considers received direct benefit of drain maintenance works within the drain catchment areas of Meeanee, Napier, Puketapu, and Dartmoor but excluding Napier CBD and the Brookfields Awatoto drainage area within Napier City.	Capital Value
Napier City	D0	Rateable land within the D1 differential and being zoned for industrial purposes. The council considers the benefit to these properties is added economic activity made possible by the drainage network and its continued maintenance.	Capital Value
Ohara Whakaki Drainage Scheme			
Wairoa District	A	This scheme is located only a few kilometres east of Wairoa where it drains a 3,410 hectare catchment to Hawke's Bay. The scheme uses a combination of detention and gravity drains plus controlled pump discharges to enable landowners to improve production. The cost is apportioned across a land area of just over 2,038 hectares based on the location. Land that without drainage could be inundated up to 12 months of the year. Primary rate payer.	Capital Value
Wairoa District	B	This scheme is located only a few kilometres east of Wairoa where it drains a 3,410 hectare catchment to Hawke's Bay. The scheme uses a combination of detention and gravity drains plus controlled pump discharges to enable landowners to improve production. The cost is apportioned across a land area of just over 1,038 hectares based on the location. Land that without drainage could be inundated up to 12 months of the year. All other ratepayers.	Capital Value

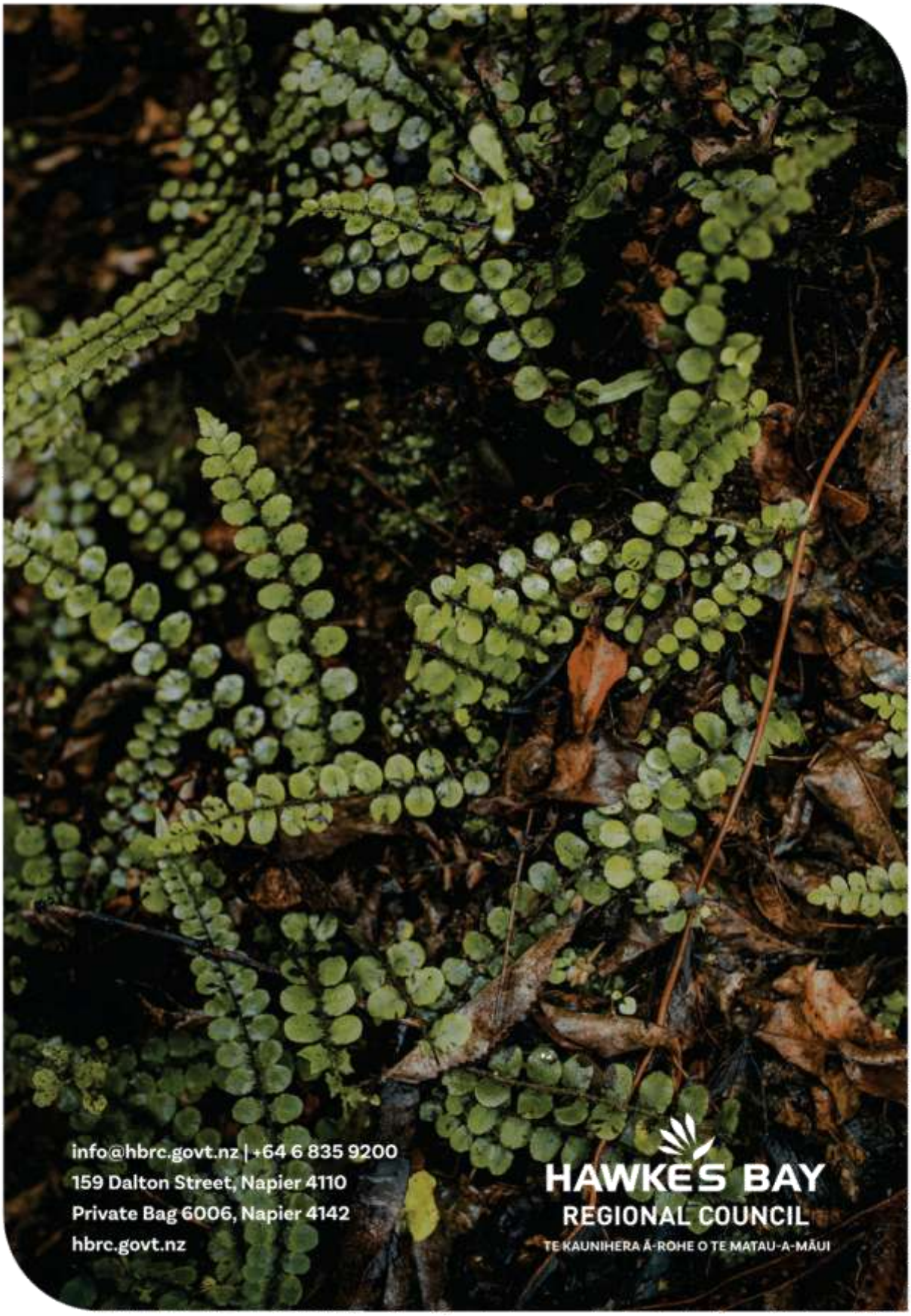
Explanation of rating methods - types of rates / activities funded

Drainage and pumping stations

Targeted rates	Rating factor	Types of land to be rated (Local Government (Rating) Act, schedule 2)	Basis of rating (Local Government (Rating) Act (2002), schedule 3)
Opoho Drainage Scheme			
Wairoa District	A, B, C	This scheme drains approximately 308ha of low lying, productive land to the east of the Opoho Stream near Mahaka. The Opoho scheme involves three neighbouring farms situated approximately halfway between Wairoa and Mahaka. The relativities between the three properties in the scheme were determined by the way of an analysis of the benefits received by each property and respective apportionment of costs. The rating allocation should be reviewed every six years.	LRV (refer to note 1)
Wairoa Drainage Scheme Special Rating Area			
Wairoa District	A	Rateable property situated in the Wairoa District on the lower Wairoa land in the valley of the Waikoko Stream, the sloping land in the Clydebank Road area and on the valley floors in the middle reaches of the Awatere and Waikoko Streams which the Council considers receives both direct and indirect benefit of the drain and stream maintenance works.	Capital Value
Wairoa District	B	Rateable property situated in the Wairoa District which the council considers receives direct and indirect benefit.	Capital Value
Pākōwhai			
Hastings District	DS	Rateable land situated in the Hastings District within the Pākōwhai, Puketapu drainage area which the council considers receives direct benefit of drain and stream maintenance works.	Capital Value
Puketapu Drainage Special			
Hastings District	A	Rateable properties situated in the Hastings District which the council considers receives both direct and indirect benefit of the maintenance of the drainage scheme.	Capital Value
Portage			
Hastings District	DO	Rateable land situated in the Hastings District within the Clive Muddy Creek drainage area which the council considers receives benefit of drain and stream maintenance works.	Capital Value
Raupare Enhancement			
Hastings District	DA3	Selected properties in the Raupare catchment (1,179 hectares) which have agreed to contribute to the enhancement of specific streams and drains in the Raupare Catchment.	Area
Twyford Twyford			
Hastings District	D3	Rateable land situated in the Hastings District within the Twyford Raupare drainage area which the council considers receives direct benefit of drain and stream maintenance works.	Capital Value
Tūtaekurī Waimate Moteo			
Hastings District	DS	Rateable land situated in the Hastings District within the Tūtaekurī Waimate, Moteo drainage area which the council considers receives direct benefit of drain and stream maintenance works.	Capital Value

All rates' figures are GST inclusive




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HAWKE'S BAY
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TE KAUNIHERA Ā-ROHE O TE MATAU-A-MĀUI


Better Bus
CONNECTIONS
Regional Public
Transport Plan
2025-2035
HAWKE'S BAY
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TE KAUNIHERA Ā-ROHE O TE MATAU-A-MĀUI

Transport Planning

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2025-2035

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Foreword of the Regional Public Transport Plan 2025 - 2035

In 2022, Hawke's Bay Regional Council adopted a new and visionary Regional Public Transport Plan after extensive consultation envisaging a new bus network that provided not only more efficient bi-directional bus routes, but also improvements where buses would run more frequently, later, earlier, and with greater weekend services. The 2022 plan envisaged these changes would occur this year, in 2025.

The region and the country have changed since 2022, however, which has significantly impacted the ability to implement the 2022 plan. Funding for public transport improvements is constrained within Hawke's Bay as we focus on rebuilding our flood resilience post Cyclone Gabrielle, and national funding is also constrained with competing transport priorities taking precedence.

This review, a requirement of the Land Transport Management Act, reconfirms our intent to move to a new network design of more efficient bi-directional routes, but practically accepts many of the previously planned frequency and span of hours improvements will need to wait until additional funding becomes available. In the short term, we think we can use existing resources to move to the new network but operating it within the current timetable and overall levels of service.

The new network is still in draft form, and as always there is no doubt room to improve. We need your feedback on what could change and why. The following page shows the planned new network, with some potential future tweaks to come.

In this plan we also have several refinements on the 2022 plan to ensure we have the framework to deliver an efficient and effective bus and Total Mobility service to the region.

The funding required to provide Total Mobility services is putting extreme strain on our resources available for this essential service. We do not want to restrict how Total Mobility is used by those who need it, but we can put some controls on how our taxi and companion service operators provide these services.



Figure 1: Planned new Napier-Hastings bus network

1 Introduction

1.1 About the Regional Public Transport Plan

The Hawke's Bay Regional Public Transport Plan (RPTP), prepared by the Hawke's Bay Regional Council (HBRC), is a strategic document that sets the objectives and policies for public transport, contains details of the public transport network and development plans for the next ten years.

The RPTP provides a means for councils, transport operators, stakeholders, and the public to work together to develop and improve the public transport network and supporting infrastructure.

Hawke's Bay Regional Council (HBRC) is responsible for providing public transport services in our region, which largely comprise bus services that operate in and between Napier and Hastings, and the Total Mobility service, which provides subsidised transport for people with disabilities who are unable to access or use other transport alternatives, such as public buses. These services are provided under contract to, and are subsidised by, HBRC. Each Council in the urban areas serviced by public transport, being Hastings District Council and Napier City Council, are responsible for the deliver of supporting infrastructure. This can include bus stop, lighting, suitable sidewalks, and more. HBRC works closely with these Councils, as key delivery partners, to ensure the necessary supporting infrastructure that is fit for form and function is in place the enable and enhance the service.

The money to pay for these contracts comes from fares from passengers using the service, New Zealand Transport Agency Waka Kotahi and HBRC ratepayers. The money to pay for supporting infrastructure comes from both New Zealand Transport Agency Waka Kotahi and the relevant Council.

1.2 Timeframe

This RPTP covers the ten-year period from 2025 to 2035 but must be reviewed in three years' time. However, the Plan may also be reviewed in the event of any major changes to the funding or planning environment.

1.3 Strategic context for the RPTP

1.3.1 The Land Transport Management Act 2003

The Land Transport Management Act 2003 (LTMA) was amended in 2013, repealing the Public Transport Management Act and bringing the relevant provisions into the LTMA. The LTMA was further amended in 2023 to introduce the Sustainable Public Transport Framework (SPTF) - a new framework for the planning, procurement, ownership, and delivery of public transport services. There is a strong emphasis on value chain involvement, workforce sustainability, and service delivery.

The purpose of the LTMA is to "contribute to an effective, efficient and safe land transport system in the public interest" and requires regional councils to adopt a regional public transport plan (RPTP), which must be reviewed every three years. The LTMA prescribes how plans are to be developed and sets out the matters that must be contained in a plan. It also describes the purpose of the plan, which is to:

- describe the public transport services that are integral to the public transport network
- define the policies and procedures that apply to those public transport services
- identify the information and infrastructure that supports public transport

Principles of the SPTF have been incorporated into the amended LTMA. The SPTF seeks to prioritise mode-shift, fair and equitable treatment of employees, and improved environmental and health outcomes. It aims to make working in public transport a more attractive career option and gives Council's the opportunity to be involved in the ownership and delivery of services. The SPTF has the following objectives that are woven into the LTMA and subsequently into RPTPs:

- public transport services supports mode-shift from private motor vehicles, by being integrated, reliable, frequent, accessible, affordable, and safe

- employment and engagement of the public transport workforce is fair and equitable, providing for a sustainable labour market and sustainable provision of public transport services
- Well-used public transport services reduce the environmental and health impact of land transport, including by reducing reliance on single occupancy vehicles and by using zero-emissions technology.
- Provision of services supports value for money and efficiency from public transport investment while achieving the first three objectives.

1.3.2 Land Transport Management Act (Regulation of Public Transport) Amendment Act 2023

In August 2023, the Land Transport Management Act (LTMA) was amended with the passing of the Land Transport Management (Regulation of Public Transport) Amendment Act 2023. The Amendments to the Act mean:

- There are new objectives for the planning, procurement, and delivery of public transport to be established and embedded in the LTMA
- That in – house delivery of public transport services is enabled
- That there is transparency around aspects of service delivery including the procurement and contractual arrangements
- Different asset ownership, including public transport authorities owning assets directly, is enabled
- Greater collaboration is encouraged between regional Councils and territorial authorities in preparing regional public transport plans
- The framework for exempt services has changed, expanding the scope to include commercial and inter-regional public transport services
- The definition of Public Transport is expanded to include On-Demand public transport services and shuttle services
- Some exempt On-Demand services are allowed, and all exempt shuttle services are to be operated without the requirement to be registered with the regional council
- That regional councils can procure, contract, and deliver on demand services separately to timetabled services

The amendments acknowledge that need for public transport investment to be efficient and provide better value for money. It facilitates stronger measures for Territorial Authority involvement in the RPTP development process. The changes also acknowledge that the previous operating model created a barrier for decarbonisation targets and improvement of employee terms and conditions.

Some of the changes to the LTMA will be appropriate and applicable in Hawke's Bay, while others will not. Some may become applicable over time.

1.3.3 The Ministry of Transport Outcomes Framework

The Ministry of Transport's Transport Outcomes Framework outlines five outcome areas sought from the transport system. Public Transport contributes to these outcome areas in various ways.
By way of example, public transport can:

- Enable efficient and productive use of high value urban space (*supporting economic prosperity and environmental sustainability*)
- Reduce congesting and decrease travel times (*economic prosperity*)
- Improve access to markets, employment, and areas that contribute to economic growth (*economic prosperity, inclusive access*)
- Enable access to employment, education, healthcare, social and cultural opportunities (*economic prosperity, inclusive access, healthy and safe people*).

- Ensure access to essential services for those unable to drive (*economic prosperity, inclusive access, healthy and safe people*)
- Provide resilience to rising transport and energy costs by providing an alternative to private motor vehicles (*resilience and security, inclusive access, economic prosperity*)
- Reduce harmful emissions to the environment and human health (*environmental sustainability, healthy and safe people*)
- Reduce deaths and serious injuries as public transport is among the safest form of transport (*healthy and safe people*)



1.3.4 The Government Policy Statement on Land Transport

The Government Policy Statement on Land Transport (GPS) sets out the Government's desired outcomes and priorities for the national land transport system and determines how investment into the land transport system from the National Land Transport Fund (NLTF) will contribute to achieving overall government outcomes. It outlines central government's strategy to guide land transport investment over the next 10 years. It also provides guidance to decision makers about where and under what conditions government will focus investment and allocate resource.

The GPS 2024 – 2034 sets out four strategic priorities:

1. Economic growth and productivity
2. Increased maintenance and resilience
3. Safety
4. Value for money

Over $7 billion is spent through the NLTF each year, supported by co-investment from local government, along with some additional funding and financing.

The GPS influences decisions on how money from the NLTF will be invested across approved activities that align with the GPS strategic direction, such as Public Transport Services. Central government can also provide additional funding to progress specific transport activities or projects. In most cases, this funding is appropriated by Parliament outside of the NLTF and is spent by NZTA or, in some cases KiwiRail, acting as the Crown's delivery agent.

The Hawke's Bay RPTP has taken account of the 2024 GPS direction and priorities, particularly in relation to economic growth and productivity, as well as value for money, through creating a path for "step change" in public transport for Hawke's Bay.
The RPTP contains the following direction that is consistent with the GPS:

- Longer term investments in increased frequency and span of public transport services to meet the objective of Economic Growth and Productivity
- Supports both value for money and patronage increases, better private share levels, and economic growth and productivity, through more direct routes, better frequency, and a reliable service meaning users (both current and future) reduce their costs and increase their access while reducing travel times.
- Increases safety by creating a genuine commuting and travel alternative for users, helping to reduce single occupancy car trips and reducing road user risk.

1.3.5 The Regional Land Transport Plan

The Regional Land Transport Plan (RLTP) sets out the region's vision, objectives and funding bids, along with accompanying investment allocations, for all modes of land transport for which funding is received from the National Land Transport Fund. It contains objectives relevant to public transport and seeks the optimal funding for the provision of public transport services and infrastructure over the next three years.

The RLTP has the following 30-year strategic vision:
"An efficient transport system that is resilient, low emissions, safe, provides genuine and equitable choices, and places community wellbeing at the centre."

The RLTP goes on to set out that for Hawke's Bay to achieve this vision we must:

- Have an efficient, resilient, safe, and equitable transport system
- Reduce emission and vehicle kilometres travelled while improving health outcomes
- Ensure that all parts of the transport system integrate and connect the communities they serve
- Ensure critical routes, or suitable alternative are operating for communities, people, and freight at all times.

Underpinning the 30-year strategic vision are five strategic objectives. These help to articulate what the region aims to do to deliver on the regional vision over time. The supporting strategic objectives are:

1. **Resilience and security**
   Invest in an efficient transport system that is resilient to a changing climate and other risks, with urgency and priority.
2. **Emissions Reduction**
   Drive a low – emissions transport system that reduces the risks associated with global warming.
3. **Healthy and safe people**
   Provide a safe transport system for all users and modes that reduce the economic and social costs of crash injuries.
4. **Inclusive access**

Support fit-for-purpose, genuine, safe, and equitable transport choices for all users to sustain the health and wellbeing of communities.

5. **Environmental sustainability**
   Integrate land use planning and development to enable effective and efficient use of transport networks.

Following the devastating impacts of Cyclone Gabrielle in February 2023 the RLTP was re-written to reflect the reality our region faced.
The Cyclone highlighted that our transport system is at the limit of its durability, network improvements and enhancements are no longer appropriate for the environmental conditions, and transport choices are limited and some-what disconnected. Further, the Cyclone emphasised that our relatively car centric transport system is not as resilient as it could be, and that alternative transport options, such as public transport, are vital to a thriving and connected region.

The RLTP is primarily focused on resilience and securing reliable journeys for the community. By providing a genuine and reliable transport alternative, public transport contributes to resilience, along with driving a low emissions transport system and improving health outcomes. Aligning with the GPS on land transport 2024, the planned new public transport network can enable greater economic growth and productivity by creating efficient and effective connections to work, education, healthcare, and social engagements along with a host of broader outcomes.

1.3.6 Hawke's Bay Regional Council Plans

The HBRC Strategic Plan 2020-25 identifies four areas of focus for this period. One of these is for sustainable and climate resilient services and infrastructure. The plan sets a strategic goal of a carbon neutral Hawke's Bay by 2050. The public transport services described in this RPTP will contribute to this goal. At the time of writing the HBRC Strategic Plan 2020 – 25 is current. Throughout 2025 the HBRC strategic plan will undergo a refresh, and some elements of the strategic direction may change.

The HBRC Long Term Plan sets out public transport activities and funding sources for the next three years. The current LTP, unlike others with a ten-year horizon, focuses only on the next three years. This is a result of a special condition granted to regions that had been significantly impacted by Cyclone Gabrielle. Subsequent Long-Term Plans will revert to the usual ten-year horizon. The plan is reviewed every three years, but significant changes in activities or expenditure are captured in an annual plan.

1.4 Strategic Case

This section provides a summary of the strategic case for the Regional Public Transport Plan. The strategic case forms part of the business case approach to investment in transport. As part of this process, key stakeholders in public transport have jointly identified regional problems, the benefits of addressing those problems, and responses to them, considering the feedback received from consultation with bus users and stakeholder organisations.

Problem 1: Driving (Vehicle Kilometres Travelled) has been increasing in Hawke's Bay over the last decade. This presents a challenge for increased public transport uptake, mode shift, and a low emissions transport system.
There are many incentives to drive in Hawke's Bay. There is little congestion due to historical investment in high-capacity roads. Parking in both cities is plentiful and cheap. There is plenty of all-day free parking within easy walking distance of the city centres, and district plan rules have required parking provision for businesses until changes in 2022. Further, both long term population and economic growth have led to an increase of the movement of goods and people around the region.

This environment has supported increases in Vehicle Kilometres Travelled (VKT) over the past decade. Cyclone Gabrielle highlighted the fragility of our regional transport system and underpinned the importance of resilience and genuine transport choice to ensure people and communities stay connected, have options of how they will get around, and continue to drive a low emissions transport system. Figure 1 shows the VKT trend in Hawke's Bay between 2010 and 2024.

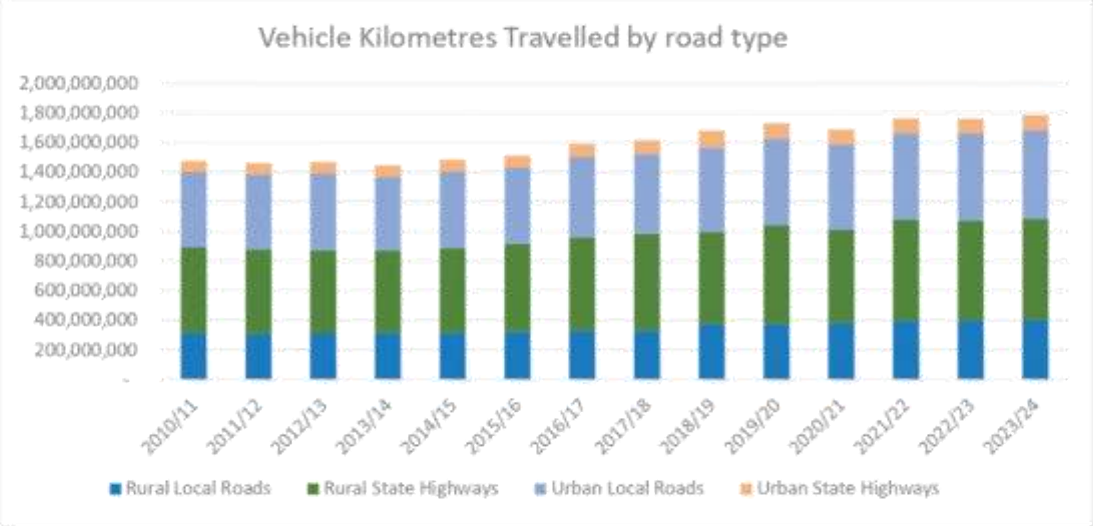


Figure 2: Vehicle Kilometres Travelled in Hawke's Bay by road type – Source New Zealand Transport Agency

This RPTP is responding to this long-term trend by developing a plan for public transport that is a viable and attractive alternative to driving for more journeys. This will support a reduction in driving in the Napier-Hastings urban area along with an increase in genuine transport options, reliable connections, and transport resilience.

Problem 2: The current car focused investment model in both rural and urban areas is leading to a suboptimal transport system that does not effectively integrate public transport and is inequitable for those who cannot drive.

Historically, transport planning and investment has been targeted at providing an ever-improving roading network, with public transport filling a secondary role. The urban areas have grown almost entirely with low density, car-centric, suburban development at the fringe of the cities. This has contributed to the declining use of the public transport network and growth in driving.

A focus on roading improvements and car-centric development excludes those who are unable to drive, whether due to age restrictions, disability, the cost of driving, or lack of access to any transport alternative. It is therefore an inequitable distribution of resources.

Population and economic growth are forecast to occur in Central Hawke's Bay towns like Waipukurau and Waipawa. While this provides significant opportunities, it needs to be supported with investments in public transport. This is necessary to ensure more equitable access to the services and opportunities located in Hastings and Napier.

Wairoa currently has no public transport services, leaving the community with few options. While traditional public transport may not be well suited to a small community, there is a desire to see alternative services introduced.

Problem 3: Public transport is not seen as an attractive or viable alternative to driving, in part due to limited frequency, span and accessibility of the existing network.

Public transport in the region is often viewed as a mode used only by people without any alternative. In the absence of significant deterrents to driving like traffic congestion or parking pressures, many Hawke's Bay residents simply do not think public transport is for them. The convenience of driving often outweighs any other reasons for using public transport. This view supports the limited historical investment in public transport, further embedding public transport as an option only for those with no other choice.
The current public transport network uses several low-frequency one-way loop routes to provide high coverage from a limited budget, however this results in poor service levels across the network. The existing network runs at low frequencies for limited hours each day. Most services are hourly or half hourly, even at peak times, with the last buses commencing service just after 6pm on weekdays, while weekend service is even more limited. This makes it inconvenient and unattractive for most potential users, which does not help reverse falling patronage.
The strategic responses we have developed to address these issues are described in Section 5. The supporting policies for the public transport services are described in section 4.

1.5 Business Case for Public Transport Services

The strategic case, outlined in section 1.4, identifies the main challenges and opportunities facing public transport services in Hawke's Bay. These challenges are significant in nature and depend on complex interrelationships, such as integrated land use planning, parking policy impacts, and investment in other transport modes, to drive change and achieve benefits.

The business case, developed and endorsed in late 2024, focuses on addressing structural challenges within public transport services and provides a pathway for improving both services and infrastructure. It identifies two primary problems facing public transport in Hawke's Bay:

Problem 1: Poor integrated planning and underinvestment leading to low patronage and constrained regional growth

Historically, there has been a fragmented approach to public transport planning and investment in the region. This disjointed strategy has resulted in suboptimal service design across urban areas and, in some cases, infrastructure that fails to effectively support services. Moreover, underinvestment in service delivery has contributed to persistent driver shortages, which undermine service reliability through trip cancellations. This, in turn, has negatively impacted patronage, as unreliable services deter potential users.

Plans such as the Napier/Hastings Future Development Strategy and the Regional Land Transport Plan aim to address these issues by better integrating growth planning (e.g., housing and industrial land) with transport and infrastructure planning. This approach seeks to create a cohesive and complementary environment for public transport services.

A key benefit of resolving this strategic problem is increased public transport patronage, which supports sustainable economic growth, community well-being, and the transition to a low-emissions transport system.

Problem 2: Poor infrastructure and services reducing community support for public transport

Investment in supporting infrastructure has historically been inconsistent and ad hoc, with limited integration into broader planning mechanisms. As a result, public transport infrastructure varies widely, from poorly

maintained roadside markings to main terminus areas with adequate facilities, such as the Hastings Library bus shelter.

Additionally, there is a lack of essential supporting services, such as shelters, seating, lighting, public toilets, and clear signage at bus stops. Accessibility is also a concern, with some stops not concreted to the kerb or poorly designed for people with mobility challenges. In some cases, key areas remain unserved by buses altogether. These issues collectively contribute to public transport being perceived as invisible or as a last-resort option for those without alternatives.

Addressing this problem through integrated planning and the provision of adequate infrastructure would enhance community support and usage of public transport assets and services.

Throughout 2024, a comprehensive business case was developed to outline the benefits public transport brings to Hawke's Bay communities and to establish a framework for integrated service and infrastructure improvements. Section 2.3 details how HBRC collaborates with local councils to plan and deliver public transport services and infrastructure and clarifies responsibility for implementation.

2 Background

2.1 Current services

The current bus and other services supported by HBRC are broadly described below. Table 1 below sets out the current bus services offered by HBRC, along with improvements made on the services to date. The current services are considered integral until such as time as HBRC can implement the planned new bi-directional network which will see buses travelling each way on direct and efficient routes. Implementation will be no earlier than January 2026.
Details of the services HBRC considers to be integral to the public transport network in Hawke's Bay, within the context of the new network, for the life of this RPTP are described in more detail in Appendix A.

2.1.1 Bus services

HBRC currently contracts the provision of bus services in and between the main urban centres of Napier and Hastings. This contract, which has been extended and now expires in July 2027, includes the following integral services:

- Route 12 H/N between Napier and Hastings via Taradale and the Eastern Institute of Technology.
- Route 11 -express between Napier, Hastings, and Havelock North (via Clive).
- Route 10 express between Napier and Hastings via the Hawke's Bay Expressway.
- Route 21 between Havelock North and Hastings.
- Route 20 between Flaxmere and Hastings.
- Route 16 a & b, 17 within Hastings (covering the suburbs of Camberley, Mahora, Parkvale and Akina). These services are currently replaced by the MyWay on demand service.
- Routes 13, 14, 15 within Napier (covering the suburbs of Tamatea, Taradale, Maraenui, Onekawa, Ahuriri, Westshore and Bayview).

2.1.2 Other services

'MyWay' On-demand trial

In June 2022, HBRC started a trial of on demand transport in suburban Hastings, replacing the underperforming 16A, 16B and 17 routes. The 'on demand' service allows users to book a ride through a call centre or app and be collected from a 'virtual stop' nearby and dropped off close to their destination. The trial has allowed the HBRC to test and understand the potential role of on-demand within the Hawke's Bay public transport system.

At the formal conclusion of the trial period a review was conducted into the performance of MyWay. The review considered a range of topics, such as value for money, patronage performance, wait times, access, community uptake and feedback, and overall role in the public transport network. At a high level the review found MyWay:

- Performed well from a patronage perspective, doubling the performance of the fixed route services.
- Provided enhanced access for the community, particularly the elderly and disabled.
- Enabled greater flexibility for users.
- Being a largely app-based service, it presented some useability challenges for some members of the community.
- Attracted some challenging social situations / behaviours from some users.
- Was expensive to run compared with the fixed route services.

On Demand services will continue to be evaluated as part of the future public transport network in Hawke's Bay and may become increasingly important, particularly as our population ages and transport needs change. Any future service could function as a complement to fixed routes.

Total Mobility Scheme

HBRC funds, administers, and manages the Total Mobility scheme in Hawke's Bay. Total Mobility is a nationwide scheme which provides subsidised taxi travel for people with permanent mobility issues / disabilities who are unable to use to the public transport system and have no other transport alternatives. At the time of writing, the Total Mobility scheme subsidises 75% of the total fare, up to a maximum fare of $50. Any fare amount exceeding $50 must be met by the user.

The scheme also helps subsidise the provision of wheelchair hoists for vehicles capable of carrying people who use mobility aids or are wheelchair bound. The scheme operates in Napier, Hastings, and Central Hawke's Bay.

While the Total Mobility Scheme is important for providing more equitable access for those who cannot drive or use public transport services, and even with the 75% subsidy on taxi travel, it is not affordable or equitable for everyone for all trips. Creating an attractive, accessible, and efficient public transport network that can suit the need of more people is key to managing demand for Total Mobility subsidies and delivering more equitable access.

The 65+ age cohort is forecast to account for over 20% of the population in Hawke's Bay by 2028, according to Stats New Zealand. Long term, this will result in a greater demand for Total Mobility services as people become less able to access either public transport or other transport modes. It is essential that the scheme is sustainable into the future as demand increases.

SuperGold Card free travel scheme

This is a nationwide scheme, which provides free off-peak travel (between 9am and 3pm on weekdays and anytime on Saturday, Sunday and public holidays) on all local buses for SuperGold Card holders. The scheme is funded by central government and administered by HBRC.

2.1.3 Current integral services and service improvements made to date

HBRC has made service improvements to bus services over the past few years. These improvements are listed below. Since 2009 the following improvements have been made by HBRC to bus services in Hawke's Bay:

Table 1: Current integral services and service improvements made to the Hawke's Bay network since 2011

Service	Route	Improvements
10 EXPRESS	Between Napier and Hastings via the Expressway	• New service introduced in September 2008. The route was cancelled in May 2014 due to low patronage and re-introduced in September 2016 on a different route to coincide with Te Whatu Ora Hawke's Bay's Workplace Travel Plan.
11 EXPRESS	Between Havelock North and Napier, via Hastings and Clive.	• New service introduced in September 2008.
12N	Napier to Hastings, via Taradale, EIT, Hawke's Bay Hospital and Bay Plaza	• Introduced an extra 2.30pm service Monday to Friday in November 2009. • Increased the number of Saturday services in November 2009 from 5 to 11. • Introduced a new Sunday service in January 2011. • Increased services to operate every 20 minutes in peak times and every 30 minutes in off-peak times. • Serves as the main connector service between the two main urban areas.
12H	Hastings to Napier, via, K-Mart, Hawke's Bay Hospital, EIT and Taradale.	• Introduced an extra 2.30pm service Monday to Friday in November 2009. • Increased the number of Saturday services from 5 to 11 in November 2009. • Introduced a new Sunday service in January 2011. • Increased services to operate every 20 minutes in peak times and every 30 minutes in off-peak times. • Serves as the main connector service between the two main urban areas.
13	Napier-Tamatea-Taradale-Tamatea - Napier	• Route extended to include Taradale shopping centre in November 2009. • Increased the number of services, Monday to Friday, from 9 to 11, in January 2011. • Introduced a new Saturday service in January 2011. • Route extended to cover Summerset Retirement Village, five trips Monday to Friday in 2017.
14	Napier-Maraenui-Onekawa-Napier	• Changed Saturday services to provide coverage from 5 hours to 7 hours in January 2011.
15	Napier-Ahuriri-Westshore-Ahuriri - Napier	• Trial made permanent in September 2012, operates Monday to Saturday. • Route extended to cover Bay View, five trips Monday to Friday and all four Saturday trips, in 2016.

Service	Route	Improvements
16 A & B	Hastings-Camberley-Raureka-Hastings Hastings-Mahora-Hastings	• Added an extra service at the end of the day, Monday to Friday, in November 2009. • Replaced with MyWay on-demand as part trial in June 2022.
17	Hastings-Parkvale-Akina-Hastings	• Changed route to travel via Summerset Retirement Village in November 2012. • Extended service coverage from 8 hours to 10 hours in 2016. • Changed route to travel via Karamu High School in 2016. • Replaced with MyWay on-demand as part of trial in June 2022.
20	Hastings-Flaxmere-Hastings, via The Park, Hastings	• Added an extra service at the end of the day, Monday to Friday, in November 2009. • Added an extra service in the middle of the day, Monday to Friday in January 2011. • Extended Saturday service coverage from 6 hours to 9 hours in January 2011. • Added seven extra daily services, Monday to Friday, in October 2012.
21	Hastings-Havelock North-Hastings, via The Park, Hastings	• Added an extra service in the middle of the day in January 2011. • Extended the route of the Saturday service to follow the same (wider) route as the Monday to Friday service in January 2011. • Introduced a Sunday service, consisting of 3 trips, in 2016. • Extended the route to cover the Summerset Village on Arataki Road and to better service the Lipscombe Crescent area.
MyWay On-demand	Hastings Urban Area	• On-demand trial for Hastings urban area, excluding Flaxmere and Havelock North, replaces routes 16 A & B and 17 in June 2022.
BUSES	All routes	• All buses (with the exception of the Express services) wheelchair accessible from 2009. • All buses meet the Euro 4 emission standard. • Introduced Public Holiday services (Saturday/Sunday timetable applies) in October 2011. • Bike racks installed on most of the fleet in October 2012. • Bike racks available on all the buses from 2016. • All buses wheelchair accessible from 2016. • Planned installation of CCTV on all buses in 2025.
TICKETING	All routes	• Introduced a "Smartcard" fare payment system in 2009. • New BeeCard integrated ticketing introduced in August 2020. • Planned transition to the National Ticketing System and 'Motu Move' cards at some point in 2025 or early 2026.

Service	Route	Improvements
FARES	All routes	• Simplified the fare structure by reducing the number of fare zones from four to two in November 2009. • Introduced a new concessionary fare category – 'Community Services Cardholders' to replace the 'beneficiary' and 'disabled' categories, in June 2010. • Set up system whereby passengers and caregivers travelling from Napier to Hawke's Bay Hospital for appointments/treatment can travel free of charge, with fares reimbursed by the Hawke's Bay District Health Board. • Fares are reviewed annually (though not necessarily increased). • Work with NGOs and government agencies to provide bespoke ticketing arrangements. • Free travel for hospital patients extended to passengers travelling to both Napier and Hastings for medical appointments (fares reimbursed by the HBDHB) in 2017. • Workplace travel plan arrangement established with the HBDHB (fares subsidised by the HBDHB) in 2017. • Trial of 'flat fares' approach, with $1 for one zone and $2 for two zones with a BeeCard began in August 2020. • Fares reviewed and increased in May 2024.

The number of bus passengers increased significantly between 2009 and 2014, reaching almost 800,000 passengers in the 2013 / 2014 year. However, patronage has steadily declined since then to just over half the 2013 / 2014 level. There are a range of causal factors for the steady decline in patronage with the primary reasons being:

- Covid-19 impacted patronage through social distancing and other requirements during the height of the pandemic.
- Following Cyclone Gabrielle, the public transport service was not running for approximately one month due to several key bridge crossing being destroyed, roads closed, significant congestion, and ongoing clean-up efforts.
- Ongoing driver shortages, particularly through the latter part of 2022, resulted in consistent service disruptions and cancellations impacting service reliability and frequency.

Combined, these factors along with others, have impacted the overall frequency and, importantly, the reliability of the service. The result of service reliability challenges has been a further decline in patronage over recent years as users take alternative transport options to get to work, school, and other engagements as they had been more reliable.
To address these challenges, the HBRC and our service provider, Go Bus, continued to work closely together to identify solutions. In January 2024 a driver wage uplift was implemented resulting in the full reinstatement of all services across the network. Since then, the service has experienced very limited cancellations, reliability increase, and both patronage and fare box recovery increase.
(refer Figure 3 below).

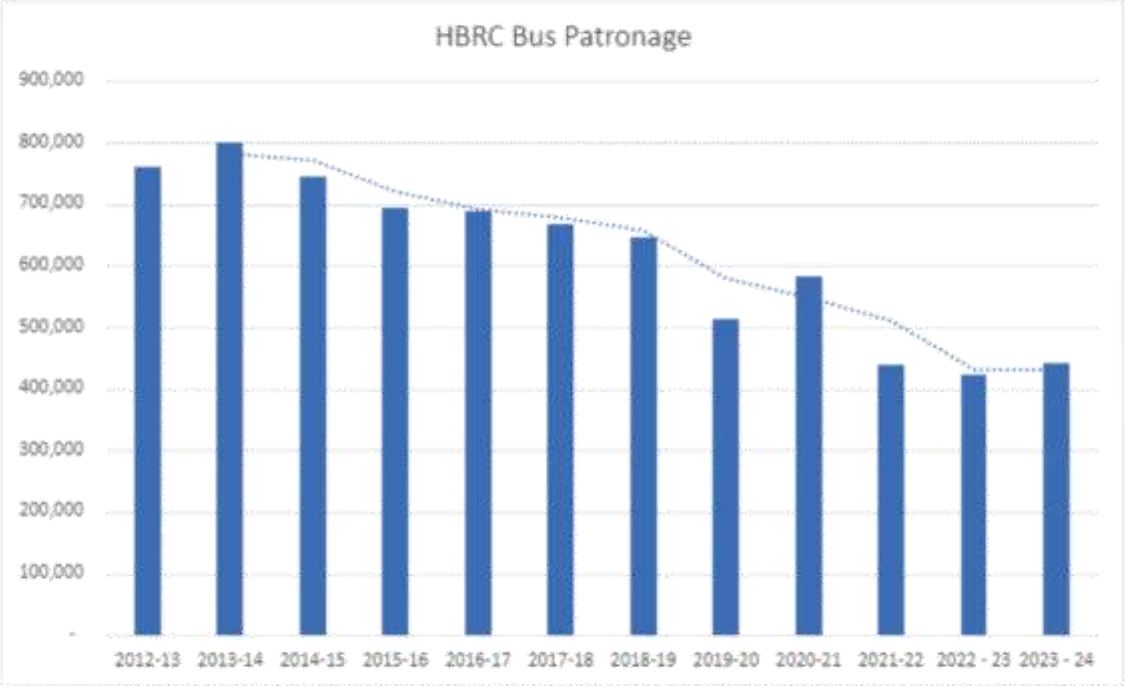


Figure 3: Hawke's Bay bus passenger trips by year

2.1.4 Total Mobility Scheme

The Total Mobility Scheme is a nationwide scheme that provides subsidised taxi transport for people with permanent disabilities and / or mobility issues who cannot use or access any other form of transport, such as public buses or private vehicles. Eligibility for the scheme is determined by the effect the impairment has on the individual's ability to undertake components of a journey on the public transport network and / or their ability to utilise other transport options.

Total Mobility services are provided under contract to, and are subsidised by, HBRC.
As demonstrated in Figure 4 below, Total Mobility trips had been steadily increasing until 2019 / 2020. From 2021 onwards there has been a marked increase in demand and usage.

During 2023 central government increased the fare subsidy from 50% to 75%, making the scheme more attractive and affordable for passengers. Coinciding with this HBRC had a blanket fare cap of $50 for all trips, irrespective of purpose (e.g. accessing healthcare, shopping, etc). The increase in the subsidy rate resulted in better affordability for users, paying a maximum contribution of $12.50 for a $50 fare. The impact of the increased subsidy made the scheme more accessible and affordable for users, there by driving more regular use of the scheme.

Following Cyclone Gabrielle there were limited transport options due to key bridges being destroyed and roads closed. As a result, some members of the community were unable to access key locations such as the hospital via the public transport network. Total Mobility provided a suitable alternative to get users to healthcare and other appointments, increasing use due to limited alternatives. Utilisation of the service had been trending upwards, and the impacts of the Cyclone coupled with public transport reliability challenges, have further increased the popularity of the scheme.

Coupled together, these two key factors have driven an increase in both users and usage of the scheme.

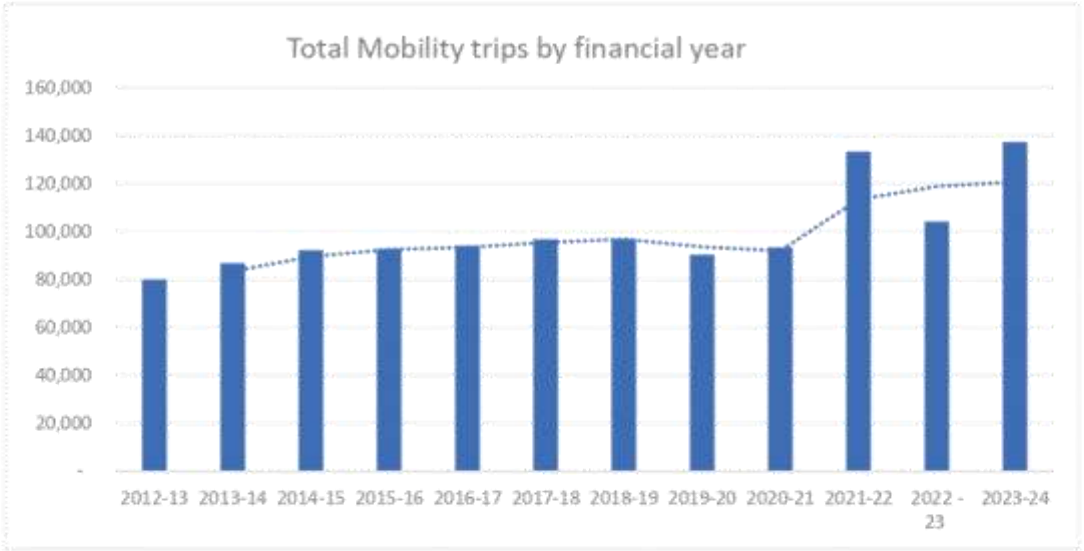


Figure 4: Hawke's Bay total mobility passenger trips by financial year 2012/13 – 2023/24.

2.2 Why HBRC subsidises public transport

Effective public transport provides commuters with both more and better choice, helping to reduce travel times, congestion, and emissions while keeping our communities connected. Passengers do not pay the full cost of the public transport services they use. Passengers' fares covered a reasonably small portion of the cost of running the bus services In Hawke's Bay. The level of fare recovery has been lower in recent years due to external factors impacting patronage. Total Mobility passengers pay a quarter of the cost of their travel up to a maximum of $50.
HBRC, via rates, and the New Zealand Transport Agency, via the National Land Transport Fund, subsidise public transport because it provides a range of benefits, including:

Roading and parking: Public transport helps relieve road congestion and reduce the need for new roads. It also reduces pressure on car-parking spaces and creates a more efficient and effective transport system.

Efficient travel: When well utilised, public transport can get people to their destinations efficiently and effectively with minimal interruptions. A bi-directional network greatly assists with this, creating direct and efficient routes in both directions.

Reduce Congestion: Effective public transport can carry more people further for a variety of purposes (e.g. work, education). More people on public transport results in less single occupancy traffic on the road, freeing up the network for smoother movement, particularly at peak times.

Economic: Providing people with access to employment and educational facilities results in economic benefits for the individual and the community. There are also economic benefits from the reduced need for road construction and maintenance.

Value for Money: Public transport services provide good value for money for both users and rate payers. Public transport is a cost-effective way to travel with relatively low fares for users. Services also present good value for money for ratepayers as the costs to run other public transport alternatives, such as commuter rail, are prohibitively expensive.

Environmental: Buses save energy compared to car trips and result in reductions in vehicle exhaust and noise emissions. Modern buses are extremely fuel efficient and have low emissions.

Health: Public transport has benefits to health, as most journeys involve a walk or bike ride to and from the bus stop and result in fewer emissions and airborne particulates than driving. It may also prove less stressful than driving.

Access and mobility: Public transport provides a means of travel to work, education, and public services for those who may not have alternative transport options. It is an essential link for many between residential areas, commercial areas, recreational areas, educational facilities, health services and community events and activities.

Safety: People have a much lower risk of accidental injury on a bus than using any other mode of transport.

Social: Many people do not have access to a car, with public transport the only viable option for travel. There is a significant social benefit from reducing community isolation.

Community resilience: A strong public transport network provides transport resilience in the face of rising/unpredictable fuel prices and vehicle operation costs. It also provides valuable choice for commuters, particularly if certain modes or routes are unavailable or unusable, ensuring communities stay connected.

2.3 Integrated planning and delivery – working with delivery partners

There are many parties involved with providing public transport services in Hawke's Bay. Under the Land Transport Management Act HBRC has the overall responsibility for the planning and delivery of public transport services to the Hawke's Bay Region. However, HBRC are not able to do this alone, either from a broader funding or service delivery perspective. HBRC works closely with our partners to help create and maintain an integrated, efficient, and effective public transport service.

This section sets out who HBRC works with, their respective roles and responsibilities, and our approach to working with our partners.
The territorial authorities (Napier City Council and Hastings District Council) play a major role through the provision of supporting infrastructure such as bus-stops. The NZ Transport Agency provides substantial co - investment for public transport. To encourage our key partners to continually consider the needs of an efficient and effective integrated public transport system we will embed a relationship-based approach to planning, funding, and infrastructure / service delivery.

Roles and responsibilities in the region
This section sets out at a high level the roles and responsibilities of each partner that plays a key role in the planning, funding, and delivery of public transport infrastructure and services in Hawke's Bay.

Hawke's Bay Regional Council
Under the LTMA, HBRC are recognised at the Public Transport Authority for Hawke's Bay. As a result, HBRC are responsible for:

- The planning, procurement, and design of public transport services.
- Co -funding public transport services through targeted rates, fare revenue, and other third party revenue generated from the public transport offering (e.g. advertising revenue from bus back advertising).
- Seeking funding from NZTA through the Regional Land Transport Plan process.
- Developing, setting, and implementing the policies that apply to the public transport services.
- Understanding and implementing government policy decision in regard to public transport, where applicable and appropriate.
- Working collaboratively with other Territorial Authorities to develop an integrated infrastructure delivery plan. This includes ensuring the required funding bids are built into the relevant Regional Land Transport Plan.
- Network and wayfinding design, along with service-related marketing and communications for users and communities.
- Planning and, in some cases, providing accessible information and associated infrastructure across the network.

New Zealand Transport Agency (NZTA)
NZTA set the high-level national policy that public transport authorities (such as HBRC) must adhere to for the public transport services they procure and provide. They are also a primary co – funder of the public

transport services and supporting infrastructure and have a statutory function under the LTMA to oversee the planning, operation, implementation, and delivery of public transport.

HBRC works closely with NZTA to:

- Secure necessary funding for the provision of public transport services.
- Ensure funding bids for supporting infrastructure are developed and submitted, showing how they will help to deliver the overall service.
- Feed into policy development initiatives at a national level.
- Work to understand the implications and impacts of policy change within our regional context.

Local councils

Local councils play a critical role in ensuring our public transport services can operate efficiently and effectively. Under the Land Transport Management Act, local councils are also recognised as Road Controlling Authorities (RCAs). RCAs are responsible for the management of local roads and supporting infrastructure.

Public Transport services are primarily delivered in the main urban areas of Hastings and Napier. On this basis, the Hastings District Council (HDC) and Napier City Council (NCC) are the main RCAs HBRC work with for the planning and delivery of public transport services. The RCAs are primarily responsible for:

- Providing and co – funding supporting infrastructure such as bus stops, signage, and road marking.
- Bidding for NLTF co – funding from NZTA for the provision of necessary infrastructure.
- Footpath and pavement enhancement and maintenance to support access to the public transport services, where appropriate.
- Roading changes to support the effective and efficient running of public transport services as required.
- Involvement in the collaborative planning of public transport services to meet the needs of communities.
- Policy alignment – ensuring that Local Council policies support and enable increased usage of public transport. For example, implementing policies around the management of and charging for on street parking in areas serviced by Public Transport, such as the CBD's, to encourage greater uptake.

HBRC works closely with the local councils to:

- Develop and deliver an integrated public transport plan, ensuring all necessary Council plans are accounting for future growth and community development.
- Develop a long term infrastructure investment pipeline, including upgrades to bus stop infrastructure to enable greater use, increases in safety, and to support longer operating hours.
- Ensure local council policy alignment supports and enable public transport operations and increased patronage, where applicable.
- Identify new or innovative service delivery improvements or opportunities.
- Ensure communities are served.

Te Whatu Ora Hawke's Bay
Te Whatu Ora Hawke's Bay funds the provision of free trips for hospital patients on all services and provides incentives to encourage its staff to use the bus. Community organisations also have a role to play as advocates for the needs of the users.

Ministry of Education
The Ministry of Education is responsible for the funding, procurement, and provision of school bus services in New Zealand. HBRC works with the Ministry of Education to see where our public transport services can provide connections, and to ensure there is no unnecessary duplication.

Major employers
The Hawke's Bay economy is underpinned by several large well-established sectors located in key nodes, such as Whakatu. Employers and communities alike rely on access to both workers and work to flourish. Engaging with major employers in key employment nodes will help to understand some of the opportunities that enhanced public transport could offer, potentially unlocking greater access to employment for our communities. Also, engagement could consider how we partner with major employers to enabling the funding and provision of public transport services.

Relationship approach
Hawke's Bay Regional Council has strong relationships with our key partners and places emphasis on making sure the relationships are constructive, well maintained, and that information is provided to partners in a timely manner. This is critical to ensuring that our public transport services are delivered in an integrated manner across the main urban areas of Hastings and Napier to:

- Meet the needs of our passengers
- Further develop an efficient and effective public transport system
- Encourage more people to use public transport services for a range of occasions
- Support people in our two main urban areas to have genuine transport choices
- Provide equitable access to social, cultural, recreational, and economic opportunities
- Reduce the environmental and health impacts of land transport
- Enable public transport investment to be efficient and give value for money.

This is primarily achieved through two main channels. Council staff and key partners work together through the Technical Advisory Group to plan, procure, implement, and run the public transport services. This is focused on both operational delivery and strategic development.

Elected representatives work together via the Regional Transport Committee and help to develop the strategic direction and governance of public transport services across Hawke's Bay. HBRC also intends to strengthen community relationships over time to ensure our services continue to be responsive to community needs and changes in travel patterns.

2.4 Funding

The funding for the services in this Plan comes from a range of sources and is a co-funding arrangement with NZTA. Activities and investments attract varying Funding Assistance Rates (FARs) from NZTA, with the remainder made up from local share, via rates. The funding sources include:

- Waka Kotahi NZTA, via the National Land Transport Fund, which contributes between 50% and 60% of the cost of services after fares through varying FARs, depending on the activity.

- HBRC, which raises its funds from local ratepayers via a targeted rate.
- Passenger fares, being all fare revenue collected from users of the bus services at the time of boarding.
- Third party revenue, being all additional funding from external sources. This includes, but is not limited to bus back advertising, tertiary institutions, developer contributions, or businesses purchasing concession fares.
- Crown funding for schemes such as Super Gold and Community connect, among others.

Farebox recovery rates, effectively the 'user pays' portion of public transport services, have been challenging for some time and have decreased in line with the steady reduction in patronage. This fall, like with the reduction in patronage, is due to a range of factors including Covid-19, disruptions because of Cyclone Gabrielle, and impacts of service reliability challenges. Further, Hawke's Bay has had a relatively flat fare structure for a number of years, with a trip between Hastings and Napier costing $2, while a trip within the respective towns costing only $1. From May 2024, the HBRC increased the fares, helping to increase the farebox recovery and off set a portion of operational costs.

Ultimately, the full 'step change' contained in this plan requires additional funding to fully implement at increased levels of service. As the result of an increasingly challenging funding environment, it is envisioned the implementation will happen incrementally over time as suitable levels of funding allow. This plan is being prepared with the assumption that new revenue sources, increased farebox recovery rates, and increased funding, over time, will enable the service to be implemented in a way that drives value for money. The Third-Party Funding Policy and objectives are set out in Appendix E.

It is anticipated the full 'step change' network, detailed in Section 5, will deliver a significant increase in patronage and therefore fare revenue once the full network is operational and ideal long-term levels of service are being delivered. The improved services will provide greater commercial opportunities including employer partnerships and advertising.
Monitoring of farebox recovery rates using the methodology and reporting process specified by Waka Kotahi is required of Public Transport Authorities. This monitoring is detailed in Appendix E.

Napier and Hastings bus service farebox recovery has declined in recent years, from near 24% in 2018 to a low of 7% in 2023/2024. This is a significant fall reflecting the disruption caused by the Covid-19 pandemic with less people travelling, Cyclone Gabrielle impacts and timetable unreliability through ongoing driver shortages. Alongside strong direction and support from NZTA, HBRC considers it to be important to improve the fare recovery ratio, over time and sustainably, back to around pre-covid levels as soon as possible. In the 2024-2025 year we are tracking a recovery to 9.4%, with subsequent years forecast at 11.5% and 13.1%. The following strategies along with the strategic response, detailed in Section 5, will support this.

Strategy 1: Staged shift to a patronage focused network
The current network is coverage-focused by design with low frequencies and indirect one-way loops, limiting its ability to be a viable and attractive alternative to driving. The low patronage from this leads to a low farebox recovery rate. The new network is patronage-focused by design, with high frequencies, to be achieved over time, and direct bidirectional routes that will see buses travelling in each direction, aimed at maximising ridership, which should ultimately lead to higher fare revenue and higher farebox recovery.

Strategy 2: Review of fare products and fare levels

The contribution of fares towards the cost of provision of public transport in Hawke's Bay has dropped significantly since 2017.

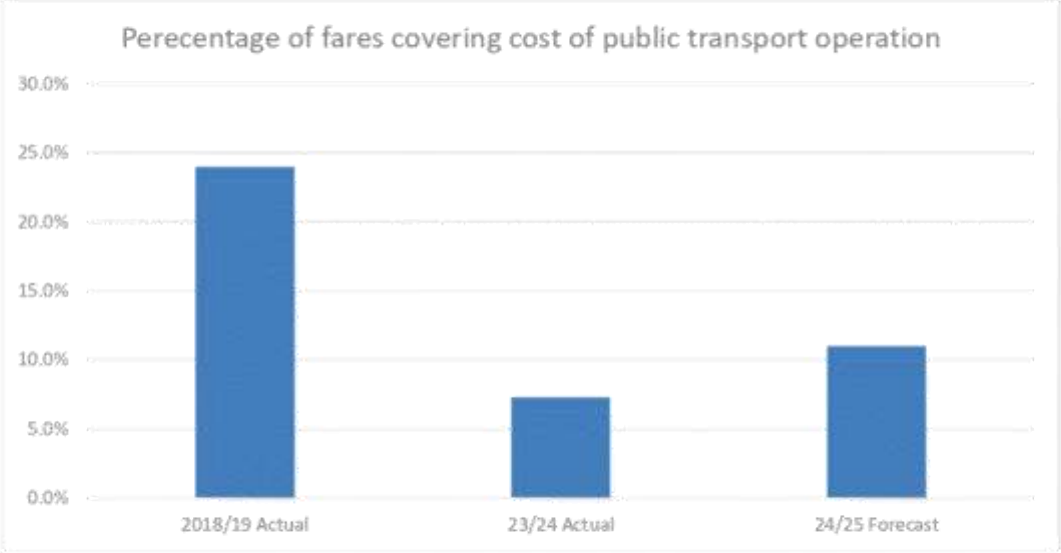


Figure 5: Percentage of fares covering cost of public transport operation

There were several contributing factors to this dramatic fall in cost recovery.

In Hawke's Bay we suffered compounding effects of patronage decline; Covid-19, the effects of Cyclone Gabrielle, and then bus timetable instability through the national driver shortage. Central government also initiated a half price fare campaign to ease the cost-of-living crisis, and to stimulate a post Covid-19 return to public transport use.

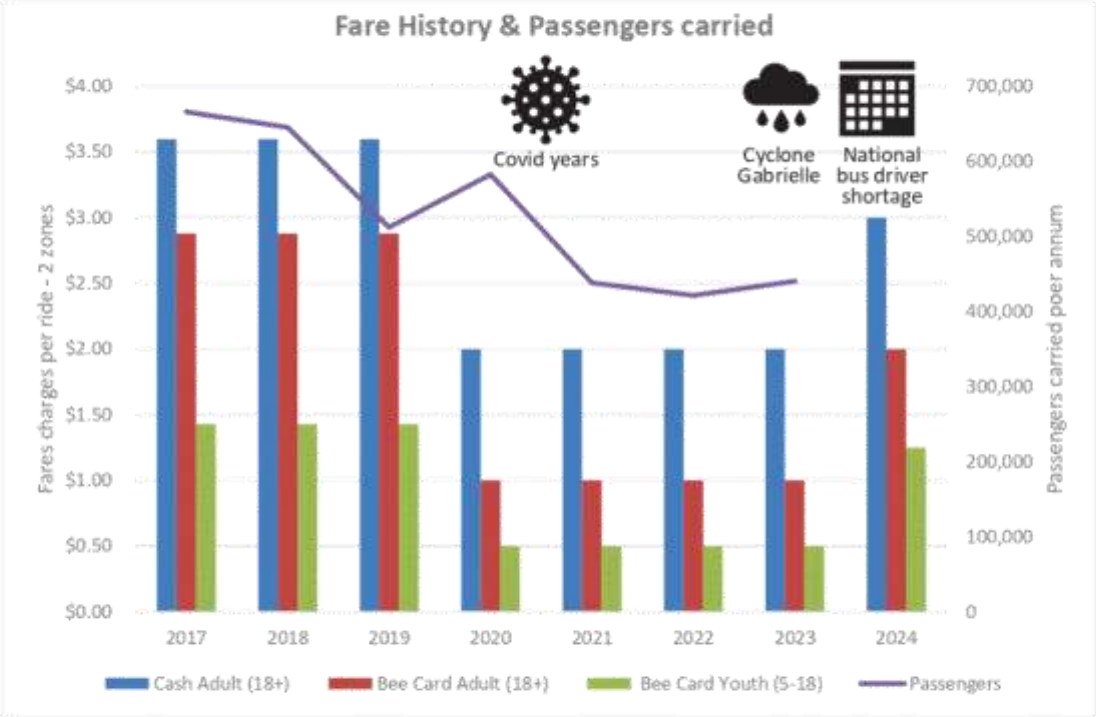


Figure 6: Fares charged versus bus patronage 2017-2024

We are therefore challenged with a need to increase fare recovery, and patronage, both at the same time, to return to levels of fare recovery experienced prior to Covid-19.

Adjusting bus fares requires careful consideration of the elasticity of demand to balance revenue generation and patronage. Moderate fare increases can help boost revenue and improve farebox recovery, particularly when aligned with rising costs of providing bus services. However, steep fare increases may disproportionately affect certain groups, reduce patronage, and risk a net decline in revenue, ultimately undermining farebox recovery. Any changes to fares must therefore be carefully evaluated for their economic and social impacts. Since September 2020, NZTA Waka Kotahi, on behalf of the Ministry of Transport, has funded half-price fares for Community Services Card holders. Whilst this discount will always be subject to change, the program ensures groups with specific economic disadvantage have access to lower cost public transport whilst fare levels return to their previous share of costs.

Fare product and fare level reviews may also include the introduction or trial of new or different fare types or products. For example, commuter concession schemes could be developed and implemented, or a new fare product developed to help the transport disadvantaged access the services they need.

Bus fares are expected to rise at a higher rate than costs of providing the service in the coming years. This is because fares have not kept up with rising costs for more than six years, and a gradual adjustment is needed to recover the historic funding shortfall, as well as meet increasing costs over time.

Strategy 3: Community responsiveness and integration

Public transport services exist to meet the needs of users and communities. To maintain their appeal and advance the vision for providing improved public transport, it is crucial for HBRC to collaborate closely with the community, key strategic partners (e.g., Councils, Waka Kotahi NZTA), service users, and the broader public. This collaboration should focus on continual improvement - exploring options for service improvements and infrastructure enhancements, within the constraints of available funding and resources.

3 The Transport Disadvantaged

Under Section 120(1) (viii) of the Land Transport Management Act (2003) , the Plan is required to describe how the proposed services will assist people who are "transport disadvantaged". Section 124(d) also requires HBRC to consider the needs of the transport disadvantaged when approving an RPTP.
The term "transport disadvantaged" is defined in the LTMA as those who HBRC has reasonable grounds to believe are the least able to travel to basic community activities such as work, education, health care, welfare, and shopping. HBRC considers these needs and access requirements when creating policies to assist the transport disadvantaged.
A range of personal, demographic, social, and geographical attributes are likely to restrict access to, and the use of, public transport services and facilities leading to a person being transport disadvantaged. HBRC believes the following groups are transport disadvantaged:

- Children
- The elderly
- People with disabilities
- Tertiary students
- People on low incomes / beneficiaries
- People who are unable to drive or have no access to a vehicle
- People living in high deprivation neighbourhoods

Factors that may contribute to transport disadvantage could include:

- **Limited affordability**: high transport costs (or costs of alternatives such as car ownership) can prevent people from accessing services.
- **Lack of available transport options:** People may not have access to public transport or may not be able to drive.
- **Physical and mental disabilities**: People with disabilities may have difficulty accessing public transport.
- **Age**: children and elderly people may have difficulty accessing public transport and / or have safety concerns.
- **Low incomes:** people on low incomes may not be able to afford transport.

HBRC believes that the planned bi -directional network change, long term service improvements and the associated fare policies proposed in this Plan will assist the needs of these groups in the long term. The planned future services are designed to provide efficient coverage of residential areas, linking them with commercial, community, and key educational facilities. By delivering a more legible, increasingly frequent network over time, the transport disadvantaged will be able to make more types of trips. As we scale up the frequency and expand operating hours in future years, as funding allows, this will further unlock opportunities and connection for the transport disadvantaged.

The existing fare system provides support to the elderly, who benefit from the SuperGold Card free travel scheme. From September 2022, there will also be a 50% discount on fares for Community Services Card holders.

The buses used on the services in Hawke's Bay are all wheelchair accessible, which assists people with disabilities, older people, and parents with young children. Working closely with our key partners, particularly Local Council's as the infrastructure delivery agents, HBRC will continue to collaboratively plan for the implementation of supporting infrastructure that enables smoother access to the network.

All buses have bike racks, which enables people to travel a greater distance to or from a bus stop. Some types of small electric scooters and other small micro-mobility devices, dependent on weight and size, can be carried onto buses. Bike racks on buses can only carry two at any one time. Improving bike parking at key bus stops and interchange points can support greater use of bikes for first/last mile access.

The Total Mobility Scheme provides services for those with a permanent disability who are unable to use public transport. However, the Public Transport network infrastructure needs to become more accessible to enable people of all abilities to have equitable access and options.
HBRC continues to partner with a range of groups representing those who are transport disadvantaged, to ensure all needs are considered, and access remains equitable.

4 Vision, Objectives and Policies

4.1 Vision

HBRC's vision for public transport is:

"To deliver a public transport system that is safe, accessible, and supports the shift to reduce driving and emissions in Hawke's Bay, while improving the economic, social, and environmental well-being of the people of Hawke's Bay."

4.2 Objectives and policies for Hawke's Bay Regional Council Bus Services

4.2.1 Our network:

Network design objectives

- A straightforward public transport network that runs all-day, seven days a week, with a hierarchy of routes at consistent levels of service.
- An effective network that connects residential neighbourhoods to key employment, shopping, medical, entertainment, recreational and educational facilities, and other destinations to serve more types of journeys.
- An efficient network that represents good value for money, by supporting the greatest number of journeys it can from the resources used to operate it.

Network operation and service quality objectives

- Subject to suitable levels of available funding, bus schedules are frequent or run to a regular timetable to minimise waiting time and allow people flexibility for when they travel.
- Bus routes are direct, clear, and legible to be easy to understand and use.
- Services run throughout the day, enabling users to access education, work, shopping, medical, and recreation activities.
- Buses are timely and reliable to create an attractive service that users can rely on.

4.2.2 Our customers

Objectives:

- People in the urban areas of Hastings and Napier have access to public transport services to connect them to employment, shopping, medical, entertainment, recreational and educational facilities.
- Services are environmentally responsible and integrated with other transport modes, particularly walking, and cycling.

Table 2: HBRC customer policies

Policy Area	Policy
NETWORK DESIGN	HBRC will: 1. Plan and deliver a network which is simple and legible for users and reasonably direct. 2. Provide service levels with targeted minimum long-term frequencies , as follows: • Frequent services: 15 minutes or better between 7am and 7pm, 7 days (weekdays and weekends). Services may have lower frequency outside those hours.

Policy Area	Policy
	• Connector services: 30 minutes or better between 7am and 7pm, 7 days (weekdays and weekends). Services may have reduced frequency outside those hours. • Other (Local, rural-township, peak-only, school, Total Mobility and on demand services): no minimum service levels. • All service types and frequencies are subject to suitable and available levels of funding 3. Following the MyWay trial, continue to investigate options and opportunities for an on-demand service in the future public transport network as a complement to fixed routes.
ACCESS TO SERVICES	HBRC will: 4. Aim to provide services so that at least 70% of residents within the Napier-Hastings urban area are within 400m walking distance of bus stops with all-day bidirectional service. 5. Subject to available funding, and where sufficient demand exists, look to introduce new services on a trial basis. Any trial should be subject to a minimum trial period of twelve months before any amendment or cessation. 6. Subject to available funding and capacity, ensure the network caters for patterns of student travel that are likely to overcrowd already scheduled public buses on established urban routes. 7. Consider the provision of extra services for special events: a. which are non-commercial. b. where there is free entry for the general public; c. where over 5,000 attendees are expected; and d. where organisers will contribute one-third of the net cost of additional services.
TRANSPORT DISADVANTAGED	HBRC will: 8. Consider the needs of those who are transport disadvantaged when providing services. 9. Ensure all services are operated by wheelchair accessible buses. 10. Subject to available funding and in collaboration with key delivery partners, ensure that the public transport network has accessible infrastructure that is fit for form and function, providing options to people of all abilities. 11. Actively engage with reference groups as subject matter experts in the design of bus stops, fare structures, customer experience, and service development to ensure accessibility and equity are meeting the needs of all people across the whole network. 12. Actively engage with the disabled community to ensure accessibility needs and service design requirements are understood in the design and delivery of public transport services, with a long-term implementation horizon. 13. Continue to evaluate on demand services as a potential tool to enable greater access to the wider public transport network for a range of users, including the

Policy Area	Policy
	mobility impaired and aged communities with a view that the mode is a complementary network enabler.
HEALTH AND SAFETY	HBRC will: 14. Ensure vehicles operated under contract to HBRC meet the safety standards required by law and the quality standards set out in the NZ Transport Agency Requirements for Urban Buses, and that safety monitoring is undertaken through the Operator Safety Rating System. 15. Continue the current scheme, initiated with Hawke's Bay District Health Board with Health New Zealand to facilitate ease of travel for those needing to attend health appointments, while Health New Zealand, funding allows.
ENVIRONMENTALLY RESPONSIBLE	HBRC will: 16. Ensure vehicles operated under contract to HBRC meet the environmental standards as set out in NZ Transport Agency Requirements for Urban Buses. From 2025 this means all new public transport buses brought into Hawke's Bay Region's contracted bus fleet must be zero emission.
INTEGRATION WITH OTHER MODES	HBRC will: 17. Ensure that all buses used in HBRC services have bike racks. 18. Work with local authorities and key delivery partners to improve integration of buses with cycling and walking. 19. Work with local authorities to achieve effective integration of multi modal transport, including (subject to sufficient available funding)the provision of secure bike storage and e-bike charging stations within easy reach of bus stops at key interchanges and locations such as Clive that are fed by cycleways that provide vital connections to more remote communities like Te Awanga and Haumoana.

4.2.3 Our Service

The purpose of this section is to ensure the experience of the customer is enhanced by having appropriate vehicles and infrastructure complemented by consistent service delivery.

Objectives

- Public transport operations provide comfortable and safe travel, minimise adverse environmental effects and improve health outcomes.
- Provision of a high standard of integrated infrastructure by key delivery partners that supports the network of bus services.
- Users experience a consistent and reliable service, every time to sustain levels of patronage.

Table 3: HBRC service policies

Policy Area	Policy
BUSES	HBRC will: 20. Ensure all vehicles providing services under contract are part of a consistent HBRC endorsed brand and colour scheme.

Policy Area	Policy
	21. Ensure all publications and marketing materials feature the HBRC endorsed brand and colour scheme. 22. Permit suitable commercial advertising on and in buses, where appropriate and applicable in line with the Bus Advertising Policy. 23. Investigate rollout of zero-tailpipe emissions buses earlier than required by government policy.
SERVICE PERFORMANCE	24. Provide high-quality, reliable services which create a consistent customer experience. 25. Specify high standards for reliability, timekeeping, and customer service, and incentivise good service performance on all routes through bus operator contracts.
INFORMATION AVAILABILITY	26. Ensure service information is readily available and easy to understand. 27. Provide up to date information on all services on the HBRC network and encourage Hastings District Council, Napier Council, and other partners to do the same. 28. Make information available through social media(e.g. Facebook). and other channels / mediums as applicable and as funding allows. 29. Ensure information for those with sight impairment is available.
FARES	30. Ensure fare payment systems are easy to use and accurately record passenger trip information. 31. Work with delivery and investment partners to implement and integrate the National Ticketing System (NTS) across the network. 32. Set fares in accordance with the targets and policies contained in the farebox recovery and fare-setting policy set out in Appendix E. 33. Review fare levels in accordance with the policy set out in Appendix E. 34. Cash to be removed as a form of payment across the network when cash fares reduce to less than 5% of total ticket transactions for a period of at least six months, and, having given no less than two months' notice to the community, following the implementation of the National Ticketing System. 35. Consider fare exemptions for the mobility impaired and their companions, with value given to the balance of costs across all funded activities (i.e., the increased cost of further subsidising PT fares is outweighed by the savings in total mobility subsidies).
PROCUREMENT, FUNIDNG, AND DELIVERY	36. Consider the following criteria when establishing public transport units: a. Does the unit configuration form a marketable whole? b. What customer market would it serve? c. How attractive would it be to tenderers? (to encourage competition) d. Will the unit configuration maximise efficiency and achieve the best value for money possible? 37. Procure bus services using the partnering delivery model and the price quality selection method as set out in NZTA's Procurement Manual 2009. 38. Maximise funding from NZTA. 39. Support the SuperGold Card free travel scheme funded by NZTA.

Policy Area	Policy
	40. Explore partnership and bulk purchase opportunities with large employers, places of education, and other destinations.
COMMERCIAL PARTNERSHIPS	41. Consider opportunities to develop commercial partnerships with businesses to provide targeted public transport services that meet the needs of both the business community and employees.

4.2.4 The experience

The purpose of this section is to ensure the experience of the customer is enhanced by having appropriate vehicles and infrastructure.
Objectives:

- Public transport operations provide comfortable and safe travel, minimise adverse environmental effects and improve health outcomes.
- Provision of a high standard of infrastructure in key locations on the network that supports the bus services.

Table 4: HBRC experience policies

Policy Area	Policy
BUSES	HBRC will: 42. Ensure all vehicles operated under contract will meet the minimum vehicle quality specifications as set out in the NZTA Requirements for Urban Buses. 43. Provide wheelchair accessible vehicles on all services to ensure easy access for wheelchair users, parents with young children and passengers with mobility difficulties. 44. Ensure driver training is provided annually around disabled and mobility impaired users with a view to ensuring they are assisted to utilise the service, where practical. 45. Through the contract held between Council and Service Providers, require customer service training be completed by all bus drivers and support staff annually. Additionally, ensure any new drivers receive service / network specific customer service training as part of the on boarding process. 46. Ensure the appropriate size bus is used on each service by catering for peak loadings at the service peak time.
BUS STOPS AND TIMETABLE INFORMATION	47. Work collaboratively with local councils to add more bus shelters to the network, subject to available funding, ensuring the shelters and / or stops are fit for form and function. 48. Work with local councils to implement bus-stop improvements in line with Waka Kotahi Bus Stop Design Guidance. 49. Liaise with Napier City and Hastings District Councils regarding improved access from bus stops to buses for people in wheelchairs and those who require other mobility aides. 50. Ensure printed timetables are readily available, including large-print versions. 51. Provide high quality web timetable and journey planning information.

Policy Area	Policy
	52. Subject to funding, provide multi-platform real time bus arrival and departure times at key stops in the network. 53. Ensure visual wayfinding / network design at stops is clear, concise, and simple for users to understand.

4.2.5 Looking forward

The purpose of this section is to ensure that public transport services cater for the changing needs of the population, including changes in residential and commercial areas; make provision for potential growth in demand for passenger services caused by increases in fuel prices; and recognise future developments in infrastructure technology, modal innovation, and service delivery innovations.

Objective:

- A flexible network that adapts to changes in demand.

Table 5: HBRC future network policies

Policy Area	Policy
DEMAND	HBRC will: 54. Improve service levels and the quality of the network to stimulate demand for public transport, subject to available funding. 55. Work with key partners to consider ongoing and potential changes in population, land-use and other factors that influence demand, to ensure the supply of services matches the demand. 56. Monitor the demand for rural services. 57. Carry out a two-yearly passenger survey in line with NZTA requirements. 58. Investigate the longer-term potential for park and ride facilities serving rural areas and improved interchange and terminus facilities at key points in the urban network. 59. Monitor and review the effectiveness, efficiency, and equity of a transition to a high frequency direct public transport model over time as it is implemented, subject to available funding. Regular reviews should be undertaken with key stakeholders, annually following full implementation and any subsequent improvements to levels of service.
TECHNOLOGY	60. Subject to available funding, use changing technology where possible to provide a better service through improved ticketing systems and the progressive implementation of integrated real time end to end trip information across the network and applicable channels (e.g., bus stops, applications, online, in-bus).
INTEGRATION WITH OTHER SERVICES	61. Discuss any potential improvements for better integration and shared facilities for long-distance bus and/or tourism services with the relevant council.
PASSENGER RAIL	62. Work with other councils, KiwiRail, NZTA, Ministry of Transport, Government, and operators, to support investigating opportunities for intra and inter regional passenger rail. This includes leadership and advocacy to support better use of the rail network, and better funding structures.

Policy Area	Policy
	63. Undertake a high-level feasibility study of future commuter rail inclusion in the wider Hawke's Bay Public Transport network, if suitable funding permits.
PUBLIC TRANSPORT SERVICES	64. Consider the role of new and emerging technologies and mobility options as a means to manage travel demand, provide travel choice, and create efficient journeys for communities. 65. Continue to investigate, evaluate, and endeavour to secure funding to enable the Central Hawke's Bay Commuter Express trial.

4.3 Objective and policies for Total Mobility

4.3.1 Our customers

Table 6: HBRC total mobility customer policies

Policy Area	Policy
TRANSPORT FOR PEOPLE WITH A PERMANENT DISABILITY	HBRC will: 66. Continue to provide the Total Mobility Scheme in Napier, Hastings, Waipawa and Waipukurau in line with the policy set out by NZTA, while reserving the right to limit resources subject to funding and to operate within budget. 67. Subject to NZTA funding, make wheelchair payments for each wheelchair transported in a vehicle. 68. Hawke's Bay Regional Council will work in partnership with ACC and approved assessment agencies to investigate where there may be gaps in the current Total Mobility and ACC transport schemes when providing for individuals requiring transport assistance and options to fill these gaps.

4.3.2 Your service

Objective:
A funding system for Total Mobility services that is fair to ratepayers and users of the service, is efficient and effective, is fit for purpose, and recognises the different benefits occurring to each funding party.

Table 7: HBRC total mobility service policies

Policy Area	Policy
INFORMATION AVAILABILITY	HBRC will: 69. Ensure information on the Total Mobility Scheme is readily available and easy to understand.
FARES	70. Ensure fare transaction systems are easy to use and accurately record passenger trip information. 71. A 75% concession applies to a maximum fare level of $50, thereby meaning the Total Mobility passenger pays 25% of the first $50 of a fare. 72. The operator must charge the user the remaining 25%, or applicable balance, of the chargeable fare.

Policy Area	Policy
	73. The minimum fare chargeable, within the fare concession levels, must not exceed $25. 74. Total Mobility operators provide a fare schedule to the Council for approval on an annual basis along with necessary supporting information that may be requested from time to time. No company can exceed the combined average fares of the other companies by more than 10%. 75. Average fares are calculated using industry standard kilometre rates. 76. Fares charged will be a total for the applicable fare travelled and include all transactional costs, including technology fees. 77. The fare subsidy will apply for the time the vehicle is travelling from location to location. For the avoidance of doubt, the subsidy does not cover or include non-driving time, such as waiting time, repositioning / dead running, or assistance / companion time. 78. All fares, fare policies, and concession levels are subject to change at any time according to levels of available funding, NZTA policy settings, and HBRC operational consideration or constraints.
FUNDING AND DELIVERY	79. Maximise funding from Waka Kotahi NZ Transport Agency. 80. Consider applications from transport operators for the provision of Total Mobility transport services, while reserving the right to decline applications where: a. Demand cannot be demonstrated. b. Adequate services are in operation. c. Value for money cannot be demonstrated. 81. Undertake regular audits of operator's and their vehicles to ensure contract compliance.
ASSESSMENT	82. Assessment agencies will be required to seek and obtain accreditation with the Council annually. 83. Assessment agencies, and their assessments, will be regularly audited to ensure accreditation compliance. 84. Assessment agencies will be required to implement any scheme changes made by the Council in a timely manner, following suitable communication and training by HBRC. 85. Hawke's Bay Regional Council will investigate alternative funding and operational models for undertaking eligibility assessments for the Total Mobility Scheme, with the aim of ensuring long term sustainability, improved accessibility, and consistency of service.

4.3.3 The experience

Objective:
A Total Mobility service that provides comfortable and safe travel and delivers value for money.

Table 8: HBRC total mobility experience policies

Policy Area	Policy
ACCESSIBLE VEHICLES	HBRC will: 86. Subject to NZTA funding, provide grants for the installation of wheelchair hoists up to a maximum grant amount per installation. 87. HBRC will consider applications for grant installation on a case-by-case basis, while reserving the right to decline the applications where: - suitable funding is not available. - The submitted quote covers works outside the scope of a hoist installation, for example the installation / shifting of vehicle seats. - Where HBRC believes, on reasonable grounds, the vehicle to which the hoist is to be installed does not meet vehicle safety and age specifications.
HEALTH AND SAFETY	HBRC will: 88. Ensure vehicles operated under contract to HBRC meet the safety standards required by law. 89. Ensure Total Mobility providers have health and safety policies and procedures in place which meet the requirements of the Health and Safety at Work Act 2015. 90. Ensure driver training is provided annually around disabled and mobility impaired users with a view to ensuring they are assisted to utilise the service and have a positive customer experience.
TECHNOLOGY	91. Operate Total Mobility user ID smartcard transaction technology for Total Mobility in the region, to support more independent travel.

4.3.4 Looking forward

Objective:
A flexible service that adapts to changes in demand.

Table 9: HBRC total mobility future policies

Policy Area	Policy
DEMAND	HBRC will: 92. Consider changes in population demographics, land use and other factors that influence demand on the Total Mobility Scheme, as opportunities to improve the Public Transport Network to ensure a range of options are provided to people of all abilities.
TECHNOLOGY	93. Use changing technology where possible to provide a better service.

Policy Area	Policy
SERVICE DELIVERY	94. Continue to investigate options and opportunities, as they arise and are applicable, to deliver Total Mobility services in an innovative, responsive, and / or integrated manner with other public transport services.

4.4 Objectives and policies for Community Transport

Objective:
Support existing and the development and implementation of new community-based transport solutions for smaller settlements outside of the main urban areas, where and when suitable funding becomes available.

Table 10: HBRC community transport policies

Policy Area	Policy
DEMAND	HBRC will: 95. Provide support for community transport services where: a. There is demonstrated evidence to support the need for a transport service in communities outside the urban areas of Hastings and Napier, i.e., Wairoa, Central Hawke's Bay, and Cape Coast. b. There is willingness by members of the community to set up, operate and maintain a trust or similar structure to oversee governance of the service, and for people to volunteer to be drivers. c. There is sufficient funding available to support the establishment and administration of the trust and the purchase of vehicle(s). d. The establishment of the trust has the demonstrated support of the relevant territorial authority. 96. Support for community transport services will be assessed on a case-by-case basis and may include: e. Council staff assistance to establish a Trust or service in a new area where a request is received from the relevant local authority, community board or residents' group. f. Financial grants towards vehicle purchase/replacement and Trust administration costs, subject to availability of funding. g. Provision of supporting technology to help make community transport services easier to manage and more accessible for users, subject to availability of funding. h. Where possible leverage council's purchasing ability to obtain best value for community vehicle/hoist purchase, and/or other professional services such as driver training.
FUNDING	97. Where applicable and appropriate, advocate for funding to enable Community Transport from both the NLTF and Local Share, supported by private share contributions / donations (e.g. foundation grants and the like).

5 What we plan to do

5.1 Strategic response

To address the issues identified through our 2022 consultation, network review, and subsequent business case processes (refer Section 1), we have developed several strategic responses, and from these, several action points to be implemented as suitable levels of funding allow, in addition to the provision of existing services.

1. **Deliver a new "step change" network as suitable levels of funding allow over time.**

At the time of writing, a detailed business case is currently being developed to comprehensively set out the opportunity, benefits, and implementation pathway for Hawke's Bay to introduce the new bi- directional 'step change' network. Once the business case is completed and endorsed by the NZTA board, HBRC will be able to further engage with NZTA around funding uplift opportunities, working through their established processes to determine improvement suitability, enabling us to scale up the urban public transport network in terms of frequency and operating hours, improving the Levels of Service we can deliver.

The new network will ultimately be a "step change" improvement over the current bus system, designed to make public transport a viable and attractive option for more journeys within the Napier Hastings urban areas, and lead to significant growth in patronage. Due to the impacts of funding constraints the network will be implemented in stages, as increased levels of funding become available.
The planned changes, to be implemented no earlier than 2026 include:

- **Legible bi-directional routes,** replacing the slow and indirect one-way loops of the existing network with two-way routes on more direct alignments. This will see buses travelling in both directions on routes.

Future planned changes and improvements that are dependent on increased funding include:

- **Increased all-day service frequency** across all routes, with investment targeting connections to major employment, education, retail destinations and essential needs.
- **Increased span of service**, with all urban services running from 6am to 9pm, seven days a week. Like frequency, the increase in span of operational hours will happen incrementally over time, as community feedback supports, and any necessary safety requirements are enabled.

Ultimately, once fully implemented this will provide a significant step change in terms of level of service, in particularly the frequency and span, and is designed to deliver increased patronage.
These staged improvements, as well as further long-term service improvements to frequency and span of service, are detailed in Appendix A.

2. **Deliver incremental service improvements ahead of new network delivery**

Simple service improvements can be implemented as funding and demand allow.

Unprogrammed service improvements or changes will occur through the life of this plan so as the network can adapt to unforeseen issues or opportunities. These are likely to be minor route changes or additional singular additions to a timetable.

Whilst the new network design proposed for introduction in 2026 will see the conclusion of the MyWay trial in Hastings, we will continue to examine the place of an on-demand style service to enable more reliable and frequent public transport to communities where this service is more suitable than traditional fixed route services. On-demand services are typically utilised in lower density or lower population areas

that are typically hard to effectively and efficiently service with standard public transport but can also provide an effective complement to fixed routes services in urban centres. The core purpose of any future on demand offering would be focused on efficiency and access.

3. **Investigate and implement innovative ways to provide better transport options in small towns and rural areas, as suitable levels of funding allow.**

HBRC would like to further improve access for residents in communities outside the main urban areas, particularly those experiencing sustained growth in population and housing. HBRC intends to explore more flexible ways in which this could be achieved in a cost-effective manner. This will involve looking wider than conventional bus services and exploring options such as community van / transport services.

4. **Undertake a program of continuous improvement**

We will continually work with communities across the region to ensure public transport services are optimised to deliver the best services to them. We will do this by ensuring regular engagement with representatives of each community, including iwi and hapu, where service design and delivery is jointly assessed to ensure it remains fit for purpose.

5.2 Planned activities

The following activities are planned for future implementation. These are not listed in any particular order, as programming will depend on suitable levels of available funding, resources, and external factors. However, the items have an indicative timeframe based on relevant factors.

Table 11: Planned activities

Initiative	Details	Indicative timeframe
Improve journey time and journey time reliability	To include consideration of: • streamlining routes to reduce dead-running • timetable revision to reflect changed running times. • Subject to funding, increasing frequencies to reduce waiting time. • minimise the impacts of any delays that do or may occur. • Engage with communities and user groups to ensure the network serves their needs.	Ongoing
Investigate options to partner with organisations and businesses to promote commuter bus use through concession fare schemes.	• Build upon existing partnerships model which has been successful with Hawke's Bay Fallen Soldiers' Memorial Hospital. • Engage with business in key employment nodes to understand challenges and opportunities, trialling new services where sufficient demand, funding, and business buy in exists.	Ongoing

Initiative	Details	Indicative timeframe
Trial a commuter express bus service between the Central Hawkes Bay towns of Waipukurau, Waipawa and Ōtāne through to Hastings.	Subject to available levels of funding, operate two morning peak services to Hastings from Waipukurau, via Waipawa, and Otane, with two evening return services to Waipukurau from Hastings. Any trial should last for at least 18 months.	Trial implementation subject to availability of funding (both NZTA and Local share)
Community Transport	Identify existing initiatives and support the establishment of a Trust to run Community Transport services across the region, including Wairoa, Central Hawke's Bay and satellite communities around Napier & Hastings.	Implementation by 2028, subject to available funding.
Implement planned 'Step change' fixed route bus network	See Appendix A for details. Short term levels of service will be at current frequencies and operating hours, with long term frequency and operating hours increasing as suitable levels of funding allow.	No earlier than 2026, subject to available levels of funding.
Refine and solidify the new network with affected communities and key stakeholders	Engage with communities that will have material route / network changes, as subject matter experts in their needs, to ensure the new network services their needs and key destinations sufficiently while not significantly impacting network planning foundations.	To be completed by the implementation of the new network, expected no earlier than 2026.
Investigate and understand barriers and challenges to increased public transport uptake in the main urban areas	Undertake engagement and workshops with users, stakeholders, and community to understand, quantify, and tease out either real or perceived barriers / challenges to either the use or increased uptake of PT services in Hawke's Bay. These insights will be utilised in network & infrastructure review, design / development, and service delivery planning.	Ongoing – to be completed by the implementation of the new network
Implement the National Ticketing Solution	Working with delivery partners, Cubic, and others, implement the National Ticketing System across the network. Consider the role of cash fares across the service as part of the NTS implementation, in line with policy #32. Following consultation, cash payment may or may not be retained as part of the NTS transition. All system and fare product changes will be supported by relevant and targeted communications and engagement.	No earlier than September 2025

Initiative	Details	Indicative timeframe
Investigate potential for MyWay, or an On Demand service, to operate as a complement to bi-directional fixed route services to deliver greater accessibility for all communities	Following the MyWay trial in Hastings, and utilising the lessons from the trial review, we will continue to investigate where On Demand services could complement fixed route services or as a standalone service. A future iteration of the service could be used to pick people up locally and drop them at the nearest main public transport line. HBRC will continually investigate the role and place of on demand services in the broader public transport network and seek suitable levels of funding to support implementation.	Ongoing

6 Review and monitoring

6.1 Monitoring

The purpose of monitoring the implementation of the Plan is:

- to measure whether the Plan has been successful in meeting regional public transport objectives;
- to measure the quality of the services provided, and;
- enhance the continuous improvement of the service

The region's objectives for public transport are set out in the Regional Land Transport Plan 202-34 (RLTP). The RLTP has the following vision:
"An efficient transport system that is resilient, low emissions, safe, provides genuine and equitable choices, and places community wellbeing at the centre."

Supporting strategic objectives include:

- **Resilience and security** – invest in an efficient transport system that is resilient to changing climate and other risks, with urgency and priority.
- **Emissions reduction** – drive a low-emissions transport system that reduces the risks associated with global warming.
- **Healthy and safe people** – provide a safe transport system for all users and modes that reduce the economic and social cost of crash injuries.
- **Inclusive access** – support fit-for-purpose, genuine, safe, and equitable transport choices for all users to sustain the health and wellbeing of communities.
- **Environmental sustainability** – integrate land use planning and development to enable effective and efficient use of transport networks.

Policies within the RLTP relevant to public transport to achieve these objectives are:

- Subject to funding, implement the Regional Public Transport Plan, focusing on reliability, efficiency, and a low or zero emissions bus fleet to provide an attractive and realistic alternative to private cars for daily journeys in the main urban areas of Hastings and Napier.
- Seek additional funding to invest in alternative transport options, including commuter routes, outside the main urban areas, in accordance with the Regional Public Transport Plan.
- Subject to funding, develop and implement public transport infrastructure that enables easy and safe multi modal integration at key hubs and locations across the public transport network.
- Investigate and pilot the conversion of key transport corridors in each of Napier and Hastings to give priority to active and public transport modes over heave commercial and private vehicles.
- Invest in a low emissions and low impact transport system that enables genuine and safe travel choices which contribute to improved health and wellbeing.
- Subject to funding, implement the adopted Regional Public Transport Plan with a focus on service delivery, including reliability, frequency, and efficiency and develop new services and solutions for attractive and efficient public transport, including working in partnership with stakeholders to promote the expansion of public and shared transport incentive programmes.

This draft RPTP contains HBRC's specific vision for public transport in Hawke's Bay which is:
"To deliver a public transport system that is safe, accessible and supports the shift to reduce driving and emissions in Hawke's Bay, while improving the economic, social, and environmental well-being of the people of Hawke's Bay".
With respect to the RLTP objective and methods and the vision statement of this Plan, we aim to:

- Improve reliability, consistency, and customer experience on the existing network.
- Identify and implement improvements to span and frequency of existing routes where funding allows.
- Trial new commuter express route from Central Hawke's Bay to Hastings as funding allows.
- Prepare for rollout of new network, including identifying infrastructure required to support the network change and ensuring the necessary funding is secured in the relevant Council's transport investment plan to enable implementation in the short term and improvements over the long term.

6.2 Information requirements

HBRC will require information from public transport operators in accordance with LTMA requirements for information disclosure. The LTMA permits councils to require the operator of a public transport unit to supply fare revenue and patronage data. HBRC must publicise the patronage data and the extent to which a unit is subsidised.

6.3 Review

The RPTP must be reviewed every three years. At that time, HBRC will consider whether a formal renewal of the Plan should be undertaken. If changes are warranted, the significance policy for variations to the Plan may be triggered (Refer Appendix D for our significance policy) and this will tell HBRC how widely it must consult affected parties and the community about the variation. However, in all cases HBRC will consult with persons who will or may be affected by or have an interest in the proposed variation in accordance with Sections 126(4) and 125(2) (a) of the LTMA and Section 82 of the LGA. Reviews will be undertaken to coincide with the review of the Regional Land Transport Plan (RLTP). This will help to ensure that the RPTP is consistent with the public transport objectives of the RLTP.

7 Legislative requirements

An RPTP must contribute to the purpose of the LTMA and meet certain other requirements. A description of how this draft Plan complies with those requirements is set out in Appendix C.

8 Significance Policy

Refer to Appendix D for further information.

9 Third Party Funding, Farebox Recovery Monitoring, and Fare Setting Policy

Refer to Appendix E for further information.

10 Bus advertising policy

Refer to Appendix H for further information.

11 Consultation undertaken

Consultation has been undertaken in the review of this plan, in accordance with the requirements of Section 125(1) of the LTMA.

- A review (in 2022) of the existing public transport network and services by external consultants along with a subsequent review of the future public transport network and planned improvements by HBRC officers.
- An early consultation round with elected members from the Regional Transport Committee.
- Public consultation on the draft plan for a period of 4 weeks.
- Targeted engagement and consultation with Total Mobility providers, assessor, and users.
- Ongoing engagement with communities around proposed changes and network refinements, in line with the significance policy.

Glossary and abbreviations

Term/Acronym	Meaning
DHB	District Health Board
ERP	Emissions Reduction Plan
HBRC	Hawke's Bay Regional Council
GPS	Government Policy Statement
LTMA	Land Transport Management Act
LTP/Long Term Plan	A plan prepared by all local authorities under the Local Government Act which covers a period of at least ten years (also known as the Ten Year Plan)
MoE	Ministry of Education
NLTF	National Land Transport Fund
NLTP	National Land Transport Programme
Waka Kotahi	New Zealand Transport Agency
PTOM	Public Transport Operating Model
SPTF	Sustainable Public Transport Framework
RLTP	Hawke's Bay Regional Land Transport Plan
RUB	Requirements for Urban Buses

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Term/Acronym	Meaning
SuperGold Card	A discount and concessions card issued free to all NZ residents aged 65 and over and those under 65 receiving a Veteran's Pension or NZ Superannuation. SuperGold Card holders can travel free of charge on public transport between 9am and 3pm on weekdays and anytime at the weekend or on Public Holidays
Ten Year Plan	A plan prepared by all local authorities under the Local Government Act which covers a period of at least ten years (also known as the Long-Term Plan)
The Plan, RPTP	Hawke's Bay Regional Public Transport Plan
Total Mobility	A nationwide scheme which provides discounted taxi travel for people with disabilities which prevent them from using buses

Appendix A Planned new routes and long-term service improvements

The following pages set out the routes for the future public transport network across the Hastings and Napier urban areas. The frequency and span have been broken down into short term and long term.

Short term frequency and span sets out the levels of service that will likely be delivered when the planned network is implemented. These will most likely be at the current levels of service that are delivered at the time of implementation, no earlier than January 2026.

Long term frequency and span sets out the service level improvement aspiration. These increases in the levels of service (e.g. better frequency, longer operating hours) will be implemented as suitable levels of funding are available and secure.

The following routes may have some changes made following targeted community engagement and consultation prior to network implementation. Engagement, consultation, and changes will be made in line with the Significance Policy contained in this Plan.

Appendix B on page 79 sets out the planned levels of service for the new network once implemented. The "Future Public Bus Network" sets out the initial Levels of Service. These will be increased incrementally over time, in line with supporting funding.

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Route 1: Primary Trunk Service - Napier to Hastings, Havelock North via Taradale shops, EIT/PGA & Fallen Soldiers' Hospital

Planned Route Description

This trunk route will be the core service of the new network and primary driver of public transport patronage in the region (shown in Figure 7 below). It will connect most of the major destinations (Napier CBD, Tamatea shops, Taradale shops, EIT/PGA, Fallen Soldiers Hospital, Hastings CBD, Havelock North Village) to many different smaller destinations and residential areas with fast, increasingly frequent services over time. The route will mostly follow the same path as the existing Route 12.

The path will differ from Route 12 in the following ways:

- Route via Nottingley Road & Percival Road in Hastings instead of Pākōwhai Road. This gives the following benefits:
    - Avoid having to make a two-kilometre detour, including U-turn, to serve the hospital.
    - Serve Hawke's Bay Regional Sports Park, which has been widely requested by stakeholders.
- Potential removal of the current Tait Drive deviation in Napier to improve travel time and reliability.
- Extension to Havelock North, replacing the current route 21.
- The route will split in two at the Havelock North town centre with one 'tail' going east along Te Mata Road and the other going west along Te Aute Road. These will be evenly split from the trunk. The splinter routes may be subject to change following engagement and consultation with the community.

Frequency and Span

Short term frequency and span

- Current levels of service will remain in the short term, with a higher level of service in the long term.

Long term frequency and span:

- Span: This service will eventually run from 6am to 9pm, 7 days a week as funding allows.
- Frequency will be every 15 minutes from 7am-7pm and every 30 minutes all other times, as suitable levels of available funding allow. It is likely this level of frequency will take some time to obtain and will be less frequent during the early stages of the new network.



Figure 7: Planned Route 1 map

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Route 2: Eastern Institute of Technology to Napier via Taradale, Tamatea & Kmart

Planned Route Description

This route will connect residential Taradale, Tamatea and the new Parklands developments to Napier CBD, Kmart, Tamatea shops, Taradale shops and EIT/PGA. There will be an easy connection to Route 1 trunk line to continue to Hastings, Havelock North, and the hospital.

The route will follow a similar path as the current Route 13, with the following changes:

- Removal of complicated one-way loops.
- New routing via Orotu Dr and Prebensen Drive to serve new residential and commercial developments (Kmart).
- Extension to EIT/PGA, with service to residential areas in southwest Taradale.

This route may change slightly following targeted community engagement and consultation. Any route changes will be updated in this Plan once confirmed.

Frequency and Span

Short term frequency and span

- This route will remain at its current levels of service in the short term, with a higher level of service in the long term.

Long term frequency and span

- Span: This service will run from 6am to 9pm as funding allows, with the goal of increasing to 6am to midnight, 7 days a week.
- Frequency will be every 20 minutes from 7am-7pm as funding allows, and every 30 minutes all other times.



Figure 8: Planned Route 2 map

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Route 3: Tamatea to Napier via Maraenui

Planned Route Description

- Replacement of the current Route 14.
- Removal of one-way loops through Maraenui.
- Connecting key destinations through:
    - Napier City Centre.
    - McLean Park.
    - Maraenui Shops.
    - Tamatea Shops, providing access to the supermarket, pharmacy, medical centre, and other services in the Tamatea centre.

This route is shown in Figure 9 below. The extension through to Tamatea shops provides the opportunity to interchange with Route 1 and Route 2 to access the rest of the network.

Options

- The route could be rerouted to serve proposed Riverbend Residential Development which could deliver up to 670 homes at 215 Riverbend Road. This would require the street network within the new development being designed to allow through running of buses to Waterworth Avenue.

Frequency and Span

Short term

- Frequency and span will remain at the current levels of service, with a higher level of service in the long term.

Long term

- Span: This service will run from 6am to 9pm increasing 6am to midnight by 2030, 7 days a week. These service levels improvements will happen when suitable levels of funding are available
- Frequency will be every 20 minutes in from 7am-7pm and every 30 minutes all other times. These service levels improvements will happen when suitable levels of funding are available.



Figure 9: Planned Route 3 map

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Route 4: Flaxmere to Akina via Fallen Soldiers' Hospital, Mahora and the Hastings City Centre

Planned Route Description

- Partial replacement of the current Route 20, new route shown in Figure 10 below.
- In combination with the new Route 4, this route allows for the removal of one-way loops in Flaxmere while maintaining a good level of coverage.
- Provides direct, frequent connections to trunk Route 1, providing connection to EIT/PGA and Napier city for Flaxmere, Mahora and Akina with the following potential direct connections:
    - Flaxmere to/from Hospital and onward to Hastings CBD, with deviation.
    - Mahora to/from Hospital and Hastings CBD.
    - Akina to/from Hastings CBD and onward to Hospital, with deviation.

Route options

- This proposed route is subject to change following targeted engagement with communities along the route, in line with the Significance Policy in this Plan.

Frequency and Span

Short term

Frequency and span will be developed following the targeted engagement with communities along with route. However, levels of service will be subject to suitable levels of available funding.

Long term

- Span: This service will run from 6am to 9pm as funding allows, with the goal of increasing to 6am to midnight, 7 days a week.
- Frequency will be every 20 minutes, as funding allows, (ultimately increasing to 15 minutes) from 7am-7pm and every 30 minutes all other times.

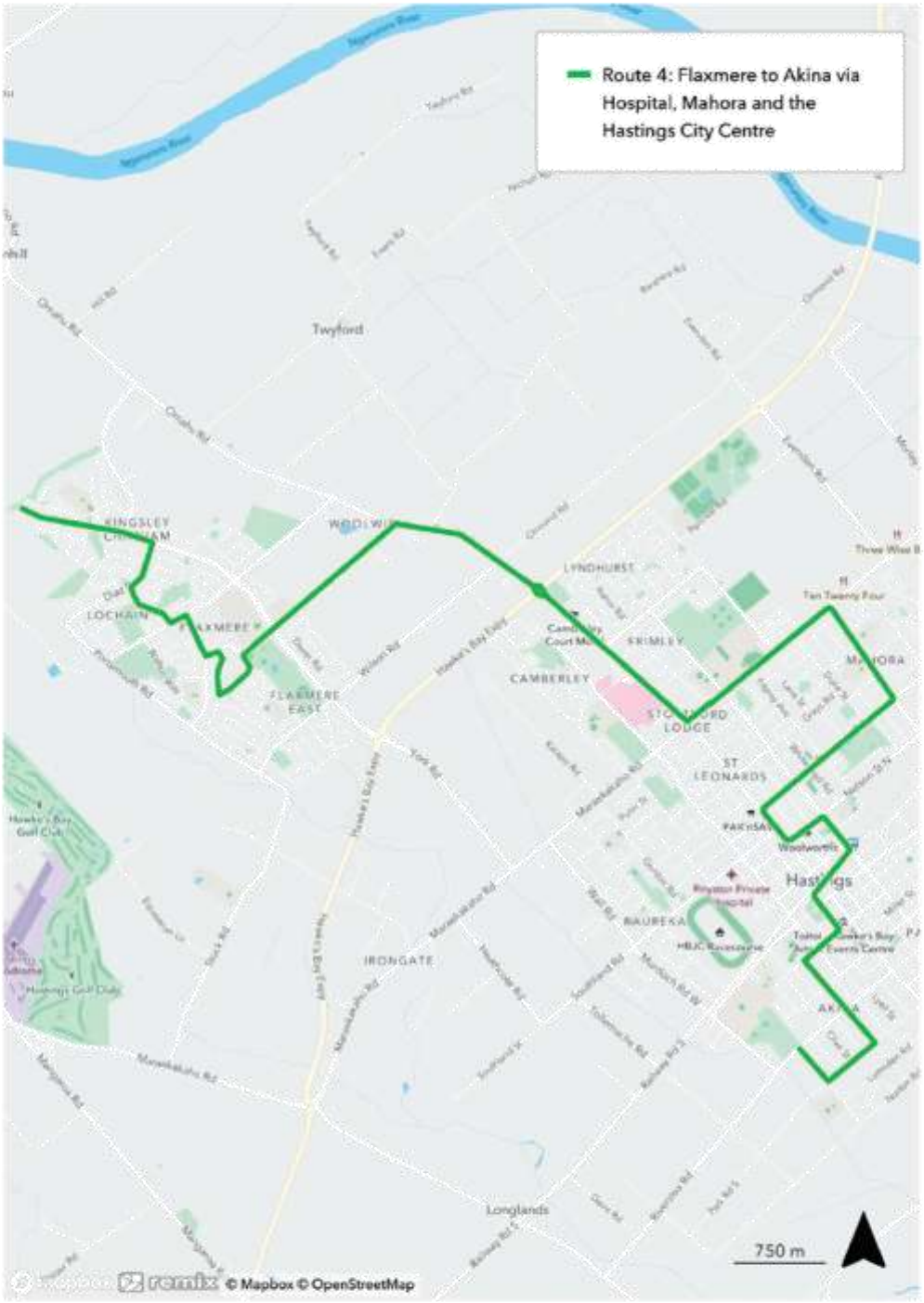


Figure 10: Planned Route 4 map

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Route 5: Flaxmere to Karamu via Raureka and Hastings City Centre

Planned Route Description

- Partial replacement of the current Route 20.
- In combination with the new Route 5, this route allows for the removal of one-way loops in Flaxmere while maintaining good coverage.
- Through routing to Karamu improves access to western side of the city centre, high schools and facilities in Windsor Park, including Splash Planet.
- Route is shown in **Figure 11** below.

Route options

- This proposed route is subject to change following targeted engagement with communities along the route, in line with the Significance Policy in this Plan.

Frequency and Span

Short term

Frequency and span will be developed following the targeted engagement with communities along with route. However, levels of service will be subject to suitable levels of available funding.

Long term

- Span: This service will run from 6am to 9pm as funding allows, with the goal of increasing to 6am to midnight, 7 days a week.
- Frequency will be every 20 minutes as funding allows from 7am-7pm and every 30 minutes all other times.

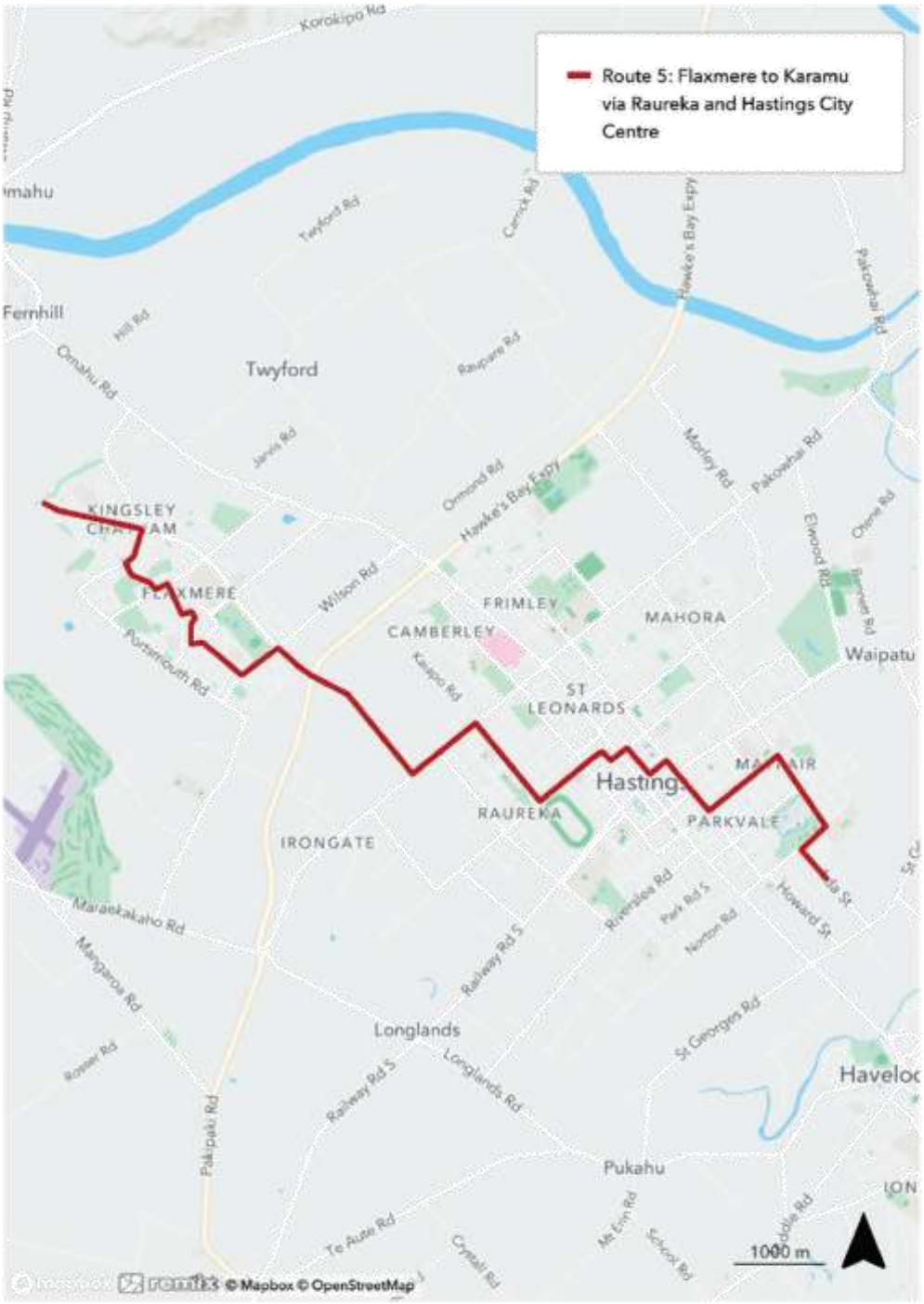


Figure 11: Planned Route 5 map

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Route 6: Napier to Hawke's Bay Airport and Bay View via Bluff Hill and Ahuriri

Planned Route Description

- Replacement of the current Route 15.
- Removal of one-way loops through Ahuriri and Westshore.
- Every second run extending to Bay View village.
- Shown in **Figure 12** below.

Frequency and Span

Short term

- Current levels of service will be maintained on the route, with a higher level of service in the long term.
- Every second trip will extend to Bay View.

Long term

- Every 60-minutes between 6am-9pm, 7 days a week.

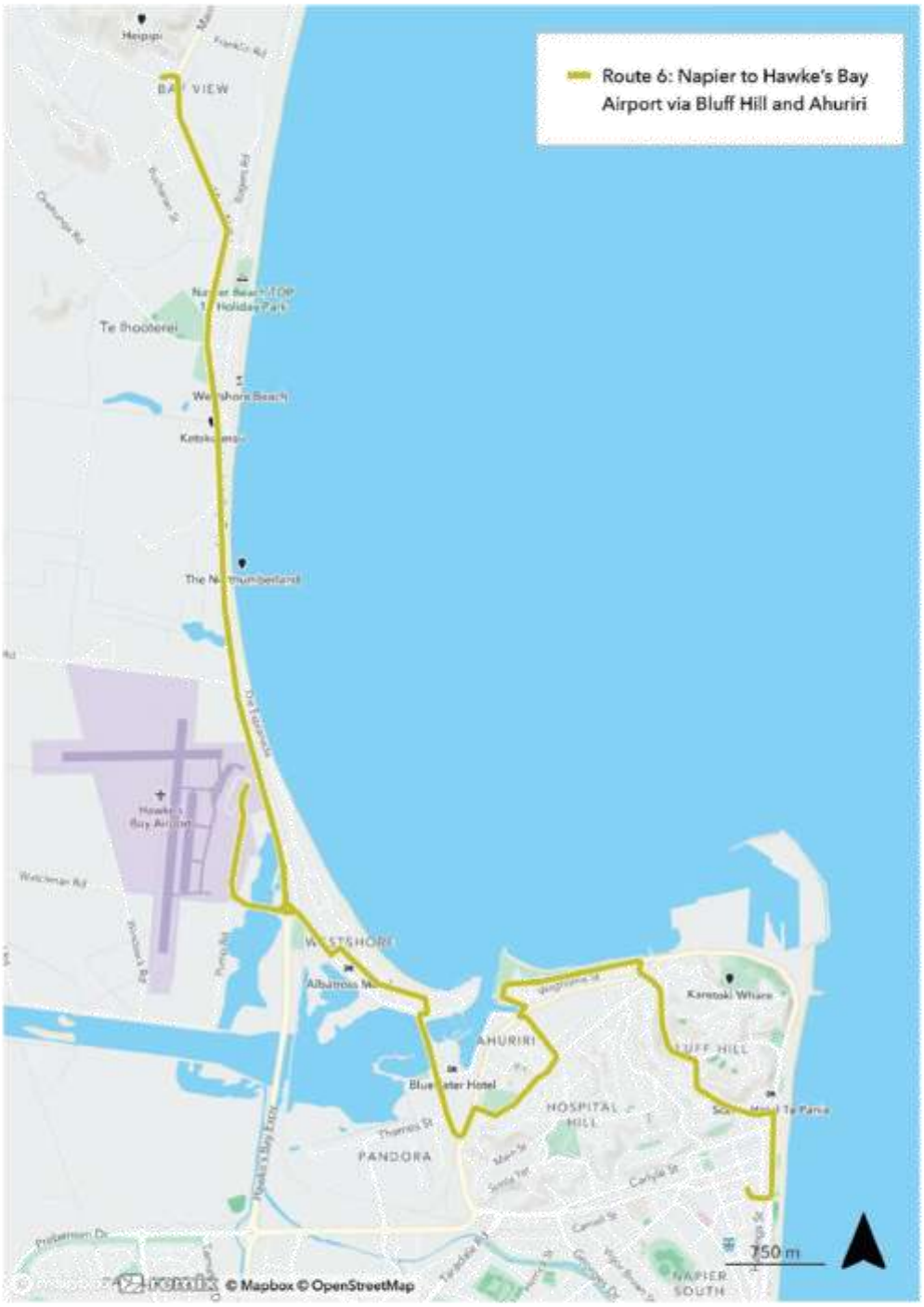


Figure 12: Planned Route 6 map

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Route 7: Hawke's Bay Hospital to Hastings City Centre via Camberley and Raureka

Planned Route Description

- Coverage route to provide service to areas of Camberley and Raureka which are not directly served by the frequent routes.
- Connections to hospital & Hastings CBD.
- Shown in **Figure 13** below.
- This route may change slightly following targeted community engagement and consultation. Any route changes will be updated in this Plan once confirmed.

Frequency and Span

Short term

- Current levels of service will be implemented on this route, with a higher level of service in the long term.

Long term

- Every 60-minutes between 6am-9pm, 7 days a week.



Figure 13: Planned Route 7 map

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Route 8: Hastings to Napier via Whakatu, Clive, and Te Awa

Planned Route Description

- Modification of the current Route 11, from a peak express service to an all-day service.
- This route will not serve Havelock North, as does Route 11, but frequency and connectivity to Havelock North will be increased significantly by being connected to the Route 1 trunk service.
- Unlike Route 11, this route will serve Whakatu, along with Waipatu, and Karamu.
- Shown in **Figure 14** below.
- This route may change slightly following targeted community engagement and consultation. Any route changes will be updated in this Plan once confirmed.

Frequency and Span

Short term

- Every 60 minutes between 6am – 6pm, 7 days a week, subject to funding.

Long term:

- Every 60-minutes between 6am-9pm, 7 days a week.

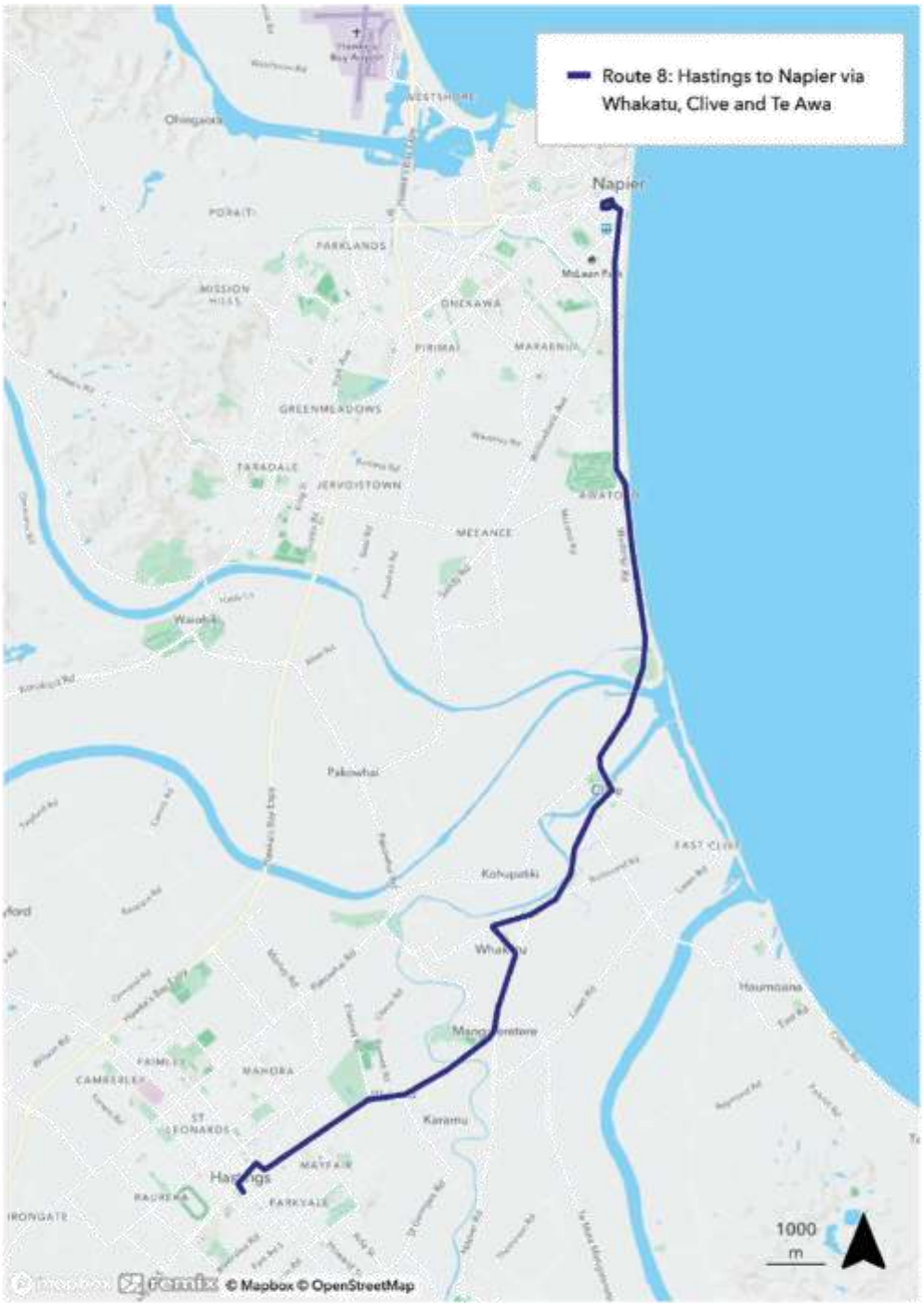


Figure 14: Planned Route 8 map

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Route 9Route 9: Central Hawke's Bay Peak Express trial

Planned Route Description

- Subject to available funding, a new limited-stop service targeting commuters from Central Hawke's Bay to Hastings. From there, people can easily transfer to the Route 1 trunk route and other routes with minimal wait time.
- Proposed stops at:
  - Waipukurau outside the Visitor Information Centre.
  - Waipawa on High Street Northbound and using the existing off-street stop southbound.
  - Ōtāne stopping outside the Town Hall and using the Higginson, Miller, Ross Street triangle to turn the bus around to head back to the state highway.
- The trial service is subject to funding. The design of the route, including stops and frequency, along with fare products, will be discussed with the CHB community during the planning phases.
- Route map shown in **Figure 15** below.

Frequency and Span

- Two AM peak services to Hastings, two PM peak services to Central Hawke's Bay, weekdays only.

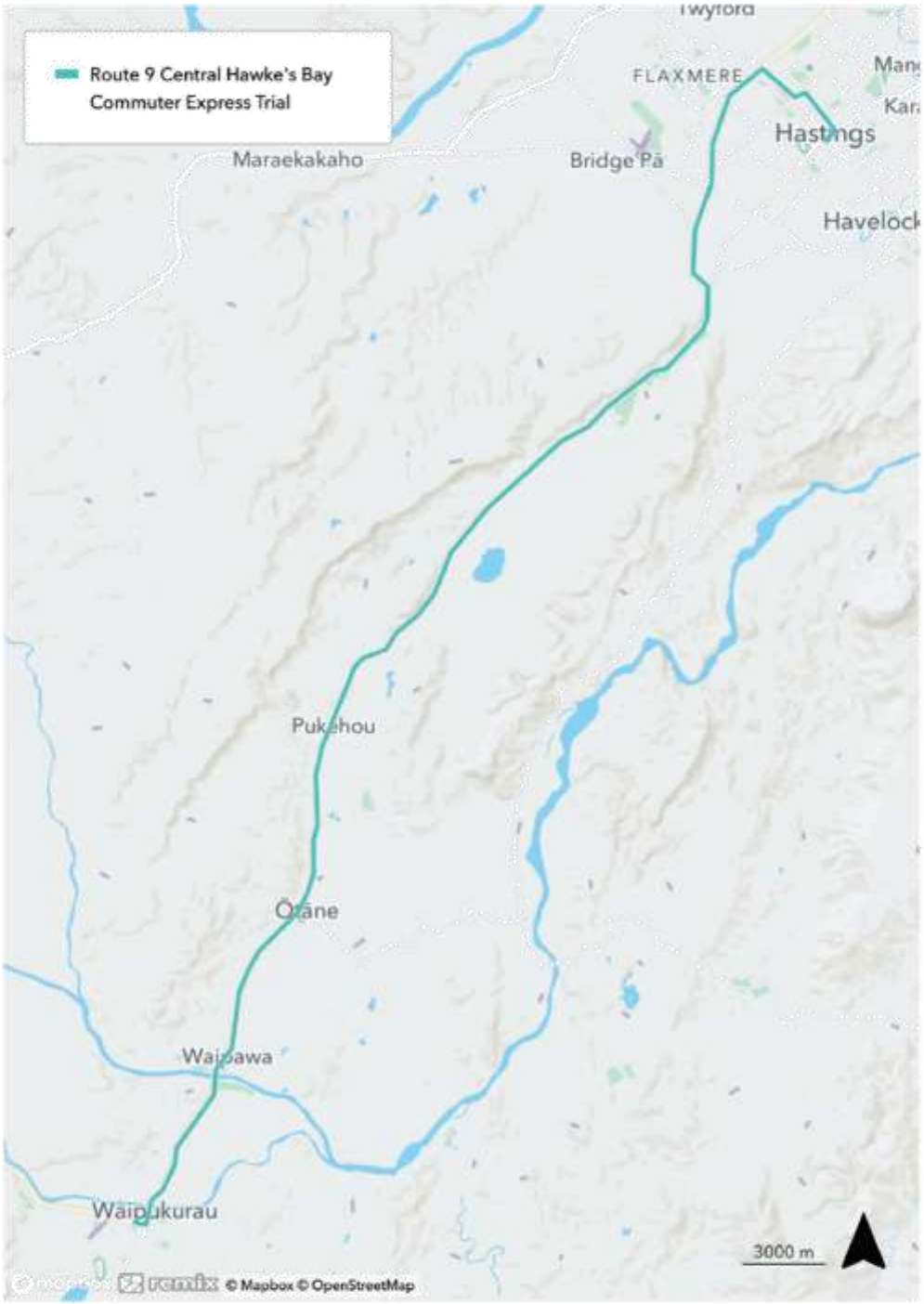


Figure 15: Route 9 Proposed CHB Commuter Express Trial map

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Appendix B Description of services integral to the Hawke's Bay public transport network and unit delineation

Current 2025 Network services and unit delineation

Service	Route	Approximate frequency	Unit Description
10 Express	Between Napier and Hastings	Peak time weekday service, 2 in the morning and 1 in the late afternoon between Napier and Hastings. Two in the late afternoon between Hastings and Napier	Napier Hastings Unit Commenced 1 July 2016
11 Express	Between Havelock North and Napier, via Hastings and Clive	Peak time weekday service, 4 in the morning and 4 in the late afternoon	Napier Hastings Unit Commenced 1 July 2016
12N	Napier to Hastings via Taradale, EIT, Hawke's Bay Hospital and Bay Plaza	Every 20 minutes in peak time and 30 minutes in off-peak times, 6.30am to 6.30pm weekdays Every hour on Saturdays/Public Holidays between 8am and 6.30pm Every 2 hours on Sundays/Public Holidays between 9am and 5.40pm	Napier Hastings Unit Commenced 1 July 2016
12H	Hastings to Napier, via Bay Plaza, Hawke's Bay Hospital, EIT and Taradale	Every 20 minutes in peak times and 30 minutes in off-peak times, 6.30am to 6.30pm Every hour on Saturdays/Public Holidays between 8am and 6.30pm Every hour on Sundays/Public Holidays between 8am and 4.55pm	Napier Hastings Unit Commenced 1 July 2016
13	Napier-Maraenui-Onekawa-Napier	Every hour between 7am and 6pm,	Napier Hastings Unit Commenced 1 July 2016

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Service	Route	Approximate frequency	Unit Description
		weekdays Approximately every 1¾ hours on Saturdays/Public Holidays, between 8am and 5.20pm	
14	Napier-Maraenui-Onekawa-Napier	Every 40 minutes in peak times and hourly in off-peak times, between 6.50am and 5.55pm, weekdays Every 1¾ hours, between 9am and 4.25pm on Saturdays/Public Holidays	Napier Hastings Unit Commenced 1 July 2016
15	Napier-Ahuriri-Westshore-Bay View, Westshore, Ahuriri-Napier	Every hour between 6.45am and 6.20pm, weekdays (5 trips per day to Bay View Every two hours between 10am and 2pm on Saturdays/Public Holidays	Napier Hastings Unit Commenced 1 July 2016
16A	Hastings-Camberley-Raureka Hastings	Every hour between 7.25am and 5.15pm, weekdays	Napier Hastings Unit Commenced 1 July 2016 Currently replaced by MyWay
16B	Hastings-Mahora-Hastings	Every 2 hours between 8am and 5.15pm, weekdays	Napier Hastings Unit Commenced 1 July 2016 Currently replaced by MyWay
17	Hastings-Parkvale-Akina-Hastings	Approximately every hour between 7.30am and 5.15pm, weekdays	Napier Hastings Unit Commenced 1 July 2016 Currently replaced by MyWay
20	Hastings-Flaxmere-Hastings	Every 30 minutes in peak times and hourly off-peak times between 6am and 6.05pm, weekdays Every 1-2	Napier Hastings Unit Commenced 1 July 2016

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Service	Route	Approximate frequency	Unit Description
		hours between 8am and 5.50pm on Saturdays/Public Holidays. Three trips on Sundays	
21	Hastings-Havelock North-Hastings	Every 30 minutes in peak times and hourly in off-peak times between 6am and 6.05pm, weekdays Every 2 hours between 9am and 4.50pm on Saturday/Public Holidays. Three trips on Sundays	Napier Hastings Unit Commenced 1 July 2016

Future public bus network

The future network is set out below. The short-term frequency sets out the levels of service we will be able to provide when we move to the bi-directional network. These will likely be the same or similar levels of service we have today. Long term frequency sets out the step change aspiration in levels of service. These will be realised when there are suitable levels of available funding.

Unit: Napier / Hastings unit

Service	Route	Short term frequency	Long term Frequency	Unit Description
1	Between Napier, Hastings & Havelock North	• Every 20 minutes in peak time and 30 minutes in off-peak times, 6.30am to 6.30pm weekdays Every hour on Saturdays/Public Holidays between 8am and 6.30pm Every 2 hours on Sundays/Public Holidays between 9am and 5.40pm	• Every 15 minutes 7am-7pm, 7 days a week • Every 30-minute frequency between 6am-7am and 7pm-9pm, 7 days a week	Napier Hastings Unit – commencement date TBC

Service	Route	Short term frequency	Long term Frequency	Unit Description
2	EIT to Napier via Tamatea	• Every hour between 7am and 6pm, weekdays Approximately every 1¾ hours on Saturdays/Public Holidays, between 8am and 5.20pm	• Every 20 minutes 7am-7pm, 7 days a week • Every 30-minutes between 6am-7am and 7pm-9pm, 7 days a week	Napier Hastings Unit – commencement date TBC
3	Tamatea to Napier via Maraenui	• Every 40 minutes in peak times and hourly in off-peak times, between 6.50am and 5.55pm, weekdays Every 1¾ hours, between 9am and 4.25pm on Saturdays/Public Holidays	• Every 20 minutes 7am-7pm, 7 days a week • Every 30-minute between 6am-7am and 7pm-9pm, 7 days a week	Napier Hastings Unit – commencement date TBC
4	Flaxmere to Akina via Hastings	• Every 30 minutes in peak times and hourly off-peak times between 6am and 6.05pm, weekdays Every 1-2 hours between 8am and 5.50pm on Saturdays/Public Holidays. Three trips on Sundays	• Every 20 minutes 7am-7pm, 7 days a week • Every 30-minute frequency between 6am-7am and 7pm-9pm, 7 days a week	Napier Hastings Unit – commencement date TBC
5	Flaxmere to Karamu via Hastings	• To be developed and confirmed following community and provider engagement, and suitable levels of funding	• Every 20 minutes 7am-7pm, 7 days a week • Every 30-minute frequency between 6am-	Napier Hastings Unit – commencement date TBC

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Service	Route	Short term frequency	Long term Frequency	Unit Description
			7am and 7pm-9pm, 7 days a week	
6	Napier to Hawke's Bay Airport via Bluff Hill and Ahuriri	• Every hour between 6.45am and 6.20pm, weekdays (5 trips per day to Bay View Every two hours between 10am and 2pm on Saturdays/Public Holidays	• Every 60 minutes 6am-9pm, 7 days a week	Napier Hastings Unit – commencement date TBC
7	Hastings to Hospital via Raureka and Camberly	• Every hour between 7.25am and 5.15pm, weekdays	• Every 60 minutes 6am-9pm, 7 days a week	Napier Hastings Unit – commencement date TBC
8	Hastings to Napier via Mahora, , Karamu, Waipatu, Whakatu, Clive and Te Awa	• Peak time weekday service, 4 in the morning and 4 in the late afternoon	• Every 60 minutes 6am-9pm, 7 days a week	Napier Hastings Unit – commencement date TBC
9	Waipukurau to Hastings City Centre via		2 AM peak services to Hastings, 2 PM peak services to Central Hawke's Bay, weekdays only	Napier Hastings Unit – commencement date TBC

TOTAL MOBILITY

The Total Mobility Scheme caters for those people with permanent disabilities who are unable to use buses or other forms of transport. HBRC intends to continue to operate the scheme in:
Napier (24 hours a day, 7 days a week, Napier city and suburbs, and between Napier and Hastings)
Hastings (24 hours a day, 7 days a week, Hastings city and suburbs, and between Hastings and Napier)
Central Hawke's Bay (14 hours a day, 6 days a week).
The above operating hours are generally indicative. It is likely that operating hours may vary depending on the capacity and usual operating hours of each operator.

EXEMPT SERVICES

The LTMA requires all exempt services in a region to be registered before operation. The LTMA sets out the meaning of an exempt service as:

a) it operates in a region that is required to have a regional public transport plan, but-
   i) when it started operating, it was not identified in that plan as integral to the public transport network in that region; and
   ii) it operates in a region that is not required to have a regional public transport plan
b) it operates in a region that is not required to have a regional public transport plan
c) it operates inter-regionally between 2 or more regions, at least 1 of which is required to have a regional public transport plan, but –
   iii) when it started operating, it as not identified in any plans as integral to the public transport network in any of those regions; and
   iv) it operates without a subsidy for its provision
d) it operates inter-regionally between 2 or more regions that are not required to have regional public transport plans
e) Is specified as an exempt service by regulations made under s150 of the LTMA.

Exempt services are not included in this Plan. Potential operators of exempt services should contact HBRC for details or refer to Section 133 of the Land Transport Management Act 2003 for details of registration requirements. Registration is free but must be completed at least fifteen working days before the commencement of the service.

In Hawke's Bay there are some exempt services that operate without any financial support from HBRC. As these services operate independently and are commercial enterprises, operators are able to set fares, timetables and routes as they see appropriate. HBRC's general approach is that there is no need to intervene in the provision of an exempt public transport service.

The LTMA does however enable regional councils to require information from operators of commercial units, where these are included in the Plan for public transport planning, contracting, and monitoring purposes. If HBRC considers that a contracted commercial public transport unit does not meet the needs of the community, HBRC and the operator will review the service. Following the review, if improvements cannot be made commercially, HBRC may choose to intervene by

a) developing a unit and providing a concessionary fare scheme or

b) offering improved services by way of competitive tender and securing a contracted operator. There are currently no contracted commercial units in Hawke's Bay.

There are currently no contracted commercial units in Hawke's Bay.

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Appendix C Legislative requirements

The Land Transport Management Act 2003 (LTMA) requires a council to consider certain matters when preparing its plan. Section 124 requires councils to:

a) Be satisfied that the plan
   i) Contributes to the purpose of the LTMA
   ii) Has been prepared in accordance with any relevant guidelines that the Agency has issued
   iii) Is, if it includes a matter that is not within the scope of the RLTP, otherwise consistent with that plan.

b) Be satisfied that it has applied the principles specified within Section 115(1).

c) Take into account
   i) Any national energy efficiency and conservation strategy
   ii) Any relevant regional policy statement, regional plan, district plan or proposed regional plan or district plan prepared under the RMA
   iii) The transport component of any plan or strategy that has been developed and publicly consulted on by – a territorial authority in the region, or the Regional Council if it has transferred its public transport responsibilities to a territorial authority under section 17 of the RMA
   iv) The public transport funding likely to be available within the region
   v) The need to obtain the best value for money
   vi) The views of Territorial Authorities in the region
   vii) The views of public transport operators in the region
   viii) the views of the public transport workforce and its representative unions under Part 4 of the Employment Relations Act 2000.

d) Consider the needs of persons who are transport disadvantaged.

HBRC is satisfied that this draft Plan contributes to the LTMA.

LTMA REQUIREMENT	CONTRIBUTION OF THIS PLAN
Contributes to the purpose of the LTMA which is to contribute to an effective, efficient, and safe land transport system in the public interest.	The draft Plan sets out policies that will improve access and mobility, efficiently use existing capacity and resources, and encourage use of the Hawke's Bay public transport network. Safety is improved through high vehicle standards. Increased public transport use reduces the personal risk of car crashes.
Has been prepared in accordance with any relevant guidelines that the Agency has issued.	NZTA's 2024 Development guidelines for Regional Public Transport Plans have been followed when preparing this plan.
Is, if it includes a matter that is not within the scope of the RLTP, otherwise consistent with that plan.	Matters considered within this draft Plan are within the scope of the Regional Land Transport Plan.
Be satisfied that it has applied the principles specified within section 115 (1), namely a) well used public transport services reduce the environmental and health impacts of land transport, including by reducing reliance on single-occupant vehicles and using zero-emission technology b) public transport services support a mode shift from private motor vehicle use and equitable access to places, facilities, services, and social and economic opportunities if they are co-ordinated, integrated, reliable, frequent, accessible, affordable, and safe c) fair and equitable employment or engagement of people in the public transport workforce should ensure that there is a sufficiently robust labour market to sustain and expand public transport services d) regional councils, territorial authorities, and public transport operators should work together to co-ordinate public transport services, the provision of infrastructure, and land use as necessary – i) To meet the needs of passengers ii) to encourage more people to use the services e) public transport services should be provided in a way that assists –	a) The strategic response and business case response sections set out how the public transport networks will enable greater use and transport choice, minimising reliance on single occupancy vehicles. Policy 16 also highlights rolling stock procurement must be RUB compliant. b) The planned new network represents a viable transport alternative for a range of uses, encouraging mode shift. Routes have been planned to intersect and interact at key locations, with all major regional destinations served, including key employment nodes. c) Fair and equitable employment and engagement of people in the public transport workforce will be a consideration in the tendering and procurement of the new services contract d) Section 2.3 sets out how HBRC will work closely with territorial authorities and other delivery partners to ensure the co-ordinated development and delivery of infrastructure and land use, driving uptake of the services and meeting the needs of passengers. e) Planned public transport service improvements and the new network maximise the available network, ensuring services are efficient, effective, and reliable

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LTMA REQUIREMENT	CONTRIBUTION OF THIS PLAN
i) Public transport investment to be efficient ii) Public transport investment to give value for money	driving investment efficiency. The planned public transport services deliver maximum value for money by offering a genuine transport alternative, and driving innovation, with the intent of increasing patronage. Therefore, the overall public investment will be offset by increases in third party revenues.
Take into account i) Any national energy efficiency and conservation strategy; and ii) Any relevant regional policy statement, regional plan, district plan or proposed regional plan or district plan prepared under the RMA iii) The transport component of any plan or strategy that has been developed and publicly consulted on by – a territorial authority in the region, or the Regional Council if it has transferred its responsibilities to a territorial authority under section 17 of the RMA. iv) The public transport funding likely to be available within the region v) The need to obtain the best value for money. vi) The views of Territorial Authorities in the region vii) The views of public transport operators in the region viii) The views of the public transport workforce and its representative unions under part 4 of the Employment Relations Act 2000	i) One of the priority focus area of the New Zealand second emissions reduction plan (EPR) 2026 - 2030 is efficient, low emissions transport. The ERP reconfirms support for zero emissions buses. Provision of efficient commuter bus services will contribute to this priority and any future new rolling stock in Hawke's Bay will be zero emissions. ii) These plans are supportive of the integration of public transport network planning and land use planning. The planning of commuter bus routes and neighbourhood access routes takes land use into consideration and is consistent with existing Plans across the region. iii) Transport planning in Hawke's Bay is integrated across all Councils, with HBRC being the only entity that plans, procures, and runs public transport services at this time. iv) The services listed in this plan take available funding into account and levels of service will be delivered accordingly. Proposed future developments will be evaluated in terms of affordability and available funding when investigated. v) Policies in Section 4 of the Plan set out how HBRC will procure its services to encourage competition and achieve value for money. The Third-Party Revenue policies and targets set out how HBRC will drive increased value for money within the scope of services. vi) All Territorial Authorities in the region are invited to provide their views on a range of matters during the public consultation on this plan. HBRC officers worked closely with Territorial Authority officers in the development of this Plan, its contingent parts, and the impacts on their network and communities.

LTMA REQUIREMENT	CONTRIBUTION OF THIS PLAN
	vii) All public transport operators in Hawke's Bay and neighbouring regions were invited to provide their views on a range of matters during the development of the draft Plan. viii) All members of the public transport workforce and their union representatives have the ability to provide their feedback on a range of matters contained within this plan during the public consultation period.
Consider the needs of persons who are transport disadvantaged.	Section 3 of the draft Plan sets out how the needs of the transport disadvantaged have been considered.

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Appendix D Significance policy

SIGNIFICANCE POLICY

This policy sets out how to determine the significance of variations to this Plan, in accordance with the requirements of Section 120(4) of the Land Transport Management Act.

APPLICATION

This Plan can be varied at any time. However, public consultation as set out in Sections 125(1) and 125(2) will be required if the variation is found to be significant under this policy.

The approach to consultation will reflect the level of significance of any proposed variation. Consideration will be given to the costs and benefits of any consultative process or procedure, and the extent to which any significant and recent consultation has already taken place.

However, HBRC may undertake targeted engagement and consultation on matters or proposed changes affecting specific communities, user groups, and stakeholders, even if the significance threshold outlined in this policy is not invoked. Targeted engagements and consultation will be assessed on a case-by-case basis and may result in network enhancements and changes without broad public consultation, provided those changes do not materially impact the overall network.

GENERAL DETERMINATION OF SIGNIFICANCE

The significance of variations to this Plan will be determined on a case-by-case basis. When determining the significance of a variation, consideration must be given to the extent to which the variation:

- Signals a material and significant change to the planned level of investment in the public transport network.
- Materially affects the consistency of this Plan with the RLTP or any of HBRCs' long-term plans.
- Significantly impacts a large number of residents of two or more suburbs along a route. (Variations with a moderate impact on a large number of residents will be considered case by case. Variations with a major impact on a small number of residents will have greater significance than those with a minor impact and may result in targeted engagement and consultation to refine the variation).
- Includes potentially significant changes to two or more routes in their entirety, to be assessed on a case-by-case basis.
- Requires broad public buy in and / or support due to significant change in the overall structure of the network, unless the change has been previously consulted on.
- Signals a wholesale change to the network, unless the change has been previously consulted on.
- Affects the integrity of this Plan, including its overall affordability.

SIGNIFICANT AND NON-SIGNIFICANT MATTERS

Matters that will always be considered 'significant' are:

- Any variation that amends this policy on significance; and
- Any variation that introduces a new public transport unit
- Any variation that increases the cost of the provision of public transport services by more than 10% in one financial year, with the impact resulting in increased Local Share, unless the variation has been pre-planned, previously consulted on. By way of example, increases in frequency and operating hours, or the establishment of a Trial service, provided it is included in the relevant and adopted Plan will not be considered significant in this context.

- Any major reorganisation of Units

Matters that will always be considered 'not significant' are:

- Minor editorial and typographical amendments to this Plan; and
- Changes to fare levels in accordance with current NZTA policy, this plan and its policies and funding levels
- Matters that will usually be considered 'not significant' are:
  - A matter that has already been consulted on.
  - Minor changes to the description of services following a service review, e.g. changes to the route, frequency and hours of a service that may include a reduction in service levels on a route or routes, but which result in the same, or better, overall level of service across the network.
  - Changes to the description of services or grouping of services as a result of an area wide service review, provided that there is no significant increase in cost.
  - Any variation that alters the cost of the provision of public transport services in one financial year by less than 10%.
  - Any unavoidable operational cost inflations or indexation that must necessarily be met to ensure the continued operation of services.
  - Changes to services, frequency, or routes resulting from targeted and specific community engagement, provided there is no significant increase in cost.

TARGETED CONSULTATION ON NON-SIGNIFICANT VARIATIONS

Where HBRC determines that a proposed variation is not significant in the context of the wider network, HBRC may still undertake targeted engagement and consultation as follows:

- Consultation for minor changes in the delivery of public transport services
- Minor changes in service delivery that are required to improve efficiency, such as the addition or deletion of trips and route changes that have only a local impact.
- Implementation of new or improved supporting infrastructure in collaboration with the relevant Territorial Authority.
- Engagement with communities, user groups, and key stakeholders to gain insights into travel patterns, trends, challenges, and opportunities that may be used to inform or shape service delivery.
- Where there is planned / intended reduction of service levels on a given route (hours or frequency)

In these cases, engagement and consultation will generally be undertaken at a local level with the operator/s involved, the relevant territorial authority and passengers who use the services.

OTHER NON-SIGNIFICANT VARIATIONS

Any proposals for changes that affect only a sector of the community or the industry (e.g. a change in Total Mobility provision, or a change to specific vehicle quality standards) will be worked through with those most likely to be affected by the proposed change.

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Appendix E Private share revenue, Farebox recovery monitoring, and Fare Setting Policy

1. Purpose

The following suite of policies combine to set out the overall **third-party funding policy** for Hawke's Bay public transport operations. Collectively, they recognise the contribution of third-party revenue towards the operational cost of providing public transport in the region.

Third Party revenue includes fares paid by passengers, advertising sold on the outside and inside of buses, indirect government funding for concession fares such as Super Cold card travel, and any other third-party contributions such as subsidised bus tickets for employees.

Third party funding comprises however, in the whole, the fares charged to passengers.

The following describes the key objectives of the fare recovery policy, which has a primary purpose of ensuring that the public transport system is financially sustainable and drives value for money, while remaining accessible and equitable for users.

2. Key Objectives of the Fare Recovery Policy:

2.1. **Financial Sustainability**:

- Helps determine what proportion of operational costs should be covered by fare revenues versus government funding (from the regional council and central government).
- Reduces reliance on public funds, enabling reinvestment in infrastructure, service improvements, or other initiatives.
- Reflects central government third party funding targets as a percentage of operating revenue
- Helps to identify and build alternative revenue streams, helping to offset operational costs

2.2. **Equity and Affordability**:

- Ensures that fares are set at a level that maintains access for various user groups, especially the Transport Disadvantaged.
- Balances fare levels with government funding to prevent pricing out low-income users.

2.3. **Service Efficiency and Optimisation**:

- Encourages operational efficiency by assessing the relationship between costs and revenues.
- Informs decisions on route optimisation, service frequency, and capacity planning.
- Offers potential for service improvements, should suitable additional funding become available.

2.4. **Accountability and Transparency**:

- Provides clear benchmarks for fare setting and adjustments, ensuring decisions are data-driven and transparent to stakeholders and the public.
- Communicates the cost-sharing responsibility between users and funders.

2.5. **Encouraging Public Transport Use**:

- Supports policies that make public transport a viable alternative to private vehicle use by keeping fares competitive.

- Helps achieve broader social and environmental goals including reducing traffic congestion and carbon emissions.

2.6. **Policy Alignment:**

- Integrates with regional and national transport objectives, such as accessibility, mode shift targets, and emission reduction strategies.

3. Calculating private share revenue

3.1. Private share revenue will be used to offset the total operational costs of running the public bus service, thereby reducing the overall level of public subsidy required. Given the nature of having various revenue streams, it is logical to expect total third-party revenue to fluctuate in any given year, while steadily increasing over time.

3.2. The calculation for private share revenue will include fares, bus advertising, concessions, new / innovative fare products or service. For simplicity, any revenue that does not come from a direct public subsidy via NLTF or rates funding will be included in the private share revenue calculation.

4. Private share targets

4.1. From December 2024 public transport authorities are required to collaboratively develop and set private share targets with NZTA. The core intent of these targets is to drive operational efficiency and value for money by incrementally increasing third party revenues, thereby decreasing service reliance on public subsidies.

Below are the private share targets for Hawke's Bay

Year	Private share target
2025 / 2026	11.5%
2026 / 2027	13.1%

5. Farebox recovery and Fare setting

The changes to national funding policy in mid-2018 mean HBRC are no longer required to set a regional target for farebox recovery. However, monitoring of farebox recovery rates using the methodology and reporting process specified by Waka Kotahi is still required.

For clarity, this Policy deals with how the fare recovery rate is quantified, at how the fare review and setting process occurs. It forms a part of the overall Third-Party Revenue policies.

Service included in the calculation.
The public transport services to be included in the calculation of the fare recovery are all HBRC contracted and co-funded services operating in the region. Long-distance (e.g., inter-city services) services, privately funded school services, Ministry of Education funded school services; tourist and charter services are not included. For clarity, this calculation applies only to fares paid and does not include any other forms of revenue.

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The Farebox recovery rate

HBRC monitors the farebox recovery of the system as a whole rather than measuring individual routes or trips. Individual routes or services, particularly those designed to primarily play a coverage role, are not necessarily expected to achieve the target set out in this policy.

Figure 12 below shows the actual farebox recovery level for the latest full financial year (1 July 2023 to 30 June 2041). The graph also identifies major events over recent years that have impacted patronage. All figures have been calculated using the NZTA farebox recovery formula.



Figure 16: Farebox recovery rates by year

Method of calculation

The formula used to calculate farebox recovery is prescribed by NZTA and is set out in detail on its website. In essence the formula is total fare revenue divided by total costs.

Fare - setting

An annual fare level review will be undertaken before the conclusion of each financial year. This review will take into consideration both the farebox recovery levels and the overall third-party revenue levels but may also include any other factors HBRC considers relevant. As a general principle, fare levels should remain balanced between being competitive with the price of private car travel to encourage patronage growth, particularly for commuting and being deemed affordable within the context of costs of living. Ultimately, fare levels will need to be balanced with ensuring that passengers contribute sufficiently to the cost of operating the service.

The review will also address the level of discounts and concessions within the existing fare structure, along with investigating potential new / innovative fare products.

Cash payment for fares

The implementation of the National Ticketing System (NTS) will enable a greater choice of payment methods for users across a range of platforms (e.g. debit / credit card, Motu Move, cash). The NTS will unlock the ability for more users and more trips across the network. As part of the transition to NTS, the role of cash in the future public transport system will be considered. In determining the role of cash fares, HBRC and the service provider will consider the impacts on health and safety (both for drivers and passengers), the impacts on the transport disadvantaged, and other wider implications around accessing the services.

Fare structure review

The fare structure on the HBRC network is currently a flat fare structure with it being $2 for one zone and $3 for two zones with a BeeCard (last reviewed 1 May 2024).

HBRC will review fare structures at least every six years, if not sooner. The fare structure review will address all aspects of the fare system, including:

- the appropriateness of zones as the base for the system, and
- the availability of (and discount to be applied to) concession fares
- the availability of discounts for bulk purchases of fares using BeeCard or other smartcards / integrated ticketing systems.

17 June 2025 6.52 pm

Appendix F Hawke's Bay Regional Council Bus Advertising Policy

1. Purpose

The purpose of this policy is to outline the conditions under which advertising space on buses operated by Hawke's Bay Regional Council may be sold. The policy is designed to ensure that bus advertising aligns with the Council's values while generating revenue to support public transport services as part of the third-party revenue streams.

2. Advertising Opportunities

The Council offers the following advertising opportunities on its buses:

- **Rear of the Bus:** Advertising will predominantly be placed on the rear of the bus, as this location offers high visibility and minimises distraction to passengers and drivers.
- **Sides of the Bus:** Advertising on the sides of buses will be permitted on occasion, at the discretion of the Council. This will be considered for campaigns of significant size or importance.
- **Full Bus Wraps:** In exceptional circumstances, full bus wraps (covering the exterior of the bus, excluding windows where it could hinder safe sightlines) may be allowed. Such requests will be assessed on a case-by-case basis.
- **Inside the bus:** on surfaces, including any video & audio display, as long as the advertisement or the medium does not interfere with the operation of the vehicle not the quiet enjoyment of travel by passengers of the driver.

3. Prohibited Advertising

The following types of advertising are not permitted on or in any Hawke's Bay Regional Council buses:

- **Alcohol, Tobacco or Vaping Advertising:** The Council will not accept any advertisements promoting the sale or consumption of alcoholic beverages, the consumption of tobacco or related products, or use of vaping products.
- **Political Advertising Related to the Council:** While political advertising is generally allowed, advertisements for political candidates or causes directly associated with the Hawke's Bay Regional Council, including from or by current councillors or council officers, or individuals seeking election to the Regional Council, are prohibited.

4. General Conditions

- All advertisements must comply with relevant national laws and standards, including those relating to decency, public safety, electoral rules and the protection of vulnerable groups.
- Advertisements should not contain offensive, discriminatory, or misleading content.
- The Council reserves the right to review and approve all advertising content before it is placed on its buses.

5. Exceptions and Discretion

In cases where proposed advertising falls outside the typical scope of this policy, exceptions may be considered by the Council on a case-by-case basis, provided the content aligns with the Council's values and does not contravene the prohibited advertising categories.

6. Review

This policy will be reviewed periodically to ensure it remains aligned with the Council's strategic objectives and public expectations.

17 June 2025 6.52 pm


~~Draft~~ Napier Hastings
Future Development
Strategy
~~2024~~ 2025 – 2054 ~~2054~~
~~November~~ May 2025 ~~2024~~

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1. Foreword

Creating a strong and sustainable future for the Heretaunga Plains has been the focus of the Heretaunga Plains Urban Development Strategy (**HPUDS**) since its inception in 2010. This Future Development Strategy (**FDS**) replaces HPUDS and builds on that legacy by looking out another 30 years. The FDS seeks to manage urban growth on the Heretaunga Plains in a way that acknowledges mana whenua and their aspirations for development, is respectful of the precious land and water resources that sustain us, while supporting our housing, business and community needs. This is not an easy task as there are many conflicts, tensions and trade-offs that need to be navigated, especially considering the challenges that climate change puts before us.

This Strategy looks out to 2054 and has been prepared jointly by the partner councils – Napier City Council, Hastings District Council and Hawke's Bay Regional Council, in partnership with mana whenua through Maungaharuru-Tangitū Trust, Mana Ahuriri Trust and Tamatea Pōkai Whenua. It sets out to meet the councils' obligations under the National Policy Statement on Urban Development 2022 (**NPS-UD**) but is essentially driven by a broader need for continued leadership and collaboration by the councils and mana whenua through the Treaty of Waitangi settlement entities in the way urban development occurs in this special part of Aotearoa New Zealand.

The NPS-UD requires the FDS to set out how well-functioning urban environments will be achieved and must show:

- the general locations for Napier and Hastings capacity to grow, including through intensification within existing urban areas
- the infrastructure needed to support and service that growth
- development constraints that need to be avoided or mitigated.

Three major factors driving our decision-making are mana whenua knowledge and expectations, the need to protect highly productive land, and managing the effects of natural hazards as far as possible. Many other factors have been considered, but we acknowledge that in 30 years many things will change that we cannot foresee. Accordingly, the strategy will be reviewed every three years, to incorporate and respond to current issues. Nevertheless, the strategy takes a long-term approach to how we address urban development on the Heretaunga Plains, with a focus on a preferred settlement pattern that will lead us to more compact development.

This approach means further changes in the current way growth is managed, but we believe that long-term leadership and robust growth management will lead to sustainable growth, while recognising that getting there will necessitate a transitional period over time.

We particularly acknowledge the input of mana whenua in the development of the strategy. Mana whenua have an important role in planning future growth in Napier and Hastings, including the delivery of housing, and the protection of our natural and physical resources. We

will continue to collaborate in genuine partnership with our Treaty partners on the future growth of Napier and Hastings.

Let us look forward, continue to work with our communities to create the kind of region we all love to live, work and play in.

Many thanks to all of those who have provided input into the development of this draft strategy through the informal and formal consultation processes. We look forward to your feedback on the Draft FDS.

Hawke's Bay Regional Council Chair Hinewai Ormsby

Napier City Council Mayor Kirsten Wise

Hastings District Council Mayor Sandra Hazlehurst



2. Mihi

Kei aku maunga whakahī, kei aku awa whakatere taniwha, tēnā koutou katoa.

Haramai rā ki a au, ki te rautaki nei, ka nui te mihi.

He hua te rautaki nei o te mahinga tahitanga a ngā kaunihera e toru, a Hastings District Council, a Napier City Council me Hawke's Bay Regional Council, ki a Tamatea Pōkai Whenua, Mana Ahuriri Trust me Maungaharuru Tangitū Trust.

I te marama o Hepetema ki te marama o Nōema i tēra tau, i whai wā te marea ki te tuku kōrero mai e pā ana ki tēnei rautaki. I wānangahia ērā whakahokinga kōrero, ā, anei te hua.

He tirohanga 30 tau tēnei, ā, e tūmanako ana ka pūawai te rohe mā roto mai i te rautaki nei.

Heretaunga Haukū nui

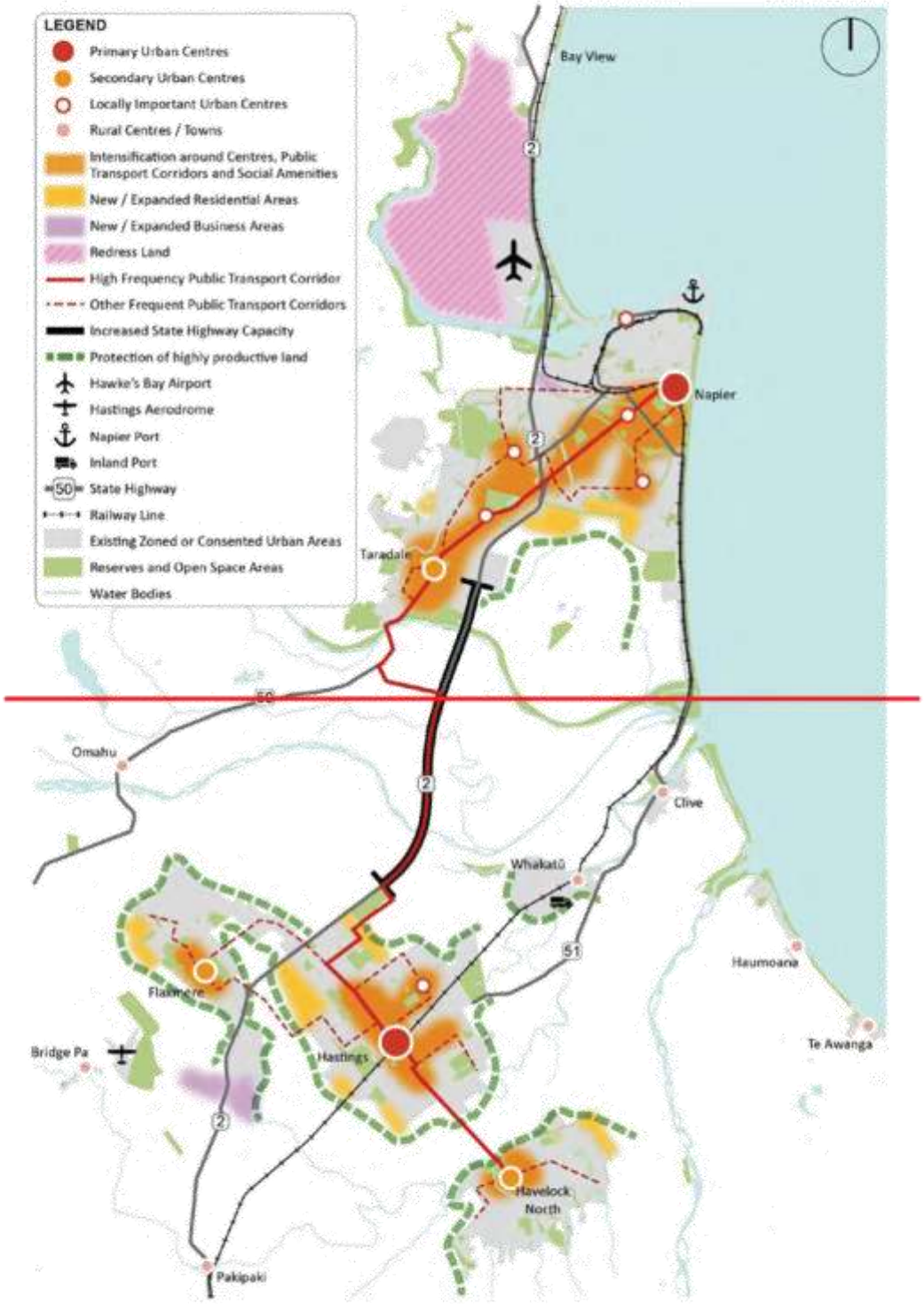
Heretaunga Ararau

Heretaunga Hāro o Te Kāhu

Heretaunga Takoto noa.

Kia tōaitia anō i konei, ko ā mātou mihi ki a koutou, kei aku rangatira.

3. Overview


LEGEND
Primary Urban Centres
Secondary Urban Centres
Locally Important Urban Centres
Rural Centres / Towns
Intensification around Centres, Public Transport Corridors and Social Amenities
New / Expanded Residential Areas
New / Expanded Business Areas
Redress Land
High Frequency Public Transport Corridor
Other Frequent Public Transport Corridors
Increased State Highway Capacity
Protection of highly productive land
Hawke's Bay Airport
Hastings Aerodrome
Napier Port
Inland Port
State Highway
Railway Line
Existing Zoned or Consented Urban Areas
Reserves and Open Space Areas
Water Bodies
Bay View
Napier
Taradale
Omahu
Clive
Whakatū
Haumoana
Te Awanga
Flaxmere
Hastings
Bridge Pa
Havelock North
Pakipaki
2
50
51

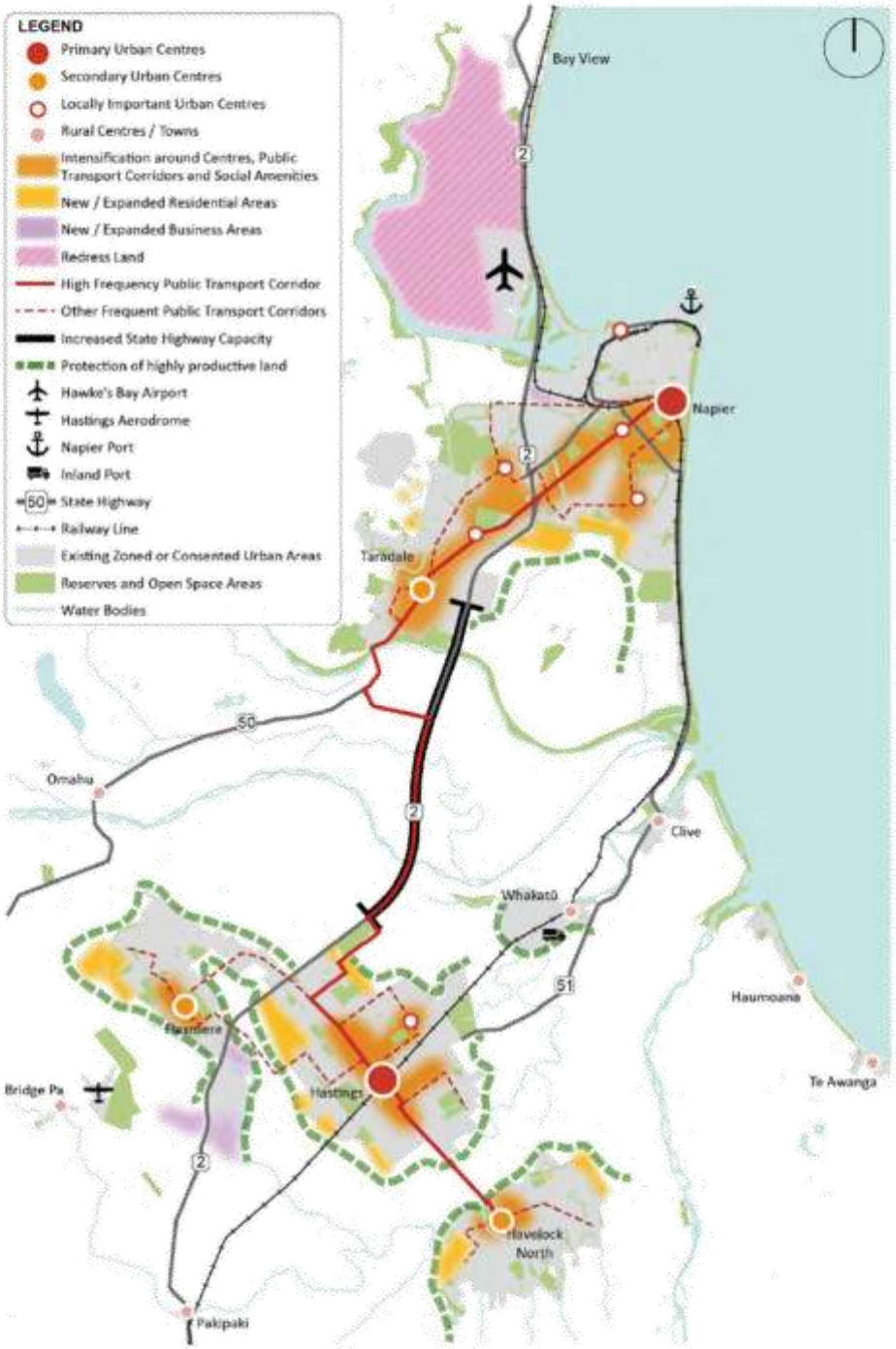


Figure 1 The Draft Future Development Strategy

At its heart, the ~~Draft~~ FDS ~~strategy~~ **seeks to achieve a compact urban form, focussed around a network of consolidated and intensified centres in Napier and Hastings**. The ~~draft~~ strategy achieves this by enabling more housing growth and choice within and adjoining the existing urban area in locations close to the public transport network and community services. It also achieves this by providing choices for different types of businesses in efficient locations.

The ~~Draft~~ FDS ~~strategy~~ provides for:

- **increased density and diversity of housing**, including apartments and terraced housing, within and close to Napier and Hastings' primary, secondary and locally important centres and high frequency bus corridors;
- **general residential development in other neighbourhoods** within existing urban areas, including small scale infill and suburban scale duplexes and terraced housing;
- **targeted expansion to enable new compact neighbourhoods with a mix of housing types** to the south of Napier's urban area, Mission Estate, and on the fringes of Havelock North, Hastings and Flaxmere, in locations that can integrate efficiently with existing transport networks and services, while avoiding the best productive land;
- **increased density and diversity of retail and commercial activities** in Napier and Hastings' primary, secondary and locally important centres, the Severn Precinct, and in new centres that support new compact neighbourhoods;
- **a new strategic industrial node at Irongate and Irongate West** that is efficiently located close to the state highway network and existing industrial areas;
- **supporting infrastructure**, including transport, three waters, open space and social infrastructure network improvements; and
- **opportunities to deliver ecologically sustainable, resilient urban development at Ahuriri Station.**

The ~~Draft~~ FDS ~~strategy~~ enables a number of benefits to be realised, including:

- providing the **best opportunity to achieve more compact housing** consistent with changing housing needs in Napier and Hastings;
- providing for new housing in a variety of areas which supports **reduced travel times for people with lower impacts on the transport network;**
- directing growth to areas that **better utilise existing amenities and infrastructure** (e.g. drinking water, wastewater, stormwater, roading, schools and public transport);
- **avoiding the need for significant new capital investment in new infrastructure** in areas with limited existing and planned infrastructure;
- **minimising urban expansion** in areas subject to significant natural hazard risks;
- providing opportunities to **more efficiently protect existing communities from natural hazard risks;**
- **minimising urban expansion in areas with highly productive land** used for productive activities;

- **providing opportunities for further economic agglomeration** of the Irongate industrial node should the uptake of industrial land occur faster than anticipated; and
- **recognising Mana Ahuriri's aspirations** for development by identifying Ahuriri Station as Redress Land.

4. Introduction

4.1 What is the Future Development Strategy?

The ~~Draft~~ Napier Hastings Future Development Strategy (**the ~~Draft~~ FDS**) is a strategic tool to assist with the integration of planning decisions under the Resource Management Act 1991 (**RMA**) with infrastructure and funding decisions. It must show:

- where we will grow in Napier and Hastings, including the general locations for growth in existing and new urban areas over the next 30 years;
- The infrastructure needed to support and service that growth; and
- Development constraints.

The ~~Draft~~ FDS has been developed in partnership with Hastings District Council, Napier City Council, Hawke's Bay Regional Council, Maungaharuru Tangitū Trust, Mana Ahuriri Trust and Tamatea Pōkai Whenua. The ~~Draft~~ FDS satisfies the statutory requirements for future development strategies under the National Policy Statement for Urban Development 2020 (**NPS-UD**).

The NPS-UD states that the purpose of an FDS is to promote long term strategic planning by setting out how the partner councils and mana whenua intend to:

- achieve well-functioning urban environments in existing and future urban areas;
- provide at least sufficient development capacity over the next 30 years to meet expected demand; and
- assist with the integration of planning decisions under the RMA with infrastructure planning and funding decisions.

While establishing the overall direction for managing growth of urban environments across Napier and Hastings, it is important to note that an FDS does not:

- rezone land;
- make changes to any district or regional plan;
- set out details and standards around subdivision and building design;
- provide funding and other resourcing to meet costs of development, infrastructure and other services.

4.2 Where does it apply?

In preparing the ~~Draft~~ FDS we have identified a study area around the existing urban areas of Napier and Hastings. The study area is shown in Figure 2 and includes Napier, Taradale, Hastings, Flaxmere, Havelock North, the surrounding Heretaunga Plains and peripheral areas including Bay View and Whirinaki, Whakatū, Clive, Haumoana and Te Awanga, and a number of rural settlements on the Heretaunga Plains within an approximate 20-minute (uncongested) drive time from the main centres of Napier and Hastings.

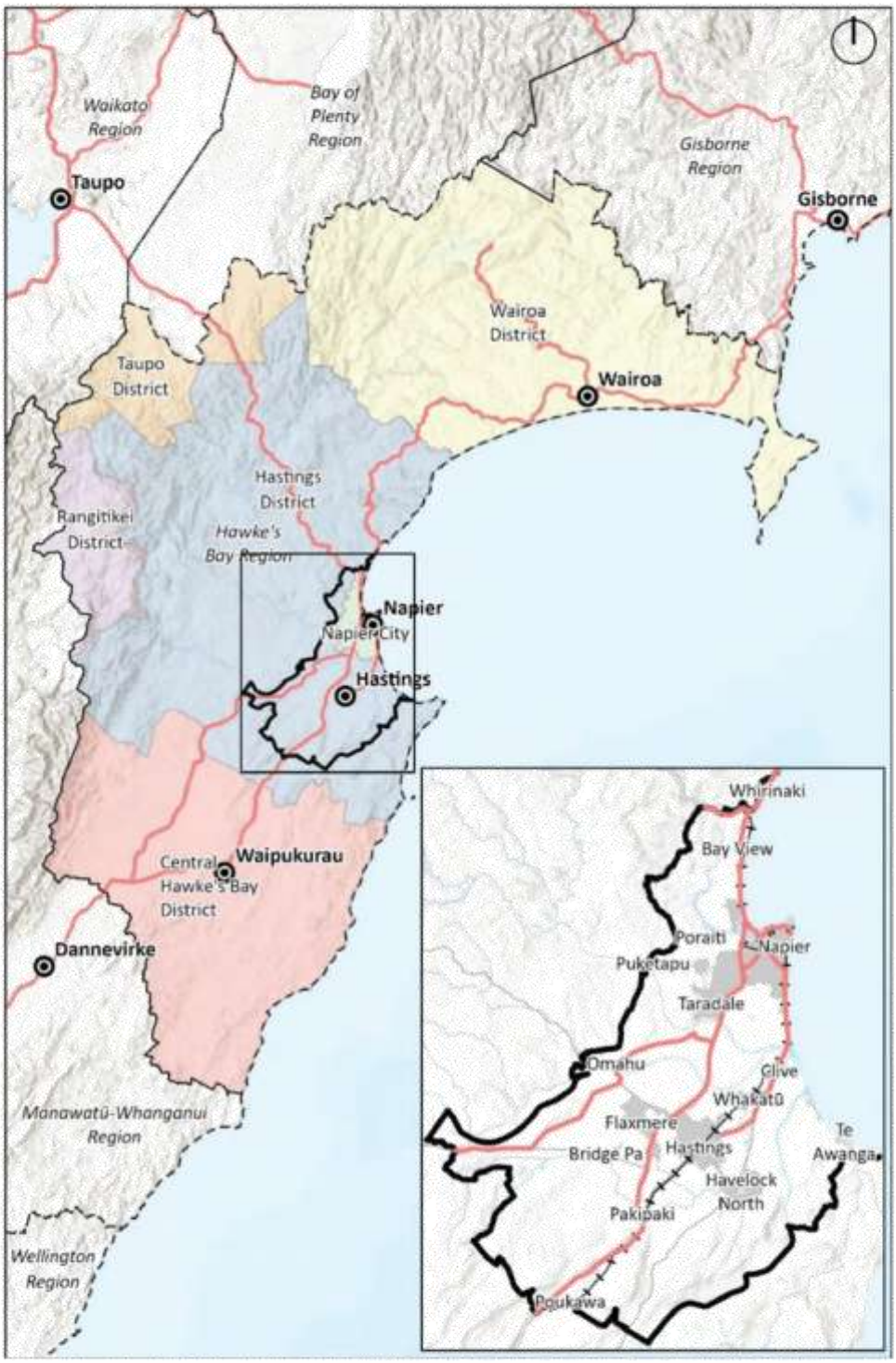


Figure 2 FDS Study Area Extent within Hawke's Bay Region

4.3 Cross Boundary Relationships

The neighbouring districts of Central Hawke's Bay and Wairoa were invited to participate in preparing the FDS, and the relationship of urban development in Napier and Hastings with the community and infrastructure networks in Central Hawke's Bay and Wairoa has been considered in developing the FDS. In terms of Wairoa, the relationship is reasonably limited. While there is movement of people and freight along State Highway 2 that connects the districts, there is a limited spatial connection between the developed urban areas.

The Central Hawke's Bay District is located to the south of Hastings, with the settlements of Ōtāne, Waipawa and Waipukurau being within 30-40 minutes drive time from central Hastings via State Highway 2. Commuting between these areas and Napier beyond is common, and anecdotally, there is a local sense that Ōtāne is becoming more of a satellite town. The FDS provides for strategic employment opportunities on the southern side of Hastings, which improves access for these communities. The relationship of these areas can be considered further through future regional spatial planning exercises.

4.4 Well-functioning urban environments

A key requirement of an FDS is to set out how the partner councils, and mana whenua, through the Treaty Settlement Entities, will achieve well-functioning urban environments. These are described in Policy 1 of the NPS-UD as urban environments that, at a minimum will:

- have or enable a variety of homes that meet the needs, in terms of type, price and location, of different households;
- have or enable a variety of homes that enable Māori to express their cultural traditions and norms;
- have or enable a variety of sites that are suitable for different business sectors in terms of location and site size;
- have good accessibility for all people between housing, jobs, community services, natural spaces and open spaces, including by way of public or active transport;
- support, and limit as much as possible adverse impacts on, the competitive operation of land and development markets;
- support reductions in greenhouse gas emissions; and
- be resilient to the likely current and future effects of climate change.

4.5 Heretaunga Plains Urban Development Strategy

The Heretaunga Plains Urban Development Strategy (HPUDS), initially developed in 2010, was a joint strategy developed by Hastings District Council, Napier City Council, Hawke's Bay Regional Council and mana whenua to manage urban growth on the Heretaunga Plains over a 30-year timeframe through to 2045. Subsequent updates and amendments to HPUDS were made in 2017.

The ~~Draft~~ FDS builds on and replaces HPUDS, responding to the new requirements of the NPS-UD and other recent national direction, including the National Policy Statement for Highly Productive Land 2022 (**NPS-HPL**). In preparing this ~~Draft~~ FDS, all unzoned future growth areas identified within HPUDS have been reconsidered to determine their appropriateness to accommodate future development.

HPUDS was based on a preferred settlement pattern that recognised the community's preference to maintain the versatile land of the Heretaunga Plains for production purposes. The strategy defined growth areas and urban limits, with a need to balance increased intensification and higher densities close to the commercial nodes and higher amenity areas in the districts, against the provision of lifestyle choice. Under HPUDS, development was expected to transition to 60 per cent intensification, 35 per cent greenfield, and five per cent in rural areas by 2045.

HPUDS sought to recognise and provide for mana whenua values and aspirations, including through governance and implementation of the strategy, and by recognising the unique relationship that mana whenua have with the land, waterways and other people. HPUDS specifically provided for Marae-based settlements at Bridge Pa and Omahu, noting that

servicing could be more practically achieved in these locations from a physical and cost viewpoint than more remote marae. HPUDS also acknowledged and supported the development of papakāinga housing. The ~~Draft~~ FDS continues to promote this approach.

Strong growth since 2015 has seen development in rural and greenfields areas maintain their shares of the market, although a significant proportion of greenfield development has been in higher density retirement villages. It is only in recent years, in a cooling housing market, that a proportionate shift towards intensification and more efficient use of greenfield growth areas has started to occur.

A number of growth areas identified within HPUDS have been enabled through plan changes and detailed planning, and now form part of the existing urban environment. Several have been recently developed or are under development, including:

- Parklands
- Te Awa
- Mission Hills
- Brookvale Road
- Lyndhurst
- York Road (Wairatahi Fast Track Consent)
- Howard Street
- Tomoana (industrial)
- Irongate (industrial)
- Omahu Road (industrial)

4.6 Cyclone Gabrielle

On February 14, 2023, the region experienced the devastating effects of Cyclone Gabrielle. While the full impacts of the cyclone continue to be assessed, significant investment will be required to rebuild and future-proof infrastructure. While the development of the FDS commenced prior to Cyclone Gabrielle, it is important that the ~~Draft~~ FDS responds to the information gathered as a result of, and as part of, the ongoing cyclone recovery process.

The recovery conversations with mana whenua, communities and the Hawke's Bay Regional Recovery Agency (**RRA**) to understand how communities and infrastructure were impacted, and how best to build back for long term resilience, have all influenced the ~~Draft~~ FDS issues and options, and the development of spatial scenarios.

Following Cyclone Gabrielle, councils and mana whenua developed their own locality plans to set out their recovery priorities. The RRA developed a Regional Recovery Plan which presented these priorities within a single cohesive document to advocate for the region and seek support from central government towards the recovery efforts.

In November 2023, a Briefing to Incoming Ministers (**BIM**) setting out the region's priorities was presented to Governments. Both housing and regulatory relief (primarily to support a streamlined planning process for necessary flood protection works) were identified within the

BIM. The region's housing shortfall has been exacerbated as a consequence of those whānau who have been displaced by the cyclone. The flood mitigation works, now able to proceed more quickly under a recently enacted Order in Council, will provide greater certainty to seven residential areas in the region, as well as for the Awatoto industrial area and Napier Wastewater Treatment Plant.

Plan Change 6 (**PC6**) to the Hastings District Plan is progressing which seeks to enable Category 3 impacted sites to relocate within close proximity. This provides the opportunity for cyclone-affected homeowners to relocate within their existing rural communities.

Following Cyclone Gabrielle, the Hawke's Bay Regional Council commissioned an independent review of the response to this major weather event[1]. This review includes a number of recommendations for future planning work that should be carried through to the FDS Implementation Plan and future planning processes. This includes recommendations for future natural hazard data collection and Regional Policy Statement and District Plan reviews.

The ongoing cyclone recovery is a separate process from the ~~Draft~~ FDS but forms part of the evidence base which has informed decision making.

4.7 Why has the ~~Draft~~ FDS been prepared?

The councils are required to jointly prepare an FDS for Napier and Hastings in accordance with the requirements of the NPS-UD.

Over the next 30-years, the population of Napier City and the Hastings District is projected to increase by over 40,000 people from 2023 levels. The majority of this increase will be accommodated in or around the main urban areas of Napier, Hastings, Flaxmere and Havelock North. These projections are higher than those used to develop HPUDS and reflect changing migration policy settings from around 2015-2019 and the 2020 COVID-19 repatriation of New Zealanders from abroad. This has seen the growth projections for 2015-2020 (and expectations to 2045), which informed the development of HPUDS, exceeded by a considerable margin.

Strong population growth and the resulting national housing crisis has affected the Napier and Hastings housing market. While HPUDS growth expectations were met and even exceeded by new dwelling construction, this has not been sufficient to meet the unprecedented demand. A sizable backlog of demand for new housing across Napier and Hastings now exists.

The ~~Draft~~ FDS is needed to ensure that the projected population growth across Napier and Hastings over the next 30-years can be accommodated.

4.8 Where does the FDS fit with other council strategies?

Each of the councils involved in the development of the ~~Draft~~ FDS are ~~is~~ required to prepare and implement a number of Plans under various pieces of legislation including the RMA, Local

[1] https://www.hbrc.govt.nz/our-council/hb-independent-flood-review/

Government Act 2002 (**LGA**) and Land Transport Management Act 2003 (**LTMA**). These include District Plans, Regional Plans, Long-Term Plans, Regional Land Transport Plans, Infrastructure Strategies, and Annual Plans. The FDS provides strategic direction and is a tool to inform these plans and strategies.

The partner councils are also progressing their own local and regional planning processes, many of which have informed the ~~Draft~~ FDS.



Figure 3 Where the FDS sits

5. How the ~~Draft~~ FDS has been prepared

Developing the ~~Draft~~ FDS has involved a partnership approach with mana whenua, and extensive engagement with elected officials, the community, interested landowners and developers, as well as using detailed technical analysis and evaluation. Consistent with the requirements of the NPS-UD, we have undertaken the following steps to get to this point, informed by the RMA and relevant national policy statements.

- **Relevant existing plans, strategies and data have been reviewed,** including the Napier Spatial Picture and Structure Plans, Proposed Napier District Plan (**PDP**), Plan Change 5 to the Hastings District Plan (Right homes, right place) (**PC5**), the Napier Hastings Industrial Land Supply Strategy, the Housing Development Capacity Assessment 2021, Business Development Capacity Assessment 2022, the Hastings Medium Density Housing Strategy, and infrastructure plans and strategies.
- **Partnership and engagement with mana whenua** has enabled an understanding of their values and aspirations for urban development. This engagement has been integral to the development of the ~~Draft~~ FDS, to ensure the principles of the Treaty of Waitangi are taken into account.
- **Community engagement on issues and options**, including a **'call for opportunities'** in September – October 2023 has resulted in many sites being put forward by the community and landowners for consideration in the ~~Draft~~ FDS.
- **Different spatial scenarios/options have been developed and identified** to accommodate urban growth based on the outcome of the above.
- **The advantages and disadvantages of spatial scenarios** have been evaluated with input from a multi-disciplinary team and supported by independent technical advice on residential and business demand and capacity, highly productive land and transport.
- **Infrastructure providers and Government organisations have been engaged with,** to test the spatial scenarios and supporting analysis. This group included the New Zealand Transport Agency, the Ministry of Education, Kāinga Ora, telecommunications providers, Transpower, Unison, Hawke's Bay Airport, Port of Napier and the Ministry for the Environment.
- **A preferred spatial scenario was identified** based on the outcome of the above and direction from elected members and mana whenua partners.
- The relevant Council and central Government agencies were worked with to identify in further detail the infrastructure network upgrades necessary to support the preferred spatial scenario.

Further collaborative engagement with mana whenua is required to ensure the partner councils meet their obligations under Te Tiriti o Waitangi. This includes continuing to develop the information base relating to mana whenua demographics, including population distribution and housing needs, as well as information regarding the location of wāhi tapu and sites of cultural significance within the FDS study area. This information will inform the monitoring and

implementation of the FDS as well as future reviews. The Councils will also work collaboratively with Mana Ahuriri Trust to advance development processes for Ahuriri Station that provide for Ahuriri Hapū economic, cultural and social well-being.

6. Iwi and hapū values and aspirations

6.1 Te Tiriti o Waitangi context

Māori have enduring rights and interests affirmed under Te Tiriti o Waitangi/the Treaty of Waitangi and as indigenous peoples under international law.

The principles of Te Tiriti provide a framework for a dynamic and enduring relationship between local authorities and mana whenua that enriches the future of the region with the unique knowledge, wisdoms, practices, and aspirations of te ao Māori. The Councils recognise mana whenua as kaitiaki, contributors to the economy, and leaders within the Region.

Te Tiriti guaranteed Māori authority over their lands, villages and taonga. However, land confiscation and alienation of Māori land by the government occurred within a few decades of the signing of Te Tiriti. What has been left following confiscation or settlement is either encumbered or simply not economically sustainable to hold.

The Treaty settlement process has provided for the return of land to Māori, including for specific purposes. Such Redress Land is land intended to be transferred by the Crown to Treaty ~~appellants~~ claimants, so that those ~~appellants~~ claimants and other descendants can realise the economic aspirations that should have been afforded to their tīpuna[2]. The land returned through these processes is often located outside of existing urban and future urban areas, which can lead to perceived limitations for the enablement of socio-economic outcomes and undermine the potential for economic or commercial redress.

The use and development of Māori land, including land returned to Māori through Treaty Settlements, is to be enabled as provided for in Te Tiriti and intended by the purpose of Treaty Settlements, subject to relevant statutory resource management considerations being satisfied.

Māori have consistently expressed the aspiration to live on their takiwā with their people. Where they cannot live in papakāinga on their ancestral land, they have expressed a desire to live in papakāinga-style living arrangements with their extended whanau in other areas, including urban areas. It is likely that this can only be realistically achieved in new, affordable developments co-led or owned by mana whenua entities.

The councils will work collaboratively with iwi authorities to help facilitate their economic, environmental, cultural and social objectives.

6.2 Combined statement

An FDS is required to include a clear statement of hapū and iwi values and aspirations for urban development. Three Treaty settlement entities – Maungaharuru-Tangitū Trust, Mana

[2] Based on *Beresford, Bunker and Rouse v Queenstown Lakes District Council (2024) NZEnvC 182*, paragraph 65

Ahuriri Trust and Tamatea Pōkai Whenua, represent the hapū of Ahuriri (Napier) and Heretaunga (Hastings).

The hapū of Ahuriri and Heretaunga are mana whenua within their respective takiwā or traditional areas. Hapū statements for the three distinct mana whenua are included in this section. Maungaharuru-Tangitū Trust, Mana Ahuriri Trust, and Tamatea Pōkai Whenua participated with the three councils in preparation of this strategy.

Maungaharuru-Tangitū Trust

The hapū and marae of Maungaharuru (the mountain) to Tangitū (the sea) are represented by Maungaharuru-Tangitū Trust. Maungaharuru-Tangitū Trust represents six hapū and one marae within the Maungaharuru to Tangitū region. The Maungaharuru-Tangitū Hapū Claims Settlement Act 2014 finalised settlement redress for the historical Treaty grievances of Maungaharuru-Tangitū Hapū against the Crown. The Maungaharuru-Tangitū region is in northern Hawke's Bay, extending from Keteketerau (the former outlet of Te Whanganui-a-Orotu) in the south, northwards beyond the FDS boundary.

Mana Ahuriri Trust

The hapū and marae of Ahuriri are represented by Mana Ahuriri Trust. Mana Ahuriri Trust represents seven hapū and six marae within the Ahuriri region. The Ahuriri Hapū Claims Settlement Act 2021 finalised settlement redress for the historical Treaty grievances of Ahuriri Hapū against the Crown. The Ahuriri region extends from the Ngaruroro River in the south, northwards beyond the FDS boundary. The northern region of Ahuriri is shared with Maungaharuru-Tangitū.

Tamatea Pōkai Whenua

The hapū and marae of Heretaunga are represented by Tamatea Pōkai Whenua. Tamatea Pōkai Whenua represents 43 hapū and 23 marae within the Heretaunga and Tamatea (Central Hawke's Bay) regions. The Heretaunga Tamatea Claims Settlement Act 2018 finalised settlement redress for the historical Treaty grievances of Heretaunga Tamatea against the Crown. The Heretaunga region extends from the Tūtaekurī River in the north, southwards beyond the FDS boundary.

The following map outlines the regions and areas of interest of the three distinct mana whenua within and beyond the FDS Study Area ~~boundary~~.

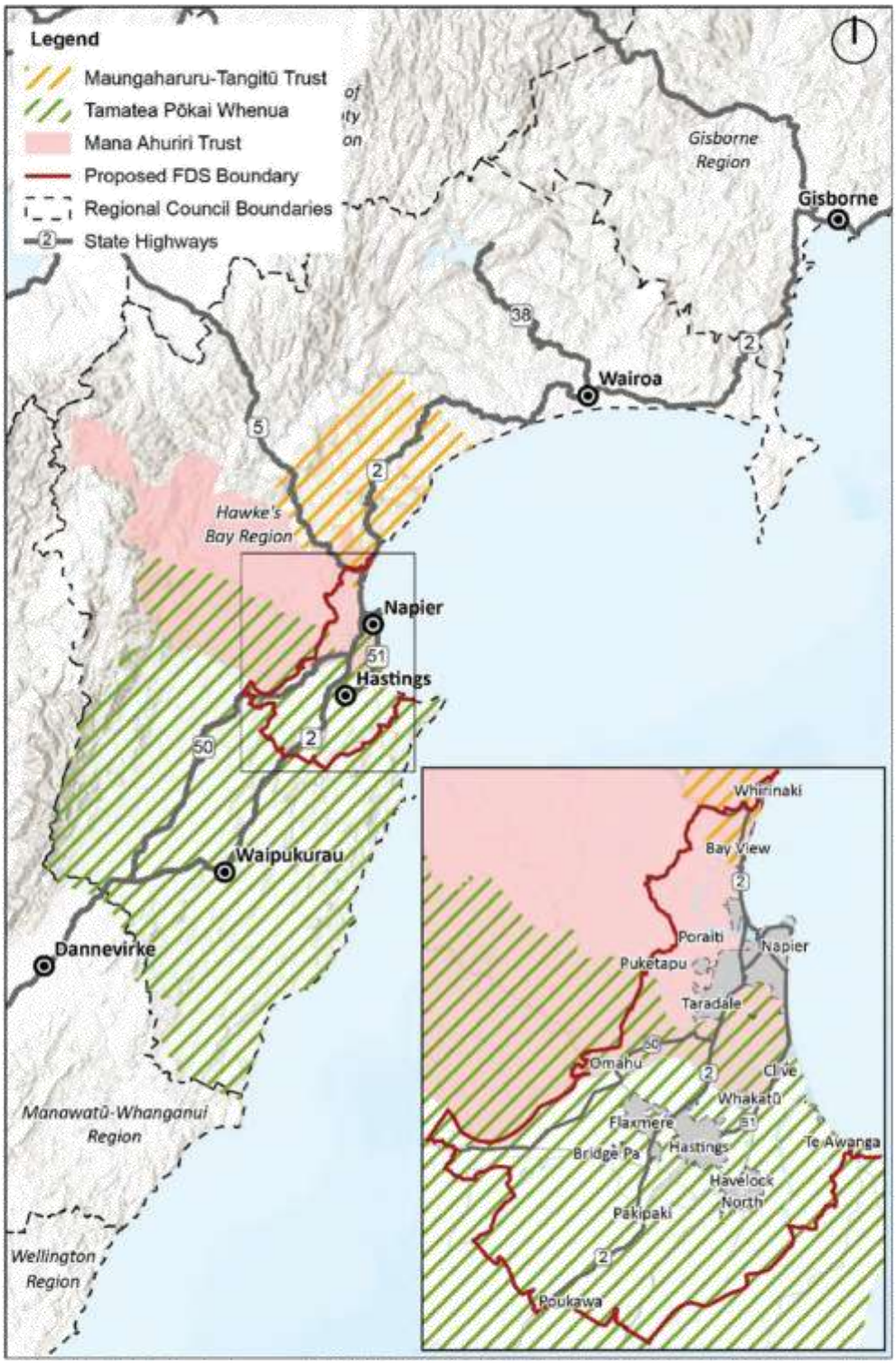


Figure 4 Areas of Interest within and beyond the FDS Study Area

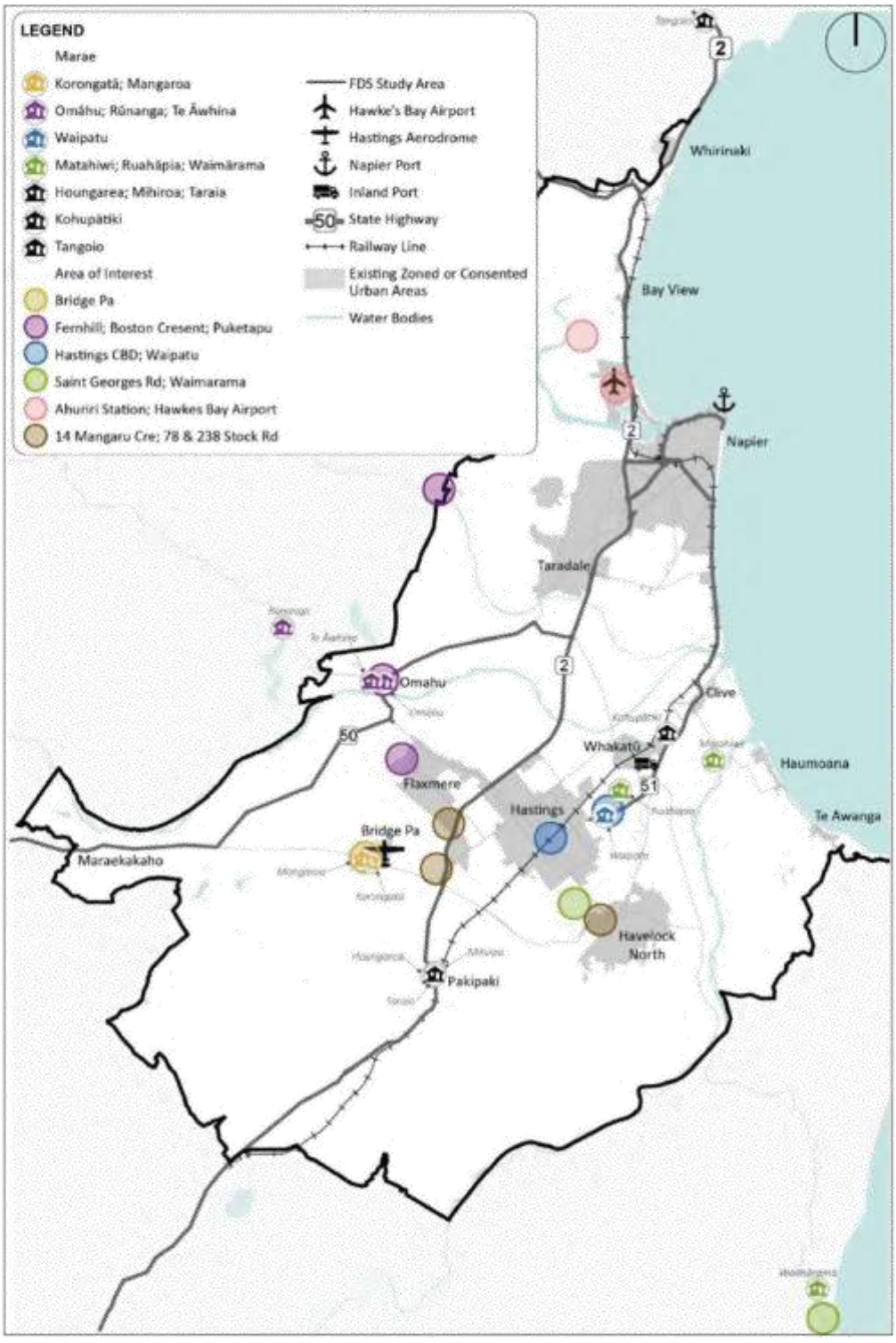


Figure 5 FDS Study Area and Area of Interest identified by PSGEs

6.3 Mana Ahuriri Trust

Mana Ahuriri Trust - Values and Aspirations

Statement of hapū values and aspirations for urban development for the Napier Hastings Future Development Strategy

Future Vision

Ko rua te paia ko Te Whanga.

He kainga tō te ata. He kainga ka awatea. He kainga ka ahiahi.

The Whanga is the storehouse that never closes.

A meal in the morning. A meal at noon. A meal in the evening.

Our statement for future development in our takiwa ensures we live up to the abbreviated whakatauki that descripts what Te Whanga was and what it should be, a source that supports environmental, economic, social, spiritual, historical and cultural value for present and future generations. This sets the tone for Mana Ahuriri in delivering Hapū aspirations and values in future developments.

Te Tiriti o Waitangi roadmaps Ahuriri Hapū to engage in enduring partnerships with other Hapū and local Kaunihera into the Future Development Strategy (FDS), acknowledging each other's Rangatiratanga, mana motuhake and legislative responsibilities in future policy and decision-making.

We participate in this process with the aim to achieve our aspirations in assertion of our kaitiakitanga, increasing our whanaungatanga, providing manaakitanga, acting in tika and pono and strengthening wairuatanga.

We do so to protect, revive and enhance Te Taiao, provide for whanau culturally and socially and to build an economic base for future generations. We make mokopuna decisions.

Desired Goals

Water

Our waters are in optimal health

- FDS must provide for te Mana o te Wai to improve water quality through management of water source, use and discharge.
- Stormwater management ensures water discharge is of the highest possible quality.

Environment

We have a flourishing ecosystem to support resilient biodiversity

- Address climate change impacts in developments and Hapū have a decision making voice in climate policy.
- All development activities respect and enhance our natural ecosystems, water sources, and biodiversity, aligning with our commitments to environmental kaitiakitanga.
- Future developments within our takiwa must adhere to the principles and guidelines set forth in the Te Muriwai o Te Whanga plan and the Mana Ahuriri Taiao plan.

Historical / Educational

Our stories are understood and embraced as we share with our hapori

- Whanau have a greater understanding of our sites of significance.
- Promote the historical activities within our takiwa so the Cultural / Spiritual – Ahuriritanga and Matauranga are embedded in the way we connect whanau to the whenua.
- Our community recognises wahi taonga and are active in their preservation and enhancement.
- Whanau have cultural identity to their whenua though tikanga application and mātauranga practices.

Social

We have clean sustainable use of Te Taiao to provide for the betterment of the community in the provision of healthy recreational activities

- Whanau have spaces and places where they can safely participate in activities that promote oranga.
- Whanau are acting socially responsible to Te Taiao.

Ohanga

We provide sustainable value through our developments that benefit whānau, hapū and the wider community

- Mana Ahuriri developments, including medium to long term aspirations for Ahuriri Station (refer to attached Masterplan), Hawkes Bay Airport, and general housing and industrial developments throughout our Takiwa are environmentally, culturally and economically sustainable.
- Mana Ahuriri and Councils work together in a Te Tiriti partnership to achieve Mana Ahuriri's specific development aspirations in identified areas.
- Mana Ahuriri is actively engaged in developments undertaken by others within our takiwa.
- Hapū members are given adequate opportunities to be utilised in developments.

6.4 Tamatea Pōkai Whenua

Heretaunga Hapū

Statement of hapū values and aspirations for urban development for the Napier Hastings Future Development Strategy



Heretaunga Haukū nui Conserving Fertile Resources of Heretaunga	Heretaunga Ararau Enabling Thriving Communities within Heretaunga	Heretaunga Hāro o te Kāhu Growing Leadership and Legacy Across Heretaunga	Heretaunga Takoto Noa Securing Heretaunga Language and Culture
This priority asserts our ***kaitiakitanga***, protecting and enhancing our ***whenua***, our waterways and our taonga. • Heretaunga kawa, tikanga and hapū mātauranga inform kaitiakitanga practices in our region. • Native flora and fauna are protected, considered and incorporated into residential and commercial developments. • Waterways and riparian zones are protected, sustained and enhanced to ensure thriving communities and to support biodiversity. • Heretaunga knowledge and preferred actions underpin future development solutions.	This priority speaks to ***thriving mana whenua***, our whānau and hapū, and **their** aspirations for future community development. • Heretaunga hapū demographic forecasts inform investment in planned future development. • Expand papakāinga and other housing developments on ancestral land, including on Māori and general land titles. • Provision of electricity, wastewater and stormwater infrastucture for development of hapū and marae communities. • Amenities, facilities, and public transport are provided in hapū communities, to enhance quality provision of services to Heretaunga hapū and the community.	This priority focuses on ***leadership and legacy***, the future vision and what we will leave our tamariki and mokopuna. • Hapū are respected and engaged as Treaty of Waitangi partners in decision making for future development opportunities in Heretaunga. • Hapū expect equitable outcomes from investment in Heretaunga to enhance hapū development. • Priority for progress and development of Tamatea Pōkai Whenua properties to provide for optimum opportunity in realising hapū aspirations. • New and specific land development designations are created for ancestral land to facilitate social, cultural and economic growth.	This priority ensures our ***language and culture*** is thriving, we honour our heritage and protect it for future generations. • Heretaunga hapū embrace development that acknowledges the cultural and spiritual wellbeing of hapū and the health of our lands, waterways and taonga. • Heretaunga histories, language and cultural associations are exemplified, are visible and create cultural connection. • Wāhi tapu, wāhi tīpuna and sites of cultural significance are identified, protected and restored to maintain and disseminate hapū mātauranga and histories. • Heretaunga hapū culturally identify with, feel pride in, and are connected to development in our region.

Marae, hapū and Tamatea Pōkai Whenua Statements

The statements below are specific aspirations of hapū, marae and Tamatea Pōkai Whenua for sites and areas within the region to protect, enhance or develop. These aspirations have informed the priorities of this statement.

Waipatu Marae

Waipatu marae and associated hapū wish to continue the development of papakāinga and other housing developments on ancestral lands, including on Māori and general land titles. Support to achieve this, including strengthening existing and establishing new infrastructure, is sought. Hapū seek the provision of Council services such as rubbish and recycling collection for existing and future papakāinga. Waipatu Marae and hapū expressed an aspiration to establish urban papakainga in the middle of the Heretaunga CBD with a kaumātua retirement village, apartments for whānau, a commercial hotel, restaurant and wānanga space. The creation of a Waipatu Boulevard from Karamu Bridge to ngā pou at the Hastings Library is also a desire of the marae and hapū. The Waipatu Community Plan sets out in more detail the priorities of Waipatu marae and hapū for future development in the area.

Ruahapia, Matahiwi and Waimarama Marae

Hapū expressed a strong desire to establish new and expand existing papakāinga and other housing developments on ancestral lands, including in Waimārama and on St Georges Road South, Havelock North. Hapū identified infrastructure and support through Council processes as high priority to enable these developments. The identification and protection of wāhi tapu and sites of cultural significance is a concern and priority, particularly for Te Awanga and the surrounding area. Climate change is a serious concern and issue for coastal hapū and marae due to the significant cost in future proofing marae and marae communities from a changing coastal environment. Mana whenua expect to be engaged and supported with climate change adaptation planning, pathways and implementation within these communities.

Korongatā and Mangaroa Marae

Korongatā and Mangaroa marae and associated hapū assert their role as partners in the community and expect to be consulted about development in the area. Hapū would like Bridge Pā to be zoned and warded as one community. Hapū have identified infrastructure and provision of services as high priority. Hapū seek infrastructure to support papakāinga and other housing developments, provision of social services facilities for the community, multifunctional recreational spaces, access to public transport, and a speed limit of 50km on Maraekakaho Road. Bridge Pā should be a destination, not a thoroughfare. Hapū have also identified the protection of waterways, including water flow, as a major concern and priority. Protecting, maintaining and enhancing the mauri of the waterways is imperative to ensure thriving mana whenua communities and to support biodiversity.

Kohupātiki Marae

Kohupātiki expressed aspirations to continue engaging in papakāinga development opportunities to support affordable housing and encourage the return of their people to their whenua, reconnecting with their grandparents, parents and Marae. "*Kohupātiki ki te rangi, Kohupātiki ki te awa, Kohupātiki ki te whenua*".

Houngarea, Mihiroa and Taraia Marae

Hapū expect to be engaged and consulted on all developments in and around the area of Te Pakipakitanga o Hinetemoa. The protection of wāhi tapu, sites of cultural significance, waterways and the taiao is of paramount importance. This includes the protection and enhancement of streams, native species, flora and fauna. This is to ensure Te Pakipakitanga o Hinetemoa is culturally safe in all facets, maintains and upholds the mauri of the taiao, and upholds the mana of their tīpuna. Mana whenua seek papakāinga and other housing development opportunities, and support with infrastructure, to provide affordable housing options for whānau. Mana whenua also emphasized the need for community recreational areas in the village. Hastings District Council is encouraged to, and marae welcome, the opportunity to engage and collaborate on community recreational areas. In the short term, mana whenua request quality walkways from the village to Te Kura o Pakipaki and to the Poukawa School bus pickup point, and a new bus shelter to be built in the village.

Omahu, Runanga and Te Āwhina Marae

Omahu, Rūnanga and Te Āwhina marae and hapū were severely impacted by Cyclone Gabrielle. Te Piringa Hapū, the Hapū Authority for Omahu and the surrounding area has led the response and recovery for the community. The Utaina 10 Year Recovery Plan was prepared by Te Piringa Hapū in response to the cyclone and is a key document setting out the short to medium term hapū priorities for the recovery and rebuilding of the Omahu community and surrounding area. Te Piringa Hapū have also developed a Statement of Hapū Values and Aspirations for Future Development. This includes a Spatial Plan that visualises these aspirations, outlining their vision for sustainable and culturally aligned growth. This Statement is included in this strategy and is supported by Tamatea Pōkai Whenua. Both documents are integral to inform and support recovery priorities, and future development and investment in the area.

Tamatea Pōkai Whenua

Tamatea Pōkai Whenua seek to advance hapū aspirations and create valuable enhancements in the region. Tamatea Pōkai Whenua has properties for development at 78 and 238 Stock Road, Hastings and 14 Mangarau Crescent, Havelock North. Tamatea Pōkai Whenua request that these properties are prioritised for residential and industrial developments in the short-medium term. This prioritisation is critical. It will optimise development opportunities for realising hapū aspirations.

6.5 Maungaharuru-Tangitū Trust

MAUNGAHARURU TANGITŪ

Te Hawaikitanga I Our Vision

Puāwaitanga o te Puawānanga I Living our Dreams

A future where our Hapū are living their dreams with our whānau prospering culturally, socially, spiritually and economically

MAUNGAHARURU-TANGITŪ HAPŪ

The Trust represents a collective of hapū including in particular for the purposes of the Draft FDS, Marangatūhetaua (also known as Ngāti Tū), Ngāti Whakaari and Ngāi Te Ruruku ki Tangoio (the Hapū). The Trust is the voice and representative body of the Hapū.

The takiwā of the Hapū extends north of Napier from Keteketerau to the Waitaha River, from the Maungaharuru Range in the west to Tangitū (the sea) in the east. It includes the areas of the Draft FDS at Bay View, Te Waiohingānga - Esk, Patane and Whirinaki. The Trust also acknowledges the overlapping interests the Hapū have with their whanaunga and neighbouring hapū, Ngāti Matepū.

The only marae of the Hapū at Tangoio and papakāinga at Tangoio, Te Waiohingānga and Arapawanui were devasted by Cyclone Gabrielle in 2023 and large swathes of their takiwā have been determined to be Category 3. Supporting the relocation and rebuild of Tangoio Marae and papakāinga within the takiwā is a key focus for the Trust, as well as providing housing options for whānau within the wider areas covered by the draft FDS.

The following aspirations and values are based on the Trust's Strategic Plan 2019-2024.

Ngā Aronga I Focus Areas

Kia Niwha
Strong People

building the capability and capacity of our people to achieve their potential, including the provision of papakāinga that ideally avoids or is resilient to natural hazards.

Kia rīrā te Pā kai ngā Rekereke
Strong Culture, Reo and Marae

relocating and developing our Marae in an area that avoids or is resilient to natural hazards; strengthening our culture through te reo Māori revitalisation and mātauranga Māori to grow a sense of belonging, identity, confidence and pride.

He Kāinga Taurikura
A Treasured Environment

caring for and protecting our environment including wāhi taonga and taonga species, and planning for adaptions to the effects of climate change.

Kia Rawaka
Strong Hapū Economy

building our Hapū economy to provide the resources we need to plan and action our dreams and goals.

Ngā Matapono I Values

Pūmau te Wairua
Spiritually Strong

understanding, appreciating and applying our spiritual beliefs.

Whai Hua
Progressive

a commitment to continuous improvement including innovation, ambition and discipline.

Tuakiri Motuhake
Strong Identity

acknowledging the importance of our cultural identity as a source of pride, uniqueness and connection and the importance of our cultural practices. Ensuring the wāhi taonga of the Hapū are protected and that the cultural identity, practices and mātauranga ā-Hapū are accommodated and expressed in future developments relevant to the Hapū.

Oranga Ngākau
Wellbeing

focusing on the holistic wellbeing of our people, acknowledging the interconnectedness of our world and promoting a balanced approach to development.

Whanaungatanga
Family

including:
Manaakitanga - Caring,
Aroha - Love
Tauutuuto - Reciprocity
Whakapapa - Connectedness

Te Piri Ngātahi
Unity

working together for our greater good. Unity provides greater strength and enables us to overcome challenges and achieve our future dreams together.

7. Vision and objectives

7.1 Te Pae Tawhiti | Vision

The overarching vision which has helped guide the development of the FDS is:

> *In 2054, Napier and Hastings have thriving, resilient, safe, equitable, sustainable and connected communities, within a protected and enhanced natural environment.*

To achieve this vision, a number of principles and objectives were developed. The objectives are intended to state the goals or desired future state for urban growth in Napier and Hastings. The key principles outline our values and how we intend to work together to achieve the objectives.

Ngā Mātāpono | Key Principles

Mahi Ngātahi - Partnership

Mana Taurite - Equity and inclusion

Manawaroa - Resilience

Haumako - Productivity

Taiao - Environment

Tūhononga – Connectivity

Matahūhua – Diversity

7.2 Ngā Whāinga | Strategic objectives

The strategic objectives set out below describe what the ~~Draft~~ FDS is seeking to achieve to ensure the vision is realised. These objectives will form the basis of future implementation and monitoring of the FDS.

1. Mana whenua and councils work in a **genuine Te Tiriti partnership** to achieve their shared goals for urban development.
2. We have a compact urban form, focussed around **consolidated and intensified urban centres** in Napier and Hastings.
3. Our communities and infrastructure are **resilient to the effects of climate change** and risks from natural hazards.
4. We have a **diverse range of housing choices** that meet people's needs in neighbourhoods that are **safe** and **healthy**.
5. We have a **strong economy**, and businesses can grow in locations that meet their functional needs.
6. The highly productive land of the **Heretaunga Plains** is protected for productive uses.
7. Our communities and business areas are **well connected and accessible**, particularly by public and active transport.
8. We have **sufficient land** for housing and business to meet demand.
9. Te Taiao/our **natural environment is protected and enhanced**, including our water bodies, indigenous biodiversity, wāhi taonga and outstanding landscapes.

10A. Our **infrastructure** is planned and designed to ~~**efficiently**~~ **effectively** **support development** and be resilient.

10B. **Operational and functional needs** of nationally and regionally significant infrastructure is are not compromised by the location, design and suitability of new development.

11. Urban growth and infrastructure investment supports **equitable social outcomes**.
12. The **values and aspirations of mana whenua** for development are a priority and are recognised and supported.



8. The Growth Picture

8.1 Responding to demand

The starting point for the FDS is understanding how much residential and business growth to plan for over the next 30 years and what future communities will look like. Within the 30-year timeframe, the FDS needs to consider residential and business demand in the short term, medium term and long term.[3]

8.2 Residential demand

Population and households

Under a medium-high growth outlook the Statistics New Zealand ('**StatsNZ**') **subnational population projections** estimate that the populations of Napier City and Hastings District will increase to almost 200,000 people, an increase of over 40,000 people from 2023 levels.[4] The majority of this increase will be accommodated in or around the main urban areas of Napier, Hastings, Flaxmere and Havelock North.

The census data on 2023 population and households in Napier and Hastings has recently been published. However, StatsNZ has not yet updated the forward-looking household and population projections. These updated projections will be used to inform the monitoring and implementation of the FDS.

To understand the future demand for housing in Napier and Hastings, a Housing Capacity Assessment (**HCA**) was prepared in 2021. The HCA demand has since been updated to include the most up-to-date StatsNZ population projections[5] which reflects the impact of COVID-19 and more recent information about birth and mortality rates. The updated information is used to inform the ~~Draft~~ FDS and was based on the StatsNZ medium-high outlook. This included updating the baseline to 2022 and undertaking additional development capacity analysis of the Napier PDP and PC5 in Hastings.

Figure 6 shows the changing population composition by age across both Napier and Hastings. The ageing population, combined with factors such as affordability and accessibility have flow-on implications for the total housing demand, including on the type and size of dwellings that will be needed to accommodate our growing population. In response to this and projected reductions in average household sizes, we expect there will be greater demand for smaller houses over time compared to the housing available today.

[3] Short term is defined as within the next three years, medium term as between 3 and 10 years, and long term as between 10 and 30 years.
[4] The impact of Cyclone Gabrielle on population and household numbers and future demand are unknown and not reflected in this analysis. Short-term effects could see an increase in demand due to workers assisting with the rebuild moving to the area. But this could be tempered by shifting migration patterns.
[5] December 2022.

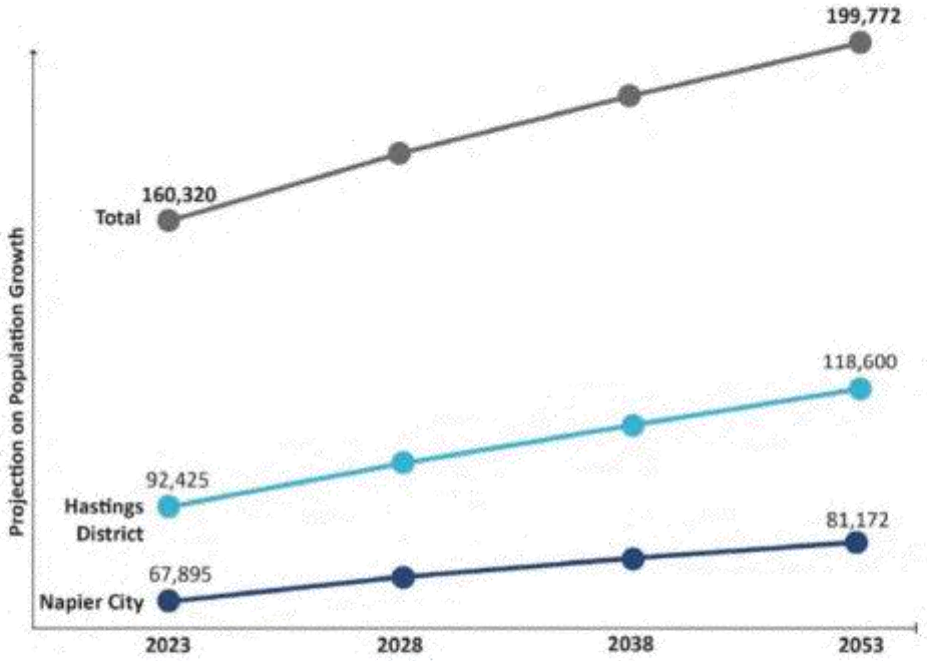


Figure 6 Population Growth (2018- 2048) for Napier and Hastings (Market Economics 2023; StatsNZ, 2022)

The HCA states that households identifying as Māori currently account for about 12 per cent of all households and this is expected to remain relatively stable, with growth of about 650 Māori households expected over the long term. Further analysis of the demand and specific needs of Māori housing is needed to better inform housing policies and initiatives. This is important considering Māori make up almost 28.6 per cent of the Hawke's Bay population (Census, 2023).



Figure 7 Population Changes by Age Group 2018 - 2048 (StatsNZ, 2022)

How much housing does the FDS need to plan for?

In addition to the number of new dwellings required to accommodate projected population growth, the NPS-UD requires that an FDS also provides for a competitiveness margin in enabled housing supply. This is equivalent to 20 per cent over the short-to-medium term and 15 per cent over the long-term.

When we account for this, the FDS needs to ensure there is capacity for at least an additional **16,320 dwellings** across the Napier and Hastings urban area over the next 30-years. Of this, approximately **6,700 additional dwellings** will be needed in Napier and approximately **9,620 additional dwellings** will be needed in Hastings.[6] Put differently, Napier needs to accommodate for average growth of up to 225 dwellings per annum while Hastings needs to accommodate for average growth of 320 dwellings per annum.

Short-term demand in Napier and Hastings is estimated to be around 980 and 1,510 additional dwellings respectively (equivalent to 830 dwellings per year). Growth is anticipated to slow over the medium-term to 2,040 additional dwellings in Napier and 2,500 additional dwellings in Hastings (equivalent to 650 dwellings per year). **Figure 8** shows the housing demand for Napier and Hastings over the short, medium and long term (including the competitiveness margin). The FDS must, at a minimum, provide sufficient development capacity to meet this demand.

This demand does not account for unmet demand (or latent demand) in the current housing market. Unmet demand refers to the number of households that are seeking housing but are unable to find any that meets their needs. Those households are typically looking for affordable housing, and capacity provided by community housing providers is therefore the key response.

[6] Across the wider Hastings District, a further 2,050 dwellings, are required to meet demand in rural areas. These will need to be met in rural parts of the Hastings District (including rural residential areas) outside of the main urban areas and are not required to be provided as part of the FDS.

It is important that the FDS broadly provides additional capacity to cater for this demand through a mix of redevelopment and greenfield options.

We have analysed the extent to which this demand would reasonably be met by the supply of new housing within existing urban areas and new housing in greenfield areas. This is important to understand to ensure the ~~Draft~~ FDS provides a variety of homes that will meet the needs of the local market over time.

Within existing urban areas, redevelopment will take many forms, from small-scale infill, to comprehensive and compact redevelopment for townhouses, terraces and apartments. However, there is some uncertainty about how and where the market will deliver this, and how future home buyers will respond, which the FDS needs to account for. Development outside of the existing urban area (greenfield) can also deliver compact development but may offer a different lifestyle/location choice for people.

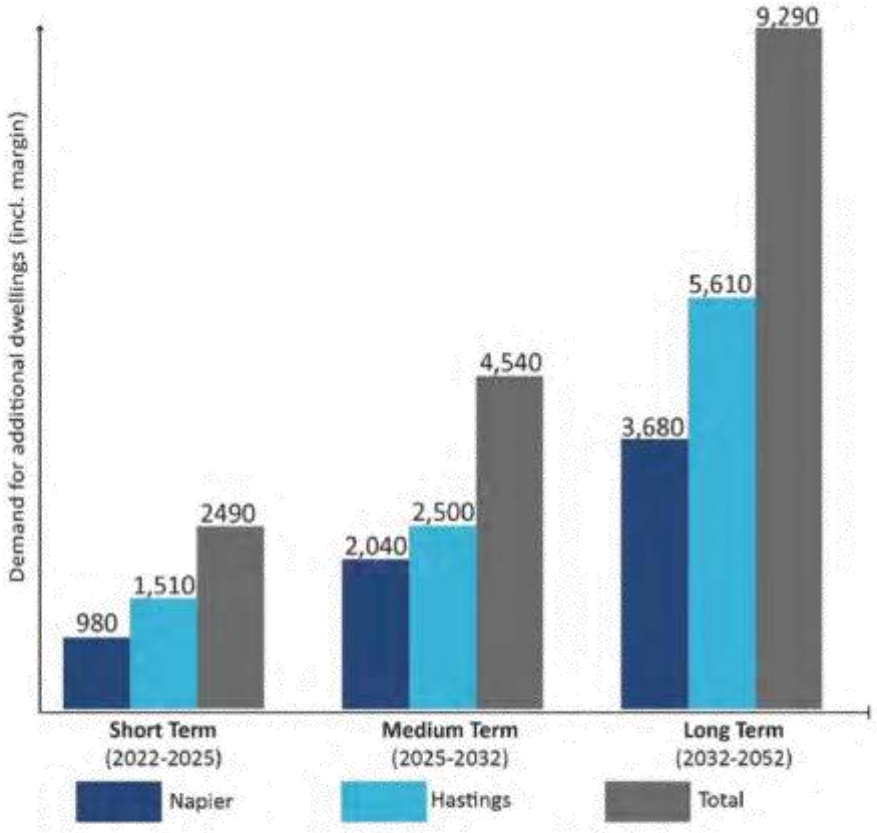


Figure 8 Housing Demand for Napier and Hastings

For these reasons, the ~~Draft~~ FDS splits the total housing demand by location, being that met within the existing urban area and in greenfield areas. These splits are set out in **Table 1** and are based on observed trends in other New Zealand cities. We expect that demand for housing

in the existing urban area will grow over time from 40 per cent in the short term to 60 per cent in the long term. Conversely, we expect that demand for housing in greenfield locations will decrease over time, from 60 per cent in the short term to 40 per cent in the long term. Over the life of the FDS we expect demand will be evenly split.

Adopting this approach is important to ensure the ~~Draft~~ FDS is realistic about the rate of development that might be delivered through redevelopment in the existing urban area, and ensures it does not over-provide or under-provide housing opportunities in greenfield locations.

However, the FDS can and should aim to achieve greater levels of development in the existing urban area. If the rate of development in the existing urban area in the future is greater than we predict today, the need to release greenfield areas for development will decrease.

Table 1 – Housing Demand by Location

Broad Type	Short Term	Medium Term	Long Term	Total
Redevelopment in the existing urban area	40% (996 dwellings)	50% (2,270 dwellings)	60% (5,574 dwellings)	54% (8,840 dwellings)
New housing in greenfield areas	60% (1,494 dwellings)	50% (2,270 dwellings)	40% (3,716 dwellings)	46% (7,480 dwellings)
Total	**2,490 dwellings**	**4,540 dwellings**	**9,290 dwellings**	**16,320 dwellings**

8.3 Business demand

The Napier and Hastings centres are the main economic centres in Hawke's Bay. Napier has significant regional economic assets in the Port of Napier and Hawke's Bay Airport. Napier is also viewed as the tourism and retail centre of the wider region. The Hastings economy includes a large rural and industrial component. The wider sub-region has a strong diversified primary sector economy including pip fruit, timber, viticulture, other crops and pastoral farming.

There are several factors currently putting pressure on the Hawke's Bay economy, including higher interest costs, the increasing costs of production, labour shortages and tightening economic conditions in key export markets. Combined with the ongoing impacts and recovery from the COVID-19 pandemic and Cyclone Gabrielle, short-term economic growth in the region is likely to remain subdued. However, the medium-to-long term outlook for the economy remains positive, with growth forecast across a number of different sectors.

Figure 9 below shows the projected employment growth of Napier and Hastings over the short, medium and long term.

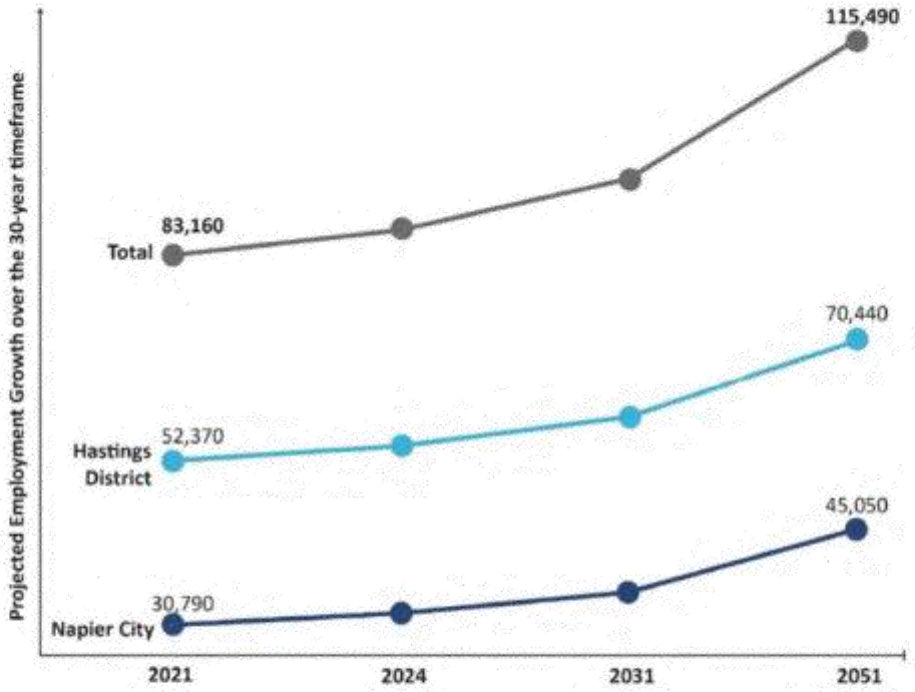


Figure 9 Employment Growth (2018-2048) for Napier and Hastings (Market Economics, 2022)

A Business Capacity Assessment (**BCA**) for Napier and Hastings was completed in September 2022 and has been used to inform the development of the ~~Draft~~ FDS. The BCA identifies the

retail, commercial and industrial land requirements over the next 30-years across Napier and Hastings.

Retail and commercial demand

Retail demand captures all forms of retail activity and retail-based services such as personal services (e.g. hairdressers) and repair services. Commercial demand generally refers to office-based activities and public administration, and includes visitor accommodation and the health and education sectors.

The BCA found there will be demand for 21.4 additional hectares of commercial and retail floorspace in Napier and 13 hectares in Hastings over the long term. Vacant land capable of redevelopment for retail and commercial use is limited in both Napier and Hastings. However, sufficient land is available to support this future demand if redevelopment and intensification of existing commercially zoned land occurs in line with what is currently enabled.

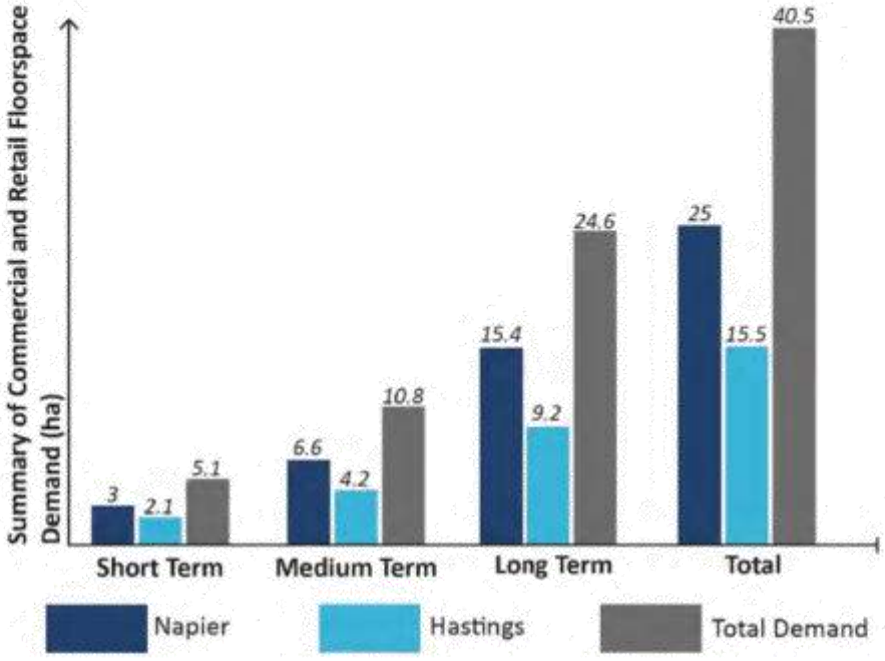


Figure 10 Commercial Floor Space Demand (incl. Competitiveness Margin) for Napier and Hastings (Market Economics, 2022)

Industrial demand

The BCA found there will be additional demand for industrial land of approximately 55 hectares in Napier and 141 hectares in Hastings over the long term. Of this demand, approximately 61 hectares is for wet industry, which is defined in the BCA and relate to certain types of manufacturing activities.

At a regional and city-wide level in both Napier and Hastings, there is sufficient industrial (plan-enabled) capacity to accommodate the future demand for industrial land. However, there are some identified deficiencies at a local level (e.g. Havelock North, light industrial and Whirinaki). It is assumed that some of the localised deficiencies in industrial capacity can be relocated elsewhere (e.g. to Irongate).

Within Napier, the consideration of sufficient capacity assumes that development within the vacant airport land to the south of Watchman Road can be realised. There are some constraints associated with development in this area associated with the location of the airport runway, natural hazards and ground suitability.

If development of the vacant airport land to the south of Watchman Road does not occur, then there would be a shortfall of 30 hectares of industrial land within Napier to meet future requirements.

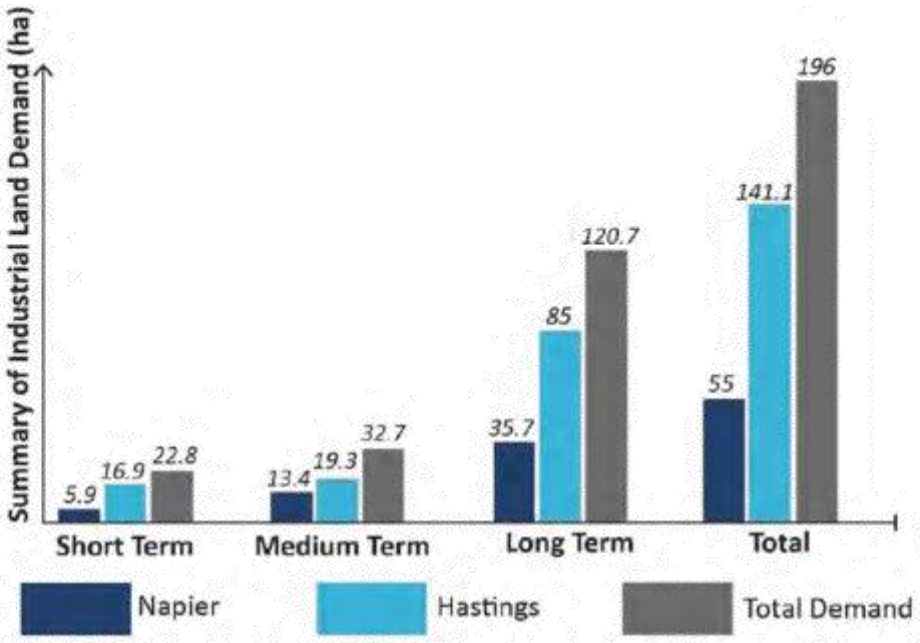


Figure 11 Industrial Land Demand (incl. Competitiveness Margin) for Napier and Hastings (Market Economics, 2022)

In addition to these capacity estimates, the BCA identifies strong recent growth in industrial development in Hastings. While this rate of growth will rise and fall over time, it indicates strong demand, at least in the short term. This is consistent with what we heard from the industrial development sector when preparing the ~~Draft~~ FDS.

Other key considerations for industry relate to water supply and trade waste capacity. Access to water is constrained, which limits the ability to establish new wet industry. Similarly, trade

waste networks that are needed to support wet industry are localised and in the Hastings context currently service the Whakatū and Omahu Road industrial areas. There is capacity in these areas to meet demand for wet industry in the long term, but there is a risk that this capacity is taken up by other industrial activities. If there is strong uptake of these areas for dry industry, then there may be a shortfall of capacity for wet industry in the long term.

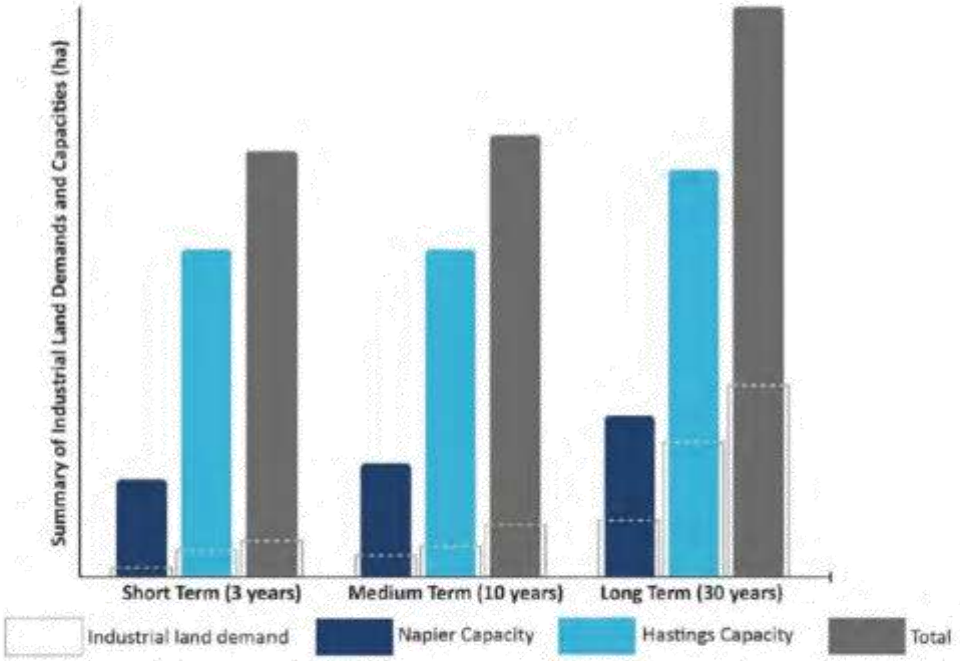


Figure 12 Business Land Capacity and Demand for Napier and Hastings

How much business land does the FDS need to plan for?

For commercial and retail the ~~Draft~~ FDS assumes that additional demand can be met within Napier and Hastings existing network of centres and commercial areas. That is consistent with Objective 2 of the ~~Draft~~ FDS, which seeks to deliver consolidated and intensified urban centres. Comprehensive development in greenfield locations also provides the opportunity to expand Napier and Hastings centre network in a strategic and coordinated way.

For industrial, there is technically sufficient zoned capacity to meet projected demand for industrial over the short, medium and long term. However, there are localised shortfalls and market feedback indicates there is strong and continuing demand. The need to provide secure long-term locations for wet industry is also important, taking into account the location of the trade waste network.

Tomoana, Whakatu and the industrial land to the south of Omahu Road (**Omahu South**) have access to Hastings' separated trade waste network. This is a strategic advantage for wet industries such as food processing that produce high volumes of trade waste. Notwithstanding

issues of water supply, if there is strong uptake at Whakatu, Tomoana and Omahu South for dry industry of 50 percent or more in these locations, then there may be a shortfall of capacity for wet industry in the long term of approximately 20 hectares or more. However, there is uncertainty regarding this, given that not all wet industries will require access to the separated trade waste network.

To address these matters the ~~Draft~~ FDS takes a strategic approach to industrial capacity and seeks to enable greater supply to encourage choice and competition in the market. This focuses on defining efficient long-term locations for industrial activities based on site suitability, access to transport networks, potential to minimise reverse sensitivity effects, and access to the employment base, amongst other matters.

Industrial development aspirations of mana whenua

Tamatea Pōkai Whenua and Mana Ahuriri Trust have expressed clear aspirations to develop land at 78 Stock Road and Ahuriri Station for industrial uses.

The ~~Draft~~ FDS seeks to prioritise and support the future development aspirations of mana whenua for their land, including the development of assets acquired through Treaty Settlement processes, where their aspirations align with other FDS objectives. Land that has been returned to (or retained by) mana whenua is often subject to development constraints. Where aligned with other FDS objectives, the ~~Draft~~ FDS recognises this restriction on Māori land and seeks to enable mana whenua to give effect to their development aspirations in a way that accounts for any development constraints while also ensuring mana whenua needs are met, including their economic development needs. In addition, the ~~Draft~~ FDS recognises Ahuriri Station as Redress Land.

9. Development constraints and opportunities

9.1 Introduction

Section 3.13(2)(c) of the NPS-UD requires every FDS to spatially identify "any constraints on [urban] development." In many instances, constraints on urban development may also represent opportunities for other forms of development, involve values which the community have identified as being important and which must be protected, or which are necessary to support the creation of well-functioning urban environments (for example, avoiding development in areas likely to be subject to coastal inundation as a result of sea level rise).

Key constraints and opportunities of relevance to the ~~Draft~~ FDS are set out below. Further details are set out in the Technical Report.

9.2 Constraints

There are a wide range of development constraints that have been identified within the FDS study area. These are summarised in **Figure 13** and include areas for the safe operation and functional needs of nationally and regionally significant infrastructure, coastal hazards, land hazards, flooding, outstanding landscapes, significant natural areas, areas with limited infrastructure capacity, highly productive land, wetlands, and areas of conservation value. The attributes of particular constraints vary depending on location and some areas may contain multiple constraints that, when combined, could make an area unsuitable or unfeasible for development.

Some constraints relate to significant natural hazard risks, significant ecological sites and protected areas, which are matters of national importance under the RMA. In some instances, areas where these constraints have been identified are unsuitable for any urban development because they are either unsafe to develop (e.g. subject to significant and ongoing coastal inundation risks) or have significant values that need to be protected (e.g. Conservation land).

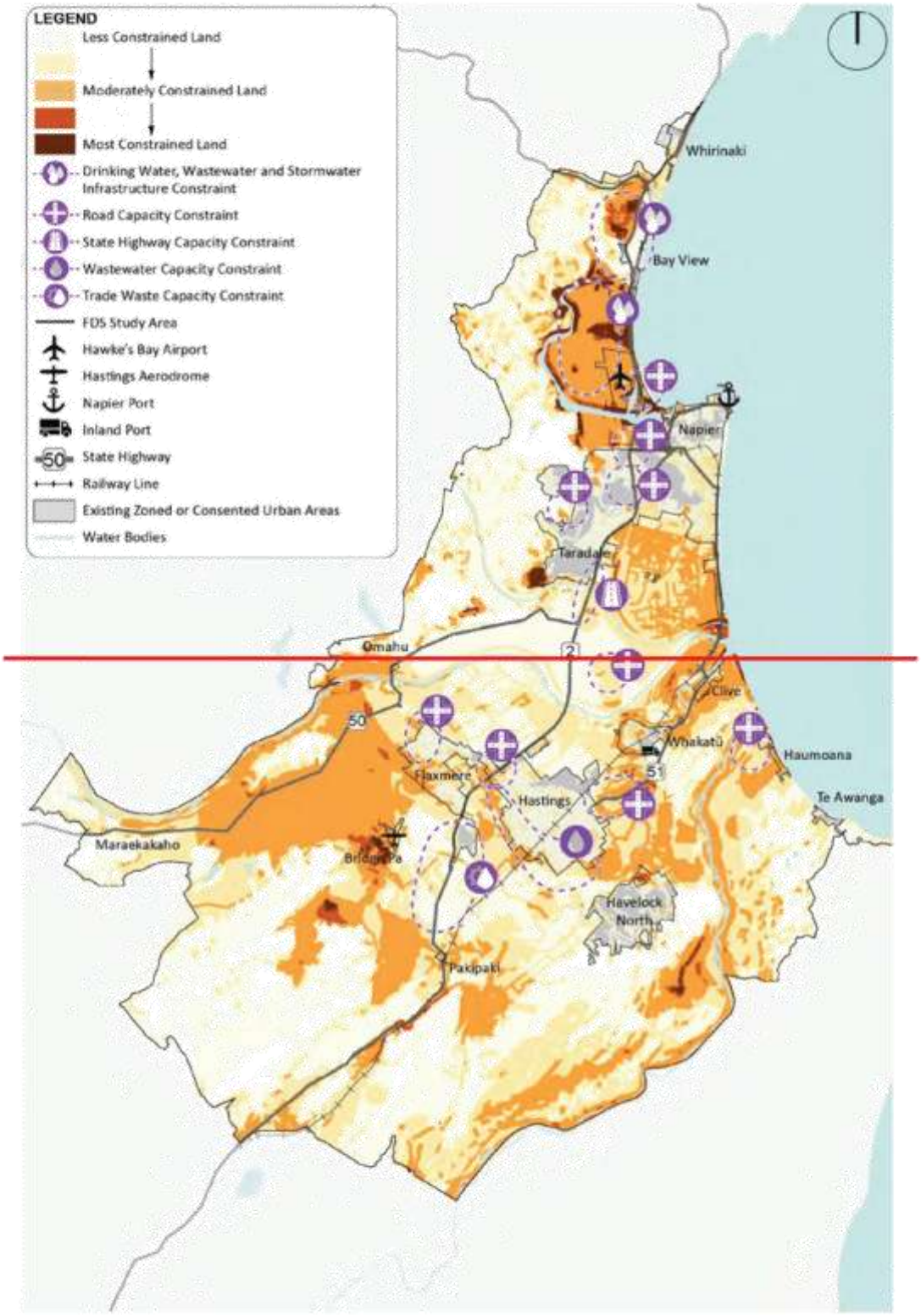
In other instances, identified constraints require careful consideration when urban development is undertaken. This may require some restrictions on the extent of development to protect identified values (e.g. building setbacks) or the application of mitigation options through design to ensure risks can be sufficiently mitigated (e.g. raised ground levels to avoid flooding). These areas would not, overall, be unsuitable for development, but rather greater care would be required to ensure an appropriate design solution is implemented.

Layering the FDS study area with the constraints highlights the most constrained areas for potential urban development (see **Figure 13**). These areas include the eastern areas along the coastline around Bay View, Clive, and Haumoana, areas to the east of Hastings and north-east of Havelock North, parts of land in proximity to Hawke's Bay Airport, and areas south of Napier around Meeanee. These are affected by a variety of natural and man-made constraints which make them less suitable for long-term urbanisation, compared with other less constrained areas.

The sections below provide further information on natural hazards and highly productive land, which are key constraints that impact Napier and Hastings spatial pattern of growth.

Statutory acknowledgement areas, Wāhi Tapu and sites of cultural significance

Statutory Acknowledgement Areas present opportunities and constraints for urban development. Wāhi tapu and sites of cultural significance have not yet been fully identified in the FDS study area. In the past, wāhi tapu and sites of cultural significance have been negatively impacted by development. The councils will work with mana whenua to identify these areas and ensure they are appropriately protected. This is a key implementation action in the FDS.


LEGEND
Less Constrained Land
Moderately Constrained Land
Most Constrained Land
Drinking Water, Wastewater and Stormwater Infrastructure Constraint
Road Capacity Constraint
State Highway Capacity Constraint
Wastewater Capacity Constraint
Trade Waste Capacity Constraint
FDS Study Area
Hawke's Bay Airport
Hastings Aerodrome
Napier Port
Inland Port
State Highway
Railway Line
Existing Zoned or Consented Urban Areas
Water Bodies
Whirinaki
Bay View
Napier
Taradale
Omahu
Clive
Whakatū
Haumoana
Te Awanga
Flaxmere
Hastings
Maraekakaho
Havelock North
Pakipaki
50
2
51

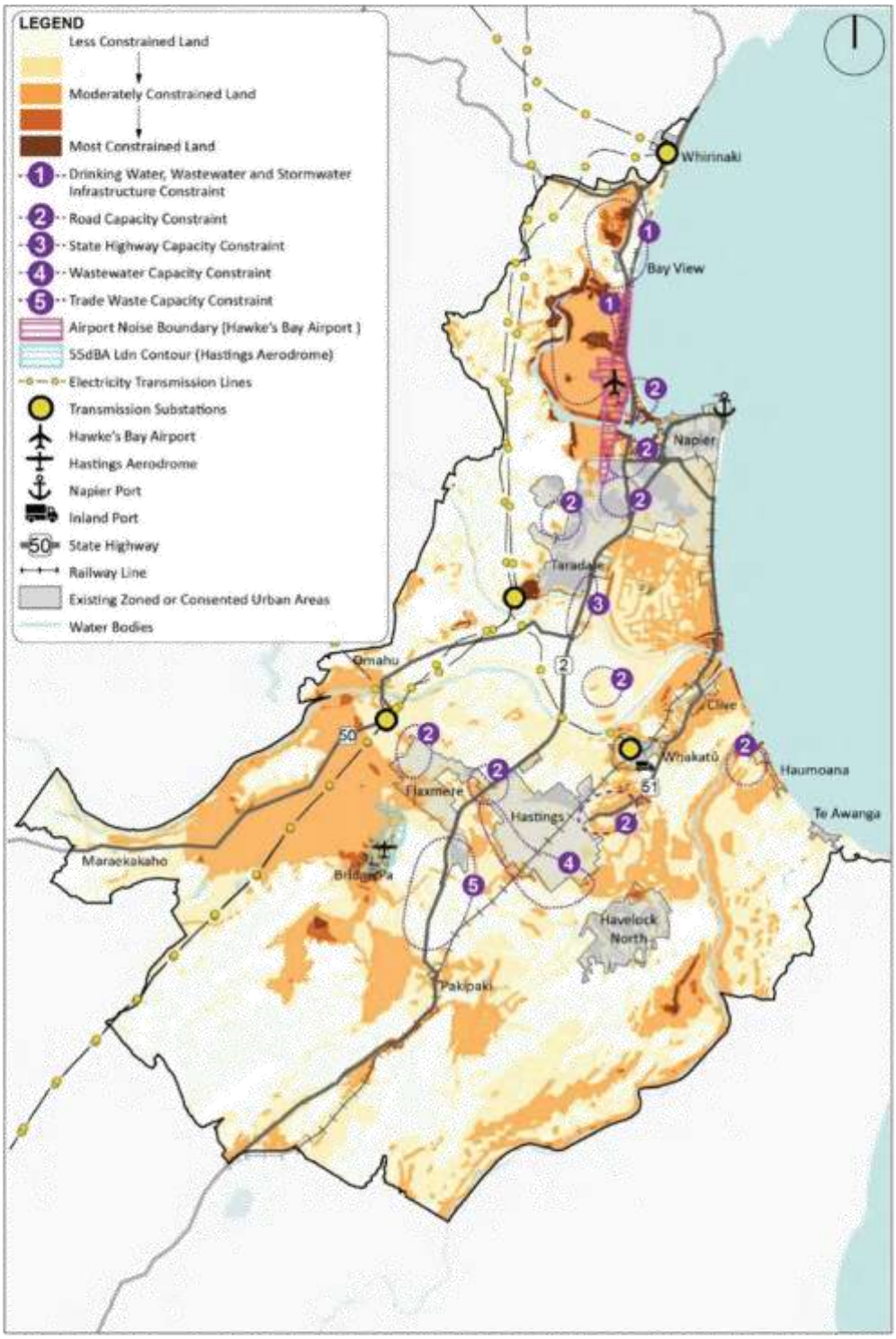


Figure 13 Summary of development constraints across the FDS study area

9.3 Natural hazards

Areas in Napier and Hastings are at risk from a number of natural hazards including flooding, droughts, coastal erosion and inundation, tsunami, landslide and seismic hazards, and the effects of a rising sea-level.

Each of these hazards will have varying impacts on different types of urban activities. Low probability events with high impacts need attention and management in a different way to frequently occurring hazards with lesser impacts. Therefore, it is important that the ~~Draft~~ FDS not only consider the type of natural hazards but also the varying degrees of impact (consequences) for different types of urban activities occurring in at-risk locations.

Land hazards

A number of different land hazards have been identified within the study area. These include liquefaction, land instability and fault lines.

The risks associated with these land hazards is unlikely to make development completely inappropriate however it does impact on building and infrastructure design/placement and can therefore ultimately impact on development cost and feasibility.

Flood hazards

The study area is subject to two main types of flooding events – fluvial flooding (i.e. rises in river levels following sustained rainfall over a period of time) and pluvial flooding (i.e. isolated events when extreme rainfall can exceed the infiltration capacity of the surrounding area and may or may not be associated with a nearby waterbody).

Floods and storms are the most frequent hazard in Hawke's Bay. With climate change, they will likely increase in frequency and intensity. Historically there have been numerous major storms resulting in severe flooding which has resulted in stop banks, pumping stations and other protection measures being put in place.

Flood modelling for the main river flood risk areas has been undertaken by the Hawke's Bay Regional Council, using a 100-year return and 50-year return period (1% and 2% annual exceedance probability). The flood risk results from this modelling are shown in **Figure 14** and the main areas of risk are located around the Tūtaekuri, Ngaruroro and Te Awa o Mokotūāraro (Clive) Rivers, Ahuriri Lagoon, low-lying areas of Napier such as Te Awa, Maraenui and Meeanee, and inland areas near Pakipaki.

However, flood risk modelling has not been undertaken for all of the FDS study area. Large portions of the study area, including existing urban areas in Hastings, are not included within existing models, as also shown in **Figure 14**. As such, a degree of caution is needed when assessing existing flood hazards.

While there are often engineering solutions available to address flood risk, other factors need to be considered. This includes the frequency and impact of the hazards and how residual risk

will be managed. The relative affordability of maintaining engineered solutions (e.g. stop banks and pumped stormwater systems) for ratepayers in the long term is also a consideration.

Cyclone Gabrielle

Figure 14 shows the area impacted by Cyclone Gabrielle land, and the land identified as Category 3 areas where the risk of future severe weather event risk cannot be mitigated and presents a risk to life. The impact and consequences of Cyclone Gabrielle illustrate how quickly one event can trigger a series of cascading and compounding events that have significant consequences. Cyclone Gabrielle resulted in:

- the tragic loss of eight lives, as well as hundreds more injuries or hospitalisations;
- the displacement of hundreds of families and whānau;
- significant damage to, or loss of, homes and property;
- the failure of bridges between Napier and Hastings and impacts on the transport network;
- power supply issues (including loss of supply to Napier) resulting in the declaration of a grid emergency for Hawke's Bay;
- the failure of telecommunication systems;
- stop bank breaches at Awatoto which led to inundation of the Napier wastewater treatment facility and other industrial operations, resulting in contamination of surrounding land;
- the failure of Napier's wastewater treatment plant; and
- the closure of flooded businesses.

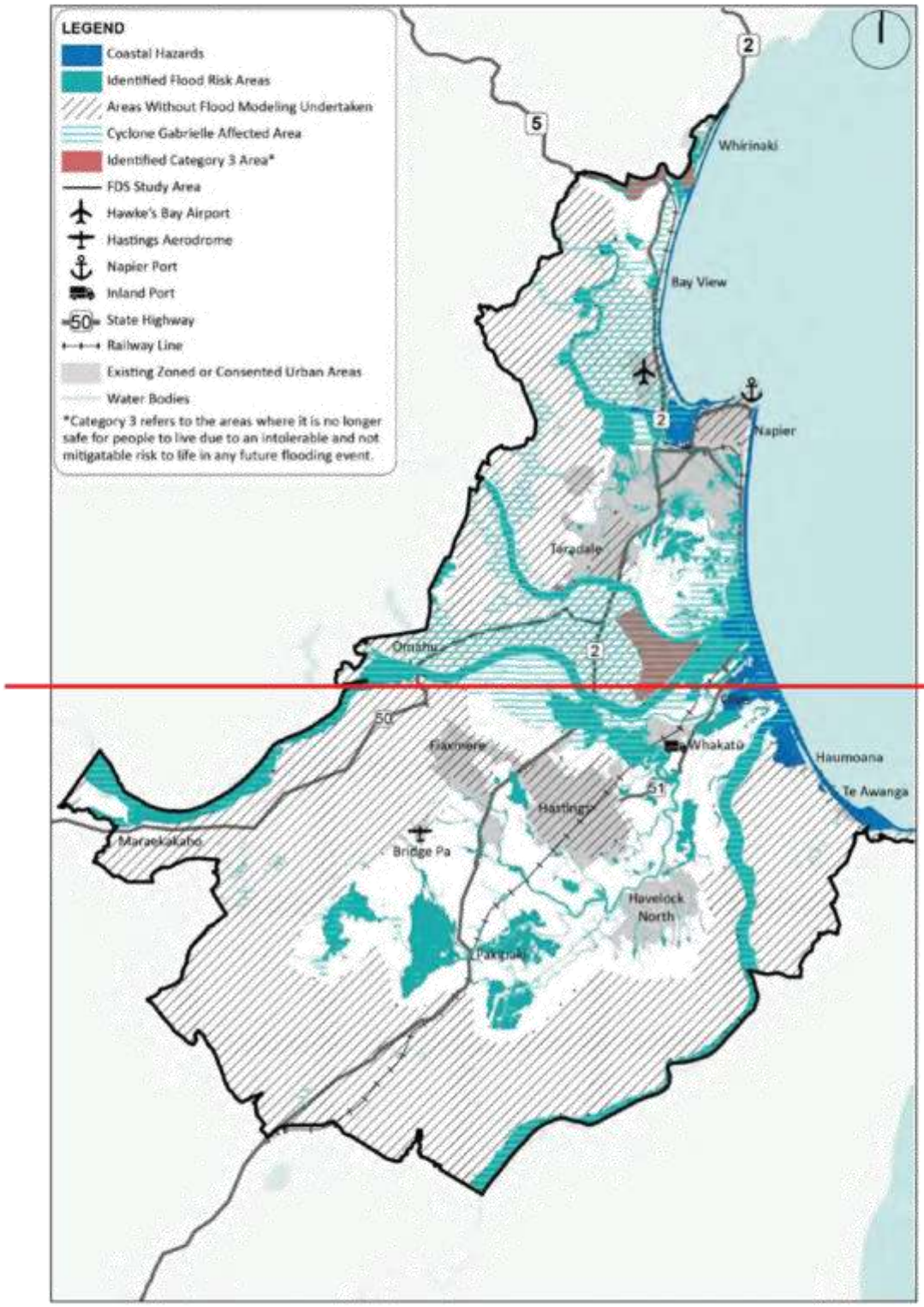
Collectively, this has significantly impacted the economic and social wellbeing of all communities, particularly in terms of property damage or loss, reduced productivity, and increased costs to ratepayers to pay for cyclone-damaged infrastructure and the worst affected properties.

Coastal hazards

Coastal hazards in Hawke's Bay include storm erosion, tsunami and coastal inundation. The present-day extent and likelihood of these coastal hazard risks are expected to increase as a result of climate change projections with increased storm intensities, sea level rise, and coastal subsidence. Low-lying parts of Napier including Pandora, Ahuriri, and Awatoto are identified as being particularly vulnerable. Coastal hazards in low-lying parts of Napier in particular, are also exacerbated by land subsidence.

The coastline south of Clive through to Te Awanga is particularly vulnerable to coastal hazards and has been subject to the effects of coastal inundation and coastal erosion, most recently in June 2024. The Clifton to Tangoio Coastal Hazards Strategy 2120 project aims to set an adaptive management pathway to manage these risks over the next 100 years. As at April 2025, the Hawke's Bay Regional Council is establishing a community reference group for further testing of the possible options, their costs and how those could be funded. ~~In 2025, the~~

~~partner councils will be seeking feedback from the community on proposed coastal adaptation options.~~


LEGEND
Coastal Hazards
Identified Flood Risk Areas
Areas Without Flood Modeling Undertaken
Cyclone Gabrielle Affected Area
Identified Category 3 Area*
FDS Study Area
Hawke's Bay Airport
Hastings Aerodrome
Napier Port
Inland Port
State Highway
Railway Line
Existing Zoned or Consented Urban Areas
Water Bodies
*Category 3 refers to the areas where it is no longer safe for people to live due to an intolerable and not mitigatable risk to life in any future flooding event.
Whirinaki
Bay View
Napier
Taradale
Omahu
Clive
Whakatū
Haumoana
Te Awanga
Hastings
Bridge Pa
Havelock North
Pakipaki
Maraekakaho
Flaxmere

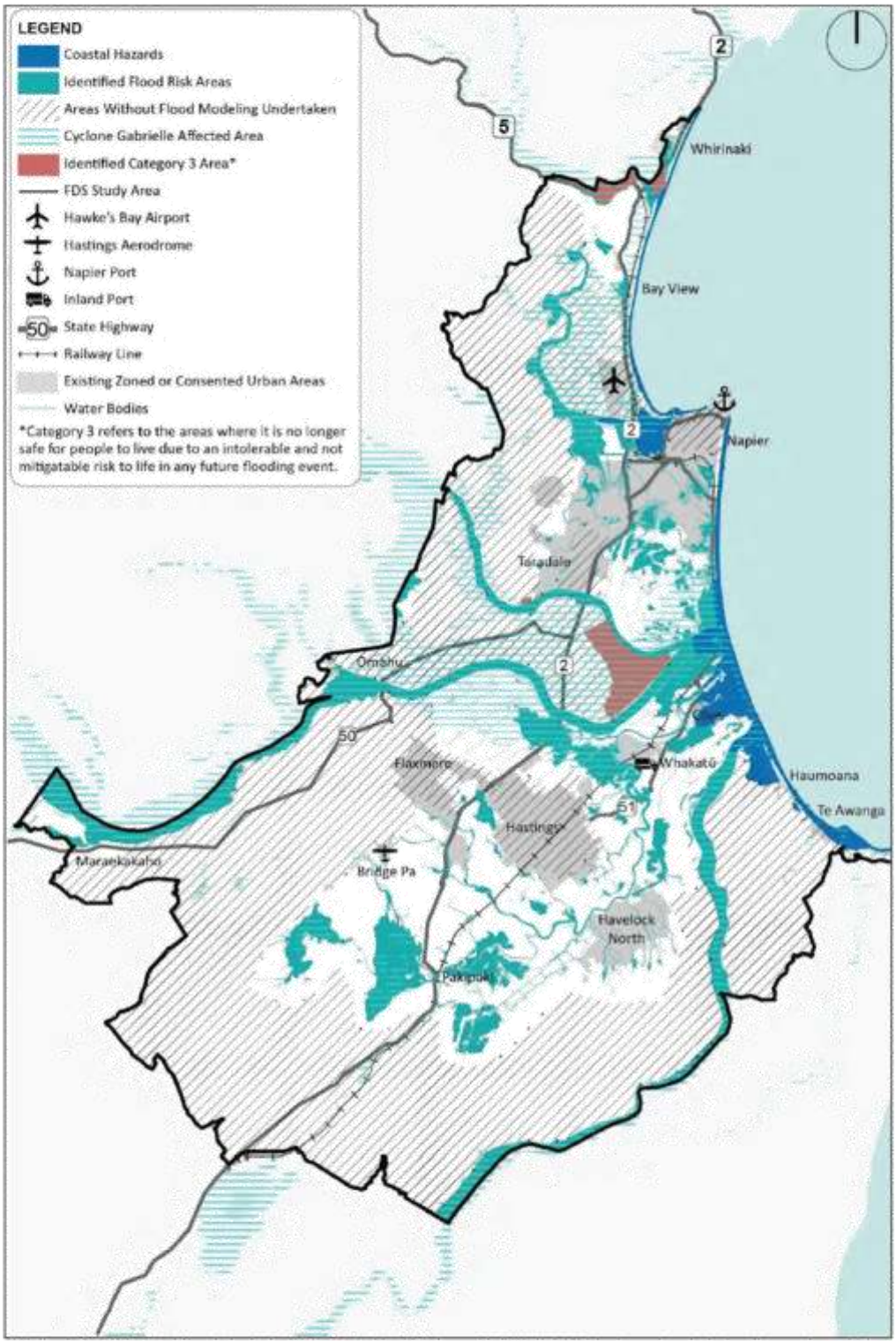


Figure 14 Natural Hazard Constraints across the FDS Study Area (Feb 2025 Cyclone Gabrielle data)

Tsunami

Hawke's Bay faces tsunami risk from near and distant earthquake sources. Tsunami hazard mapping has been commissioned by the Hawke's Bay Regional Council to help inform future land-use planning along the coastal margin. Within the FDS study area, a number of scenarios have been modelled, based on different earthquake sources and strengths, and considering a range of possible sea level rises.

Figure 15 demonstrates potential inundation for an infrequent but significant impact earthquake, using two sea level rise possibilities: a tsunami with a 1 in 1000 Year Annual Return Interval (**ARI**) event, and sea level rise of 1m and 1.99m. The latter has been used to inform an understanding of potential risks associated with new urban development of areas. However, it is acknowledged that tsunami inundation is a low probability, yet high consequence event affecting much of the urban area. Emergency management preparedness will also play an important role in managing some of this risk in the future.

Key areas impacted in a tsunami event include Bay View, Hawke's Bay Airport, Ahuriri, Awatoto, Clive and Haumoana. Large areas within and to the south of Napier are also subject to tsunami inundation under a larger sea level rise scenario (1.99m)

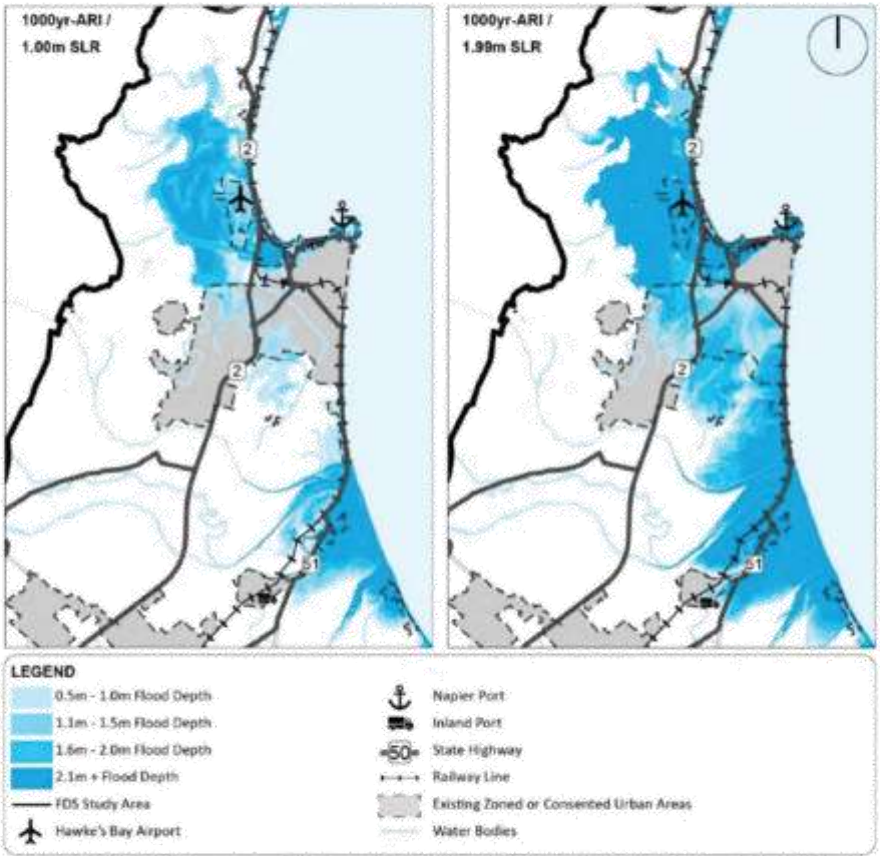


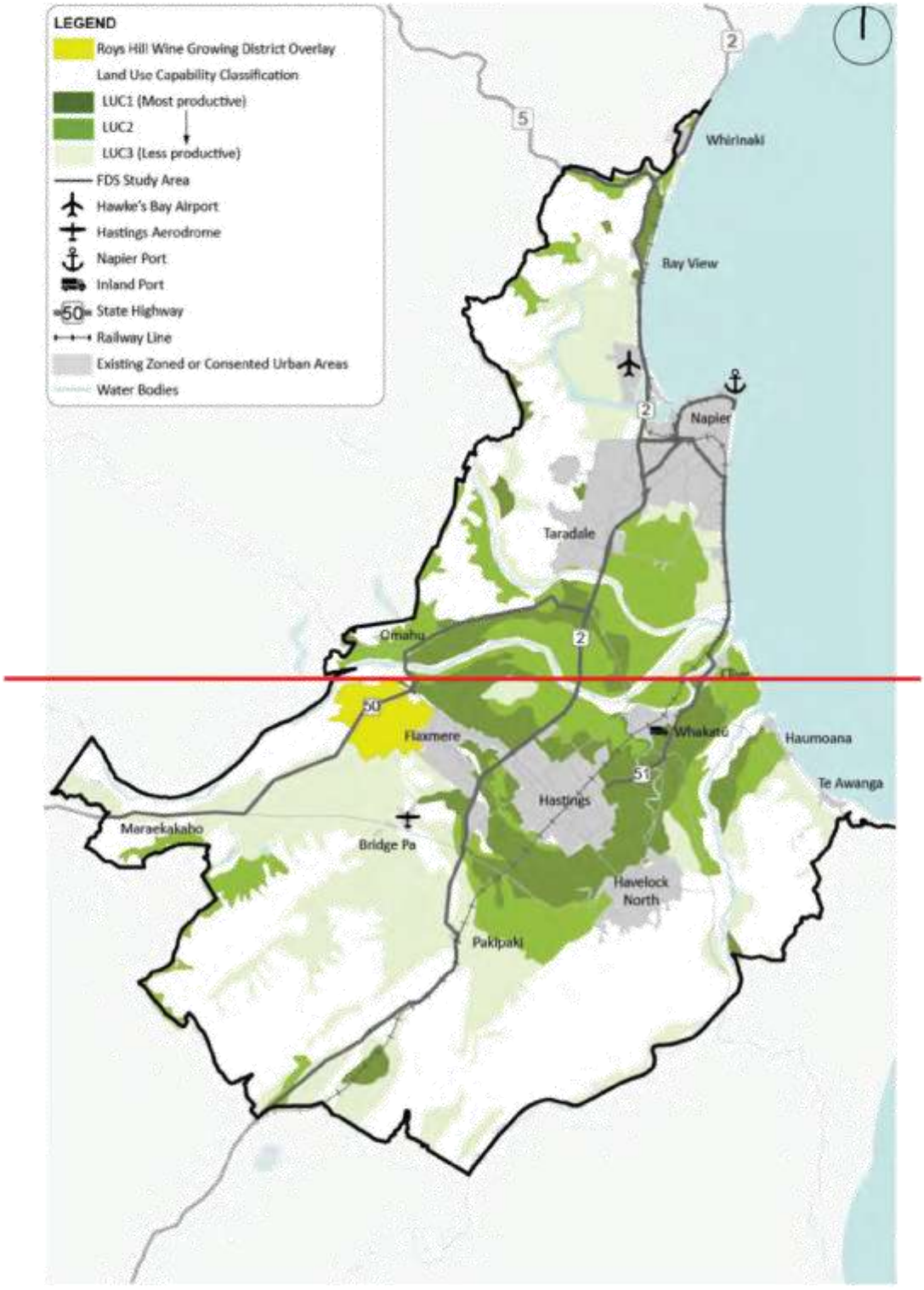
Figure 15 Tsunami Hazard Risks 1000 Year ARI event

9.4 Highly productive land

The versatile and productive soils of the Heretaunga Plains are a significant productive resource for Hawke's Bay and New Zealand and are highly valued by the community. Hawke's Bay is one of the two largest fruit producing regions in the country, and the rural environment has become increasingly popular for vineyards and wineries. The primary sector (which includes agriculture and horticulture) is the largest employer across Napier and Hastings, supporting approximately one fifth of total employment.

The importance of the productive values associated with the land across the Heretaunga Plains, including its economic benefits for the region, is one of the primary constraints on urban development given its location on the urban fringes. The National Policy Statement on Highly Productive Land (**NPS-HPL**) places greater emphasis on protection of highly productive land and requires regional councils to map this land.

Until the Hawke's Bay Regional Council completes this mapping, the ~~Draft~~ FDS has identified LUC 1, 2 and 3 land and the Roy's Hill winegrowing area as highly productive land, as shown in **Figure 15**. This mapping excludes land with urban or rural lifestyle zonings.


LEGEND
Roys Hill Wine Growing District Overlay
Land Use Capability Classification
LUC1 (Most productive)
LUC2
LUC3 (Less productive)
FDS Study Area
Hawke's Bay Airport
Hastings Aerodrome
Napier Port
Inland Port
State Highway
Railway Line
Existing Zoned or Consented Urban Areas
Water Bodies
Whirinaki
Bay View
Napier
Taradale
Omahu
Flaxmere
Whakatū
Haumoana
Te Awanga
Hastings
Maraekakaho
Bridge Pa
Havelock North
Pakipaki
2
5
50
51

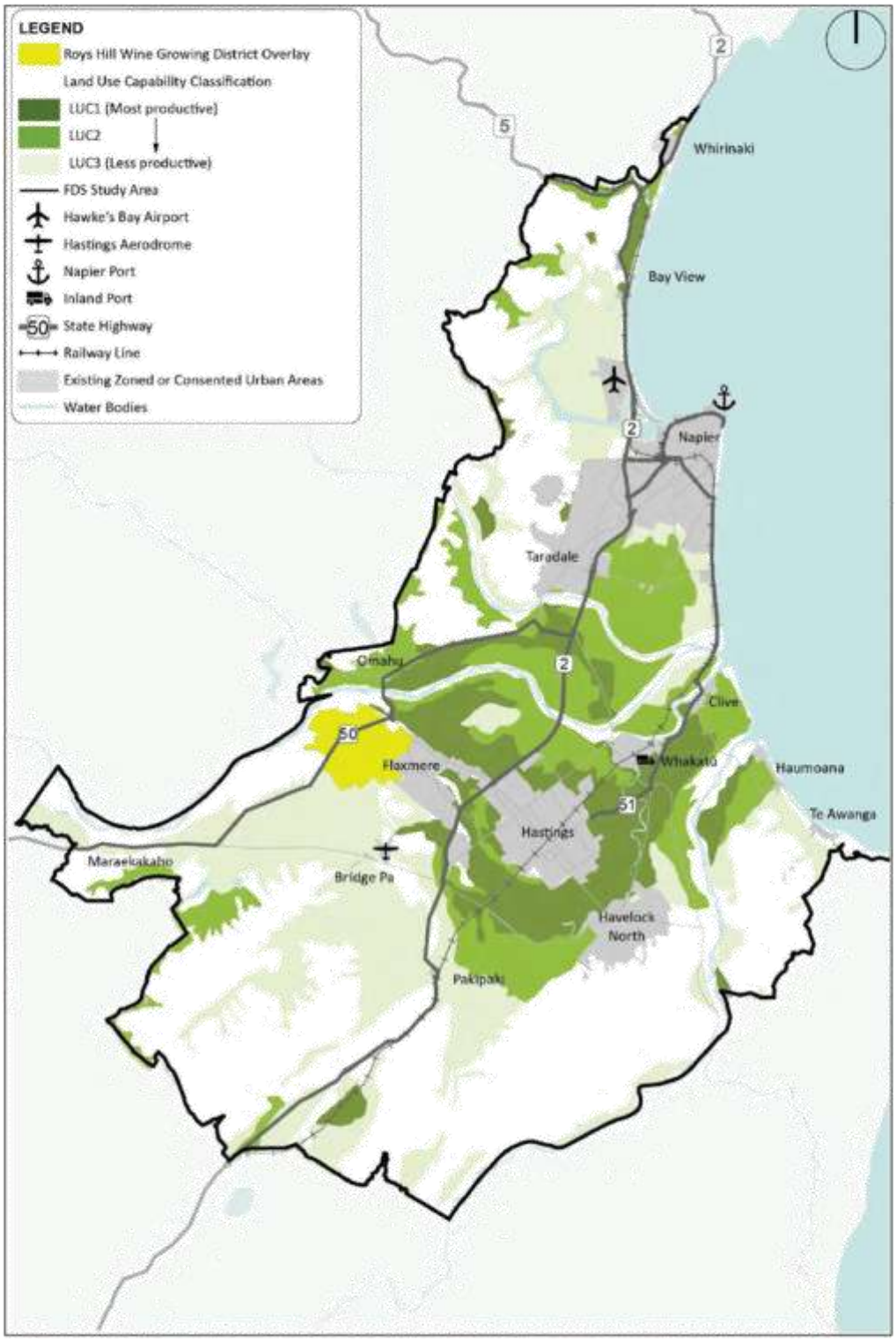


Figure 16 Highly Productive Land within the FDS Study Area

Napier

The most productive land in Napier is located to the north (around Bay View) and south (around Meeanee). These areas contain large expanses of land identified as either LUC1 or LUC2, the most productive type of land within the LUC system. LUC3 land tends to border existing urban areas in Napier, including around the airport and at the southern fringe. While LUC3 land is also considered productive, poor drainage and waterlogging has limited its use to seasonal cropping and pasture.

Hastings

Hastings, Flaxmere and Havelock North are largely surrounded by LUC1 and LUC2 land. While there are some isolated pockets of poorly drained and waterlogged soil, there are generally few limitations on this land's value for productive purposes. Limits on water allocation and reverse sensitivities to urban land uses place some constraints on productive uses.

South of Havelock North, the steeper hills are of lower soil quality, while south of Flaxmere and around Bridge Pa and Pakipaki, there are large areas of LUC3 land alongside organic soils and other soils of less productive value.

North-west of Flaxmere, the Roys Hill Wine Growing Area is a highly productive area for grape growing and wine production, known as the 'Gimblett Gravel' soils.

Māori land

Policy 3.8(1)(b) of the NPS-HPL provides a potential exclusion pathway for Māori land from the subdivision restrictions of highly productive land provided that any potential cumulative effects on the loss of productive capacity and reverse sensitivity effects are mitigated or avoided. This allows mana whenua to exercise rangatiratanga over their whenua and determine whether subdividing and building on their land is appropriate.



9.5 Opportunities

The low-lying land within and around Napier is subject to a number of natural hazard risks, while the Western Hills area is not suitable for significant levels of urban development due to the topography. In contrast, Hastings, Flaxmere and Havelock North are all relatively unconstrained by natural hazards but all border the Heretaunga Plains' most productive land, which is a critical feature of the local economy and important source of employment. Despite this, there are still opportunities for growth.

Intensification

Intensification of existing urban areas provides a significant opportunity to accommodate both Napier and Hastings' future housing demands. Intensification of existing urban areas can take many forms, including small scale infill, and comprehensive and compact redevelopment made up of town houses, terraces and apartments.

Intensification has a number of benefits, including:

- providing a greater variety of housing choices that can better serve a diverse range of socio-economic and demographic needs;
- allowing more people to live in close proximity to jobs, social amenities (e.g. schools) and areas of high natural amenity;
- reducing reliance on private vehicle travel, in turn supporting a reduction in greenhouse gas emissions and enabling a more viable public transport system; and
- Making more efficient use of existing infrastructure and reducing the need to extend existing networks.

In line with the NPS-UD, intensification should be targeted at those areas with good accessibility to a wide range of commercial and community services. This is reflected in the locations that enable greater levels of intensification by the Napier PDP and Hastings' PC5. Local area planning and other tools and incentives will support intensification by defining the local infrastructure needed to support growth in Napier and Hastings' neighbourhoods and centres.

The Hawke's Bay Racecourse is 32 hectares of land within a short walk of Hastings' city centre. There is potential for the racecourse to relocate in the future to a new purpose-built facility elsewhere in the Hastings district. While not factored into the ~~Draft~~ FDS ~~strategy~~, the redevelopment of the racecourse presents a significant opportunity to deliver a quality mixed-use development in a highly accessible location in the future.

Affordable Housing

Like many other urban centres across New Zealand, demand for social and more affordable housing options is growing. There is currently a waitlist of 1,380 households on the social

housing register across both Napier and Hastings[7]. Demand projections indicate the majority of demand will be for lower cost homes, which modelling indicates will be challenging from a commercial feasibility perspective.

Long-term, the provision of social and affordable housing will remain a critical issue for Napier and Hastings. Enabling higher density housing developments at different price points and in different tenure models, including public and community housing will remain vital to meeting the projected increase in demand for more affordable dwellings.

Mana whenua have shared their concern that intensification can lead to gentrification and increased prices and rates in areas where Māori have lived for generations. They have also shared concerns regarding increased council rates for Māori living rurally in areas bordering new greenfield development. In the past, Māori have experienced increases simply for adjoining these developments and it has priced them off their land.

Retirement villages

Due to the ageing populations in both Napier and Hastings, the retirement housing sector is likely to capture a significant portion of overall demand for housing. It is expected that up to 1,560 additional retirement units (or 52 units per year on average) may be needed over the next 30-years across Napier and Hastings combined.[8]

Retirement villages typically have unique land requirements compared with conventional housing. This reflects that retirement villages include a broader range of activities including, residential, care facilities, and recreation and support services. Greenfield options are more likely to suit this demand given the larger size of sites available.

Providing retirement living options in the community will be important in enabling intensification and greater housing choice. People of retirement age often sell up a larger family home in established communities to down-size and relocate to a retirement village. This can support increases in the availability of larger older homes for families, or alternatively help to deliver larger sites onto the market for developers to realise more intensive forms of housing.

[7] Ministry of Social Development, March 2024.
[8] Market Economics, 2024, pg. 19.

10. The ~~Draft~~ FDS ~~Strategy~~

10.1 Summary

At its heart, the ~~Draft~~ FDS ~~strategy~~ **seeks to achieve a compact urban form, focussed around a network of consolidated and intensified centres in Napier and Hastings**. The ~~draft~~ strategy achieves this by enabling more housing growth and choice within and adjoining the existing urban area in locations close to the public transport network and community services. It also achieves this by providing choices for different types of businesses in efficient locations.

The ~~Draft~~ FDS ~~strategy~~ provides for:

- **increased density and diversity of housing**, including apartments and terraced housing, within and close to Napier and Hastings' primary, secondary and locally important centres and high frequency bus corridors;
- **general residential development in other neighbourhoods** within existing urban areas, including small scale infill and suburban scale duplexes and terraced housing;
- **targeted expansion to enable new compact neighbourhoods with a mix of housing types** to the south of Napier's urban area, Mission Estate, and on the fringes of Havelock North, Hastings and Flaxmere, in locations that can integrate efficiently with existing transport networks and services, while avoiding the best productive land;
- **increased density and diversity of retail and commercial activities** in Napier and Hastings' primary, secondary and locally important centres, the Severn Precinct, and in new centres that support new compact neighbourhoods;
- **a new strategic industrial node at Irongate and Irongate West** that is efficiently located close to the state highway network and existing industrial areas;
- **supporting infrastructure**, including transport, three waters, open space and social infrastructure network improvements; and
- **opportunities to deliver ecologically sustainable, resilient urban development at Ahuriri Station.**

The ~~Draft~~ FDS ~~strategy~~ enables a number of benefits to be realised, including:

- providing the **best opportunity to achieve more compact housing** consistent with changing housing needs in Napier and Hastings;
- providing for new housing in a variety of areas which supports **reduced travel times for people with lower impacts on the transport network;**
- directing growth to areas that **better utilise existing amenities and infrastructure** (e.g. drinking water, wastewater, stormwater, roading, schools and public transport);
- **avoiding the need for significant new capital investment in new infrastructure** in areas with limited existing and planned infrastructure;
- **minimising urban expansion** in areas subject to significant natural hazard risks;

- providing opportunities to **more efficiently protect existing communities from natural hazard risks;**
- **minimising urban expansion in areas with highly productive land** used for productive activities;
- **retaining future flexibility to accommodate changes in housing demand**;
- **providing opportunities for further economic agglomeration** of the Irongate industrial node should the uptake of industrial land occur faster than anticipated.; and
- **recognising Mana Ahuriri's aspirations** for development by identifying Ahuriri Station as Redress Land.

The ~~Draft~~ FDS ~~strategy~~ provides limited opportunities for new greenfield expansion in Napier and promotes development within the existing urban area. This reflects that land surrounding Napier's urban area is generally low lying, is vulnerable to land subsidence and rising ground water levels, and a range of other natural hazards. These hazards are also present in the existing urban area, and the ~~Draft~~ FDS provides the opportunity to concentrate efforts on mitigating these effects for existing communities.

The ~~Draft~~ FDS also avoids the best productive land in the Heretaunga Plains by promoting development within the existing urban area and directing opportunities for new greenfield development to locations with lower quality soils. This approach ensures that the life supporting capacity of the Heretaunga Plains is protected for future generations.

The boundaries of the new growth areas identified in the FDS are indicative only. Future structure planning and rezoning will determine the extent of any urban zones needed to support development and this will be based on detailed technical evaluations undertaken at the time.

The FDS is focussed on identifying strategic opportunities for growth across the urban areas of Napier and Hastings. Except in some circumstances, smaller sites with capacity for less than 100 dwellings or singular business/commercial development proposals are not identified. It is intended that proposals of this scale, or other unanticipated development, are considered on their merits through a plan change/review and/or resource consent processes. Collectively, development on smaller sites may make a meaningful contribution to housing and business capacity and this will be regularly monitored and documented through the Councils' three yearly Housing and Business Capacity Assessments.

Ahuriri Station Redress Land

Mana Ahuriri Trust has strong aspirations to deliver ecologically sustainable, resilient urban development at Ahuriri Station.

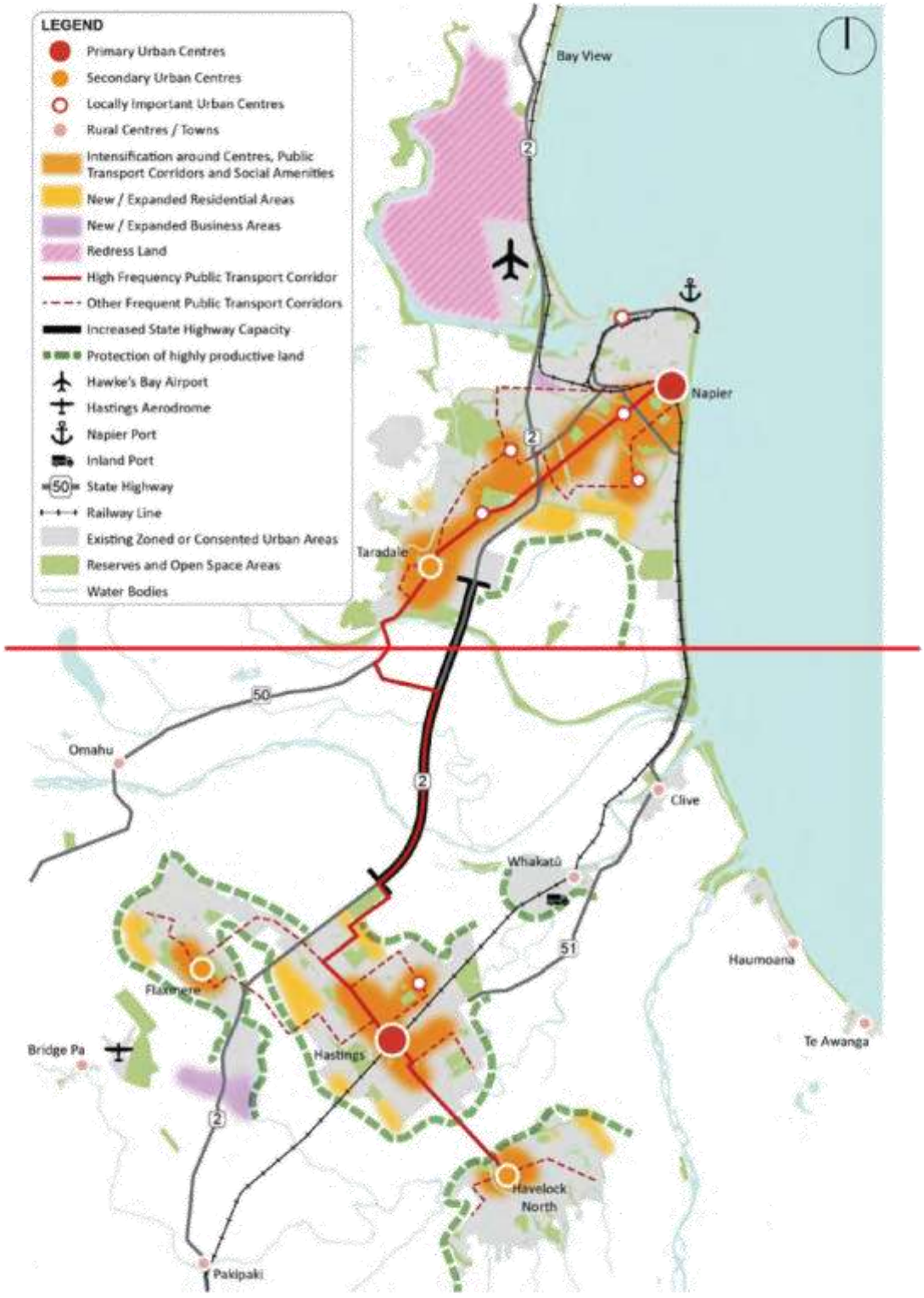
This land is available for Mana Ahuriri Trust to purchase as part of Mana Ahuriri's Treaty settlement with the Crown, which was received in 2022. The settlement recognises the losses suffered by Ahuriri Hapū arising from the breaches by the Crown of its obligations to Ahuriri Hapū under the Treaty of Waitangi and its principles. The ability to purchase Ahuriri Station is intended to provide Ahuriri Hapū with resources to advance the development of their economic and social well-being and assist with their cultural aspirations.

It is also recognised that some of the hapū represented by Mana Ahuriri Trust, such as Ngāi Te Ruruku ki Tangoio and Ngāti Tū, are also represented by the Maungaharuru-Tangitū Trust. This reflects shared and overlapping relationships and highlights that Ahuriri Station will provide benefits beyond Mana Ahuriri Trust's interests alone. Mana Ahuriri Trust acknowledges the support of its post settlement entity partners, the Maungaharuru-Tangitū Trust and Tamatea Pōkai Whenua, for the inclusion of the Ahuriri Station in the FDS.

The land comprised in Ahuriri Station is of a regionally significant and strategic scale for the Hawke's Bay region and there are potentially significant benefits to unlocking development of that scale. Developing the land has the potential to support the economic, social and cultural aspirations of Ahuriri Hapū, Napier, and the wider Hawke's Bay economy and its people. The site is of sufficient scale to present potential opportunities for resilience, adaptive design and ecological restoration.

Significant engineering works would be required to reduce potential or currently modelled natural hazard risks and maintain important environmental values to an acceptable level to enable a sustainable and resilient development both now and into the future. In addition to the mitigation measures required to safely enable any development, significant and ongoing infrastructure investment would be required, as with any project of this scale and regional significance given its engineering challenges and complexity. As part of its masterplanning, Ahuriri Hapū will take the lead on planning and developing Ahuriri Station.

The Councils will work collaboratively with Mana Ahuriri Trust to advance development processes for Ahuriri Station that provide for Ahuriri Hapū economic, cultural and social well-being. Given the scale of the opportunity, this will likely occur in stages over time and the FDS provides sufficient additional capacity for this to happen. Mana Ahuriri Trust does not intend to delay its planning for making the most of its redress land for Ahuriri Hapū.


LEGEND
Primary Urban Centres
Secondary Urban Centres
Locally Important Urban Centres
Rural Centres / Towns
Intensification around Centres, Public Transport Corridors and Social Amenities
New / Expanded Residential Areas
New / Expanded Business Areas
Redress Land
High Frequency Public Transport Corridor
Other Frequent Public Transport Corridors
Increased State Highway Capacity
Protection of highly productive land
Hawke's Bay Airport
Hastings Aerodrome
Napier Port
Inland Port
State Highway
Railway Line
Existing Zoned or Consented Urban Areas
Reserves and Open Space Areas
Water Bodies
Bay View
Napier
Taradale
Omahu
Clive
Whakatū
Haumoana
Te Awanga
Bridge Pa
Hastings
Havelock North
Pakipaki
2
50
51

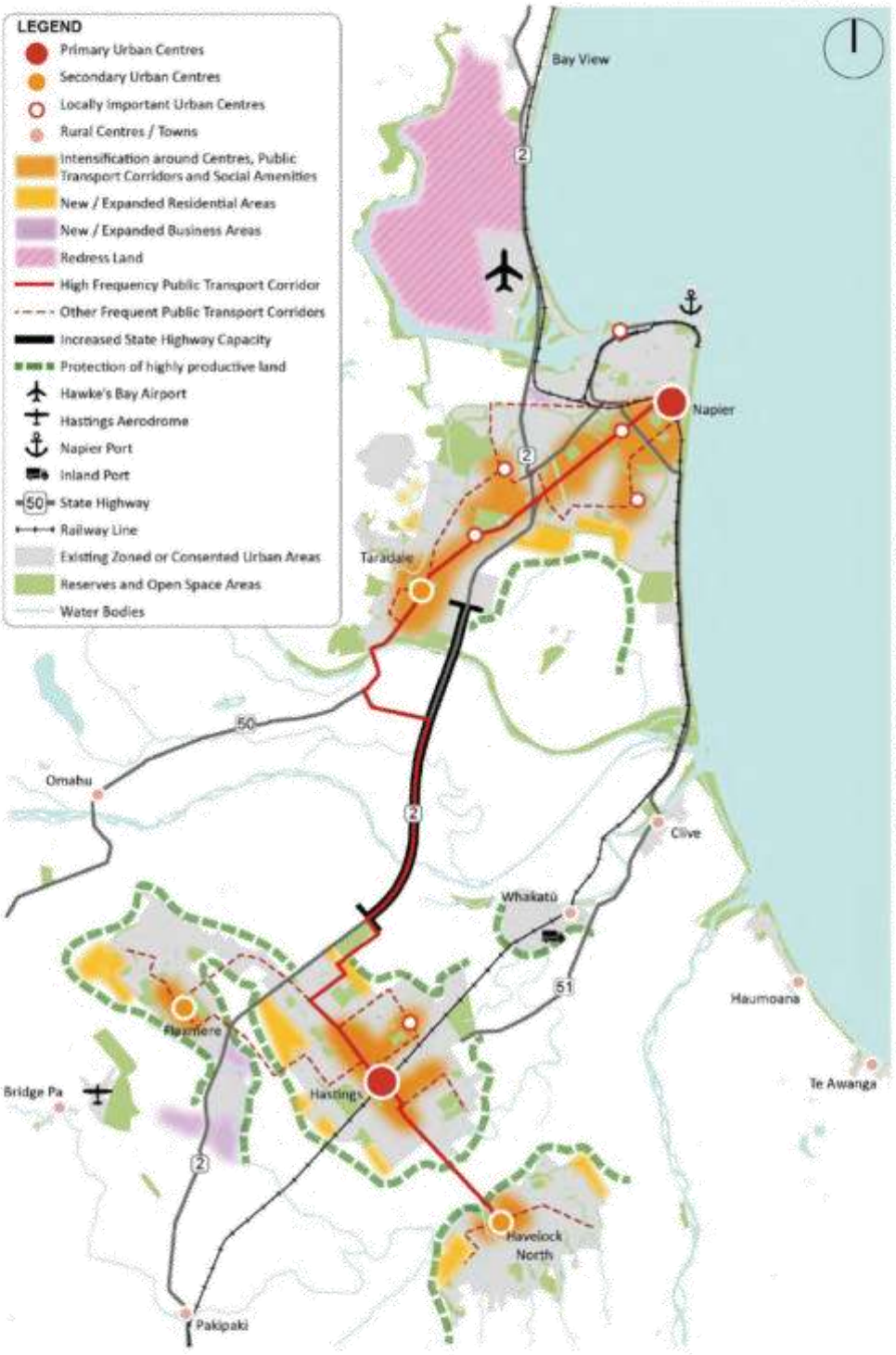


Figure 17 The ~~Draft~~ Future Development Strategy 2025-2055

10.2 Summary of residential development capacity

Consistent with the approach outlined above, approximately 80 per cent of future residential development capacity enabled by the ~~Draft~~ FDS ~~strategy~~ would be on land already zoned for urban development. About 60 per cent of this will be through redevelopment of existing sites, and about 20 per cent will be through development of already zoned greenfield land, some of which is consented but not yet developed. The broad location and type of residential growth enabled by the ~~Draft~~ FDS is set out in **Table 2** below and shown in **Figure 17.**

Table 2 – Residential Development Capacity Enabled by Council Area

Broad Type	Napier	Hastings	Total
Redevelopment / Infill in the existing urban area	4,070	5,840	9,910
Existing Zoned / Consented Greenfield Development	2,085	2,125	4,210
New Greenfield Development[9]	2,420	~~1,560~~ 2,695	~~3,980~~ 5,115
Total Dwellings Enabled	8,575	~~9,525~~ 10,660	19,235 ~~18,100~~[10]
Total Demand	6,700	9,620	16,320
Sufficiency	+1,875	~~-95~~ +1,040	~~+1,780~~ +2,915

[9] Unless detailed masterplanning information was made available by landowners / developers during the preparation of the Draft FDS, a conservative density of 15 dwellings per hectare on the net developable area has been used to derive capacity numbers. Based on detailed design, development capacity figures could be higher than this figure.

[10] The total enabled residential development capacity does not equate to the total number of new homes that will be built. It includes allowance for a competiveness margin which is equivalent to 2,390 dwellings across Napier and Hastings.

10.3 Redevelopment in the existing urban area

Promoting a compact urban form focussed around a network of consolidated and intensified centres in Napier and Hastings is the core concept underpinning the ~~Draft~~ FDS ~~strategy~~.

Over the 30-year life of the FDS, growth within the existing urban area is expected to deliver at least 50 per cent of all residential growth. Over the long-term, intensification is anticipated to deliver the majority (60 per cent) of future residential growth across both Napier and Hastings toward the end of the 30 years. This will mean new housing across the region will increasingly move towards medium and higher density housing types, such as townhouses, terraced housing and multi-storey apartment buildings.

Greater intensification in and around the key centres of Napier, Taradale, Hastings, Flaxmere and Havelock North and along more frequent public transport routes will help support the development of a range of dwelling types to meet the changing demographic profile in Napier and Hastings, particularly for an ageing population and smaller household sizes. Intensification in these areas will also have more proximate access to local shops and businesses for people to access their daily needs and services. They will also be closer to education, employment and community facilities. There are also opportunities for more mixed-use development along key public transport corridors.

Moving towards the delivery of more medium and higher density housing types and supporting mixed use development will take time. It requires a range of factors to come together, including willing landowners, enabling planning rules, available infrastructure and a development and construction sector willing and able to deliver different forms of housing. The community must also be willing to accept that existing amenity values may change, and that this can be positive for future generations and can help to protect those aspects of the natural environment that we value the most. These factors will be key to successfully implementing the ~~Draft~~ FDS ~~strategy~~.

10.4 Development in greenfield locations

Greenfield development allows for housing and supporting services to be delivered at scale and pace. This differs from growth in the existing urban area, which tends to occur incrementally over time.

The release of greenfield land for development can assist to moderate land prices and support overall housing affordability, however, it may also attract demand away from the existing urban areas and impact broader outcomes to intensify and achieve a compact urban form. Therefore, there is a need to closely monitor the uptake of development in the existing urban area and manage the timing of greenfield land release in response, to ensure there is sufficient land to meet demand.

There are a number of large development areas that have already been zoned or consented for urban development, or where subdivision and development has already commenced.

Combined, these currently provide capacity for approximately 4210 dwellings. These will provide sufficient capacity over the short-to-medium term to meet the demand for new greenfield housing. Significant areas of existing residential development capacity include:

- Mission Hills (800 dwellings)
- Te Awa (615 dwellings)
- Parklands (320 dwellings)
- Wharerangi Road (350 dwellings)
- Wairatahi (460 dwellings)
- Brookvale Road (550 dwellings)
- Howard Street (350 dwellings)
- Iona (350 dwellings)
- Lyndhurst Stage 2 (140 dwellings)
- other smaller-scale sites around the FDS Study Area (275 dwellings).

Over the long-term, the creation of new greenfield development areas will continue to be part of how Napier and Hastings meet future urban housing requirements. This will ensure that a range of lifestyle choices and sufficient residential development capacity can continue to be provided.

Opportunities for new greenfield growth across both Napier and Hastings outside of these areas are limited. A combination of development constraints including natural hazards, highly productive land and topography mean the greenfield growth locations signalled in the ~~Draft~~ FDS are limited to a number of smaller development areas at the edge of existing urban areas. They are broadly located close to existing centres, existing or proposed frequent public transport routes and social amenities.

These areas and their approximate development capacity are set out in **Table 3** below. In many instances, the development capacity set out in Table 3 is likely to be lower than what might be realised, given that the estimates are preliminary and site-specific investigations and structure planning have not yet been undertaken. When these areas are progressed for rezoning, greater density should be sought to reduce the need for further expansion into areas with known constraints.

Table 3 – New Residential Greenfield Development Areas (Currently not zoned for residential development)

Site Ref	Site Name / Location	Approx. Capacity
NC4a	Riverbend Road / Willowbank Avenue, Napier	290 dwellings
NC4b [11]	Riverbend Road, Napier	660 dwellings
NC4d	South Pirimai, Ulyatt Road, Napier	370 dwellings
NC6	Mission Estate, Church Road, Napier	100 dwellings
H2a	Lyndhurst Extension, Hastings	280 dwellings
H3	Kaiapo Road, Hastings	430 dwellings
H4	Murdoch Road, Hastings	120 dwellings
H8	Copeland Road, Hastings	130 dwellings
FM2 & FM9	Portsmouth Road, Flaxmere	~~330~~ 655 dwellings
HN2b	Arataki Road Extension, Havelock North	~~110~~ 170 dwellings
HN6	Brookvale Road, Havelock North	125 dwellings
HN10	Oderings Site, Havelock North	35 dwellings
H5	Wall Road, Hastings	110 dwellings
HN3a and HN3b	Middle Road, Havelock North	640 dwellings
AS	Ahuriri Station, Bay View	1,000 dwellings
Total		**~~3,980~~ 5,115 dwellings**

10.5 Business land

The ~~Draft~~ FDS ~~strategy~~ provides sufficient capacity to meet demand for business activities over the short, medium and long term. Business development will continue to be concentrated around established nodes and connected with an improved bus network. Capacity enhancements to the state highway network will help to improve the resilience and reliability of strategic freight corridors which provide access to the Port of Napier and Hawke's Bay Airport.

Centres (retail and commercial)

Centres are focal points where people meet to learn, work, shop and play.

Napier city centre and Hastings city centre will remain the primary retail, commercial, civic and entertainment hubs for the region. Intensification of commercial activities (e.g. offices) will need

[11] Additional land will be required to manage stormwater and flooding effects arising from development of Riverbend Road (NC4b), with the exact location to be determined through future planning processes.

to occur to ensure they can continue to support a growing population within their urban areas and across the region more broadly.

Taradale, Flaxmere and Havelock North Town Centres are also important centres for their local communities and provide access to a range of goods and services in close proximity to residents.

Over time, these centres, particularly Napier and Hastings city centres, will become increasingly important as places for people to live as well. An increased residential population in and around centres can help support new business establishing but has the potential to displace some commercial activity. Any shortfalls in commercial land across these centres, as well as other commercial zones, over the long-term are expected to be met through intensification. As such, planning controls will need to ensure a suitable balance between residential and commercial uses can be provided.

Development in greenfield locations also provide the opportunity to efficiently integrate new centres and commercial areas as part of delivering compact neighbourhoods. Careful consideration will be needed to ensure new centres and commercial areas support and reinforce the existing network of centres in Napier and Hastings. The planned centre as part of the Wharerangi Road development in Napier is a good example of how to achieve this through a structure planning and rezoning process.

In addition to intensification of centres, a further six hectares of commercial land in the Severn Precinct (off Prebensen Drive) has been identified within the ~~Draft~~ FDS. This provides opportunities for large format retail and other commercial activities in an area with good access to the strategic road network.

Industrial land

The ~~Draft~~ FDS ~~strategy~~ provides sufficient capacity to meet demand for industrial activities over the short, medium and long term. However, there may be localised shortfalls in capacity for wet industry depending on the extent to which future wet industrial activities require access to Hastings' separated trade waste network.

There is approximately 60 hectares of industrially zoned vacant land still to be developed in Napier, the majority of which is located within the vacant airport land to the south of Watchman Road. In Hastings, there is approximately 200 hectares of vacant industrial land primarily located in established nodes in Omahu Road, Irongate, Whakatū and Tomoana.

For Napier, a critical assumption around sufficiency is that the Airport Zone to the south of Watchman Road (42 hectares) will be available for development. This area faces some challenges around access, ground suitability and vulnerability to natural hazards. If development of this area was unable to occur, there would be a shortfall in industrial land of approximately 30 hectares. Such a shortfall could be met by additional development capacity in Hastings or in Napier if industrial development is realised at Ahuriri Station. Existing industrial capacity at Pandora is also vulnerable to a number of natural hazards.

Within Hastings, an additional ~~100~~ 119 hectares of industrial land has been identified around the Irongate industrial node, to be developed over the long-term. This area can accommodate dry industry, and wet industrial activities that do not have a functional need to access Hastings separated trade waste network. Council monitoring has indicated that uptake of industrial land at Irongate has been strong, and its location on the strategic road network, close to areas of primary production and between two main urban areas means it is ideally suited for further growth should demand arise. While this land is not required to meet any requirements under the NPS-UD, there are advantages in signalling that further development may occur in this location. These include that it:

- supports the development aspirations of Tamatea Pōkai Whenua which is a major landowner in the area;
- provides an opportunity for enabling established dry industries to decant/relocate from areas where there is existing trade waste capacity, potentially releasing vacated sites for wet industries (e.g. Tomoana and Whakatū); and
- provides opportunities to explore rezoning of existing industrial land close to Hastings city centre for commercial or mixed-use zones to better realise more intensive forms of residential and commercial uses.

The FDS does not identify additional areas for wet industry and relies on existing capacity in Omahu South, Tomoana and Whakatu in the short to medium term. However, In the long term, there is potential for a shortfall in development capacity for wet industry if a large proportion of that demand requires access to Hastings separated trade waste network and the level of dry industry uptake is greater in these areas. If that occurs, and if additional land is required, then further expansion to the existing industrial areas at Tomoana and/or Whakatu may be appropriate.

At that time, the available options would be comprehensively assessed in order to minimise loss of highly productive land. This includes ensuring that the planning framework protects any rezoned land for wet industry only, has a functional need to access Hastings separated trade waste network, and could not otherwise occur efficiently elsewhere with mitigation in place.

To reduce the likelihood of this occurring, the FDS recommends that the Hastings District Council explore policy options in the short term to better protect remaining capacity in Whakatu for wet industry, and potentially Omahu South depending on the amount of trade waste capacity available there.

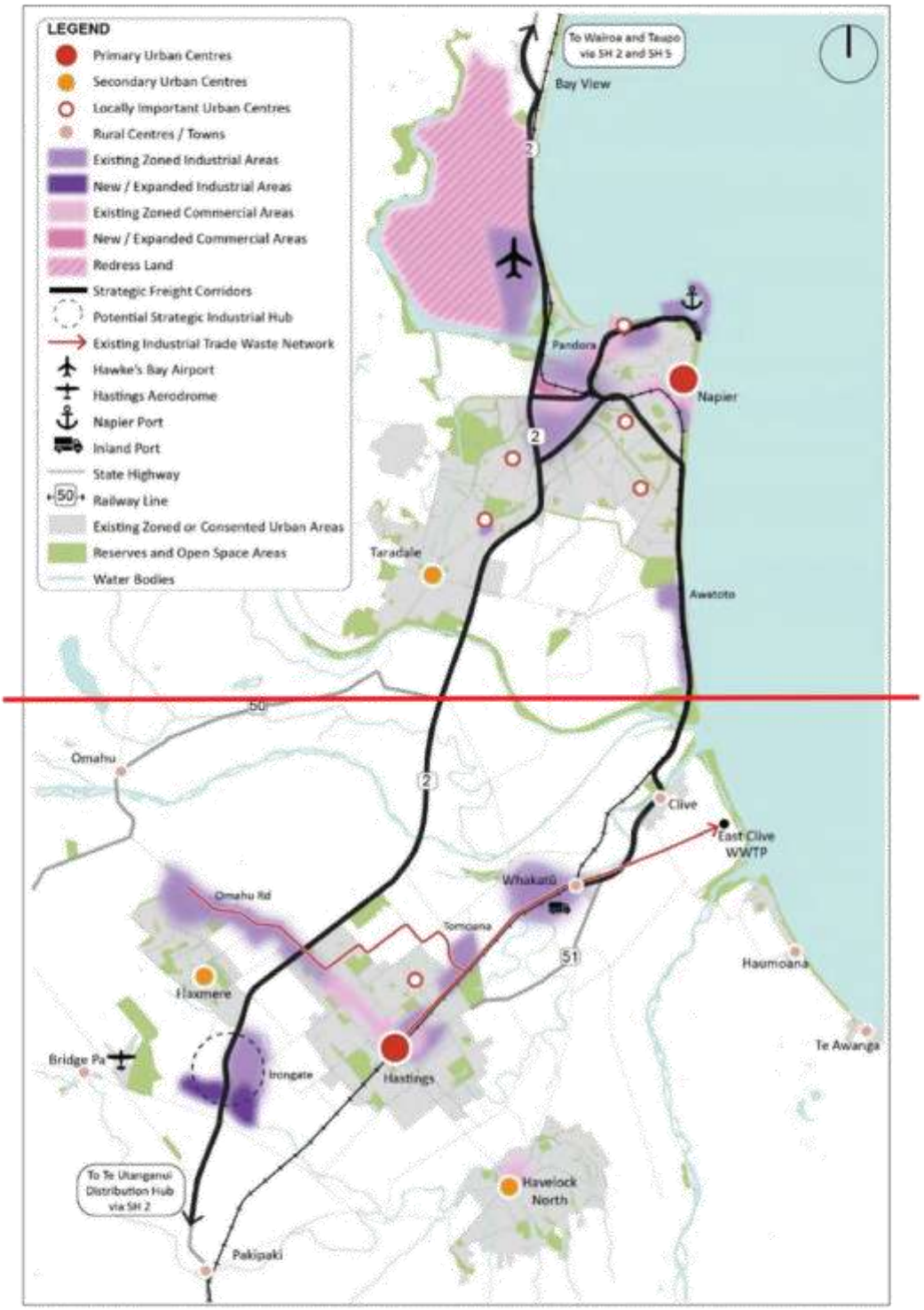
At the same time, a sustainable long-term solution for water supply should be progressed as a high priority as this is the key constraint for new industrial activities across Napier and Hastings.

~~Other strategies to better encourage wet industries to locate to areas with existing trade waste capacity will need to be considered if demand rises, and broader issues around water supply across the Heretaunga Plains must be addressed.~~

Other industrial options considered

The *Awatoto* industrial area and Wastewater Treatment Plant (**WWTP**) was heavily impacted by Cyclone Gabrielle. As part of the recovery process, flood mitigation and protection works are required to support the long-term operation of established industrial sites and the WWTP. Current investigations include the potential for flood protection along the alignment of McLeods Road. This could support the development of an additional 37 hectares of land for industrial development, contiguous with the existing industrially zoned land and with good access to strategic freight links. However, there are a number of constraints to redevelopment of the site related to natural hazards and ground conditions.

This option has been carefully considered but has not been included in the ~~Draft~~ FDS at this time as it is not needed to meet demand in the 2024-2054 period.


LEGEND
Primary Urban Centres
Secondary Urban Centres
Locally Important Urban Centres
Rural Centres / Towns
Existing Zoned Industrial Areas
New / Expanded Industrial Areas
Existing Zoned Commercial Areas
New / Expanded Commercial Areas
Redress Land
Strategic Freight Corridors
Potential Strategic Industrial Hub
Existing Industrial Trade Waste Network
Hawke's Bay Airport
Hastings Aerodrome
Napier Port
Inland Port
State Highway
Railway Line
Existing Zoned or Consented Urban Areas
Reserves and Open Space Areas
Water Bodies
To Wairoa and Taupo via SH 2 and SH 5
Bay View
Pandora
Napier
Taradale
Awatoto
Omahu
Clive
East Clive WWTP
Whakatū
Omahu Rd
Tomoana
Haumoana
Te Awanga
Flaxmere
Bridge Pa
Irongate
Hastings
Havelock North
To Te Utanganui Distribution Hub via SH 2
Pakipaki
2
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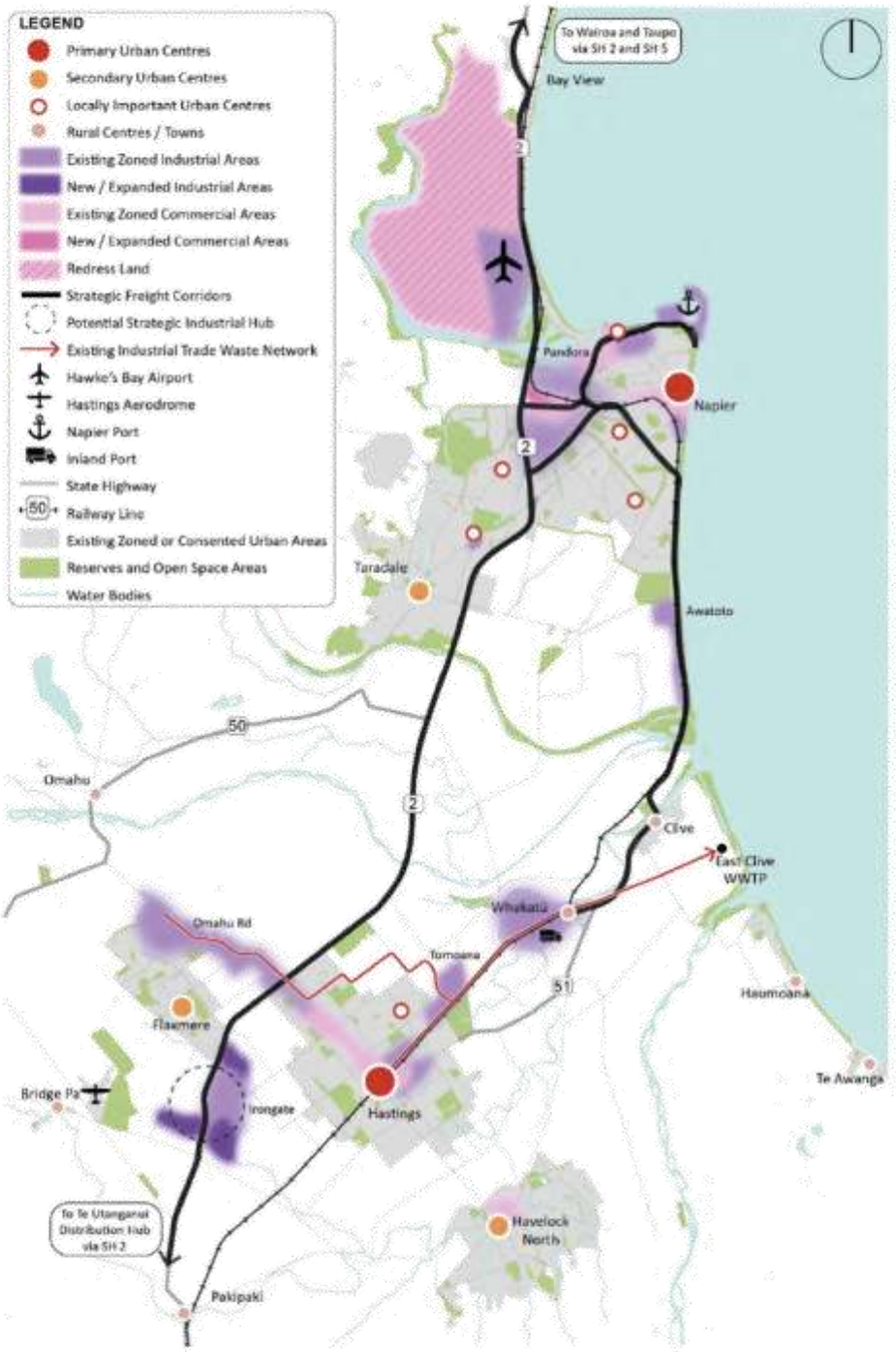


Figure 18 ~~Draft~~ Industrial and Business Land Strategy

10.6 Rural lifestyle and rural and coastal settlements

The ~~Draft~~ FDS strategy does not identify opportunities for new rural residential living. While rural residential development close to the existing urban area forms part of the urban housing market, it does not form a core component of urban growth. However, rural residential living does provide a type of housing and lifestyle that some households prefer. For this reason, the partner councils could consider separately progressing a Rural Residential Strategy. If progressed, this work would define future demand and supply for rural residential and would identify locations or other planning mechanisms available for meeting this demand over the short, medium and long term.

The ~~Draft~~ FDS does not identify the future form, function and growth potential of Napier and Hastings rural and coastal settlements. The ~~Draft~~ FDS promotes a compact urban form and does not propose significant intensification and growth of rural and coastal settlements on the grounds that these locations are distant from the urban area and would be challenging to affordably service with infrastructure.

However, area-specific planning for rural and coastal settlements is essential to ensure local community needs are met. This is particularly important for communities impacted by coastal hazards including Haumoana, Te Awanga and Clifton, and this will progress as a priority once the Clifton to Tangoio Coastal Hazards Strategy 2120 is further developed. The partner councils will progress planning for other rural and coastal settlements on a staged basis over time.

In the interim, the strategic direction for coastal and rural settlements from HPUDS 2017 is set out in the Appendix to the FDS. This ensures that the strategic direction for our rural and coastal settlements remains in place until such time as it is superseded by a Rural Residential Strategy or similar.

The strategic direction set out in HPUDS 2017 was high level and our rural and coastal communities have changed and evolved since then, so too has our understanding of environmental factors and limitations. It is important to note that the interim strategic direction imported from HPUDS 2017 does not account for changes in policy direction or the environment that have occurred since 2017, for example, the effects of Cyclone Gabrielle on affected rural communities, infrastructure and the environment.

10.7 Papakāinga

Mana whenua have expressed a clear desire to develop papakāinga. The partner councils will continue to work with mana whenua to realise their aspirations to develop papakāinga. This includes reviewing rules in the district plans to ensure they provide an enabling framework for development and potentially expanding the definition of land where papakāinga can be developed.

Te Piringa Hapū has also expressed strong aspirations to develop their whenua close to Omahu Marae, Te Awhina Marae and Rūnanga Marae for a mix of papakāinga, urban development and recreational facilities. The Hawke's Bay Regional Council is progressing consenting and design for flood protection works in Omahu which will provide greater resilience for the community. The partner councils will continue to work with Te Piringa Hapū to support it to realise those aspirations for development.

10.8 Mana whenua values and aspirations

Mana whenua expect that the taiao is at the forefront of all decisions on new development. This includes providing for Te Mana o te Wai – ensuring water supplies are prioritised and secured into the future, minimising the impact of development on the taiao, and protecting and incorporating native flora and fauna into residential and commercial developments.

10.9 Napier

The majority of future residential growth (up to 60 per cent) over the next 30-years is anticipated to be delivered through intensification within existing urban areas connecting to centres and employment nodes through more frequent public transport services. Up to 30 per cent can be delivered in existing greenfield areas which have already been zoned or consented for urban development, such as Mission Hills, Parklands and Te Awa.

A total of 2,420 dwellings have been identified as being located on land not currently zoned or consented for urban development, although the majority of these sites are identified as long-term development areas within HPUDS. If all of these areas were developed to this potential, this would be equivalent to 21 per cent of Napier's long-term housing demand.

Greenfield development in the southern part of Napier (incorporating South Pirimai, Riverbend and The Loop) has the potential to deliver approximately 1,320 new dwellings. Future development in this area is well located to take advantage of existing cycling and public transport infrastructure, and amenities including supermarkets, primary and secondary schools, and public open spaces.

Whilst some development has already occurred in this location (such as the Willowbank Retirement Village), the area has some known flooding constraints which will need to be addressed prior to any further development. This is likely to include raising the land to suitable levels and the development of extensive stormwater detention facilities. Significant planning and investigation has already been undertaken to support potential redevelopment in parts of this area. Significant investment in stormwater infrastructure will be required.

A small area of greenfield development has also been included on the southern portion of the Mission Estate area in the vicinity of Church Road and Tironui Drive. Development of this area provides an opportunity to enhance Taipo Stream, which passes through the site.

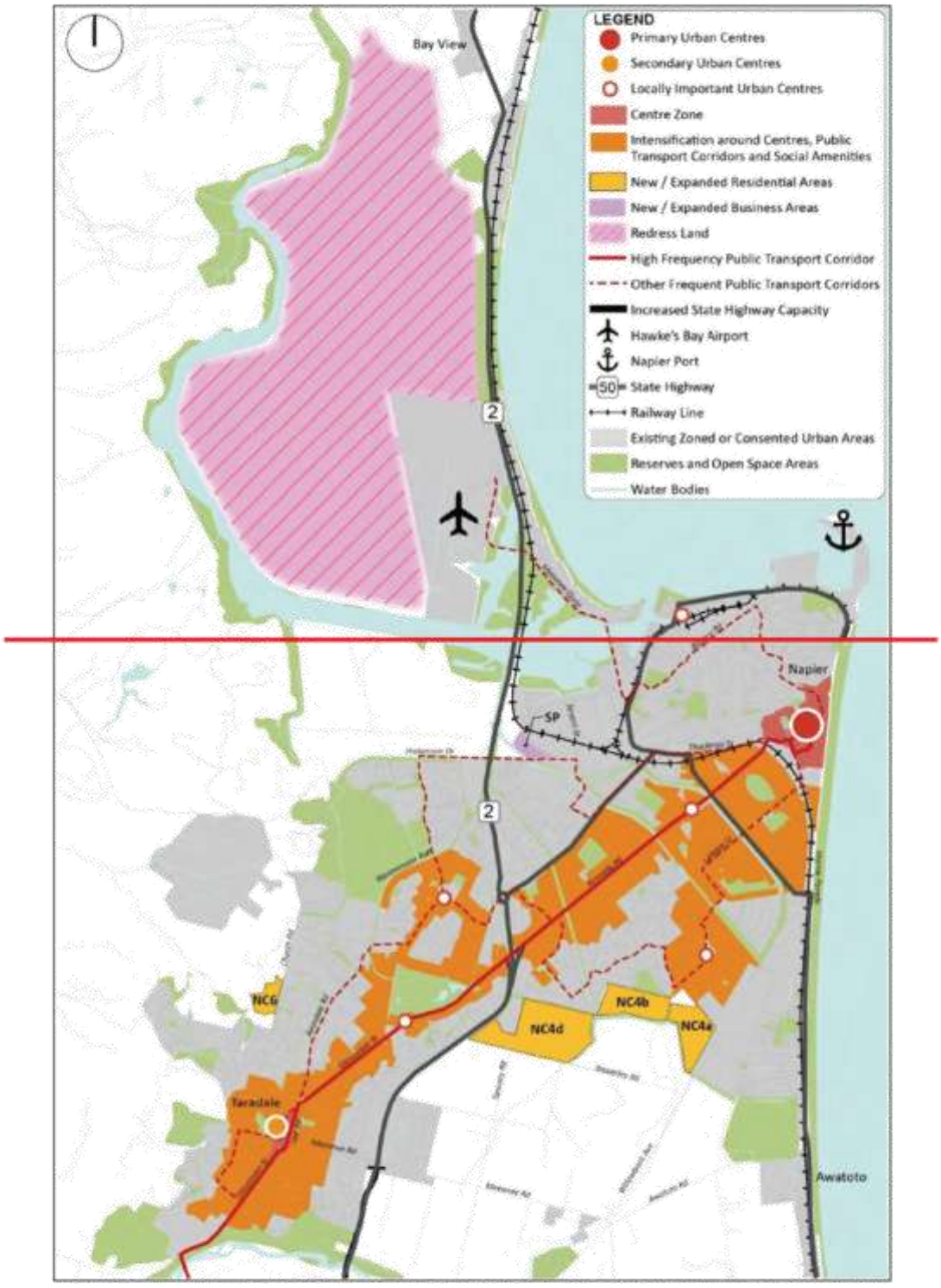
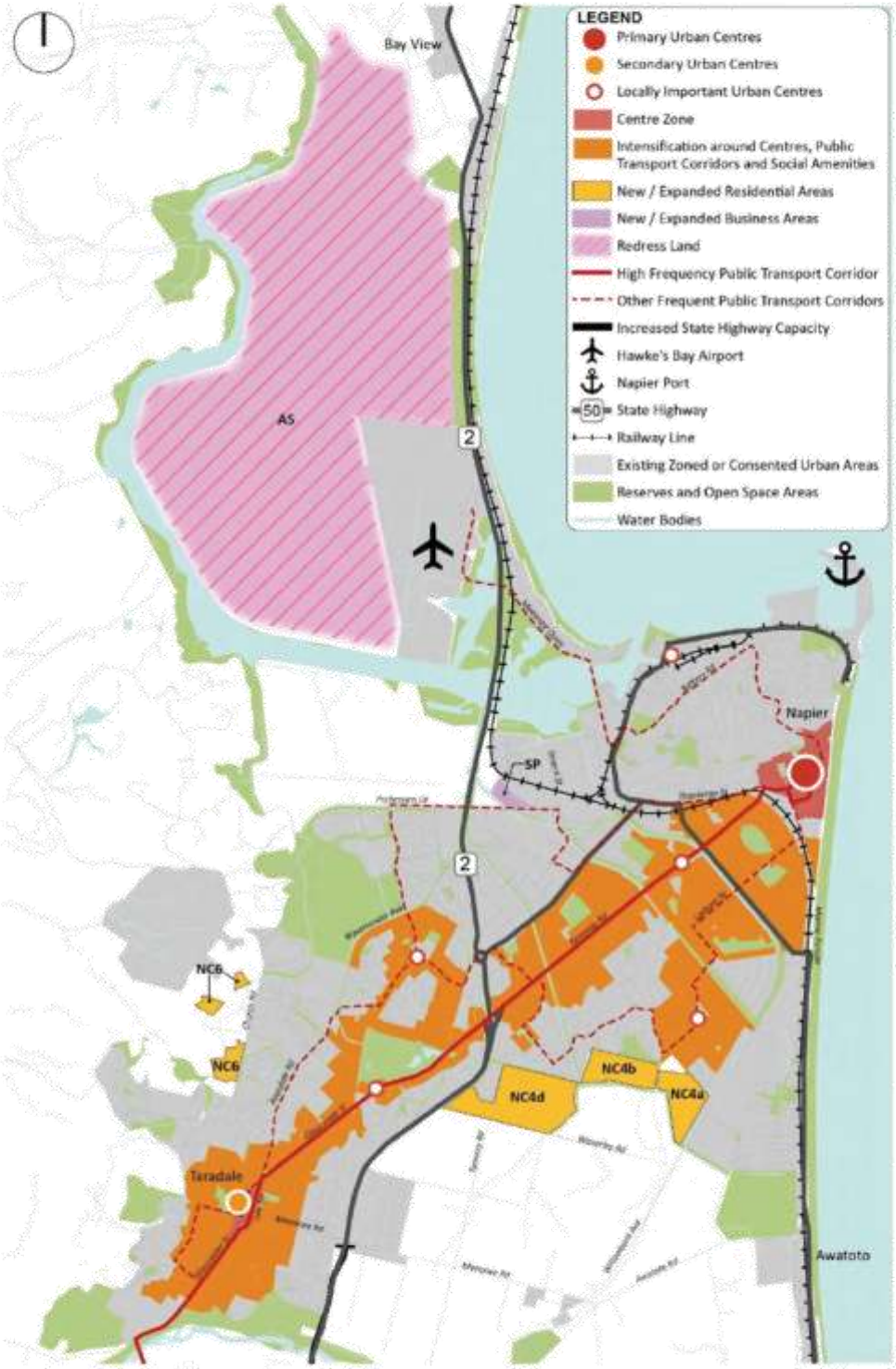


Figure 19 Draft Future Development Strategy (Napier)


LEGEND
Primary Urban Centres
Secondary Urban Centres
Locally Important Urban Centres
Centre Zone
Intensification around Centres, Public Transport Corridors and Social Amenities
New / Expanded Residential Areas
New / Expanded Business Areas
Redress Land
High Frequency Public Transport Corridor
Other Frequent Public Transport Corridors
Increased State Highway Capacity
Hawke's Bay Airport
Napier Port
50 State Highway
Railway Line
Existing Zoned or Consented Urban Areas
Reserves and Open Space Areas
Water Bodies
Bay View
AS
2
Napier
SP
NC6
NC6
NC4b
NC4d
NC4a
Teradale
Awatoto

10.10 Hastings

Hastings

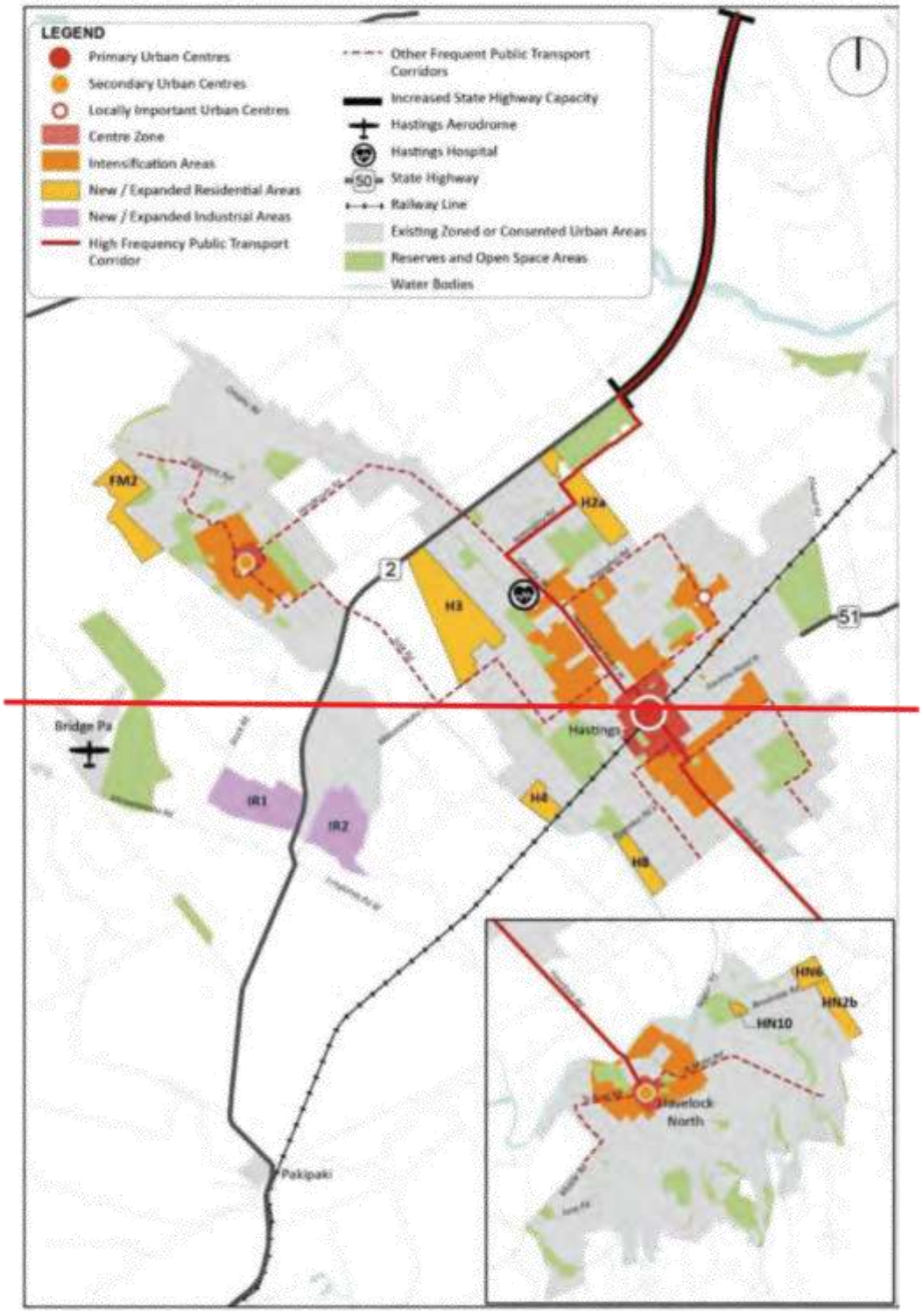
Hastings will accommodate the majority of its growth through intensification of existing residential areas and the city centre. A number of smaller scale opportunities for greenfield growth have been identified at the edge of the urban area. This includes approximately ~~680~~790 new dwellings along its western edge, with the Southland Drain forming the long-term western boundary of Hastings' urban area. These areas are generally well located in terms of proximity to employment, schools and public open space. However, there are known infrastructure capacity constraints which would need to be addressed before development can commence. A further 280 new dwellings have been identified as being located east of Lyndhurst Road. This land is ideally placed near the regional sports park, frequent public transport, schools and employment areas.

Flaxmere

The majority of future development in Flaxmere will occur within the existing urban area through intensification, as well as in the recently consented Wairatahi area south of Dundee Drive. Approximately ~~330~~655 new dwellings on a greenfield site extending along the northern end of Portsmouth Road has been identified. Existing development patterns mean this area can be well integrated into the existing residential environment and provide the opportunity to expand the services and amenities offered within the Flaxmere centre. These also ensure convenient connections with nearby amenities including public open spaces and schools. Consideration of appropriate acoustic treatment of any new dwellings may be required to mitigate any potential noise effects from the Hastings Aerodrome, while physical setbacks/landscaped buffers from adjoining productive uses will also be required.

Havelock North

Over the short-to-medium term, development in Havelock North will be enabled through intensification around the centre and in established greenfield locations including Brookvale, Arataki and Iona. Over the long-term, there is potential for further greenfield development of approximately ~~235~~ 640 new dwellings ~~east of Arataki and Davidsons Roads~~around Middle Road.


LEGEND
Primary Urban Centres
Secondary Urban Centres
Locally Important Urban Centres
Centre Zone
Intensification Areas
New / Expanded Residential Areas
New / Expanded Industrial Areas
High Frequency Public Transport Corridor
Other Frequent Public Transport Corridors
Increased State Highway Capacity
Hastings Aerodrome
Hastings Hospital
State Highway
Railway Line
Existing Zoned or Consented Urban Areas
Reserves and Open Space Areas
Water Bodies
FM2
H2a
H3
2
51
Bridge Pa
Hastings
IR1
IR2
H4
H9
HN6
HN2b
HN10
Havelock North
Pakipaki

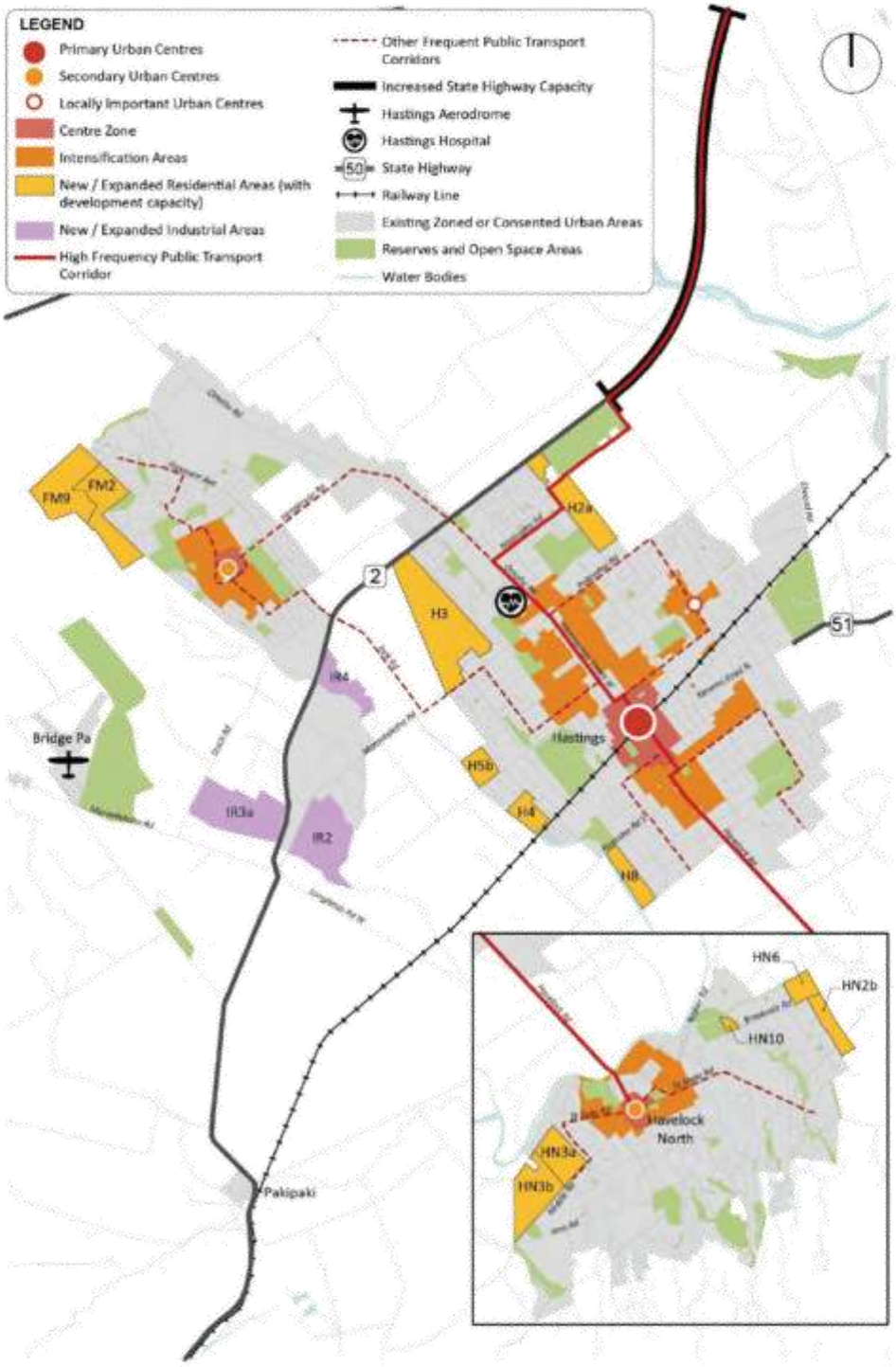


Figure 20 ~~Draft~~ Future Development Strategy (Hastings)

10.11 Strategic infrastructure

The NPS-UD requires an FDS to spatially identify development infrastructure and additional infrastructure required to support development. Development infrastructure refers to network infrastructure for three waters (drinking water, wastewater and stormwater) and land transport. Additional infrastructure includes things like social infrastructure (such as schools), public open spaces, and electricity and gas distribution.

This FDS also recognises the importance of the operational and functional needs of nationally and regionally significant infrastructure. The location, design and suitability of new urban development must not compromise the operational and functional needs of nationally and regionally infrastructure now or in the future. Nationally and regionally significant infrastructure refers to those types of infrastructure that are of national or regional significance – more than just local importance.

Drinking water supply is a significant infrastructure issue for mana whenua. Demands on water, the impacts of residential and commercial intensification, and plans for water storage must be factored into the viability and sustainability of the FDS as it is implemented.

Key development and additional infrastructure are shown in **Figures 21 – 23** and are described briefly below. This does not include the infrastructure required to support development at Ahuriri Station.

Water supply

Drinking water in Napier and Hastings is largely sourced from the Heretaunga Plains Groundwater Quantity Area, parts of which are identified as Hastings and Napier Source Protection Zones. This area is fully allocated, and the water management regime proposed by the Hawke's Bay Regional Council under changes to the Regional Plan is currently subject to appeal.

According to the Regional Water Assessment, the region could experience fresh water demand shortfall of nearly 25 million cubic metres, increasing to 33 million cubic metres by 2060.

Addressing this projected shortfall will require much more efficient use of existing water sources, demand management, new ways of securing water supplies, and consideration of the needs of all water users, including for municipal supplies, mana whenua, industry and primary production, such as horticulture, viticulture and agriculture.

Protecting waterways, water sources, and ensuring water is clean is of critical importance to mana whenua. Water scarcity is already an issue for mana whenua communities. Mana whenua believe we must reduce water allocation and improve the health of our waterways as quickly as we develop land.

Investigations of all practical options for increasing freshwater supplies in Hawke's Bay is being undertaken as part of the Regional Water Security Programme. This includes community-scale water storage investigations for Heretaunga. This work remains a high priority.

In addition to resolving water supply constraints for the Heretaunga Plains, growth identified in the ~~Draft~~ FDS will need to be supported. Improvements across the municipal water supply networks (including new and upgraded pipelines) have been programmed, committed to and funded to help accommodate growth, improve network efficiency and ensure network resilience across both Napier and Hastings.

In addition to network wide upgrades, key pieces of bulk infrastructure required to support growth are identified in **Figures 21 – 23**. This includes two new water reservoirs to enable intensification across Napier and greenfield development within the Taradale and Mission Hill areas. Upgrades and improvements are required to a number of existing water pump stations, storage, water bore and treatment plants across Hastings, Flaxmere and Havelock North areas. Upgrades to the existing Bridge Pa Drinking Water Supply have also been identified to better support the existing community as well as future industrial growth around Irongate.

Wastewater

The wastewater networks serving urban areas in both Napier and Hastings have been under significant pressure to accommodate recent housing growth. Many elements of the wastewater network (e.g. pump stations) are currently either at or reaching capacity.

Figures 22 and 23 show the general locations of upgrades required to the network to service existing or planned growth in Napier, Hastings, Flaxmere and Havelock North areas.

In Napier, the construction of new wastewater main trunk infrastructure and pump stations is required to enable wider uptake of medium-density development and urban intensification, and to provide for future residential greenfield growth in the south (South Pirimai, Riverbend and The Loop).

In Hastings, significant investment in wastewater capacity has already been planned and funded as part a 10-year wastewater programme. In addition to this, the construction of new wastewater main trunk infrastructure is required. This is shown as the Infrastructure Acceleration Fund (**IAF**) project in **Figure 23** and it comprises major new wastewater pipes that add capacity to the Hastings and Flaxmere network, improving capacity and connectivity to the main trunk interceptor pipes that convey wastewater to the East Clive Wastewater Treatment Plant. Further capacity upgrades will be required over the long-term to support intensification within Kaiapo and Akina (which includes the future residential greenfield growth around Copeland Road).

Stormwater

The approach to stormwater in Napier and Hastings will need to adapt to growth pressures, increasing environmental standards and the future impacts of climate change (e.g. more intense rainfall events). As development in greenfield areas occurs over time or as part of

structure planning or subdivision processes, new and upgraded infrastructure may be required to provide stormwater capacity, detention and treatment. The development of stormwater infrastructure may involve land acquisitions and is likely to be addressed catchment by catchment at the time development occurs. Any stormwater solution is encouraged to be developed in the most effective and efficient way to achieve yield while managing potential effects, whether this is located within or outside of FDS growth areas.

Figures 22 and **23** show the general locations of new stormwater infrastructure that will be required to service future growth. This includes the provision of stormwater detention and storage facilities for planned development at Wharerangi Road and Parklands in Napier, and Iona in Havelock North. Additional stormwater detention and storage facilities will also be required to enable residential development and mitigate natural hazard risks in the Waverly area of Napier as well as Kaiapo Road (Hastings) . In addition to these new stormwater facilities, upgrades to the existing network will also be required.

Electricity

A reliable and resilient electricity supply is critical for both existing and future residents and businesses, as well as enabling transition to a lower carbon economy. The Napier and Hastings electricity supply is provided by the National Grid (the high voltage transmission network operated by Transpower) and the local electricity distribution network is operated by Unison.

National grid

Transpower has not identified the need for any significant upgrades or projects to support additional demand in the distribution network based on current forecasts. However, the forecasts will be annually reviewed in conjunction with Unison.

Transpower has announced its intention to strengthen and raise the Redclyffe substation in its current location in response to the impacts of Cyclone Gabrielle. Transpower will continue to monitor the resilience of the National Grid generally in the context of climate change and natural hazard risks.

The ~~Draft~~ FDS recognises the role that the National Grid will play in transitioning to a low carbon economy. To support this, the National Grid will need to be protected from inappropriate subdivision, land use and development, which will continue to be implemented through rules in the District Plan.

Electricity distribution

The majority of sites identified in the ~~Draft~~ FDS fall within Unison's existing planned growth zones. Some localised upgrades to existing electricity infrastructure will be required and this will be determined based on the timing and extent of residential and industrial development.

Telecommunications

Telecommunications is critical infrastructure providing digital services that support and enable social interaction, entertainment, education, business activities and engagement with Government, medical and emergency services.

The increased height of residential developments and building is increasingly leading to the need to replace existing poles and add new sites. Consideration of the existing telecommunications facilities is important as growth and development occurs to avoid unnecessary relocation of existing infrastructure. Telecommunications networks can be most effectively developed to suit the needs of a growing population by early planning in association with developers and councils.

Social infrastructure

Capacity in primary, intermediate, and secondary school networks across existing urban areas in Napier, Flaxmere and northern neighbourhoods in Hastings is expected to be sufficient to accommodate the growth anticipated in the ~~Draft~~ FDS strategy. There are some potential capacity constraints for primary schools that would service central Hastings, while there are potential constraints to primary, intermediate and secondary schools serving Havelock North. The Ministry of Education will work with schools and communities as growth occurs to ensure the appropriate responses, including new property provision where necessary. Close monitoring on the rates and timing of household growth in these areas will be needed over the life of the FDS to determine if capacity expansions will be required for schools in these locations.

~~The forecast demographic changes and population growth of the Māori population means existing schools may not meet the demand for Māori medium and kaupapa Māori education in Napier and Hastings.~~ While there is growth in the Māori population, the overall school aged population is declining. Mana whenua have expressed aspirations for more kohanga reo, kura kaupapa Māori and wharekura over the next 30 years. ~~Further consideration is required to determine whether existing schools are sufficient to accommodate the future growth and demand for Māori medium and kaupapa Māori schools in Napier and Hastings.~~ The Ministry of Education is working with whānau, hapū and iwi and is expanding capacity at existing Te Kura Kaupapa Māori to meet any demand.

Redevelopment or replacement of the Hawke's Bay Fallen Soldiers Memorial Hospital has been identified in Tranche 2 of Te Whatu Ora / Health NZ's Regional Hospital Redevelopment Programme in response to seismic and capacity issues. Te Whatu Ora / Health NZ is currently (as at July 2024) undertaking a business case assessment.

Public open spaces

Public open spaces are vital for the wellbeing of the community and offer opportunities to gain multiple environmental benefits and help mitigate the effects of climate change.

Both Napier and Hastings have identified existing shortfalls in the provision of public open spaces across the urban area. Potential acquisition of land for use as public open space will need to be considered within existing urban areas to support growth informed by Local Area Plans. The provision of new public open spaces, including playgrounds, in existing urban areas will also be considered as part of master planning/neighbourhood planning of any large-scale developments. Structure planning or master planning being undertaken to inform development in residential greenfield areas will need to include provision for new public open spaces; the size and function of which will be informed by the overall scale of development proposed.

Transport

The strategic transport network provides regionally significant connections for people and freight within and beyond the region via road, rail, air and sea.

Figure 21 shows the key upgrades and committed projects under the Napier and Hastings strategic transport network, which is made up of:

- four-laning the Hawke's Bay Expressway between Napier and Hastings;
- planned service improvements on bus routes as part of the Regional Public Transport Plan 2022-2032;
- key prioritised capital projects as identified in the Regional Land Transport Plan 2024-2034;
- general improvements and upgrades of the existing cycling and walking networks across Napier and Hastings; and
- improvements and upgrades to identified intersections and roads to improve capacity across the Napier and Hastings roading networks.

Four-laning of the Hawke's Bay Expressway will improve capacity along this strategic freight connection to the port and airport, and improve access between existing and proposed areas of residential growth and employment areas.

Proposed increases to bus frequencies on a number of routes will better support transport choice and mode shift in areas where intensification is being enabled. Several high frequency routes will support the larger residential greenfield growth areas, including at the south of Napier, Portsmouth Road (Flaxmere), Kaiapo Road and Lyndhurst Road (Hastings).

Solid waste

Napier City and Hastings District Councils manage solid waste through a Joint Waste Management and Minimisation Plan, which is currently being reviewed. Omarunui Landfill serves both councils, receiving waste from the three refuse transfer stations at Henderson's Road, Redclyffe and Blackbridge, as well as kerbside waste and commercial and industrial waste. The new plan, Te Rautaki Para Waste Strategy, is expected to place more emphasis on achieving a low emissions and low waste society, built upon a circular economy, by 2050. New development needs to provide for operational needs for waste collection, transportation and resource recovery infrastructure when sites are being developed.

Nationally and regionally significant infrastructure

It is important that future urban development is appropriately located so that the safe and efficient development, operation and maintenance of nationally and regionally significant infrastructure is not compromised now or in the future. Careful consideration also needs to be given to protecting communities' health and safety and amenity values when planning for urban activities in proximity to nationally and regionally significant infrastructure.

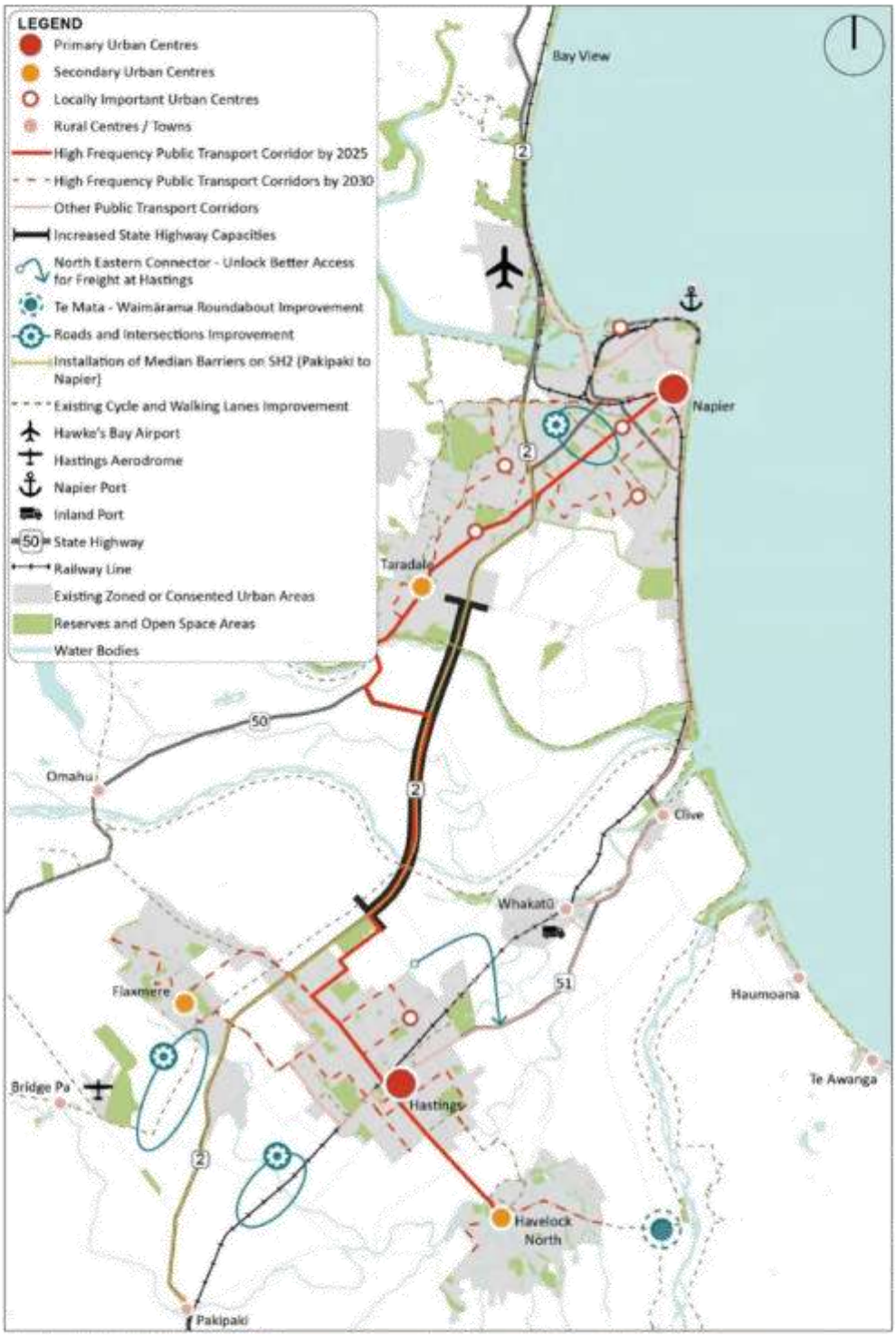
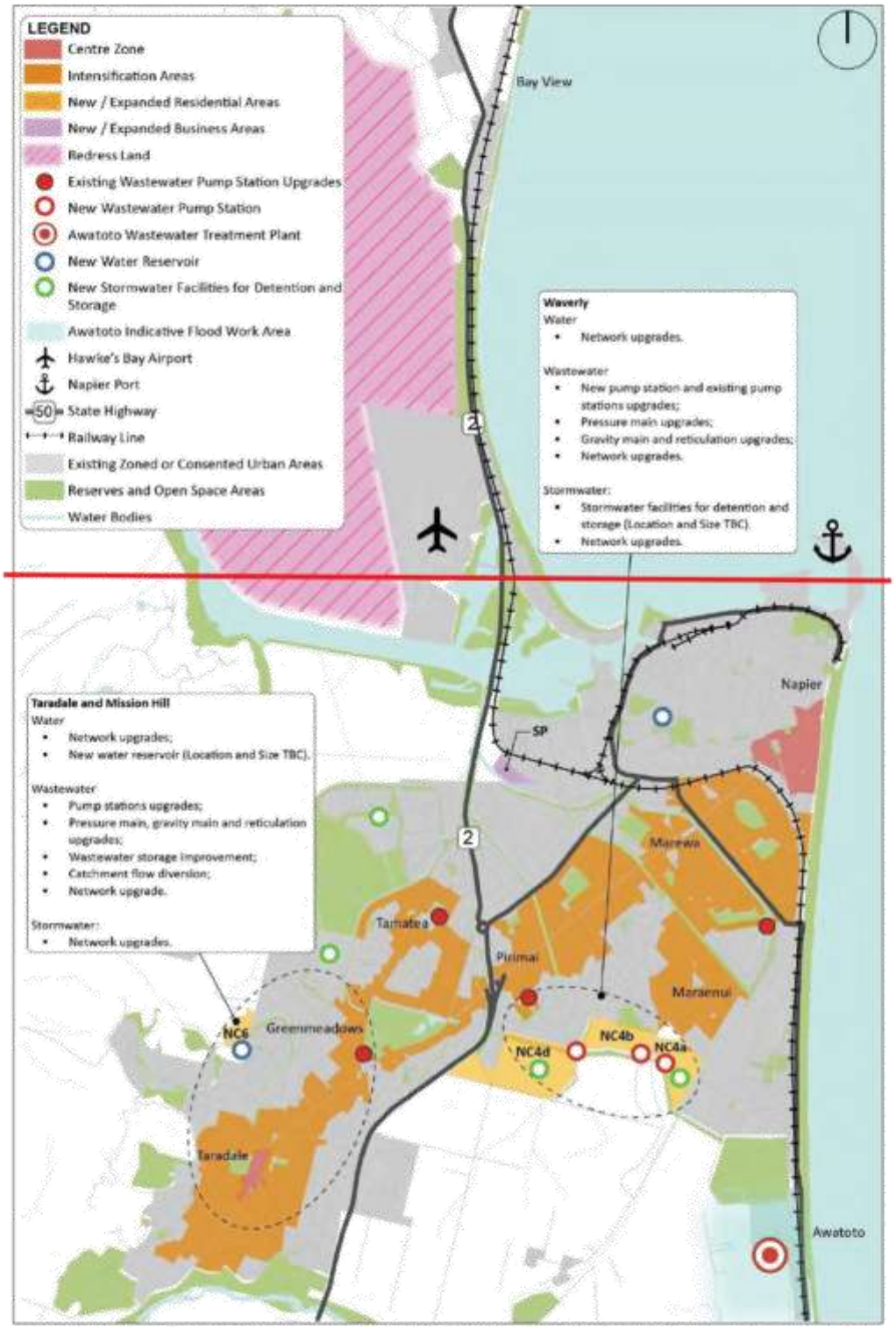


Figure 21 ~~Draft~~ Future Development Strategy – Transport Upgrades


LEGEND
Centre Zone
Intensification Areas
New / Expanded Residential Areas
New / Expanded Business Areas
Redress Land
Existing Wastewater Pump Station Upgrades
New Wastewater Pump Station
Awatoto Wastewater Treatment Plant
New Water Reservoir
New Stormwater Facilities for Detention and Storage
Awatoto Indicative Flood Work Area
Hawke's Bay Airport
Napier Port
50 State Highway
Railway Line
Existing Zoned or Consented Urban Areas
Reserves and Open Space Areas
Water Bodies
Bay View
Waverly
Water
Network upgrades.
Wastewater
New pump station and existing pump stations upgrades;
Pressure main upgrades;
Gravity main and reticulation upgrades;
Network upgrades.
Stormwater:
Stormwater facilities for detention and storage (Location and Size TBC).
Network upgrades.
Taradale and Mission Hill
Water
Network upgrades;
New water reservoir (Location and Size TBC).
Wastewater
Pump stations upgrades;
Pressure main, gravity main and reticulation upgrades;
Wastewater storage improvement;
Catchment flow diversion;
Network upgrade.
Stormwater:
Network upgrades.
Napier
SP
Marewa
Tamatea
Pirimai
Maraenui
NC6
Greenmeadows
NC4d
NC4b
NC4a
Taradale
Awatoto
2
2

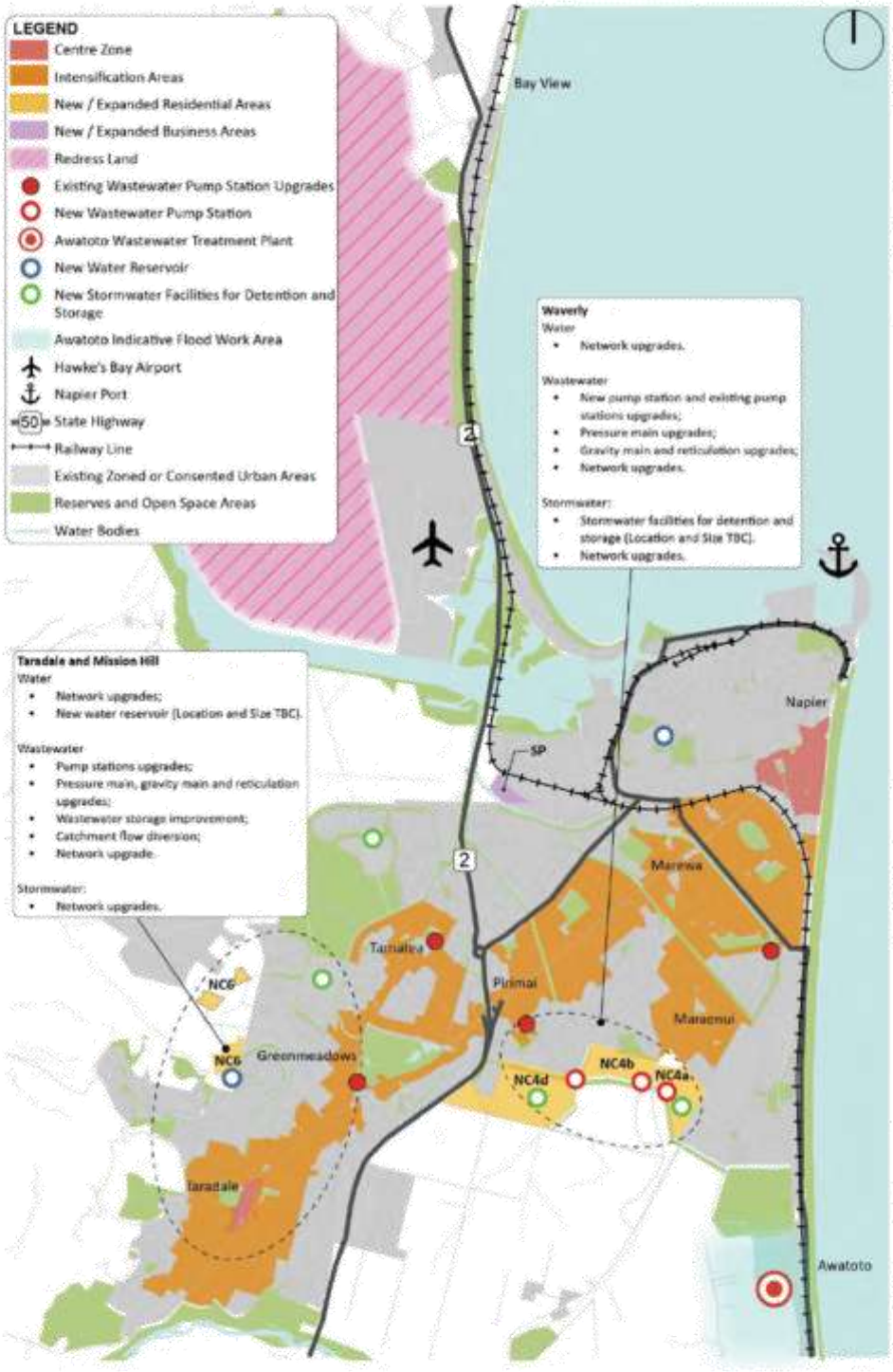
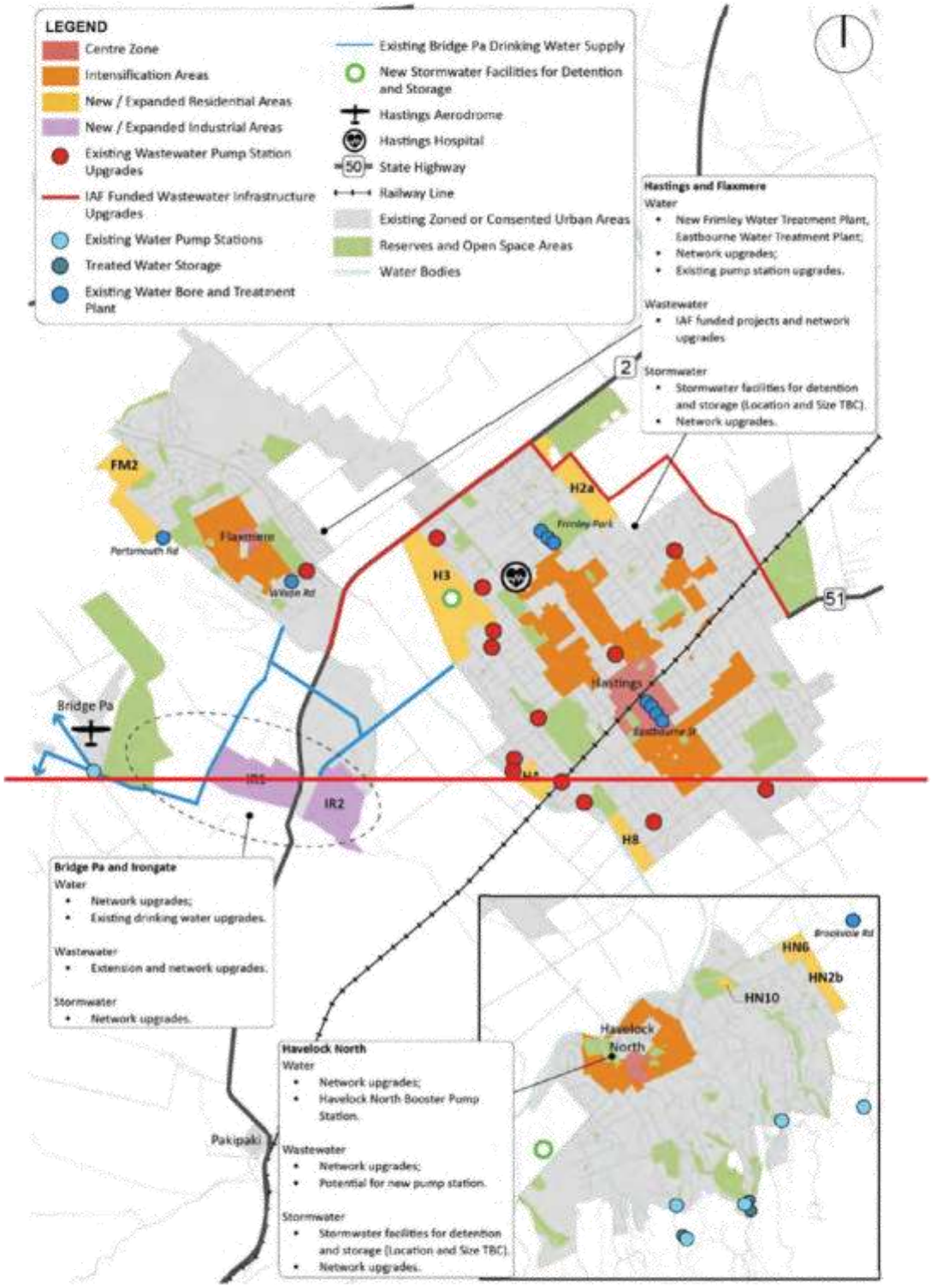


Figure 22 ~~Draft~~ Future Development Strategy – Napier 3 Waters Upgrades


LEGEND
Centre Zone
Intensification Areas
New / Expanded Residential Areas
New / Expanded Industrial Areas
Existing Wastewater Pump Station Upgrades
IAF Funded Wastewater Infrastructure Upgrades
Existing Water Pump Stations
Treated Water Storage
Existing Water Bore and Treatment Plant
Existing Bridge Pa Drinking Water Supply
New Stormwater Facilities for Detention and Storage
Hastings Aerodrome
Hastings Hospital
State Highway
Railway Line
Existing Zoned or Consented Urban Areas
Reserves and Open Space Areas
Water Bodies
Hastings and Flaxmere
Water
New Frimley Water Treatment Plant, Eastbourne Water Treatment Plant;
Network upgrades;
Existing pump station upgrades.
Wastewater
IAF funded projects and network upgrades
Stormwater
Stormwater facilities for detention and storage (Location and Size TBC).
Network upgrades.
Bridge Pa and Irongate
Water
Network upgrades;
Existing drinking water upgrades.
Wastewater
Extension and network upgrades.
Stormwater
Network upgrades.
Havelock North
Water
Network upgrades;
Havelock North Booster Pump Station.
Wastewater
Network upgrades;
Potential for new pump station.
Stormwater
Stormwater facilities for detention and storage (Location and Size TBC).
Network upgrades.
FM2
H2a
H3
H8
IR1
IR2
HN6
HN2b
HN10
Bridge Pa
Flaxmere
Hastings
Havelock North
Pakipaki
2
51

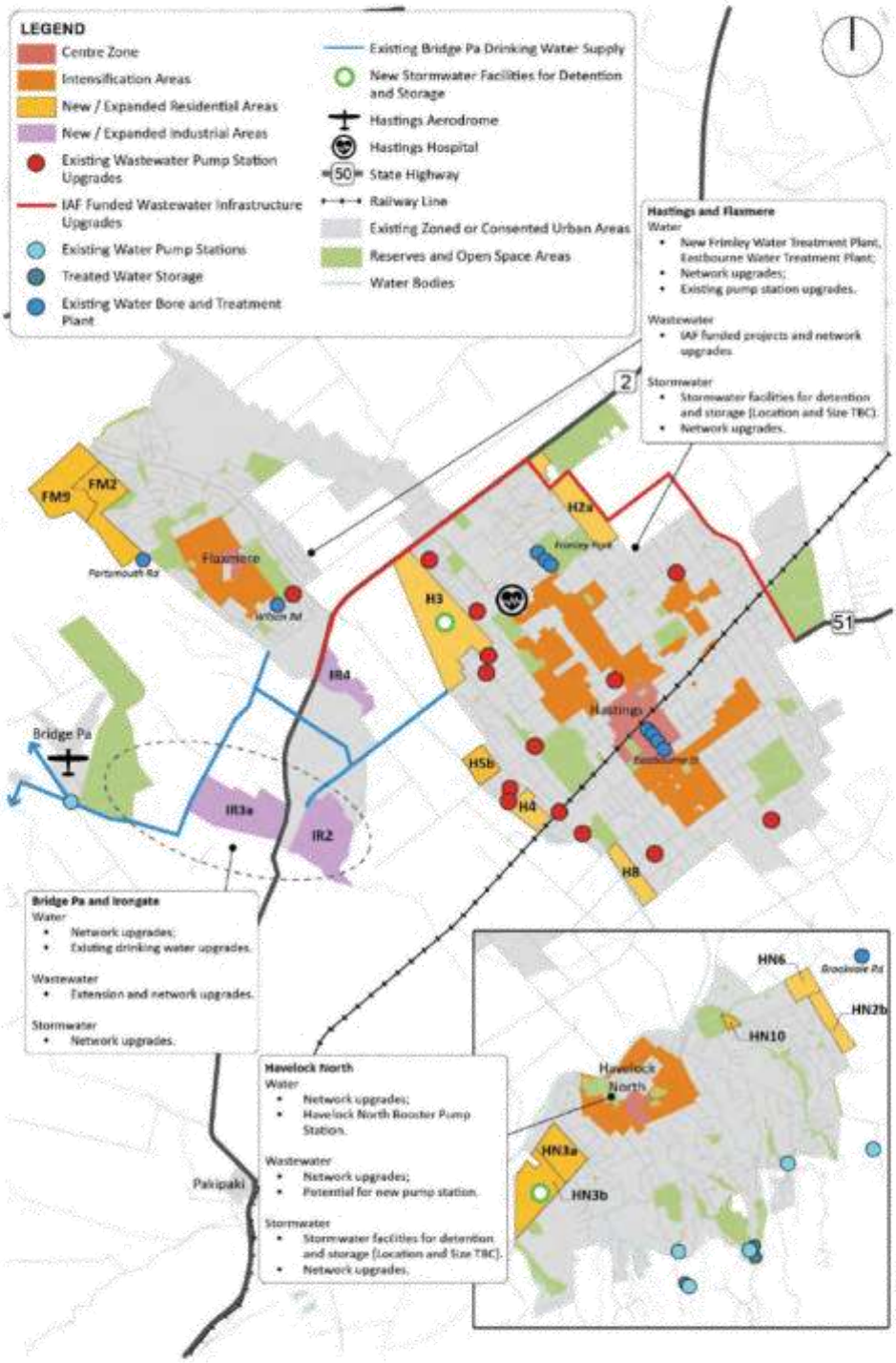


Figure 23 ~~Draft~~ Future Development Strategy – Hastings 3 Waters Upgrades

10.12 Staging/prioritisation

It is important to prioritise how and where Napier and Hastings grows over time to achieve a compact urban form. This will assist to focus councils' investment priorities and ensure the capacity provided meets housing needs and supports efforts to promote redevelopment within the existing urban area.

Figure 24 and **Table 4** below set out how the ~~Draft~~ FDS intends to stage development capacity to meet demand over the short, medium and long term across the FDS area. This is particularly important given the longer lead-in times and significant investment required to structure plan, rezone, plan and fund the infrastructure required to support new greenfield opportunities.

The ~~Draft~~ FDS staging is as follows.

- **Short-Long term**: Prioritise supporting redevelopment within the existing urban area from the short term onwards. These areas are currently being rezoned and the partner councils will need to support the level of development enabled with significant infrastructure planning and investment over time.
- **Short-medium term**: Prioritise supporting greenfield development within the existing urban area that is live zoned and progressing through the consenting and development process.
- **Medium-long term**: Identify greenfield areas at Kaiapo Road, Lyndhurst, Mission Estate and the Oderings site where some active planning work is currently being undertaken.
- **Long Term**: Identify other greenfield areas not currently zoned as long-term priorities. These areas may proceed earlier where infrastructure funding solutions are available, and the development would meet demand and support efforts to promote redevelopment in the existing urban area.

The ~~Draft~~ FDS provides sufficient capacity to meet the projected demand for new intensified housing types across Napier and Hastings. In the short-to-medium term there is more than sufficient capacity already zoned to meet demand. In the long term, there is ~~a slight shortfall in greenfield~~ also sufficient capacity ~~however there is sufficient capacity~~ enabled over the full 30-year horizon of the ~~Draft~~ FDS. The partner councils will also work with mana whenua to prioritise residential and papakāinga development as much as possible over the life of the ~~Draft~~ FDS.

Table 4 – Sufficiency of housing development capacity to meet demand

	Short Term	Medium Term	Long Term
Demand for redevelopment in the existing urban area	8,840		
Redevelopment Capacity	9,910 (+1,070)		
Greenfield Demand	3,770		3,710
Greenfield Capacity	4,310 4,605 (+540 +835)		3,880 4,720 (+170 +1,010)

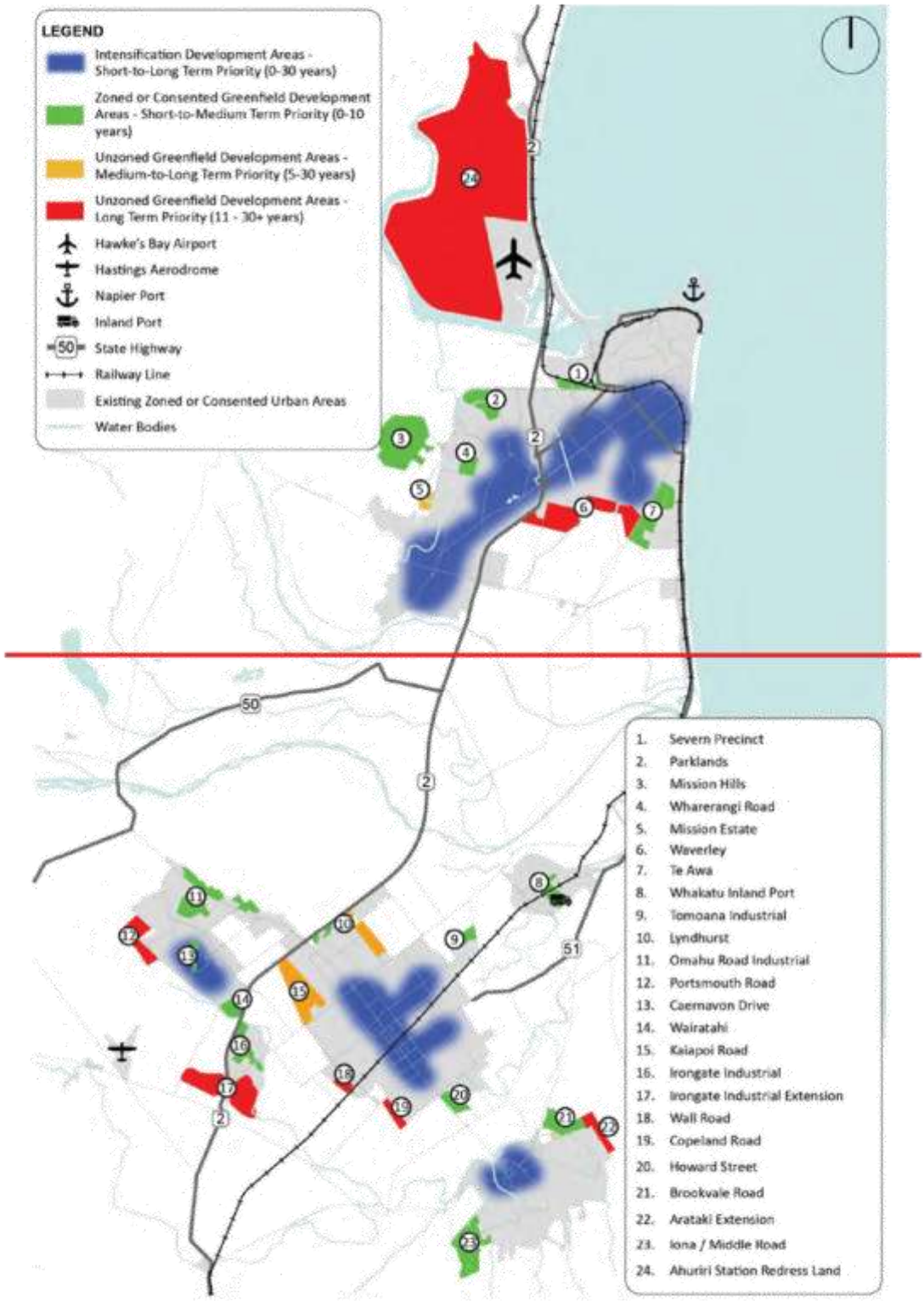
Future policy changes

In early July 2024 the Government announced its intention to amend the RMA and NPS-UD to require councils to live-zone 30 years of development capacity and plan for a 50-year period and a high growth scenario. The Government has also foreshadowed it will be making changes to how infrastructure is provided and incentives for councils and developers. These changes will not be introduced until 2025, consequently, the final form of those amendments is unknown and have therefore not informed the ~~Draft~~ FDS. Until there is greater clarity, the ~~Draft~~ FDS recommends that the partner councils be cautious about releasing too much greenfield land, which could undermine efforts to promote redevelopment in existing urban areas, increase pressure to zone scare highly productive land, and stretch financial resources.

Responsive planning

Both Napier and Hastings councils will need to be responsive to landowners wanting to bring forward areas for development through a plan change, should the development be required to meet changes in demand.

When reviewing any proposal to bring forward development, the scale of the opportunity and the ability of the proposal to deliver on the FDS vision and objectives will need to be considered. In addition, the impacts on the planned and funded programme for infrastructure delivery will need to be considered. Where significant changes from this would be required to enable development, developer-funded infrastructure and/or alternative funding arrangements (e.g. Crown infrastructure financing) will be needed before development can proceed. It will also be relevant to consider whether the proposal will support and reinforce the councils' efforts to promote redevelopment in the existing urban area.


LEGEND
Intensification Development Areas - Short-to-Long Term Priority (0-30 years)
Zoned or Consented Greenfield Development Areas - Short-to-Medium Term Priority (0-10 years)
Unzoned Greenfield Development Areas - Medium-to-Long Term Priority (5-30 years)
Unzoned Greenfield Development Areas - Long Term Priority (11 - 30+ years)
Hawke's Bay Airport
Hastings Aerodrome
Napier Port
Inland Port
State Highway
Railway Line
Existing Zoned or Consented Urban Areas
Water Bodies
1. Severn Precinct
2. Parklands
3. Mission Hills
4. Whareranga Road
5. Mission Estate
6. Waverley
7. Te Awa
8. Whakatu Inland Port
9. Tomoana Industrial
10. Lyndhurst
11. Omahu Road Industrial
12. Portsmouth Road
13. Caernavon Drive
14. Wairatahi
15. Kaiapoi Road
16. Irongate Industrial
17. Irongate Industrial Extension
18. Wall Road
19. Copeland Road
20. Howard Street
21. Brookvale Road
22. Arataki Extension
23. Iona / Middle Road
24. Ahuriri Station Redress Land

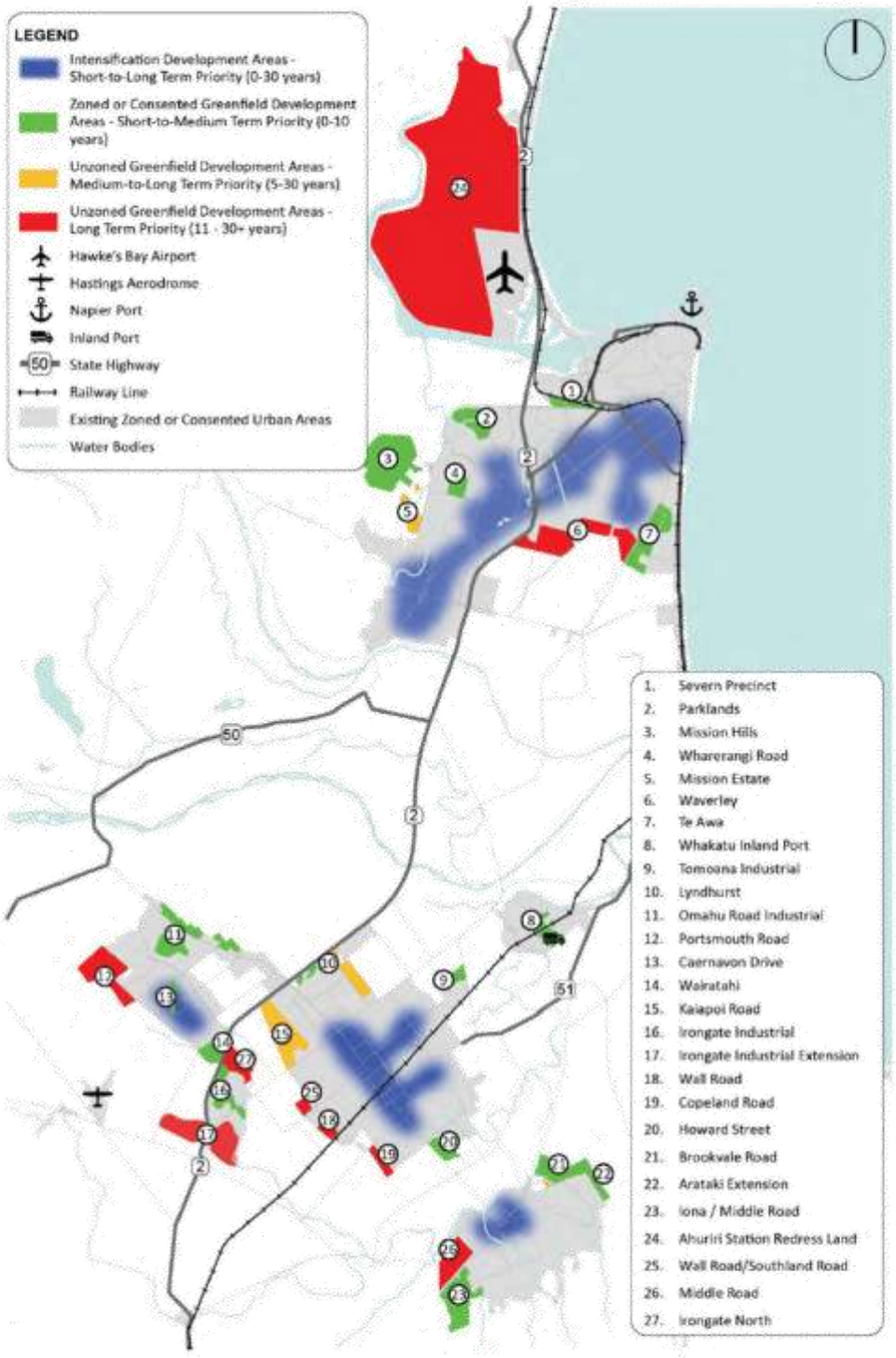


Figure 24 ~~Draft~~ Future Development Strategy Development Staging

Tables 5 and **6** provide a breakdown of development capacity over time for Napier and Hastings. Generally, sufficient development capacity has been provided across both Napier and Hastings to meet long-term housing demand. ~~In achieving this, the Draft FDS has taken an overs/unders approach to meeting the short, medium- and long-term requirements.~~

Table 5 – Sufficiency of housing development capacity in Napier to meet demand

	Short Term	Medium Term	Long Term
Intensification Development Demand	3,620		
Intensification Development Capacity	4,070 (+450)		
Greenfield Development Demand	1,610		1,470
Greenfield Development Capacity	2,185 (+575)		2,320 (+850)
Total Sufficiency of Greenfield Residential Development			+1,425

Table 6– Sufficiency of housing capacity in Hastings to meet minimum development targets

	Short Term	Medium Term	Long Term
Intensification Development Demand	5,220		
Intensification Development Capacity	5,840 (+620)		
Greenfield Development Demand	2,160		2,240
Greenfield Development Capacity	~~2,125~~ 2,420 (~~-35~~ +260)		~~1,560~~ 2,400 (~~-680~~ +160)
Total Sufficiency of Greenfield Residential Development			~~-715~~ +420

11. Implementation

The ~~Draft~~ FDS is a long-term strategic document with a 30-year view of growth and development, and it is acknowledged that it cannot be delivered all at once.

The FDS, once finalised, will be delivered jointly by Napier City Council, Hastings District Council and Hawke's Bay Regional Council, in partnership with iwi and hapū, and in collaboration with Government, non-government organisations, businesses and community groups.

11.1 Implementation plan

To achieve the FDS vision and strategic objectives, and deliver the growth and development set out the ~~Draft~~ FDS, a number of actions will need to be implemented throughout the life of the finalised document (and any subsequent updates). Many of these actions will be delivered through other statutory and non-statutory council processes, including reviews of the regional policy statement and district plans, structure planning, long-term planning and regional transport planning. The recommendations contained in the Hawke's Bay Independent Flood Review Panel's July 2024 Report will be considered in developing the implementation plan, as well as in future reviews of the FDS.

A supporting implementation plan will sit alongside the FDS as a roadmap for the actions required to implement the FDS, including those relating to strategic and statutory planning, advocacy and research, other initiatives and infrastructure investment. It also includes details of who is responsible for delivering each action, as well as supporting agencies and organisations. This plan will be a live document that will be reviewed and updated annually with those involved, as required by the NPS-UD. New actions can be added to the Implementation Plan should the need arise for this in the future.

Development of the implementation plan is a non-statutory process to ensure it will be flexible enough to respond to changing circumstances on the ground. It will involve engagement with a range of stakeholders and local communities will be kept up to date with progress. The actions will be informed by the strategic objectives that guide the FDS, which will provide a framework for prioritising actions over the short, medium and long term.

Joint working group

The FDS is a joint document between the partner councils, Maungaharuru-Tangitū Trust, Mana Ahuriri Trust and Tamatea Pōkai Whenua and implementing it will require a coordinated approach to decision-making.

The ~~Draft~~ FDS recommends retaining the FDS Joint Committee in some form to guide decision-making on the implementation plan to ensure actions are coordinated across the partner councils. This will be supported by a cross-council FDS implementation working group involving Maungaharuru-Tangitū Trust, Mana Ahuriri Trust and Tamatea Pōkai Whenua, key Government agencies and infrastructure providers.

Future planning processes

The FDS is a high-level strategic plan and we need to work through a number of steps before development happens in new greenfield areas.

Planning processes

1. Structure planning (an integrated land use and infrastructure plan)
2. District Plan Change for rezoning
3. Resource consents for development
4. Build

Infrastructure processes

1. Planning, design and funding supporting infrastructure
2. Designation and consents
3. Build

Undertaking structure planning and rezoning can be a council-led or a developer-led process progressed under the Resource Management Act 1991.

The process for supporting redevelopment in an existing urban area is slightly different as development is already enabled. The planning processes are therefore focussed on working with communities on **Local Area Plans** (or similar) to determine the future form and function of existing neighbourhoods, setting out how they will change over time and what amenities and infrastructure are needed to support growth. These plans, and other network planning will inform infrastructure planning processes, including development contributions or financial contributions and other funding allocation through the Long-Term Plans and Annual Plans.

The Government has signalled its intent to progress city and regional deals with councils. These are long-term agreements that set agreed regional outcomes and set out joint funding commitments. This provides an opportunity to help fund the significant infrastructure investment required to support growth in the long term. This opportunity will be explored through the Implementation Plan process.

11.2 Monitoring and review

The NPS-UD requires the FDS to be regularly reviewed and, if needed, updated every three years in time to inform the Long-term Plan processes of each partner council. At a minimum, there is a requirement to refresh and develop a new FDS every six years.

The next Housing and Business Capacity Assessment will be undertaken in 2026, which will involve an update of the outlook for residential and business demand and capacity. This will include an analysis of mana whenua housing needs. This will inform a review of the FDS in late-2027, early-2028.

12. Appendix to the Napier Hastings FDS 2025-2055

12.1 HPUDS strategic direction for Coastal and Rural Settlements

12.2 Preamble

The purpose of the FDS is to set out how the Councils will achieve well-functioning urban environments in its existing and future urban areas and show the broad locations within which development capacity will be provided in those areas to meet demand. To do this, the FDS has a strong focus on the urban areas of Napier and Hastings. Consequently, the FDS does not address rural residential growth in surrounding coastal and rural settlements.

Prior to the FDS, the Councils jointly prepared the Heretaunga Plains Urban Development Strategy (HPUDS) which was first adopted in 2010 and then reviewed in 2017. HPUDS included high level strategic direction for coastal and rural settlements and had a broader geographic Study Area than the FDS – stretching from Waipatiki in the north, Maraekakaho and Te Aute to the west/south-west and Waimarama to the east).

Because the FDS replaces HPUDS, the strategic direction for coastal and rural settlements from HPUDS 2017 is set out below as an Appendix to the FDS. Also included are the relevant maps from HPUDS 2017. This ensures that the strategic direction remains in place until such time as it is superseded by a Rural Residential Strategy or similar.

The strategic direction set out below is high level and was adopted in 2017. Our rural and coastal communities have changed and evolved since then, so too has our understanding of environmental factors and limitations. The strategic direction imported from HPUDS 2017 into this Appendix does not account for changes in policy direction or the environment that have occurred since 2017, for example, the effects of Cyclone Gabrielle on affected rural communities, infrastructure and the environment.

12.3 Coastal Settlements - Interim Strategic Direction

Waipatiki Beach

Waipatiki Beach is located approximately 45 minutes travelling distance north of Napier City and is a popular beach for day trippers and campers. The Hastings Coastal Strategy identifies it as a bach settlement and provides for modest growth in recognition of its high levels of natural amenity. This growth has largely been undertaken and no additional growth should be undertaken in the period 2015-2045 in recognition of its relatively remote location and to protect the scale and natural character of the settlement.

Tangoio Beach

Tangoio Beach previously housed a number of original baches located on the foreshore reserve. These were removed in the mid 2000s. The area is also in a flood hazard zone of the Te Ngarue Stream and in an area of high landscape and natural character values. An area

of land capable of containing 30-40 new baches was rezoned in 2008 as a result of a private plan change. District Plan rules relating to the new zoning require flood mitigation, an effluent treatment system and tight building and design controls to protect a coastal bach settlement character. Due to the aforementioned development constraints there is no additional growth outside of the newly rezoned land proposed over the HPUDS 2015-2045 timeframe.

Whirinaki Beach

Whirinaki Beach is located approximately 5 km north of Bay View. It is an established coastal settlement located between State Highway 2 and the coast and is adjacent to the Pan Pac Pulp Mill and Contact Energy's electricity generation site. There were limited water supply services, but those could be overcome by expansion of HDC's Esk/Whirinaki water supply scheme. While this allows Whirinaki to be removed from the 'inappropriate' list in HPUDS2017, there is insufficient basis or need at this time to include all or part of it as an appropriate residential greenfield growth area (or reserve area) as part of the HPUDS Settlement Pattern.

Haumoana

Haumoana is a popular coastal settlement located approximately 9km east of Hastings. The settlement is low lying and parts of it have been subject to flooding coastal inundation, and coastal erosion. Infrastructure limitations and topographical considerations generally make the settlement unsuitable for further growth. There is however a small area of land located off the southern side of East Road and contiguous to the existing Coastal Residential Zone and close to the Suburban Commercial Zone off Clifton Road, that is free of flooding and coastal hazard constraints and suitable for residential growth.

There is also an area of approximately 20ha on the corner of Raymond Road/Parkhill Road opposite the Haumoana School on 'Ruataniwha f' soils (also described as 'Waipukurau 30' soils), free of flooding and coastal hazard restraints that could be suitable for coastal growth choices. This would be subject to further assessment through the proposed Masterplan process to commence after the completion of the Clifton – Tangoio Coastal Hazards Strategy. This assessment would include matters such as:

- The productive versatility of this area and the Ruataniwha f soil type;
- Reverse sensitivity with nearby horticultural/viticultural and poultry farm activities; and
- Appropriateness in terms of contributing to the Haumoana / Te Awanga development options as part of the HPUDS preferred settlement pattern.

Te Awanga

Te Awanga is situated approximately 2 km to the south of Haumoana. For the most part it is not as low lying as Haumoana and as such is better suited as a growth option to provide for that segment of the market seeking a coastal location. There are however a number of issues that point to any growth being limited in this area. This includes land use compatibility with the area being a valued viticulture area. The landscape in this area also has special qualities. Any

future growth must be away from coast in recognition of climate change and the potential for coastal erosion.

Clifton

Clifton is the gateway to Cape Kidnappers and settlement is limited to the long established camp ground at the site. The area is severely affected by coastal erosion and no development should be permitted in recognition of the coastal hazard and natural character issues.

Ocean Beach

Ocean Beach is recognised by the wider community as a natural coastal environment of significance. Previous development proposals at Ocean Beach were met with considerable resistance from the community as result of the effect on the landscape quality of the area. There are also considerable infrastructure issues for any development at this location. Notwithstanding the Resource Management Act merits or otherwise of urban development at Ocean Beach, the Hastings District Council's preference is that there be no subdivision and development for residential or other significant development activities on the Haupouri Flats, including around and north of the Haupouri Woolshed area. Accordingly, it is not proposed to encourage or facilitate further housing development at Ocean Beach beyond the existing Waipuka settlement and consideration should be given to appropriate mechanisms for retaining this value for future generations. Accordingly, no allocation of projected demand has been made for Ocean Beach.

Waimarama

The Hastings Coastal Environment Strategy recommended that provision be made for future growth at Waimarama. The natural coastal character of Waimarama has already been impacted on by the existing level of development.

It is recommended that in order to provide for a range of living environments, low level growth be provided for at Waimarama. This is contingent on planning for infrastructure as the water supply is already fully committed and the surface waters in the area are sensitive to any development. The settlement may also provide an opportunity for further holiday home development once servicing constraints are overcome and depending upon demand this should be considered in the planning for Waimarama.

12.4 Rural Settlements - Interim Strategic Direction

Bay View

Bay View is located approximately 10km north of Napier City and has been a popular alternative to suburban living. Bay View is characterised by large sites and this is due to the area not previously being serviced. Since becoming part of Napier City in 1989 a water supply has been provided but this has placed additional strain on the onsite wastewater systems upon which the community relies. There is a proposal for a serviced wastewater system with cost implications for residents. In order to provide residential choice growth of the area is

recommended at a low level to recognise the infrastructure limitations which include development adjacent to the State Highway. This growth must be sequenced to occur when the servicing issues are resolved.

Puketapu

Puketapu was identified in the Hastings Low Density Strategy as a potential growth option. While the area is located in relatively close proximity to both Napier and Hastings there are parts of the settlement that are susceptible to flooding and servicing in the long term would be problematic. It is recommended that no further growth be provided for due to the natural character of the area and servicing issues.

Clive

The Clive Development Strategy which was undertaken in 2002 looked at the servicing aspects of future growth to ascertain the potential for future development. Stormwater is the major issue for Clive and a number of sites were identified for future growth that were outside the potential flood hazard areas. Since that time these sites have largely been developed. There has been no stormwater upgrading and therefore it is recommended that no growth be provided for in Clive due to stormwater servicing issues, apart from some smaller parcels in Clive South where stormwater effects can be managed on site. Maraekakaho Settlement

In considering the future of the Maraekakaho settlement consideration was given to a number of factors. It has an existing level of settlement and established social infrastructure including a school. The area is popular in the market but this must be balanced against the energy efficiency principles with the settlement located some distance from the main employment opportunities in Hastings. Previous flood hazards have been mitigated. However constraints around access to water are recognised and will need to be resolved. Maori have reservations about development west of Bridge Pa due to potential effects on the aquifer.

Overall it is recommended that low level growth be provided at Maraekakaho to ensure that there is rural settlement choice for Hastings.

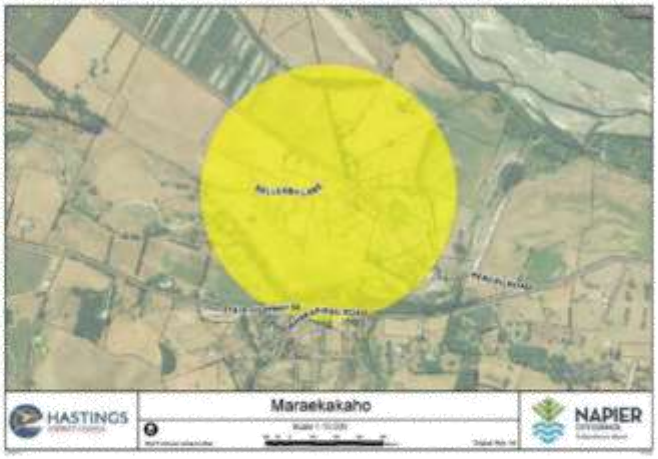
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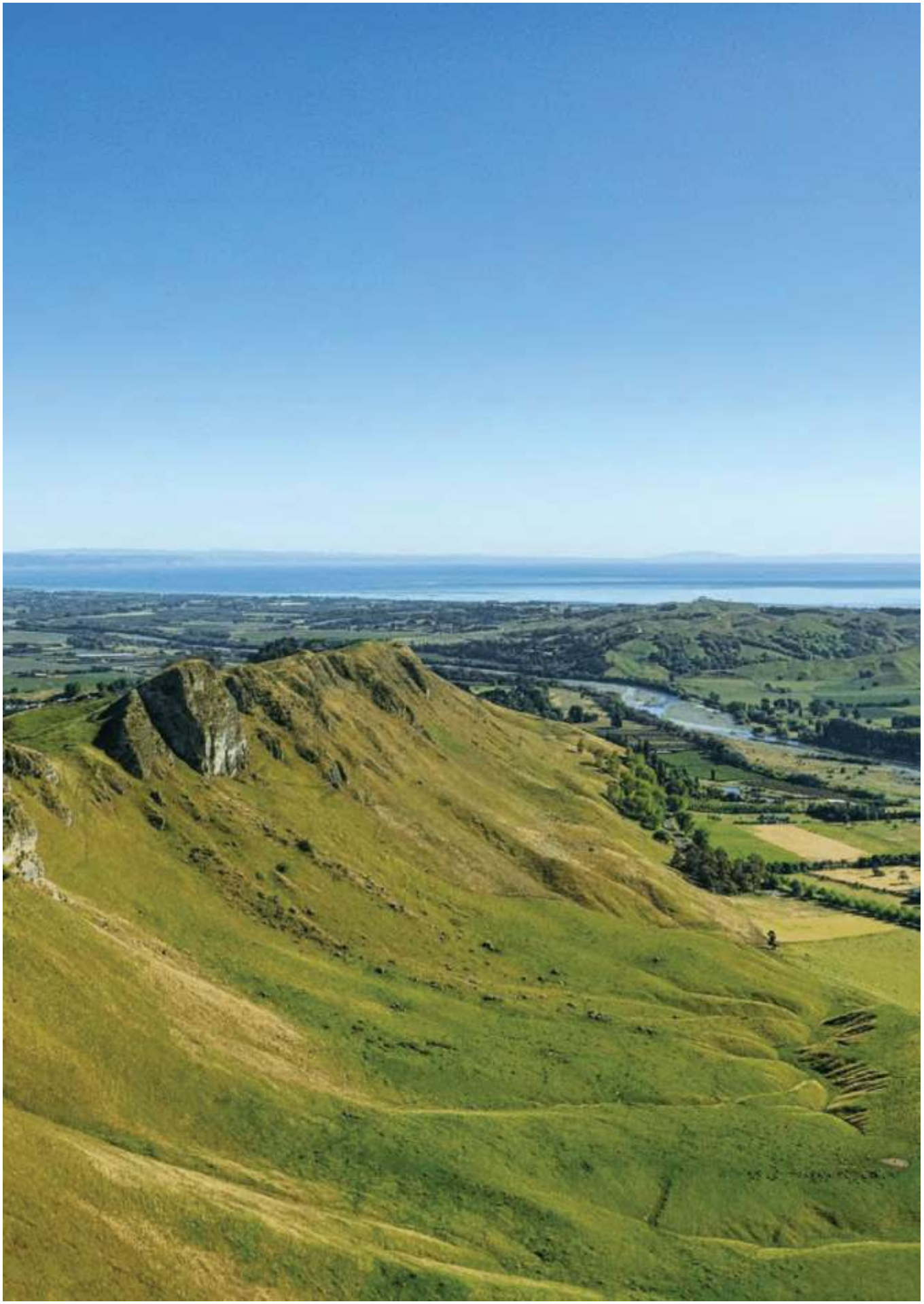





HASTINGS
Haumoana
NAPIER


HASTINGS
Maraekakaho
NAPIER


HASTINGS
Waimarama
NAPIER



Recommendations of the Independent Hearings Panel to the Future Development Joint Committee on the Napier-Hastings Future Development Strategy

9 May 2025

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Glossary

The following table sets out some of the acronyms and abbreviations frequently used in this report.

Acronym / abbreviation	Meaning
FDS	Future Development Strategy
FDS Advisors	The Technical Advisory Group comprised of professional experts and advisors from Napier City Council, Hastings District Council and Hawke's Bay Regional Council as well as technical advisors from Tamatea Pōkai Whenua, Mana Ahuriri Trust and Maungaharuru-Tangitū Trust
HBAL	Hawke's Bay Airport Ltd
HBRC	Hawke's Bay Regional Council
HDC	Hastings District Council
HDP	Hastings District Plan
Hearing Report	Napier Hastings FDS Report for Hearings Panel on submissions to the Draft FDS dated 14 March 2025
HPL	Highly Productive Land
HPUDS	Heretaunga Plains Urban Development Strategy 2017
IHP / the Panel	Independent Hearings Panel
Joint Committee	The Napier-Hastings Future Development Strategy Joint Committee, being a partnership of Hastings District, Napier City and Hawke's Bay Regional Councils and Maungaharuru Tangitū Trust, Mana Ahuriri Trust and Tamatea Pōkai Whenua.
LGA	Local Government Act
LTP	Long Term Plan
LUC	Land Use Capability, derived from the NZLRI
MAT	Mana Ahuriri Trust
MCA	Multi-Criteria Analysis
MTT	Maungaharuru Tangitū Trust
NCC	Napier City Council
NDP	Napier City District Plan
NES	National Environmental Standards
NHC	Natural Hazards Commission
NKII	Ngati Kahungunu Iwi Incporporated
NPS	National Policy Statement
NPS-HPL	National Policy Statement for Highly Productive Land 2022
NPS-UD	National Policy Statement on Urban Development 2020
NZLRI	New Zealand Land Resource Inventory
Reply Report	Napier Hastings FDS Report for Hearings Panel on submissions to the Draft FDS Officer Reply dated 4 April 2025
RMA / the Act	Resource Management Act 1991
RPS	Hawke's Bay Regional Policy Statement
TPW	Tamatea Pōkai Whenua

The Councils	Hastings District Council, Napier City Council and Hawke's Bay Regional Council

1. Executive Summary

1. Having considered the submissions received, the Independent Hearings Panel (IHP or Hearings Panel) has recommended several changes to the draft FDS. Most of those changes were recommended to us by the professional experts and advisors representing Napier City Council, Hastings District Council and the Hawke's Bay Regional Council and Tamatea Pōkai Whenua (TPW), Mana Ahuriri Trust (MAT) and Maungaharuru-Tangitū Trust (MTT) (FDS Advisors).

2. Our more substantive recommended changes to the draft FDS include:
   (a) A new section 4.3 on cross-boundary relationships
   (b) References to the Hawke's Bay Independent Flood Review Report recommendations in respect to natural hazard data collection and Regional Policy Statement and district plan reviews
   (c) Amendments to section 6 to address redress land and papakāinga
   (d) Amendment to the strategic objectives in section 7 to amend objective 10 and include a new objective relating to nationally and regionally significant infrastructure
   (e) Reference to latent demand and that there may be a shortfall in wet industry in the long term in section 8
   (f) Amend the constraints identified in Figure 13 to include areas for the safe operation and functional needs of nationally and regionally significant infrastructure
   (g) Amend section 10 to address that growth area boundaries shown in the FDS are indicative only and why small sites have not been included
   (h) Amend table 2 in section 10 to include the additional capacity identified for the Hastings District
   (i) Inclusion of Middle Road (HN3a and HN3b), Wall Road (HN3b) and FM9 Portsmouth Road, Flaxmere as new Residential Greenfield Development Areas in Table 3, and include the additional land at the Mission Estate
   (j) Include Irongate North as a new industrial area in section 10
   (k) Include reference in section 10 about a potential shortfall in development capacity for wet industry and the approach to be taken if this eventuates
   (l) Amend 10.6 to reference a carry-over of the strategic direction for coastal and rural settlements from HPUDS in an appendix, including maps, until such time as a Rural Residential Strategy is promulgated
   (m) New paragraph in section 10.11 to reference the importance of the operational and functional needs of nationally and regionally significant infrastructure,
   (n) Amend section 10.11 to say that stormwater solutions may occur out of identified growth areas and reference specific Māori education demands
   (o) Include new sections in 10.11 on solid waste and nationally and regionally significant infrastructure
   (p) Amend table 6 to reference additional greenfield capacity and remove reference to an "overs/unders" approach.

3. Other than for the matters listed above, we do not recommend any substantial changes to any 'spatial' components of the FDS are recommended.

4. Our recommendations are to be considered by the Napier-Hastings Future Development Strategy Joint Committee, with final decisions made by the Councils.

2. Introduction

Draft Future Development Strategy 2025-2055

5. Hastings District Council, Napier City Council, Hawke's Bay Regional Council (the Councils) and iwi Post-Settlement Groups (Maungaharuru Tangitū Trust, Mana Ahuriri Trust and Tamatea Pōkai Whenua) (the Joint Committee) jointly developed the draft Napier-Hastings Future Development Strategy (FDS).

6. The Councils' website sets out the following in respect to the purpose of the FDS:

> *The FDS will guide the location of urban, industrial and commercial development in the two districts over the next 30 years. It is a requirement of the Government's National Policy Statement – Urban Development. The FDS replaces the Hastings and Napier's long-standing Heretaunga Urban Development Strategy prepared by the councils in 2010 and updated in 2017.*
>
> *The FDS will ensure development areas are available to meet projected residential and business needs, while protecting the region's highly productive soils, freshwater and natural environments, and sites and areas of significance to Māori. It also addresses the challenges natural hazards, including the affects posed by climate change, will have on development. The development constraints include flood risk information gathered post-Cyclone Gabrielle (2023). It will allow us to plan and deliver the necessary infrastructure to support growth.*
>
> *Land identified for development in the FDS will still need to go through Resource Management Approval and Building Consent processes, which will address issues specific to a site and any mitigations proposed.*
>
> *It is also of note that all areas included in the plan are private property, so decisions on whether or not to develop those areas will be made by the owners of the properties. The councils will consider the public infrastructure required to enable these developments during their Long-term Plan and Annual Plan deliberations*[1].

7. In summary, a FDS is a high-level strategic guidance document that broadly shows how the Councils intend to achieve a "well-functioning urban environment", as required by the National Policy Statement on Urban Development 2020 (NPS-UD), and confirms that

[1] https://www.hastingsdc.govt.nz/hastingsnapierfuturedevelopment/

they have identified the general location and opportunities for how sufficient development capacity to meet future growth needs over the next 30 years will be provided. The FDS will inform the Council's planning and infrastructure investment decisions and be implemented through an Implementation Plan (which does not form part of our recommendations) and other relevant plans and strategies. These include the Hawke's Bay Regional Policy Statement, the Napier City District Plan, the Hastings District Plan, and the Councils' Long Term Plans (LTPs) and Annual Plans.

8. We also record our acknowledgement that section 3.16(1) of the NPS-UD requires every tier 1 and tier 2 local authority to "regularly review its FDS to determine whether it needs updating, and the review must be done in time to inform the next long-term plan (i.e. every 3 years)". This presents an opportunity on a regular basis to review, adjust and incorporate additional land areas or amend the approach to intensification as may be required and appropriate. Aside from the separate RMA opportunities that exists immediately through plan change and resource consent processes, this also means that this current FDS process does not foreclose options for requested areas to be included in the future.

Independent Hearing Panel

9. The Councils jointly appointed an Independent Hearing Panel (IHP / Hearing Panel) to hear and make recommendations on submissions made on the draft FDS. The IHP comprised:
   - Gina Sweetman (chair)
   - Juliane Chetham
   - Michael Parsonson
   - Shad Rolleston
   - Steven Wilson

10. We held a hearing on submissions to the draft FDS where the submitters wished to be heard from 24 to 26 March 2025. Initial deliberations were held on 27 March, with final deliberations occurring on 11 April 2025.

Officers' Reports

11. The IHP received two jointly authored reports prepared by the FDS Advisors. These reports were:
   - Napier Hastings FDS Report for Hearings Panel on submissions to the Draft FDS dated 14 March 2025 (Hearing Report)
   - Napier Hastings FDS Report for Hearings Panel on submissions to the Draft FDS Officer Reply dated 4 April 2025 (Reply Report)

12. We refer collectively to these reports as "FDS Advisors' Reports". Both reports were made available to the public on the FDS website.

Consideration of Submissions

13. The draft FDS was publicly notified on 23 November 2024, with the submission period ending on 23 December 2024, and it followed the Special Consultative Procedure in accordance with section 83 of the Local Government Act and the requirements of the NPS-UD 2020. In total 139 submissions were received. These consisted of Draft FDS Survey submissions[2] and other forms of submissions[3]. Eighty-six submissions were spoken to at the hearing as listed in Appendix Three. We record that we considered all submissions in making our recommendations to the Joint Committee.

14. To ensure that submitters had the opportunity to respond to the Hearing Report in a meaningful way before and at the hearing, we issued our Direction 1 on 4 March 2025. This set out our request for submitters to provide any further information, evidence or legal representations to support their submissions in advance of the hearing and in response to the Hearing Report. We thank those submitters who took up this opportunity, as it assisted all participants to the hearings to better understand the relief sought through submissions, most importantly ourselves in making our recommendations. This first Direction also set out our request for the FDS Advisors to provide a Reply Report after the conclusion of the hearing. Our Direction 2 on 6 March 2025 clarified some points from our first Direction in response to submitter feedback and our final Direction 3 on 28 March 2025 set out specific questions to be addressed in the Reply Report.

15. The two FDS Advisors' Reports assessed the submissions and recommended amendments to the draft FDS's narrative, maps, tables and figures, as well as all the additional information, evidence and legal representations provided through the hearing process. We have considered the FDS Advisors' recommendations alongside the submissions and all evidence and information that was presented to us before and at the hearing.

Approach to our recommendation report

16. We found that the FDS Advisors' Reports provide a comprehensive summary of submissions made on the draft FDS and the issues they raised in respect of the FDS narrative, maps, tables and figures. We have generally structured our report using that same format, however, there are some FDS-wide issues we have addressed first to avoid unnecessary repetition.

17. Also to avoid unnecessary repetition or duplication, we have adopted the approach of focusing our written analysis on those aspects of the FDS Advisors' Reports where:
    (a) we disagreed with the reasoning and/or recommendations in the FDS Advisors' Reports

[2] 55 (39.6%)
[3] 84 (60.4%)

(b) material provided to us by submitters, either in the form of evidence or representations, called into question the reasoning/recommendations in the FDS Advisors' Reports
(c) there are additional matters that we wish to address in respect to FDS Advisors' recommendations on particular submissions or issues; and/or
(d) the FDS Advisors, having considered the evidence or representations of submitters, and following questioning from the IHP, altered their initial recommendations to us, as set out in the Reply Report.

18. If we do not refer to an individual submission or group of submissions on a particular matter addressed in submissions and during the hearing, or discuss the reasons for our recommendations in relation to it, that is because, having reviewed the submissions alongside the written and oral evidence and representations from submitters, and the commentary, recommendations and reasoning in the two FDS Advisors' Reports, we have accepted (and accordingly adopted) the FDS Advisors' final recommendations to us. This means that our recommendation report must be read in conjunction with both FDS Advisors' Reports, with our recommendations taking precedence over the FDS Advisors' recommendations where they differ.

19. Our recommendation report, accordingly, generally takes the form of an 'exceptions' report.

3. Recommended amendments with overarching consequence

Overview

20. There are several matters raised in submissions and addressed through the FDS Advisors' Reports which have overarching consequences for our subsequent recommendations on particular chapters of the FDS and / or are best addressed comprehensively. These matters are:
(a) Urban Housing Demand, Capacity and Choice
(b) Staging of development
(c) Development constraints – highly productive land and natural hazards
(d) Riverbend - NC4b
(e) Ahuriri Station - AS1 and AS2
(f) Approach to smaller sites
(g) Wet industry
(h) Regionally and nationally significant infrastructure
(i) Coastal and rural settlements and rural lifestyle development.

21. We address these matters first and then move to consider more specific requests under the next section of this report.

Urban Housing Demand, Capacity and Choice

22. As outlined in the FDS Advisors' Hearing Report[4], many of the submissions raised higher level issues regarding housing demand, development capacity and housing choice. Concerns raised from there being an over-supply, assumptions of uptake of intensification and greenfield development being wrong, latent demand and the needs of the retirement sector not having been considered, and that the NPS-UD does not allow for a shortfall in greenfield development capacity to be made-up by an over-supply in Napier. We carefully considered the FDS Advisors' evidence alongside that produced through submissions and in evidence before and during the hearing.

23. Overall, we find that the FDS Advisors' evidence-based approach to evaluating demand and consequential land allocation aligns with the objectives of the FDS and is consistent with national direction under the NPS-UD and National Policy Statement on Highly Productive Land (NPS-HPL).

24. We accept the FDS Advisors' assessment that with the inclusion of Middle Road (HN3a and 3b) and Wall Road (H5b), along with FM9, the FDS now identifies sufficient residential capacity for both Napier and Hastings to meet medium- to long-term demand and the requirements of the NPS-UD.

25. In respect of the retirement village sector and projected growth demands, we agree with FDS Advisors that it is not the place of an FDS to ringfence greenfield land specifically for retirement village development. This is the same with wet industry, which we address later in this report. We also agree with FDS Advisors that there are a range of considerations and constraints at play, which we also discuss in this report, which mean that this sector may need to consider different development models to a greenfield approach.

26. In respect of latent demand, we carefully considered the FDS Advisors' evidence and that provided by submitters. We are satisfied that the FDS Advisors' recommended approach as set out in section 4.4 of their Hearing Report to take into account latent demand in the overall demand projections set out in the FDS and provide greater greenfield capacity and flexibility, satisfactorily addresses the submitters' concerns.

27. We find that the FDS, through a combination of intensification and greenfield expansion, identifies sufficient land to meet expected population growth and urban development needs for residential and business, along with latent demand, without extending into additional unplanned or less serviceable areas. We also reiterate that this FDS is not the final document guiding growth over the next 30 years. It is required to be reviewed on a regular basis and amended where necessary.

[4] Section 4.1 of the Napier Hastings FDS Report for Hearings Panel on submissions to the Draft FDS

Reprioritising the timing of development

28. There were a number of submissions where submitters whose land was recommended for inclusion within the FDS sought that their sites be "brought forward" for an earlier timing of development, for instance from long-term, to short or medium-term.

29. We carefully considered the submissions that sought these changes and the FDS Advisors' responses in their Hearing Report and Reply Report. We record here that we agree with the FDS Advisors' analysis that while there is no specific requirement under the NPS-UD to include staging and prioritisation within an FDS, being able to provide an indication of what is required over the short, medium and long term is good planning practice and provides an indication of development priorities over the 30-year period. The FDS Advisors' Reply Report frames the NPS-UD's meaning of 'plan-enabled' and 'infrastructure ready' development capacity and NPS-UD Clause 3.4 as helpful criteria guiding how sites should be considered in this regard.

30. FDS Advisors accepted that an indication of development timing within the FDS to ensure consistency for developers and landowners alike is helpful, but where individual submitters sought recognition of short-term timing then relative certainty that the project would be committed to within the short term is important. As the FDS Advisors highlighted, potential impacts of bringing development timings forward resulting in expectations that the Councils will change their respective LTPs and Infrastructure Strategies to align with the altered staging would have a flow on effect on development contributions and funding mechanisms. The FDS Advisors further cautioned that if the land is delivered to market as indicated, then while the generous supply could offset development contributions' increases, the higher uptake stimulated may be at the expense of intensification. This could increase pressure for release of even more greenfield land in the longer term, thus undermining efforts to protect HPL and increase intensification.

31. In light of this analysis and additional evidence put forward at the hearing, FDS Advisors reconsidered submissions seeking amendments to indicated staging in the FDS. They recommended that the Arataki Extension land (HN2b) should be reconsidered as short-medium term supply. This was due to the Fast Track Approvals Act consenting requirements and pre-application discussions held with HDC signalling a reasonable likelihood that this development is achievable within the short-medium term period. Additionally, the FDS Advisors considered that the infrastructure upgrade requirements for this site are relatively minor, lessening the risks on HDC of bringing it forward. For similar reasons, FDS Advisors recommend bringing forward the timing of the Brookvale Extension (HN6) land to short-medium term This land does not have the certainty and timeframe parameters as the Arataki Extension land but is reasonably far advanced in the private plan change process under the RMA. While granting of a plan change request is not absolute, they accepted that following approval the development would likely occur relatively quickly.

32. In terms of all other sites requested to be reprioritised, the FDS Advisors did not recommend amending staging of these as evidence was not sufficient to give reasonable

certainty as to when the development may occur, or when the location might be 'infrastructure ready.'

33. Finally, the FDS Advisors' Reply Report notes that the inclusion of both Arataki and Brookvale Extension as short-medium term priority will resolve the short-medium term deficit in the Hastings area, changing capacity from -35, to a surplus of +260 (being 170 dwellings for Arataki and 125 for Brookvale). We concur with the FDS Advisors that this level of sufficiency is adequate and will not negatively impact the intensification objectives of the FDS.

34. In accordance with these findings, we agree with the analysis provided and support the recommended amendments to the Strategy Prioritisation Map at Figure 24 of the FDS.

Development Constraints – highly productive land and natural hazards

Introduction

35. Development constraints are addressed in Section 5.0 of the FDS Advisors' Hearing Report, through various submissions, and in the FDS Advisors' Reply Report. The focus of the submissions were on:
    (a) Highly productive land (HPL)[5] – to what extent urban growth should avoid encroachment into Class 1, 2 and 3 land[6] and balancing the outcomes sought by the NPS-UD and NPS-HPL
    (b) Natural hazards – to what extent urban growth would mitigate or avoid natural hazards, in this case being focussed on flooding, liquefaction and tsunami risk. Land instability was not directly addressed by the FDS Advisors or submitters.

36. Potential HPL and flooding effects are relevant to both the Napier and Hastings urban areas, but in a general sense, the HPL issue is primarily focussed on the Hastings District portion of the FDS area, while flooding, liquefaction and tsunami risk is more focussed on the Napier City portion. Accordingly, while not reading down the relevance of all these issues to both districts, we take this focus in our following discussion.

37. Overall, we adopt the recommendations of the FDS Advisors' Hearing and Reply Reports. We consider that to have appropriately balanced the competing issues and opportunities.

Highly Productive Land

38. It is obvious that the pattern of urban development of the Hastings urban areas has been a patchwork extensions from the central hub of Hastings, and the settlements of Flaxmere and Havelock North.[7]

[5] As defined in Section 3.4 of the National Policy Statement for Highly Productive Land, comprising Class 1, 2 and 3 land under the New Zealand Land Use Inventory 1:50,000 map series.
[6] Ibid
[7] This pattern is also evident in the urban growth between Napier and Taradale.

39. Significantly, those extensions have occurred across HPL and now result in quite significant areas of Class 1 and 2 land and associated primary production being situated between, and bounding directly with, residential, commercial and industrial urban areas. This fundamental characteristic of the Hastings district, and the significance of horticultural production to the district (fruit, vegetables and grapes), has been emphasised by many submitters, both for and against urban expansion onto that land.

40. The presence of HPL presents a tension between typical urban design efficiency and ongoing access to that productive land capacity. This is expressed through various submissions including the submissions from:
    - the Heretaunga Connection Project that identified the approximately 470ha area of predominately Class 1 and 2 land between Hastings, Flaxmere and the Omahu Road industrial strip for long-term, master-planned urban expansion.
    - Mr Apple, who sought inclusion of its approximately 34ha Class 1 land holding at 334 State Highway 51, primarily but not exclusively for future wet industry use.
    - Save the Plains, Horticulture New Zealand, Hawke's Bay Vegetable Growers, Hawke's Bay Fruit Growers and others who promoted avoidance of HPL and a refocus of urban expansion onto lower class soils, including hill slopes and rural and coastal settlements.
    - Horticulture New Zealand, Hawke's Bay Vegetable Growers and Hawke's Bay Fruit Growers who considered the current absence of highly productive use of some land was a result of current restrictions that could be resolved through improved water availability and land parcel amalgamation. Hawke's Bay Wine Growers also identified the Gimblett Gravels as Class 7 land that has a high primary production value.

41. We find that the current patchwork pattern of development is not fundamentally inconsistent with the various policies of the NPS-UD, in that the provision of urban land uses can accommodate this District's distinct characteristics and resources. We do not accept that best urban outcomes for this district necessitates a complete 'closing the gaps' approach to urban form.

42. Distinct from the above issues, various submitters sought recognition of constraints at an individual property scale, as justification for inclusion of their properties within the area identified for future urban expansion. These issues included fragmentation of land parcels, isolation from other HPL land, reverse sensitivity caused by residential boundaries, other comprising characteristics of sites such as existing or proposed development and infrastructure, and inaccuracy of the New Zealand Land Resource Inventory (NZLRI) mapping system at a site-specific scale.

43. In relation to the accuracy of land use capability mapping, the report by Hanmore Land Management provided with the submission by Vermont Street Partners in particular, describes the scale and originally intended purpose of the NZLRI regional mapping system. This is not debated. However, until updated regional mapping is incorporated by way of a notified change to the Regional Policy Statement, the NPS-HPL requires us to adopt the NZLRI mapping for planning purposes. We were4 advised that the regional

mapping process is underway, but a change to the RPS has not yet been publicly notified under the RMA.

44. Various submitters described how the land area of their properties was no longer of an economical scale due to fragmentation and separate ownership of adjacent small land holdings. In general, we have not accepted that proposition, noting the options raised by Horticulture New Zealand for amalgamation and economic productive use of adjacent land parcels through purchase or lease by larger operators. The exception is Wall Road (H5b) and Middle Road (H3a and 3b), where we agree with the FDS Advisors' recommendation and reasons that they should be identified as Development Areas.

45. Gareth Holder on behalf of Hawke's Bay Vegetable Growers and others submitted in favour of protection of HPL across both districts. Through the Hawke's Bay Vegetable Growers submission, Mr Holder made particular reference to Class 3 land that he leases at Pirimai South (NC4d) in Napier, which is proposed for inclusion in the FDS for residential development. We acknowledge Mr Holder's stated investment in the productive capacity of that property. However, we accept the FDS Advisors' recommendation for its inclusion along with Riverbend (NC4b) and The Loop (NC4a), for the reasons discussed elsewhere in this report.

46. We consider that FDS Advisors have demonstrated that the recommended areas for inclusion have been selected to avoid or minimise the use of HPL wherever possible. In cases where some sites intersect with LUC 1 or 2 land, a robust justification has been provided that clearly outlines the functional or locational need for development, the absence of feasible alternatives, and the consistency of the proposed land use with broader urban planning strategies. In all such cases, the land is contiguous with existing urban form, does not lead to leapfrog development, and does not undermine the integrity of surrounding productive land holdings. The Panel is satisfied that these instances align with the limited exceptions stipulated under the NPS-HPL and that the required evidential threshold has been met for purposes of preparing a FDS under the NPS-UD.

47. Overall, we find that our adoption of the FDS Advisors' recommendations strikes an appropriate balance between retention of the long-term productive capacity of the land and particular constraints and limitations of the incorporated sites. We find that inclusion of a greater extent of HPL is not justified on the basis of necessary development capacity[8]. Doing so at an FDS level is not sufficiently justified under the NPS-UD and would be inconsistent with the NPS-HPL. This does not preclude the more granular consideration of rezoning of additional areas under future individual RMA plan changes and/or resource consent decision-making.

Natural Hazards

48. Overall, we adopt the FDS Advisors' recommendations with respect to inclusion and exclusion of properties that are subject to identified significant natural hazard risk, which we address in more detail through the body of this report. We acknowledge that

[8] As discussed earlier in this report.

some sites nominated for inclusion in the FDS have other factors that must be given significant weight in their consideration. Below we make specific recognition of those sites which drew the greatest focus through submissions.

49. We take account of the Hawke's Bay Independent Flood Review Panel (HBIFRP) July 2024 report and its recommendations, as discussed in section 3.2.1 of the FDS Advisors' Hearing Report. In particular, we note its recommendation to update the RPS and the district plans in relation to managing natural hazards, including flood modelling. At the hearing, Gavin Ide, Principal Advisor for the Hawke's Bay Regional Council, advised that newer riverine flood hazard modelling is underway and continuing through 2025. The FDS Advisors' Hearing Report makes specific note of the HBIFRP's recommendation 25, which the FDS Advisors' Hearing Report states as "to ensure that new and intensified residential development and subdivision is prohibited in areas subject to unacceptable flood hazard".

50. We find that the FDS should acknowledge the risks presented by natural hazards and climate change, be forward-looking not only for urban development capacity but also the health and safety of people, and enable resilience for existing and future communities. In that we support the inclusion of FDS Objective 3:

> *Our communities and infrastructure are resilient to the effects of climate change and risks from natural hazards.*

51. Avoiding unacceptable natural hazard risks and identified opportunities for mitigating risks guide our recommendations. In the absence of an updated RPS, natural hazards mapping, and national policy guidance on natural hazards management[9], we agree with the FDS Advisors' Hearing Report statement that *"In the interim, the Draft FDS grapples with managing natural hazard risk in the existing policy environment and with best available information for now"*.

52. We accept there are site-specific opportunities to mitigate some risks but, consistent with the FDS Advisors' Hearing Report, we limit inclusion of sites with identified significant (before mitigation) natural hazard risk to the sites discussed below that are subject to other relevant factors that support their inclusion. We agree with the FDS Advisors' Hearing Report in its response to the Natural Hazards Commission and the Hawke's Bay District Health Board submissions, that site specific risk assessments for those future growth areas are most appropriately undertaken *"at the structure planning and plan change [and resource consent] stage, where a detailed stormwater and flood modelling can be undertaken in the context of a specific proposal"*.

53. We recommend an addition to the FDS Implementation section that the HBIFRP recommendations for RPS changes must be taken into account when preparing the FDS Implementation Plan and in future FDS reviews.

[9] The National Policy Statement for Natural Hazards is currently expected to be in place late 2025.

Riverbend – NC4b

Introduction

54. Riverbend is a residential growth area in the Heretaunga Plains Urban Development Strategy (HPUDS) and meets the definition of being *"identified for urban development."*[10] The draft FDS identifies the area as a suitable specific growth area, acknowledging that the area is subject to complex and overlapping natural hazards constraints. While there are engineering solutions available to address these constraints, they may impact the feasibility and timing of development.[11]

55. The development division of Ngāti Kahungunu Iwi Incorporated (NKII), K3 Development, has an interest in developing part of this area as a joint venture with several other parties. An application for referral through the fast track process under the Natural and Built Environment Act 2023[12] has been made to the Environmental Protection Authority, and is under consideration by the relevant Minister. NKII is a Post-settlement Governance Entity which resulted from a fisheries settlement in the 1990s stretching from Wairoa to Wairarapa. As such they do not have an interest in land that could support additional points being awarded through the multi-criteria analysis (MCA) to support the aspirations of the mana whenua of Ahuriri.[13]

56. Legal submissions[14] on behalf of the Joint Venture provided the planning history of this site. It is clear that the site has a long history of recognition as a future development area, including through Heretaunga Plains Urban Development Strategy 2010 and 2017. It is also noted that a private Development Agreement between the Joint Venture and NCC was agreed in principle in 2023, to address infrastructure requirements and financial contributions. The current version of that agreement was executed on 18 February 2025. Additional land (the Southern Area – approximately 16.7ha) for stormwater management has been conditionally purchased by parties to the Joint Venture to the south of the Riverbend site and Cross-Country Drain.

57. Submitters had differing positions on including Riverbend area NC4b in the FDS; some supporting,[15] some requesting more information[16], and others opposing (on natural hazard and environmental grounds)[17]. The submissions are analysed in section 9.3.3 of the FDS Advisors' Hearing Report and the analysis is not repeated here.

58. The Draft FDS notes the divergence in view with the Joint Committee's recommendation to include the Riverbend site NC4b in the draft FDS, while the HBRC recommended

[10] Section 5.3.1 of Napier Hastings FDS Report for Hearings Panel on submissions to the Draft FDS
[11] Section 4.3.5 of Napier Hastings FDS Report for Hearings Panel on submissions to the Draft FDS
[12] This is a referral application made prior to Parliament repealing much of the Natural and Built Environment Act 2003 in late 2024.
[13] Section 6.3 of Napier Hastings FDS Report for Hearings Panel on submissions to the Draft FDS
[14] Legal Submissions on Behalf of Te Orokohange Hou Joint Venture; 19 March 2025
[15] Te Orokohanga Hou Joint Venture, Bayden Barger for Ngāti Kahungunu Iwi Incorporated
[16] Maungaharuru Tangitū Trust
[17] Natural Hazards Commission; HBRC, John Reid; Myriam Parker; Gary Curtis; Andrew Lessells; Simon Nash; Samatha McPherson; Susan Garner; Forest and Bird

excluding NC4b from the FDS.[18] HBRC submitted that *"that inclusion of those sites within the FDS in no way guarantees any or all necessary consents and approvals required by the Hawke's Bay Regional Resource Management Plan or national regulations administered by the Regional Council."*[19]

Development Constraints

59. The HBRC remains opposed to the inclusion of the site at this time, based on the ongoing uncertainty about methods to mitigate flood risk at this site to an acceptable level. We do not criticise HBRCfor taking that stance. There is well documented recent evidence of rain event flooding of the site (2020 and 2023), with the site providing significant flood storage adjacent to the existing residential area.

60. Stormwater engineering evidence was presented on behalf of the Joint Venture by Ms Landon of Development Nous Limited. Ms Landon acknowledged that the site currently functions as an "unofficial" stormwater detention area for the surrounding urban areas. She described the likely approach to flood mitigation for development of the site, which included flood storage and pumping, and conservatism in her assumptions. This is subject to ongoing analysis and design and will require detailed interrogation through a resource consent process.

61. We agree with Mr Winchester at paragraph 8 of his legal submissions for the Joint Venture that "the history of planning for the land, the nature of the development proposed, the level of work, engagement and analysis which has been done to support the approval of the Riverbend proposal, and the likely processes that will be pursued in order to achieve those approvals" are relevant to our consideration of its inclusion in the FDS. We do not agree with his submission at paragraph 6 that:

> *"With respect to the submissions lodged by both the Hawke's Bay Regional Council (HBRC) and the Natural Hazards Commission (NHC), while their underlying concerns and their policy positions are understood, the issues that they raise are submitted to be at a level of abstraction that they should not be given significant weight.'*

62. The matters raised in the submission by HBRC in particular are highly relevant. We also acknowledge the submission by Dooney Brothers Partnership and evidence by Angela McFlynn that the adjacent Waverley Road site (NC4c), which is not recommended for inclusion, may have less flood risk than the Riverbend site (NC4b) and potentially less reliance on off-site areas for flood mitigation. HBRC's submission also mooted that site as potentially more suitable for development.

63. FDS Advisors in their Reports recommended including a statement in the FDS explaining that additional land will be required to manage stormwater and flooding effects arising from development of the Riverbend site, with the exact location to be determined through future planning processes. This was addressed by the addition of footnote 11 to NC4b in Table 3 of the FDS. We think this appropriate as it recognises the constraints

[18] Preamble, Draft Napier Hasting Future Development Strategy 2024 – 2054.
[19] Hawkes Bay Regional Council.

associated with the site while not predetermining the design details still being worked through by the Joint Venture parties.

NPS-UD

64. We concur with the FDS Advisors' that the site represents a relatively efficient location for growth at the southern extent of Napier with good access to services and amenities in Onekawa and Maraenui. During our site visit it was apparent that this location would avoid ribbon development, and we observed the close connection of the site to existing urban development and public facilities such as sport and recreation facilities and Pukemokimoki Marae. Mr Barber's comments on behalf Ngāti Kahungunu Iwi Incorporated emphasised the benefits of this site being able to offer locational choice, housing types and price point and meet Iwi and community aspirations. He stated that most Māori who were not mana whenua to the area live in two main places, Maraenui and Flaxmere and Pukemokimoki Marae is a mātāwaka marae, which is available for all people and is a solution for Māori living in but who whakapapa to places outside the area.

65. We agree with these sentiments and are cognisant that removing Riverbend site NC4b from the FDS would result in a significant reduction in residential greenfield capacity of approximately 660 dwellings, and share the view presented in the FDS Advisors' Reports that there are no viable alternatives for that scale of capacity for Napier at present.

Summary

66. For the reasons outlined above, we accept and adopt the recommendation of the FDS Advisors' Hearing Report to include Riverbend site NC4b in the FDS, at the timing recommended by the FDS Advisors. Ultimately, its suitability for development will be managed through the more granular plan change and resource consent processes. Its planning history and the consequential investment in development planning weighs in favour of its inclusion. We also note that a rebalancing of the Napier residential development capacity might be achieved on the adjacent Waverley site if insufficient capacity can be achieved on the Riverbend site. We also note that should they choose, Dooney Brothers Partnership could separately seek a plan change and/or resource consents for development of their site.

Ahuriri Station – AS1 and AS2

Introduction

67. Submitters had differing positions on including Ahuriri Station in the FDS; some supporting[20], some requesting more information or seeking to partner with Mana Ahuriri Trust[21], and others opposing (on natural hazard and environmental grounds).[22]

[20] Mana Ahuriri Trust, Maungaharuru Tangitū Trust, Tamatea Pōkai Whenua, Hawke's Bay Airport
[21] NZTA, Ministry of Education
[22] Ahuriri Protection Society, Forest and Bird, Natural Hazard Commission, Simon Nash, Susan Garner, Lunne Anderson, Chris Maclean, Garth Eyles

68. Ahuriri Station is redress land available from the Tiriti o Waitangi settlement process. Ahuriri Station is a Listed Project under the Fast Track Approvals Act 2024. Rezoning is also being sought by Mana Ahuriri Trust through its submission on the proposed NDP.

69. Mr Pohio, the chair of Mana Ahuriri Holdings Limited Partnership, drew parallels with his experience with the Waikato Tainui (Tainui Group Holdings) development at Ruakura, *"a strategically located inland port and major industrial facility"*, and the aspirations for Ahuriri Station. He reinforced the development of Ahuriri Station as a taonga of great importance to Mana Ahuriri and their development aspirations, with such development being an expression of the rangatiratanga of the seven hapū of Ahuriri with the Station.[23]

70. Mr Hawaikirangi, the chair of Mana Ahuriri Trust, reinforced those comments discussing the five pou of their strategic framework, Te Ara Whakamua, and how the FDS contributes to achieving their strategy.[24] Any development at Ahuriri Station must occur consistent with the values and kaitiaki responsibilities of the hapū of Ahuriri. This includes economic and environmental drivers, and papakāinga development at Ahuriri Station.

Natural Hazards

71. Evidence presented by Mana Ahuriri Trust detailed its aspirations for potential staged future development of that land, and also the various and significant natural hazards that actually and potentially impact the site. Primarily these risks are related to flooding and coastal inundation. A high-level discussion on possible engineering approaches to mitigate those hazards was also provided in evidence.

72. Mr Gardner-Hopkins, for Mana Ahuriri Trust, noted that Mana Ahuriri had spoken with the Natural Hazards Commission (NHC) and he noted that NHC were *"pleased to hear that any development would meet or exceed the relevant MFE's guideline requirements."* Following our query, Mr Gardner-Hopkins provided further detail of the meeting with NHC, a meeting prompted by NHC's initial submission. NHC had a level of comfort following the meeting with Mana Ahuriri and were looking forward to further engagement. While acknowledging the flood risk, NHC are not recommending amending the way in which AS1 and AS2 are provided for in the Draft FDS.[25]

73. There is no question that significant natural hazard constraints exist on this land. Other submissions also identified these risks[26]. The final development potential is unknown. We accept that the extent and form of development across the site will be determined through the extent of mitigation that can be achieved through engineering design and construction practicalities. As noted by the Mana Ahuriri Trust and the NHC, this will be tested through future plan change and consenting processes.

[23] Mike Pohio speaking notes
[24] Te Kaha Hawaikirangi speaking notes
[25] Natural Hazards Commission Further Information
[26] Andrew Caseley and Chris Maclean

Other constraints

74. Although acknowledging Mana Ahuriri Trust's aspirations for the Ahuriri Station, Hawke's Bay Airport Ltd (HBAL) raised concerns with the inappropriateness of residential and ecological activities in close proximity to the airport, such as proposed at Ahuriri Station. Their concerns related to ensuring safe and efficient airport operation (e.g., wetland development increasing the risk of bird strikes and potential loss of aircraft or occupants), and reverse sensitivity issues (e.g., protecting residents from the adverse effects of aircraft noise).

75. In response to our query on ways to resolve their concerns, HBAL noted that they are submitting to the NCC District Plan review and are seeking relief with statements in the NDP that acknowledges the risk of bird strike and that any habitat restoration that could affect HBAL's operational requirements is required to have an approved Wildlife Management Plan. Following our query Mr Greening, for Mana Ahuriri Trust, commented that Mr Hawaikirangi and he had met with the HBAL and discussed their proposed development at Ahuriri Station and how with, following best practice development, the Trust expected that should allay HBAL's concerns.

76. Mr Maclean spoke of the ecological value of the Ahuriri Station area and the constraints to its development. He talked of how cycling the tracks across the block enables a full appreciation of the site, and how doing so has led him to conclude that the site is unsuitable for development. We address the development challenges of the site On this matter, we find that the provision of access is a matter of detail that can be addressed through master planning and plan change processes.

77. The Ahuriri Estuary Protection Society sought greater protection for the estuary and opposed encouragement of development that might adversely impact on its natural values. For Mana Ahuriri Trust, Mr Gardner-Hopkins asserted that they believed the Ahuriri Estuary Protection Society's concerns would be *"well addressed by Mana Ahuriri in their development of the Station."*[27]

78. We find that the matters raised by these submitters are best addressed through future district plan change processes and/or resource consent processes and the inclusion of Ahuriri Station within the FDS now does not foreclose on outcomes acceptable to the airport and those submitters in that regard.

Summary

79. We note above the comments from Mana Ahuriri Trust that, at the level of the FDS, satisfies most of the concerns submitters have raised.

80. As per section 96(2) of the Ahuriri Hapū Claims Settlement Act 2021,[28] we have reviewed and had regard to Te Muriwai o te Whanga Plan (2024) ('Plan'). We expect that Te Komiti Muriwai o Te Whanga will give effect to this Plan as the Ahuriri Station is developed.

[27] James Gardner-Hopkins speaking notes

[28] https://www.legislation.govt.nz/act/public/2021/0054/latest/whole.html#LMS300576

81. The impact of development constraints on the Ahuriri Station and the effect of that on future business / industrial land supply can be reconsidered through future reviews of the FDS and district plan change processes.

Approach to smaller sites

82. During the hearing, several submitters requested the inclusion of smaller residential or industrial sites in the FDS. After careful consideration, we recommend that these sites be excluded, based on the FDS Advisor's approach of applying clear and consistent criteria across all proposals. Our approach was guided by the FDS's strategic objectives, as well as the national direction set by the NPS-UD and NPS-HPL, along with the evidence presented in the FDS Advisors' Hearing and Reply Reports.

83. Regarding residential land, we accepted the FDS Advisors' recommendation to include only those sites that demonstrated alignment with compact urban form principles, infrastructure readiness, and the avoidance of HPL, as detailed in the MCA analysis. Most smaller site submissions fell short on one or more of these criteria. Many were either located on LUC 1 or 2 soils, disconnected from existing urban areas, or did not demonstrate sufficient strategic merit to warrant inclusion at this time. We agreed that the currently identified growth areas provide adequate capacity to meet short, medium and long-term demand. Further inclusion of smaller, isolated sites would fragment the urban form and undermine the FDS's integrated and infrastructure-led approach. The only exception where we have included a smaller area is the land sought to be included at Mission Estate (NC6). We address this later in this report.

84. In respect to the submission of Mr. and Mrs. Holder, supported by Willowbrook Village Development, who sought the inclusion of 63 Main Road, Clive, we agreed with the FDS Advisors not to include it in the FDS. While the site has limited productive value, minimal hazard risk, and is well located between existing semi-urban development, in our view, its small scale means it does not meet the threshold for inclusion as a strategic growth area in the FDS. However, we note that the site's development would not offend the principles of the FDS, and the landowner has the opportunity to progress the proposal through a private plan change or resource consent process.

85. Similar considerations applied to industrial land. We endorsed the FDS Advisors' methodology, which was evidence-based and consistently applied across all sites. With one exception (the Irongate North Extension), we agree with FDS Advisors that smaller or ad hoc industrial land submissions should be excluded due to constraints such as hazard exposure, insufficient servicing, and encroachment onto HPL. These recommendations were consistent with the NPS-HPL directive to avoid unnecessary urban expansion into productive soils unless there is a clear and demonstrable need.

86. In summary, the exclusion of smaller sites reflects the strategic, evidence-based approach taken in preparing the FDS. It ensures that urban growth is well integrated with infrastructure and aligns with national policy. We note that future opportunities remain available through subsequent FDS reviews, Council-initiated or private plan changes and resource consent applications.

Wet industry

87. We received several submissions and requests for the inclusion of land identified for wet industry. However, we are satisfied that sufficient capacity exists within the zoned industrial land at Whakatu, Tomoana, and Omahu to accommodate the anticipated short to medium-term wet industry demand. This approach aligns with the evidence presented in the FDS Advisors' Hearing and Reply Reports, which confirmed that the available land at Whakatu remains the most appropriate and strategically located option to support wet industry activity, considering the existing servicing infrastructure and land characteristics.

88. We support the FDS Advisors' recommendation to retain flexibility in the FDS by incorporating a short-term action to investigate policy changes aimed at protecting the remaining capacity for wet industry use at Whakatu. This action acknowledges the importance of maintaining viable land options for water-intensive operations while recognising that the suitability and uptake of land may evolve.

89. Proposals from submitters for additional wet industry land, particularly those situated on HPL or in areas with unresolved servicing or hazard constraints, did not meet the high policy thresholds required under the NPS-HPL. We agree with FDS Advisors that expansion into these areas is not justified at this stage and could risk fragmenting the supply of industrial land, thus undermining the strategic, infrastructure-led direction of the FDS.

90. Importantly, we reiterate that the FDS is not a static document. It will be reviewed every three years as required under the NPS-UD, allowing reconsideration of new evidence and emerging demand trends over time. In the meantime, submitters seeking to facilitate wet industry development in other locations are not precluded from pursuing alternative RMA processes, such as private plan changes or resource consent applications.

Coastal and rural settlements and rural lifestyle development

91. We received many submissions and heard evidence from several submitters who sought inclusion of coastal and rural settlements within the FDS, as well as the identification of new areas for rural lifestyle development. Many of these submissions expressed concern that the HPUDS had included these areas, and these were now excluded from the FDS. As a consequence, they sought identification of areas suitable for new and expansions to existing coastal and rural settlements and rural lifestyle development areas. They also sought high-level policy support that would influence future zoning changes to the Hastings and Napier City District Plans. Submissions also expressed concern that there was no certainty as to when a Rural Residential Strategy would be

developed and that the existing Regional Policy Statement and District Plan provisions are restrictive and at odds with commentary in the draft FDS.[29]

92. Conversely some submitters supported removing these areas from the FDS, so as to minimise urban sprawl and the risk of natural hazards and the timing of development of a more detailed Rural Residential Strategy.

93. We have carefully considered the submitters' requested relief and the FDS Advisors' recommendations. We concur with the FDS Advisors' advice set out in both reports that the purpose of a FDS as stated in clause 3.13 of the NPS-UD is to set out how the Councils intend to achieve well-functioning urban environments in its existing and future urban areas[30], provide at least sufficient development capacity over the next 30 years to meet demand, and to assist with the integration of RMA planning decisions with infrastructure planning and funding decisions[31]. We accept the FDS Advisors's advice that the FDS is focussed on ensuring that Hastings and Napier's future urban housing needs are met, rather than broader rural residential style development in the wider area, and that the approach to development and scope of this FDS is consistent with a number of other FDSs prepared through the country[32].

94. We agree with the FDS Advisors' recommendations and reasons given to include the relevant strategic direction set out in the HPUDS as an Appendix to the FDS as an interim measure before a Rural Residential Strategy is promulgated, and to the associated amendments to Section 10.6 of the FDS. We agree with the caution expressed in the recommended new text that the HPUDS was not prepared with the same level of information in respect to environmental factors and limitations. We note the officers comment that the indicative Maps for some of these areas in HPUDS could also be included here. We recommend that the relevant indicative Maps from the HPUDS for each of the areas mentioned in the Appendix are specifically included. We also agree that this should only be an interim measure, and we recommend that the Councils prioritise the development of a Rural Residential Strategy so that it can more meaningfully respond to the issues raised by submitters.

Summary

95. We agree with the FDS Advisors' recommendations, subject to the inclusion of the indicative Maps from the HPUDS for all the areas mentioned in the recommended new Appendix.

[29] Sections 8.1 to 8.3 of the Napier Hastings FDS Report for Hearings Panel on submissions to the Draft FDS
[30] Sec 8.2 of the Napier Hastings FDS Report for Hearings Panel on submissions to the Draft FDS
[31] NPS-UD
[32] Sec 8.3.1 of the Napier Hastings FDS Report for Hearings Panel on submissions to the Draft FDS and section 2.3 of the Napier Hastings FDS Reply Report.

4. Chapter-related amendments

Iwi and Hapū Development Aspirations and Papakāinga

Introduction

96. Multiple submitters raised a number of key issues in the matter of iwi and hapū development aspirations and papakāinga. These included the approach to council and mana whenua relationships in the planning process, the role of Ngāti Kahungunu Iwi Incorporated in the FDS process, the relative treatment of Māori land and redress land emerging from Te Tiriti o Waitangi settlement processes, resilience of and adaptation to changes, natural hazard risks, a Māori-led study of Māori demographics, a suggested wording change (p 69 of Draft FDS regarding education requirements for Māori populations), and commentary on papakāinga/marae-based development (managing risk in hazard-prone areas, supporting infrastructre and services)[33].

97. The FDS Advisors' Hearing Report responded to the key issues raised and the responses are not repeated here. Following analyses of the submissions received, FDS Advisors recommended *"a range of amendments to the Draft FDS to better reflect iwi and hapū development aspirations. This includes spatially identifying areas of interest, and other actions to be addressed in the FDS Implementation Plan."*[34] FDS Advisors summarised the main themes and key issues raised in submissions:

    i. *Recognition that papakāinga, redress land development, and Māori-led demographic studies must be supported as part of any long-term strategy.*
    ii. *Recognition of stronger meaningful partnership in decision-making, enabling Māori to co-lead growth planning consistent with Te Tiriti commitments.*[35]

Mana Whenua – Ngāti Kahungunu

98. Bayden Barber, on behalf of Ngāti Kahungunu Iwi Incorporated ('NKII') criticised the Councils in the process to develop the draft FDS in that NKII were not invited to participate in the Napier-Hastings FDS Joint Committee. The FDS Advisors' Hearing Report provides a response to that concern at 6.2, outlining the process to establish the Joint Committee. That response is not repeated here though we do note the FDS Advisors' comment that *"[t]he Implementation Plan should identify actions relating to the partnership approach going forwards (sic.)"*[36]

99. At the hearing, Mr Barber spoke to his submission expanding on the population and geographical scope of Ngāti Kahungunu. He stated that Ngāti Kahungunu Iwi Incorporated is the only mandated Iwi Authority across the whole of the Ngāti

[33] Section 6 of Napier Hastings FDS Report for Hearings Panel on submissions to the Draft FDS
[34] Executive summary of Napier Hastings FDS Report for Hearings Panel on submissions to the Draft FDS
[35] Section 2.2 of Napier Hastings FDS Report for Hearings Panel on submissions to the Draft *FDS*
[36] Section 6.3 of Napier Hastings FDS Report for Hearings Panel on submissions to the Draft FDS

Kahungunu rohe. He reiterated his concern at NKII not being at the Joint Committee table.

100. As mentioned in the hearing, we do not comment on the approach to establish the Joint Committee, nor on NKII's involvement in developing the draft FDS, as both are beyond the Panel's scope. We do support the FDS Advisors' comment regarding the partnership approach and hope that this may be a way to resolve Ngāti Kahungunu Iwi Incorporated's concerns in the FDS implementation.

Papakāinga

101. The FDS Advisors' Hearing Report notes:

> *"Most submitters considered that mana whenua aspirations have been adequately addressed and papakāinga and marae-based development contributed appropriately towards achieving the FDS objectives. However, a few were concerned at the preferential treatment of Māori over non-Māori, perceived non-utilisation of Māori land, or that there were more important priorities to address first."*[37]

102. Submitters raised issues around developing papakāinga in hazard-prone areas, the need for local government to genuinely partner with mana whenua to fix issues with servicing papakāinga, and further consideration to developing papakāinga on land in Māori title, General title, in urban and rural settings.[38] These issues are analysed in the FDS Advisors' Hearing Report and are not repeated here.

103. We heard from submitters L Walford and J Scott who, though not speaking on behalf of their hapū and marae, spoke about the importance of marae and papakāinga in the context of their hapū and marae vision, aspirations, tikanga and approach. They discussed the book, 'Te Tangi a te Manu' and 'Te Aranga Māori Cultural Landscapes Strategy', Te Aranga design principles being mentioned in Mr Scott's written submission. We note that reference to Te Aranga design principles form part of the FDS Advisors' recommendations.[39]

104. Mana Ahuriri Trust referred to their aspirations for papakāinga housing as part of the proposed Ahuriri Station development. NKII noted that Māori owned land was also on HPL. However, the land was where it was and Mr Barber believed that if whānau wanted to develop papakāinga on their land, then they should be able to develop those papakāinga, even if they were on HPL. Whānau often do not have the option of moving to other areas to develop papakāinga.

105. The FDS Advisors' Reply Report helpfully explained how Hastings District Council and Napier City Council are providing for or amending their respective District Plans to enable papakāinga development. They also noted how the NPS-HPL allows subdivision

[37] Section 6.4 of Napier Hastings FDS Report for Hearings Panel on submissions to the Draft FDS
[38] Ibid.
[39] Section 6.5 of Napier Hastings FDS Report for Hearings Panel on submissions to the Draft FDS

on Māori Land providing effects on HPL are avoided or mitigated.[40] These explanations are not repeated here.

Business and Industrial

Introduction

106. We note that we did not hear from any submitters who sought changes to those aspects of the FDS that dealt with areas identified for business growth. We therefore focus on industrial growth in this section.

107. We generally support the industrial areas identified in the draft FDS, which direct future business and industrial growth to strategic nodes such as Irongate, Irongate West, Tomoana, and Whakatu. We are satisfied that the areas identified in the draft FDS represent a well-considered and efficient industrial footprint that supports the region's long-term economic development while aligning with infrastructure capacity and environmental constraints.

108. The Panel accepts the overall strategic direction the Joint Committee took regarding which sites to include or exclude. We consider the methodology was consistent, evidence-based, and appropriately risk-averse in situations involving constraints such as hazard exposure, lack of servicing, or high soil productivity. In this context, the Panel concurred with all of the FDS Advisors' recommendations *except one*: the proposed extension of the Irongate industrial area to the north.

Irongate North Extension

109. Our recommendation to incorporate the Irongate North Extension into the final FDS represents the only deviation from the FDS Advisors' recommendations in relation to business and industrial land. The submission from the Irongate Landowners Group, backed by Phoenix Contracting, proposed a modest northern extension to the existing Irongate industrial area. The Panel also heard the proposal directly from the submitters. FDS Advisors advised against the extension, primarily because the stream north of the current zone was considered a natural and defensible boundary to further industrial growth.

110. After a thorough evaluation, the Panel found this rationale inadequate. While the stream was identified as a potential boundary, it already intersects with a section of the existing industrial zone. Moreover, there is a precedent for industrial development occurring near the stream, and the submitters convincingly demonstrated to us the technical feasibility of managing stormwater and riparian values through best practice design.

111. Crucially, the land subject to the extension is classified as LUC 7 according to the NZLRI, which is not defined as highly productive under the NPS-HPL. This distinguishes it from other industrial land requests that proposed development on LUC 1 or 2 land. The

[40] Section 6.1 of Napier Hastings FDS Report for Hearings Panel on submissions to the Draft FDS Officer Reply

absence of HPL constraints, combined with the site's contiguity to the existing Irongate node and its proximity to planned infrastructure, such as the Irongate Road East roundabout and State Highway network, means the extension offers a coherent and efficient expansion opportunity.

112. We also noted that uptake within the Irongate zone has been strong, with industrial land in high demand. The submitters highlighted the risk of land banking or constrained supply, and we agree that a modest extension would provide additional flexibility and resilience within the regional industrial land market. In this case, we considered the expansion to be not only appropriate but also desirable in terms of regional employment, infrastructure optimisation, and long-term economic planning.

113. Therefore, we find that including the Irongate North Extension is warranted due to its planning merits, policy alignment, infrastructure readiness, and the FDS's strategic goals. Given the current availability of zoned industrial land within Irongate and the wider FDS area, and the need to align development with future infrastructure investment, the Panel recommends that Irongate North be identified for long-term growth. Its development should be sequenced accordingly to support coordinated infrastructure planning and ensure a resilient industrial land supply over time.

Additional commentary on industrial land submissions

114. For all other industrial land submissions, the Panel concurred with the recommendations provided by the FDS Advisors. Although the submitters raised valid and often well-reasoned points during the hearing regarding economic development, infrastructure access, landowner aspirations, and regional demand, each proposal fell short in one or more critical respects under the FDS's strategic and statutory frameworks.

115. Most notably, several proposed areas, including those at Wilson Road, Whakatu (Mr Apple Ltd), Awatoto, and other isolated or privately held parcels, are situated on LUC 1 or 2 land. Under the NPS-HPL, such land must be protected unless urban development is deemed necessary, it cannot be reasonably located elsewhere and is strategically justified. In all these cases, business land capacity assessments confirmed that the existing zoned industrial land at Irongate, Tomoana, and Whakatu is sufficient to meet short- to medium-term demand, including the demand for wet industry.

116. During the hearing, we considered Mr. Apple's proposal regarding Whakatu and noted the advice from FDS Advisors, as outlined in both their Hearings and Reply Reports, that the site is located entirely on LUC 1 land. FDS Advisors advised that the proposed expansion did not meet the high threshold required under the NPS-HPL, as it had not been demonstrated that the operational needs could not be met within existing industrial zones. We accept that advice and are satisfied that excluding this site at this point in time aligns with the strategic direction and policy framework underpinning the FDS.

117. Similarly, the Wilson Road submissions and presentation at the hearing highlighted the strategic infrastructure benefits and existing industrial activity. This is within the greater

area promoted for inclusion by the Heretaunga Connection Project. However, the land is highly productive, and the overarching FDS objectives of protecting such land and promoting coordinated growth outweigh the individual site benefits. We acknowledge that Wilson Road may have long-term potential, but equally the amalgamation of smaller land holdings (through ownership or lease) could create economically sustainable production units. We find its inclusion at this stage to be premature.

118. We agree with the FDS Advisors' position in respect to the Awatoto submissions due to unresolved natural hazard risks, particularly flooding from the Tūtaekurī River and servicing limitations. Despite strong arguments regarding existing industrial uses and future potential, the lack of 1:100-year flood protection rendered the proposals inconsistent with the risk-based planning principles underpinning both the FDS and national policy.

119. Finally, we also recommend that the submissions from Te Aratika Group, Hamachek Holdings Ltd, Jim Bishop, and Wrightson Contracting Ltd are rejected. While these submissions proposed socially valuable, innovative, or historically established activities, each was situated on HPL, represented ad hoc development beyond urban nodes or were not of a sufficiently strategic nature to warrant inclusion within the FDS. We accepted the officers' advice that these matters should be addressed better through district plan processes or private plan changes rather than the regional-level FDS.

Summary

120. The Panel's support for most of the FDS Advisors' recommendations reflects our shared commitment to upholding the purpose, objectives and integrity of the FDS. We reaffirm the importance of aligning growth with infrastructure, protecting productive land, and avoiding speculative or ad hoc development. The only exception, the Irongate North Extension, was justified by its strong planning rationale, compatibility with policy, and the absence of constraints affecting other areas nominated in various submissions.

Greenfield Residential Napier

121. As identified in the FDS, there are limited opportunities for new greenfield expansion in Napier due to its low-lying nature, vulnerability to land subsidence and rising ground water levels, and a variety of natural hazards. Overall, we support the conclusions reached by the FDS Advisors in their Reports regarding all new residential growth areas identified in the draft FDS, namely to include Ahuriri Station, Mission Estate, Riverbend, The Loop and South Pirimai, and exclude Waverley Road & Willowbank Road sites. We have addressed the Ahuriri Station and Riverbend site earlier in this report.

Mission Estate

122. In considering Mission Estate, there was a difference of opinion between FDS Advisors and Mr Phil McKay on behalf Marist Holdings Greenmeadows Limited regards identifying the Artisan Village and 'Future Area' of the Mission Estate Masterplan on Figure 18 as part of NC6. While the FDS Advisors saw merit in potentially developing these areas, their preferred approach was to incorporate the two smaller areas by

reference note in the FDS rather than spatially identifying them, which they considered would have limited strategic benefit. Mr McKay while supportive of the footnote, remained firmly of the view that the Artisan Village and Future Area extents need to be spatially incorporated into NC6 as well. In reply, FDS Advisors maintained that subject to the recommended footnote, this matter is best addressed through the proposed NDP or future resource consent pathway. While we understand this logic, as pointed out by Mr McKay, the Mission Estate land scored highly in the comparative analysis exercise (ranked 3rd of 28 sites in the MCA shortlist), and the FDS states a development capacity of 100 dwellings for this location. As these two additional areas are contiguous components of the wider Mission Estate and can help support the developable area to achieve the allocated 100 dwelling development capacity, we recommend that that the Artisan Village and Future Area extents be added to the map at Figure 18 (now 19) of the FDS as part of NC6, and retaining NC6 as a medium term priority. To that end, we have not carried through the footnote in Table 3 of the FDS as recommended by FDS Advisors' Reply Report.

Summary

123. In conclusion, the Panel supports including all new residential growth areas recommended by FDS Advisors for Napier, with a minor amendment to the mapped extent of Mission Estate NC6 to include the Artisan Village and Future Area.

Greenfield Residential Hastings/Havelock North/Flaxmere

124. The IHP supports the FDS Advisors' recommendation to include all new residential growth areas identified in the draft FDS, and we accept both the officers' initial report and their subsequent reply report. We agree with the FDS Advisors that the recommended proposed growth areas in Hastings, Havelock North, and Flaxmere represent a logical, coordinated, and well-considered response to projected population growth, housing demand, and regional urban development pressures over the medium to long term.

125. In terms of the relevant tests under the NPS-UD, we find that the new residential areas in Hastings and Havelock North are appropriately situated near existing urban nodes, schools, community amenities, and employment areas, supported by infrastructure planning frameworks that allow for timely servicing. Their inclusion in the FDS fulfils the NPS-UD's directive to enable strategic and forward-looking growth, especially in locations where demand is already demonstrably strong. We support and agree with the FDS Advisors' recommendations and reasons for inclusion of Middle Road {HN3a and HN3b) and Wall Road (H5) development areas. We find that their inclusion is consistent with the application of the MCA used for all other areas.

126. In Flaxmere, the additional growth areas address current housing needs and the identified lack of affordable housing options in the western urban corridor of the Hastings District. The recommendation from FDS Advisors reflects a strong alignment with the FDS objective to enable inclusive, diverse, and resilient communities. The Panel agrees that including these areas is warranted and strategically important. The proposed

sites in Flaxmere are situated on land that can be effectively serviced with wastewater and water supply upgrades already programmed through HDC's Long-Term Plan. This ensures alignment with the FDS principle of infrastructure-led growth.

Summary

127. In conclusion, we support including in the FDS all new residential growth areas recommended by FDS Advisors within Hastings, Havelock North, and Flaxmere.

Additional commentary on land not recommended for residential identification

128. We recognise that the submitters' requests for inclusion of land that we have not recommended be included are driven by a growing demand for residential land, particularly in areas where population growth, market interest, and infrastructure investment converge. Many of the proposed sites requested for identification are located on the outskirts of existing urban areas or in places that, at first glance, seem suitable for greenfield development. Some submitters cited the benefits of proximity to established amenities, future transport corridors, and servicing capacity as key justifications for inclusion in the FDS. We understand the importance of providing a pipeline of development-ready land and the private sector's significant role in ensuring land supply and market responsiveness.

129. However, after carefully considering the submissions, supporting documentation, and the planning analysis provided by FDS Advisors in their Reports, the Panel agree with their recommendations not to include most of these requested areas in the current iteration of the FDS. We consider that the FDS Advisors undertook a robust and methodical assessment of all proposed growth areas using an MCA that considers factors such as land productivity, servicing feasibility, natural hazard exposure, connectivity, and alignment with compact urban form principles.

130. Our recommendations do not reflect on the quality or intent of the submissions; rather, they stem from the FDS's strategic and evidence-based framework, designed to prioritise growth in areas well-aligned with infrastructure readiness, environmental constraints, hazard risk, and national policy direction.

Infrastructure

131. A range of submitters identified infrastructure issues associated with provision for future growth, and we generally agree with the way the Draft FDS has addressed strategic infrastructure given that the availability of, and provisioning for, infrastructure has guided preferential locations for urban development along with indicative timings of development in those locations. Based on feedback received through the submissions and evidence presented before and at the hearing, the FDS Advisors, through their Hearings and Reply Reports, have recommended adding text to the Infrastructure section to clearly identify planning requirements for solid waste management, the effective and efficient development of stormwater solutions, and protecting the

development, operation and maintenance of nationally and regionally significant infrastructure. We agree with the general intent of those recommended additions.

132. Infrastructure providers such as the New Zealand Transport Agency (NZTA), Transpower and the Ministry of Education (MoE) as well as HBAL and Hawke's Bay & East Coast Aero Club Incorporated (HBECAC) raised matters specific to them and sought changes to the Draft FDS.

133. Turning to the FDS strategic objectives, HBAL requested Objective 10 be amended to better recognise the relationship between the provision and operation of infrastructure and urban development. In response to evidence from HBAL and the NHC, FDS Advisors recommended amending this objective through their Hearing and Reply Reports as follows:

> *10A. Our infrastructure is planned and designed to effectively support development and be resilient.*
>
> *10B. Operational and functional needs of nationally and regionally significant infrastructure are not unduly compromised by the location, design and suitability of new development.*

134. We consider these amendments to be appropriate, apart from use of the word "unduly" proposed in Objective 10B which is somewhat vague and likely subjective in interpretation and implementation. We are uncomfortable with an objective that implies that new development could compromise the operational and functional needs of nationally and regionally significant infrastructure. We agree that the operational and functional needs of such infrastructure should be maintained for the benefit of current and future generations. The requirement to avoid compromising the operational and functional needs of such infrastructure does not preclude all development. It just requires appropriately located and designed development. As such, we recommend that the word "unduly" be removed from recommended new Objective 10B as it does not add anything and the objective is sufficiently clear that new development can still occur, provided it does not compromise nationally and regionally significant infrastructure.

135. Consequential to amending Objective 10, FDS Advisors recommended rewording in section 9.2 and 10.11. While we address development constraints elsewhere in our recommendation report, we note that the relevant submissions consistently called for infrastructure to be referenced as a constraint and mapped. FDS Advisors have recommended updating Figure 12 (now 13) accordingly to include noise contours for both airport facilities and have added electricity transmission lines and substations. They have also recommended amending Section 9.2 of the FDS to clarify that areas for the safe operation and functional needs of nationally and regionally significant infrastructure are also constraints. Having heard evidence of the relevant submitters and advice that the Hastings Aerodrome would fall within the definition of strategic infrastructure under the RPS we recommend that these changes are accepted. Our only caveat to the additional wording at section 10.11 is inclusion of the term "unduly" and for the reasons mentioned above we recommend that it is also removed from paragraph 2 of section 10.11.

136. In relation to social infrastructure, we agree that the minor revision proposed in section 10.11 responding to the Ministry of Education is needed to properly reflect Māori demographics in education. The Ministry of Education also highlighted that future development will require planning for additional educational services. We agree with the FDS Advisors' comments that engagement with MOE and other providers/government agencies in such specifics is more appropriately addressed via the proposed Implementation Plan than in the FDS itself.

137. Lastly, we consider the FDS Advisors' recommended addition of a subsection on "nationally and regionally significant infrastructure" as worded in their Reply report strikes the right balance between HBAL's proposed wording and being overly prescriptive. We agree with the FDS Advisors' position that "the FDS should not be confused or conflated with being an infrastructure strategy" (pg. 30).

Summary

138. In conclusion, the Panel supports the recommendations made by FDS Advisors in reply in respect of Strategic Infrastructure and recommend a minor amendment to delete the word "unduly" from Objective 10B and paragraph 2 of section 10.11.

5. Conclusion

139. The Panel acknowledges the submissions received from landowners, developers, and community representatives seeking amendments to the FDS. We appreciate the time, effort, and detailed evidence provided by submitters to support their proposals, reflecting a clear commitment to addressing the region's future urban development needs and a desire to contribute constructively to the long-term development of Napier City and the Hastings District.

140. Through this process, we have aimed to balance landowners' economic ambitions with the long-term public interest in coordinated, sustainable, and equitable urban growth and provision of infrastructure.

141. Subject to our recommended amendments, we find that the FDS provides a strategic, efficient, and sustainable response to the Councils' future urban development needs and demands. While we acknowledge the aspirations of submitters seeking additional areas for inclusion, our responsibility is to ensure growth is directed in a manner that integrates with infrastructure, maximises sustainability outcomes, and is consistent with long-term planning objectives. The input provided through submissions has been valuable to this process and will continue to inform future planning. We encourage ongoing engagement between submitters and the Joint Committee to ensure the FDS, the Regional Policy Statement, the two District Plans and Councils' Long Term and Annual Plans are responsive to current and emerging urban development demands.

Signed by the Independent Hearings Panel

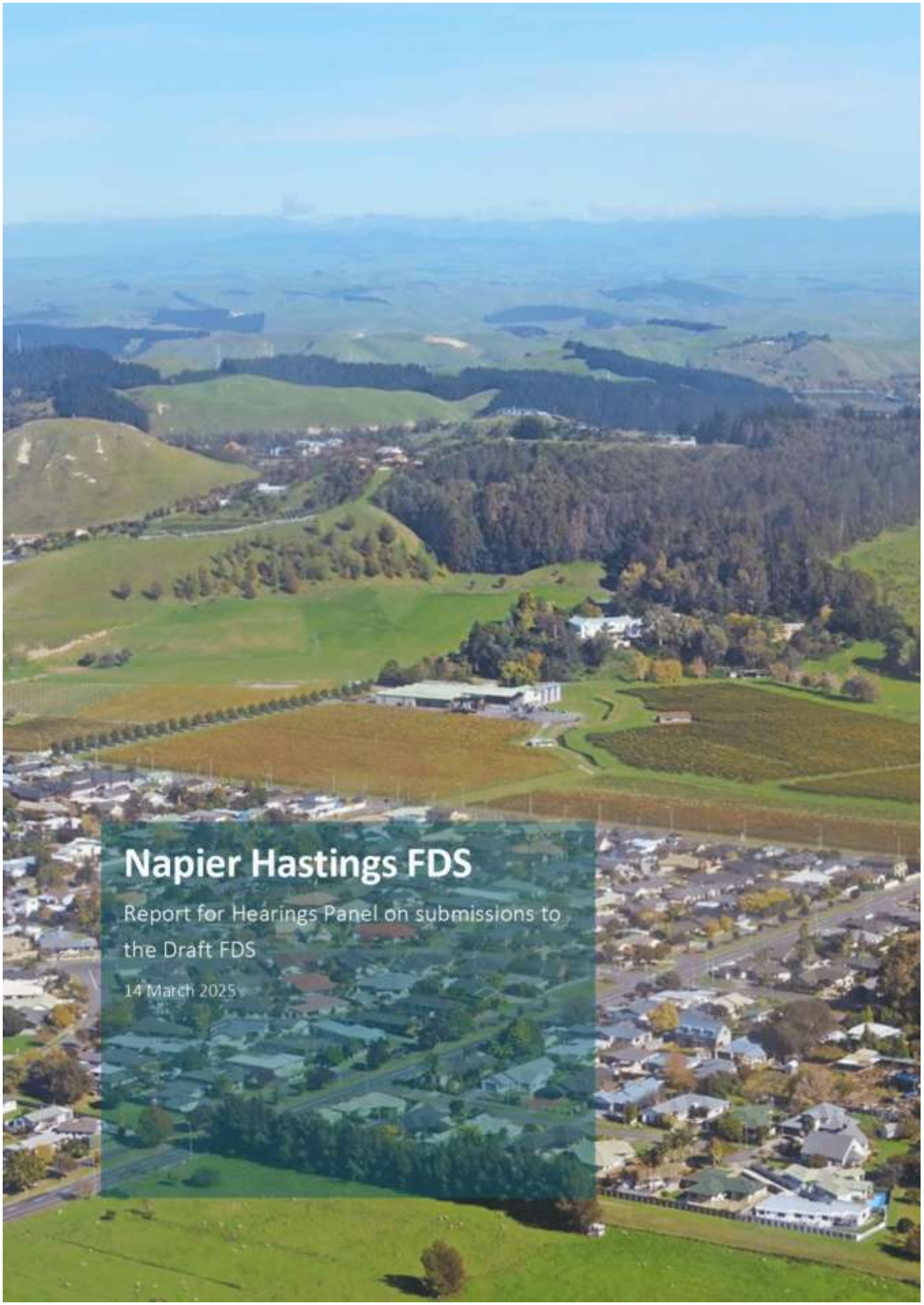
Gina Sweetman (Chair)

Juliane Chetham

Michael Parsonson

Shad Rolleston

Steven (Tipene) Wilson


Napier Hastings FDS
Report for Hearings Panel on submissions to the Draft FDS
14 March 2025

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Appendix 10	Hawke's Bay Regional Council Memo: Analysis for potential wet industry impacting soils / HPL

Executive Summary

This report analyses the submissions received on the Draft Napier Hastings Future Development Strategy 2025-2055 (**Draft FDS**). This report provides recommendations to the Hearings Panel for amendments to the Draft FDS in response to the analysis.

This report contains recommendations for changes to the Draft FDS but does not in all instances recommend specific wording/mapping changes and a full revised version of the Draft FDS is not provided. Council officers intend to provide this as part of Reply, taking into account what we have heard during the course of the Hearing.

This report should be read in conjunction with the supporting evidence and analysis undertaken to inform the Draft FDS. In preparing this report, additional advice has been sought from a range of specialists. This is targeted to specific issues raised in submissions.

The key conclusions and recommendations of this report are listed below. In reaching these conclusions, we have taken a balanced approach, noting that there are a range of often competing objectives that that the FDS seeks to achieve.

Urban housing demand, capacity and choice

a) Do not amend the housing demand projections for Napier and Hastings, but provide greater flexibility in development capacity to cater for latent demand and uncertainties about landowner intentions and the timing of development.

b) Acknowledge that there is some interchangeability of residential and business demand for Napier and Hastings but generally treat them as independent housing and employment markets.

Development constraints

c) Carry through the key recommendations of the Independent Flood Review on planning controls to the Draft FDS in the implementation section or the Implementation Plan.

d) Ensure that the FDS is informed by all other National Policy Statements under the RMA but enable the detailed assessments to be carried out through future plan change processes. This includes the detailed requirements of the National Policy Statement for Highly Productive Land (**NPSHPL**) in particular.

Iwi and hapu development aspirations

e) Make a range of amendments to the Draft FDS to better reflect iwi and hapū development aspirations. This includes spatially identifying areas of interest, and other actions to be addressed in the FDS Implementation Plan.

Business and industrial

f) Amend Section 10.5 of the Draft FDS to explain that expansion of Tomoana and/or Whakatu may be required in the long term to meet wet industry demand.

g) Related to (a), include a short term action to investigate policy changes to better protect remaining vacant capacity at Whakatu for wet industry.

Rural residential / rural and coastal settlements

h) Retain the Draft FDS approach of evaluating growth options for rural residential and rural and coastal settlements through a subsequent Rural Residential Strategy.

i) Carry over the strategic direction for rural and coastal settlements from HPUDS 2017 as an Appendix to the FDS as an interim measure and until the Rural Residential Strategy is in place.

Greenfield residential – Napier

j) Retain the greenfield residential sites for Napier identified in the Draft FDS.

k) Make minor amendments to the description of Mission Estate (NC6) and Riverbend (NC4b) that respond to site specific issues addressed in the landowner submissions for these sites.

Greenfield residential - Hastings

l) Retain the greenfield residential sites for Hastings identified in the Draft FDS.

m) Include the following additional greenfield sites in Hastings:

- Middle Road (HN3a and HN3b);
- Wall Road/Southland Road (H5b);
- An expanded area Portsmouth Road (FM9).

n) Increase the approximate capacity for Arataki Extension (HN2b) by 60 dwellings to total 170 dwellings.

Infrastructure

o) Amend Objective 10 of the Draft FDS and Section 11 to better provide for the functional and operational needs of significant infrastructure.

Other matters / general

p) Amend Section 10.1 of the Draft FDS to clearly state that the boundaries are indicative only and that refinements may occur through the structure planning and rezoning process.

q) Related to (p), include additional text in Section 11.1 that sets out the considerations for stormwater infrastructure, including when it would be appropriate to locate this outside of FDS boundaries.

A full list of recommended changes to the Draft FDS in included at Section 12 of this report.

Section 12 also includes updated and summarised development capacity information.

1.0 Purpose and Introduction

1.1 Purpose

The purpose of this report is to analyse the submissions received on the Draft Napier Hastings Future Development Strategy 2025-2055 (**Draft FDS**). This report provides recommendations to the Hearings Panel for amendments to the Draft FDS in response to the analysis.

This report addresses the key issues raised in submissions and undertakes the analysis thematically. This report does not classify individual points raised by submitters. A list of submitters and full copies of the feedback received is included at **Appendix 2**.

The Hearings Panel has indicated that they would like a written Reply from Council officer's shortly after the Hearing closes on 26th March 2025. The Reply will contain further analysis and any revised recommendations in response to questions from the Panel and further information provided by submitters at the Hearing.

This report contains recommendations for changes to the Draft FDS but does not in all instances recommend specific wording/mapping changes and a full revised version of the Draft FDS is not provided. Council officers intend to provide this as part of Reply, taking into account what they have heard during the course of the Hearing.

This approach and the process generally adopted to prepare this report reflects that the FDS follows the Special Consultative Procedure under the Local Government Act 2002.

1.2 Report Authors

This report has been prepared by the Technical Advisory Group for the project, who have worked collaboratively to develop the recommendations.

The Technical Advisory Group includes professional experts and advisors from Napier City Council, Hastings District Council and Hawke's Bay Regional Council (**HBRC**) as well as technical advisors from Tamatea Pokai Whenua (**TPW**), Mana Ahuriri Trust (**MAT**) and Maungaharuru-Tangitū Trust (**MTT**).

Below is a list of the lead author for the various sections of the report, although each section has involved multiple authors (not only the lead) in its preparation and review.

The qualifications and experience of the lead authors are included in **Appendix 3**.

Table 1 List of lead author

Topic	Report Section	Lead Author
General matters Urban Housing demand, capacity and choice Development Constraints	Section 3-5	Rachel Morgan, Barker & Associates
Iwi and hapū development aspirations and papakāinga	Section 6	Dale Meredith, Hawke's Bay Regional Council Heather Bosselmann, Tamatea Pōkai Whenua
Business and Industrial, Rural residential, Greenfield Residential Napier	Section 7-9	Rachel Morgan, Barker & Associates
Greenfield Residential Hastings	Section 10	Mark Clews, Hastings District Council Craig Scott, Hastings District Council
Infrastructure	Section 11	Dale Meredith, Hawke's Bay Regional Council

In preparing this report, the report authors have had various discussions with some of the submitters to better understand the basis for their respective requested changes. Further details of these discussions are contained in the relevant sections of the report below.

1.3 Supporting Evidence and Analysis

The Technical Advisory Group undertook extensive analysis and evaluation to assist preparation of the Draft FDS by the Joint Committee. This is detailed in the Draft FDS and the Technical Report that supports it[1] .

The reports and advice relied on to prepare the Draft FDS that were specifically developed for the FDS are summarised as follows:

a) **Barker & Associates Issues and Options Report *(dated July 2023)***: This Report was prepared to outline the identified key issues and strategic choices shaping the draft FDS. Taking all identified issues into consideration, the Report suggested several initial spatial scenarios, including increased infill in existing urban areas, additional greenfield

[1] All information is available in the consultation documents tab available here: https://www.hastingsdc.govt.nz/hastingsnapierfuturedevelopment/

growth and potential satellite developments. This formed the basis of early public consultation for the project.

b) **MCA Analysis and Site Summaries** ***(dated November 2024):*** The MCA Analysis is contained within Appendix 3 of the Technical Report and it applied scores to each potential refined growth area against a broad set of criteria, such as cultural values, housing capacity, highly productive soils, and natural hazards (e.g., flooding, coastal risk, or land instability). The set of criteria was made up of key policy drivers, such as NPS-UD and NPS-HPL, as well as key issues that have been identified in the Issues and Options Report. The analysis helped to guide decisions on which areas or parts of an area, were considered to be suitable for growth.

c) **The Site Summaries** (Appendix 4 of the Technical Report) were prepared to offer more detailed profiles for each shortlisted growth area. For each area, it lays out background information including current land use, ownership patterns, estimated housing yield or industrial capacity, and significant constraints. Infrastructure needs and cost implications were also highlighted. This document translated the high-level MCA findings into a comparison of the advantages and disadvantages of residential intensification, greenfield housing, industrial expansion, or a combination of uses of each area. The findings of this document have fed into the Draft FDS's recommended spatial strategy.

d) **Market Economics Residential Capacity Assessment – Intensification Options** ***(dated May 2024):*** This Assessment forms part of Appendix 5 of the Draft FDS Technical Report and provides updated residential demand and capacity information. It provides capacity estimates for the various spatial scenarios assessed. The Draft FDS adopts the residential intensification estimates from this report.

e) **Birman Retirement Village Section Housing Assessment** ***(dated May 2023):*** This Assessment is contained in Appendix 5 of the Draft FDS Technical Report. It highlighted the growing importance of retirement and aged-care developments.

f) **Stantec Transportation Network Impact Assessment (*dated July 2024*)**: This assessment is contained in Appendix 6 of the Draft FDS Technical Report and it evaluated four future development scenarios in Napier and Hastings that could affect the transport network up to 2048 in both the interpeak and evening peak periods. The four future development scenarios included the intensification scenario, Ahuriri-focused growth scenario, Flaxmere-focused growth scenario and Napier South-focused growth scenario. The Assessment recommended targeted transport improvements to support growth areas, which has informed the evaluation of spatial scenarios.

In response to feedback, further focussed technical evidence has been sought from Market Economics on industrial demand and development capacity. This advice is included at **Appendix 5**.

Submitters did not raise fundamental issues with the use of the MCA framework to guide decision-making, or the broad process adopted to evaluate spatial scenarios for the Draft FDS. We therefore do not address the spatial scenario or site selection methodology further in this report.

However, various submitters queried how specific constraints such as highly productive land and natural hazards are evaluated and addressed in the preferred spatial scenario. Submitters also raised issues with the scoring of specific sites using the MCA framework. These matters are addressed in the relevant sections of the report below.

With the exception of the Hawke's Bay Airport Limited, submitters also did not raise fundamental issues with the Principles or Objectives contained in the Draft FDS. Hawke's Bay Airport Limited did request changes to Objective 10 regarding significant infrastructure and this is addressed in Section 11 of this report. No other changes to the Principles or Objectives were sought from submitters.

2.0 Overview of Submissions

2.1 Origin of submitters

The Draft FDS was publicly notified on 23rd November and following the Special Consultative Procedure (in accordance with section 83 of the LGA) the public engagement period on the Draft FDS was between 23rd November to 23rd December 2024. A total of 139 submissions were received. The submissions consisted of:

a) 55 (39.6%) through the Draft FDS Survey submissions;

b) 84 (60.4%) through other forms of submissions.

Submissions came from land developers or organisations with development interests, representatives of community groups, horticultural interests and individual property owners. Submissions were received from locations across Napier and Hastings, including Bay View, Riverbend, Te Awanga, Haumoana, Havelock North, Pakipaki, Maraekakaho, as well as peripheral areas on the Heretaunga Plains. **Figure 1** showing the general origins of the submissions is provided below.

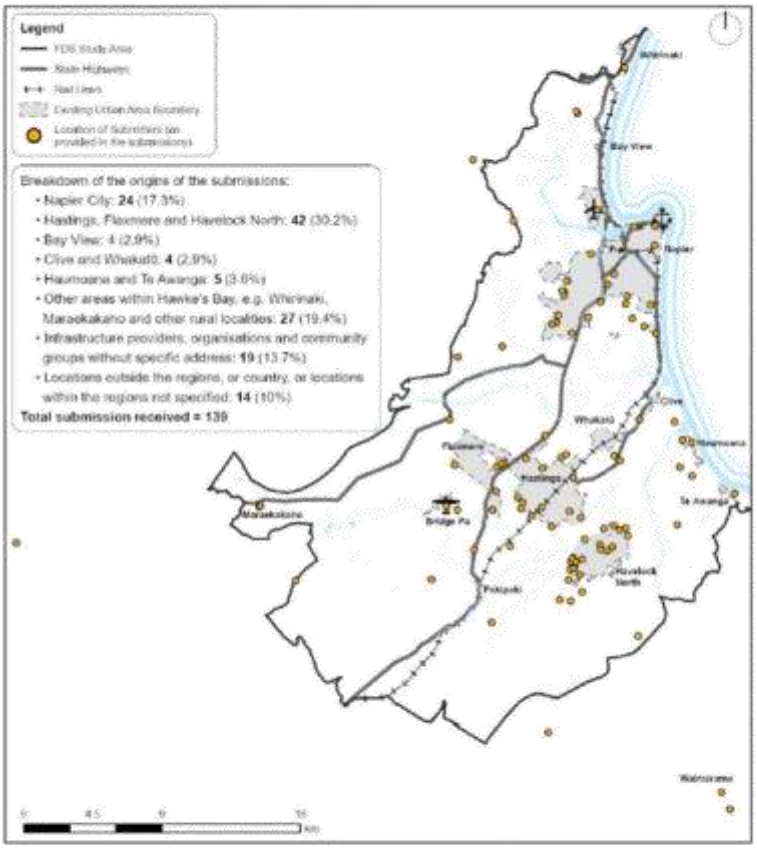


Figure 1 Showing submitter origins and breakdown.

2.2 Key themes and issues

The main themes and key issues arising from submissions can be summarised as follows:

a) **General Matters:**

(i) Request to expand the spatial extent of the FDS.

(ii) The strategic approach and weighting underpinning the FDS.

(iii) Request to extend the consultation timeframe for providing feedback.

b) **Urban Housing Demand, Capacity and Choice:**

(i) Differing views on whether the population/housing demand forecasts are too high or too low.

(ii) Calls to increase both infill/intensification and new greenfield land supply.

(iii) Concerns that the 60% intensification / 40% greenfield target might be too rigid or too lenient, depending on stakeholder interest.

(iv) Request for more explicit provision for retirement villages and aged-care housing.

c) **Development Constraints:**

(i) Clear division between those wanting strict protection of LUC 1–3 soils and those preferring balanced expansion.

(ii) Strong emphasis on aligning with recent flood review findings, steering urban growth out of high-risk areas if possible, and using robust mitigation in any hazard-prone zone.

(iii) Concerns on site-specific hazard assessments, air quality and other human health considerations.

d) **Iwi and Hapū Development Aspirations and Papakāinga:**

(i) Recognition that papakāinga, redress land development, and Māori-led demographic studies must be supported as part of any long-term strategy.

(ii) Recognition of stronger meaningful partnership in decision-making, enabling Māori to co-lead growth planning consistent with Te Tiriti commitments.

e) **Business and Industrial:**

(i) Request for rezoning and specifically to provide a new supermarket.

(ii) Support enabling more mixed-use development near high-density housing areas.

(iii) Calls for identifying sufficient land for 'wet industry', distinguishing it from dry industrial uses in growth scenarios.

f) **Rural Residential and Coastal Settlements:**

(i) Calls for more rural-residential growth, rezoning or intensifying existing rural-residential zones.

(ii) Support for a dedicated rural-residential strategy or policy to guide future rezoning and coordinate with local infrastructure (e.g. schools, roads).

g) **Infrastructure:**

(i) Widespread calls for improved alignment of growth areas with existing or planned services and for exploring new funding/financing models to deliver long-term network upgrades.

Beyond the abovementioned main themes and key issues, site-specific submissions on greenfield residential areas in Napier and Hastings were also considered.

Submissions that broadly support or oppose the Draft FDS are noted.

3.0 General Matters

3.1 Issues Raised in Submissions

Multiple submitters raised general matters about the scope and approach of the Draft FDS.

The key issues raised are as follows:

The Draft FDS should include the wider Hawke's Bay / Central Hawke's Bay (St Columba Presbyterian Church; Walter Breustedt)

Revise the Draft FDS with respect to the weighting to be applied to the FDS for District Plan level decisions (Angela McFlynn)

The timeframe for providing feedback should be extended (Cheryl Nicholls).

3.2 Analysis and Discussion

3.2.1 Spatial Extent of the FDS

The NPSUD requires an FDS to be prepared for the Napier and Hastings Tier 2 urban environment. This is set out in Table 2 of the NPSUD.

Statistics New Zealand defines the Napier Hastings urban area as shown on **Figure 2** below. The *Study Area* for the FDS was deliberately expanded to cover a wider area (20 minute drive time from the main centres of Napier and Hastings). This allowed a comprehensive consideration of potential locations for future growth, which was important when taking into account the development constraints present adjoining the existing urban areas. The 'study area' does not, nor is intended to, illustrate the extent of the urban area over the FDS's 30-year planning horizon.

The neighbouring districts of Central Hawke's Bay and Wairoa have been invited to participate in preparing the draft FDS and the relationship of urban development in Napier and Hastings with the community and infrastructure networks in Central Hawke's Bay and Wairoa has been considered in developing the draft FDS. In terms of Wairoa, the relationship is reasonably limited. While there is movement of people and freight along State Highway 2 that connects the districts, there is a limited spatial connection between the developed urban areas.

There is a stronger spatial relationship between Central Hawke's Bay and Hastings, with commuting occurring from the rural settlements of Ōtāne, Waipawa and Waipukurau, which are located about 30-40 minutes drive time from central Hastings. Anecdotally, there is a local sense that Ōtāne is becoming more of a satellite town[2]. Providing for strategic employment opportunities on the southern side of Hastings improves access for these communities. This is a

[2] Refer to the Central Hawke's Bay Integrated Spatial Plan 2020-2050 (pg. 10).

matter to explore further through a future regional spatial planning exercise for Hawke's Bay.

The Draft FDS does not contain commentary on regional relationships with Wairoa and Central Hawke's Bay. We recommend including additional commentary on this matter on the FDS as per the recommendations of St Columba Presbyterian Church and Walter Breustedt. The additions would reflect the matters discussed above.

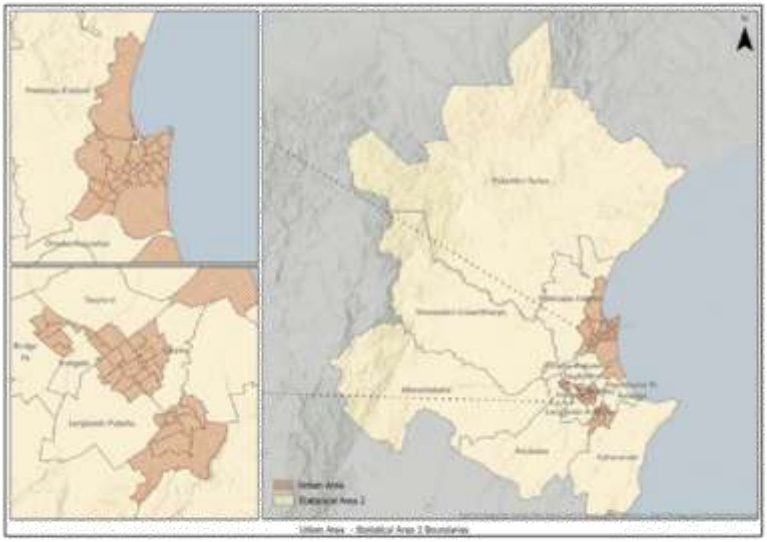


Figure 2 Showing the Napier-Hastings Urban Areas as defined by Statistics New Zealand (StatsNZ).

3.2.2 Weighting to apply to the FDS

Angela McFlynn requests changes to the FDS to make it clear that it is unnecessary to consider the FDS when making or considering applications for resource consent or private plan changes. Clause 3.17 of the NPSUD sets out the effect of an FDS. It states that Councils must "have regard to" the relevant FDS when preparing or change RMA planning documents. This includes the Regional Policy Statement and District Plans. On this basis, we see no reason to amend the description of the weighting the FDS in the document.

3.2.3 Timeframes and process

Cheryl Nicholls requested an extension to the timeframe for providing feedback on the Draft FDS. The NPSUD requires that councils use the Local Government Act Special Consultative Procedure for release of the draft FDS. HDC's standard Special Consultative Procedure was used for this given HDC is the administering council for the joint FDS project. Prior to this, opportunities for public engagement on early issues and options were provided from February 2023-July 2024. This included public engagement sessions and one-on-one discussions with those wanting to discuss their issues/concerns. There are further opportunities for submitters to present to the Hearings Panel and

provide information through that phase of the Special Consultative Procedure process.

3.3 Recommendations

In relation to general matters, we make the following recommendations for amendments to the Draft FDS:

a) Amend the Draft FDS to include further brief information on cross-boundary relationships with Wairoa and Central Hawke's Bay districts. Draft wording for the Panel's consideration is as follows, for inclusion in a new Section 4.3. This would be supported with an appropriate plan:

4.3 Cross Boundary Relationships

The neighbouring districts of Central Hawke's Bay and Wairoa have been invited to participate in preparing the draft FDS and the relationship of urban development in Napier and Hastings with the community and infrastructure networks in Central Hawke's Bay and Wairoa has been considered in developing the FDS. In terms of Wairoa, the relationship is reasonably limited. While there is movement of people and freight along State Highway 2 that connects the districts, there is a limited spatial connection between the developed urban areas.

The Central Hawke's Bay District is located to the south of Hastings, with the settlements of Ōtāne, Waipawa and Waipukurau being within 30-40 minutes drive time from central Hastings via State Highway 2. Commuting between these areas and Napier beyond is common, and anecdotally, there is a local sense that Ōtāne is becoming more of a satellite town. The FDS provides for strategic employment opportunities on the southern side of Hastings improves access for these communities. The relationship of these areas can be considered further through future regional spatial planning exercises.

4.0 Urban Housing Demand, Capacity & Choice

4.1 Issues Raised in Submissions

Multiple submitters raised broader issues regarding housing demand, development capacity and housing choice. Submitters raised these issues directly and indirectly.

Issues relating to rural residential demand and capacity are addressed in Section 8 of this report.

The key issues raised are as follows:

a) The housing demand projections underpinning the draft FDS are inaccurate leading to over-supply of housing and intensification (Myriam Parker; Kirk Doyle; Lynne Anderson);

b) The FDS should provide greater residential development capacity across the board (intensification and greenfield) to enable greater market competition and increase housing choice (Matt Holder; multiple land development submitters including for example Heretaunga Connection Project Limited, CDL Land (NZ) Limited and T&J McKenna; Carl Wezel);

c) Related to the above, the 60% assumption for intensification is either too high (Myriam Parker; Kirk Doyle; Lynne Anderson; Susan Garner; Rachel Hayward) or too low (Hawke's Bay Wine Growers Association; Matt Holder). Other submitters stated that the greenfield assumption of 40% is too high (Save the Plains);

d) Latent demand for housing is not clearly addressed/catered for in the demand projections (Heretaunga Connections Project Limited; Development Nous Ltd; The Strawberry Patch Ltd; Meeanee Developments Limited; Te Orokohanga Hou Joint Venture; CDL Land (NZ) Ltd);

e) The needs of the retirement sector have not been catered for in the demand projections and the development capacity enabled does not cater for the sector's specific land requirements (Summerset; Heretaunga Connections Project Limited; Development Nous Ltd; The Strawberry Patch Ltd; Meeanee Developments Limited; Te Orokohanga Hou Joint Venture; CDL Land (NZ) Ltd; Carl Wezel; Oceania Village Company Ltd; Bupa Care Services Ltd);

f) The shortfall in greenfield residential development capacity in Hastings cannot be "made up" with an over supply of residential development capacity in Napier given the requirements of the National Policy Statement: Urban Development (**NPSUD**) (Development Nous submissions);

g) Query the intensification calculations in Section 10.9 compared to earlier versions of the Draft FDS (Transpower).

4.2 Information and Evidence

The key evidence relating to the issue of urban housing demand, capacity and choice that underpin the Draft FDS is as follows[3]:

a) Napier and Hastings Housing Development Capacity Assessment 2021 (prepared by Market Economics);

b) Napier and Hastings Business Development Capacity Assessment 2022 (prepared by Market Economics);

c) Napier and Hastings Urban Housing Market Snapshots, which provide real time quarterly information about residential land capacity and affordability;

d) Housing and Business Capacity Assessments undertaken for the Draft FDS (prepared by Market Economics) – refer to Appendix 5 of the Technical Report;

[3] Documents (a)-(c) can be found here: https://www.hpuds.co.nz/resources/

e) Retirement Village Sector Housing Demand Forecasts 2023-2053 (prepared by Birman Consulting)[4].

To respond to specific issues raised by submissions, Market Economics has prepared a memo included at **Appendix 5**. This addresses issues raised in submissions regarding retirement village demand, and latent demand for housing.

4.3 Analysis and Discussion

4.3.1 Housing Demand Projections

Several submitters queried the demand projections that underpin the FDS, arguing that they are too high / inaccurate, which has led to an over-supply of housing.

Overall, we are satisfied that the demand projections that have been used to inform the FDS are compliant with the NPSUD and are reliable for strategic planning purposes. They have been analysed by highly experienced urban economists, and we rely on their expert opinion. It is also important to keep in mind that household projections are a best estimate at a given point in time and are not intended to be pin-point accurate.

We make the following additional comments on the issues raised by submitters:

a) The NPSUD sets out the framework for how councils are to establish residential demand projections through their Housing and Business Capacity Assessments. HBAs must then be used to inform the FDS (see 3.14 of the NPSUD). The HBA is required to set out a range of projections across the short, medium and long term and select the projections that they consider to be most likely.

b) The **most likely** demand projections have been assessed by Market Economics and are the medium-high population projections series provided by Stats NZ. This reflects historic observed development patterns in Napier and Hastings. Submitters have not provided evidence to suggest that the medium-high series is not the most likely.

c) Councils are required to add a **competitiveness margin** to the projections, which are then translated into housing bottom lines. This is an additional 20% in the short and medium term and an additional 15% in the long term. This purposefully inflates residential demand in the form of housing bottom lines, to encourage greater market competition and support improved housing affordability.

4.3.2 Latent Demand

A number of submitters have stated that latent demand has not been addressed in the demand projections. The submitters state:

[4] Refer to the supporting documents available here: https://www.hastingsdc.govt.nz/hastingsnapierfuturedevelopment/

Part 3.3.2 of the HBCA does not clearly consider this matter, and HCP notes that the estimated demand adds between 680 -1425 additional dwellings that will need to be accommodated. This is in addition to the growth figures listed that are to be fulfilled by the mainstream market.

Submitters have not provided evidence of accurate latent demand numbers nor evidence of methodologies that should be used to calculate numbers of latent demand housing.

Section 3.3.2 of the Napier Hastings HCA addresses latent demand. This is also addressed in the memo prepared by Market Economics at **Appendix 5**.

Latent demand refers to the amount of housing demand that is not currently being met by the market. In other words, it is the number of households that would like a dwelling but cannot find one that meets their needs. The reasons for this are varied and may relate to a mismatch of the price of current housing stock relative to current household incomes. This occurs at the lower end of the market. Latent demand is not captured by Stats NZ demand projections given that they are based on future growth rates.

There is no known established methodology for calculating latent demand, but the social housing waitlist provides an indicator by proxy of the number of households that do not have housing that meets their needs. As at December 2024 there were 522 applicants on the social housing register in Napier and 582 in Hastings (1,104 total). This has trended down over recent years following highs in 2022.

The Napier Hastings HCA provided broad estimates of latent demand expressed as a range:

a) Napier 60 – 360

b) Hastings 620 – 1,065

c) **Total 680 – 1,425**

The current social housing waitlist sits generally at the mid-point of this range and provides a guide as to the current extent of latent demand for housing in Napier and Hastings, but again, is not pin-point accurate.

Meeting this demand will largely be delivered by social and community housing providers that have a different development model to typical residential land developers. The development model of social and community housing providers is not catered for in the development capacity analysis undertaken for the HCA and this needs to be taken into account when considering where and how this demand is met. For example, additional rural residential or other high value housing would not meet the needs of those on the social housing waitlist. The private development market can play a role in meeting affordable housing needs although this is difficult to quantify.

We agree with the submitters that latent demand should be taken into account when considering whether development capacity enabled by the FDS would meet demand. However, in our opinion, it should continue to be separately

identified given that the development capacity provided to meet that demand has different characteristics to typical development. We discuss this further in Section 4.3.5 below, with respect to the overall sufficiency of residential capacity to meet demand.

4.3.3 Retirement Village Demand

Several submitters stated that the needs of the retirement sector have not been catered for in the demand projections and the development capacity enabled does not cater for the sector's specific land requirements.

As stated above, we are satisfied that the demand projections are reliable for this process. Retirement villages accommodate older people which is a growing sector of the population. These demographic changes, including changes to household composition are factored into the demand projections.

The concerns expressed in the submissions are more relevant to the matter of development capacity and where and how the FDS provides for that. The submitters outline that retirement village operators have specific functional requirements and typically look for sites of approximately 8-10 hectares to allow for comprehensive development. we agree with this statement, and it aligns with our experience and discussions with retirement village operators across New Zealand.

Like the rest of New Zealand, Napier and Hastings population is aging and broadly, there will continue to be strong demand for retirement villages and aged care facilities[5]. It is therefore appropriate to take into account their functional requirements when considering locations for development capacity. However, the Draft FDS does not ringfence greenfield land specifically for retirement village development. This would create a competitive advantage for retirement village operators and would reduce innovation and diversity in the housing market for retirement style housing. This reinforces the need for a balanced approach to growth with a mix of intensification and greenfield options.

There are a range of considerations at play, including the need to protect highly productive land and effectively manage significant natural hazard risks which constrains opportunities for greenfield expansion. Responding to these constraints will require the retirement sector to develop with a high level of land efficiency and explore new development models, including redevelopment and intensification in existing urban areas.

4.3.4 Intensification / Greenfield Assumptions

Submitters raised concerns about the intensification assumptions used in the Draft FDS stating that they are either too high or too low. Those stating that the assumptions are too high generally opposed intensification on amenity and infrastructure grounds. Conversely, other submitters considered that the

[5] This is consistent with the findings of the Birman Report commissioned for the FDS and the further analysis undertaken by Market Economics.

intensification assumptions are too low given the need to limit greenfield expansion and protect the fertile soils of the Heretaunga Plains. Save our Plains raised similar concerns stating that the greenfield assumption of 40% is too high. Matt Holder considered that greater intensification capacity should be allowed.

The total urban demand number for Napier and Hastings have been categorised into "urban" and "greenfield" demand. This aligns with the NPSUD requirement for housing demand to be assessed for different locations[6]. It is also useful to guide where and how the FDS provides development capacity. This is one method for ensuring that the preferred spatial scenario is realistic and can reasonably be delivered by the market.

The Market Economics assessment at Appendix 5 of the Draft FDS outlines the methodology that sits behind the intensification and greenfield splits. This analysed attached vs detached dwellings consent data in cities across New Zealand, with attached dwellings used as a proxy for intensification. It then compared these to Napier and Hastings to determine a realistic scenario that accounts for the trend towards intensification in New Zealand's larger cities.

For completeness the assumed splits are provided below:

Table 2 Housing Demand by Location

Broad Type	Short Term	Medium Term	Long Term	Total
Redevelopment in the existing urban area	40% (996 dwellings)	50% (2,270 dwellings)	60% (5,574 dwellings)	54% (8,840 dwellings)
New housing in greenfield areas	60% (1,494 dwellings)	50% (2,270 dwellings)	40% (3,716 dwellings)	46% (7,480 dwellings)
Total	**2,490 dwellings**	**4,540 dwellings**	**9,290 dwellings**	**16,320 dwellings**

It is important to note that **these splits are not a target or a limit**. They simply provide an indication of demand by location in terms of what we might realistically expect the market to deliver. This then flows through to the development capacity and spatial scenario analysis, with respect to whether a scenario provides sufficient capacity to meet demand. The market could deliver more housing in the urban area than what is stated in the table. The Councils themselves are able to enable and encourage intensification to occur through their District Plans and other mechanisms, and this is provided for in the Draft FDS objectives and strategy.

Based on this analysis, it is not realistic or appropriate to assume higher levels of demand for redevelopment in the urban area/intensification as sought by Save our Soils. The Market Economics analysis demonstrates that the

[6] Refer to clause 3.4(1)(a) of the NPSUD.

assumptions are already ambitious in the Napier Hastings context. Although on the capacity side, ensuring there is ample supply for intensification to occur through District Plan rules and infrastructure provision, will strongly encourage this outcome to occur. The Councils have/are already addressing this through the now Operative Plan Change 5 to the Hastings District Plan and the Napier Proposed District Plan and through their Long Term Plan processes. If the market takes up these opportunities in greater numbers than anticipated by the Draft FDS, this will reduce pressure to release greenfield areas for rezoning and development.

4.3.5 Amount of Residential Capacity

Several submitters stated that the Draft FDS does not provide enough options for greenfield development. For example, Heretaunga Connections Limited states that the FDS must make contingency for the fact that some sites may not in eventuality be developed during the life of the strategy, and if there is a level of attrition, there is a real prospect that a deficit will arise in meeting capacity obligations. They further state that the timing of development will vary immensely depending on market demand and the rate of uptake through economic cycles.

We agree with the submitters that there is uncertainty, and within the confines of the growth areas identified in the FDS, actual landowner intentions and market conditions and preferences will drive when and where land is developed. An analysis of the build out of Napier and Hastings' historical growth areas, which is helpful to demonstrate this (refer **Figure 3** below), noting that the timing/staging of development for these areas was addressed variously in previous growth strategies/plans. This highlights that following:

a) Historically, greenfield development has occurred in locations identified in previous growth strategies with limited development occurring elsewhere;

b) Some areas identified in earlier strategies remain undeveloped e.g. Bay View, Whararangi Road/Park Island, which may be due to landowner intentions or other technical / feasibility reasons;

c) Some areas identified as long term/reserve areas in HPUDS have been developed, or are in the process of being consented e.g. northern part of Middle Road, and part of South Pirimai for retirement villages, also noting that Arataki extension is a listed project in the Fast Track Approvals Act 2024;

d) All large scale development areas in HPUDS for Napier are at various stages of completion, including Te Awa, Parklands and Misson Hills. This is similar to Hastings, where development is at various stages of consenting or completion e.g. Brookvale Road, Lyndhurst and Iona, which are partly complete, and Irongate/York which has recently been consented.

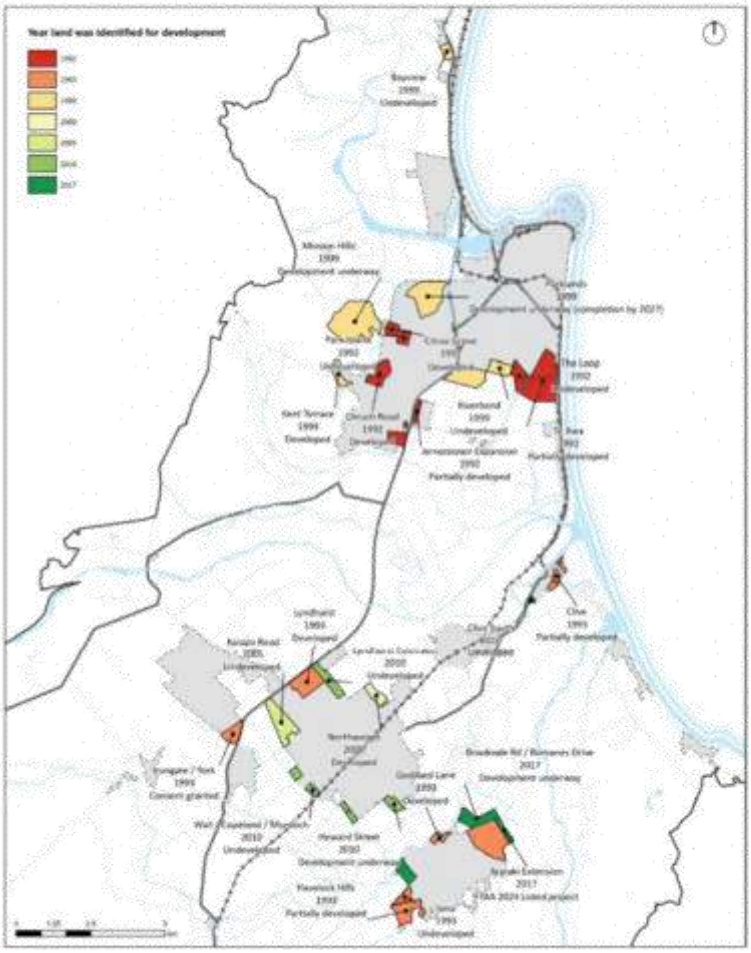


Figure 3 Showing the historic development of greenfield areas in Napier and Hastings.

This demonstrates that the timing of development is variable and driven by a range of factors and that this works in both directions. A limited number of growth areas have not been developed, and conversely some reserve areas/long term options have been partly developed. However, on balance development has unfolded broadly as intended by HPUDS and previous growth strategies, noting that as of 2025, it is only eight years into the planning period for HPUDS 2017.

We also note the following with respect to the effect of market uncertainties on providing sufficient development capacity:

a) As noted in Section 4.3.1 above, the NPSUD requires a competitiveness margin to be added to the future demand projections that inform the FDS. This is intended to ensure that planning documents cater for the types of market uncertainties described by the submitters.

b) The feasible capacity analysis undertaken by Market Economics for the Draft FDS has factored in feasibility and a reasonable uptake rate for

intensification[7]. This has ensured that the intensification assumptions underpinning the draft FDS are reasonable and not over-stated.

c) For greenfield capacity, the draft FDS assumes that all growth areas be developed within the 2024-2054 planning period (30-year time horizon). While there are under and overs, this is a reasonable long-term assumption based on observed historic trends in Napier and Hastings and the additional competitiveness margin buffer. However, it is important to provide some flexibility in greenfield capacity, particularly in Hastings, to account for the following:

   (i) Several greenfield development areas in the draft FDS are subject to complex and overlapping natural hazards constraints e.g. Riverbend, Kaiapo Road and Ahuriri Station. While there are engineering solutions available to address these constraints, they may impact the feasibility and timing of development.

   (ii) Within Hastings, there is a shortfall of greenfield residential capacity of 715 dwellings while there is an oversupply in Napier. As per the advice of Market Economics[8], while there is a degree of interchangeability of residential capacity to meet demand, it cannot be fully substituted. We observe that this will also depend on the location of growth. i.e. growth locations at the southern extent of Napier may more easily substitute growth locations at the northern parts of Hastings and this will relate to the location of key employment nodes.

   (iii) Latent demand has not been factored into the overall demand calculation. While this is appropriate given the uncertainties set out in Section 4.3.2 above, this weighs in favour of providing greater flexibility in greenfield capacity.

In terms of greenfield capacity numbers, it would be appropriate in our opinion for the FDS to provide sufficient greenfield capacity in Hastings to meet projected demand for greenfield in Hastings (approximately an additional 715 dwellings above the Draft FDS). It would also be appropriate to provide some additional greenfield capacity to account for existing latent demand for housing, noting that this may be met through a combination of redevelopment in the existing urban area and new development in greenfield areas. This affects greenfield capacity in Hastings primarily, where the Draft FDS notes there is a shortfall of capacity to meet demand. The draft FDS provides greater capacity in Napier than what is needed to meet demand, which would broadly address latent demand.

While there is some uncertainty about the timing of development in the more constrained greenfield areas e.g. Riverbend, Kaiapo Road and Ahuriri Station,

[7] See Section 4.3 of the Market Economics assessment prepared for the Draft FDS.
[8] Refer to the Market Economics memo included at Appendix 5.

this can be monitored over time as required by the NPSUD[9] and addressed through subsequent three-yearly reviews of the FDS.

4.4 Recommendations

In relation to urban housing demand, capacity and choice we make the following recommendations that will inform the more site specific recommendations in the report below:

a) Take into account latent demand into the overall demand projections for Napier and Hastings and amend the Draft FDS to reflect that.

b) Provide greater greenfield capacity in Hastings to ensure that there is no shortfall (approximately 715 dwellings) and provide some flexibility to account for latent demand that may be provided for within greenfield areas.

5.0 Development Constraints

5.1 Issues Raised in Submissions

Multiple submitters raised broader issues regarding development constraints in Napier and Hastings and how these should inform future locations for growth in the region. Submitters were primarily concerned about highly productive land and natural hazards.

The key issues raised are as follows:

a) Do not allow development on **highly productive land** (Save the Plains; Hawke's Bay Vegetable Growers Association; Horticulture NZ; Simon Nash; Paula Smith et al[10]). Conversely, other submitters stated that a more balanced approach is necessary that reflects the need to provide for urban growth in efficient locations while protecting highly productive land. Or otherwise, recognise the limitations of the NZLRI mapping and take into account site specific matters when considering the productive capacity of the land. These broad comments were generally in the context of justifying the inclusion of sites in the FDS that are mapped as LUC 1-3 (including but not limited to Heretaunga Connections Project Limited; Development Nous Ltd; The Strawberry Patch Ltd; Meeanee Developments Limited; Te Orokohanga Hou Joint Venture; CDL Land (NZ); Mr Apple Ltd; Jim Bishop; Bunnings Ltd; Te Aratika Group);

b) Ensure that recommendations from the **Hawke's Bay Independent Flood Review Panel** are followed (TPW; MTT);

[9] Quarterly monitoring is required in terms of housing demand and supply as per clause 3.9, with a full stocktake undertaken on a three-yearly basis through the Housing and Business Capacity Assessment.
[10] Sarah Swinburn; Daniel Kittow; Samantha McPherson; Sarah Swinburn; Barbara Brookfield; Nyla Sorensen; John Reid; Monique Webster; Krysia Shuker; Teresa Munro - Landmarks Trust; Corrie Hughes; Estate R C Macniven; Andrew Lessells; Jacob Scott; Peter Beaven; Trevor & Myffie James; St Columba Presbyterian Church; Walter Breustedt; Sandy Broad; Vanessa Moon.

c) Avoid development in **low-lying and hazard prone areas** (Mike Johansson; Peter Richardson; Daniel Kittow; John Reid; Sera Chambers; Save the Plains);

d) In response to these constraints, **favour development in the hills** (e.g. Bay View, Havelock Hills, Te Awanga) where these constraints are not present/are less present (Daniel Kittow; Sarah Swinburn; Forest and Bird - Hastings/Havelock; Barbara Brookfield; Noel Bates; John Reid; Lynne Anderson; Kirk Doyle; Sera Chambers; Horticulture NZ);

e) Land with low exposure and vulnerability to natural hazards is prioritised for development and where development must occur on land that has a more than minimal natural hazard risk, mitigations and risk tolerance are both explored before development is undertaken (TPW; MTT);

f) If an area exposed to high flood risk is considered for future development **sufficient mitigation must be in place**. This includes flood protection that manages residual risk to at least a 1% annual exceedance probably accounting for climate change (Insurance Council New Zealand);

g) Encourage councils to consider how density impacts overall flood risk noting that greater density may increase flood risk (Insurance Council New Zealand);

h) Complete **site-specific risk assessments** in every proposed future growth area and consider how to mitigate the natural hazard risk, including feasible evacuation routes in the event of flooding or inundation (Natural Hazards Commission; Te Ikaroa – Hawke's Bay District Health Board);

i) Include consideration of any **likely impacts on air pollution** arising from the growth anticipated by the FDS, including any mitigation measures needed to protect human health (Te Ikaroa – Hawke's Bay District Health Board).

Separate to the submissions, in adopting the Draft FDS for public consultation, the Hastings District Council made the following recommendations in its meeting on 19 November 2024:

> *That Council notes its priority focus about ensuring;*
>
> *1.1.1 Future physical building/housing development in the Napier / Hastings Future Development Strategy catchment, is directed away from locations where natural hazards cannot be safely mitigated.*
>
> *1.1.2 The protection of Land Use Capability 1, 2 and 3 fertile soils.*
>
> *Council expects these issues to be a topic of robust interrogation and discussion both during the Formal Consultation Process and later as the draft Napier / Hastings Future Development Strategy is considered and finalised by the Partner Councils in 2025.*

The focus areas noted by the Hastings District Council have been raised as issues in submissions to the Draft FDS and are addressed below and in subsequent sections of the report.

5.2 Information and Evidence

The key evidence relating to the issue of development constraints that underpin the Draft FDS is set out in the Technical Report – see Section 6 of the report. This is also addressed in the earlier Issues and Options report prepared in the earlier stages of the project.

The project team has used best available information on development constraints to inform the Draft FDS. There are gaps, particularly in the flooding modelling data, and this is clearly stated in the reporting. A combination of information has been used, including flood hazard modelling information available on the Hawke's Bay Hazards Portal, information on Cyclone Gabrielle impacted areas, site specific modelling and analysis, and local knowledge about historic events.

The Hawke's Bay Independent Flood Review made 57 recommendations, including some relating to the Regional Policy Statement (**RPS**). The Panel recommended that the RPS is amended to outline a regionally consistent approach to identifying flood hazard areas, defining climate change assumptions and identifying and managing areas of risk. The Panel state that this work is urgently required. At the time when the Panel released its recommendations, HBRC had already commenced a review of its RPS. This work by HBRC will assist in developing a consistent evidence base and policy framework for flood assessment and land use responses.

HBRC has yet to complete its mapping of highly productive land in accordance with the NPS-HPL. In the interim, the New Zealand Land Resource Inventory LUC1-3 mapping has been used as required by the NPS-HPL. This mapping is at a coarse scale 1:50,000 and is therefore not always accurate at a site-specific level. In addition to this, as part of the MCA analysis of growth areas, advice was sought from Carl O'Brian from AG First (Horticultural Consultant) and Dr Ashton Eaves, Senior Land Scientist at Hawke's Bay Regional Council. Their feedback is captured in the MCA spreadsheet and in the site summaries. Dr Eaves and Dr Kurt Barichievy also provided further advice on particular sites in response to specific submissions, which is addressed in Section 5.3.1 below.

5.3 Analysis and Discussion

5.3.1 Highly Productive Land

Submitters were concerned about the extent of LUC1-3 land that Draft FDS identifies for urban development. The submitters argue that urban and industrial greenfield growth needs to be concentrated on unproductive land and that the Draft FDS contravenes the NPS-HPL.

For context, the table below summarises the sites in the Draft FDS that meet the definition of highly productive land under the NPS-HPL currently. This does not include Kaiapo Road, Lyndhurst Extension, Copeland Road, The Loop or Riverbend. These areas are identified as residential growth areas in HPUDS and meet the definition of "identified for urban development" given that they are

identified in a strategic planning document, are suitable for commencing development over the next 10 years, and have readily identifiable boundaries. It also does not include Mission Estate (NC6) as this is currently zoned Rural Residential. On this basis, these areas are excluded from the definition of highly productive land under clause 3.5(7) of the NPS-HPL.

Table 3 Relevant growth areas and their current HPL status

FDS Growth Area	HPL status (refer to the site summaries for LUC mapping)
South Pirimai (NC4d)	LUC 3. HPUDS Reserve Area.
Arataki Extension (HN2b)	LUC 3. HPUDS Reserve Area.
Murdoch Road (H4)	LUC 2. HPUDS Reserve Area.
Portsmouth Road (FM2)	Within the Roys Hill Winegrowing Area and partly LUC3.
Irongate (IR12 and IR3a)	IR2 – LUC 2. IR3a – mix of LUC 1-3.
Severn Precinct (SP)	LUC 3.
Ahuriri Station	LUC 3.

The NPSUD requires the FDS to be informed by the NPS-HPL as well as other national policy direction[11]. The NPSHPL restricts the circumstances in which highly productive land can be rezoned or subdivided. In the case of rezoning, this may only occur on highly productive land where the capacity is needed to meet demand, there are no other reasonably practicable options for providing that capacity, and the benefits outweigh the costs[12]. The FDS can consider these matters at a high level, but the NPS-HPL appropriately directs this to occur at the plan change/plan review stage, where up to date and detailed demand and capacity information can be provided.

The evaluation of reasonably practicable options for accommodating urban growth has been undertaken at a strategic level through the MCA and spatial scenario development and assessment process. This would be tested and refined as part of a plan change/plan review.

The soil capability of growth area options has been considered through the MCA process with input from a range of qualified experts[13]. The MCA evaluation did

[11] See clause 3.14(f) of the NPS-UD.
[12] See clause 3.6 of the NPS-HPL.
[13] Carl O'Brien (Horticultural and Environmental Consultant, AgFirst) and Lochie MacGillivray (Agribusiness and Environmental Consultant, Director, AgFirst) provided specialist advice during a workshop held in February 2024. Their role included reviewing the long-listed development areas and

not adopt a rigid approach to excluding areas simply because they were on LUC 1, 2 or 3 land. Equally, the MCA evaluation did not put HPL considerations to one side in favour of maximising growth opportunities at the urban fringe. This is not what the NPSHPL requires. The approach has been a more nuanced one, where the productive capacity of sites has been considered at a strategic level in addition to the land use classification. This is a precursor to the nuanced assessment that is required through a plan change/plan review process[14]. In our opinion, this is appropriate for informing an FDS as a high level strategic planning document that is seeking to achieve various competing national policy objectives.

5.3.2 Natural Hazards

Submitters raised a range of issues with respect to natural hazards, which we address below.

5.3.2.1 Hawke's Bay Independent Flood Review Panel

Various submitters have voiced support for the recommendations of the Hawke's Bay Independent Flood Review Panel. This report was published in July 2024, having been commissioned by the HBRC in the aftermath of Cyclone Gabrielle[15]. The report contains a range of recommendations canvassing structural works, emergency management, and land use planning, amongst other matters.

The discussion on planning controls is pertinent to the FDS (See Chapter 9 of the report). It identifies that the RPS and District Plans are out of date and do not provide a consistent planning framework for managing natural hazard risk. The report observes the gaps in flood modelling data - the same datasets used to inform preparation of the Draft FDS and identified in technical reports. The Independent Panel recommends that the Councils remedy those gaps. These are key recommendations that could be carried over to the implementation section of the FDS or as an alternative, included in the FDS Implementation Plan.

Recommendation 25 states that the review of the RPS should ensure that new and intensified residential development and subdivision is prohibited in areas subject to unacceptable flood hazard. In order to identify areas of unacceptable flood hazard, updates to flood hazard mapping are required, followed by a public discussion about tolerance to risk, undertaken as part of the RPS and District Plan reviews/changes. The upcoming NPS for Natural Hazards will also provide further direction, which we understand will be in place late-2025. In addition to regulatory changes, this data would inform land use and infrastructure planning in the urban areas as well as infrastructure investment aimed at protecting existing communities from the effects of climate change.

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contributing to the Multi-Criteria Assessment (MCA) through high-level assessments of Land Use Capability (LUC) classes, soil versatility, and catchment contexts. Their input has contributed to informing the strategic evaluation of potential growth areas for the Draft Napier Hastings FDS.

[14] Note that the recent Environment Court decision in Blue Grass Limited v Dunedin City Council [2024] NZEnvC 83 related to a resource consent.

[15] https://www.hbrc.govt.nz/our-council/hb-independent-flood-review/.

In the interim, the Draft FDS grapples with managing natural hazard risk in the existing policy environment and with best available information for now. The MCA process has considered this at a strategic level and has taken into account the potential for natural hazard risk to be mitigated. Mitigation of natural hazard risk is required for most growth options, including all of Napier's growth options, with the exception of the rural residential areas in the Western Hills and Bay View.

5.3.2.2 Development in low lying hazard prone areas

Several submitters seek to avoid development in low lying hazard prone areas.

Objective 3 of the Draft FDS is as follows:

> *Our communities and infrastructure are resilient to the effects of climate change and risks from natural hazards.*

Resilience to natural hazards can be delivered by avoiding development in low lying areas, or where appropriate, mitigating natural hazard risks to a tolerable level. The Draft FDS provides a combination of both these approaches, which also accounts for NPSUD objectives, including ensuring sufficient feasible capacity is provided, and people are enabled to live and work in and around centres, areas well-serviced by public transport and where there is high demand (Objective 3). With the exception of the Treaty Settlement Redress Land at Ahuriri Station and Severn Precinct, greenfield development in Napier's low lying areas with overlapping natural hazards is limited to existing HPUDS areas where site specific technical work has been undertaken.

Mitigation of natural hazard risks is supported by several submitters, including the Insurance Council NZ. They recommend that flood protection works manage residual risk to at least a 1% annual exceedance probability accounting for climate change. This is consistent with the findings of the Independent Flood Review [16] and with the requirements of the New Zealand Coastal Policy Statement (**NZCPS**). This is a matter to be addressed in the RPS and District Plan reviews but does not preclude the FDS from taking this into account.

Similarly, the Natural Hazards Commission and the Hawke's Bay District Health Board recommend preparing site specific risk assessments for every proposed future growth area. We agree. However, this would be more appropriately required at the structure planning and plan change stage, where a detailed stormwater and flood modelling can be undertaken in the context of a specific proposal. We note that Policy UD10.4 of the RPS already requires a structure plan to prepared as part of rezoning that amongst other things requires details of how any natural hazards will be avoided or mitigated. This would address the matters raised by the submitters.

The Insurance Council NZ has also requested that the Councils consider how density impacts overall flood risk, with respect to the increase in impervious area. Both Councils have programmes of work underway to address this issue in response to intensification indicated in the Draft FDS and as

[16] Refer to page 142 of the Independent Flood Review Report.

implemented/being implemented through Plan Change 5 in Hastings and the Napier Proposed District Plan. This is being led by the Council's infrastructure planning and delivery managers and is informing a programme of upgrade works in the Long Term Plans.

5.3.3 Development in the Hills

In response to these matters, several submitters favoured development in the hills (e.g. Bay View, Havelock Hills, Te Awanga) where the natural hazards constraints are not present/are less present.

This was broadly considered in Spatial Scenario 2 which assessed the growth option of strictly avoiding highly productive land[17]. This scenario assessed the advantages and disadvantages of development generally occurring in the hills as well as some existing HPUDS areas. While there are obvious advantages to this approach, there are disadvantages that mean it is not a reasonably practicable growth option. Specifically, this scenario would result in a highly dispersed pattern of growth with residential located away from employment areas and infrastructure networks, with the effect of increasing car dependence and significantly increasing servicing costs. Importantly, hill country growth drives towards lower density forms of housing that respond to the steeper topography, which drives up house prices. While it would meet some segments of the market, this type of housing alone would not meet Napier and Hastings future housing needs, the majority of which will be in the affordable range given the low household income levels projected[18].

As an example, in 2021 Napier City Council undertook a detailed investigation of the feasibility of developing in the Western Hills in Taradale & Poraiti (refer **Figure 4** below). This work developed layout plans, yield analysis and high level plans for infrastructure servicing that was then costed. While the topography in this area is particularly challenging compared with the Mission Hills development, the analysis showed a low yield, relative to land area (~800 lots) and had unfeasibly high costs to service with bulk infrastructure, conservatively priced at $242,000-$285,000 per lot in 2021 dollars[19]. While there may be a case for using this land more efficiently for rural residential style development in the Western Hills, this analysis showed that for this area at least, urban scale development is not a reasonably practicable or affordable option.

A similar situation applies to the Havelock Hills, which is extensively populated with rural residential development. Further intensification is potentially possible, although there are infrastructure constraints to consider and the housing delivered is likely to be at the higher end of the market, which would not meet the majority of future housing needs.

[17] Refer to page 61 of the Draft FDS Technical Report.
[18] Refer to Tables 2-13 and 2-14 of the Housing Capacity Assessment 2021.
[19] https://www.napier.govt.nz/our-council/plans-strategies-reports/napiers-district-plan/district-plan-review-discussion-documents/growth-in-the-hills/



Figure 4 Showing Napier's Western Hills, subject to various structure planning in 2021.

5.3.4 Clifton to Tangoio Coastal Hazards Strategy 2120

The Draft FDS states the following with respect to the Clifton to Tangoio Coastal Hazards Strategy 2120:

> *The coastline south of Clive through to Te Awanga is particularly vulnerable to coastal hazards and has been subject to the effects of coastal inundation and coastal erosion, most recently in June 2024. The Clifton to Tangoio Coastal Hazards Strategy 2120 project aims to set an adaptive management pathway to manage these risks over the next 100 years. In 2025, the partner councils will be seeking feedback from the community on proposed coastal adaptation options.*

The project has evolved since this time, which we explain below.

The Clifton to Tangoio Coastal Hazards Strategy 2120 project has progressed to a point where in August 2024, a draft strategy was agreed by the project partners (the same three council and three PSGEs who have overseen the FDS to date). The Project partners' Joint Committee passed the draft strategy over to HBRC. In January 2025, HBRC agreed to defer formal (Local Government Act Special Consultation Process) consultation on the draft strategy. That decision to defer consultation recognised timing for consultation was not optimal given economic pressures on ratepayers and HBRC's work programme since Cyclone Gabrielle. In the interim, a community reference group is to be formed for further testing of the possible options, their costs and how those could be funded.

This community engagement phase does not detract from the earlier technical assessments of erosion, coastal inundation and tsunami hazards along that

stretch of coast. That geospatial data can be viewed online in the HB Hazards Portal.

Accordingly, we recommend updating the text of the FDS that refers to Clifton to Tangoio Coastal Hazards Strategy 2120 to reflect the project's current status. We propose to provide specific wording as part of the Officer's Reply, reflecting the above.

5.3.5 Air Pollution

The Hawke's Bay District Health Board requested that the FDS consider the likely impacts of air pollution arising from growth, and any mitigation measures needed to address those impacts.

Urban air quality is managed by a combination of rules in regional plans and national regulations. Rules apply to discharges into air from industrial and trade premises. One of the biggest challenges with ambient urban air quality is small particulate contaminants (typically from domestic home heating burning). The HB Regional Resource Management Plan (RRMP) includes policies and rules controlling PM_{10} particulate matter concentrations in urban 'airzones' (see **Figure 5**) which have been operative since 2012. The subsequent **Figure 6** shows the effectiveness of the rules introduced in 2012, with fewer breaches evident now in Hastings and Napier. The rules, in conjunction with a multi-million dollar home heating improvement financial assistance scheme from HBRC, have achieved significant improvements in PM_{10} concentrations within the urban airzones over the last decade.

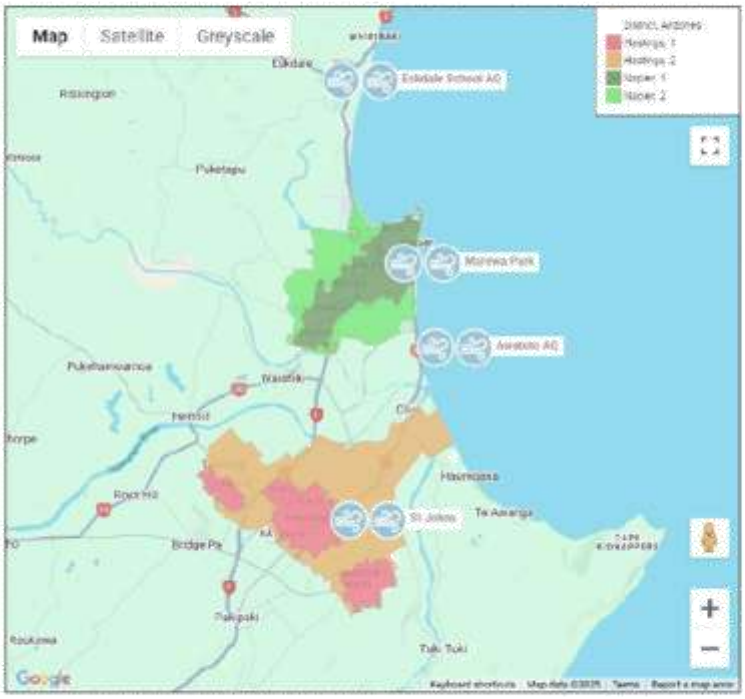


Figure 5 Airzones for Napier and Hastings.

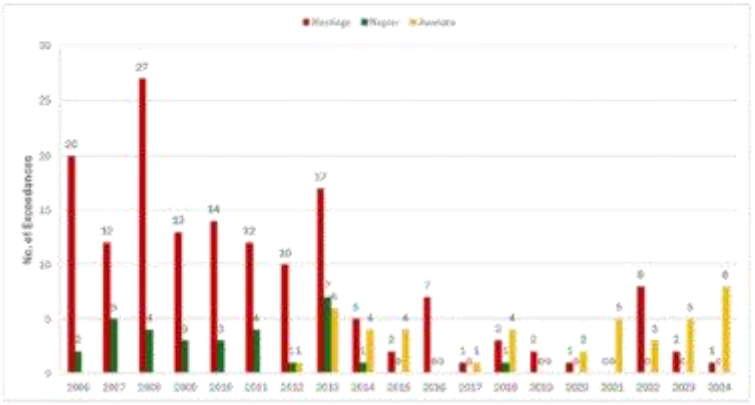


Figure 6 Annual particulate matter exceedances for Hastings, Napier and Awatoto (2006-2024)

HBRC has already commenced a review of the RRMP. That review could accommodate an 'update' of additional urban areas (existing and future) that might be identified in the FDS. This is ultimately a matter for FDS implementation and less about FDS evaluation and content.

5.4 Recommendations

In relation to development constraints, we make the following recommendations for amendments to the Draft FDS:

a) Carry through the key recommendations of the Independent Flood Review on planning controls to the Draft FDS in the implementation section. Alternatively, address this separately through the FDS Implementation Plan that will be published separately.

b) Update the text of the FDS that refers to Clifton to Tangoio Coastal Hazards Strategy 2120 to reflect the project's current status outlined in Section 5.3.4 above. We propose to provide specific wording as part of the Officer's Reply.

6.0 Iwi and Hapū Development Aspirations and Papakāinga

6.1 Issues Raised in Submissions

Multiple submitters addressed the matter of iwi and hapū development aspirations and papakāinga.

The key issues raised are as follows:

a) Take a partnership approach to council relationships, where mana whenua are able to contribute to all aspects of planning (TPW; MTT; MAT);

b) Role of Ngāti Kahungunu Iwi Incorporated in the FDS process (Bayden Barber);

c) Support special consideration being given to the use and development of redress land (TPW; MTT; MAT);

d) Concern over preferential treatment for Māori over non-Māori, and perceived under-utilisation of Māori land;

e) Ensure that Māori are not disproportionately impacted by risks from natural hazard (MAT; MTT);

f) Natural hazard risks associated with Ahuriri Station and Riverbend (Natural Hazards Commission/HBRC/others)

g) Enhance resilience and be able to adapt more easily to new information, unexpected challenges and emerging opportunities for mana whenua in urban, rural and coastal areas (J Scott)

h) Support scoping and supporting a Māori-led study of Māori demographics (TPW; MTT);

i) Amend the wording on page 69 of the Draft FDS under the heading Social Infrastructure regarding education requirements for the Māori population (Ministry of Education).

6.2 Council - PSGE Partnership, establishment of the FDS Joint Committee and consultation

In his submission Bayden Barber queried the role of Ngāti Kahungunu Iwi Incorporated (NKII) in the FDS process.

This sub-section provides information on the partnership between the three local authorities and the three PSGEs and provides background as to why NKII were not invited to join the Joint Committee developing the Strategy.

The Napier-Hastings FDS Joint Committee was established by common resolution of each of the three partner local authorities (Hastings District, Napier City and Hawke's Bay Regional Councils) in December 2022, and the Terms of Reference were finalised in March 2023. The key resolution made by each of the three partner councils relating to the partnership with mana whenua was:

> 4.5 *Delegates authority to, and invites, in conjunction with the Hastings District Council and the Napier City Council, the Heretaunga Tamatea Settlement Trust, Mana Ahuriri Trust and Maungaharuru-Tangitū Trust to appoint Mana Whenua representatives to the Napier-Hastings Future Development Strategy Joint Committee as provided for in the Terms of Reference, and notes that these appointments will take effect*

once they have been notified to the Chief Executive of the Administering Authority, Hastings District Council.[20]

The Agenda paper leading to this resolution is explained at paragraphs 10-14 of the associated staff report:

10. The NPS-UD requires that the FDS be informed by tāngata whenua values and aspirations for urban development. While not a requirement, it is proposed within the Terms of Reference to provide, alongside representation from the councils, for representation from each of the post settlement governance entities (PSGEs) with statutory acknowledgement within the study area for the FDS (should they each wish to appoint representatives). This is seen as one mechanism, among others, to help to incorporate the values and aspirations of tāngata whenua in a manner that is consistent with a partnership relationship between the Councils and mana whenua.

11. On that basis, the proposed make-up of the Committee is as follows:

11.1. Hawke's Bay Regional Council – 2 representatives

11.2. Napier City Council – 2 representatives

11.3. Hastings District Council – 2 representatives

11.4. Heretaunga Tamatea Settlement Trust – 2 representatives

11.5. Mana Ahuriri Trust – 2 representatives

11.6. Maungaharuru Tangitū Trust – 2 representatives.

12. This is not to say that engagement with tāngata whenua on the FDS will be limited to the identified PSGEs. Wider and more extensive engagement with iwi and hapū is planned alongside specialist technical input. However, it is proposed that the appropriate approach to seeking governance input is to provide for appointments from the PSGEs within the study area who have a statutory acknowledgement in relation to planning matters (so long as those bodies wish to appoint a representative).

13. A modified approach to this would be to provide for a representative to be appointed by Ngāti Kahungunu Iwi Incorporated (NKII) alongside the PSGE representatives. This would recognise the longstanding involvement of NKII in supporting growth planning in the Napier-Hastings area (e.g. via HPUDS). However, the context for mana whenua representation in planning and consenting processes has evolved since previous HPUDS processes due to Treaty settlements and related statutory acknowledgements. Having a governance appointment made by

[20] Example extracted from Minutes of the meeting of the Hawke's Bay Regional Council 14 December 2022

> *NKII would widen the basis for governance representation beyond organisations that have statutory acknowledgements in terms of planning/consenting matters. It can be argued that relying on a statutory acknowledgement provides a clear, transparent and legally robust basis for drawing governance representation.*[21]

NKII were included on the FDS stakeholder list, invited to participate at the initial call for opportunities and subsequent stakeholder meetings, and a possible hui was discussed but did not eventuate.

The three PSGEs worked in their own respective ways to identify mana whenua aspirations, identified in Chapter 6 of the Draft FDS (pages 18-25). Strategic Objective 1 was affirmed, and Strategic Objective 12 (page 27) added in response to feedback from mana whenua.

The Implementation Plan should identify actions relating to the partnership approach going forwards.

6.3 Redress Land and hapu and iwi development aspirations

Both Maungaharuru Tangitū Trust (MTT) and Tamatea Pōkai Whenua (TPW) requested further clarification of redress land, and how this is considered within the multi-criteria assessment framework.

MTT referred to recent case law, *Beresford, Bunker and Rouse v Queenstown Lakes District Council (2024) NZEnvC 182,* where the Environment Court held:

> *[65] … It is appropriate for [the Court] to recognise that the Site is redress land intended to be transferred by the Crown so that the appellants and other descendants can realise the economic aspirations that have been afforded to their tīpuna. As a principle under s8 the appellants and their fellow successors must not be deprived of the redress promised to them by the Crown. To the extent which any available zoning option would diminish the value of the Site for those redress purposes is a relevant matter for us to consider, given the principle of redress and the Crown's obligation to right past wrongs.*

This case clearly defines redress land as 'redress land committed by the Crown in Treaty settlement'. This would include Ahuriri Station (as proposed in the draft FDS at page 51) but excludes the Riverbend site.

The Riverbend sites (NC 4a The Loop, NC4b Riverbend, NC 4c Waverley Road, NC 4d South Pirimai) lie within a Mana Ahuriri Statutory Acknowledgement area and are held in fee simple title. Mana Ahuriri Trust have expressed their hapū aspirations in Section 6.2 and have not included this development. The development division of Ngāti Kahungunu Iwi Incorporated (NKII), K3 Development, has an interest in developing part of this area, and is party to a fast-track application which includes NC4b (FTA 115) that has been lodged with the Ministry for the Environment. NKII is a PSGE which resulted from a fisheries settlement stretching from Wairoa to Wairarapa. As such they do not have an

[21] Item 8, Napier Hastings Future Development Strategy Joint Committee Report to Council 14 Dec 2022

interest in land that could support additional points being awarded through the MCA to support the aspirations of the mana whenua of Ahuriri Napier.

All sites were assessed for cultural values, with scores ranging from Green (4 or 3) where the growth area does not adversely affect sites of cultural significance, through Orange (2 or 1) where the growth area may impact sites of cultural significance but has support from iwi and hapu, to Red (1 or 0) where the growth area adversely affects a site of cultural significance and is not supported by iwi and hapu. A red score was assessed as a 'no go' area (no areas fell into this category).

The draft FDS included 'redress land' within the MCA criterion 'hapu and iwi development aspirations'.

Hapu and iwi development aspirations were assessed as a 'bonus' and considered only for sites put forward by iwi and hapu. All sites were scored for factors such as natural hazard risks, highly productive land, infrastructure servicing. Where the site was put forward by iwi and hapu, an additional 4 points were scored, providing a more favourable result against other land, all other factors being equal. The following sites in the draft FDS scored these additional points:

Residential greenfield areas:

- AS 1 Ahuriri Station (north of Onehunga Road)
- AS 2 Ahuriri Station (south of Onehunga Road)

Industrial areas:

- AS 3 Ahuriri Station (north of Onehunga Road)
- AS 4 Ahuriri Station (south of Onehunga Road).
- IR3a Irongate Industrial
- SP Prebenson Drive

The FDS should provide further definition of what constitutes 'redress land', given the above Environment Court decision and one of the functions of redress land being to enable realisation of economic aspirations.

The three PSGEs also requested special consideration for redress land, and a better understanding of what this looks like in practice. It may be better to manage this matter through the Implementation Plan and review of the RPS.

6.4 Papakāinga/Marae-based development

Most submitters considered that mana whenua aspirations have been adequately addressed and papakāinga and marae-based development contributed appropriately towards achieving the FDS objectives. However, a few were concerned at the preferential treatment of Māori over non-Māori, perceived non-utilisation of Māori land, or that there were more important priorities to address first. Others commented that:

a) Development should not go ahead in hazard-prone areas;

b) Local government needs to genuinely partner with mana whenua to fix issues with servicing current papakāinga;

c) The FDS should give further consideration to the intent of establishing papakāinga and supporting infrastructure and services on ancestral lands, including on Māori land and general titles, and developing whenua for urban purposes in specific locations, and that Māori whenua under Te Ture Whenua Māori can and should be developed for papakāinga and marae should that be the wish of the whānau.

One submitter (Jacob Scott), who was involved in developing Auckland Council's Te Aranga Design Principles, advocated for their use locally.

Papakāinga

Papakāinga is a key priority for mana whenua.

Proposed new national direction enabling papakāinga (and granny flats) is expected to be released by the Government soon.

The draft FDS accounts for urban papakāinga within the overall housing demand analysis for Napier and Hastings (illustrated in Figure 7, page 31), which includes all types of housing.

In HPUDS, Bridge Pa and Omahu were identified as marae-based settlements, and it was assumed that any development would independently meet any servicing requirements and district plan provisions. Tangoio and Puketapu were identified as areas inappropriate for future residential growth beyond existing areas. However, the HPUDS study area was much broader than the study area adopted for FDS/NPSUD purposes more recently.

The draft FDS identified more areas of interest for iwi and hapū, including for urban development in general. **Figure 7** below shows the local marae and the location of these specifically identified places, which span both urban land, coastal and smaller settlements, and rural land. This should be included in the FDS as it clarifies where those areas of interest are located.

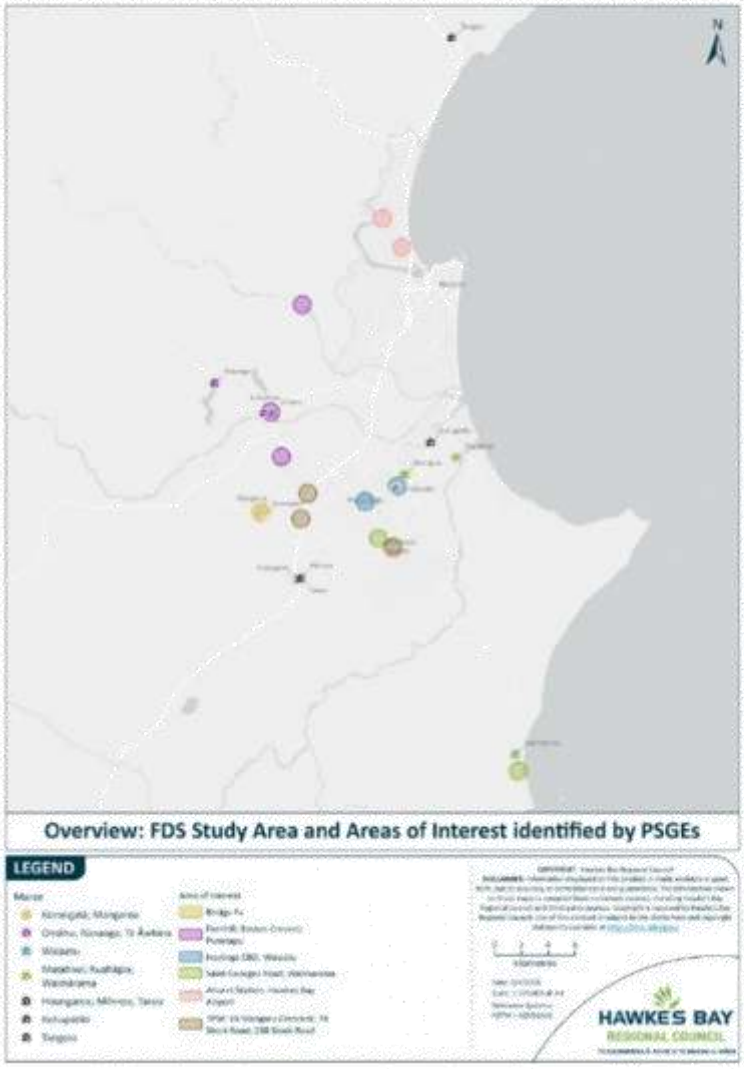


Figure 7 Marae-based areas of interest identified by PSGEs.

Te Aranga Design Principles

The Te Aranga Design Principles[22] were originally developed at Te Aranga Marae in Flaxmere, as part of a response to the 2005 New Zealand Urban Design Protocol. These principles recognise Māori values, identity and sense of place, enabling a more holistic consideration of cultural, environmental and social factors in design processes for structure planning and residential development. Submitter Jacob Scott, identifies further elements for consideration, including bringing flood risk and climate adaptation more clearly into the assessment of development options and working with a better understanding of the Māori world view.

[22] Auckland Design Manual Te Aranga Principles

Given the importance of addressing iwi and hapū aspirations for urban development, as articulated by mana whenua and required by the NPSUD, it may be appropriate to consider use of the Te Aranga Principles or updating them in light of new information on natural hazard risks, climate change and evolving understandings of what is required to build resilient, sustainable and culturally vibrant communities. This could be included as an action in the Implementation Plan, when Regional Policy Statement and district plan reviews and plan changes are prepared.

Natural hazards and development constraints

Māori have traditionally responded to natural hazard risks (and events) in different ways. The movement of water across the Heretaunga and Ruataniwha Plains has shaped the movements and choices of mana whenua. Examples of this include:

a) Abandoning temporary settlements on the Ruataniwha Plains when the waters of the Waipawa swelled;

b) Seasonal movement of the hapū of Maungaharuru Tangitū from their coastal settlements to the mountains;

c) Te WhangauPani, a meeting house near the Tūtaekurī, shifted three times in response to flood events, and after the flood in 1867 was moved to Moteo;

d) Relocation of Matahiwi Marae from the flood-prone flats of the Tukituki River to higher ground.

Ōmahu Marae aspire to move their whānau to higher ground at Puketapu as a long-term solution to the flood risk their current location presents. This is consistent with the pattern of responses by mana whenua to risks from wai over time, where it is accepted that wai will travel where it wants and the best response is to move with it, respecting these movements as immutable.

Over time the ability of marae and hapū to move in this way has become restricted by the alienation of hapū from their takiwā. Although outside the FDS study area, the clearest example of this is Tangoio Marae, which was forced to remain on low-lying floodprone land as the surrounding higher land had been taken out of hapū control. In the wake of Cyclone Gabrielle, they have lost the ability to have their marae within their takiwā.

Māori consistently express the aspiration to live on their takiwā with their people. Where they cannot live in papakāinga on their ancestral land, they express a desire to live in papakāinga-style living arrangements with their extended whanau in other areas. It is likely that this can only be realistically achieved in new, affordable developments co-led or owned by mana whenua entities. We recommend adding this material to the introductory text of Section 6.1 as it summarises one of the issues facing iwi and hapū as they seek to realise their aspirations for papakāinga and development.

In response to Question 7 in the submission form on development constraints, a number of submissions were received on the natural hazard risk inherent in

development at Ahuriri Station and Riverbend Road. Both developments are led by organisations that represent mana whenua and reflect mana whenua aspirations. One of the inherent tensions for the FDS relates to the management of redress land in the face of these constraints. Each proposal is assessed later in this report (at Sections), including with respect to specific mana whenua aspirations.

Social infrastructure (education)

The Ministry of Education requested change to the wording in the section on social infrastructure (FDS page 69) to better reflect the current situation regarding education for Māori students. This revision is appropriate, with a minor modification to clarify the overall school-age population is declining.

Housing needs of Māori

Two of the PSGEs, MTT and TPW, requested a focus on Māori statistics relating to housing needs as part of the first FDS review. This is more appropriately managed under FDS implementation.

6.5 Recommendations

In relation to iwi and hapū development aspirations, we make the following recommendations for amendments to the Draft FDS:

a) Amend the FDS to better recognise iwi and hapū aspirations for development and papakāinga by inserting a paragraph into the introductory text of 6.1 Iwi and hapū values and aspirations, as shown below:

> *The use and development of Māori land, including land returned to Māori through Treaty settlements is to be enabled as provided for in Te Tiriti and intended by the purpose of Treaty settlements, subject to relevant statutory resource management considerations being satisfied.*
>
> *Māori have consistently expressed the aspiration to live on their takiwā with their people. Where they cannot live in papakāinga on their ancestral land, they have expressed a desire to live in papakāinga-style living arrangements with their extended whanau in other areas, including urban areas. It is likely that this can only be realistically achieved in new, affordable developments co-led or owned by mana whenua entities.*
>
> *The councils will work collaboratively with iwi authorities to help facilitate their economic, environmental, cultural and social objectives.*

b) Include a map of specified areas of interest, at the end of the Section 6.2 combined statement by the three PSGEs, refer to Figure 7 above.

c) Further define what constitutes 'redress land' by additional wording in Section 6.1 (3rd paragraph, page 18):

> *...The Treaty settlement process has provided for the return to land to Māori, including for specific purposes. Such 'redress land' is land*

intended to be transferred by the Crown to Treaty appellants, so that those appellants and other descendants can realise the economic aspirations that should have been afforded to their tīpuna[23]*. The land returned through these processes ....*

d) Update the Social Infrastructure section (2nd paragraph, page 69) to read:

~~...The forecast demographic changes and population growth of the Māori population means existing schools may not meet the demand for Māori medium and kaupapa Māori education in Napier and Hastings. While there is growth in the Māori population, the overall school aged population is declining~~. Mana whenua have expressed aspirations for more kohanga reo, kura kaupapa Māori and wharekura over the next 30 years. ~~Further consideration is required to determine whether existing schools are sufficient to accommodate the future growth and demand for Māori medium and kaupapa Māori schools in Napier and Hastings~~. The Ministry is working with whānau, hapū and iwi and is expanding capacity at existing Te Kura Kaupapa Māori to meet any demand.

e) Set out a programme of work to support iwi and hapū development aspirations in the Implementation Plan, which may include actions to:

(i) Establish a genuine partnership between the PSGEs and the councils to implement the FDS;

(ii) Support special considerations for addressing redress land;

(iii) Work with iwi and hapū to update and include the Te Aranga Design Principles in reviewing the RPS and district plans;

(iv) Analyse Māori housing needs ahead as part of the Housing and Business capacity Assessment (HBA);

(v) Achieve sustainable water use.

7.0 Business and Industrial

7.1 Issues Raised in Submissions

Multiple submitters raised broad issues regarding business demand and development capacity. Submitters requested that several additional industrial sites be included in the FDS, most of which have been assessed in preparing the Draft FDS. Other submitters requested that the FDS more explicitly provide for commercial/mixed use.

No submissions specifically opposed the inclusion of the new industrial areas at Irongate South (IR2) and Irongate West (IR1) in the Draft FDS. However, land in those areas is LUC1-3 and the submissions opposing new development on highly productive land are therefore relevant.

[23] Based on *Beresford, Bunker and Rouse v Queenstown Lakes District Council (2024) NZEnvC 182*, paragraph 65

The key broad issues raised are as follows:

a) Taradale is growing quickly and needs land zoned specifically for a supermarket (Pam Lane).

b) Identify more opportunities for mixed use activities in the areas identified for more intensive housing as this enables more people to access goods and services by active modes (NZTA).

c) The draft FDS does not provide sufficient capacity for wet industry and additional capacity is required; the MCA framework should separate wet and dry industry requirements (Mr Apple).

The key site-specific issues raised in relation to industrial are set out in the table below. The Plan at **Appendix 6** shows the location of these sites/areas.

Table 4 Site-specific issues raised in relation to industrial areas

Industrial sites/ areas	Submitters and position
Napier	
Ahuriri Station	Submitters supported and opposed the inclusion of Ahuriri Station. MAT supported the inclusion of the site and MTT and TPW supported enabling development on redress land. Hawke's Bay Airport supports MAT's development aspirations and outline a range of operational matters that future development will need to address. NZTA requests more detail on the proposed process for investigations, including how infrastructure will be identified and assessed. The Ministry of Education seeks to work with MAT and hapū in the master planning process. Of those submitters opposed to including Ahuriri Station in the FDS, they were on natural hazard and environmental grounds (e.g. Ahuriri Protection Society; Forest and Bird, Natural Hazard Commission et al[24])
Severn Precinct	Oppose development of this area on natural hazards grounds (Sara Chambers).
Awatoto	Include additional land at Awatoto for industrial development (129, 133, 148 Awatoto Road, 54 McLeod Road and 60 McLeod Road) (Berkett Commercial 2021 Ltd).

[24] Simon Nash; Susan Garner; Lynne Anderson; Chris Maclean; Garth Eyles.

	Ensure that infrastructure works are undertaken prior to making land use decisions for Awatoto (Hawke's Bay Protein Ltd).
Hastings	
Whakatu	Include additional land at Whakatu in the FDS as wet industry (334 State Highway 51) on the basis that it is required to meet demand and can be efficiently serviced (Mr Apple). Include the site to the east (9 Giles Lane) (Te Aratika). Note that National Grid assets in Whakatu and corridor protection is a constraint (Transpower). *This applies to the land within the existing General Industrial Zone at Whakatu.*
Irongate	Include additional land in the FDS as industrial to the north of the existing Irongate industrial area on the basis of its access, infrastructure capacity, soils classification and limited availability of industrial land (Irongate North Landowners). Extend the land identified for industrial growth at Irongate South to Longlands Road West / Maraekakaho Road to provide a clear industrial boundary (Angela McFlynn).
Evenden Road	Include land at 160 Evenden Road in the FDS as industrial for the purpose of transport related infrastructure in the form of an energy centre (Hamachek Holdings Ltd).
Omahu	Include an additional 47 hectares of land in the FDS as industrial at the western end of the existing Omahu Road General Industrial Zone, given industrial demand and historical land uses (Wrightson Contracting Limited).
Tomoana	Include the land at 1411 and 1403 Pakowhai Road within area H6 in the FDS as industrial to enable Bunnings to expand its Hastings offering (Bunnings Ltd). Include the land in area H6 for industrial (dry and wet) given it can be serviced, does not adjoin a residential zone and is not prone to natural hazards (Jim Bishop). The Natural Hazards Commission supported the exclusion of this land from the FDS on natural hazard grounds.
Wilson Road	Include the land bounded by Wilson Road, Flaxmere Avenue, State Highway 2 and the southern end of the Omahu Road General Industrial Zone in the FDS as

	industrial (Wilson Road Collective; Stephen and Elizabeth Davis; LE Cooke; James Fyfe; Greg Cornes).

7.2 Information and Evidence

The key evidence relating to the issue of business and industrial demand and capacity that underpin the Draft FDS is the Napier and Hastings Business Development Capacity Assessment 2022 prepared by Market Economics.

To respond to specific issues raised by submissions, Market Economics has prepared a memo included at **Appendix 5**. This addresses issues raised in submissions regarding wet industry demand and capacity particularly as it relates to Whakatu and Hastings.

Brett Chapman, Principal Advisor – Essential Services at Hastings District Council has also provided advice on the Council's separated trade waste network for industrial activities.

7.3 Analysis and Discussion

7.3.1 Mixed Use & Commercial

Submitters sought to zone more land for supermarket at Taradale and identify more opportunities for mixed use activities in the areas identified for more intensive housing.

Regarding the need for an additional supermarket at Taradale, the FDS is a strategic growth document and this is a detailed matter best addressed through the Napier District Plan review process.

Regarding the potential for greater mixed use, again, in our opinion, this would be best addressed through the District Plan review process/future plan change. There are many options for providing a greater range of mixed use, including through a dedicated Mixed Use zone or through more enabling provisions in higher density residential zones. The way in which this is provided for will depend on the specific context of the area and the activities sought to be enabled. It would also usefully be informed by additional economic analysis focussed on how greater mixed use provision can continue to support and reinforce the primary role of centres in meeting the community's social and economic needs. The upcoming amendments to the NPSUD will no doubt provide updated direction on the matter.

7.3.2 Industrial Demand

Mr Apple has made a detailed submission on the Draft FDS approach to industrial demand and capacity, in the context of seeking to include the site at 334 State Highway 1, Mangateretere in the FDS as a future industrial growth area. The focus of the submission is on wet industry as a subset of overall industrial demand and supply and is supported by expert economic and engineering analysis. Given that this submission provides new information/evidence we address the issues raised in detail below.

Other submitters have sought to include additional sites in the Draft FDS for industry but these have focussed on the specific qualities of the site/area. We address these requests in the industrial capacity section below.

Industrial demand is addressed by Market Economics in the BCA 2022, which has been relied on for the Draft FDS. This is referred to as the "base scenario" and is medium-high. In summary, across Napier and Hastings, industrial demand by type is as follows, *including the competitiveness margin:*

Table 5 Breakdown of wet and dry industry demand

Type	Napier	Hastings	Total	% of overall demand
Wet industry	10 hectares	51 hectares	61 hectares	31%
Dry industry	45 hectares	90 hectares	135 hectares	69%
Total combined	55 hectares	141 hectares	196 hectares	100%

Mr Apple states that there is significant latent demand for wet industry that has not been properly evaluated. As stated above and consistent with the requirements of 3.14(1) of the NPSUD, the industrial demand projections used for the Draft FDS are derived from the BCA 2022.

Market Economics has addressed the issue of latent demand for industrial in their memo at **Appendix 5**. They observe that a high level review of industrial land for sale shows some listings that have been on the market for four years and that there has been strong uptake of industrial land supply since 2017. This is reinforced by the outcome of discussions with the development sector undertaken as part of the BCA. Market Economics conclude that there is limited evidence of latent demand for industrial land in the local market. We rely on this advice and do not recommend any amendments to the industrial demand projections to account for latent industrial demand. While there may have been some element of unmet demand specifically for wet industry, this may have been due at least in part due to the inability to secure a water allocation since the Hawke's Bay Regional Council notified TANK Plan Change 9 in May 2020 and currently under appeal, as opposed to an inability to secure land with a trade waste service. This is discussed further below.

No other submitters queried or challenged the industrial demand assumptions underpinning the Draft FDS.

7.3.3 Industrial Capacity - Specific Considerations for Wet Industry

There are a range of specific considerations for wet industry capacity that we address below, before working through the site specific issues.

7.3.3.1 Access to the Trade Waste Network

The memo prepared by Brett Chapman details the role of the Hastings District Council's trade waste network in meeting wet industry needs (see **Appendix 4**). To summarise, Hastings operates a separated industrial trade waste network which collects trade waste from Omahu Road, Tomoana and Whakatu for treatment at the East Clive wastewater treatment plant (see **Figure 8** below). Mr Chapman notes that trade waste capacity is available in the main trunk sewers located along the railway corridor between Coventry Road in Hastings and Anderson Rd in Whakatu. There is some capacity in the industrial area to the south of Omahu Road but this is limited.

For comparison, Napier also operates a trade waste network that services existing industry on Thames Street and in Awatoto. There is some capacity in both areas although upgrades will be required to the network and the inlet works at the wastewater treatment plant in Awatoto. Any additional trade waste flows may also require a change to Council's discharge consent for the Napier wastewater treatment plant.

Access to the trade waste network is needed for wet industries that use and discharge water in manufacturing processes. This includes for example food processing (e.g. Heinz-Watties, Silver Fern Farms) and textile manufacturing (e.g. NZ Wool Scouring; Woolworks). On site pre-treatment for these activities would also be required in line with the District Council's Bylaw requirements.

We agree that access to the trade waste network for wet industry is a strategic advantage and this is already captured in the site assessments for Whakatu and Tomoana and the MCA. However, based on advice from Mr Chapman, we agree that this matter should be elevated in importance when considering potential locations for wet industry. In principle, Mr Chapman agrees with Mr Apple that it is not viable to extend the trade waste network further south to Irongate and that discharging to the municipal network is not an option for wet industries that need it, even with extensive on-site pre-treatment. Mr Chapman also considers that full on-site treatment and discharge solutions are not feasible. We rely on Mr Chapman's advice on this matter.

This therefore narrows the locations within which wet industry capacity can be provided to meet demand, largely to land in Whakatu, Tomoana and Omahu Road South. This must firstly account for capacity provided in existing zoned industrial land in these locations, and then if necessary, consider potential future expansion if that is needed to meet demand. Awatoto is an option for wet industry, however this is limited by current capacity constraints at the Napier wastewater treatment plant and the other matters we address in more detail below.

With that said, it is important to keep in mind that not all wet industry demand will require access to the trade waste network. We understand from Mr Chapman that small trade waste volumes can discharge to the domestic network with appropriate pre-treatment in place. This may be suitable for smaller scale wet industry activities and this already occurs for some, including

packhouses with lower discharge flow rates (Sunfruit Limited & NH Packing and Farming).

As per the BCA and the memo prepared by Market Economics, the following Australian and New Zealand Standard Industrial Classification activities are defined as wet industry:

a) C11 Food Product Manufacturing
b) C12 Beverage and Tobacco Product Manufacturing
c) C13 Textile, Leather, Clothing and Footwear Manufacturing
d) C15 Pulp, Paper and Converted Paper Product Manufacturing
e) C17 Petroleum and Coal Product Manufacturing
f) C18 Basic Chemical and Chemical Product Manufacturing
g) C19 Polymer Product and Rubber Product Manufacturing
h) C20 Non-Metallic Mineral Product Manufacturing

Market Economics has analysed the location of current trade waste consents, the output of which is documented in the memo at **Appendix 5**. While this is not determinative of future trends, it provides a sense of the portion of existing activities occurring in Whakatu, Tomoana and Omahu Road south, that actually require access to the trade waste network. This analysis shows that industries that have an existing trade waste consent account for a relatively small portion of land within existing industrial zones, being 3% of land area in the Omahu Road South area, 17% of land area in Tomoana and 8% of land area in Whakatu.

This low percentage is likely to be driven in part by existing vacant capacity in these areas and the operative planning rules that permit a range of industrial activities to establish. While not definitive, it does indicate that:

a) Demand for land with access to Hastings' trade waste capacity is not necessarily the same as demand for land to accommodate wet industry;

b) Land with access to the trade waste network in Hastings is not being used as efficiently as it could be for those activities that have a functional need to use the trade waste network. It is not realistic or feasible to assume relocation of established large scale dry industry activities in these areas. However, with the right planning incentives in place it is reasonable to assume that some relocation could occur over time for smaller scale activities or for those sites with lower value improvements, if demand is strong enough.

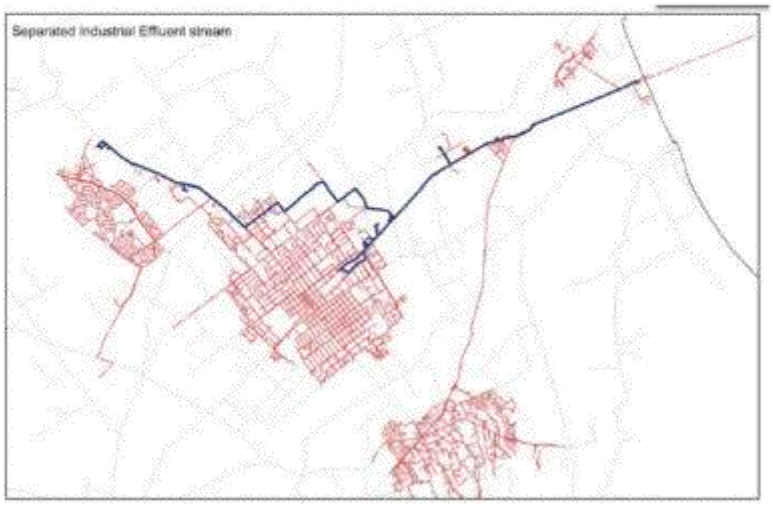


Figure 8 Showing the location of the separated trade waste network.

7.3.3.2 Zoning Framework & Vacant Capacity

The General Industrial Zone applies to Whakatu, Omahu and Tomoana. A portion of Tomoana is within the Tomoana Food Industry Zone and this area was rezoned in 2016 following uplift of the previous deferred zoning. The location of these zones is shown in **Figure 9** below.



Figure 9 Showing the locations of General Industrial Zones and Tomoana Food Industrial Zone.

The Tomoana Food Industry Zone requires activities to be food related and have a locational requirement to be in the zone. This supports the intent for this area to develop as a major food processing and allied industry hub. In line with this,

only food related industrial activities are permitted in the zone[25], with other activities being non-complying. This is not limited to activities that require a trade waste consent, however, it is reasonable to assume that a good proportion of remaining vacant capacity would be used for food processing and manufacturing activities.

Whakatu and Omahu Road South are located within the General Industrial Zone. All industrial activities are permitted in the zone, as is ancillary retail and the sale/hire of industrial & agricultural goods. The operative District Plan takes a market-led approach in Whakatu and Omahu, with remaining vacant capacity potentially able to be used for wet or dry industry. Assuming that the market-led approach will remain, at least for the short and possibly medium term, it is reasonable to assume that remaining vacant capacity in these locations will be used for a combination of wet and dry industry.

7.3.3.3 Access to Water

Wet industrial activities require access to water for manufacturing processes. In some cases, municipal water provides some of the water for potable and sanitary needs and in some cases minor amounts of process water, but typically, the locations of such activities and their quality control requirements (chlorine and fluoride) mean they need to source and access water through their own systems. The HBRC has restrictions[26] in place that limit new water take consents given that Heretaunga catchments are currently over-allocated, particularly groundwater. Those limits also apply to new water take consents for agricultural and horticultural activities, which wet industry demand is related to i.e. food processing & manufacturing. New takes of groundwater or surface water are proposed to be a Prohibited activity except in very limited circumstances.[27]

This constraint limits new wet industry from locating in Napier or Hastings unless it is possible to transfer existing water rights or some other site specific solution can be developed. Transfers/changes of water permits where the purpose for the water use changes will require a resource consent as a Discretionary Activity.[28] Policy TANK 45 of Proposed Change 9 requires the HBRC to consider declining applications to change/transfer water away from irrigation of the versatile land of the Heretaunga Plains for primary production, especially food production,

The Tukituki Water Security Project is a listed project under the Fast Track Approvals Act 2024. This project involves damming the Makaroro River and

[25] Definition as per Hastings District Plan *Food Related Industrial Activity: means industrial activities and warehousing associated with the processing, manufacturing, storage, packaging, distribution or transportation of produce, food or beverage products or goods used in the processing, manufacturing or packaging of food or beverage products, including food or beverage industry research facilities but excluding freezing works, abattoirs and livestock transportation depots.*

[26] Proposed TANK Plan Change 9 to the Hawke's Bay Regional Resource Management Plan. PPC9 is currently subject to Environment Court appeal proceedings, but does have legal effect nonetheless.

[27] Rule TANK 12 in Proposed TANK Plan Change 9 to the Hawke's Bay Regional Resource Management Plan.

[28] Rule 62B as amended in Proposed TANK Plan Change 9 to the Hawke's Bay Regional Resource Management Plan.

creating a water storage reservoir to enable regional water security and sustainability. The application states that the project would enable potential for enhanced flow from the Tukituki main-stem to be taken and utilised (through a pumped take in the Mangateretere area) into the water-short Lower Heretaunga Plains area (including the Whakatu-Tomoana Wet Industrial Area). This is intended to take pressure off the groundwater resource in that lower catchment[29].

Meanwhile, HBRC is currently investigating another water storage scheme, which includes a 27 million cubic metre (Mm^3) water storage facility near Whanawhana[30]. The proposed reservoir would be located on a small tributary off the Ngaruroro River. Peak winter flows would be stored for release back into the lowland river and stream network during dry summer months, to recharge the aquifer and offset water extraction. This project is now in the feasibility stage, which will be overseen by a new governance entity. The outcome of the feasibility stage will be a decision on whether to progress with securing resource consents. There is not yet an established timeframe for this work.

The TANK Plan change's new freshwater limits will continue to restrict, and in some cases prohibit, the taking and use of scarce water resources in the Heretaunga catchments. Innovative alternatives for accessing and using limited water will be crucial. These future water storage scheme projects, or other suitable alternatives could assist in providing additional water capacity for the Heretaunga catchments. In the meantime, new or transfers of water permits to service wet industry in the Heretaunga catchments can be assumed to be extremely constrained by water availability issues.

7.3.3.4 Updated Wet Industry Capacity Analysis

Mr Apple's submission contains a detailed wet industry capacity analysis. On the basis of this, the submitter concludes that "at best the Draft FDS would enable the potential for 9.6 ha of vacant zoned industrial land across Napier and Hastings that is unconstrained and suitable for wet industry." This is based on analysis undertaken by Property Economics included within the submission.

We have discussed this with representatives for Mr Apple who advise that the 9.6 ha includes two sites, being the vacant sites at Hanui Road, Tomoana[31] and the south-eastern part of the Severn Precinct in Napier[32]. They advise that other sites with vacant capacity were otherwise excluded on the grounds of infrastructure servicing (water and trade waste), site sizes (sites less than 2 ha were excluded), vulnerability to natural hazards, transport and connectivity and reverse sensitivity. It remains unclear how the last three matters factored into the assessment, in terms of whether sites were specifically excluded on this basis, and if so, how. The submitter may wish to clarify this at the Hearing.

[29] From the Fast Track application material for the Tuki Tuki Water Security Project available here: https://environment.govt.nz/acts-and-regulations/acts/fast-track-approvals/fast-track-projects/tukituki-water-security-project/

[30] Next steps in Heretaunga water security confirmed | Home | Hawke's Bay Regional Council

[31] Referred to as Site 53 in the Mr Apple submission (7.73 ha).

[32] Referred to as Site 58 in the Mr Apple submission (1.84 ha).

We provide an updated summary of current wet industry vacant capacity below and a comparison with overall demand. We have conservatively focussed the vacant capacity analysis on the areas at Whakatu, Omahu (south) and Tomoana given that these areas have access to Hastings separated trade waste network and given the trade waste network constraints in Napier. Although this constraint in Napier could be resolved, or a bespoke solution to be developed depending on the specific wet industry use.

Vacant capacity for wet industry was assessed through the BCA 2022. Vacant capacity has reduced further since this time, and it is therefore appropriate to provide updated information to inform for this report. The assumptions that this is based on is as follows:

All vacant sites within the Whakatu, Tomoana and Omahu Road South areas are included. This includes sites less than 2 hectares. While larger sites are more efficient for large scale wet industries, smaller sites present opportunities for smaller scale manufacturing and processing activities, which form a component of overall demand. We further note that the minimum site size of subdivision in the Tomoana Food Industry Zone is 5,000m^2. [33]

It is assumed that natural hazard risks within the existing zoned areas can be engineered and designed to mitigate potential adverse effects. This is a reasonable assumption given that the sites are signalled as being appropriate for urban development.

Access to water is not considered a constraint for this analysis given that all sites are currently affected by water allocation limits in the Heretaunga catchments. Including more land for wet industry in the FDS would not address this constraint.

Transport connectivity and reverse sensitivity are not addressed as constraints in this analysis, particularly given that the sites have an industrial zoning and are considered suitable for this use. Although we note that this would have design implications for some industrial uses.

Conservatively, it is assumed that 50% of available remaining vacant capacity within Whakatu, Tomoana and Omahu Road South would be used for wet industry. This accounts for the current enabling zoning framework, and reflects that wet industry accounts for approximately 31% of overall industrial demand in Napier and Hastings but would seek to locate in areas with access to the trade waste network. With stronger rules in place to better protect suitable land for wet industry, together with increased land supply for dry industry, new dry industries will be incentivised to locate in more appropriate locations e.g. Irongate.

[33] Note that a 5,000m^2 minimum site size for subdivision is consistent with other wet/heavy industry zones around New Zealand.

Table 6 Industrial capacity at Whakatu, Omahu South and Tomoana Food Hub

Location	2022 BCA capacity	Q4 2024 vacant capacity	50% uptake of vacant capacity
Whakatu	47.4 hectares	36 hectares	18 hectares
Omahu South	41.5 hectares	37 hectares	18.5 hectares
Tomoana Food Hub	12.6 hectares	11 hectares	5.5 hectares
Total	101.5 hectares	84 hectares	42 hectares

This indicates that conservatively, there is a potential shortfall of wet industry capacity to meet demand of approximately 20 hectares. This occurs in the long term given the amount of vacant capacity currently available. This capacity number is significantly different to that assessed by Mr Apple and reflects the different assumptions that have been applied, which in our opinion is more appropriate for this strategic planning process.

Given the high degree of uncertainty about how and when water constraints will affect demand for wet industry, the current low proportion of trade waste consents relative to industrial land area, and uncertainty on the potential split of uptake between wet and dry industries, it is appropriate in our opinion to treat these more refined estimates with caution. Particularly where there are other strategic considerations at play such as highly productive land. We discuss this further below.

7.3.4 Industrial Capacity – Site Specific Analysis

7.3.4.1 Whakatu (Mr Apple) & Tomoana

In addition to the Mr Apple site in Whakatu (part of WH1), Jim Bishop and Bunnings Limited have sought to include the Tomoana area (H6) as an industrial area. Both of these areas are identified as indicative industrial areas in HPUDS 2017, and originally identified in the Hastings Industrial Expansion Strategy in 2003, along with Irongate and Omahu North.

Both of these sites have high productive value and are classed as LUC1. High level advice from HBRC's Dr Kurt Barichievy (see **Appendix 10**) states that the loss of these sites for production would be significant in the context of LUC1 being a highly valuable resource. Dr Barichievy states that the loss of the Whakatu site in particular would be significant given the capital and land improvements and the potential downstream impacts on surrounding orchards and supporting sectors. As HPUDS 2017 does not define the boundaries of these areas they are not excluded from the definition of highly productive land under clause 3.4 of the NPS-HPL.

Excluding the issue of soil productivity, the sites themselves are well suited to wet industry use. They adjoin existing industrial hubs, are flat, close to the strategic transport network, have access to the separated trade waste network and can be efficiently accessed by local workers. Both sites have reverse sensitivity issues that would need to be managed and while natural hazard constraints vary, they are not fundamental based on available information and would likely be managed through the engineering and design process.

However, the NPS-HPL introduces a considerably more restrictive policy framework for managing highly productive land. At the time of rezoning, it must be demonstrated that the site/s are needed to provide sufficient development capacity, there are no other reasonably practicable and feasible options, and the benefits outweigh the costs.

In terms of the first matter, the vacant capacity analysis undertaken above illustrates that one of the sites may be needed to provide sufficient development capacity based on current information, however, there is some uncertainty regarding this. In terms of other reasonably practicable and feasible options, these are limited to stronger policy direction for wet industry in existing zoned areas with trade waste capacity to protect what vacant capacity remains, and/or addressing trade waste constraints for remaining capacity at Awatoto and near Thames Street. Both of these are possible but uncertain as to timing and effectiveness. In our opinion, these matters are most appropriately addressed through a plan change process as the NPSHPL intends.

Given the uncertainties set out above with respect to wet industry demand, we recommend amending the Draft FDS to explain that the expansion of Tomoana and/or Whakatu may be required in the long term should monitoring show that there is a shortfall of capacity, which is not limited by industry-wide constraints such as access to water given that additional capacity would not resolve this issue. This can be addressed in text amendments to Section 10.5 of the Draft FDS.

Further, we recommend amending the Draft FDS to include a short-term action to investigate making policy changes to better protect remaining capacity at Whakatu for wet industries, noting that appropriate protection is already in place for Tomoana. The same action could apply to Omahu Road South, subject to having greater certainty over remaining trade waste capacity. Alternatively, these actions could be included in the FDS Implementation Plan.

7.3.4.2 9 Giles Lane, Whakatu

Te Aratika Group seeks to include of 9 Giles Lane, Mangateretere in the FDS for industrial. The site is located on the eastern side State Highway 51 immediately opposite the industrial area sought by Mr Apple at Whakatu.

The submission states that the intention is to relocate the Te Aratika Academy from the Mangateretere School site overtime onto the 9 Giles Lane, and to develop an integrated infrastructure depot and training academy on the one site. They state that the industrial zoning sought would provide for the infrastructure depot and create a consenting pathway for the educational

training component of the activity. The submission also states that retrospective resource consent is required to legitimize the establishment of the infrastructure depot.

The site has good access to the transport network and is close to the established industrial area at Whakatu. However, the site is LUC1 and therefore subject to the NPSHPL. Dr Barichievy has commented on this site in terms of land productivity. He states that the conclusions in the submission documents do not provide a fair overview of the site and focus on the negatives rather than giving a balanced overview. He states that the site is classified as LUC 1, which is not disputed, with many of the stated limitations caused by anthropogenic reasons. We note that the submission states that the current activities on the site do not have the appropriate consents in place.

While Giles Lane does provide a boundary, it is designed to rural standard and does not provide a strong boundary in the same way that State Highway 51 does.

Given the specific and relatively small-scale nature of the activity that the submitter is seeking to establish, in our view, this matter would be more appropriately addressed through a resource consent or plan change/plan review process.

7.3.4.3 Ahuriri Station & Severn Precinct

Ahuriri Station and Severn Precinct are part of the Ahuriri Deed of Settlement from the Crown which is administered by MAT.

The Draft FDS identifies the potential to establish an ecologically sustainable business development at Ahuriri Station of approximately 300 hectares. The Severn Precinct is already partially zoned under the Operative Napier District Plan and the Draft FDS signals an extension to that area. MAT are seeking to rezone this area for a combination of Large Format Retail and General Industrial Zone through the Napier Proposed District Plan process.

MAT, MTT, TPW support including this land in the Draft FDS. Hawke's Bay Airport also support including Ahuriri Station and together with Ministry of Education wish to continue working with MAT to ensure that the operational needs of the Airport are met and that education infrastructure is addressed through master planning. NZTA request more detail on the process for investigating and identifying supporting infrastructure. We agree that these are important matters that will need to be addressed, and they would be appropriately considered through a plan change/plan review process, informed by a Structure Plan as required by the RPS. This would detail infrastructure requirements and funding options. Input from the Hawke's Bay Airport would be required to determine the layout and design of any development, including wetland restoration areas and building areas & heights, to ensure that operational matters are catered for.

Other submitters opposed including Ahuriri Station on natural hazards and environmental grounds. Ahuriri Station is subject to a range of overlapping and

complex natural hazard constraints, including a high ground water table and vertical land movement, that if left to natural processes would see much of Ahuriri Station permanently underwater, as it was prior to the 1931 earthquake. These types of constraints are not unique for Napier and the scale of the development provides opportunities to mitigate this risk through substantial raising of ground levels, as proposed by MAT. Technical evidence provided by MAT through the call for opportunities process demonstrated at a high level that there is an engineering solution available to manage natural hazard risks.

The evaluation of natural hazard risk in more detail, and the robustness of mitigation measures must be a key component for a future structure planning and plan change/plan review process for Ahuriri Station and the Severn Precinct. In order to mitigate natural hazard risk, we acknowledge that there are potential inefficiencies for the community to develop in this location, in terms of costs to develop and service, compared to other available areas that are less constrained.

We also note that the Ahuriri Station development is a listed project under the Fast Track Approvals Act 2024. Schedule 2 states that the project will involve approximately 1,000 residential dwellings, a commercial and industrial business park, ecological parks and recreational spaces, an approximately 30 to 80 hectare solar farm and preserving and enhancing places of cultural significance.

We do not recommend further changes to the Draft FDS relating to Ahuriri Station or the Severn Precinct.

7.3.4.4 Awatoto

Berkett Commercial 2021 Ltd seeks to include additional land at Awatoto for industrial development as shown on the plan below. This area is identified as a possible industrial expansion area in HPUDS 2017. Hawke's Bay Protein has requested that infrastructure works are undertaken in the short term and prior to making land use decisions regarding possible expansion.



Figure 10 Showing the additional land Berkett Commercial 2021 Ltd seeks to include in the FDS at Awatoto.

The information below has been supplied by HBRC and provides background to some of the infrastructure improvements currently being investigated for Awatoto.

The Awatoto industrial area suffered considerable damage from Cyclone Gabrielle. A stopbank on the lower Tutaekuri River was breached and the entire Awatoto area was flooded, in some cases by over 2.0m. The Napier City Wastewater Treatment Plant was rendered inoperable and many of the businesses also suffered extensive floodwater damages (a total insurance claim over $270M). The Awatoto Industry Action Group (AIAG)[34] has been formed to represent major industry interests in the Awatoto area.

A recent review of HBRC's river flood model for the Tutaekuri River shows that a storm flood in excess of the current level of service (LOS) of the Heretaunga Flood Protection Scheme would result in widespread flooding on the Heretaunga Plains, including Awatoto. The current Level of Service is 1:100 year but the modelling shows that a 1:100 storm (with post-Cyclone Gabrielle flows) results in overtopping of the stopbanks. Currently, there is no budget allocated and no timeframe to make any stopbank improvements. This remains subject to further review and work by HBRC of the Heretaunga Plains Flood Scheme.

The AIAG is focused on increasing the resilience of the area as soon as practical. The AIAG have assessed a number of possible options. The preferred option is a secondary containment scheme involving construction of a bund around the built-up area of Awatoto.

[34] *AIAG members are: WoolWorks New Zealand Ltd, Bremworth Ltd, Ziwi Limited (through land/building owners Hapai Ahuriri & Hapai Zoto), Ravensdown Ltd, Hawke's Bay Protein Ltd, Ruminate, Unison, Napier City Council and mana whenua representatives.*

AIAG's preferred route (Option 1) is shown in blue in Figure 11. Option 2 (white) has been investigated but is less preferred. Option 1a (red) is an alternative southern route avoiding complexities through the Ravensdown site. Modelling of water depths for a 1:500 year storm with and without a bund (Option 1) has confirmed that a bund would be effective in mitigating flood risks for up to 1:500 year storm (0.2%ARI) if it is constructed to an elevation similar to the current bund at Maraenui golf course (to the north).



Figure 11 Showing the secondary containment alignment options for Awatoto.

Preliminary estimates of capital costs for the secondary containment work range between $16M-$20M, excluding any land purchase costs. AIAG is progressing work to refine the costs by further site investigations and detailed design. AIAG anticipates funding would be sourced from beneficiary contributions and loan or grant funding through targeted Government funds.

Should Option 2 be progressed, in our opinion, there is a stronger case for providing for a western expansion of the Awatoto industrial area, although the area remains subject to a range of other natural hazard risks that require further investigation. However, at this time, there is uncertainty over the preferred alignment, and it would therefore be premature to indicate that this area is suitable for urban development.

Berkett Commercial 2021 Ltd also outlines concerns about industrial capacity in Napier to meet demand. We have already addressed wet industry capacity above in response to the Mr Apple submission.

Regarding dry industry, relying on the BCA 2022, demand over 30 years is approximately 135 hectares across Napier and Hastings, with most of that demand occurring in the long term. Existing vacant capacity for dry industry across Napier and Hastings as at 2024 is approximately 103 hectares, excluding the Deferred Airport Zone in Napier. The Draft FDS further provides for approximately 300 hectares of business/industrial development at Ahuriri Station and approximately 100 hectares of industrial land at Irongate. Based on this, the Draft FDS provides significant capacity for dry industry and additional

land at Awatoto is therefore not required at this time, although it remains an option to consider in future FDS reviews.

7.3.4.5 Irongate

Two submissions sought expansions to the industrial areas indicated at Irongate. The Irongate North Landowners sought to extend the existing Irongate industrial area north, as shown on **Figure 12** below. The submitters recommend extending Maultsaid Place north to provide road access. Angela McFlynn sought to extend the proposed industrial south area to Longlands Road West / Maraekakaho Roads to provide a clear industrial boundary.

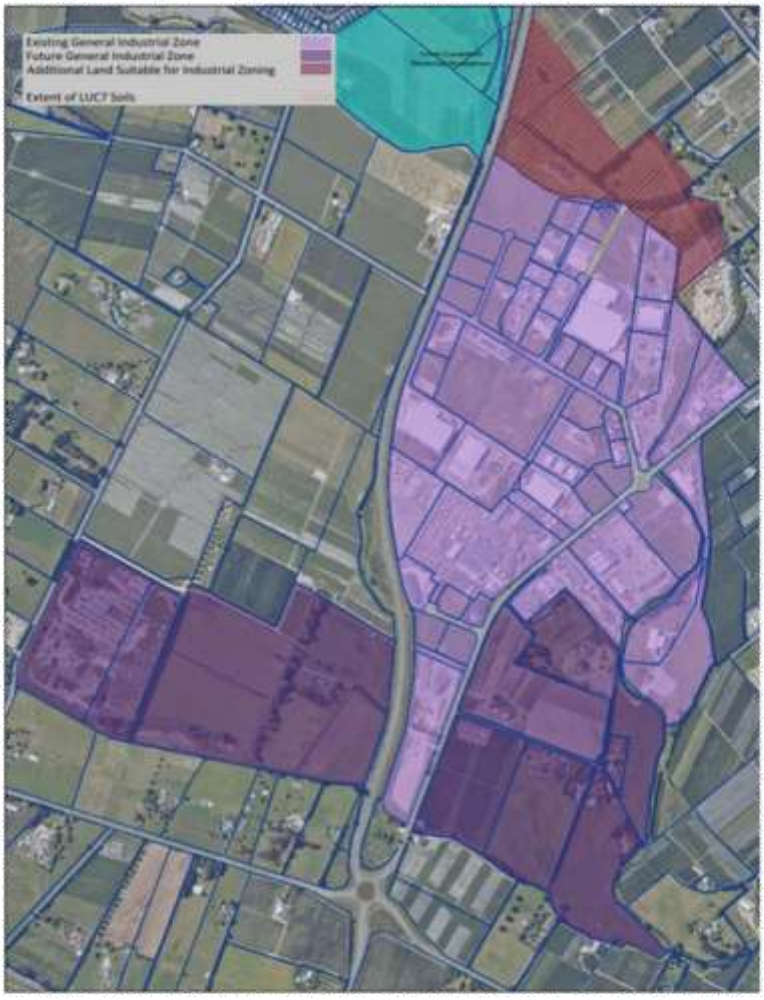


Figure 12 Requested northern expansion of Irongate.

We do not support expanding the existing Irongate industrial area further north. The Irongate Stream provides a clear and defensible boundary at the northern end of Irongate. While the land in question is LUC7, northern expansion of Irongate without a well defined boundary risks further expansion occurring to

the north onto the LUC1 land immediately adjoining. Future demand would comfortably be met by the proposed 100 hectare area proposed further south.

The Draft FDS aligns the southern extent of the proposed Irongate expansion (IR1 and IR2) with existing watercourses to provide a natural boundary. This also serves to protect the LUC1/2 land that is currently in productive uses on the eastern side of State Highway 2. The western side of State Highway 2 has more mixed soil classifications (LUC3 mainly) and accommodates a range of non-productive activities.

There are potentially benefits in extending parts of IR1 and IR2 south as this would provide an additional vehicle access point that is not from State Highway 2. This is particularly the case for IR1, which would be accessed from Stock Road and does not have a secondary access like what exists on the eastern side. In our opinion, there is merit in expanding IR1 and IR2 south, however this would be more appropriately considered through a structure plan and plan change/plan review process, given the productive values and transportation implications present. The boundaries indicated in the FDS are not intended as fixed hard lines as indicated by **Figure 13** below (and as per Figure 19) in the Draft FDS, and structure planning may result in adjustments depending on the outcome of technical assessments and informed by an Integrated Transport Assessment with input from NZTA.

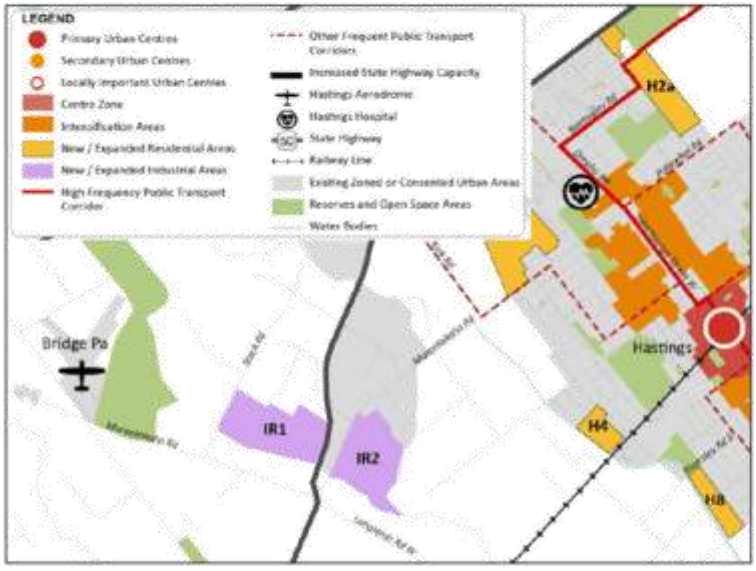


Figure 13 Showing proposed Irongate expansion.

7.3.4.6 Evenden Road

Hamachek Holdings Ltd seeks to include the land at 160 Evenden Road in the FDS as industrial for the purpose of transport related infrastructure in the form of an energy centre. The submission states that the intention is to develop an energy centre offering green hydrogen, electric vehicle charging as well as traditional petrol and diesel offerings. Given the relatively small size of the site

(2.5 hectares) and isolation from other general industrial activities, in our opinion, this matter is best addressed through a resource consent process.

7.3.4.7 Omahu

Wrightson Contracting Limited seeks to include an additional 47 hectares of land in the FDS as industrial at the western end of Omahu Road, given industrial demand and historical land uses. The area is shown in **Figure 14** below. This area was assessed under the MCA as FM3 & FM4. Based on the current network the area would only be suitable for dry industry.

The area is within the Plains Production Zone, but does accommodate a range of rural industrial activities, some of which are provided for as 'scheduled activities' in the Hastings District Plan[35]. We understand that other activities are operating under resource consents or existing use rights. The area is bordered to the south by the Roys Hill Wine Growing Area. While there are established rural industries in place, identifying a non-contiguous industrial area would pose a risk to future expansion onto what is a strategically important wine-growing district for the region. Furthermore, the area overlays the unconfined Heretaunga aquifer. We are advised by Mr Chapman that there are relatively high costs involved in extending infrastructure networks along Omahu Road that would be needed to service the area.

In the context of the Draft FDS providing sufficient capacity for dry industry by some margin, we do not recommend including this as an industrial area in the FDS.



Figure 14 Showing the land at the western end of Omahu Road sought for inclusion as industrial.

[35] Schedule 23 provides for timber milling, treatment storage and sales at 2670 Omahu Road. Schedule 29 provides for Agricultural contractors associated with harvesting including storage and servicing of vehicles.

7.3.4.8 Wilson Road

Various submitters sought to include the land bounded by Wilson Road, Flaxmere Avenue, State Highway 2 and the southern end of the Omahu Road General Industrial Zone in the FDS as industrial. It was also part of the Heretaunga Connections project submission. This area is shown on **Figure 15** below. This area was not put forward during the call for opportunities and was therefore not assessed under the MCA.

In terms of advantages, the site immediately adjoins the existing Omahu Road industrial area, is flat, has access to the strategic transport network, close to a source of employees and is efficient for people and other businesses to access. In terms of disadvantages, the land is highly productive, being a combination of LUC1, 2 and 7 and is currently in productive use, as are the neighbouring sites to the east and west. The block also lacks a well defined and defensible boundary. As discussed above, there are also some constraints in the trade waste network for the area south of Omahu Road meaning that this block would likely be suitable for dry industry only. Given that the Draft FDS provides ample capacity for dry industry, in our opinion, there is limited strategic benefit to including this land for industrial when taking into account the productive capacity of the land and the stringent requirements of the NPSHPL.



Figure 15 Showing the location of the Wilson Road industrial expansion sought by several submitters.

7.4 Recommendations

In relation to business and industrial, we make the following recommendations for amendments to the Draft FDS:

a) Explain that the expansion of Tomoana and/or Whakatu may be required in the long term for wet industry should monitoring show that there is a shortfall of capacity that is not related to the issue of access to water. This can be addressed in text amendments to Section 10.5 of the Draft FDS.

b) Include a short-term action to investigate policy changes to better protect remaining capacity at Whakatu for wet industries, noting that appropriate protection is already in place for Tomoana. The same action could apply to Omahu Road South, subject to having greater certainty over remaining trade waste capacity. Alternatively, these actions could be included in the FDS Implementation Plan.

c) Amend the Draft FDS to clearly state that the boundaries are indicative only and that refinements may occur through the structure planning and rezoning process, as a result of more detailed technical analysis.

8.0 Rural Residential and Coastal Settlements

8.1 Issues Raised in Submissions

Multiple submitters raised issues regarding the approach to rural residential taken in the Draft FDS. Submitters also raised issues regarding the approach to development in coastal settlements including Waimarama and Haumoana.

Submitters requested that the FDS includes specific rural residential sites in the FDS or otherwise provide greater certainty over the timing for the development of a Rural Residential Strategy.

The key broad issues raised are as follows:

The FDS should allow growth in rural areas and actively promote rural residential development / satellite development or otherwise identify locations for rural residential (Maree Bradshaw; Neville Bradshaw; Brian Hankin; Jill Hankin; Matt Holder; R C Macniven; Willow View Terrace Ltd; Craig Alexander);

Rezone the rural residential zones, or lower lying parts of rural residential zones, to provide for intensification above what the current rules allow (e.g. Havelock foothills; Te Awanga Hills and Poraiti) given that the land is unproductive, are close to services, are north facing mainly and have suitable contour (Hastings District Landmark Trust; David Oliver; Noel Bates), or otherwise do not limit land sizes to a minimum of one hectare (RCD Group);

Support removing the rural and coastal areas from the FDS to minimise urban sprawl and manage hazards (Andrew Lessells; Kirk Doyle);

Provide opportunities for early engagement in planning for rural residential growth / settlements to inform decisions relating to capacity within the school network (Ministry of Education);

In relation to the Draft FDS recommendation to prepare a Rural Residential Strategy:

a) Support for progressing a more detailed Rural Residential Strategy (David Oliver; Fernhills Limited);

b) Support for progressing a more detailed Rural Residential Strategy but do this as part of the FDS now given that the sites/areas have been assessed (RCD Group);

c) Specific wording changes to the description of the Rural Residential Strategy in the Draft FDS are sought by Kingfisher Pass & Rangimoe Trust and I Grieve & Mutiny Hills Ltd (refer pg. 14-15 of their submission).

d) Strengthen the references to ensure the strategy is completed in a timely manner and amend section 10.6 of the Draft FDS to recommend that policies be added to the RPS and District Plan that enable rezoning for rural lifestyle development in appropriate locations (Tuki Tuki Road Residents);

e) Ensure there is a directive in the FDS that spatial strategies are undertaken for rural areas, in particular areas where rural residential living is already occurring to enable growth options with a specified timeframe e.g. 12 months (V & L Howard; Chesterman).

Ensure the FDS includes a directive that enables future rezoning requests for rural residential to be considered on their merits based on achieving specified criteria that are consistent with the FDS objectives (V & L Howard).

The key site/area specific issues raised are set out in the table below. The Plan at **Appendix 6** shows the location of these sites/areas.

Table 7 Site-specific issues raised for rural and coastal settlements

Rural & coastal sites/ areas	Submitters and position
Napier	
Bay View	Expand the rural residential area west of the Bay View township given the area is unproductive hill country already held in small titles (Maree Bradshaw; Neville Bradshaw; Brian Hankin; Jill Hankin).
Hastings – Rural Residential	
Havelock Hills	Include the sites at 120 Endsleigh Drive and Red Hills (72.44 hectares) as rural residential in the FDS. Collectively the sites would provide for approx. 65 new dwellings. (Kingfisher Pass & Rangimoe Trust).
Mutiny Road	Include the land at Mutiny Road in the General Rural Zone (54 hectares) as rural residential in the FDS, with a yield of approximately 54 dwellings. (I Grieve and Mutiny Hills Ltd).
Maraekakaho	Include Maraekakaho in the FDS as a satellite town that provides capacity for about 300 dwellings & an

	additional 150 dwellings as large lot residential (Focus Maraekakaho; Willow View Terrace Ltd).
Fernhill	Include multiple sites at Fernhill in the future Rural Residential Strategy for development. The sites are approximately 411 hectares (Fernhills Ltd).
Tuki Tuki	Extend the Tuki Tuki Special Character Zone to include approximately 118 hectares of land at the southern end and identify this as rural residential in the FDS (Tuki Tuki Road Residents). Include the site at 116 Matangi Road (5.6 hectares) as rural residential in the FDS (V & L Howard).
Puketapu	Include approximately 90 hectares of land in Puketapu accessed from Seafield Road/Puketitiri Road as rural lifestyle in the FDS (Robert Pattullo).
Turamoe Road	Include the land at Awanui Station (approx. 688 hectares) at the end of Turamoe Road as residential in the FDS on the basis that the site is close to the existing urban area, is not highly productive, has no flood risk and infrastructure would be provided by the developer (Peter and Caroline Raikes).
Hastings – Coastal Settlements	
Haumoana	Include the land generally within one kilometre of Haumoana School as an area for further investigation (RCD Group) including the land at 42 Raymond Road (Endsleigh Cottages). General support for development at Raymond Road (Stephen Gittings; Jacob Scott).
Waimarama	Include the land at Okaihau Road and Te Apiti Road (12.4815 hectares – 10 proposed lots) as rural residential in the FDS (Rangimoe Trust). Include the land at 53 and 155 Harper Road (95 hectares) in the FDS and identify it as a coastal settlement (Chesterman).

8.2 Information and Evidence

In line with the requirements of the NPSUD, the Draft FDS is focussed on identifying broad locations in which development capacity will be provided over the long term in **existing and future urban areas** (clause 3.13(2)(a)). Because of this, the Draft FDS does not address, spatially at least, new locations for rural residential because it is not urban in scale.

With that said, existing rural residential areas on the urban fringe, including the Havelock Hills, Poraiti and Bay View, were factored in urban development capacity and this is addressed in the Market Economics report prepared for the

Draft FDS. In our opinion, this is appropriate given that these locations function as part of the urban environment due to their proximity to urban services.

Urban scale development in rural and coastal settlements was assessed as part of the spatial scenarios – see Scenario 3 assessed in the Technical Report. That considers urban scale development at Maraekakaho, Paki Paki, Bridge Pa and Te Awanga. This scenario was discounted due to high servicing costs and transport efficiency, amongst other matters as explained in the report above.

8.3 Analysis and Discussion

8.3.1 General Approach to Rural Residential & Rural Residential Strategy

Various submitters sought to actively promote rural residential development, including as an alternative to development in low lying areas and on highly productive land. We have already discussed this matter in Section 5 above. While rural residential style development provides a legitimate housing choice for people in terms of Policy 1 of the NPSUD, providing significant additional rural residential capacity would not meet Napier and Hastings future urban housing needs, given the costs of developing and servicing (including on site) and the preferences and needs of buyers, particularly with an aging population.

As explained in Section 3.1.1 of the Market Economics report for the Draft FDS, approximately 20% of total housing demand for Napier and Hastings is expected to be met in rural areas (approximately 2,050 dwellings). This reflects residential consenting volumes outside of the urban Stats NZ SA2 areas over the last three years. The recommended Rural Residential Strategy (see Section 10.6 of the Draft FDS) is intended to determine the most efficient and effective way of providing for this growth that meets the needs of rural communities. Until this occurs, development can occur within established rural and coastal settlements, which have vacant capacity[36], as well as within rural areas in accordance with the District Plan rules. In the Hastings context, this includes provision for:

- Rural residential farm parks in the Rural Zone, which provides for rural lifestyle development on larger sites of 60 hectares or more;
- The subdivision of one rural lifestyle lot every three years on sites in the Rural Zone provided that the minimum balance area is at least 20 hectares.

Submitters generally supported the need for a Rural Residential Strategy. However, several observed that the operative Regional Policy Statement includes directive policies that discourage inappropriate rural lifestyle development in the Heretaunga Plains sub-region[37] (see Objective UD4 and Policy UD3), which are at odds with the commentary in the Draft FDS. We agree that reconsideration of the RPS objectives and policies on rural residential and lifestyle development may be required, and this would be usefully informed by

[36] Refer to Table 4-1 and Table 4-4 of the Market Economics report for the Draft FDS.
[37] This area is defined in HPUDS 2017 as shown on the map available here: https://www.hpuds.co.nz/themes/hpuds2016/images/hpuds-region-map.jpg

the outcome of the Rural Residential Strategy. However, in the meantime, we note that Objective UD4 refers to avoiding "inappropriate" lifestyle development, which does leave the door open for "appropriate" lifestyle development to be considered on its merits. At a strategic level, the Strategy would need to carefully consider the impact of rural residential development in terms of scale and location, on the compact urban form objectives of the RPS and the FDS, including impacts on the transport network and currently low volume rural roads.

Kingfisher Pass & Rangimoe Trust and I Grieve & Mutiny Hills Ltd requested specific amendments to Section 10.6 of the Draft FDS (refer pg. 14-15 of their submission). These amendments seek to remove reference to the preparation of a Rural Residential Strategy and instead refer this to the statutory planning process via amendments to the RPS and District Plans. We do not support this approach. A Rural Residential Strategy is an appropriate precursor to changes to the RPS and District Plan. This provides the opportunity to work with existing rural communities and iwi and hapū to establish their vision and values for their local areas. This work could inform a range of Council processes, including infrastructure investment and community initiatives, as well as supporting changes to statutory documents. We acknowledge that this two-step process would occur over a longer period of time. However, the extent of vacant capacity in operative rural residential zones, indicates that amendments to the RPS and District Plans is not an urgent priority from a development capacity perspective.

HPUDS 2017 provides strategic direction on growth outcomes for coastal and rural settlements (see pages 38-39 of the document[38]). This level of detail is not contained in the Draft FDS given that it is focussed on providing for urban scale growth. However, given that the FDS is intended to replace HPUDS, it is important that this strategic direction is not lost, particularly prior to the preparation of a Rural Residential Strategy. We recommend that this direction is carried over to the Draft FDS as an Appendix, with appropriate introductory and explanatory text. We recommend further amendments to Section 10.6 of the Draft FDS to reference and provide context for this Appendix. This would partly address area-specific concerns raised by submitters, including those relating to Maraekakaho, Te Awanga and Haumoana.

8.3.2 Site Specific Requests

Several submitters requested that specific sites/areas be identified in the FDS as rural residential/lifestyle. As outlined above, we consider that these matters would be more appropriately addressed through a Rural Residential Strategy. However, should the Panel be minded to identify specific rural residential sites in the FDS (which we are not recommending) as part of its preliminary deliberations, the project team can provide further advice on those areas based on information currently available.

[38] https://www.hpuds.co.nz/

8.4 Recommendations

In relation to rural residential and coastal settlements, we make the following recommendations for amendments to the Draft FDS:

a) Include the text from pages 38-39 of HPUDS 2017 as an Appendix to the FDS with appropriate explanatory text, stating that the Appendix provides strategic direction for the listed rural and coastal settlements until such time as a Rural Residential Strategy has been prepared. This recommended text is included at **Appendix 1** to this report.

b) Make appropriate supporting amendments to Section 10.6 of the Draft FDS to reference the Appendix.

9.0 Greenfield Residential Napier

9.1 Issues Raised in Submissions

Multiple submitters raised issues regarding the greenfield sites identified for Napier requesting that they either be retained or removed from the Draft FDS. Various submitters sought to include new sites in the FDS.

This section of the report addresses site specific issues raised by submitters for Napier. These issues are set out in the table below. The Plan at **Appendix 6** shows the location of these sites/areas.

The general submissions, particularly those relating the avoiding development on highly productive land and hazard prone/low lying land set out in Section 5.3 of the report above, are relevant to this topic.

Table 8 Napier site-specific key issues raised

Napier sites/ areas	Submitters and position
Ahuriri Station	Ahuriri Station includes capacity for approximately 1,000 dwellings on the northern side of Onehunga Road in Bay View. Submissions that support or oppose development at Ahuriri Station are detailed in Section 8.1 of the report above. The Natural Hazards Commission specifically opposed the inclusion of AS1 and AS2 at Onehunga Road on natural hazard grounds.
Mission Estate and Mission Hills	Include additional land at Mission Estate for residential development, including the Artisan Village Area within the Rural Lifestyle Zone and the Future Area within the Rural Production Zone as per the Mission Estate Masterplan (Marist Holdings (Greenmeadows) Ltd). General support for the Mission Hills development (Natural Hazards Commission; Daniel Kittow; Samatha

	McPherson; Forest and Bird). No submitters opposed the Mission Hills area proposal.
Riverbend / South Pirimai / The Loop & Surrounds	
Riverbend	Support for development of Riverbend (Te Orokohanga Hou Joint Venture; Bayden Barber), noting that engineering solutions are available to manage natural hazard risk. Multiple submitters opposed development at Riverbend on natural hazards grounds (Natural Hazards Commission; HBRC, John Reid; Myriam Parker; Gary Curtis; Andrew Lessells; Simon Nash; Samatha McPherson; Susan Garner; Forest and Bird). Some submitters requested further information to determine whether natural hazard mitigations could provide a reasonable level of protection for the Riverbend Road site (MTT).
The Loop	Only one submitter specifically opposed the inclusion of the Loop in the Draft FDS on natural hazard grounds (Natural Hazard Commission).
South Pirimai	Support the inclusion of 225 Waverley Road and 45 Ulyatt Road as part of NC4d – South Pirimai (Currie Family Trust). Only one submitter specifically opposed the inclusion of South Pirimai in the Draft FDS on natural hazard grounds (Natural Hazard Commission).
Waverley Road	Support for the inclusion of land bounded by Waverley Road and South Pirimai, Riverbend and The Loop (approx. 150 hectares) as residential in the FDS (Dooney Brothers Partnership). Note that the western extent of the land is identified as a stormwater management area in the Te Orokohanga Hou Joint Venture submission to facilitate the Riverbend development. The Natural Hazards Commission supported the exclusion of this land from the FDS on natural hazard grounds.
Willowbank Road	Support for the inclusion of the land bounded by Willowbank Road, Eriksen Road and Awatoto Road (approx. 45 hectares) as residential in the FDS (Meeanee Developments Ltd). The submission notes that the site could assist to create an east-west linkage from Awatoto Road to the Waverley Road land and development.

	The Natural Hazards Commission supported the exclusion of this land from the FDS on natural hazard grounds.

9.2 Information and Evidence

The key information and evidence relating to the issue of Greenfield Residential - Napier that underpin the Draft FDS is as follows:

- Housing Capacity Assessment 2021 and associated quarterly monitoring information;
- Economic Assessment undertaken by Market Economics for the Draft FDS (referred to as Appendix 5 in the Draft FDS documentation);
- Site assessments and MCA of refined growth areas (referred to as Appendix 3 & 4 in the Draft FDS documentation);
- Further advice provided by Simon Bradshaw – Napier City Council's Manager of Infrastructure Developments, on specific sites/areas (see **Appendix 7**).
- Advice of Craig Goodier, Principal Engineer at Hawke's Bay Regional Council regarding the Riverbend development (see **Appendix 8**).

The relevant aspects of this information is referenced in the analysis below.

9.3 Analysis and Discussion

9.3.1 Ahuriri Station

Ahuriri Station has been addressed in Section 7.3.4.2 above, and the discussion there equally applies to the residential component of the Mana Ahuriri Trust proposal. The residential area is located on Onehunga Road in Bay View, at the northern end of Ahuriri Station, and is identified as AS1 and AS2 in the site summaries and MCA assessment. The sites have capacity to accommodate approximately 1,000 residential units.

Given its location at the northern end of Napier, greater investment in infrastructure networks will likely be required to realise development compared with other locations. This includes transport and wastewater supply upgrades primarily, as well as the school network, with additional growth likely triggering the need for a new primary school. As part of future structure planning for Onehunga Road, integration with the surrounding Bay View community should be considered, including whether there are other opportunities for urban development that could complement the development and assist to spread the cost of required infrastructure investment.

We acknowledge the issues raised by the Natural Hazards Commission in their submission. The sites are subject to a range of natural hazard constraints and there is incomplete information on flood hazards. This will need to be investigated in detail as a next step to ensure that risks can be mitigated to an

acceptable level. We acknowledge that the scoring of the MCA places the Bay View sites at the lower end. This is primarily driven by the natural hazard constraints and relative inefficiency of servicing development in this location compared to other areas that are more proximate to existing services and transport. However, the sites are Treaty settlement redress land, and they are identified as such in the Draft FDS (refer to the discussion above on iwi and hapū aspirations for urban development in Section 6). The natural hazard constraints are clearly acknowledged and will need to be investigated as a next step.

On the basis of the submissions received, we do not recommend amending the way in which AS1 and AS2 are provided for in the Draft FDS.

9.3.2 Mission Estate

Marist Holdings (Greenmeadows) Limited submitted in support of the Draft FDS and the inclusion NC6 – Mission Estate (Residential). The submitter requests that two additional areas in the Mission Estate Masterplan are also included in the Draft FDS, which is referred to as "Artisan Village Area" and "Future Area" in the submission as shown in **Figure 16** below. The "Church Road General Residential Area" is NC6. The submitter states that the 100 dwelling yield is only realistic if all three areas are included. By the numbers provided in the submission, the breakdown of yield is as follows:

a) Church Road General Residential Area – 48 residential units;

b) Artisan Village – 22 residential units;

c) Future Area – visitor accommodation – no yield provided.

Under the Napier Proposed District Plan, the Church Road General Residential Area and Artisan Village are located in the Rural Lifestyle Zone and are within the Mission Landscape and Visitor Precinct. This precinct provides for a range of visitor accommodation activities and restricts establishment of residential activities to what the Rural Lifestyle Zone allows. We support providing greater flexibility for residential to establish in these locations, informed by site specific analysis undertaken through the Mission Estate Masterplan and provided that the overall purpose of the Precinct is achieved. Given the small scale of development in the Artisan Village, this is more appropriately addressed through the Napier Proposed District Plan in the context of the specific issues and outcomes sought for the Precinct. To enable this to occur, we recommend including a footnote for NC6 in Table 3 of the Draft FDS, stating that NC6 includes consideration of discrete areas in the immediate surrounds, informed by site and development specific analysis. Or words to that effect.

The 'Future Area' is located in the Rural Production Zone and is within the Mission Productive Rural Precinct (and is defined as highly productive land under the NPS-HPL). It appears that the submitter intends to use only a very small part of this land for visitor accommodation, which is not currently in productive use. Given the scale of this proposal, it would be more appropriately addressed through the resource consent and/or Napier Proposed District Plan

process. It would otherwise be addressed by the recommendation outlined in the above paragraph.



Figure 16 Showing the location of the Artisan Village Area and the Future Area that Marist Holdings seek to include in the Draft FDS.

9.3.3 Riverbend

The Riverbend site (NC4b) attracted a number of submissions that supported and opposed its inclusion in the Draft FDS. The site is included in the Draft FDS and was assessed using the MCA framework. We do not repeat that assessment here.

The key issue in contention is the appropriateness of enabling development on this site given its natural hazard constraints and susceptibility to flooding in particular. We note that these constraints are generally present in all of Napier's low lying areas.

Te Orokohanga Hou Joint Venture which is progressing a development proposal on the site, supported its inclusion, as did Bayden Barber. Their submission outlines the proposed stormwater management solution for the site. This includes a large constructed wetland/stormwater management area to the immediate south of the cross country drain that borders the southern boundary of the site.

The Natural Hazards Commission states that flood risk is their greatest concern for Riverbend, stating that the site was completely inundated in the 2020 floods and during Cyclone Gabrielle, noting that surrounding suburbs were also impacted. They state that further urbanisation of this area will exacerbate localised flooding as it will disrupt natural drainage patterns and increase impervious surfaces. The Commission's submission also references recent flood modelling from Napier City Council that shows the expected extent and depth of flooding under a range of rainfall events. This shows extensive flooding across the site during a 1% AEP event, a portion of which is 500mm or greater. They further note that raising the land prioritises dwellings on the site, and does not

address risks to surrounding areas, and that the approach is not future proofed, and could result in repeated remediations, such as further raising or relocating homes as flood risks continue to evolve.

The site has a long planning history, having been included as an indicative growth area by Napier City Council for the last 26 years, since the 1999 Napier Urban Growth Strategy was published. In recent years, active planning has been undertaken by the landowner through various channels in consultation with the City Council (and only recently with HBRC). This has included resource consent pre-application discussions under the Operative Napier District Plan and the Covid-19 Recovery (Fast Track Consenting) Act 2020. While it was a referred project under the Covid-19 Recovery (Fast Track Consenting) Act 2020, we understand that the landowner did not lodge a resource consent application under that legislation. As part of that process, the landowner and Napier City Council jointly commissioned Stantec to undertake stormwater modelling to determine the effects of development on the stormwater network. This work assessed the effects of displaced water on surrounding sites as a result of raising ground levels on the site.

Following this, the landowner applied for consideration under the new Fast Track Approvals Act 2024, but was not included as a Schedule 2 Listed Project[59]. More recently, the landowner has lodged a referral application under the fast track process of the Natural and Built Environment Act 2023 (transitional provisions). Earlier this year, the Minister for the Environment invited comments from Napier City Council and HBRC on the referred application. Both councils provided written feedback to the Minister, but that feedback is bound by confidentiality constraints imposed by the Minister and the fast-track referrals process. We understand that the landowner still has a range of issues to address in the stormwater modelling and methodology, including the rainfall data used as the basis for modelling, and assumptions applied for climate change and the effects of ground settlement as it relates to vertical land movement. The landowner/Joint Venture parties have further work to do to demonstrate the effectiveness of the proposed stormwater solution for the site. This long planning history indicates the challenges associated with developing on Napier's low lying land even where there is technically an engineering solution available.

In addition to this, Simon Bradshaw, Napier City Council's Infrastructure Manager of Infrastructure Developments has outlined his opinion on the Riverbend submissions (see **Appendix 7**). He echoes some of the matters raised by the HBRC by Craig Goodier on the veracity of the Stantec modelling assumptions. He also highlights that the shallow groundwater present may impact the feasibility of the stormwater solution proposed. He also states that the on-going capital costs to enable infrastructure upgrades to support development will be higher than development in another area not prone to flood risk. Based on the work undertaken to date for the FDS, given the nature of Napier's growth options, avoiding these costs completely would likely require

[59] https://environment.govt.nz/acts-and-regulations/acts/fast-track-approvals/fast-track-projects/

looking beyond Napier to accommodate growth, including in Hastings. This may be required for future FDS reviews/Regional Spatial Strategy. We note that for the FDS a full and agreed engineered solution does not need to be determined to a resource consent level of detail.

Overall, while the site is constrained, the landowner has worked over several years to implement HPUDS and develop a viable stormwater solution. It would be premature in our opinion to remove the site on flooding and stormwater grounds at this point given that the landowner, in good faith, is in the process of addressing the issues recently raised by the two Councils. Retaining the site in the FDS would provide the landowner with the opportunity to address these matters through future planning processes. As explained in the site summary, the site is otherwise a relatively efficient location for growth at the southern extent of Napier with good access to services and amenities in Onekawa and Maraenui.

We recommend including a statement in the FDS explaining that additional land will be required to manage stormwater and flooding effects arising from development of the Riverbend site, with the exact location to be determined through future planning processes. This could be addressed through a footnote to NC4b in Table 3 of the Draft FDS. We do not recommend spatially defining the area at this stage, given those design details are still being worked though by the Joint Venture parties.

9.3.4 The Loop & South Pirimai

The Loop (NC4a) and South Pirimai (NC4d) are located to the west and east of Riverbend and are currently identified in HPUDS. South Pirimai is identified as a Reserve Area in HPUDS and has been partly developed for a Bupa retirement village.

The Natural Hazards Commission opposes the inclusion of these sites on natural hazard grounds. The Commission's concerns are similar to those raised for Riverbend although the submission acknowledges that the extent of flooding is not as significant for these sites, owing to the slightly higher land elevation in the case of the Loop. They state that managing stormwater in this context will require significant and coordinated investment, even with pre-established retention basins. They also note that on-going maintenance of these systems present uncertainties which may require further remediation and investment in the future, placing a financial burden on either the council or homeowners.

We agree with these concerns in principle and note that development in this general area is possible from an engineering perspective but may have residual risks for the community after mitigation is in place. These risks are less evident in other more elevated locations, of which there are very few in Napier. However, a range of matters must be considered as outlined in the site assessments and evaluation of spatial scenarios. These sites generally perform well against other criteria, including accessibility and ability to efficiently service with infrastructure. These sites have also been included in Council plans and strategies for several planning cycles and are partly developed in the case of

South Pirimai. While development is not currently actively being planned in these locations, they present viable solutions for urban growth subject to more detailed engineering assessment and we recommend that they be retained in the FDS.

9.3.5 Waverley Road & Willowbank Road

The Dooney Brothers Partnership seeks to include the sites to the north of Waverley Road in the FDS (approx. 150 hectares). Meeanee Developments Ltd seeks to include the land at Willowbank Road, Eriksen Road and Awatoto Road in the FDS (approx. 45 hectares). Both are seeking residential land uses on the sites. **Figure 17** below shows the location of these areas.



Figure 17 Showing the location of the areas sought for inclusion in the FDS by Meeanee Developments Limited and Dooney Brothers Partnerships.

The Waverley Road site was assessed through the MCA as NC4c. The area to the north of the Willowbank Road site was also assessed through the MCA as NC7a and NC7b. Both of the sites, including the additional area sought by Meeanee Developments Ltd generally have efficient access to the existing urban area of Napier and transport and infrastructure network could be extended, noting that the wastewater treatment plant is located close by in Awatoto. The sites are a mix of LUC 2-3 and are therefore subject to the NPS-HPL and currently accommodate productive uses. The sites are also subject to a range of natural hazards constraints similar to other locations at the southern end of Napier.

A large proportion of the Waverley Road site is required as a stormwater management area to service the Riverbend development. We expect that this area would need to be significantly larger to cater for additional development on the remaining part of the site. The impact of this on development area and yield are unknown.

While there are advantages to extending development further south of Napier relating to accessibility and infrastructure provision, we do not recommend including these sites in the FDS. While we recommend retaining the existing HPUDS areas further north, in our opinion, additional land further south should not be included at this time, at least until there is clearer policy direction on the management of natural hazards at a national level and through amendments to the RPS. Further, these sites are not required at this time to meet residential demand in Napier.

9.4 Recommendations

In relation to greenfield residential in Napier, we make the following recommendations for amendments to the Draft FDS:

a) Include a footnote for NC6 in Table 3 of the Draft FDS, stating that NC6 includes consideration of discrete areas in the immediate surrounds, informed by site and development specific analysis. Or words to that effect.

b) Include a statement in the FDS explaining that additional land will be required to manage stormwater and flooding effects arising from development of the Riverbend site, with the exact location to be determined through future planning processes. This could be addressed through a footnote to NC4b in Table 3 of the Draft FDS. We do not recommend spatially defining the area at this stage, given those design details are still being worked though by the Joint Venture parties.

10.0 Greenfield Residential Hastings

10.1 Issues Raised in Submissions

Multiple submitters raised issues regarding the greenfield sites identified for Hastings requesting that they either be retained or removed from the Draft FDS. Various submitters sought to include new sites in the FDS. Various submitters sought to include new sites in the FDS or amend the staging/prioritisation of sites.

This section of the report addresses site specific issues raised by submitters for Hastings. These issues are set out in the table below. The Plan at **Appendix 6** shows the location of these sites/areas.

The general submissions, particularly those relating the avoiding development on highly productive land and hazard prone/low lying land set out in Section 5.3 of the report above, are also relevant to this topic.

Table 9 Hastings site-specific key issues raised

Hastings sites/ areas	Submitters and position
Hastings / Flaxmere	
Heretaunga Connections	Include approximately 470 hectares of land between Hastings and Flaxmere as urban in the FDS (Heretaunga Connection Project Ltd). The site includes the Kaiapo area included in the Draft FDS. The vision for the land does not specify land use in detail, although provision for a relocated Hastings Racecourse, Hospital and Stockyards are identified[40] Support for development between Flaxmere, Omahu Road, the expressway and Chatham Road given lack of water availability for orcharding (Geoff Ellis). Support for the Heretaunga Connections project (Carl Wezel).
Hastings	
Ada Street	Include the sites at Lot 1 DP 18792, Lot 1 DP 14784 and Lot 2 DP 28292 in the FDS in the short term to allow for the expansion of the Hastings Retirement Village (Summerset). Include the sites Lot 1 DP 18792, Lot 1 DP 14784 and Lot 2 DP 28292 (as listed above) and the sites at Lot 4 DP 402003 and Lot 5 402003 for development in the FDS (Thompson Perry Family Trust).
Wall Road	Include the site at 1211 Southland Road and 600 Wall Road (identified as Wall Road Reserve Area in HPUDS) in the FDS, given it was previously included as a development site in HPUDS, its accessibility, ability to be serviced and limited productive potential (Jason Troup; Hawke's Bay Racing Incorporated). Include the site at 1000 Wall Road in the FDS (Byron Cash). Support for the inclusion of Wall Road within the FDS from Southland Road to Maraekakaho Road along the southland drain in Hastings (Carl Wezel).
Murdoch Road	Support the inclusion of the Murdoch Road site (H4) within the FDS (Tollemache Orchards Ltd).

[40] Refer to page 7 of the presentation attached to the submission.

Lyndhurst Extension	Support the inclusion of Lyndhurst Extension (H2A) in the FDS and identify the existing Graceland Retirement Village in the FDS to enable appropriate rezoning in the future (Oceania Village Company Ltd). Noting that the existing zoning of the retirement village is Plains Production.
Flaxmere	
Portsmouth Road	Support the inclusion of Portsmouth Road (FM2) in the FDS, increase the development yield from 330 to 600+ dwellings, provide for small localised mixed commercial retail and service opportunities, and amend the staging/prioritisation for the site from long term to short-medium term (Maven Collective). Update the social infrastructure comments for this site in the MCA table (Ministry of Education). No rezoning or residential development south of Portsmouth Road or west of Stock Road towards the Aerodrome and no residential intensification under the eastern and western helicopter approach and departure paths as per the Aerodrome AIP chart (Hastings Aerodrome Inc).
Flaxmere South	Update the social infrastructure comments for this site (FM11) in the MCA table (Ministry of Education). No rezoning or residential development south of Portsmouth Road or west of Stock Road towards the Aerodrome and no residential intensification under the eastern and western helicopter approach and departure paths as per the Aerodrome AIP chart (Hastings Aerodrome Inc).
Havelock North	
Middle Road	Include land at Middle Road as residential in the FDS (Nicky Gardner; T&J McKenna; Karen Dear - 150 Middle Road; Nigel Rowe and Tammy Bishop; Karen and John Davidson – 47 Gilpin Road; Cherie Barber-Davidson – 166 Middle Road; CDL Land (NZ) Ltd; Bupa Care Services Ltd; Village Baptist Church; Carl Wezel).
Brookvale Road	Support the inclusion of Brookvale Road (HN6) in the FDS and amend Figure 23 to show the site as a short-medium term priority (Metlifecare Retirement Villages Ltd). Update the social infrastructure comments for this site in the MCA table (Ministry of Education). These comments also apply to the Oderings site (HN10).

Arataki Extension	Support the inclusion of Arataki Extension (HN2b) in the FDS (CDL Land (NZ) Ltd; Metlifecare Retirement Villages Ltd; Carl Wezel). Increase the dwelling capacity for Arataki Extension from 110 dwellings to 200 dwellings, amend the staging/prioritisation to show the site as a short-medium term priority and amend the HPL notation in Figure 1 to exclude the site (CDL Land (NZ) Ltd). Update the social infrastructure comments for this site in the MCA table (Ministry of Education).
Te Mata Mushrooms	Include the site at 174 & 176 Brookvale Road as residential in the FDS given its location on the urban fringe, large landholding, productive capacity constraints and ability to be serviced with infrastructure (Vermont Street Partners No.4 Ltd). Update the social infrastructure comments for this site in the MCA table (Ministry of Education).
147-151 Napier Road	Include the land at 147-151 Napier Road as residential as FDS with capacity for approximately 29 dwellings (Sun Properties Limited).
Thompson Road	Include the eastern extent of the site at 60 Thompson Road as residential within the FDS (approx. 1.85 hectares) or allow for the partial off-setting of the stormwater overlay on the western part of the site (refer to Figures 3 & 4 in the submission) (Paul Stevenson). Include the Thompson Road/Davidson Road blocks in the FDS (Carl Wezel).
Strawberry Patch	Include the land at 76-98 Havelock Road (approx. 10.5 hectares) as residential/retirement in the FDS given its limitations for productive use and the site's accessibility (Shelagh & Neil Mannering; The Strawberry Patch).
Bridge Pa	
Hastings Golf Club	Include the Hastings Golf Club at 1523 Maraekakaho Road as residential within the FDS consistent with the GSDLP Concept Plan contained in the feedback, which has capacity for approx. 150 dwellings (Golf Sports Development Limited; Hastings Golf Club). No rezoning or residential development south of Portsmouth Road or west of Stock Road towards the Aerodrome and no residential intensification under the eastern and western helicopter approach and departure

	paths as per the Aerodrome AIP chart (Hastings Aerodrome Inc). Update the social infrastructure comments for this site in the MCA table (Ministry of Education).
Clive	
63 Main Road	Include the site at 63 Main Road, Clive (approx. 1.76 hectares with capacity for approx. 43 dwellings) as residential/retirement in the FDS, given that the site has no infrastructure servicing constraints, is not flood prone has limited other natural hazards and has limited productive capacity (Chris and Cheryl Holder).

10.2 Information and Evidence

The key information and evidence relating to the issue of Greenfield Residential - Hastings that underpin the Draft FDS is as follows:

- Housing Capacity Assessment 2021 and associated quarterly monitoring information;
- Economic Assessment undertaken by Market Economics for the Draft FDS (referred to as Appendix 5 in the Draft FDS documentation);
- Site assessments and MCA of refined growth areas (referred to as Appendix 3 & 4 in the Draft FDS documentation).

Specific information and evidence supporting the evaluation of Hastings greenfield sites is referenced in Section 10.3 below.

10.3 Analysis and Discussion

10.3.1 Heretaunga Connections

10.3.1.1 Additional Information

Although the Heretaunga Connections Project was submitted as part of the call for opportunities, no specific reports or further work was completed as part of the FDS preparation. A large part of the project land had however, already been identified by the FDS Technical Advisory Group as part of the Expansion Thematic Scenario. As a result, the concept was discounted as part of the scenario refinement process and before the MCA analysis of specific sites was undertaken. Kaiapo Road however, was already included in the Draft FDS, and Wall Road and Wilson Road had been separately identified by others and subject to the MCA evaluation in their own right and are discussed in relation to other submissions below.

The following additional evidence is laid out to better understand the implications of the proposal:

a) Land Fragmentation - Rateable Units at Kaiapo Road number approx. 20 with an average ha per unit of 3.5 ha. The balance of the connections land

is in approx. 40 rateable units with a 10 ha per unit average (See **Figure 18** below).

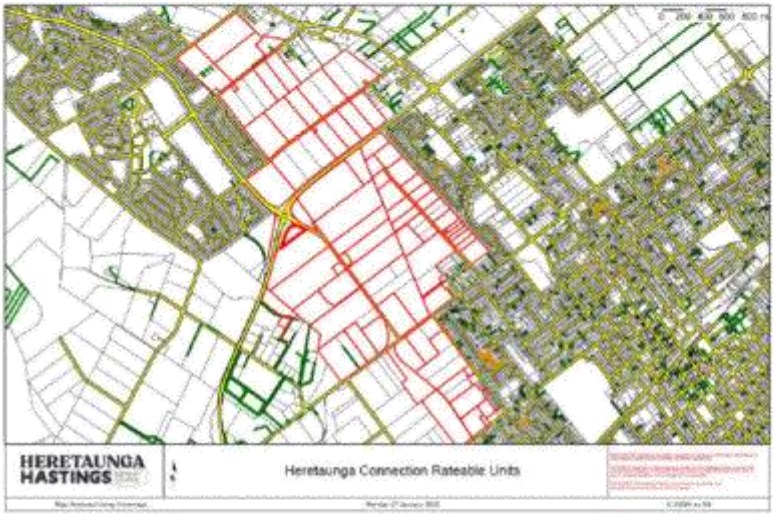


Figure 18 Showing land fragmentation within the Heretaunga Connections block.

b) Land use capability - LUC 1 area approx. 290 ha, LUC 2 approx. 120 ha LUC 7 approx. 60 ha (62%,25%,13%) (refer to **Figure 19** below).

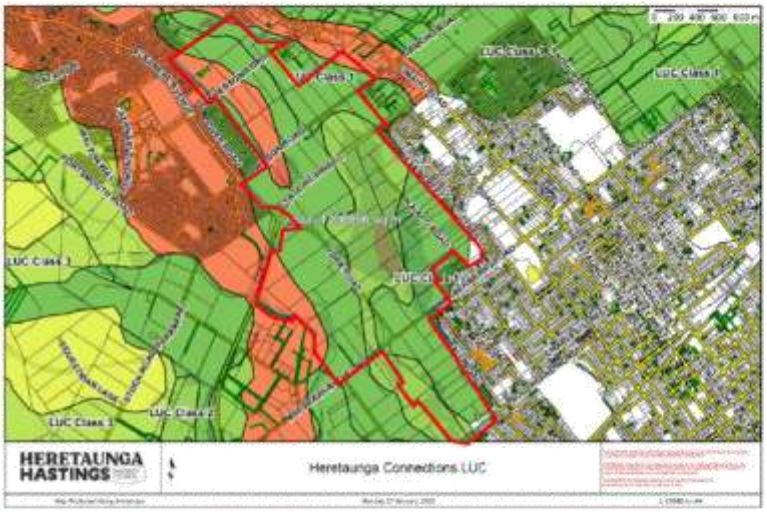


Figure 19 Showing LUC status within the Heretaunga Connections block.

10.3.1.2 Analysis and Discussion

Expansive Growth Scenario

Noting that there was a potential shortfall in future residential development capacity, the FDS process identified new potential growth areas and grouped these together to create a series of high-level "thematic" scenarios. This included an Expansive Urban Growth Scenario that included the subject site, including Kaiapo Road and Wall Road separately (see Figure 10, page 75 of the

FDS Technical Report). It also encompassed the Wilson Road and Irongate North sites that have been submitted on separately by others for industrial development as part of a wider area.

Detailed consideration of the advantages and disadvantages of the four spatial scenarios saw the removal of potential growth areas where there was considered to be a significant conflict with the objectives of the FDS. This included the Expansion Scenario sites, with the exception of Kaiapo Road, which had been previously identified in HPUDS. While acknowledging the urban development and design benefits of larger land aggregations and the land being regarded as a potentially logical extension of existing urban area, the assessment noted that:

> *The majority of the land within this area is classified as LUC1 and characterised by well-developed orchards. Soils and conditions support good productive capacity of the land are considered to be of high value. There are some constraints on the western edge due to the hard residential boundary. It is concluded that as other alternatives for growth in proximity to this area with less productive soil exist, development in this area is not considered appropriate or required to meet the NPS-UD requirements.*

Demand

At 470 ha the land has substantial potential capacity. Even allowing for the possible relocation of the Hospital, Racecourse and Saleyards Facilities as signalled, a net 400 ha could yield up to 6,000 units at a modest HPUDS average gross density of 15 houses per ha, the site; much more at more contemporary higher densities.

This compares with projected greenfields demand for Hastings of 4,400 dwellings under the FDS's 60% intensification objective, including competitiveness margin. Existing capacity in Hastings exists within zoned and developing areas of 2,125 sites, meaning the shortfall that needs to addressed is 2,275. This reduces to just 1,630 if the areas identified in HPUDS that are exempt from the NPSHPL limitations and carried through into the Draft FDS as recommended are also counted. In these circumstances it would be very difficult to justify such a large area for urban development to meet projected demand given the tests in Clause 3.6 of the NPSHPL. More detailed evidence and discussion on matters relating to projected demand and the application of the NPSHPL are discussed in Section 4.3.1 and Section 5.3.1.

Locational Choice

We do not agree that there are no other reasonably practicable broad localities that can meet the target market demands in terms of clause 3.6 of the NPSHPL and it would be a stretch to promote this site as a preferred market replacement for the Havelock North and Napier options. In this respect we assume that the proposal is in addition to Napier and Havelock North sites at least, if the NPSUD's requirement for a variety of locations and price points is to be met, rather than this site being "the one option that does it all".

We are also conscious that a surplus supply of greenfields land is likely to affect the economics for intensification of existing urban areas to reduce pressure on the very productive soils that this proposal intends should sacrificed for urban development.

We do acknowledge the range of benefits that large scale development opportunities present for urban outcomes, including relocation of facilities to create space for intensification closer to the existing commercial centres and providing easier opportunities for age care facilities and other space intensive activities. While there may also be some intangible benefit in linking up Hastings and Flaxmere as an urban continuum, the practical reality is that the expressway will still constitute a significant severance. Also of note in this regard, is the fact that Flaxmere was developed specifically to accommodate demand in a location that enabled highly versatile and productive land to be avoided.

The Connection site is not the only conceivable option for development at such scale, if soil protection objectives are given less prominence, albeit that other sites may have a different combination of advantages and disadvantages from an urban development perspective. For example, the land between Hastings and Havelock North bounded by Crosses Road and the Southland Drain (the Havelock Connection) or the land between Lyndhurst Extension and the Ngaruroro River are potential alternatives. These have similar sizes at 400+ha and similar or lower average hectare per rateable unit metrics.

Choosing between options at this scale, provided they could be justified at a strategic level in the first place, would require a comprehensive cost benefit analysis (including lost production values) over multiple sites and a much broader consultation exercise than is possible here. For the purposes of this FDS, an evaluation of an appropriate range of thematic scenarios has been undertaken. The Draft FDS has selected a more diverse and modest range of sites to meet reasonably foreseeable demand so as to minimise the loss of productive LUC Class 1 and 2 land in particular.

While the prospect of relocating some larger urban activities to create brownfields sites may seem like an attractive proposition, not much weight can be put on that given decision making by those parties will encompass many other variables and opportunities that do not necessarily depend upon an FDS pathway. It is noted for example, that consents were granted for the relocation of the saleyards to the Irongate area in 2008, but did not proceed for commercial reasons.

Similarly, relocation of the Racecourse to the Showgrounds and to sites with lesser productive capacity has been investigated previously, with costs being the main barrier. Including the Connection project in the FDS will not remove those barriers given the productive values the land holds. The future of the Hastings Hospital on its current site has also yet to be determined and there are powers to designate land if relocation is the desired outcome. Accordingly, these elements do not in any event, depend upon the identification of land in the FDS along with housing and industrial development.

Productive Soils

The current proposal as noted would occupy a further 2.1% of Napier Hastings Class 1-2 land on top of the estimated 19% already occupied by urban development[41]. This compares to the 1.1% of class 1-2 taken up over the last 25 years since the turn of the millennium. By comparison the draft FDS recommends sites occupying approx. 0.75 % of Class 1-2 land over the next 30 years (including remaining unzoned HPUDS areas and proposed Irongate Industrial areas IR1 and IR2 comprising 0.3%).

We do not consider the area has the productive land limitations of the nature envisaged by Clause 3.10 of the NPS-HPL. **Appendix 9** notes that the submission make very general conclusions in this regard that are not defensible.

Being an alluvial flood plain, the Heretaunga Plains is inevitably susceptible to some degree of ponding or inundation (outside of the unconfined aquifer) in certain events. Having said that only 15% of the site is subject to modelled inundation of any note at a 1% AEP and the Kaiapo Road land already included in the Draft FDS accounts for 40% of this, as shown on the map below. This location includes the Regional Council detention basin adjacent to the Southland Drain, and inundation of adjoining land that is known to occur.

Beyond this however, there is little recorded ponding relative to other areas surrounding Hastings (see **Figure 20** below) and even the modelled flood areas are currently producing orchards of some long standing. While ponding and inundation may have some impact on the intensity of productive use, this is inevitably problematic for residential development as well.



Figure 20 Showing approximate extent of flooding and ponding within the Heretaunga Connection block.

[41] For the exiting Land Resource Inventory urban area polygons there is no underlying soils data, so we have assumed that for these footprints all the land is in the classes being measured i.e. Classes 1-2 or 1-3. This could mean that the impact of urbanisation on Class-1-2 soils may be overstated and to a lesser extent classes 1-3.

It is accepted that the current limitations on water allocation will impact plans for more intensive or expanded primary production, but that applies across most of the Heretaunga Plains. This site however, has no particular limitations that make it unsuitable for the continuation of the long term high value productive activities which make use of the versatile Class 1 and 2 soils that predominate in this location as shown on the attached aerial, particularly if water security issues are overcome in the medium to longer term.

The current approach to water allocation is to reconsent existing water permits for taking and use of water for irrigation or industrial use on an actual and reasonable use basis. The transfer of irrigation water "freed up" by development is not automatic and will require consent under the provisions of the TANK Plan Change 9 (See section 7.3.3) and other relevant rules and regulations relating to freshwater.

While water freed up by urban conversion of the subject land could potentially be transferred to replace the lost production elsewhere, this could be potentially on less productive soils, which would be an inefficient use of a scarce resource. However, it also possible that at least some would be used to augment municipal supplies to meet growth demand or retained in the natural system to help achieve environmental limits. There is therefore little economic upside to relocating water as a result of conversion of land to urban use.

The fact that the area is currently heavily invested in productive activities as indicated by the aerial photo below (including the ponding areas), also suggests land fragmentation on either an ownership or lease basis, is not a significant ongoing issue that mitigates in favour of urban use.

Leaving aside Kaiapo Road, which is the most fragmented portion at an average of 3.5 hectares per unit (one of the reasons the area was selected in HPUDS), the site is no more fragmented than most of the Heretaunga Plains at an average of 10 hectares per unit. By way of example the area enclosed by Twyford Road and the Omahu Industrial Zone is one of the most productive areas on the Plains and has an average of 9 hectares per rateable unit (compare also Hastings Havelock Connection at 3ha and Lyndhurst Extension to Ngaruroro River at 9 hectares referred to above).



Figure 21 Showing Kaiapo Road (shown in red line) in relation to the Heretaunga Connection block.

Conclusion

In conclusion therefore, the Connections proposal, while attractive on some levels due to its scale, is more extensive than required, with some potentially elusive benefits, but comes at a significant cost in terms of protection of versatile and productive soils. Those soils do not have significant physical or practical limitations that separate them apart from other Plains Production Zoned land. From the perspective of using some or all of the land for Industrial or Commercial Land we note that there are several other industrial sites subject to specific submissions that are under consideration with similar or less productive soils and locational advantages that do not rely on the overall Connections scheme to proceed.

While the proposal can meet some of the FDS's objectives around sufficient land for housing and business growth, well connected communities and diversity of housing choice (provided it is not the only location on offer), it fails to meet other objectives. These include promoting a compact urban form focussed around consolidated and intensified urban centres and the protection of highly productive land of the Heretaunga Plains for productive uses. These are not just directions and considerations under the NPSHPL, but strong long-standing and well consulted on objectives of the Heretaunga Councils and their communities. As the as the land is not required to meet demand and being largely LUC Class 1 land, the proposal would offend the FDS objectives to protect and minimise the loss of highly productive and versatile soils.

Accordingly, we do not recommend any changes to the Draft FDS as a result of this submission.

10.3.2 Wall Road/Southland Road (H5/H5b)

10.3.2.1 Additional Information

Wall Road from Southland Road to Maraekakaho Road was not submitted as part of the call for opportunities so no specific reports or further work was

completed as part of the FDS preparation. It was however, assessed in HPUDS 2010 (https://www.hpuds.co.nz/assets/Document-Library/Strategies/HPUDS-18march2011.pdf - page 171) and again as part of the 2016 Review.

In both cases it was rejected based largely on soil quality (being nearly all LUC1) and, with the exception of the eastern end, being all in existing productive use as shown below. It was assessed again as part of the long list MCA process scoring reasonably well at 56/76 and ranking 10/67 on the unweighted scale. It scored poorly on the HPL weighted scale and was discounted from the refined scenarios for that reason.



Figure 22 Showing Wall Road and Southern Road sites.



Figure 23 Showing LUC status of Wall Road and Southern Road sites.

The eastern end comprising the area between Southland Road and the Racing Centre stables and training track was included in the 2016 HPUDS review as a "reserve area" (https://www.hpuds.co.nz/assets/Document-

Library/Strategies/2017-Heretaunga-Plains-Urban-Development-Strategy-incl-Maps-AUG17.pdf - page 40). This was seen as a potential partial substitute for Kaiapo Road if drainage challenges there could not be feasibly overcome. This area, badged HSb in the FDS project, and was put forward by HB Racing through the call for opportunities. It was subject to a refined assessment (Page 8 Site Summaries Appendix 4 Technical Appendix), scoring 56/76 and ranking 11/67 on the long list on the MCA.

In addition to the information contained in the site assessment and supplied by the submitters the following additional information is tendered showing the difference between the wider and more confined area in terms of land fragmentation relevant to productive potential.

a) Wider Wall Road Average Rateable Unit area 5 hectares LV/ha Ratio $150

b) Southern Wall Road Average Rateable Unit 2 hectares CV/LV Ratio $430.

The site-specific assessment noted that wastewater reticulation network constraints remain post the Infrastructure Acceleration Funded upgrades. This is based on the Hastings District Council Infrastructure Constraints Report (2023), which identifies the local Southland/Wall and Hemi Street wastewater catchments as being constrained in the five-year design storm, primarily due to the extent of inflow and infiltration allowing stormwater to enter into the system. There is an extensive programme in place across the 2024/33 Long Term Plan that targets both renewals and new infrastructure (pump stations, rising mains, new and upsized reticulation) to address capacity constraints across the southern Hastings wastewater network. This includes but is not limited to the current IAF funding.

These projects are staged to ensure that growth (intensification and greenfields) can be implemented in a prioritised way and that funding is aligned to Council's growth planning. The ability to service growth areas out of sequence may require other associated works to be brought forward, however this can be accommodated if there is demand. This suggests that while serving issues would be a limiting factor in the short to medium term, the longer term programme may well resolve these.

It is also noted that the wider Wall Road area is captured in the Heretaunga Connections submission, but no other information or evidence has been presented or was contained in these submissions.

10.3.2.2 Analysis and Discussion

There does not appear to be anything new raised in submissions that would lead to a different outcome for the wider Wall Road area to that reached in HPUDS, with the exception on new growth demand projections. Demand projections are covered in Section 4.3.1 above, but it is noted that Kaiapo and Copeland Road remain included in the Draft FDS and would meet the same market segments as Wall Road would.

In the event that there was a need to identify more greenfields land for housing generally, there are areas that are less productive and versatile in nature that

would be preferred over Wall Road, notwithstanding the Southland Drain forming a natural urban edge, e.g. Middle Road, or Flaxmere South. This land is not therefore considered necessary to meet demand and being largely LUC Class 1 land would offend the FDS objectives to protect and minimise the loss of highly productive and versatile soils. Wall Road may however, need to be revisited in the event that Kaiapo Road does not proceed.

Accordingly, we do not recommend that the FDS be amended to include the land between H5b and Maraekakaho Road as requested, as the land is not required to meet demand and being largely LUC Class 1 land would offend the FDS's objectives to protect and minimis the loss of highly productive and versatile soils.

The situation is somewhat different with the Southland Road end. The MCA site summary noted

> *"the majority of the site is classed as LUC 1 and 2 land. Further soil experts advised the site is highly constrained due to the nature of the existing development and hard urban boundaries. Some variability in mapped soil conditions but is unlikely to become highly productive in the future."*

The information on Capital/Land value ratios and average lots sizes also indicate a very different productive potential to the wider Wall Road area. While there has been some small-scale productive use in the past, the fragmented subdivision pattern has long existed and the investment in existing housing and stabling dating from the 1950s, suggests that conversion to productive use is remote. Notwithstanding it is technically LUC Class 1 and 2, it would assist in the avoidance of other land with more productive potential if the land was to be used to its fullest urban potential. The further engineering evidence outlined above also suggests relevant servicing concerns may be overstated.

On that basis we consider that area H5b could be reconsidered for inclusion and indicted for the longer term to allow servicing improvements to be implemented in line with Council's programme. At an estimated yield of 110 dwellings, it would make a modest, yet meaningful contribution to housing supply and broaden the locational choices available.

While there may be questions about strict compliance with the specific provisions of the NPSHPL at rezoning time, a pragmatic approach to the soil productive capacity constraints in this location is considered appropriate given the thirty-year timeframe of the FDS. From a consistency perspective we note the site is very similar to Murdoch Road West, which is included in the Draft FDS. In terms size, shape both have a Southland Drain boundary forming and urban edge and are of similar size and shape and while the Murdoch Road site is mainly LUC2 rather than 1, it is less fragmented and has a producing orchard over half is area.

Accordingly, we recommend that FDS be amended to include the H5b sites as a future (long term) residential greenfield development area as it would better meet the FDS's objectives relating to housing supply and diversity, avoidance of natural hazards, with limited impact on productive land use.

10.3.3 Murdoch Road (H4)

10.3.3.1 Additional Information

This site is included in Draft FDS and was previously identified as "Reserve Area" in HPUDS 2017, having been previously considered in 2010 HPUDS, but not recommended at that time. As the submission is supportive of its inclusion, no further information of evidence is presented. Background information can be found at page 6 of the Refined Scenarios Site Assessment Summaries in the Technical Appendix.

10.3.3.2 Analysis and Discussion

The site was scored 59/76 and ranked 4= on the longlist in the MCA. While site is largely LUC 2 with about half in producing orchard and the remainder in grazing, it has strong defensible boundaries and adjoined by urban development on three sides.



Figure 24 Showing the location and extent of Murdoch Road site.

In two titles with a total area of 11 hectares it can provide a modest, but meaningful contribution to housing demand with a potential yield of 120 at traditional densities. It also provides an opportunity for a retirement village in an established Hastings location that is otherwise relatively scarce. On that basis would help to meet te demand for that price point and typology. No submissions were received specifically opposing its inclusion, however, being LUC Class 2, it is captured in the spirit of submissions opposing the use of productive soils. For the reasons given above it is considered the relatively small loss of versatile soils is outweighed by the benefits in this case (see also general discussion at Section 5.3.1)

Accordingly, no amendments are recommended.

10.3.4 Strawberry Patch 76 Havelock Road

10.3.4.1 Additional Information

This site, located at 76 Havelock Road, was raised in the call for opportunities but was discounted early due to its smaller single and separate site nature. Accordingly, specific reports and general assessments have not been prepared for it as part of the Draft FDS preparation. The following information is therefore supplied as background for the discussion below.

Feature	Description
Land Area	11.6 ha of flat land in three titles.
Dimensions	Roughly rectangular at approx 355m x 310m.
Location	150m west of the Havelock North Bridge.
LUC Class (leased)	100% Class 1 until recently in producing strawberry farm.
Natural hazards	Moderate Liquefaction Risk.
Potential Yield	150-180 at traditional densities.



Figure 25 Showing the location and extent of the Strawberry Patch site.



Figure 26 Showing LUC status of the Strawberry Patch site.

10.3.4.2 Analysis and Discussion

Notwithstanding the site is located on the old channel of the Ngaruroro River, it does not have any known natural hazards, other than liquefaction which is common for this area generally. This together with its proximity to Havelock North and its location on Havelock North Road close to the Village centre, means it would rate highly in terms of servicing and accessibility, although traffic management implications for Havelock Road could be significant. It would, however, feature poorly in relation to soil versatility and productive potential as there are no indications of any limitations that would not apply to other urban edge options. In this respect the site is over 150m to urban properties (mainly the Mary Doyle retirement Village) with the Karamu Stream defining the western boundary of Havelock North.

Inclusion of this site could create a significant precedent for further development and ultimately an urbanised corridor between Hastings and Havelock North, whereas planning through HPUDS and the Howard Street Structure Plan has sought to limit expansion in this way. Of note, another property on the other side of Havelock North Road was originally submitted for inclusion as part of the call for opportunities but was not carried through to the Draft FDS.

Notwithstanding the site is of an ideal size and shape for a retirement village (see discussion at Section 4.3.3 on retirement villages) the inclusion of this site without any natural defensible boundaries would signal a significant shift in the FDS direction towards a more expansive approach. As noted above for the Heretaunga Connections project this was discounted in the evaluation of the Thematic Scenarios.

Similarly, this order of change would necessarily involve choosing between other options at this scale, provided they could be justified at a strategic level

in the first place, requiring a comprehensive cost benefit analysis (including lost production values) across multiple sites.

Finally, the suggestion that land be considered for relocating urban recreational use to allow for brownfields development is similarly speculative and could apply to a myriad of other sites. Either way productive capacity is sacrificed to accommodate housing elsewhere.

For these reasons, the proposal would not give effect to the objectives of the Draft FDS in relation to the protection of versatile and productive soils and accordingly no amendments are recommended.

10.3.5 Ada Street

10.3.5.1 Additional Information

Two submissions have been received for land on Ada Street to the Northeast of the existing Summerset retirement village (Subs 81 & 110). Both relate to the same area of land.

The inclusion of the land listed as Lot 1 DP 18792, Lot 1 DP 14784, Lot 2 DP 28292, Lot 4 DP 402003 & Lot 5 DP 402003 was not submitted through the call for opportunities and therefore no specific reports or general assessment has been prepared for it as part of the draft FDS preparation. The following information is therefore supplied as background for the discussion below.

Feature	Description
Land Area	10.7 ha of flat land in one title.
Dimensions	Roughly rectangular at approx. 390m x 230m.
Location	Behind existing Summerset Retirement Village and Karamu High School.
LUC Class (leased)	100% Class 1 and until recently in orchard land.
Natural hazards	Moderate Liquefaction Risk.
Potential Yield	212 at average lot size of 500m^2 net.



Figure 27 Showing location and extent of the Ada Street site.



Figure 28 Showing LUC status of the Ada Street site.

10.3.5.2 Analysis and Discussion

While there is a small area of the Awahou Stream that runs through a portion of the site, it does not have any known natural hazards other than liquification which is common for this area generally. The Awahou Stream is a minor tributary to the Karamu, highly urbanised at this point and not anticipated to be a significant source of flooding. The proximity to existing Hastings urban areas, including Karamu High School and Parkvale School means it would rate highly servicing and accessibility. The site rates poorly in relation to soil versatility and productive potential as there are no indications of any limitations that would not apply to other urban edge options.

The site has been proposed to be an expansion of the existing retirement village activities, and it is accepted that its size and location (and single holding) would make it an ideal strategic location for the expansion of the existing village. The site is of an ideal size and shape for a retirement village (see discussion at Section 4.3.3 on retirement villages). It is also recognised the previous retirement village was established on LUC 1 soils under a previous resource consent.

Notwithstanding, there is strong policy direction for this FDS that versatile soils will be protected, which is contrary to this proposal being proposed for versatile land. No evidence has been provided by the submitter as to limitations on the land's productive characteristics. Further to this, there are no natural

boundaries to the north and west, although it is noted that the site is adjoining existing residential and there currently existing no natural boundaries on this side of Hastings.

While recognising the need to provide additional land for retirement village purposes, the proposal would not give effect to the objectives of the Draft FDS in relation to the protection of versatile and productive soils and accordingly no amendments are recommended.

10.3.6 Lyndhurst Extension H2a

10.3.6.1 Additional Information

Oceania Village Company Limited (Oceania) supports the acknowledgement of the role retirement villages play in meeting future housing needs and seek the retention of Section 9.5 of the FDS.

The Draft FDS shows an area marked H2a known as Lyndhurst Extension. The submission from Oceania requests that the area marked in the FDS as H2a be expanded to include the Graceland's Retirement Village.

Graceland's Retirement Village marked in green below is zoned Plains Production zone with the retirement village having been developed by way of resource consent. It is shown in grey on the FDS maps to reflect that it is a developed site with that development being urban in nature.



Figure 29 Showing location and extent of Lyndhurst Extension in relation to the proposed H2a in the Draft FDS.

10.3.6.2 Analysis and Discussion

The FDS has been prepared as a high-level strategic document intended to guide future urban development by identifying areas that are earmarked for new or expanded residential development. The FDS does not mirror the zoning contained in the District Plan rather it serves to delineate areas that are currently urban in nature versus planned new or expanded residential areas.

Oceania's concern is that excluding the Graceland's site from H2a might result in a missed opportunity to consider a residential zoning reclassification through a subsequent plan change. However, it is standard practice for Council to evaluate the wider zoning context as part of any residential growth plan change and this will occur as part of any plan change for the Lyndhurst Extension area.

Moreover, amending the FDS to include the Graceland's site in H2a would potentially create a misleading impression regarding the quantum of land available for future residential development. The strategic intent of the FDS is to present a realistic and coherent framework for urban growth. Altering the mapped extent in this instance could overstate available residential land, thereby compromising the integrity of the high-level planning framework. Accordingly, we recommend that no change be made the FDS.

10.3.7 Middle Road (HN3a and HN3b)

10.3.7.1 Additional Information

The Middle Road area was assessed as part of HPUDS 2010 and 2017 and again as part of the call for opportunities refined scenario assessments. The HN3a area was included as a reserve area as part of HPUDS 2017, however the HN3b area was not considered necessary as part of the Draft FDS. Following the call for opportunities, the land was recommended for inclusion by officers but ultimately removed from the draft strategy by the FDS Joint Committee due to concerns around soil productivity. The areas in question are shown below:



Figure 30 Showing location and extent of Middle Road site (HN3a).



Figure 31 Showing location and extent of Middle Road Extension site (HN3b).

The sites in question ranked relatively well in the MCA analysis scoring 52 & 53 out of 76 points in the overall ranking and 14 & 16 out of 28 in the refined list.

There were nine submissions specifically relating to the inclusion of the Middle Road land within the Draft FDS (relating to both HN3a and b), all of these submissions supported the inclusion of the land as part of the FDS. All of the submitters own land or have land interests within the subject area. The submission are listed below:

- Sub 60 – Nicky Gardner
- Sub 63 – T & J McKenna
- Sub 66 – Karen Dear
- Sub 67 – Nigel Rowe and Tammy Bishop
- Sub 68 – Karen & John Davidson
- Sub 70 – Cherie Davidson
- Sub 84 – CDL land (NZ) Ltd
- Sub 88 – Bupa Care Services Ltd
- Sub 96 - Village Baptist Church

Figure 32 below shows the location of land owned by submitters:



Figure 32 Showing the location of land owned by submitters in relation to the Middle Road sites.

10.3.7.2 Analysis and Discussion

The Middle Road HN3a and HN3b sites had been previously assessed through HPUDS, although only the HN2a site had been included within HPUDS as a reserve area. There were no submissions on this land through the call for opportunities, however it was reconsidered through the MCA and refined site analysis due to its consideration within HPUDS. The following reasons were provided for the decisions in HPUDS:

> *'The land was considered unsuited for greenfield development for a number of reasons. Firstly it is Plains zoned land that has been used productively and it would set a new direction for the development to the south of Havelock North. It is also such a large area of land it would provide for greenfield land well in excess of what is needed for the area in the time period and could reduce the incentive to intensify within the Havelock North area which under the strategy assumptions, is not necessary at the present time. Finally, the Brookvale/Romanes/Arataki area is a better alternative providing a smaller area of land and creating a defined urban edge. If however there are problems with developing northwards in Havelock North, such a new direction may be justified. A smaller area has*

> *therefore been identified as a reserve site in HPUDS 2016, which largely aligns with the existing urban boundary at this time and would extend across Te Aute Road to the Karamu stream. A strong artificial urban buffer would be needed to signal the limit to further urban sprawl to the south. The area between Te Aute Road and the Karamu stream will be around half of the finger of development referred to above, and would make an attractive location for a retirement village development.'*

Following additional analysis of the urban land supply through the HBA, it has been shown that there is additional demand on top of what has been provided for at Arataki and Brookvale over the next 30 years. To ensure that the NPSUD Policy 1 requirements regarding having a range of housing locations and choices and to provide flexibility if other development areas cannot be achieved, the Middle Road sites were recommended by officers for inclusion as part of early reporting for the Draft FDS.

While it is recognised that the soil values are listed as LUC 2, additional advice was sourced by the Technical Advisory Group as to the actual productivity of the land. Advice was obtained from Agfirst through the MCA analysis, which indicated that due to the high susceptibility to flooding and high water table, the opportunity to utilise the land productively was compromised and the ability to use the land for cropping purposes was limited. There has not been information received that provides an alternative viewpoint to the AgFirst analysis, and many of the submissions support the difficulties for using the land for productive land-based purposes. As part of the MCA analysis, the productivity of the site was still ranked as a 2 for HN2a and 0 for HN2b.

As part of the soils assessment undertaken by Dr Barichievy (**Appendix 9**) the following comments were made:

> *The mapping / information provided is very broad. The submission influences large tracts of LUC 2 land including existing high value crops and agricultural infrastructure. No soil or LUC report, no scientific analysis. Much more information is required to make a defensible decision. Including these large tracts of land in the FDS without site specific reports is not advised.*

The key point to the assessment is that no additional soils information has been provided through submissions to amend the existing knowledge we have around soil quality. As such there is a reliance on the existing LUC mapping and additional advice provided by AgFirst for the MCA analysis. More detailed analysis would be required before a rezoning could be promoted in the fullness of time if the area is accepted for inclusion in the FDS on the basis of the wider need and suitability considerations.

Following initial analysis, it was recommended by officers that both Middle Road HN2a and HN2b were included within the Draft FDS. This was based on the strong levels of accessibility, relative ease of extending infrastructure, and the compromised nature due to surrounding land uses, though the lack of a strong natural boundary and productivity of the soils were noted.

The sites were removed prior to the final draft by recommendation of the FDS Joint Committee, which were accepted by the partner Councils. The following reasons were provided:

> *That the Joint Committee adopt the draft 'Napier / Hastings Future Development Strategy' (FDS) attached as Attachment One and 'Summary of Information' attached as Attachment Two with the following variations,*
>
> *a) That the Ahuriri Station land is identified for inclusion as redress land as detailed in Attachment 5.*
>
> *b) Hn3a- Middle Road (excluded).*
>
> *c) Hn3b- Middle Road extension (excluded).*
>
> *On the basis for II & III that:*
>
> *These areas are not needed to provide sufficient development capacity to meet demand (including the 20% competitiveness margin),*
>
> *Hn3a and Hn3b are areas of land are Highly Productive (including 'Land Use Capability' level 1 and 2 land),*
>
> *These areas are not included in Heretaunga Plains Urban Development Strategy (except as a reserve area in the case of Hn3a),*
>
> *It would be contrary to the objectives of the FDS to include these areas.*

In terms of the reason that '*These areas are not needed to provide sufficient development capacity to meet demand (including the 20% competitiveness margin),*' additional clarification is necessary. The removal of the Middle Road areas means that there will now be a deficit in sufficiency of housing development capacity within Hastings. This deficit is shown in Table 6 of the Draft FDS as notified, see **Figure 33** below:

Table 6– Sufficiency of housing capacity in **Hastings** to meet minimum development targets

	Short Term	Medium Term	Long Term
Intensification Development Demand	5,220		
Intensification Development Capacity	5,840 (+620)		
Greenfield Development Demand	2,160		2,240
Greenfield Development Capacity	2,125 (-35)		1,560 (-680)
Total Sufficiency of Residential Development			-715

Figure 33 Screenshot of Table 6 of the Draft FDS as notified.

As can be seen above there is a 715 dwelling shortfall for greenfield in Hastings, primarily over the long term. While this could theoretically be offset by greater levels of intensification, this has been concluded through the Market Economic assessment that intensification levels greater than 60% are aspirational and it is unlikely that even greater levels could be achieved.

The sufficiency as referenced by the Joint Committee and the Partner Council's relates to the overall sufficiency across both Napier and Hastings. Napier is shown to provide a surplus of 1,425 dwellings, in effect offsetting the greenfield residential capacity shortfall in Hastings. There are questions here as to whether

offsetting Hastings and Napier's demand meets the NPSUD Policy 1 requirements to *have or enable a variety of homes that: (i) meet the needs, in terms of type, price, and location, of different households;* particularly in terms of locational requirements. Market Economics in **Appendix 5** observe *"From a price-point perspective, there appears to be some potential to substitute between locations (across Napier and Hastings) due to a broad level of price comparability. However, the other factors play an overriding role in housing preferences. While there is some overlap in the housing offer, the wider factors mean that the two market are for the most part separate."*

The removal of the Middle Road areas has also significantly reduced the additional capacity that the strategy has achieved to meet overall demand as shown on Table 4 of the Draft FDS as notified (see **Figure 34** below):

Table 4 – Sufficiency of housing development capacity to meet demand

	Short Term	Medium Term	Long Term
Demand for redevelopment in the existing urban area	8,840		
Redevelopment Capacity	9,910 (+1,070)		
Greenfield Demand	3,770		3,710
Greenfield Capacity	4,310 (+540)		3,880 **+170)**

Figure 34 Screenshot of Table 4 of the Draft FDS as notified.

While the table shows that the Draft FDS can meet demand, there is risk of other locations not being achievable over the 30 year horizon which would lead to a shortfall in capacity. There are a number of areas which have significant infrastructural requirements or market appeal issues to overcome. It is officer's preference to provide greater buffer in capacity numbers to ensure flexibility if areas within the strategy are unable to develop.

As mentioned, there are nine submissions from landowners within HN3a and HN3b. All support the inclusion of the land within the FDS. The submissions largely reinforce existing issues that are known about the area, primarily that the land:

a) Is fragmented and small blocks are difficult to use productively;

b) Surrounding residential creates an issue with spray drift and general orcharding practices;

c) Existing flooding susceptibility limits productivity;

d) Multiple supporting reasons (e.g. close to urban area and infrastructure) that make it easier for development of the area.

No submitter provided additional evidence than what is already known about the land, particularly around the soil quality and versatility. The issues raised by submitters are generally supported by officers which led to the inclusion in the Draft FDS in the initial instance. However, the strong direction of the Joint

Committee and Partner Councils, relating to the need to protect productive land needs to be considered. There is acceptance that the soils in HN3a and HN3b are productive, albeit with some significant limitations, and the Joint Committee and partner Councils have chosen to place a greater weighting on this aspect than officers leading to the land exclusion.

Ultimately the decision on whether to include the HN3a and HN3b comes down to whether there is considered suitable demand to require additional land to be included and whether this is the most appropriate location to include additional land. In our opinion, this site should be considered ahead of the Te Mata Mushrooms site HN3a. HN3a has greater soil capabilities, but a weaker defendable boundary. The Middle Road site is already surrounded by residential on three sides, and the Gilpin Road boundary could be bolstered to create an urban limit to the west. Both sites are adjoining existing infrastructure networks, however the HN3a and HN3b sites have a greater level of transport accessibility. Finally, the HN3a and HN3b sites provide a greater range of choice on the western side of Havelock North.

10.3.8 Portsmouth Road FM2 and FM9

10.3.8.1 Additional Information

The Portsmouth Road land is listed as FM2 under the Draft FDS and was originally considered through the call for opportunities submissions. The land in question has been supported and included within the Draft FDS. There has been one submission received for this area, which is in support of the recommendation. No specific submissions were received in opposition to this area being included. The land ranked favourably with a score of 59/76 and a refined list ranking of 4= out of 28. The land identified for FM2 is shown below:



Figure 35 Showing location and extent of FM2.

FM9

Following the feedback period, the submitter provided further information requesting that FM9 also be considered as part of their submission. While discussion of this area was not part of the original submission, it was accepted as evidence by the Hearings Panel and provided early enough to allow for comment in this report. The FM9 area overlaps some of FM2 and was merged as part of the recommendation for the Draft FDS. The land ranked identically to FM2 with a score of 59/76 and a refined list ranking of 4= out of 28. FM9 is shown below:



Figure 36 Showing location and extent of FM9.

10.3.8.2 Analysis and Discussion

FM2

As mentioned, the submission supports the inclusion of FM2 within the Draft FDS and there are no submissions in opposition. The land preforms well in terms of natural hazards. There is a portion of the land within the LUC3 soil classification, and the remainder is within the Roys Hill winegrowing area (mainly LUC 7 but with unique characteristics suitable for grape growing). While this contravenes a number of submissions requesting that productive land is not utilised, it generally performs better than many of the other sites around Hastings on this matter. The land is also close to Hastings aerodrome flight paths, but generally located on the outskirts of these. It is therefore recommended that the inclusion of FM2 should remain.

The submitter has raised a number of other issues that they would also like to see addressed as part of the inclusion of their land. The are addressed below.

The submitter would like greater emphasis on the intensification of greenfield land and would like the approximate capacity increased to 600 from 330. On

page 53 and 54 of the draft FDS, the approach is specified as generally being conservative but encouraging greater levels of density where appropriate, stating "greater density should be sought to reduce the need for further expansion into areas with known constraints".

The submitter has not provided any additional specific details to determine the number of 600. While there is benefit in being more precise with the numbers, there would be concern with estimating a number too high, that may not be achievable without specific detail to back this up. The 330 approx. capacity in no way reduces the opportunity to achieve greater densities. Likewise, the Draft FDS has direction encouraging greater density where appropriate and it is considered that additional amendments are not required to reflect this. Nevertheless, if the submitter can provide more detailed information through evidence or at the Hearing, which gives greater confidence in the number being achieved, then dwelling numbers could be amended to ensure greater accuracy.

The submitter also mentioned a business/commercial growth node. Given the small-scale nature of the node, it is unlikely to affect residential or commercial supply. Any small nodes such as this are best dealt with at structure plan stage and do not need to be reflected within the strategy.

Finally, the submitter has requested that the timeframes for development be amended from being within the long-term development timeframe (11 – 30 years) and be considered as a short, medium time frame (2 – 30 years). The timeframes developed reflect Council priorities for development of the short, medium and long term periods.

The long-term timeframe afforded to FM2 reflects that this area is not currently under development nor identified in the Long Term Plan as needed or funded for growth within the next 10 years, given other planned developments. This does not negate the fact that a private developer could bring this forward earlier but reflects that this land does not fit current short and medium term growth projections. The current focus for growth at Flaxmere remains the Wairatahi area at this time. The applicant has not provided additional evidence to show that there is demand for this proposal as well within the short to medium term.

FM9 Additional Evidence

The submitter has requested that FM9 be included, this is supported by the submission of the Natural Hazards Commission who have recommended that FM9 preforms better than other areas from a natural hazards viewpoint.

The submitter is correct in their assertion that the site performs strongly as part of the MCA, performing nearly identical to FM2 in terms of flooding and natural hazards, and actually having less LUC 3 land then FM2, although this is countered by the fact that much of the site is located within the Roys Hill Winegrowing overlay (discussed below). The soil classification and Roys Hill Wine Growing Area (shown as a blue dotted line) are shown in **Figure 37** and **Figure 38** below:

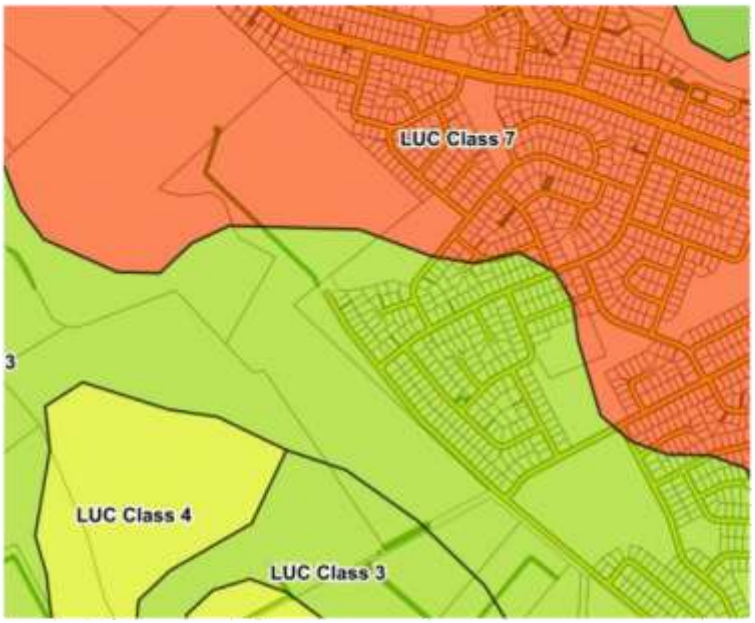


Figure 37 Showing LUC status of FM9 site.



Figure 38 Showing the extent of Roys Hill Wine Growing Area in relation to FM9 site.

Background

The submitter has questioned as to why FM9 was removed from the Draft FDS, as no specific reason has been provided. We agree that no clear pathway was discussed as part of the Draft FDS materials and a brief history is discussed below.

The area was originally looked at more broadly off the back of the Save the Plains submission to the call for opportunities., The area identified in the call for opportunities was split out between two potential areas FM2 and FM9 (see **Figure 39** below) to reflect different interest that time. and soil types/zoning. This area was further refined during the first round of spatial scenario / site assessments when taking into consideration of the Aerodrome operations and the broad / contiguous areas of LUC3 which were still in use for intensive primary production.



Figure 39 Showing the initial extent of potential FM2 and FM9 sites.



Figure 40 Showing the refined extent of FM2 and FM9 sites.

More detailed discussions with the Technical Advisory Group were subsequently held late 2023 / early 2024 on the remaining Hastings District sites, especially with regards to highly productive land (including specific discussions with Agfirst and HBRC soils experts). Nearly all of FM9 falls within the Roys Hill Wine Growing Area which had been identified as being highly productive (in addition to the NPSHPL requirements).

Much of FM9 was still in productive use and there were no specific submissions seeking its wider inclusion. At that time it was considered that the emerging Draft FDS provided for sufficient capacity in other locations. Accordingly, it was not considered necessary to include the entire revised FM9 site at that stage and only the essentially vacant/ bare portion of the site was merged with the original Portsmouth Road FM2 site.

Roys Hill Winegrowing Overlay

In terms of the Roys Hill Wine Growing Area, the soils within this location are often referred to as the Gimblett Gravels and are renowned for their grape growing properties. The land has been considered to have high productive value for the purposes of the MCA assessment but are not considered versatile (in that they are unsuitable for many types of cropping). The Roys Hill Wine Growing Area was added as part of the Hastings District Plan Review, and the following wording is extracted from the Plan:

> *The concentration of Class 7 soils around the Roys Hill area has a largely uniform land use based around grape growing and wine production. This factor means that the nature of environmental effects produced both on-site and experienced by adjoining properties owners will be virtually the*

same, meaning that the area has unique characteristics. To recognise this, the District Plan provides the 'Roys Hill Wine growing District Overlay' within which specific standards apply to recognise the uniform land use and the special amenity of the area.

The submitter has indicated that the owner of the balance area in FM9 has recently removed their production crop of grapes from this area as the production value of the land is considered poor. Additional information as to the reasons for this and why this differs to other areas within the Roys Hill Winegrowing area would be valuable and would assist in any recommendation of this land. It is accepted that if the sites are shown to be unproductive for grape growing, there is very reduced opportunity for other crop growing in this area.

Development Capacity

The additional yield that is achieved from the inclusion of FM9 is 325 dwellings. While there is some confusion due to the merging of part of the land as part of the Draft FDS, the key points are that the previous FM2 provided for 330 dwellings, and the combined FM2 and FM9 would provide for 655 dwellings. This may be greater depending on what analysis and testing is provided by the submitter at the Hearing.

It is recognised that with the addition of both the FM9 land, Wall Rd, Middle Rd and the potential increase of dwelling numbers for Arataki Extension, there would now be sufficient supply for the demand within the Hastings market.

The following table indicates the amendments as recommended by Officers:

Area	Additional Capacity
FM9 - Portsmouth Road	+325 dwellings
H5 - Wall Road	+110 dwellings
HN3a and b - Middle Rd	+640 dwellings
HN2b - Arataki Extn	+60 dwellings (TBC)
Total	**+1135 dwellings**

As this table shows, there has been an increase of 1,135 dwellings through the recommendations within the Hastings area, which when taking the existing deficit as recommended of 715 dwellings (see table 6, pg. 77 of draft FDS), provides a surplus of 420 dwellings.

It is noted, that while this site performs better than some other sites discussed in this report and included within the Draft FDS, they are not like for like replacements, particularly in regard to location and choice of households as required by Policy 1 of the NPS-UD. While the FM9 land provides additional supply across the region, it should not be considered a like for like replacement

for Havelock North growth, or vice versa. In this regard it should be noted that the Draft FDS already provides for greenfield growth on the outskirts of Flaxmere of 790 dwellings between Wairatahi (460 dwellings) and the FM2 land (330 dwellings). FM9 would increase this to 1,115 dwellings.

FM9 Conclusion

It is accepted that the inclusion of FM9 would achieve many of the objectives of the Draft FDS as identified by the submitter, although there is still uncertainty whether there is appropriate demand for this level of development in this location (noting that an additional economic assessment has not been undertaken). It is accepted that this is a low hazard area, and the soils have low versatility in this area. Any additional evidence as to the lack of additional viability for grape growing in this area would be of assistance. It is also noted that this land is likely to have less impact on aerodrome operations than FM2, although it should be noted that the aerodrome is not supportive of additional development on the southern side of Flaxmere.

On balance it is considered that FM9 would add valuable capacity to the overall housing supply in a relatively low risk location, and as such is recommended to be included within the FDS. We are however, cautious of removing other recommended areas as a consequence, just to "balance" the numbers, given its location and relatively untested market uptake in the context of Policy 1(a)(ii) of the NPSUD.

10.3.9 Hastings Golf Course

10.3.9.1 Additional Information and Evidence

Golf Sport Development Ltd Partnership (Golf Sport Development) and the Hastings Golf Club request that the Hastings Golf Course site be included in the FDS as a new/expanded residential area.

The Hastings Golf Course was considered as part of a wider BP4 area with the recommendation to exclude this area from the Draft FDS. Golf Sport Development requests that the Hastings Golf Course site be reconsidered as a standalone option.

The site (BP4) scored 52 points in the MCA and was ranked 17 out of 28 in the refined scenario rankings. The site is shown below.

It is noted that BP4 assesses a slightly larger, and different area that what has been proposed by the submitter, which incorporates just under of the golf course land as their structure plan shows below.

A private plan change request has been notified for the Hastings Golf Course to change the zoning to "Sport and Recreation Zone" with a "Heretaunga Golf and Leisure Precinct" providing for the further development of the golf course, new recreational facilities, commercial development, residential development and visitor accommodation (being 106 dwellings and 28 terraced apartments).

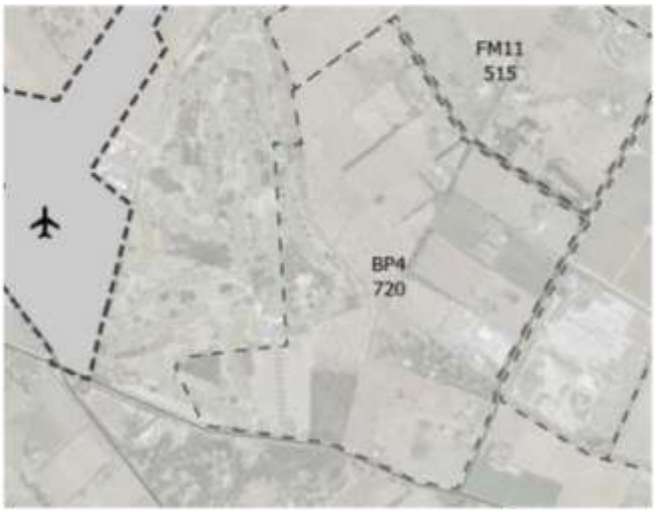


Figure 41 Showing the location of BP4 as assessed in the MCA.

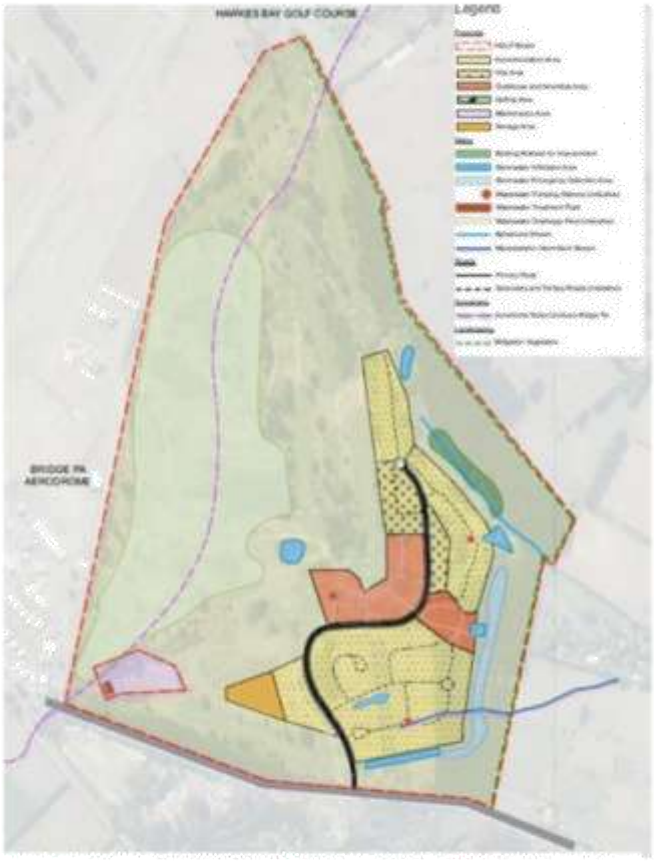


Figure 42 Showing the Hastings Golf Course Structure Plan.

10.3.9.2 Analysis and Discussion

The Draft FDS seeks to achieve "a compact urban form, focussed around a network of consolidated and intensified centres in Napier and Hastings". In particular, the Draft FDS provides for "targeted expansion to enable new compact neighbourhoods with a mix of housing types".

It is noted that the soils assessment provided in the submission was reviewed as part of the HBRC soils report **Appendix 9** which concluded that the land evaluation seemed fair and reasonable but noted that more specific details should be provided.

The proposed development of the Hastings Golf Course does not achieve the overarching aims of the FDS for the reasons set out below. Below is a zone map showing the location of both Hastings and Flaxmere with the approximate location of the residential development proposed by Golf Sport Development shown in red.



Figure 43 Showing the location of the Hastings Golf Course.

The location of the Hastings Golf Course is removed from the urban areas of Hastings and Flaxmere surrounded by Plains Production zoned land and in close proximity to the Hastings Aerodrome. The site is located in an isolated pocket not connected to any other urban boundaries, with does little to achieve the objective of the FDS around requiring a compact urban form.

Given that the proposed development does not fit with the objectives of the FDS it is best considered through the private plan change pathway that has already been initiated by Golf Sport Development.

The inclusion of the Hastings Golf Course in the FDS is seen by Golf Sport Development to "provide a more certain regulatory pathway" for their residential development. The purpose of an FDS is to set a high-level vision for urban growth not to clear a pathway for particular developments. The Hastings Golf Course development will need to be assessed on its merits against the

relevant planning instruments and legislation. This site's inclusion in the Draft FDS could be seen to be pre-empting the private plan change thereby undermining this process.

It is our understanding that the development area is proposed as a form of tourism function where property owners are less likely to be full time residents. This would make a modest contribution to meeting future housing demand, in terms of overall numbers but also the specific type of housing provided.

Much of the proposal's ability to overcome the disadvantages listed as part of the MCA analysis for BP4, comes down to the fact that the consideration of this being a niche proposal, rather than a broader area suitable for residential development. Again, we do not consider that such a proposal achieves the intent of the FDS, which aims to provide for broader areas which are suitable for urban development.

In addition, there has been concern raised through the submission of the Hastings Aerodrome around reverse sensitivity and the potential to compromise some of the Aerodrome's operational abilities. While these concerns should be considered, there is no specific requirements in the Hastings District Plan around flight paths that this proposal would infringe. In this instance, issues of reverse sensitivity would be better considered as part of the Plan Change, given that it is not being recommended for broad scale residential development.

In conclusion, this proposal does not achieve the aims of the FDS and given its niche characteristics it is best progressed as a private plan change, a pathway that it is currently progressing. No changes are therefore recommended to the Draft FDS in relation to the Hastings Golf Course site.

10.3.10 147 – 151 Napier Road (Sun Properties Ltd)

10.3.10.1 Additional Information

Sun Properties Ltd's submission for 147 – 151 Napier Road relates to the inclusion of a single site of land to the east of Havelock North. It is contiguous with the existing Havelock North urban boundary, but not with other identified urban areas. The site is 7598m2 in size. The property was submitted as part of the call for opportunities and considered under the longlist MCA analysis as HN8 and ranked 29 out of 67. While this is a reasonable score, the fact that the site can only provide an additional 29 dwellings meant that it did not merit consideration as part of the refined scenarios. The area in question is shown in **Figure 44** below:



Figure 44 Showing the location and extent of 147-151 Napier Road.

10.3.10.2 Analysis and Discussion

As mentioned, this area was discounted from the refined scenario process due to providing small additional numbers and being over LUC 1 soils. It is recognised that this site has relatively unique properties in that it is almost entirely covered in hardstand and buildings. We agree with the submission that this essentially precludes the potential for land based productive use, despite an LUC1 classification. The submission has been discussed in the HBRC soils report (**Appendix 9**) which states:

> *Site visit described in the submission documentation found that the site is completely under hardstand / gravel.... Very pertinent limitations due to packhouse development and site size <1 ha.*

It is also accepted that this site would be relatively easy for an extension of the servicing network, and that the remaining boundary to the Plains Production Zone could be made defendable by a reserve access strip, noting that, adjoining sites do not have the same argument relating to the covering of LUC land that relates to 147 – 151 Napier Road.

The primary issue with the submission and proposal is that it results in the inclusion of a relatively small area of land of little strategic value to the overall FDS, resulting in the construction of only an additional 29 dwellings. The FDS is primarily high-level strategic document which aims to locate broad areas of land suitable for rezoning that are necessary for achieving the FDS objectives. The specific detailed assessment still needs to assess specific design suitability and practicalities through a structure planning process. Including small-scale site-specific areas generally does not ensure that the wider housing supply targets can be met, while also taking a piecemeal approach to service capacity and network upgrades.

The submitter has noted *'It may be assumed that the non-complying resource consent or private plan change processes can enable the development of Plains Production Zone sites such as the subject site, however, the objectives and policies of the RPS and District Plan are discouraging of such development. Therefore, where the land has not been identified for future development in the Council's urban development strategy, there is no clear consenting pathway for residential development.'*

We agree that inclusion or not within the FDS is not determinative of a future plan change or resource consent. While the RPS and District Plan, should generally follow directions of the wider growth strategy, there are provisions that allow for new greenfield growth areas if not previously identified in a wider growth strategy. Policy 4.2 of the RPS lists a number of criteria that should be considered for new greenfield growth areas. It would appear that the sun properties submission would meet many of these criteria for consideration. Similarly, Policy 8 of the NPS-UD requires local authorities to be responsive to plan changes even if they are not part of planned land release. It is considered that the there is sufficient flexibility within existing planning documents to provide a pathway for developments as proposed by the submitter.

The site and its possible yield are not of sufficient size and scale to warrant specific mention or mapping in the FDS, which is focussed more on high level strategic directions and which nominally set a minimum 100 dwelling for inclusion. Noting that, the development would not necessarily offend the FDS principles and strategic intent and it would make a small contribution to demand and locational choice.

10.3.11 Brookvale Road (Metlifecare Submission)

10.3.11.1 Additional Information

The submission of Metlifecare is on the area generally defined as HN6. This was previously included within HPUDS and recommended as part of the Draft FDS. Further to this, the land is subject to a Private Plan Change by Metlifecare. The land in question is shown below:



Figure 45 Showing the location and extent of Brookvale Road (HN6).

The site ranked strongly at 8 out of 28 on the short list. The submitter has requested amendments to the stormwater section of the FDS and the staging requirements of HN6.

10.3.11.2 Analysis and Discussion

The submitter supports the inclusion of HN6 is noted and there is continued support from Officers to include the site.

The submitter has also requested the following addition to 10.11 strategic infrastructure, under stormwater:

> *Opportunities will be sought for stormwater capacity, detention and storage facilities to be located on adjoining land that is not zoned for residential development to promote more efficient use of land and infrastructure.*

The specific request related to the HN6 land is further addressed in the Thompson Road submission analysis elsewhere in this report, however the specific wording as requested by the submitter encourages that stormwater solutions should always be aimed to be located outside of the land identified within the FDS. It is considered that this is inappropriate, and any stormwater solution is assessed on a case-by-case basis, taking into account a range of factors particularly relating to where the stormwater detention area is located. Any site-specific solution should be addressed at structure plan/plan change stage.

However as with elsewhere in this report, it is generally accepted that some flexibility should be incorporated into the strategy which allows for solutions

outside of the FDS identified boundaries, if this solution is considered the most efficient and effective option for achieving residential yield. As such the following additional wording on page 67 of the Draft FDS is considered appropriate:

> ***Stormwater***
>
> *The approach to stormwater in Napier and Hastings will need to adapt to growth pressures, increasing environmental standards and the future impacts of climate change (e.g. more intense rainfall events). As development in greenfield areas occurs over time or as part of structure planning or subdivision processes, new and upgraded infrastructure may be required to provide stormwater capacity, detention and treatment. The development of stormwater infrastructure may involve land acquisitions and is likely to be addressed catchment by catchment at the time development occurs. Any stormwater solution is encouraged to be developed in the most effective and efficient option to achieve yield while reducing effects, whether this is located within or outside of FDS identified development locations.*

Finally, the submitter has requested that the timeframes for development be amended from being within the long-term development timeframe (11 – 30 years) and be considered as a short, medium time frame (2 – 30 years). The timeframes in the Draft FDS reflect Council priorities for development of the short, medium and long term periods. The long-term timeframe afforded to HN6 reflects that this area is not currently under development nor identified in the Long Term Plan as needed or funded for growth within the next 10 years. This does not negate the fact that a private developer could bring this forward earlier but reflects that this land does not fit current short and medium term growth projections. There is a need for a consistent approach which relates to the funding and delivery of growth within the Long Term Plan.

10.3.12 Arataki Extension (HN2b)

10.3.12.1 Additional Information

The submission for Arataki Extension was by CDL Ltd on the land defined within the FDS as HN2b. This was previously included within the HPUDS 2010 strategy, but removed in 2017 due to reverse sensitivity (odour) impacts of the Te Mata Mushroom farm operations on the adjacent property. The mushroom farm activities have ceased, (though still have consent) and this presents an opportunity for HN2a recommended as part of the FDS. The Project is a listed project in the Fast Track Approvals Act 2024. The land in question is shown below:

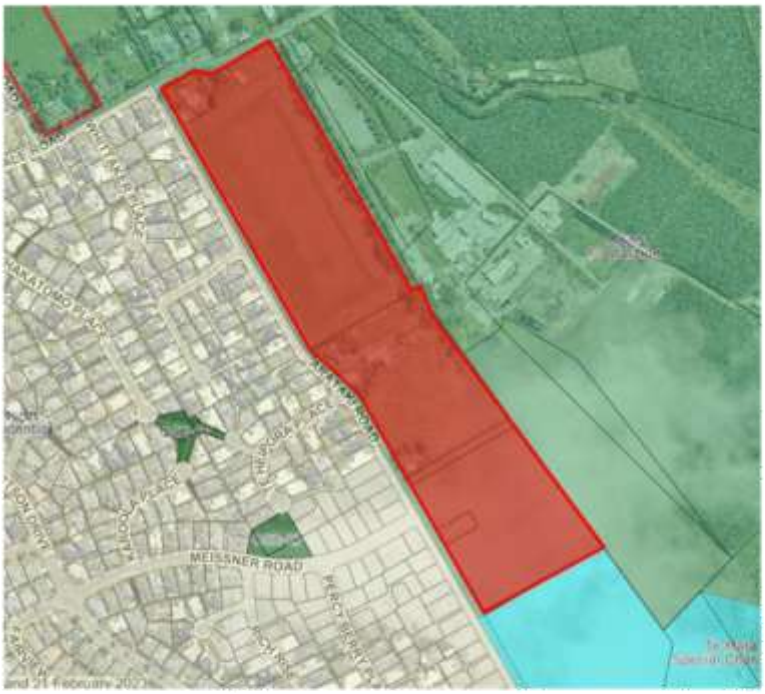


Figure 46 Showing the location and extent of Arataki Extension site (HN2b).

The site ranked strongly for the MCA analysis at 9 out of 28 sites on the short list.

10.3.12.2 Analysis and Discussion

The submitter supports the inclusion of HN2b and there is continued support from Officers to include the site.

The submitter has also requested that the approximate capacity of the development area be increased from 110 dwellings to 200 dwellings. Further correspondence with the submitter around the fast track consent has provided detail that 170 dwellings are now most likely to be developed. We would request clarification of this figure at the Hearing to ensure accuracy. We are also cognisant of the need to take a conservative approach to capacity numbers and would not want to be over-representing these. As such, we recommend retaining capacity numbers at 110 for now, but are open to amend these if more accurate details are provided.

The submitter has requested that Figure 1 on page 7 be amended that the line notating the highly productive land delineation not cut the land shown in HN2b & HN6. Officers agree that this amendment should be made.

Finally, the submitter has requested that the timeframes for development be amended from being within the long-term development timeframe (11 – 30 years) and be considered as a short, medium time frame (2 – 30 years). The timeframes developed reflect Council priorities for development of the short, medium and long-term periods. The long-term timeframe afforded to HN2b

reflects that this area is not currently under development nor identified in the Long Term Plan as needed or funded for growth within the next 10 years. This does not negate the fact that a private developer could bring this forward earlier but reflects that this land does not fit current short and medium term growth projections. While there is some differentiation with this site being a fast-track listed project, this does not change that it is not part of the demand assessment for the next ten years, and thus this should not be reflected in the strategy and ultimately Council long term funding.

We do not recommend any change to the approximate capacity figures, but officers are comfortable to amend if more accurate details to support additional numbers are provided at the hearing. We also do not recommend amending the staging, although the developer is able to bring this forward through a resource consent/plan change with supporting infrastructure delivery.

10.3.13 60 Thompson Road

10.3.13.1 Additional Information

The submission of Paul Stevenson has requested that the remainder of the site that was severed by the Brookvale structure plan, be included in the FDS for future use of providing stormwater management purposes, while the remainder of the site to be used for residential purposes. The site is shown below:



Figure 47 Showing the location and extent of 60 Thompson Road site.

Note that the dotted area marks the existing stormwater management area for the Brookvale Structure Plan and the green strip to the south is the Crombie drain. Karitūwhenua Drive is proposed to be extended to connect to Thompson Road. The Brookvale rezoning occurred following appeals to the Hastings District Plan review.

The remaining portion of the site is approximately 1.9 hectares in size and is zoned Plains Production. The site was not put forward as part of the call for opportunities so did not get assessed through the MCA process.

10.3.13.2 Analysis and Discussion

The development of the Brookvale Structure Plan has been ongoing in recent years, and one of the fundamental issues has been the development of suitable and functional stormwater management areas. While the exact design has been difficult to finalise, there is confidence that this will be achieved within the existing Structure Plan area. However, if parts of the stormwater detention solution ultimately require land outside the Structure Plan, this should be considered as a site specific consenting matter, as opposed to identifying a solution through the FDS. As discussed in the Metlifecare submission analysis, specific solutions for stormwater (or other infrastructure) requirements should be dealt with on a case-by- case basis, and where the most efficient and effective solution occurs outside of an FDS identified growth areas, these should still be considered as part of any assessment.

It is accepted that the site in question has been severed as part of the Brookvale Structure Plan, and this has left an orphaned area of land which has limited use productively. Nevertheless, the land is located entirely within LUC 1 land as shown below:



Figure 48 Showing LUC status of 60 Thompson Road site.

Given this, and that development of the site is limited to approximately 10 – 15 dwellings, it is likely that the site would have ranked poorly in terms of an MCA analysis and would not have been considered as part of the refined list.

As with other proposals, the inclusion of a relatively small area of land is of little strategic value to the overall FDS. The FDS is primarily high-level strategic document which aims to locate broad areas of land suitable for rezoning. Proposals such as this one, should ultimately occur as either a plan change or through a separate resource consent, where more specific assessments can be undertaken.

Ultimately, while acknowledging the restrictions on the landowner following the severance of the site from the Brookvale Structure Plan area, the land is ultimately not of strategic significance for inclusion within the FDS. Further to this, there is no demonstrable need to utilise the site for stormwater purposes and the site is located on LUC 1 soil, further limiting its suitability for future urban growth.

No change is recommended as the proposal would not give effect to the objectives of the Draft FDS in relation to the protection of versatile and productive soils and the development of 10 – 15 dwellings on the site is not of strategic significance for inclusion in a sub-regional growth strategy.

10.3.14 Te Mata Mushrooms -174 & 176 Brookvale Road (HN2a)

10.3.14.1 Additional Information

This site, known as HN2a, was put forward as part of the Call for Opportunities and therefore covered by the MCA analysis and site-specific summaries at page 16 of the Technical Report Appendix 4. The site should, if included in the FDS, naturally include an adjoining lifestyle block sandwiched between the land identified for inclusion by the submitter and the Arataki Terrace. The submitters connection to the property is not entirely clear, however, the submission fairly reflects the physical and legal situation as well as FDS assessments undertaken to date.

In addition, they have submitted expert reports on the soils and productive characteristics pertaining to the land. These have been reviewed in **Appendix 9** by HBRC land scientists.

No further information or evidence is considered necessary to determine this submission, other than the addition of some explanatory mapping inserted below.

10.3.14.2 Analysis and Discussion

The essential issues here relate to the productive capacity of the land and whether there is a realistic defensible boundary to further expansion eastwards into the Plains Production Zone and potentially the Te Mata Special Character Zone. This is important because while the land is noted as LUC 3, it remains highly productive land under the NPSHPL and having productive land values in terms of the operative planning documents and the objectives of the FDS. It is therefore deserving of protection for that purpose, all other things being equal.

It is accepted that some of the productive potential of the land has been compromised by the previous use of the site as a mushroom farm and that some

alternative use, possibly urban, of those buildings and related infrastructure may be appropriate, subject to specific planning controls to manage adverse effects on adjoining residential properties and productive uses to the east.

However, a large part of HN2a is still classed as LUC 3 in the soil reports and capable of some productive use, although it would benefit from some remediation from past over cultivation. The ortho below also clearly shows that a large portion of the site that has not been occupied by the Mushroom Farm operations has been used for productive use that is indistinguishable from surrounding land even though it is underlain by clays rather than gravels. The LUC classification confirmed in the submitter's soil report between the two sites is approximately 13 ha. if the non-productive area was subdivided off for an alternative urban use, this area could be amalgamated and able to be farmed with or without a lifestyle dwelling. **Appendix 9** also suggests part of 174 and 176 could be intensified agriculturally if properly managed.

A second, possibly more significant concern is that housing development of this land will undermine the urban edge that is created by the terrace to the west that was used to define the limit to the existing urban footprint of Havelock North, helping to justify the Arataki Extension. HPUDS 2010/2017 notes *"The site (Arataki Extension) is a terrace that sits above the orchard and vineyards to the east. As such it would form a natural boundary for the eastern urban edge of Havelock North."*

We do not consider the existing stream bed to the east of the site creates a strong defensible boundary and simply annexes productive land for urban use, itself creating conditions for a desire for further westward expansion. Further, we do not agree that it represents a continuation of the Southern Boundary of Havelock North, as suggested in the submission. but an extension that is accentuated by the change in level created by the terrace.

It is noted that if the existing stream is taken as a logical defensible urban boundary then it could be extended along its mainly dry drainage path to its intersection with Te Mata –Mangateretere Road, where it forms a distinct terrace that is absent at the Brookvale Road end of the drain. This roughly follows the boundary of clay based soils to the east (blue) and gravel and sand based soils of the majority of the subject site (pink) as shown in **Figure 51** below. Following the interface of the Plains Production Zone and Te Mata Special Character Zone back from the Te Mata-Mangateretere Road intersection with the drain back to the existing terrace as shown on the zoning maps below would encase a further 26 ha of Plains Production Zone LUC 3 land.



Figure 49 Showing the Hastings District Plan zoning status of the site.



Figure 50 Showing the soil map of the site.

Taking that a step further, it could possibly give rise to pressure to include the land to the south and east. While that may be ultimately seem like an unlikely proposition (at least in the foreseeable future), there is a risk that weak boundaries would lead to a cascading effect, particularly under more liberal national planning and consenting frameworks.



Figure 51 Showing the existing buffer strip and Arataki Extension in relation to the site.

Accordingly, a man-made urban edge similar to one created with the Summerset in the Vines 30m buffer in 1999 strip at a minimum would be needed to help shore up a strong urban edge. This would reduce yield and may or may not be able to accommodate onsite stormwater detention which will likely be needed. It is also noted that stormwater from the site could also complicate the stormwater management challenges with the downstream Brookvale, Arataki Extension and Metlifecare sites.

While not without some merit, it was for these reasons (mainly a lack of a strong natural boundary and weakening the existing urban edge) that the site was excluded from the Draft FDS. It is considered that parts of the site that have been compromised for future production by the former Mushroom Farm operation could have some form of appropriate urban use, subject to specific planning control, by way of resource consent. However, the overall conclusion is that housing activity over all of the site, even with a manmade urban buffer is contrary to the FDS objectives relating to protection of productive capacity and compact urban form and no change is therefore recommended.

10.3.15 Whirinaki (W1)

10.3.15.1 Additional Information

The subject land submitted on for Whirinaki has been submitted by Evans Family Trust and legally described as Lot 1 DP562586 and is approximately 9 hectares in size. The site has been referenced as W1 as part of the wider FDS assessment. The land sits at the lower Esk Valley area to the north of Napier as shown below:



Figure 52 Showing the location and extent of Whirinaki site (W1).

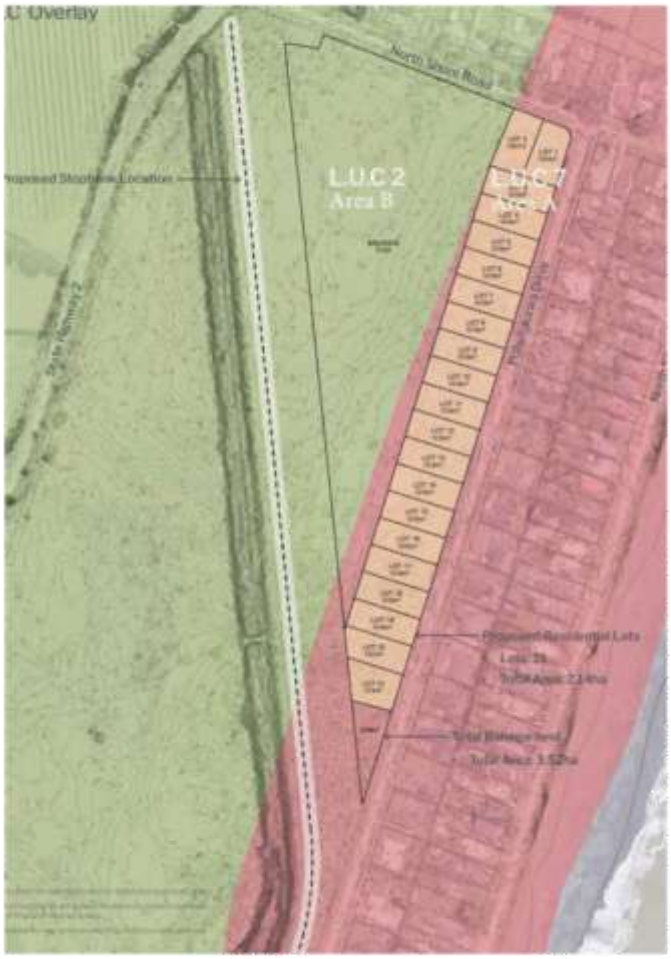


Figure 53 Showing the LUC status of the Whirinaki (W1) site.

The site was previously considered through both the 2010 and 2017 HPUDS reviews. It was originally considered as an area unsuitable for development under the 2010 strategy, but later under the 2017 review was able to be considered, but not preferable for development at that time. The assessment of the 2017 HPUDS review of submissions states

> *Ultimately, whilst the 2016 HPUDS Review concludes that Whirinaki warrants removal from the 'inappropriate' list, this area does not warrant all or parts of the Whirinaki settlement to be identified as an appropriate residential greenfield growth area (or reserve area) as part of the HPUDS Settlement Pattern. On the basis of the above, we considered that neither 'Greenfield Growth Area' or 'Reserve Growth Area' status is appropriate for this area of land at Whirinaki at this time. It should be noted however, that if future reviews identify rapid and significant change in growth demand that is unable to be catered for under the current HPUDS Settlement Pattern, the Whirinaki area is now able to be considered in the mix, along*

with other areas that are not otherwise listed as 'inappropriate areas for development'.'

As such the site was not considered as a growth area through the 2017 HPUDS review.

The site was assessed as part of the broader MCA analysis, ultimately scoring 24 out of 76 and ranking 67 out of 67 on the longlist.

10.3.15.2 Analysis and Discussion

As has been referenced within the submission, the land undertook an application through the COVID fast track legislation which was ultimately not accepted. Due to this, the site was assessed as part of the MCA analysis. The site scored poorly, particularly in relation to accessibility, flooding, natural hazards and social infrastructure such as parks and schools.

The isolation of the site is the key concern here. The isolation increases distance from existing infrastructure, schools and main urban areas does not support the objective of the FDS of requiring consolidated and intensified urban centres and compact urban form. While it is recognised there is a major employer in Pan Pac nearby to this site, it is not considered that this is sufficient to ensure the other issues related to the isolation of the site are mitigated.

The submitter is requesting that land area A and B be included as land suitable for residential expansion. Stating that while the land was inundated as part of Cyclone Gabrielle, there are plans to establish a stop bank to provide protection for this area.

The following information has been provided by HBRC in terms of the current situation of the stopbank:

Whirinaki North Island Weather Event (NIWE) project

The Whirinaki NIWE project is a critical initiative aimed at enhancing flood resilience and infrastructure in the Whirinaki area. This work was committed to as part of the Future of Severely Affected Land (FOSAL) Agreement involving the Crown and others.

Whirinaki, east of the Whirinaki Drain is currently classed provisionally as 'Category 2C' (refer Map dated 13 Nov 2023). Category 2C represents locations where "Community level interventions are effective in managing future severe weather risk event." (source: HDC website)

Several things need to occur before HBRC confirms if/when provisional Category 2C areas move to Category 1 or Category 3. Category 2C will move to Category 1, on confirmation that:

a) a sound concept that has a consenting pathway; and

b) a legal interest in favour of HBRC in the relevant land; and

c) available funding.

The first and second of these are satisfied. The third (funding) has not yet been satisfied (as at Jan 2025).

Estimates for project costs have increased. Insufficient funding is currently available for the project (as at Jan 2025) – see below.

The current design of stopbanking and stream works (see preliminary design in ***Figure 55****) is partly located on land owned by the Evans Family Trust and runs further north behind the Unison and PanPac sites. The corridor of land (and associated stream works) that the stopbank will be built on, is now HBRC land (settlement on 12th Feb 2025).*



Figure 54 Showing the preliminary design of stopbanking and stream works.

The Whirinaki NIWE Project is being led by HBRC in conjunction with a number of other agencies, groups and local businesses. The project is working towards ensuring that around forty Category 2C properties move to Category 1. Potential solution includes stopbanking, drainage and stream works, plus works for State highway 2 resilience.

Initially estimated at $11.05M (which excluded the required works on SH2), the full project costs (including works on SH2) have increased to $26.94M. This is due to several factors including:

a) *updated national climate projections for New Zealand from NIWA;*

b) *increase in stopbank height design;*

c) *increase in road raising design; and*

d) *increase in internal HBRC standards for flood protection-related assets.*

On 29 January 2025, HBRC endorsed a funding application to the Ministry of Business Innovation and Employment (MBIE) to cover the funding

> *shortfall of approximately $15.9M. Should MBIE decline the funding application in whole or part, a reassessment of the design and affordability of this programme will need to be considered by HBRC (and others).*
>
> *Stopbank construction of the Whirinaki NIWE project works are programmed to commence in May 2025, subject to sufficient funding in place. HBRC is leasing the 'truncated' portion of the Trust's land for the next 18 months for stockpiling construction materials.*

What is clear from the discussion above, is that the funding of the construction of the stop bank is yet to be confirmed, leading to a level of uncertainty around the delivery of the stopbank, its design standard and the ultimate reduction of flooding risks to the Pohutukawa Drive area. It is considered that no decisions around the inclusion of the land should be considered until the details of the NIWE project are finalised.

The submitter points out that a portion of the site is located within LUC7 land. This is correct, although only catering for the 20 sites within area A, and only a small part of the 3.5 hectares of land in area B. Further to this, additional discussion was provided as part of the soils report (**Appendix 9**) undertaken by Dr Barichievy of the HBRC:

> *A site-specific LUC needs to be conducted to complement the soil survey, and all land limitations need to be quantified. The mapping appears to overestimate the size of a proposed new stop bank (large buffer into LUC 2 land) and states this new stop bank will divide the property, in reality the Whirinaki Drain already presents a physical division of the property. The exact dimensions of the new stop bank should be requested. The owners also own the property directly adjacent to the property presented in the submission. This should be accounted for when assessing the sustainability of this portion as part of a larger enterprise. The LUC Classification of Northern HB (Page, 1988) indicates that LUC VIIs, shown on the regional map, is mainly due to a raised shingle ridge, which is droughty and shallow. However, the most eastern observation hole does not show the influence of this ridge, and it does not seem to be present at this site, as per the soil observation hole. Ultimately, the boundary of LUC 2 should be redrawn to include the entire property.*

From Dr Barichievy's commentary, it appears clear there is some uncertainty around the exact location of the boundary between LUC 2 and LUC 7, and that much more of the property should be considered as LUC 2. However, as noted, no site-specific assessment has been carried out.

As has been mentioned previously in this report, this is not of sufficient size and scale to warrant inclusion in the FDS as a greenfield growth area of strategic importance. Even if there was merit to promote this site for urban development, it is considered that a resource consent or private plan change is a more appropriate option for consideration.

Conclusion

It is considered that the proposal does not promote the objectives of the FDS to promote a consolidated urban core and the site has limited connectivity within the existing network. Much of area B is on LUC 2 land and the portion of the site not on HPL land does is not of sufficient size and scale to warrant inclusion within the strategy

Finally, uncertainty around the construction of the stop banks to ensure flood hazard mitigation is still uncertain. Guarantees around the construction of the stop bank are required prior to any consideration of the site as a safe area for residential development.

10.3.16 63 Main Road Clive (C1)

10.3.16.1 Additional Information

Clive as a location was not considered a satellite option but was considered as part of the Urban Expansion Thematic Scenario, which was discounted. This submission site and two others were however, included in the long list of sites through the call for opportunities. Identified as C1 in the MCA, it scored 33/76 in the and ranked 38/67, similar to the other two Clive sites. None of the Clive sites were short listed due to concerns relating to servicing, tsunami risk, LUC2 soils classification and in the case of this site, small yield of 12-16 dwellings given its size at 1.76 ha with a nominal yield.

The submitter has presented further information addressing these points along with other matters. This information is taken at face value, and no further information is presented other than further advice on servicing, which has been supplied by the Council's infrastructure managers. Verification of other information can occur at the resource consents or rezoning stage, if necessary, but some additional comment is made on the tsunami risk.

10.3.16.2 Analysis and Discussion

The site is sandwiched between existing residential scale rural zoned properties and the Flowerlands glasshouse complex to the south and the recent Willowbank development off Read Crescent to the north-east. Accordingly, development of this site could be characterised as infill or brownfield development, rather than a greenfields expansion of the urban footprint, particularly given the south-eastern boundary is similarly confined by Muddy Creek.



Figure 55 Showing the location and extent of 63 Main Road site (C1).

The site could accommodate a higher number of dwelling units if the retirement village concept to the north is expanded over the site yielding approximately 43 dwellings. This would still be a modest contribution to meeting housing demand in the context of the FDS and is not something normally mandated at the FDS stage.

It should be noted that while Clive has historically been constrained by servicing issues, the Read Crescent extension of 4 ha was nevertheless able to be added following submissions on the HPUDS Review in 2016. A similar submission (Davidson) for a smaller 1.1 ha piece of land that on the other side of the state highway and not similarly confined by the Karamu Stream was not included due to its small size and lack of natural boundaries. The Hearings Panel for HPUDS however indicated a resource consent pathway might not offend the intent of HPUDS and would potentially be granted all other things being equal. This subsequently occurred without creating any precedent for other land on the side of the State Highway.

This is relevant as this site and its possible yield are not of not of sufficient size and scale to warrant specific mention or mapping in the FDS, which is focussed more on high level strategic directions and which nominally set a minimum 100 dwelling for inclusion. Having said that, all other things being equal, its development would not necessarily offend the FDS principles and strategic intent and it would make a small contribution to demand and locational choice.

Unlike the Davidson site, this site does present a logical extension given the surrounding land use and confining nature of Muddy Creek. Despite the site LUC2 classification it is not of sufficient size to be conducive to be a productive economic endeavour. The site has not been in productive use since 2004, although the southern half of the site seems to have been in the process of conversion to amenity planting from the mid-1990s. Before that however there appears to have been a history of cropping from at least the 1970s.



Figure 56 Showing LUC status of the Clive South site (C1).

From a servicing perspective there may be capacity issues with extending the water supply network. Recent upgrades have been undertaken to resolve historic capacity issues and provide for estimated infill development growth, rather than further greenfields expansion. While an additional 43 dwellings may not be a "showstopper" from a capacity perspective, that cannot be assured without further Investigation.

While the site is in a high liquefaction zone, that is common to much of the Heretaunga Plains and can be managed. In terms of tsunami risk however, the MCA noted the entire site is subject to tsunami risks under a 500, 1000 and 2500 yr ARI with the inundation depths of greater than 2m across a large portion of the site under the 1.99m SLR assumption. The submitter's tsunami information is based on the same NIWA modelling, which is a finer definition of what is shown on the HB Hazard Portal, but without the SLR adjustment used in the MCA analysis.

In this respect we note that the tsunami model is much more sensitive to the SLR inputs than the return event scenarios. The 1.99 SLR is used in the NIWA modellling as an upper range of sea level rise projections over the next century. This is shown on Map 3 in the Technical Appendix 1 with a 1000 year return event, while Map 2 based only on a 1m SLR for the same a 1000 year return period is closer to the Submitter's information. This suggests the site in that scenario may be at the edge of or possibly partially outside the modelled hazard (larger scale maps are not readily available at this stage) at SLR levels less than 1m.

For greenfield and intensification within existing communities, MfE recommend using approximately 1.6 metre rise in MSL, before including VLM, for coastal erosion and inundation hazards over a 2130 timeframe (in the absence of adaptive pathway planning). Tsunami hazards, however, are not addressed in any detail in MfE guidance.

The question here is what the acceptable level of risk for tsunami as opposed to coastal inundation generally, especially given the surrounding and recent developments are potentially more impacted and the relative size and scale of the development. This is discussed at page 57 of the Draft FDS, suggesting that the presence of tsunami risk is not necessarily immutable barrier to development, but a very relevant consideration, nonetheless.

Hazard risks will be re-assessed in the future against the latest information when and if applications for consent or rezoning are made. Accordingly it is suggested that it's open to the Panel to minute that although the size and scale of the development means no change is recommended to the FDS as a result of this submission, that does not of itself indicate that the proposal is contrary to it or without merit and could potentially proceed by way of resource consent or private plan change. This follows the approach taken in the Davidson case referred to above. This is recommended below with suggested wording.

10.4 Recommendations

In relation to greenfield residential in Hastings, we make the following recommendations for amendments to the Draft FDS:

a) That the Draft FDS be amended to include the H5b sites at Wall Road.

b) That that Draft FDS be amended to include the HN3a and HN3b sites at Middle Road.

c) That the Draft FDS be amended to include both FM2 and FM9 areas at Portsmouth Road and amend the approx. dwelling capacity numbers to 655. Note that officers are comfortable to amend if more accurate numbers are provided at the hearing.

d) That in relation to the Metlifecare submission the Draft FDS be amended by inserting the following wording in section 10.11, pg. 67 or words to like effect.

Stormwater

The approach to stormwater in Napier and Hastings will need to adapt to growth pressures, increasing environmental standards and the future impacts of climate change (e.g. more intense rainfall events). As development in greenfield areas occurs over time or as part of structure planning or subdivision processes, new and upgraded infrastructure may be required to provide stormwater capacity, detention and treatment. The development of stormwater infrastructure may involve land acquisitions and is likely to be addressed catchment by catchment at the time development occurs. *Any stormwater solution is encouraged to be developed in the most effective and efficient option to achieve yield while reducing effects, whether this is located within or outside of FDS identified development locations."*

e) That in relation 63 Main Road Clive no change is made to the Draft FDS, but consideration is given to including a comment in the Panel Report as follows:

We consider that 63 Main Road Clive is not of sufficient size and scale to warrant sanctioning in the FDS as a greenfields growth area. Suffice to say we do not consider that development of this small site on its own in the peculiar circumstances of Clive would be an affront to the FDS aims and principles, given its limited productive capacity. However, its location relative the best currently available modelled tsunami risk scenarios, together with uncertainty about the capacity of the water supply system, suggests that any development may be more properly considered by way of a resource consent application (or possibly a private plan change) and by which it can be distinguished from the generality of other land surrounding the Clive township.

11.0 Infrastructure

11.1 Issues Raised in Submissions

Multiple submitters raised issues regarding infrastructure across general and specific matters.

In terms of the general matters raised:

a) Multiple submitters raised concerns about the ability of infrastructure networks to cater for growth (Myriam Parker; Maree Bradshaw; Neville Bradshaw; Jill Hankin; Gary Curtis; Sara Chambers).

b) Other submitters supported the Draft FDS approach to intensification on the grounds that it would make more efficient use of existing infrastructure (Pam Lane; Kirk Doyle;);

c) Conversely, other submitters opposed the inclusion of sites with highly productive land that would otherwise be capable of efficiently connecting to existing infrastructure (Ann Elizabeth Bennett).

Infrastructure providers, including the New Zealand Transport Agency, Transpower and the Ministry of Education provided feedback and requested specific changes to the Draft FDS relating to their specific infrastructure. Other entities raised concerns about inadequate consideration of other supporting infrastructure in the Draft FDS. This included:

a) Include stronger reference to the role that the land transport system plays in supporting growth and the efficiency and affordability of infrastructure investment (NZTA);

b) Clarify how the strategic growth priorities will inform future district plan reviews and infrastructure investment in LTPs and RLTPs (NZTA);

c) Support the transport assumptions and modelling that has been undertaken to inform the Draft FDS and support the inclusion of the Hawke's Bay Expressway (NZTA);

d) Further consider the funding and financing challenges relating to infrastructure, and potential exploration of alternative funding models to deliver strategic outcomes (NZTA);

e) Make changes to Objective 10 or otherwise include a new objective regarding the safe and efficient operation of infrastructure (Hawke's Bay Airport Limited);

f) Amend the infrastructure section of the Draft FDS to clarify that stormwater management infrastructure can be located adjacent to development areas (Metlifecare Retirement Villages Ltd);

g) Make amendments to Figure 12 to identify the Outer [aircraft noise] Control Boundary and make amendments to Section 9.2 and Section 10.11 of the Draft FDS as set out in the Hawke's Bay Airport feedback;

h) Make amendments to Section 10.11 of the Draft FDS to include the Strategic Infrastructure Constraints map, and specific amendments to the text as set out in the Transpower feedback;

i) Consider the impacts of growth on existing waste management infrastructure, including whether developing new landfill sites will be required earlier than currently planned (Te Ikaroa – Hawke's Bay District Health Board);

j) Ensure that the FDS plans for continued access to sand and aggregates and identify where these materials are located and protect those areas from other development (Aggregate and Quarry Association).

Submitters also provided a range of feedback on infrastructure matters as they related to specific sites/areas. This includes for example the submissions from Te Aratika Group and Jim Bishop that discussed trade waste capacity for wet industry and the need for this to inform the location of industrial land in the FDS. These site/area specific infrastructure issues are addressed in **Sections 10-11** of this report.

11.2 Information and Evidence

The Infrastructure Strategies for Napier City and Hastings District councils are found within their Three-Year Plans, attached here:

- Hastings District Council: Hastings District Long Term Plan - 2024-2034 (pages 201-234)
- Napier City Council: Napier City Council 3-year plan Volume 1 of 2 (page 23 summary of significant infrastructure projects); Napier City 3-year plan Volume 2 of 2 (summaries of main infrastructure projects pages 80-84); 2021-31 Infrastructure Strategy (underpinning the city's Long-Term Plan 2021-2031).

11.3 Analysis and Discussion

11.3.1 Objective 10 and Significant Infrastructure

Hawke's Bay Airport Limited (HBAL) requests either a change to Objective 10, or a new objective, to better recognise the relationship between the provision and operation of infrastructure and urban development. This is a reasonable request, given the purpose of an FDS includes both the achievement of well-functioning urban environments now and in future, and the integration of decision-making for planning with infrastructure and funding decisions (Cl 3.13 NPSUD). The principle underpinning this request applies to infrastructure in general, so it is appropriate to amend the objective.

A minor modification is proposed to Objective 10, combining both elements of the request, as follows:

> *10. Our infrastructure is planned and designed to ~~efficiently~~ effectively support development, and development recognises the operational and functional needs of significant infrastructure.*

The consequential rewording of Section 9.2 and additional wording at Section 10.11 reflect this modification, and are supported:

> *Section 9.2 Constraints*
>
> *There are a wide range of development constraints that have been identified within the FDS study area. These are summarised in Figure 12 and include areas required to allow significant infrastructure to operate unimpeded, coastal hazards, ...*
>
> *Section 10.11 Strategic infrastructure*
>
> *The NPS-UD requires ... electricity and gas distribution.*
>
> *This FDS also recognises the operational and functional needs of significant infrastructure to ensure future urban development does not result in incompatible land use and development. Significant infrastructure includes (but is not limited to) infrastructure that provides regional and national benefits.*

HBAL's suggested additional subsection on 'Significant Infrastructure' is supported, with minor amendments, because it more clearly sets out expectations for development. Simplified wording is proposed, as follows:

> *Significant infrastructure*
>
> *It is important that future urban development is appropriately located so that the safe and efficient development, operation and maintenance of significant infrastructure is not compromised. Careful consideration also needs to be given to protecting our communities' health and safety and their amenity when planning for growth in proximity to these assets.*

A consistent strategic and integrated approach to planning requires the operational and functional needs of strategic infrastructure to be considered when identifying locations for future urban development.

11.3.2 Air Transport

Two airport authorities serve Napier and Hastings: Hawke's Bay Airport at Napier and Hastings Aerodrome at Bridge Pa. Each provides important air services to the region and have operational requirements which impact, and are impacted by, urban development. The proposed rewording of Objective 10 provides clearer recognition of this relationship.

Both airports are already shown on Figure 12 Summary of development constraints across the FDS area. Rather than adding more detailed information to this summary, as requested, separate airport constraint maps may be more appropriate.

Both the Napier and Hastings District Plans already include a range of airport constraint information, including for height control and noise contours. It is unclear whether additional controls should be introduced to protect their respective future growth potential. This is particularly the case for Hastings Aerodrome, where they have identified their potential role should the Hawke's Bay Airport capability be degraded in future.

No recommendation is made until such further information is supplied to the Hearing Panel.

11.3.3 Land Transport

The New Zealand Transport Agency Waka Kotahi (NZTA) requests strengthening of aspects of the Draft FDS.

The role of land transportation is clearly recognised in the Draft FDS, for example the Overview map (page 7) illustrates the state highway network and public transport corridors as well as the major State Highway 2 improvements planned, and now under construction, between Napier and Hastings. This information is shown on all the base maps of the Draft FDS. Land transport is addressed in several parts, including generically as infrastructure in the Implementation Plan (11.1 Implementation, page 78) and the various structure planning and other future planning processes (page 79). As a number of government agencies may be involved, depending on the specific proposal, it would be inappropriate to single out any one agency.

Figure 12 (page 40) illustrates the State Highway and road capacity constraints between Napier and Hastings. If there are other state highway constraints emerging because of the spatial scenario, then these should be identified in Figure 12. For example, NZTA comments that more information is needed on assumptions and potential infrastructure needs for commercial growth around the Hawke's Bay Airport. Section 9.2 (page 38) refers to constraints for land in proximity to Hawke's Bay Airport. If NZTA considers it appropriate, Figure 12 could be amended to recognise that highway constraint.

If the FDS proposes further development in the vicinity of the Hawke's Bay Airport, including for redress land, then Figure 20 Transport Upgrades should also be amended to identify the state highway improvement needed to address the constraint identified by NZTA.

NZTA identifies that there are tight constraints around funding and that development contributions should be used to ensure that growth pays for growth. Information on Financial Contributions for Napier City Council is found here, and Development Contributions for Hastings District Council, here. These policies are reviewed regularly. The Government has also recently announced intentions to introduce legislation to create greater flexibility in the use of development contributions/levies, while still ensuring development (and developers) pay for growth. Any such legislation is yet to be introduced. For clarification, it may be appropriate to add a further sentence to the fifth paragraph of *11.1 Future planning processes* (page 79).

11.3.4 Waste Management

Under the Waste Minimisation Act 2008, territorial authorities are responsible for solid waste minimisation and management. Omarunui Landfill serves both Napier and Hastings commercial waste operators and is located to the west of Taradale, as shown in **Figure 58**. The Joint Waste Management and Minimisation Plan 2018-2024 here, has been prepared by both Councils, and funding for the next ten years is provided for through their respective Long Term Plans.

A Waste team staff member from Napier City Council reported that there is more than 30 years' capacity available at the Omarunui Landfill, based on providing for 95,000 tonnes of waste per year. New areas within the site are prepared and released for use based on demand.

Omarunui Landfill Location Map



Figure 57 Showing the location of Omarunui Landfill.

The Joint Plan is now being reviewed, having regard to the 2023 *Te Rautaki Para Waste Strategy* which envisages a 'low emissions, low-waste society, built upon

a circular economy' by 2050. The Medical Officer of Health has been part of that review process from the start. The proposed draft has received their approval and is now being finalised with Napier City Council and Hastings District Council, with the intention of undertaking public consultation in April 2025.

From a waste management perspective, the main need identified for the FDS is to ensure that appropriate consideration is given to meeting the operational needs for waste collection, transportation and resource recovery infrastructure when sites are being developed.

An additional paragraph could be added to Section 10.11 to identify the planning needs for managing solid waste.

11.3.5 Social Infrastructure - Education

The Ministry of Education has identified some areas where development may require yet to be planned additional educational services. The Ahuriri Station land is a clear example. Such consultation is envisaged under 11.1 Implementation Plan (page 78). A number of government agencies may be involved in implementation, depending on the specific proposal. It would be more appropriate to identify situations where engagement on education services is needed in the Implementation Plan rather than in the FDS.

11.3.6 Aggregates and Quarrying

The Draft FDS does not specifically address access to, and protection of, gravel and sand resources in the region needed for construction of roading, other infrastructure and development generally.

HBRC regulates sand and quarrying activities occurring within the beds of rivers and lakes through the RRMP. HBRC holds global resource consents for gravel extraction for the main Heretaunga rivers, and then authorises contractors to work within those areas. **Figure 59** shows where these global gravel consents are held. At present, HBRC's priority is to ensure that sufficient material is available for essential maintenance of its flood protection schemes. Lifeline agency projects are prioritised ahead of release of material for general use by industry. Volumes of gravel available for extraction is allocated annually.



Figure 58 Showing the Heretaunga Plains Global Gravel Consents.

Outside of these areas, individual resource consents are required for large-scale riverbed gravel extraction.

Land-based quarrying is managed by each territorial authority through land use controls in their respective district plans. For Hastings, these are found in Chapter 27.1 Earthworks, mineral, aggregate and hydrocarbon extraction here. For Napier, quarrying is provided for within the Main Rural Zone here.

A number of private quarries operate in the vicinity of the Heretaunga Plains. The link here shows quarries and open pits mapped as NZ Quarry Polygons by Land Information New Zealand (LINZ).

In terms of the NPS-UD, Policy 10(b) requires local authorities to:

> *Engage with providers of development infrastructure and additional infrastructure to achieve integrated land use and infrastructure planning.*

Aggregate and quarrying activities are essential for delivering a range of development infrastructure. The Implementation Plan giving effect to the FDS should identify the need to engage with this industry to establish the best ways to achieve supply of these materials into the future.

11.4 Recommendations

In relation to Infrastructure, we make the following recommendations for amendments to the Draft FDS:

a) Reword Objective 10 to better reflect the desired outcome for significant infrastructure, as follows:

> *10. Our infrastructure is planned and designed to ~~efficiently~~ effectively support development, and development recognises the operational and functional needs of significant infrastructure.*

b) Make a consequential rewording of Section 9.2 and add wording at Section 10.11 to reflect modified Objective 10, and are supported:

Section 9.2 Constraints

There are a wide range of development constraints that have been identified within the FDS study area. These are summarised in Figure 12 and include areas required to allow significant infrastructure to operate unimpeded, coastal hazards, ...

Section 10.11 Strategic infrastructure

The NPS-UD requires ... electricity and gas distribution.

This FDS also recognises the operational and functional needs of significant infrastructure to ensure future urban development does not result in incompatible land use and development. Significant infrastructure includes (but is not limited to) infrastructure that provides regional and national benefits.

c) Add an additional subsection on 'Significant Infrastructure' to more clearly sets out expectations for development, follows:

Significant infrastructure

It is important that future urban development is appropriately located so that the safe and efficient development, operation and maintenance of significant infrastructure is not compromised. Careful consideration also needs to be given to protecting our communities' health and safety and their amenity when planning for growth in proximity to these assets.

A consistent strategic and integrated approach to planning requires the operational and functional needs of strategic infrastructure to be considered when identifying locations for future urban development.

d) Request both airport companies present information to the Hearing Panel on what additional development protection is needed to ensure their operational and function needs are met now, and into the future.

e) Add a further sentence to the fifth paragraph of *11.1 Future planning processes* (page 79) as follows:

... These plans, and other network planning, will inform planning processes, including Development Contributions or Financial Contributions and other funding allocation through the Long-Term Plans and Annual Plans.

f) Add an additional paragraph to Section 10.11 to identify planning requirements for solid waste management, as follows:

Solid waste

Napier City and Hastings District Councils manage solid waste through a Joint Waste Management and Minimisation Plan, which is currently

being reviewed. Omarunui Landfill serves both councils, receiving waste from the three refuse transfer stations at Henderson's Road, Redclyffe and Blackbridge, as well as kerbside waste and commercial and industrial waste. The new plan, Te Rautaki Para Waste Strategy, is expected to place more emphasis on achieving a low emissions and low waste society, built upon a circular economy, by 2050. New development needs to provide for operational needs for waste collection, transportation and resource recovery infrastructure when sites are being developed.

12.0 Summary and Conclusion

The recommendations for changes to the Draft FDS are summarised in the table below. The Officers will consider any further information or evidence presented at the Hearing and update its recommendations in the Reply if appropriate. Provided below the summary of recommendations is a series of updated development capacity tables. This reflects the recommendations for amendments to greenfield sites.

	Summary of recommendations
1	Amend the Draft FDS to include further brief information on cross-boundary relationships with Wairoa and Central Hawke's Bay districts. Draft wording for the Panel's consideration is as follows, for inclusion in a new Section 4.3. This would be supported with an appropriate plan: ***4.3 Cross Boundary Relationships*** *The neighbouring districts of Central Hawke's Bay and Wairoa have been invited to participate in preparing the draft FDS and the relationship of urban development in Napier and Hastings with the community and infrastructure networks in Central Hawke's Bay and Wairoa has been considered in developing the FDS. In terms of Wairoa, the relationship is reasonably limited. While there is movement of people and freight along State Highway 2 that connects the districts, there is a limited spatial connection between the developed urban areas.* *The Central Hawke's Bay District is located to the south of Hastings, with the settlements of Ōtāne, Waipawa and Waipukurau being within 30-40 minutes drive time from central Hastings via State Highway 2. Commuting between these areas and Napier beyond is common, and anecdotally, there is a local sense that Ōtāne is becoming more of a satellite town. The FDS provides for strategic employment opportunities on the southern side of Hastings improves access for these communities. The relationship of these areas can be considered further through future regional spatial planning exercises.*

2	Take into account latent demand into the overall demand projections for Napier and Hastings and amend the Draft FDS to reflect that.
3	Provide greater greenfield capacity in Hastings to ensure that there is no shortfall (approximately 715 dwellings) and provide some flexibility to account for latent demand that may be provided for within greenfield areas.
4	Carry through the key recommendations of the Independent Flood Review on planning controls to the Draft FDS in the implementation section. Alternatively, address this separately through the FDS Implementation Plan that will be published separately.
5	Update the text of the Draft FDS that refers to Clifton to Tangoio Coastal Hazards Strategy 2120 to reflect the project's current status. We propose to provide specific wording as part of the Officer's Reply.
6	Amend the FDS to better recognise iwi and hapū aspirations for development and papakāinga by inserting a paragraph into the introductory text of 6.1 Iwi and hapū values and aspirations, as shown below: *The use and development of Māori land, including land returned to Māori through Treaty settlements is to be enabled as provided for in Te Tiriti and intended by the purpose of Treaty settlements, subject to relevant statutory resource management considerations being satisfied.* *Māori have consistently expressed the aspiration to live on their takiwā with their people. Where they cannot live in papakāinga on their ancestral land, they have expressed a desire to live in papakāinga-style living arrangements with their extended whanau in other areas, including urban areas. It is likely that this can only be realistically achieved in new, affordable developments co-led or owned by mana whenua entities.* *The councils will work collaboratively with iwi authorities to help facilitate their economic, environmental, cultural and social objectives.*
7	Include a map of specified areas of interest, at the end of the Section 6.2 combined statement by the three PSGEs, refer to Figure 7 of this report.
8	Further define what constitutes 'redress land' by additional wording in Section 6.1 (3rd paragraph, page 18): *...The Treaty settlement process has provided for the return to land to Māori, including for specific purposes. Such 'redress land' is land intended to be transferred by the Crown to Treaty appellants, so that those appellants and other descendants can realise the economic*

	aspirations that should have been afforded to their tīpuna[42]. The land returned through these processes ....
9	Update the Social Infrastructure section (2nd paragraph, page 69) to read: *~~...The forecast demographic changes and population growth of the Māori population means existing schools may not meet the demand for Māori medium and kaupapa Māori education in Napier and Hastings.~~ While there is growth in the Māori population, the overall school aged population is declining. Mana whenua have expressed aspirations for more kohanga reo, kura kaupapa Māori and wharekura over the next 30 years. ~~Further consideration is required to determine whether existing schools are sufficient to accommodate the future growth and demand for Māori medium and kaupapa Māori schools in Napier and Hastings.~~ The Ministry is working with whānau, hapū and iwi and is expanding capacity at existing Te Kura Kaupapa Māori to meet any demand.*
10	Set out a programme of work to support iwi and hapū development aspirations in the Implementation Plan, which may include actions to: (i) Establish a genuine partnership between the PSGEs and the councils to implement the FDS; (ii) Support special considerations for addressing redress land; (iii) Work with iwi and hapū to update and include the Te Aranga Design Principles in reviewing the RPS and district plans; (iv) Analyse Māori housing needs ahead as part of the Housing and Business capacity Assessment (HBA); (v) Achieve sustainable water use.
11	Explain that the expansion of Tomoana and/or Whakatu may be required in the long term for wet industry should monitoring show that there is a shortfall of capacity that is not related to the issue of access to water. This can be addressed in text amendments to Section 10.5 of the Draft FDS.
12	Include a short-term action to investigate policy changes to better protect remaining capacity at Whakatu for wet industries, noting that appropriate protection is already in place for Tomoana. The same action could apply to Omahu Road South, subject to having greater certainty over remaining trade waste capacity. Alternatively, these actions could be included in the FDS Implementation Plan.

[42] Based on *Beresford, Bunker and Rouse v Queenstown Lakes District Council (2024) NZEnvC 182*, paragraph 65

13	Amend the Draft FDS to clearly state that the boundaries are indicative only and that refinements may occur through the structure planning and rezoning process, as a result of more
14	Include the text from pages 38-39 of HPUDS 2017 as an Appendix to the FDS with appropriate explanatory text, stating that the Appendix provides strategic direction for the listed rural and coastal settlements until such time as a Rural Residential Strategy has been prepared. This recommended text is included at **Appendix 1** to this report.
15	Make appropriate supporting amendments to Section 10.6 of the Draft FDS to reference the Appendix.
16	Include a footnote for NC6 in Table 3 of the Draft FDS, stating that NC6 includes consideration of discrete areas in the immediate surrounds, informed by site and development specific analysis. Or words to that effect.
17	Include a statement in the FDS explaining that additional land will be required to manage stormwater and flooding effects arising from development of the Riverbend site, with the exact location to be determined through future planning processes. This could be addressed through a footnote to NC4b in Table 3 of the Draft FDS. We do not recommend spatially defining the area at this stage, given those design details are still being worked though by the Joint Venture parties.
18	Include the H5b sites at Wall Road.
19	Include the HN3a and HN3b sites at Middle Road
20	Include both FM2 and FM9 areas at Portsmouth Road and amend the approx. dwelling capacity numbers to 655. Note that officers are comfortable to amend if more accurate numbers are provided at the Hearing.
21	In relation to the Metlifecare submission the Draft FDS be amended by inserting the following wording in section 10.11, pg. 67 or words to like effect. *Stormwater* *The approach to stormwater in Napier and Hastings will need to adapt to growth pressures, increasing environmental standards and the future impacts of climate change (e.g. more intense rainfall events). As development in greenfield areas occurs over time or as part of structure planning or subdivision processes, new and upgraded infrastructure may be required to provide stormwater capacity, detention and treatment. The development of stormwater infrastructure may involve land*

	acquisitions and is likely to be addressed catchment by catchment at the time development occurs. Any stormwater solution is encouraged to be developed in the most effective and efficient option to achieve yield while reducing effects, whether this is located within or outside of FDS identified development locations."
22	In relation 63 Main Road Clive no change is made to the Draft FDS, but consideration is given to including a comment in the Panel Report as follows: *We consider that 63 Main Road Clive is not of sufficient size and scale to warrant sanctioning in the FDS as a greenfield growth area. Suffice to say we do not consider that development of this small site on its own in the peculiar circumstances of Clive would be an affront to the FDS aims and principles, given its limited productive capacity. However, its location relative the best currently available modelled tsunami risk scenarios, together with uncertainty about the capacity of the water supply system, suggests that any development may be more properly considered by way of a resource consent application (or possibly a private plan change) and by which it can be distinguished from the generality of other land surrounding the Clive township.*
23	Reword Objective 10 to better reflect the desired outcome for significant infrastructure, as follows: *10. Our infrastructure is planned and designed to ~~efficiently~~ effectively support development, and development recognises the operational and functional needs of significant infrastructure.*
24	Make a consequential rewording of Section 9.2 and add wording at Section 10.11 to reflect modified Objective 10, and are supported: *Section 9.2 Constraints* *There are a wide range of development constraints that have been identified within the FDS study area. These are summarised in Figure 12 and include areas required to allow significant infrastructure to operate unimpeded, coastal hazards, ...* *Section 10.11 Strategic infrastructure* *The NPS-UD requires ... electricity and gas distribution.* *This FDS also recognises the operational and functional needs of significant infrastructure to ensure future urban development does not result in incompatible land use and development. Significant infrastructure includes (but is not limited to) infrastructure that provides regional and national benefits.*
25	Add an additional subsection on 'Significant Infrastructure' to more clearly sets out expectations for development, follows:

	Significant infrastructure *It is important that future urban development is appropriately located so that the safe and efficient development, operation and maintenance of significant infrastructure is not compromised. Careful consideration also needs to be given to protecting our communities' health and safety and their amenity when planning for growth in proximity to these assets.* *A consistent strategic and integrated approach to planning requires the operational and functional needs of strategic infrastructure to be considered when identifying locations for future urban development.*
26	Request both airport companies present information to the Hearing Panel on what additional development protection is needed to ensure their operational and function needs are met now, and into the future.
27	Add a further sentence to the fifth paragraph of *11.1 Future planning processes* (page 79) as follows: *... These plans, and other network planning, will inform planning processes, including Development Contributions or Financial Contributions and other funding allocation through the Long-Term Plans and Annual Plans.*
28	Add an additional paragraph to Section 10.11 to identify planning requirements for solid waste management, as follows: *Solid waste* *Napier City and Hastings District Councils manage solid waste through a Joint Waste Management and Minimisation Plan, which is currently being reviewed. Omarunui Landfill serves both councils, receiving waste from the three refuse transfer stations at Henderson's Road, Redclyffe and Blackbridge, as well as kerbside waste and commercial and industrial waste. The new plan, Te Rautaki Para Waste Strategy, is expected to place more emphasis on achieving a low emissions and low waste society, built upon a circular economy, by 2050. New development needs to provide for operational needs for waste collection, transportation and resource recovery infrastructure when sites are being developed.*

The tables below provides updated development capacity information reflecting the above recommendations. They are intended to give an overall picture of sufficiency of residential capacity to meet projected demand. The changes are highlighted in yellow.

Revised Table 2 - Residential Development Capacity Enabled by Council Area

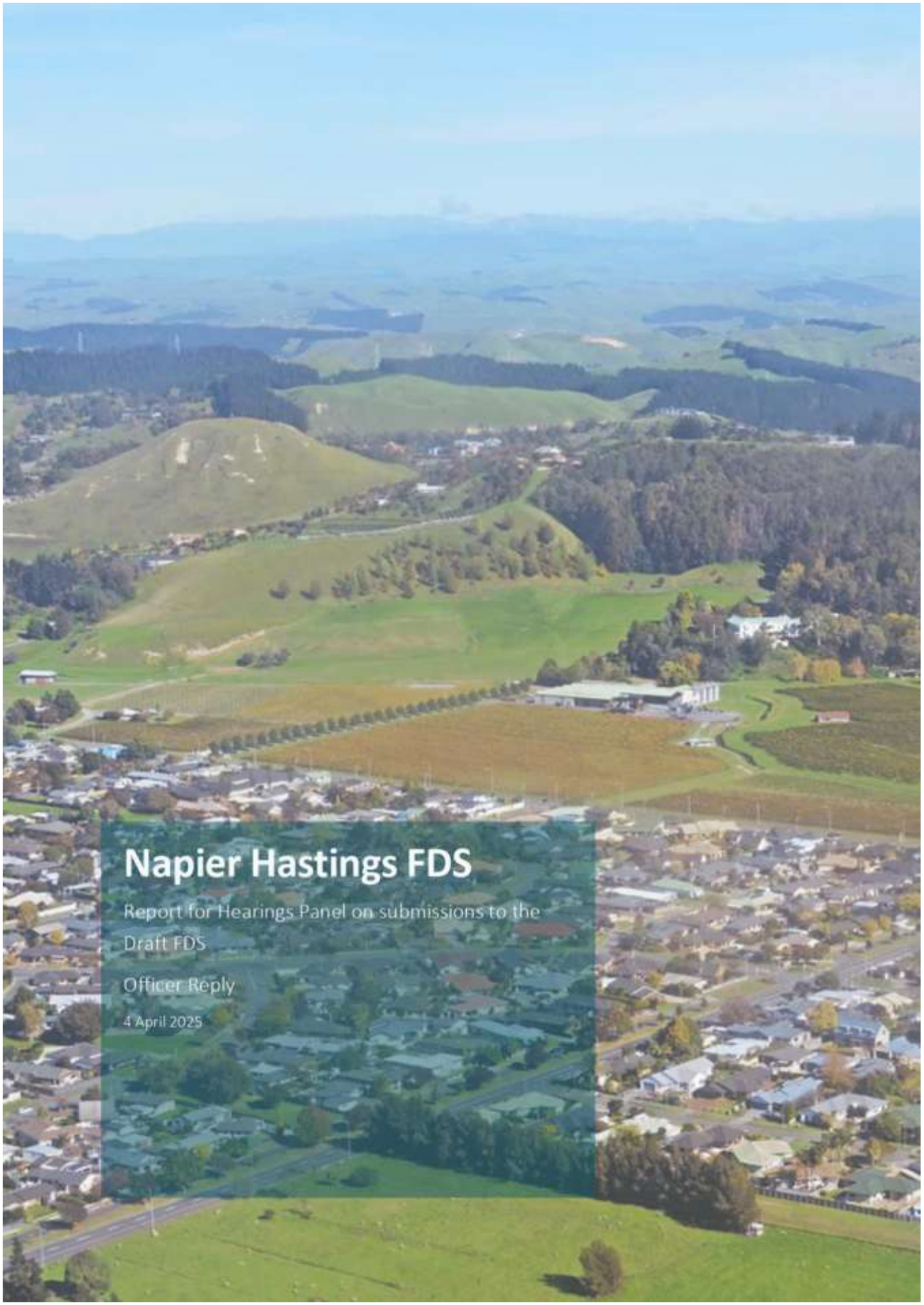
Broad Type	Napier	Hastings	Total
Redevelopment / Infill in the existing urban area	4,070	5,840	9,910
Existing Zoned / Consented Greenfield Development	2,085	2,125	4,210
New Greenfield Development	2,420	2,695	5,115
Total Dwellings Enabled	8,575	10,660	19,235
Total Demand	6,700	9,620	16,320
Sufficiency	+1,875	+1,040	+2,915

Revised Table 4- Sufficiency of housing development capacity to meet demand

	Short Term	Medium Term	Long Term
Demand for redevelopment in the existing urban area	8,840		
Redevelopment Capacity	9,910 (+1,070)		
Greenfield Demand	3,770		3,710
Greenfield Capacity	4,310 (+540)		5,015 (+1,305)

Revised Table 6 - Sufficiency of housing capacity in Hastings to meet minimum development targets

	Short Term	Medium Term	Long Term
Intensification Development Demand	5,220		
Intensification Development Capacity	5,840 (+620)		
Greenfield Development Demand	2,160		2,240
Greenfield Development Capacity	2,125 (-35)		2,695 (+455)
Total Sufficiency of Greenfield Residential Development			+420


Napier Hastings FDS
Report for Hearings Panel on submissions to the Draft FDS
Officer Reply
4 April 2025

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1.0 Purpose and Introduction

The purpose of this Reply Report is the set out the Council Officers:

- Response to Minute 3, paragraph 4 of the Independent Hearings Panel, dated 28 March 2025;
- Response to Paragraph 5 from the Panel's same Minute 3; and
- Set out updated recommendations to the Hearings Panel in response to supplementary evidence provided to the Panel at the Hearing.

Other than for our Reply to matters in (1) above which we set out in Section 2, the remainder of this reply is structured in the same manner as the hearing report dated 14 March 2025 for ease of reference. Not all topics addressed in the hearing report require an additional response.

In this Reply, Officers have endeavoured to identify recommended amendments to the draft FDS, but time constraints for preparation of this Reply (by 4pm Friday 4 April) may mean some extra amendments are also featured in a marked-up version of the FDS that the Panel has requested from Officers by 4pm Wednesday 9 April (refer Minute 3 paragraph 6).

The report authors set out in Section 1.2 of the hearing report are the same for this Reply.

2.0 Reply to questions in Minute 3 from the Panel

2.1 Difference between the HPUDS and the draft FDS re coastal and rural settlements

The Panel has asked Officers to explain the difference between the Heretaunga Plains Urban Development Strategy (HPUDS) and the Draft FDS in that coastal and rural settlements were included in the HPUDS but were not proposed to be included in the Draft FDS.

HPUDS 2017, and before that HPUDS 2010, included strategic direction for rural and coastal settlements. This include the rural and coastal settlements within the Study Area, which for HPUDS was based on the Heretaunga Plains Transportation Study and included settlements within a reasonable commuting distance. The strategic direction for the settlements in expressed on pages 38-39 of HPUDS 2017. Indicative dwelling numbers and land area are provided for some of these settlements including Haumoana/Te Awanga, Waimarama and Maraekakaho at modest levels. Indicative maps are also included for those areas. At the time that HPUDS was developed the Councils made a deliberate decision to undertake high level planning for these rural and coastal settlements. This was a discretionary initiative of the Councils.

In the case of the Draft FDS one of the first steps was to assess whether any of the rural and coastal settlements were suitable for **urban scale development** in a manner that achieved the FDS objectives, given that they are located within the wider FDS study area. This was consulted on as part of the Call for Opportunities and the Issues and Options report in 2023. Following this, the thematic spatial scenarios assessed the suitability of these settlements for urban scale development. The outcome of this exercise was that the settlements are not suitable for urban scale development at this time, owing to their distance to urban services, costs to service with infrastructure, generally more challenging topography and the availability of better performing scenarios closer to the urban area[1]. This conclusion is consistent with the outcome of spatial planning for Hastings and Napier since the

[1] Refer to the Technical Report for a discussion of the spatial scenarios assessed.

1970s. Future reviews of the FDS may determine that some urban scale development in these settlements is appropriate.

Following on from that, the second step for the Draft FDS was to determine whether a lower density of **rural residential style development** would be appropriate in the settlements and other locations put forward as part of the Call for Opportunities. On this, two options were considered:

a) Spatially identify opportunities for rural residential in the Draft FDS;

b) Do not spatially identify opportunities for rural residential in the Draft FDS and leave this to a future rural residential strategy (or similarly named strategy).

Both of these options are available to the Councils under the National Policy Statement: Urban Development (**NPSUD**) as we discuss in Section 2.3 below.

With these options before the Joint Committee, planning for the rural and coastal settlements and other rural residential locations was not proposed to be progressed under auspices of the FDS itself. In our opinion, addressing rural residential through a future planning process is a more robust approach that enables focussed engagement with rural and coastal communities and would enable a more fine-grained and meaningful strategy as a result. This deliberate approach is more robust in our opinion, and there are several options for how this could be undertaken as explained in Section 2.4 below.

2.2 Impact of including pages 38-39 of HPUDS 2017 as an appendix to the FDS

The Panel has asked what the impact is of including pages 38-39 of HPUDS as an Appendix to the FDS with appropriate explanatory text, stating that the Appendix provides strategic direction for the listed rural and coastal settlements until such time as a rural residential strategy (or similar) has been prepared. They have asked how this will play out for lower-level planning documents, requests for plan changes and resource consent applications, and Long Term Plan processes and funding for growth. They have further asked if the HPUDS coastal and rural settlements were to be included as an Appendix to the FDS, do Officers recommend any changes to the indicative areas identified in the HPUDS in the indicative location maps in section 5 of the HPUDS.

The FDS is intended to replace HPUDS 2017. To avoid a confusing situation of having two growth strategies apply simultaneously, in our view and in response to feedback, we consider that it is important to carry over those aspects of HPUDS 2017 that are not canvassed in the FDS. If this occurs, then HPUDS 2017 can be retired and will no longer be relevant for future planning decisions. This is the most efficient administrative approach.

In our Officers' Hearing Report, we recommended that the strategic direction for the rural and coastal settlements be carried over from HPUDS 2017 should be set out in an Appendix to the FDS. As it forms part of the FDS, future planning decisions will need to have regard to it under clause 3.17 of the NPSUD when preparing or changing RMA planning documents. It would also be used to inform Long Term Plans, RLTPs and other relevant strategies and plans (including a rural residential strategy for example). For resource consents, it would be considered as an "other matter" under section 104(1)(c) of the RMA. This is very similar to how near-identical content in HPUDS 2017 (pre-FDS) can, and has, been considered in other resource management related decisions.

The Appendix as recommended in our Hearing Report does not propose to map the rural and coastal settlements. However, HPUDS does include indicative maps for the settlements of Haumoana, Waimarama and Maraekakaho. If the Panel were inclined to do so, these indicative maps could also be included in the Appendix as an interim measure. We do not recommend any other amendments at

this stage given that the intention is to carry over the HPUDS direction verbatim and a future rural residential strategy (or similar) can apply a more thorough review of suitability.

2.3 Rural lifestyle development under the NPSUD

The Panel has asked if rural lifestyle development is a matter for consideration under the National Policy Statement on Urban Development that can be addressed in the FDS.

Section 3.13 of the NPSUD sets out the purpose and content of the FDS. We repeat this in full below for context, with emphasis added.

1) *The purpose of an FDS is:*

   a) *to promote long-term strategic planning by setting out how a local authority intends to:*

      (i) *achieve well-functioning urban environments in its existing and future urban areas; and*

      (ii) *provide at least sufficient development capacity, as required by clauses 3.2 and 3.3, over the next 30 years to meet expected demand; and*

   b) *assist the integration of planning decisions under the Act with infrastructure planning and funding decisions.*

2) *Every FDS must spatially identify:*

   a) *the broad locations in which development capacity will be provided over the long term, in both existing and future urban areas,* ***to meet the requirements of clauses 3.2 and 3.3; and***

   b) *the development infrastructure and* ***additional infrastructure required to support or service that development capacity, along with the general location of the corridors and other sites required to provide it; and***

   c) *any constraints on development.*

3) *Every FDS must include a clear statement of hapū and iwi values and aspirations for urban development.*

The definition of urban environment in the NPSUD is also relevant. We also note that the National Planning Standards include the Rural Lifestyle Zone within the group of Rural Zones.[2]

The focus of section 3.13 is, in our view, focussed on setting out how the Councils intend to provide for development within the Napier Hastings urban area and not the totality of Napier City and Hastings District. This reflects the language used throughout the objectives of the NPSUD that refer variously to 'urban environment' and 'urban development'. While the wider Study Area for the FDS encompassed the rural and coastal settlements, as set out above, urban scale development within one or more of those settlements was not assessed as the preferred spatial scenario at the present time.

Rural residential development is more rural than urban in scale, although we acknowledge that when located at the urban edges it does form part of the local housing market. However, it is not the focus of the FDS. The approach taken for the Napier Hastings FDS is consistent with a number of FDSs undertaken around New Zealand including Auckland, Wellington, Hamilton and Christchurch. The Auckland example is similar to the situation here, where that FDS refers to the development of a rural

[2] Refer to the District Plan Structure Standard on page 16: https://environment.govt.nz/publications/national-planning-standards/

strategy as a future action[3]. Auckland Council (a unitary authority) has recently published a draft of their Southern Rural Strategy[4].

Smaller Tier 2 councils in New Zealand take a variety of approaches and some have included rural settlements and new rural residential opportunities within their FDS (see Nelson Tasman as an example). This reflects early decisions made by the council(s) at the time, noting that there is nothing in the NPSUD to preclude councils from including rural and coastal settlements if they wish to (nor any mandatory requirement in the NPSUD to include rural and coastal living in an urban-focussed FDS). This is consistent with the early advice that Officers put to the Joint Committee on providing for rural residential living.

2.4 Anticipated timing for a rural residential strategy and what process would be followed for developing one?

The Panel has asked what the anticipated timing is for a Rural Residential Strategy and what process would be followed for developing one.

The Draft FDS assumes a much higher proportion of housing demand in rural/lifestyle areas than HPUDS 2017 and the existing capacity work that underpins the current RPS and Hastings District Plan is now ten years old. Accordingly, we consider that the first step in preparing a rural residential strategy would be undertaking a refresh of the rural capacity analysis for Hastings and Napier. This would account for changes to the rural planning framework that are being sought through the Napier Proposed District Plan. This is a technical piece of work and can be commissioned without formal Council approval as soon as the FDS is adopted. The work may include contact with market experts.

The refreshed capacity analysis would provide an indication of the urgency and scale upon which to consider next steps, including funding and timing, for preparing a rural residential strategy (or similar). This first step can be completed by the end of August 2025, which would inform the timing for any future strategy. The Councils would need to consider a range of matters, which would be appropriately addressed in a project scoping report. This may include:

a) Issues and options for planning for rural and coastal settlements;

b) How specific sites for rural residential will be addressed that are not located within existing rural and coastal settlements;

c) How the very long term urban satellite potential of some rural settlements could be addressed; and

d) Public consultation options, including options to consult with affected communities at the issues and scoping phase.

Depending upon scope, urgency and available funding, the rural residential strategy could more comprehensively review the future form and function of rural and coastal settlements and the wider rural catchment. This could also address the wider social, environmental, economic, cultural needs of rural communities, with the potential for this to be addressed in stages dealing with priority locations.

2.5 Impact of bringing developing areas identified for longer-term growth on line at an earlier time

The Panel has asked what the impact would be of changing the timing of bringing development areas identified for longer term growth on line at an earlier time. They have asked for clarification on the

[3] See page 51 of the Auckland FDS: https://www.aucklandcouncil.govt.nz/plans-projects-policies-reports-bylaws/our-plans-strategies/auckland-plan/development-strategy/Pages/default.aspx

[4] https://akhaveyoursay.aucklandcouncil.govt.nz/southern-rural-strategy

ways to address these impacts if development is intended to progress in advance of timing set in the FDS.

A number of submitters requested that certain locations should be brought forward from long term prioritisation to short - medium term prioritisation. The areas submitted on in this regard include:

a) Middle Road (HN3a and Hn3B)

b) Arataki Extension (HN2b)

c) Brookvale Extension (HN6)

d) Portsmouth Rd (FM2 and FM9); and

e) Irongate North/South

f) Wall Road.

Clearly there is a desire from landholders within the specific areas, to have their land bought forward for short to medium term development within the FDS, even if as stated within the Hearing Report, there are no barriers through the FDS to prevent landowners applying to rezone these areas earlier as the short, medium to long term prescription is about funding and enabling services to actually deliver housing when it is needed, not when rezoning can/should happen.

The arguments from submitters regarding inclusion relate to both better planning practices as it gives the public a better indication around the likely timing of development, greater levels of information for future planning and infrastructure delivery (including for network utility operators) if developments are indicated when they are most likely to occur, and the consideration that inclusion within the next ten years removes National Policy Statement: Highly Productive Land (**NPSHPL**) requirements. These arguments are addressed below.

Firstly, it is important to point out, that there is no specific requirement under the NPSUD to include staging and prioritisation within an FDS. The purpose of an FDS is to:

1) promote long-term strategic planning by setting out how a local authority intends to:

   a) achieve well-functioning urban environments in its existing and future urban areas; and

   b) provide at least sufficient development capacity, as required by clauses 3.2 and 3.3, over the next 30 years to meet expected demand.

However, it is accepted that in order to achieve (b), being able to provide an indication of what is required over the short, medium and long term is good planning practice and provides an indication as to the development priorities over the 30 year period.

In this regard, the NPSUD's meaning of 'plan-enabled' and 'infrastructure ready' development capacity and NPSUD Clause 3.4 provide useful guidance on how sites should be considered. While the FDS does not have to follow plan-enabled and infrastructure ready explicitly, the NPSUD shows there is at least an expectation that the FDS should indicate where adequate development infrastructure is needed to support development of the land for inclusion in LTPs. This provides clear direction for the priorities list, and shifting timings for certain locations solely on basis of developers' wants does not align with those interpretations.

In terms of the opportunity to provide clarity to the public and developers as to an indication around timing, we acknowledge there are benefits in this. It is accepted that where there is relative certainty around developments occurring within the short term, it is acceptable to have that indication within the FDS to ensure consistency for developers and landowners alike. However, there would need to be relative certainty in regard to assurances that the project would actually be committed to within the short term and not simply a desire. An indication from developers that they will be looking to

undertake a plan change in the short term is not sufficient. Significant work should be undertaken to provide councils a level of certainty that a proposed development will take place ahead of what is potentially needed to achieve sufficiency, particularly when there is no demand indicated a developments need over the short-medium term periods.

The impacts of bringing areas forward from long term to short term creates an expectation that Councils will change their LTPs and Infrastructure Strategies to align with the altered short to medium term desires, which would have a flow on effect on development contributions and funding mechanisms, including through contractor and consultant pricing if they are all expected to be delivered as indicated.

Whether Councils can provide infrastructure if a development is not developer led must be carefully considered. If development areas are required within the short term, Councils may need to deliver infrastructure, given that there is an indication the development is required for short term growth to meet the NPSUD targets.

Secondly, if the land is delivered to market as indicated then while the generous supply may help offset development contributions increases, the higher uptake engendered may be at the expense of intensification. This could result in pressure for release of even more greenfields in the longer term, undermining attempts to protect highly productive land and increase intensification. An everywhere-all-at-once approach will not promote the use of natural and physical resources at a rate that sustains their potential to meet the needs of future generations.

In terms of the implications for compliance with NPSHPL, this has been addressed below. It is clear that inclusion within the FDS does not provide any discounting of the NPSHPL. All sites would need to consider the NPSHPL at time of rezoning and/or resource consenting.

Using the above criteria we have reconsidered each of the submitters' positions following the additional evidence put forward.

In terms of the Arataki Extension land, it is accepted that given the Fast Track Approvals Act consenting requirements and the pre-application discussions had with Hastings District Council, that there is reasonable likelihood that this development will be achieved within the short-medium term period. In addition to this, it has been indicated that the infrastructure upgrade requirements for this site are relatively minor, meaning there is less risk on Hastings District Council if any problems were to occur. As such it is accepted that the Arataki Extension land should be reconsidered as short-medium term.

The Brookvale Extension (HN6) land has also applied for a private plan change which is currently awaiting further information. This land does not have the certainty and timeframe parameters at the Arataki Extension land but is reasonably far advanced in its planning. While inclusion as a short-medium term project is reliant on the granting of a Plan Change request and this is not fait accompli, it is accepted that following approval the development would likely occur relatively quickly, within the medium term given the nature of the development proposed. As with Arataki Extension, there is relatively low risk with infrastructure upgrades to develop this land, as the capacity was built into the system as part of the earlier Brookvale structure plan work. As such it is accepted that on balance the HN6 land should be reconsidered as short-medium term.

In terms of all other sites requested to be reprioritised, we do not consider there to be specific justifiable reasons for this to occur. While there have been some high level discussions around development opportunities on other land identified, there have been no applications lodged to give reasonable certainty as to when the development may occur, nor when the location might be 'infrastructure ready.' An indication of when an application may be lodged with a council is insufficient to reconsider prioritisation, particularly if there is already sufficient supply identified in a particular

area. As such no change has been recommended for the remainder of those submissions requesting reprioritisation.

We note that the recommendation for Wall Road did not include an indication of timing as observed by Mr Winchester, but the Hearing Report at page 109 indicated that this should be in the long term to align with the servicing programme. It is noted that the inclusion of both Arataki and Brookvale Extension as short-medium term priority will resolve the short-medium term deficit in the Hastings area, changing capacity from -35, to a surplus of +260 (being 170 dwellings for Arataki and 125 for Brookvale). We are comfortable with this level of sufficiency and do not consider it would negatively impact the intensification objectives of the FDS.

2.6 Hastings Aerodrome status in the RPS

The Panel has asked whether the Hastings Aerodrome is defined as regionally significant infrastructure (or similar) in the RPS.

The RPS (incorporated into the Regional Resource Management Plan (**RRMP**)) does not define regionally significant infrastructure per se, although it does contain a definition of strategic infrastructure which we repeat below:

9.255A Strategic Infrastructure

Those necessary facilities, services and installations which are of greater than local significance, and can include infrastructure that is nationally significant. The following are examples of strategic infrastructure:

a) strategic transport networks

b) Hawke's Bay Regional Airport

c) Port of Napier

d) Omarunui Regional Landfill

e) strategic telecommunications and radiocommunications facilities

f) the electricity transmission network and electricity distribution networks

g) renewable electricity generation activities

h) pipelines and gas facilities used for the transmission and distribution of natural and manufactured gas

i) public or community sewage treatment plants and associated reticulation and disposal systems;

j) public water supply intakes, treatment plants and distribution systems

k) public or community rural water storage infrastructure, including distribution systems

l) public or community drainage systems, including stormwater systems

m) flood protection schemes

n) other strategic network utilities.

In our opinion, the Hastings Aerodrome would fall within the definition of strategic infrastructure under the RPS. This is on the basis that the Aerodrome has a regional function rather than merely a local service function, particularly as it relates to civil defence and emergency management[5]. We note that the list of examples provided in the definition is non-exhaustive. The following policies of the RPS

[5] Refer to the Hawke's Bay Civil Defence and Emergency Management Group Response to Cyclone Gabrielle: https://www.hbemergency.govt.nz/cyclone-gabrielle-review/

would therefore be particularly relevant and require careful consideration as part of future decisions such as the private plan change application for the Hastings Golf Course:

(a) Objective UD1 and UD5; and

(b) Policy UD4.2, Policy UD10.4 and Policy UD12.

The evidence presented by the Hastings Aerodrome at the FDS Hearing highlighted potential issues with the technical acoustic reporting undertaken for the Hastings Golf Course private plan change application. This reinforces our opinion that the future development of this site is best addressed through the 'live' plan change process where the technical evidence can be rigorously tested, noting that this process is currently underway.

3.0 Context and overview matters

3.1 Resource Management Act reform

During the week of the Hearing, several key announcements were made the Minister for Resource Management Reform Hon Chris Bishop regarding the current Government's intentions for the next phases of reform. The Minister announced "actions Government has agreed to that will enable more greenfield development – allowing our cities to grow up and out." However, none of those announcements have any immediate effect. Legislation (and in some cases, Ministerial approval) is required for these policy announcements to have any legal effect.

Some of the key announcements pertinent to matters relating to the FDS are outlined below:

a) Legislation to replace the RMA to be introduced in Parliament by the end-2025 and passed in mid-2026 prior to the General Election. There will be two new Acts. A Planning Act focussed on regulating the use, development and enjoyment of land, along with a Natural Environment Act focussed on the use, protection and enhancement of the natural environment. Both Acts will include starting presumptions that a land use is enabled, unless there is a significant enough impact on either the ability of others to use their own land or on the natural environment. There will be one set of national policy direction under each Act, with greater use of standardisation such as land use zones.

b) Minister Bishop announced that Cabinet has agreed to remove Land Use Capability 3 from the definition of highly productive land (**HPL**) under the NPSHPL. Alongside this, the Minister announced that they would consult "on whether we should establish what we've called 'special agricultural zones' around key horticultural hubs like Horowhenua or Pukekohe. This will be progressed as part of Phase 2 of the RMA reforms which is currently underway".

c) The Minister said "Freeing up urban land is not enough on its own. We also need to ensure the timely provision of infrastructure." There are "five changes to our infrastructure funding and financing toolkit to get more houses built. These are some big changes, and it will take some time to get them right." The Government's "aim is to have legislation in the House by September this year, to come into effect next year."

d) The Minister announced that the Government will support National Infrastructure Funding and Financing Ltd (NIFFCO) in lending up to $100 million to developers for infrastructure needed to enable new greenfield housing.[6] The Government's overarching approach is that growth pays for

[6] Minister for Resource Management Reform Hon Chris Bishop's speech to the Property Council Residential Development Summit, 27 March 2025.

growth, moving to a future state where funding and financing tools enable responsive supply of infrastructure where it is commercially viable to build new houses.[7]

The changes signalled by the Government provide useful context but it cannot be taken into account for the purpose of this FDS. However, the changes do indicate that the policy environment is fluid, and a flexible and responsive FDS for Napier and Hastings will provide options for the community to adapt in the future.

In terms of infrastructure, the Government's proposed greenfield funding is reasonably modest and the impact of future development levies on the feasibility of development is uncertain. Councils and developers will continue to face significant challenges in sustainably funding infrastructure upgrades to support growth, particularly in an environment where councils may be required to plan for high growth.

3.2 Status of the Hawke's Bay Regional Policy Statement

At the Hearing the Commissioners queried the timing for the RPS review. Gavin Ide for HBRC confirmed that the review of the RPS had already commenced and HBRC's intention was to release a discussion document draft RPS around August 2025 for informal public feedback. However, due to legislative changes passed by Parliament last year,[8] the discussion document draft is being re-focussed on natural hazard-related content (i.e. RPS chapters as per the National Planning Standards for climate change; natural hazards and risk; energy, infrastructure and transport; and urban form and development).

Timings for next steps of the RPS review programme may well change depending on the timing and requirements of the Planning Bill and Natural Environment Bill to be released later this year. Decisions on the FDS will not have any direct implications for the scope and timing of the RPS review programme.

3.3 Planning status of recommended FDS areas

At the Hearing, submitters commented on the planning status of the various growth areas recommended for inclusion in the Draft FDS. We provide a summary of this below. We also comment on areas that are not recommended for inclusion but which are currently working through a separate planning process.

FDS recommended growth area	Planning status
Intensification (Hastings)	Plan Change 5 to the Hastings District Plan in Environment Court assisted mediation.
Intensification (Napier)	Napier PDP progressing through the Hearing phase currently. This includes proposals for intensification in the urban area.
Ahuriri Station (AS)	A Listed Project under the Fast Track Approvals Act 2024. Seeking rezoning through the Napier PDP.

[7] Minister for Resource Management Reform Hon Chris Bishop's speech to KangaNews Debt Capital Markets Forum, 27 March 2025.

[8] The Resource Management (Freshwater and Other Matters) Amendment Act 2024 was passed in October 2024. That Amendment Act introduced Section 80A(4A) into the RMA and restricts regional councils from notifying freshwater planning instruments until a new National Policy Statement for Freshwater Management (NPSFM) takes effect or December 31, 2025, whichever comes first.

The Loop (NC4a)	No active planning underway.
Riverbend (NC4b)	Seeking a referral through the fast track process under the Natural and Built Environment Act 2023. Seeking rezoning through the Napier PDP.
South Pirimai (NC4d)	No active planning underway.
Mission Estate (NC6)	Seeking amendments to the zoning through the Napier PDP.
Severn Precinct (SP)	In pre-application discussions with Council for a resource consent application.
Lyndhurst Extension (H2a)	HPUDS Structure Plan in preparation. Funding commencement in year 7 of the LTP.
Kaiapo Road (H3)	HPUDS Structure Plan in preparation. Funding commencement in year 8 of the LTP.
Murdoch Road (H4)	No active planning underway.
Wall Road (H5b)	No active planning underway.
Copeland Road (H8)	No active planning underway.
Portsmouth Road (FM2 and FM9)	Landowner advises that the private plan change application is being prepared.
Arataki Extension (HN2b)	A Listed Project under the Fast Track Approvals Act 2024. Pre-application discussions with Council commenced.
Middle Road (HN3a)	No active planning underway.
Middle Road Extension (HN3b)	No active planning underway.
Brookvale Road (HN6)	Pre-application discussions with council progressing for a private plan change application.
Oderings Site (HN10)	Resource consent granted.
Irongate West (IR1)	No active planning underway.
Irongate South (IR2)	No active planning underway.

Other growth areas (not recommended)	Planning status
Hastings Golf Course (BP1)	Private plan change application currently being processed by the Hastings District Council.

Hamachek Holdings energy centre	Resource consent lodged with Hastings District Council.
Mr Apple (WH1)	Pre-application discussions with council progressing for a private plan change application.

4.0 Urban Housing Demand, Capacity and Choice

4.1 Smaller sites

A number of submitters requested including smaller sites within the FDS. This includes Hamachek Holdings Limted, Sun Properties Limited and Mr and Mrs Holder at Clive. In the case of Sun Properties, the submitter has suggested combining the site with the Oderings site, which is at the lower end of residential capacity enabled.

We maintain that smaller sites are better addressed on their merits through a future plan change/plan review/resource consent process. This ensures that the FDS remains focussed on strategic and long term growth opportunities as required by the NPSUD (see clause 3.13).

The submitters pointed to the directive nature of the operative RPS posing a barrier to assessing smaller sites on their merits. We observe that the RPS is particularly directive with regard to urban growth in the Heretaunga Plains sub-region, and this reflects the decision making that occurred at the time, having been developed and implemented following HPUDS 2010. However, we point out that there is a 'pathway' through those directive policies in Chapter 3.1B of the RRMP. It is not an impassable barrier as some of the submitters have inferred.

We acknowledge that some smaller sites are provided for within the Draft FDS. This includes the Oderings site at 35 dwellings, which has been recently consented. This site was included in the Draft FDS because it has been recently consented but is yet to be constructed, however, this is an exception.

Since adoption of HPUDS 2010 and Change 4 to the RPS, the NPSUD and other national direction has come into effect. For a number of reasons, the RPS has not yet been updated to give effect to that new national direction. The NPSUD in particular directs the Councils to, amongst other things, be responsive to proposals for unanticipated or out of sequence growth (Policy 8). This will inform changes to the RPS that provide greater flexibility and responsiveness in decision making. These changes would lend further policy support for smaller scale development, while acknowledging that there is still a pathway for this to occur through the operative RPS and district plans as we had previously outlined in the Hearing Report.

To address the issues raised by submitters, we recommend including a statement about smaller sites within Section 10.1 of the FDS as follows:

The FDS is focussed on identifying strategic opportunities for growth across the urban areas of Napier and Hastings. Except in some circumstances, smaller sites with capacity for less than 100 dwellings or singular business/commercial development proposals are not identified. It is intended that proposals of this scale, or other unanticipated development, are considered on their merits through a plan change/review and/or resource consent processes. Collectively, development on smaller sites may make a meaningful contribution to housing and business

capacity and this will be regularly monitored and documented through the Councils' three yearly Housing and Business Capacity Assessments.

4.2 Spatial identification of growth areas

At the Hearing several submitters outlined the importance of spatially identifying their land in the FDS. Submitters' reasoning for requesting this were generally two-fold:

a) Sites that are currently defined as HPL under the NPSHPL would be excluded from that definition if spatially defined in the FDS.

b) Spatial identification would provide certainty and a clear signal to those assessing future plan changes and resource consents regarding the strategic suitability of an area for urban development. This is particularly important in the context of an operative RPS that has some directive policies about where urban growth should and should not occur in the Heretaunga Plains sub-region (see for example policies UD4.1 – UD4.5).

We address (a) in Section 5.1.2 of the Reply below. In short, it is incorrect to claim spatial identification in the FDS would mean sites are then excluded or exempted from consideration under the NPSHPL.

Regarding (b), we agree that spatial identification of growth areas has historically been the approach applied through various growth strategies in Napier and Hastings and that this has flowed through to a series of reasonably directive objectives and policies in the RPS. However, in our opinion, the issue here sits with the policies in the RPS which have emerged after an RMA Schedule 1 public consultation process.

The FDS is a high level strategic document that is intended to, amongst several things, inform RMA planning documents, including the RPS and district plans. It is expected, that the FDS once adopted, will be used inform HBRC's review of the RPS, particularly those aspects relating to urban growth and form. It is anticipated that the RPS review would need to better reflect the NPSUD's change in policy approach (alongside other NPSs), for example, a greater degree of flexibility and responsiveness to unanticipated growth.

There is also the opportunity for the RPS to implement the relevant recommendations of the FDS (whether mapped or not), as it relates to matters such as wet industry and smaller sites for example. However, we do not consider that this requires specific sites to be mapped in the FDS and therefore councils retain discretion to take a different policy approach to what has historically been the case in Napier and Hastings.

5.0 Development Constraints

5.1 Highly Productive Land

5.1.1 Amount of land defined as HPL

The evidence for Save the Plains and related submitters stated that the Draft FDS identifies approximately 416.75 hectares of HPL for urban development.

We have updated Table 3 of the Hearing Report to include the land area in hectares. This shows that approximately 508 hectares of land defined as HPL under the NPSHPL is recommended to be included in the FDS, including Ahuriri Station, which forms the majority of this. A large proportion of this is LUC3. If the sites recommended to be included in the FDS are added (extended Portsmouth Road

FM9, Middle Road HN3a and HN3b and Wall Road H5b) then this total number increases by 124 hectares to 632 hectares.

In addition, and as set out in the Hearing Report, the LUC classification relies on the interim definition of HPL that is based on coarse scale mapping undertaken in the 1970's. Because of this, we recommend an approach that takes into account advice from experts on specific sites and allows this to be assessed further through a plan change and rezoning process (see the discussion on this at 5.1.2 below).

FDS Growth Area	HPL status (refer to the site summaries for LUC mapping)	Land area (hectares)
South Pirimai (NC4d)	LUC 3. HPUDS Reserve Area.	61.6 ha
Arataki Extension (HN2b)	LUC 3. HPUDS Reserve Area.	12.1 ha
Murdoch Road (H4)	LUC 2. HPUDS Reserve Area.	11 ha
Portsmouth Road (FM2)	LUC3.	17.2 ha
Irongate (IR2 and IR3a)	IR2 – LUC 2. IR3a – mix of LUC 1-3.	48 ha 52.5 ha
Severn Precinct (SP)	LUC 3.	6 ha
Ahuriri Station[9]	LUC 3.	300 ha
Total land area		508 hectares

The Hearing Report references an unpublished document from Hastings District Council entitled: Assessment of Highly Productive Land in Hawke's Bay - Soils Occupied by Urban Development. [10]

This report was prepared by the Hastings District Council in 2023 to provide a point of reference and context for discussion and urban planning, including the FDS, district plan changes and resource consents.

This exercise is based on the existing mapping of HPL represented by the New Zealand Land Resource Inventory (**NZLRI**) from mapping undertaken between 1973 and 1979 at a scale of 1:63,360 and includes a Land Use Capability Classification (**LUC**).

The coarse urban footprint data from 1973 to 2000 was updated using the NZLRI mapping available through the HBRC website to create a new baseline as at the turn of the millennium. Council records were then used to record rural to urban land conversions from 2000-2020 and projected to 2025 as summarised below.

On this basis, over the 25 years from 2000, 0.86 % of LUC 1-3 and 1.13% of LUC 1-2 land has been committed to urban use. Nearly 2% of LUC 1 was converted on top of possibly up to 20% that has

[9] Note that clauses 3.8 and 3.9 of the NPSHPL exclude specified Māori land.
[10] See footnote 35[41] on Page 94 of the Hearing Report, where this report was intended to be described.

been occupied since settlement commenced on the Heretaunga Plains. A copy of the report is attached as **Appendix 1** and is intended to provide some broader context to the discussion on highly productive land.

5.1.2 Whether the FDS changes the HPL definition of land – relevance of clause 3.10

Several submitters sought identification of land within the FDS as appropriate for growth where that land is HPL for the purposes of the NPSHPL. It is useful to clarify the Officers' view of the relationship between the FDS produced under the NPSUD and the protection of HPL under the NPSHPL.

Inclusion of land in the FDS does not exclude application of NPSHPL from decision-making.

First, some submitters appeared to think that if land was identified in the FDS then it would cease to be defined as HPL under the NPSHPL. That is incorrect.

There are two ways land can be identified as HPL:

a) Under the interim definition of HPL set out in NPSHPL cl 3.5(7); or

b) As a result of the required Regional Council mapping exercise (refer NPSHPL cl 3.4).

In terms of the interim definition, cl 3.5(7)(b) provides that land is excluded from the meaning of HPL if "at the commencement date" it is "identified for future urban development." Commencement date of the NPSHPL was 17 October 2022.

Similarly, in terms of the HPL mapping exercise required to be carried out by HBRC, cl 3.4 provides that "land that, as at the commencement date [17 October 2022], is identified for future urban development must not be mapped as [HPL]."

Therefore, land needed to have been "identified for future urban development" as at 17 October 2022 – not later. Inclusion in the FDS at any later date has no impact on whether land is defined as HPL and therefore subject to the relevant tests in the NPSHPL. If land currently falls within the interim definition of HPL, it will still fall within that interim definition even if it is identified in the current FDS (or future FDS editions) as land suitable for commencing urban development over the next ten years (2022-2032).

It would only be excluded from being HPL if it was not mapped in the RPS as such by HBRC, however that mapping exercise is not affected or influenced by the content of the FDS.

Urban rezoning of HPL is restricted by cl 3.6(1) NPSHPL such that Tier 2 authorities may allow it only if all three of the following tests are met:

(1) The urban rezoning is required to provide sufficient development capacity to meet demand for housing or business land to give effect to the National Policy Statement on Urban Development 2020; *and*

(2) There are no other reasonably practicable and feasible options for providing at least sufficient development capacity within the same locality and market while achieving a well-functioning urban environment; *and*

(3) The environmental, social, cultural and economic benefits of rezoning outweigh the long-term environmental, social, cultural and economic costs associated with the loss of highly productive land for land-based primary production, taking into account both tangible and intangible values.

These three tests would need to be considered at the time of rezoning on its merits. The FDS cannot be used as a proxy assessment of whether or not those tests are satisfied. What the FDS might actually say about any particular location could partially inform those tests but cannot be determinative. For example, the FDS must provide "at least sufficient development capacity" for 30 years of growth (cl 3.13(1)(b) NPSUD). If a particular FDS took the approach of providing more

development capacity than what was "sufficient", then an argument that land so identified was "required" under cl 3.6(1)(a) NPSHPL would be more difficult. In such a case, it would also be more difficult to argue that the test at cl 3.6(1)(b) NPDHPL was met, as there may be identified alternatives that would enable development capacity to be met.

If a specific location is not included in the FDS and happens to feature some HPL, then the threshold tests in cl 3.6 may still be able to be met, although it is fair to say the task would likely be more difficult.

Again, the particular wording of the FDS will be important. For instance, in relation to wet industry, Officers have recommended changes to foreshadow that expansion of Tomoana and/or Whakatu may be required in the long term for wet industry and to stipulate that boundaries are indicative only and subject to refinement through structure planning and rezoning. Comments such as this would serve to displace any assumption that land not identified in the FDS is therefore not required – rather, it leaves this largely open for consideration at the time of rezoning.

Finally, it is worth recording that at the time of rezoning, territorial authorities are required to change their district plans "in accordance with" and "give effect to" all relevant national policy statements. This includes both the NPSUD and the NPSHPL, alongside others. Regardless of its obligations under the NPSHPL, councils must "have regard to the FDS when …changing RMA planning documents" (cl 3.17(1)(a)). Neither the NPSUD or NPSHPL takes precedence over the other, and to approach one as being more important, or taking precedence, would likely lead to legal error. Any council assessing a proposal for rezoning will have a careful analysis and balancing exercise to undertake. But that duty is not required in relation to the FDS.

5.1.3 Methods for managing reverse sensitivity

A number of submitters raised the issue of reverse sensitivity effects arising from the expansion (both past and future) of urban activities to the rural boundary where horticultural and other farming activities take place. The discussion on the Portsmouth Road sites (FM2 & 9) is an example of this, where a blueberry farm is currently operating on the southern boundary, which would potentially be impacted by residential expansion.

This issue is common across New Zealand at the urban fringes and we agree with Mr Aitken for Maven Collective, that this can be effectively managed through a range of methods. However, the issue is not unique to rural activities. The operational needs of significant infrastructure can also be impacted by poorly designed nearby urban development. The methods employed will depend on the nature of the interface and the sensitivity of the rural activity or infrastructure to encroaching urban activities. The methods to manage reverse sensitivity effects rightly fall on the urbanising activity to manage and this is most appropriately addressed at the structure plan and rezoning stage. Methods to manage this include:

a) Using land contours/bunding with appropriately dense landscaping;

b) Locating stormwater management areas, roading and other infrastructure along the urban interface to provide separation;

c) Requirements for acoustic treatment and forced ventilation of new noise-sensitive activities; and

d) Applying development setbacks and buffer zones where appropriate (there are several examples of these in the FDS area).

The issue of reverse sensitivity is already addressed in the RPS (and district plans) and would be considered in detail through structure planning and rezoning. Refer to Policy UD4.2 in particular.

However, the issue of encirclement is a relevant concern whereby successive developments without adequate buffering, limit the use of land for productive use. For this reason, the selection of sites without natural defensive boundaries should be approached with caution and expectations around the establishment of robust buffers clearly articulated. Officers have considered this matter carefully and consider that the greenfield areas recommended for inclusion in the FDS have a combination of natural boundaries, together with the ability to effectively manage reverse sensitivity effects through future structure planning and design.

5.2 Natural Hazards

The management of natural hazards and the appropriateness of developing in hazard prone areas was an area of focussed discussion at the Hearing. Generally, this was discussed in the context of specific sites, however the Natural Hazards Commission provided updated information to the Panel on 18 March 2025. They have qualified their position and note that their commentary on specific sites is without mitigation.

The Natural Hazards Commission has posed the following questions to the Panel. We have included these in a table and provide responses and cross references to the relevant RPS policies.

Natural Hazards Commission questions	Officer response
Is it OK to retain the status quo of continuing to develop in high hazard areas?	Riverbend and Ahuriri Station are the two sites recommended for inclusion in the FDS that could be described as having high natural hazard risk (particularly inundation) without significant mitigation works. There are site specific reasons for including these areas as outlined in the Hearing Report. A robust assessment of mitigation measures will be required at the time of rezoning in accordance with the objectives and policies of the RPS[11] and any new national level policy that applies at the time. Development may or may not occur as a result. The Draft FDS otherwise avoids new greenfield development in locations of known likely high hazard risk.
Are risk assessments adequate to determine the risk?	Yes, provided there is sufficiently robust information to support the assessment, which would be thoroughly tested through a rezoning process and/or relevant consenting processes.
Will any risk assessments, including mitigation measures, be externally peer reviewed?	Yes, as a matter of good practice.
Are mitigation measures proposed enough to reduce risks to people and property, both on and off the site?	This would be assessed in detail at the structure planning and rezoning stage and/or consenting phases too. It is not for the FDS to determine the mitigation measures in a fine grained level of detail.

[11] In particular, see Objective 31, Objective UD1(e), Policy UD10.4 in HB Regional Resource Management Plan.

What maintenance is required of mitigation measures, who is responsible for maintenance, and who pays?	This would be assessed in detail at the structure planning and rezoning stage and/or consenting phases. As above, there are specific reasons for including Riverbend and Ahuriri Station in the Draft FDS that are not related to natural hazards and it is acknowledged that maintenance of mitigation measures would be an additional cost if development is realised, but it is beyond the FDS to determine where and on whom that additional cost may fall.
How is residual risk managed?	This would be assessed in detail at the structure planning and rezoning stage and/or consenting phase too. Residual risk could also be part of a broader district plan change process (e.g. a district-wide change, as distinct from a location-specific rezoning proposal).
Are you satisfied that proposed design and mitigation measures are resilient and sustainable into the future?	This would be assessed in detail at the structure planning and rezoning stage and/or consenting too. It is not for the FDS to determine the mitigation measures in a fine grained level of detail.
What other avenues exist to mitigate natural hazard risks to acceptable levels?	Physical works may be required to mitigate natural hazard risks and these may be undertaken by developers or the Councils. In some cases, adaptive management or emergency management responses may be required to be developed for high impact and lower frequency events such as inundation from tsunami.

We note that there is a distinct possibility that upon further evaluation of details for location-specific mitigation designs, that high or even moderate risk might be unable to be appropriately reduced. In such instances, it remains entirely open for the decision-maker to reject or decline the proposal (e.g. rezoning) if it is not satisfied that the high risk cannot be sufficiently mitigated. Inclusion of specific locations in the FDS is no guarantee that any/all forms of development will go ahead.

6.0 Iwi and hapū development aspirations

6.1 Papakāinga

Bayden Barber, Chair of Ngāti Kahungunu Iwi Incorporated (**NKII**), stated that while NKII supports the need to protect highly productive land, this should not come at the expense of the ability for mana whenua to develop papakāinga on their whenua.

The NPSHPL allows subdivision on Māori land where Territorial Authorities take measures to ensure that the subdivision avoids or otherwise mitigates any potential cumulative loss of highly productive land and any actual or potential reverse sensitivity effects.

The Hastings District Plan is also already enabling of papakāinga with papakāinga development on Māori Land, and is a controlled activity. The Hastings District Plan also allows for papakāinga on

general title land owned by Māori where certain conditions are met and Hastings District Council commits to working with mana whenua to create development plans for their whenua. The Hastings District Plan assumes papakāinga will be located rurally and there are still some, primarily financial, restrictions making it difficult for whenua Māori to be development. However, Hastings District Council has indicated a willingness to rewrite this section of the Hastings District Plan to make it more enabling of papakāinga. With new national direction on papakāinga having been recently announced by Ministers, Hastings District Council's intention is to wait for this direction before making any change to the current district plan provisions.

Napier City Council is part-way through a submission and hearings process on the proposed Napier District Plan. That proposed district plan includes specific papakāinga provisions in a district-wide papakāinga chapter. The chapter, still subject to a recommendation from the Hearings Panel and final decision of Council, seeks to provide a more enabling pathway for papakāinga across the district. Noting that there is limited traditionally-owned Māori-land within Napier's boundaries, Napier City Council is proposing to extend these provisions to apply to General Title held by an iwi authority or is managed specifically for the benefit of their members. This would include land returned or acquired through Settlement with the Crown and land held by a post-Treaty settlement governance entity (or other demonstrated related entity). Where density/height standards are more enabling in an underlying zone than what would typically be expected in a traditional papakāinga, NCC is proposing to adopt the underlying standards. This will enable papakāinga within higher density environments such as medium and high density residential zones. Papakāinga standards would also enable multiple household units on a site, though the threshold for consent trigger is yet to be determined.

7.0 Business and Industrial

7.1 Mr Apple

Detailed submissions were provided by Mr Apple in relation to their request to identify their landholdings in the FDS as an industrial growth area. We have already provided a detailed response to the matters they raised in the Hearing Report and do not repeat that here. Although there are several matters raised by Mr Apple at the Hearing that require correction or clarification.

We note that many of these matters are specific to Mr Apple's evidence and their intended use of the site, and would therefore be more appropriately addressed through their private plan change proposal. Nevertheless, we provide a fulsome response below, which foreshadows issues that Mr Apple will need to address as part of a future planning process.

7.1.1 Identification of Whakatu as a growth area

Mr Apple requests inclusion of the site at 334 State Highway 51 as a "future industrial growth area."[12] While the evidence and submission talk at length about wet industry, we note that Mr Apple is not seeking to limit the identification of the site in the FDS to only that industrial sub-group. This has been confirmed with Ms Edwards following the Hearing. Mr Apple has not requested any specific prioritisation or timing for the site and did not address this in evidence. Although we understand from Ms Edwards that they are "ready to go now" and are in the process of preparing a private plan change application.

The Panel queried Ms Edwards about the appropriateness of identifying a specific site in the FDS rather than a general spatial area. If the Panel is of a mind to include and spatially define a site in the FDS, we recommend that it be done so generally (which the NPSUD allows), such that the final

[12] Refer to the Mr Apple submission.

boundaries can be determined as part of any future structure planning or rezoning process. This would equally apply to Tomoana if the Panel were of a mind to include that area as well or instead (see Submission 120 of Jim Bishop).

In terms of the location of the site, much was said at the Hearing about the inclusion of Whakatu as a future industrial area in HPUDS and the RPS. We note that the location of the Whakatu industrial area in HPUDS was only ever indicative, and notwithstanding, is to the north of the Mr Apple landholdings. Officers involved in that HPUDS process advise that this was likely due to the lesser impact on land productivity given the smaller lot sizes in the north. Figures 1 and 2 below show the HPUDS spatial identification of Whakatu relative to the Mr Apple site and current lot boundaries. It is noted also the same HPUDS notation was applied to Tomoana as one of two alternatives alongside Whakatu.

As part of any future plan change, and subject to demonstrating that there is demand for wet industry in this location after consideration of other spatial alternatives e.g. Tomoana, a s32 evaluation of the most appropriate boundaries of the zone will be necessary. This would need to consider a range of options, taking into account the need to manage reverse sensitivity effects and the impacts on the productive capacity on the land, having regard to land fragmentation and current land use, amongst other matters.

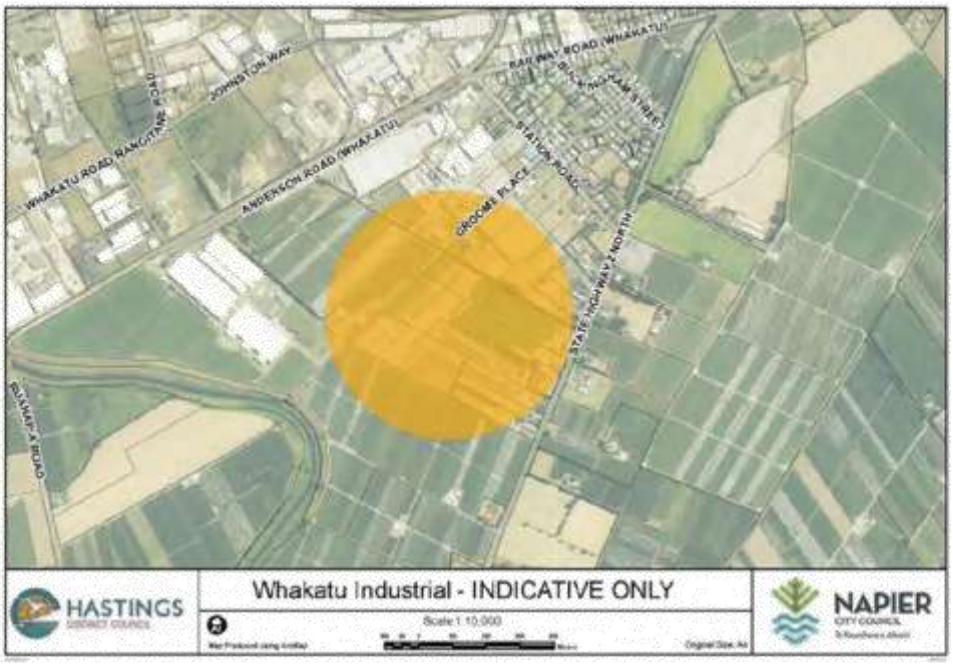


Figure 1: Showing the HPUDS 2017 spatial location of Whakatu relative to the Mr Apple site.

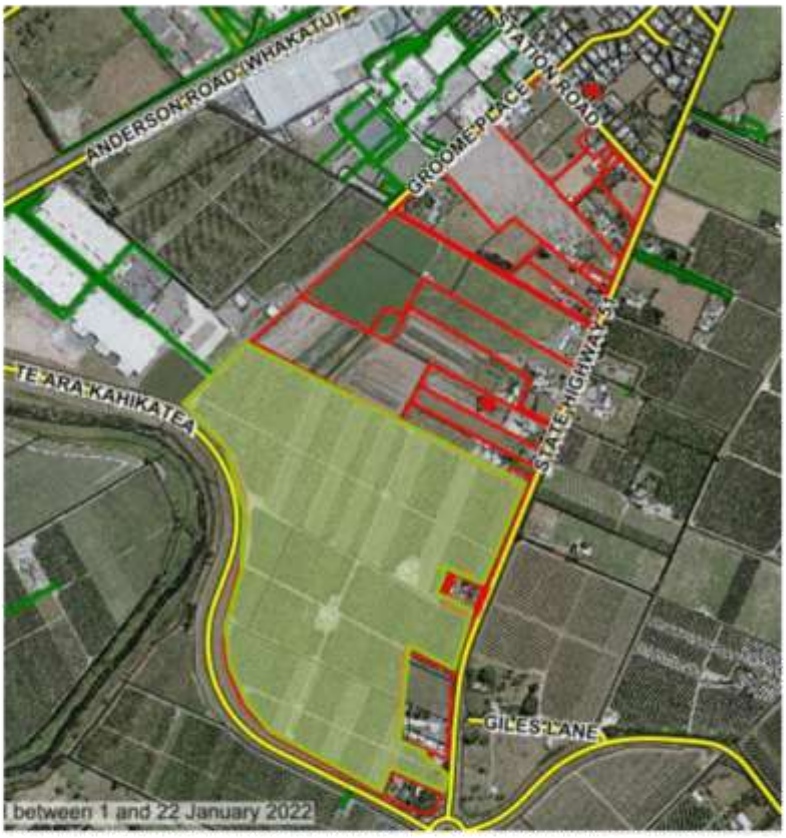


Figure 2: Showing the current lot configuration for the Mr Apple site relative to the lots to the north.

7.1.2 Functional need to access the trade waste network

The evidence for Mr Apple states that the intention is to use the land to relocate the pallet cool store and allow for the consolidation of the cool store network, which is currently in five sites.[13] Mr Joblin's statement of evidence usefully summarises the intended use of the site as well as the nature of Mr Apple's current operations in Hastings, including the trade waste discharge arrangements. Mr Joblin states at paragraph 20:

> *In peak production season, Mr Apple discharges approximately 500m³ of primary treated process water per week from its operational facilities. None of this is currently discharged to the trade waste network.*

He does not say where the current discharges occur or in what manner. He goes on to say, that when accounting for growth:

> *An increase in process water generated by these facilities could result in an additional 100m³ of discharge per week during peak season.*

He then states that a benefit of the proposal is allowing those consolidated activities to discharge to the trade waste network. On this, Mr Joblin states that it is currently HBRC's planning position for trade waste and or process water to be discharged to the Hastings District Council trade waste system ***where practicable*** (our emphasis) and it is expected that this will be the standard to which other wet industry will also be held.

[13] Refer to the summary map provided by Mr Apple at the Hearing.

To provide some context, included at **Appendix 2** is a list of the approved trade waste consents held by Hastings District Council. This does not include activities that have discharge permits from HBRC to discharge trade waste to ground or water. This list illustrates that trade waste volumes tend to be at the lower end of the spectrum for coolstores and packhouses, with food manufacturing generating more significant volumes. We also note that there is no specific requirement in the NPSUD or elsewhere that compels councils to provide separated trade waste infrastructure and we understand very few councils do so, although it is a strategic benefit for Hastings.

We have also sought advice from HBRC's consenting team to check the statements made by Mr Joblin about HBRC's current practice with applications to discharge treated trade waste to ground or water. HBRC's experts have advised us that Mr Joblin's statements are incorrect. Like any consent authority under the RMA, HBRC is required to process applications for resource consents on the merits and within the framework set by relevant regional plans and national regulations. HBRC cannot (and do not) require applicants to direct wastewater or process water to Hastings' separated trade waste network, unless that means of disposal is proposed by the applicant.

Mr Joblin also incorrectly states that Irongate is within a [drinking water] Source Protection Zone and therefore discharge to ground would be strongly discouraged in the future. The southern part of Irongate and the proposed 100 ha expansion in the Draft FDS is not within the Source Protection Zone[14], and discharge to ground or water remains a valid option with appropriate mitigation in place, including for packhouses and cool stores which generate lower volumes of trade waste.

This discussion, while specific to the Mr Apple evidence and activities, serves to reinforce our commentary in the Hearing Report that not all wet industry activities will have a functional need to access the trade waste network. We reiterate that caution should be exercised when correlating wet industry demand (assessed in the BCA at a broad level through ANZSIC categories that are more likely to use and discharge process water) with development capacity in locations with access to the trade waste network. Some wet industry demand will be able to be met elsewhere and a fine grained assessment of this will be required as part of any future rezoning proposal. This is particularly important given that the land at Whakatu and Tomoana is LUC 1 and currently in productive use.

7.1.3 Development capacity information

At the Hearing, Mr Apple representatives were critical of the capacity analysis undertaken in the Hearing Report, but did not provide any specific analysis or feedback that we could usefully address here. We remain unclear regarding the assumptions underpinning their conclusion that there is only 9.6 ha of vacant capacity for wet industry currently available. We have attempted to clarify this with Mr Apple on three occasions.

We have provided summarised development capacity information for wet industry enabled zones by area in the Hearing Report. The spreadsheet data that sits behind this and for the other greenfield industrial zones has been supplied to Mr Apple's representatives along with the methodology statement. For all intents and purposes the sites are generally similar. Three apparent exceptions were pointed out in Mr Heath's evidence, but on closer examination these do not reveal any material errors or omissions, and the relevant Officers stand by that data.[15]

[14] Proposed TANK Plan Change 9, currently subject to appeal proceedings in the Environment Court.

[15] With the possible exception of the Omahu Road example which is a very recent change (Shipping Container Hire) revealed by updated Google mapping 20/9/2024 ahead ofyet to be granted of building consents that trigger quarterly updating of the data base.

7.1.4 Other corrections and clarifications

Mr Apple's representatives made a number of incorrect or overstated matters that require correction. They are as follows:

a) It is incorrect to say that the strategic value of the of the Hastings trade waste network was not addressed in the MCA and Technical Report. It was.[16] It is fair to say that wet industry was not addressed in the level of detail that Mr Apple would prefer. In response to feedback, Officers have sought to respond to the matters raised in a constructive and objective way that will assist the Panel in forming its recommendations.

b) It is incorrect to say that Officers have sought to give effect to the NPSHPL through this process. Consistent with the requirements of the NPSUD, we have used the NPSHPL to inform the FDS and this was explained in detail in the Hearing Report, noting that LUC 1 land is the most productive, least plentiful and most impacted by historic urban development in Hastings District.

c) Ms Edwards asserted at the Hearing that access to water is an issue for the whole region. Indeed it is, however, the statement needs qualification. As outlined in the Hearing Report, there are onerous restrictions on new water take consents which affect agricultural/ horticultural activities and wet industry. For the FDS, it is an issue of most relevance to wet industry. Municipal water supply is treated differently and is available for potable supply for drinking and sanitation for industrial activities, with the exception of Whakatu where there is no reticulated supply currently. We agree with Ms Edwards that it affects all wet industry noting that any transfer of existing water rights will need water permits, assessed against highly directive policies. Approval of such water permits is not guaranteed. Zoning more land for wet industry will not resolve that constraint. Water supply has not been used as a disqualifying matter and there are steps in train to address the issue at a regional level. However, it will not be resolved immediately, and certainly not in the short term. The timing for this is outside the control of this FDS process although we agree that it should be an urgent priority.

d) It is incorrect to say that the only available capacity in the trade waste network is east of Otene Road at Whakatu and that Mr Chapman has confirmed this in his memo. He does not, and offers a qualified assessment of the issues. There are varying levels of capacity and complexity in accessing the trade waste network at Omahu Road, Tomoana and Whakatu and Mr Chapman outlines that a detailed estimate of remaining capacity cannot be provided at this time. However, if it were the case that Whakatu was the only location with trade waste capacity, then in our view, it would be even more important to ensure that development capacity in that location is retained for genuine wet industrial activities that have a functional need to access the trade waste network and could not reasonably occur elsewhere.

7.2 Irongate North

Angela McFlynn and Mr Rosenberg for the Irongate North Landowners presented evidence at the Hearing on the suitability of the land for further industrial development. Ms McFylnn noted that land on the eastern side of Irongate extends beyond the Irongate Stream and noted that this calls into question the robustness of the reasoning outlined in the Hearing Report.

We accept that the existing Irongate business area extends to the east of the Irongate Stream. We understand that this is a result of decisions made at the time of rezoning regarding the presence of

[16] See for example the site summaries for H6 Tomoana and W1 Whakatu; the MCA tables, in particular the commentary under feasibility/site suitability and wastewater infrastructure.

existing industrial activities that were allowed via scheduling in the then Hastings Proposed District Plan.[17]

We have sought further advice from Mr Chapman on this proposal to respond to comments from Mr Rosenberg. Mr Chapman advises that land to the north of the Irongate Stream does not have access to services within the Irongate east industrial area. He states that while no work has been undertaken to investigate extending services to support a future Irongate West area, there is the potential to provide water and wastewater services as part of a comprehensive strategy to align infrastructure investment to new areas identified in the FDS. A new wastewater main is being installed to service the Wairatahi residential development and is due for completion in 2026. This may provide an opportunity for another localised wastewater scheme for Irongate North but any proposals to extend this would be more appropriately considered as part of wider structure planning for the Irongate west area.

Regarding transport infrastructure, there is potential to extend Maultsaid Place to the north with a bridging structure over the Irongate Stream.

While there may be some merit in expanding to Irongate business area to the north over the LUC7 land, we remain concerned about the lack of a defensible boundary to the productive LUC1 land immediately to the north, noting that the expansion of the Irongate industrial area to the east of the Irongate Stream was a historical result of existing land uses and scheduled activities. For this reason, we maintain our recommendation that the site should not be included in the FDS at this time. There is potential to revisit this as part of structure planning for Irongate west and future rezoning given that the boundaries shown in the FDS are not fixed, and the scale of the proposal is relatively modest.

7.3 Omahu Road industrial – Wrightson Contracting

Alison Francis presented evidence at the Hearing regarding the inclusion of an industrial area in the FDS for the land at the western end of Omahu Road. As outlined in the Hearing Report, some of these activities are identified as Scheduled Activities in the Hastings District Plan but not all, and not all of the activities have been lawfully established. Despite this, we do acknowledge that the area has evolved over time to form a cluster of rural industrial activities, separated from the main Omahu Road industrial area by land in productive use on either side.

While we do not see merit in significant industrial growth in this area, there are opportunities to provide for the existing uses in a more consolidated and coordinated fashion. In our opinion, this is best addressed through a review of the Hastings District Plan, where a bespoke planning solution can be developed that responds to the specific management context of this area and not through the FDS, which is intended to signal broad areas for growth. A key matter to address through any future process would be ensuring that a well defined and defensible boundary is established that minimises the potential for development creep along Omahu Road and to the Roys Hill Winegrowing Area to the south.

7.4 Awatoto – Berkett Commercial Ltd

Jason Kaye presented evidence at the Hearing for Berkett Commercial Ltd. We do not propose any amendments to our recommendations for Awatoto however, we wish to clarify the situation with respect to water supply. Mr Kaye outlined that Napier City Council has plans for water servicing of the area. Mr Bradshaw for the Napier City Council wishes to clarify that there are currently no plans to change or expand water servicing Awatoto.

[17] Refer to section 7.2.2 of the section 32 report for Variation 2 to the Proposed Hastings District Plan: irongate-section-32-report-with-appendices-a-d.pdf

8.0 Greenfield Residential Napier

8.1 Riverbend

Evidence was presented at the hearing on behalf of Te Orokohanga Hou Joint Venture – the developers for the Riverbend site. There are two points from this material that we clarify in this Reply:

a) The evidence states that the proposed stormwater management solution will relieve pressure on the wider network and existing flooding risks. The modelling undertaken to indicates a modest improvement to flooding risks within the existing network although this is subject to further testing and analysis, taking into account the issues identified by both Mr Goodier and Mr Bradshaw in their memos attached to the Hearing Report.

b) The evidence refers to a Development Agreement between Napier City Council and the Joint Venture developer setting out respective responsibilities for infrastructure upgrades needed to support the development. For avoidance of doubt, HBRC is not a party to that agreement, despite having asset management interests in several of the nearby waterways. The Developent Agreement is confidential, however, Officers can say that this document sets out funding responsibilities for the Napier City Council and the developer in the event that the development proceeds as currently proposed. It does not represent agreement from Napier City Council that the development should proceed on the basis of currently available information. The development agreement is also subject to funding approval through Napier City Council processes.

Evidence from the Dooney Brothers was presented by Ms McFlynn. In our opinion, this did cast some doubt over the legal arrangements for the proposed stormwater solution for Riverbend. However, this will be a matter for Te Orokohanga Hou Joint Venture to resolve as part of the development scheme they are currently progressing. We maintain that for the wider Dooney Brothers site on Waverley Road, a stormwater solution would be required, and in the event that the western end of the site is needed to service Riverbend, this is unlikely to leave much developable land for the remaining area without needing to push further south.

Should the Panel be persuaded to remove Riverbend from the FDS we note that this would result in a reduction in residential greenfield capacity of approximately 660 dwellings. There would still be overall sufficiency in residential greenfield capacity in Napier if this were to occur (reducing to approximately 765 dwellings). However, this is entirely made up of residential capacity from Ahuriri Station. There remains uncertainty over the timing and form of residential development at Ahuriri Station/Bay View, and further technical work is required to understand natural hazard risks in that location. It would therefore be prudent to include additional greenfield options to 'make up' the difference, of which in our opinion, there are no viable alternatives for Napier at the present time. Additional capacity could be provided in Hastings, but this may not meet demand in terms of locational choice, housing types and price point.

8.2 Mission Estate

Phil McKay presented evidence on behalf Marist Holdings Greenmeadows Limited at the Hearing. He generally agreed with the recommendations of the Hearing Report but requested that the "Future Area", which is classified as HPL under the NPSHPL, be identified on Figure 18 as part of NC6.

We agree that there is merit in potentially developing this small "Future Area" as part of a wider comprehensive and master planned development on the site. However, as we explain in the Reply above, spatial identification in the FDS does not preclude a detailed assessment under relevant clauses of the NPSHPL, unless the area was already identified as being suitable for development in the

2022-2032 period under HPUDS 2017, which this site is not. Therefore, there is limited strategic benefit in spatially identifying this small parcel of land in the FDS and we do not recommend doing so.

We maintain that subject to the recommended footnote, this matter is best addressed through the Napier Proposed District Plan. Alternatively, a future resource consent application is another pathway should Marist Holdings Greenmeadows Limited not have scope in their submission to address this through hearings and decisionson on the Napier Proposed District Plan.

9.0 Greenfield Residential Hastings

9.1 Heretaunga Connections

Heretaunga Connections Project (**HCP**) took issue with the Officers yield estimates that suggested the proposal would generate considerable surplus capacity. We compared gross yield with demand at a total level, not additional supply over existing provision, as no yield information was supplied with the submission. In any event HCP did supply further information in evidence relating to yields and uses, which has helped clarify matters.

Removing 70 ha for HCP's industrial land allowance and using their estimate of 2000 dwellings, we arrive at a "gross density of 5/ha." This seems very inefficient in the context of highly productive land. With 50% (200ha) removed for stormwater and reserves etc as estimated by HCP, we would expect individual block development yields to be closer to HPUDS targets of 15 per hectare or higher.

On an increased supply basis, removing the expected yields and land area for Wairatahi and Kaiapo Road where the FDS and HCP overlap as suggested by Mr Stickney, reduces the additional supply to just 1100 using their starting figure of 2000 dwellings, giving a gross yield on the remaining 300 ha of 3.7/ha. This compares with the FDS conservative gross yields of closer to 10/ha. Removing such a large area of highly productive land could only be justified on much higher yields and therefore by substituting for planned developments identified elsewhere in the draft FDS - effectively putting 'all the eggs in one basket.' We also do not envisage high demand for large scale community infrastructure outside the existing urban area (other than possibly schools as result of concentrating growth in one area) as suggested is needed by Mr Stickney. The level of growth projected and an ageing demographic suggests the need for more (as opposed to changing) sporting facilities away from the existing populations is likely peaking, particularly with the 2010 addition of the Regional Sports Park in Percival Road (30 ha with a possible further 8 ha extension). On this basis we doubt that this would be a requirement of the NPSUD that would justify use of HPL.

In terms of the relief sought to "placehold" the HCP for further investigation, we do not consider this particular expansion option should be considered in isolation from other expansive large scale options. It is noted the FDS is subject to review in accordance with the NPSUD on three and six-yearly cycles. During those review cycles, notable changes in trends, demand projections and resource management legislation settings will be reported.

9.2 Reverse Sensitivity Issues (FM2, FM9 and other Hastings Development areas)

A number of submissions discussed the difficulties of farming and orcharding on the urban fringe given the number of difficulties from reverse sensitivity issues such as spray drift and noise. This is a common within Hastings District, given that most of the urban area is surrounded by productive orchards. This is addressed generally in Section 5.1.3 of the Reply above and we provide specific

comments on the reverse sensitivity issues for Portsmouth Road following the discussion with Mr Aitken for Maven Collective.

One of the primary mitigation measures is for there to be an existing or created defined urban boundary. As can be seen in the Draft FDS, the preference is to locate areas where there are existing features such as a stream, waterway or road which creates a definable urban edge. While this helps reduce urban creep, it also provides a buffer between adjacent activities that can cause conflicts. Defined features such as the Southland Drain (which is more prominent than most other drains on the Heretaunga Plains) ensure that reverse sensitivities can be reduced.

Other options are to create artificial buffer zones between activities, and noise buffer structures. These can often be complimented with additional planning measures primarily in the form boundary setbacks. Many of the greenfield areas created in Hastings have a 30m setback from boundaries of the Plains Zone to ensure an appropriate measures against reverse sensitivity.

There are many options available, however these often need significant land to ensure an appropriate buffer can occur. This is part of the reason why identifying larger areas in this FDS is more appropriate, as it provides greater opportunities to mitigate these effects within the identified areas. Smaller developments often need look for alternative options to adequately manage reverse sensitivity impacts. This is also why we are careful not to over-estimate the number of dwellings that can be achieved within the FDS identified areas, as there are multiple factors that may reduce the amount of land that is actually available of buildings.

9.3 FM9 and FM2 – Dwelling Yield

Another issue raised through the Maven submission is the need to increase the number of dwelling yield likely to be realised through the FDS, providing detail that they would expect to achieve a greater density for their development. The submitter provided a high level scheme plan to contextualise this discussion. Officers maintain their position, that the detail is not yet known for us to take a less conservative view on density for this area, and therefore and current yield indications should remain. There are a variety of factors, that may mean the anticipated yield may not be achieved, and a conservative approach is preferred at this stage. As mentioned, the FDS is supportive of increased density where appropriate, and this can be reflected upon future updates as required by the NPSUD.

10.0 Strategic Infrastructure

10.1 Strategic approach to infrastructure

In our Hearings Report, Officers had recommended some amendments to Objective 10 in the draft FDS.[18] In Reply to suggestions from several submitters[19] for further amendments to Objective 10, we now consider it would be clearer if the sentiments being squeezed into Objective 10 were instead split into two objectives – objectives 10A and 10B as below.

10A. Our infrastructure is planned and designed to ~~efficiently and~~ effectively support development and be resilient.

10B. Operational and functional needs of nationally and regionally significant infrastructure is not unduly compromised by the location, design and suitability of new development.

[18] Recommendations 23-26.
[19] For example, Natural Hazards Commission and Hawke's Bay Airport Limited.

We consider these are a clearer and improved expression of an objective (or goal) compared to other suggestions that needs of significant infrastructure is merely "recognised" (a verb).

Nationally and regionally significant infrastructure (such as ports, harbours, airports, aerodromes, highways and roading networks, stopbanks, telecommunication and electricity networks etc) is key to well-functioning urban environments. It is important functional and operational needs of such vital infrastructure is not unreasonably comprised by the proximity, design and form of new urban development. In some instances, new urban developments could apply mitigation measures (e.g. setbacks, buffers, acoustic insulation, etc) so their location avoids impinging on functional and operational needs of the region's strategically important infrastructure.

As outlined in the Draft FDS itself, our Hearings Report and also in this Reply, availability of, and planned provision for, infrastructure to support and enable urban development has been central to preparation of the FDS to date. Availability of, and planned provision for, infrastructure underpins key choices of suitable preferred locations for urban development and also the associated indicative timings of development in those locations.

Notwithstanding this, the FDS should not be confused or conflated with being an infrastructure strategy or a strategy for land transport etc. Those are governed by separate legislative instruments. The relationship between the FDS and those other infrastructure strategies is one of mutual cross-pollination where each can inform the other. It is unjust for the FDS to be described as "reactionary, reacting to effects of modelled traffic movements on the existing network rather than being strategic..."[20]

In relation to strategic land transport planning, the current Regional Land Transport Plan 2024-2034 (**RLTP**) was adopted in July 2024. The RLTP's purpose is to set out the strategic direction for land transport in the **region** over the next ten years and describes what the **region** seeks to achieve to contribute to an efficient, resilient and safe land transport system. Consequently, it does not feature finer grained site-specific commercial needs for transport-related services such as service stations, refuelling facilities, truck depots, vehicle charging facilities etc.

For Hamacheck Holdings Limited, Mr Matthew Lawson presented at the Hearing and reiterated requests for the FDS to be amended to provide for a very specific type of business/industrial activity adjacent to the Hawke's Bay Expressway on a 2.4ha site. Mr Lawson was critical of transport modelling that informed both the FDS and RLTP. In response, we reiterate that the Stantec Transport Assessment Report assessed impacts of the broad-scale growth scenarios and recommended improvements for the preferred scenarios, however, no significant regional infrastructure improvements were signalled other than in vicinity of Ahuriri Station.

Respectfully, we consider the merits of Hamachek Holdings Limited's proposal for a specific activity in a specific location is better assessed via a plan change process and/or resource consent application rather than through the FDS (or RLTP). Arguably, similar facilities could be suited to other nearby locations, but no evidence has been presented to that effect. We do not recommend the FDS needs to "include" this site (160 Evenden Road) for this specific industrial use. Indeed, Mr Lawson did mention that *"the activity is to be the subject of a comprehensive application [to HDC] for subdivision consent which application will be supported by comprehensive reports on transport planning, architectural, noise, civil engineering infrastructure Report and Infrastructure Plan (sic)."*

Mr Lawson's submission goes on to suggest that the FDS should include references to options for development occurring by way of resource consents or by use of a fast-track approvals process.[21] We agree. In our Hearing Report, we had already made repeated comments that inclusion or not of

[20] Para 10 in Statement by Matthew Lawson for Hamachek Holdings Limited.
[21] Para 34 in Statement by Matthew Lawson for Hamachek Holdings Limited.

certain locations in the FDS is not determinative of a future plan change or resource consent. We remain of the view that a resource consent application pathway is one option for progressing development proposals. The FDS does not preclude that and we have recommended including additional text in Section 10.1 of the FDS regarding small sites.

10.2 Amendments to Section 10.11 of the Draft FDS

Recommendations 24 and 25 in our Hearing Report suggested adding additional commentary about the operational and functional needs of strategic infrastructure. Given the alterations now recommended above to Objective 10 into two objectives 10A and 10B, we recommend some consequential amendments to Section 10.11.

"The NPSUD requires… electricity and gas distribution.

This FDS also recognises the importance of operational and functional needs of nationally and regionally significant infrastructure. The location, design and suitability of new urban development must not unduly compromise the operational and functional needs of nationally and regionally infrastructure now or in the future. Nationally and regionally significant infrastructure refers to those types of infrastructure that are of national or regional significance – more than just local importance.

Nationally and regionally significant infrastructure

It is important that future urban development is appropriately located so that the safe and efficient development, operation and maintenance of nationally and regionally significant infrastructure is not compromised now or in the future. Careful consideration also needs to be given to protecting communities' health and safety and amenity values when planning for urban activities in proximity to nationally and regionally significant infrastructure."

We recommend a consequential amendment to section 9.2 of the Draft FDS so it would read:

"Section 9.2 Constraints

There is a wide range of development constraints that have been identified within the FDS study area. These are summarised in Figure 12 and include areas for the safe operation and functional needs of nationally and regionally significant infrastructure, coastal hazards,…"

10.3 Amendments to Draft FDS Figure 12 (Constraints summary)

Recommendation 26 in our Hearings Report was an invitation for both airport companies (Hastings Aerodrome and Hawke's Bay Airport) to present information at the hearing about what additional development protection is needed to ensure their operational and functional needs are met now and into the future. Notwithstanding our comments above regarding reverse sensitivity issues, both airport companies made representations that the FDS should at least record airport noise contours as one of several 'constraints' to urban development. We recommend FDS Figure 12 ('summary of development constraints across the FDS study area') be amended to include extent of the following:

a) 'Airport Noise Boundary' for Hawke's Bay Airport as published in the operative Napier District Plan[22]

[22] We understand that through public submissions on the Napier proposed district plan, Hawke's Bay Airport Limited has requested amendments to the Airport Noise Boundary that would better reflect acoustic modelling work commissioned by HBAL for projected airport operational noise over the next 15 years. Decisions on that request are yet to be issued by Napier City Council.

b) 'Outer Air Noise Boundary' (55 dBA Ldn contour) for Hastings (Bridge Pa) Aerodrome as published in the partly operative Hastings District Plan.

Similarly, we recommend Figure 12 be amended to also include Transpower Limited's strategic corridors for electricity transmission lines and substations.[23] Whilst many of those corridors fall outside the FDS study area, there are parts of those corridors and stations within the FDS study area.

11.0 Updated recommendations

The further recommendations for changes to the Draft FDS are summarised in the table below.

	Summary of updated recommendation
29	Include the following statement in Section 10.1 of the FDS: *The FDS is focussed on identifying strategic opportunities for growth across the urban areas of Napier and Hastings. Except in some circumstances, smaller sites with capacity for less than 100 dwellings or singular business/commercial development proposals are not identified. It is intended that proposals of this scale, or other unanticipated development, are considered on their merits through a plan change/review and/or resource consent processes. Collectively, development on smaller sites may make a meaningful contribution to housing and business capacity and this will be regularly monitored and documented through the Councils' three yearly Housing and Business Capacity Assessments.*
30	Amend the prioritisation for Arataki Extension (HN2b) and Brookvale Extension (HN6) from long term to short-medium term and amend Figure 23 and Table 4 and Table 6 accordingly.
31	Amend Objective 10 of the Draft FDS as follows: *10A. Our infrastructure is planned and designed to efficiently and effectively support development and be resilient.* *10B. Operational and functional needs of nationally and regionally significant infrastructure is not unduly compromised by the location, design and suitability of new development.*
32	Further amend Section 10.11 of the Draft FDS as follows: *"The NPSUD requires... electricity and gas distribution.* *This FDS also recognises the importance of operational and functional needs of nationally and regionally significant infrastructure. The location, design and suitability of new urban development must not unduly compromise the operational and functional needs of nationally and regionally infrastructure now or in the future. Nationally and regionally significant infrastructure refers to those types of infrastructure that are of national or regional significance – more than just local importance.* *Nationally and regionally significant infrastructure* *It is important that future urban development is appropriately located so that the safe and efficient development, operation and maintenance of nationally and regionally significant infrastructure is not compromised now or in the future. Careful consideration also needs to be*

[23] Sourced from https://www.transpower.co.nz/our-work/industry/our-grid/maps-and-gis-data

	given to protecting communities' health and safety and amenity values when planning for urban activities in proximity to nationally and regionally significant infrastructure."
33	Make consequential amendments to Section 9.2 of the Draft FDS consistent with recommendation 32 above: *"Section 9.2 Constraints* *There is a wide range of development constraints that have been identified within the FDS study area. These are summarised in Figure 12 and include areas for the safe operation and functional needs of nationally and regionally significant infrastructure, coastal hazards,..."*
34	Amend Figure 12 of the Draft FDS to include the extent of the following: • 'Airport Noise Boundary' for Hawke's Bay Airport as published in the operative Napier District Plan; • 'Outer Air Noise Boundary' (55 dBA Ldn contour) for Hastings (Bridge Pa) Aerodrome as published in the partly operative Hastings District Plan; and • Transpower Limited's strategic corridors for electricity transmission lines and substations.

Monday, 19 May 2025

HERETAUNGA HASTINGS DISTRICT COUNCIL

Te Hui o Te Kaunihera ā-Rohe o Heretaunga

Hastings District Council: Napier-Hastings Future Development Strategy Joint Committee Meeting

Ngā Miniti

Minutes

Te Rā Hui: Meeting date:	**Monday, 19 May 2025**
Venue	**Council Chamber Ground Floor Civic Administration Building Lyndon Road East Hastings**
Time start - end	**1.03pm – 2.18pm**

Go to
www.hastingsdc.govt.nz
to see all documents

HASTINGS DISTRICT COUNCIL
207 Lyndon Road East, Hastings 4122 | Private Bag 9002, Hastings 4156
Phone **06 871 5000** | **www.hastingsdc.govt.nz**
TE KAUNIHERA Ā-ROHE O HERETAUNGA

Monday, 19 May 2025

HERETAUNGA HASTINGS DISTRICT COUNCIL

Te Hui o Te Kaunihera ā-Rohe o Heretaunga

Hastings District Council: Napier-Hastings Future Development Strategy Joint Committee Meeting

Ngā Miniti

Minutes

Te Rārangi Upoko

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HERETAUNGA HASTINGS DISTRICT COUNCIL

Monday, 19 May 2025

Te Hui o Te Kaunihera ā-Rohe o Heretaunga

Hastings District Council: Napier-Hastings Future Development Strategy Joint Committee Meeting

Ngā Miniti
Minutes

Kua Tae ā-tinana:
Present:

Koromatua
Chair: Mayor Sandra Hazlehurst (HDC)
Deputy Chair: Tania Eden (Mana Ahuriri Trust)

Members:
Hawke's Bay Regional Council
Cr Jock Mackintosh (HBRC)
Cr Martin Williams (HBRC)

Napier City Council
Mayor Kirsten Wise (NCC)
Cr Ronda Chrystal (NCC)

Hastings District Council
Cr Alwyn Corban (HDC)
Cr Marcus Buddo (HDC Alternate)

Tamatea Pōkai Whenua
Dr Darryn Russell (Tamatea Pōkai Whenua)
Laura Kamau (Tamatea Pōkai Whenua)

Mana Ahuriri Trust
Chad Tareha (Mana Ahuriri Trust)
Evelyn Ratima (Mana Ahuriri Trust Alternate)

Maungaharuru Tangitū Trust
Mara Andrews (Maungaharuru Tangitū Trust)

Kua Tatū:
In attendance:

Deputy Chief Executive – Bruce Allan
Group Manager: Democracy and Emergency Management – Craig Cameron
Group Manager: Planning and Regulatory Services – John O'Shaughnessy
Team Leader Environmental Policy – Craig Scott
Director – Growth and Development – Raoul Oosterkamp
Principal Advisor: District Development – Mark Clews

<File No. CG-17-27-00224>

HERETAUNGA HASTINGS DISTRICT COUNCIL

	Manager, Democracy and Governance Services – Louise Stettner Democracy and Governance Advisor – Caitlyn Dine Hawke's Bay Regional Council – Gavin Ide Mana Ahuriri Trust – Parris Greening Tamatea Pōkai Whenua – Heather Bosselmann
Kei Konei: Also present:	Rachel Morgan – Barkers and Associates Members of the public were present in the gallery

Chad Tareha opened the meeting with a karakia.

1. APOLOGIES – *NGĀ WHAKAPĀHATANGA*

Mayor Hazlehurst/Councillor Tareha

That apologies for absence from Tania Hopmans and Councillor Boag be accepted.

CARRIED

2. CONFLICTS OF INTEREST - *HE NGĀKAU KŌNATUNATU*

There were no declarations of conflicts of interest.

3. CONFIRMATION OF MINUTES - *TE WHAKAMANA I NGĀ MINITI*

No minutes were confirmed.

4. INDEPENDENT HEARINGS PANEL 'RECOMMENDATIONS REPORT' ON THE DRAFT 'NAPIER HASTINGS FUTURE DEVELOPMENT STRATEGY'

Team Leader Environmental Policy, Craig Scott, spoke to the report and presented a PowerPoint presentation (CG-17-27-00225).

Mr Scott, Rachel Morgan from Barkers and Associates, and Principal Advisor: District Development, Mark Clews, responded to questions from the Joint Committee.

The recommendations, as set out in the report, were moved by Mayor Wise and seconded by Councillor Chrystal.

Mayor Wise/Councillor Chrystal

A) That the Napier-Hastings Future Development Strategy Joint Committee (FDSJC) receive the Report titled 'Independent Hearings Panel recommendations on the Future Development Strategy' dated 19 May 2025.

B) That the FDSJC receive and endorse the Independent Hearings Panel (IHP) Recommendation's report attached as Attachment One and the IHP Recommended Draft Future Development Strategy attached as Attachment Two.

C) That the FDSJC recommend to the Partner Councils (Napier City Council, Hastings District Council, Hawke's Bay Regional Council), that the IHP Recommended Future Development Strategy for the draft Napier Hastings Future Development Strategy (FDS) be adopted.

D) That the FDSJC notes that subject to resolution of Recommendation B & C, the Chief Executive will prepare a 'Report for the Partner Councils', which reports on the recommendations of the FDSJC.

E) That after adoption of the final FDS by the Partner Councils, the FDSJC meet to consider any future implementation requirements of the FDS.

Councillor Corban moved an amendment to the motion which was seconded by Councillor Williams. The amendment was lost.

Councillor Corban/Councillor Williams

With the following recommended exclusions:

i) Exclude Middle Road HN3a and Hn3b

ii) Exclude Wall Road H5b

With the reasons for these exclusions the sites in i) and ii) are on highly productive land and are not required to meet demand capacity under the Future Development Strategy.

(3 VOTES FOR / 5 VOTES AGAINST / 3 ABSTAINED)

AMENDMENT LOST

Councillor Williams moved an amendment to the motion which was seconded by Councillor Mackintosh. The amendment was carried.

Councillor Williams/Councillor Mackintosh

With the following recommended exclusion:

i) Riverbend Road NC4b

With the reasons for this exclusion being the site presents as a significant flooding risk and is not conducive to a well-functioning urban environment and is not required to meet demand capacity under the Future Development Strategy.

(8 VOTES FOR / 3 VOTES AGAINST)

AMENDMENT CARRIED

The amendment to the original motion became the new substantive motion.

Mayor Wise/Councillor Chrystal

A) That the Napier-Hastings Future Development Strategy Joint Committee (FDSJC) receive the Report titled 'Independent Hearings Panel recommendations on the Future Development Strategy' dated 19 May 2025.

B) That the FDSJC receive and endorse the Independent Hearings Panel (IHP) Recommendation's report attached as Attachment One and the IHP Recommended Draft Future Development Strategy attached as Attachment Two. With the following recommended exclusion:

i) Riverbend Road NC4b

With the reasons for this exclusion being the site presents as a significant flooding risk and is not conducive to a well-functioning urban environment and is not required to meet demand capacity under the Future Development Strategy.

C) That the FDSJC recommend to the Partner Councils (Napier City Council, Hastings District Council, Hawke's Bay Regional Council), that the IHP Recommended Future Development Strategy for the draft Napier Hastings Future Development Strategy (FDS) be adopted.

D) That the FDSJC notes that subject to resolution of Resolutions B) & C) above, the Chief Executive will prepare a 'Report for the Partner Councils', which reports on the recommendations of the FDSJC.

E) That after adoption of the final FDS by the Partner Councils, the FDSJC meet to consider any future implementation requirements of the FDS.

(7 VOTES FOR / 4 VOTES AGAINST)

SUBSTANTIVE MOTION CARRIED

Mayor Wise and Councillor Chrystal voted AGAINST the substantive motion.

5. MINOR ITEMS - *NGĀ TAKE ITI*

There were no additional business items.

6. URGENT ITEMS - *NGĀ TAKE WHAKAHIHIRI*

There were no extraordinary business items.

Chad Tareha closed the meeting with a karakia.

The meeting closed at 2.18pm

Confirmed:

Chairman:

Date:

Addition to page 59, directly following Ahuriri Station discussion

Riverbend (NC4b)

Riverbend (NC4b) has long been identified as a potential location for future urban development, including through the Heretaunga Plains Urban Development Strategy 2010 and 2017 editions. Active planning work has been undertaken over recent years involving the landowner and Napier City Council.

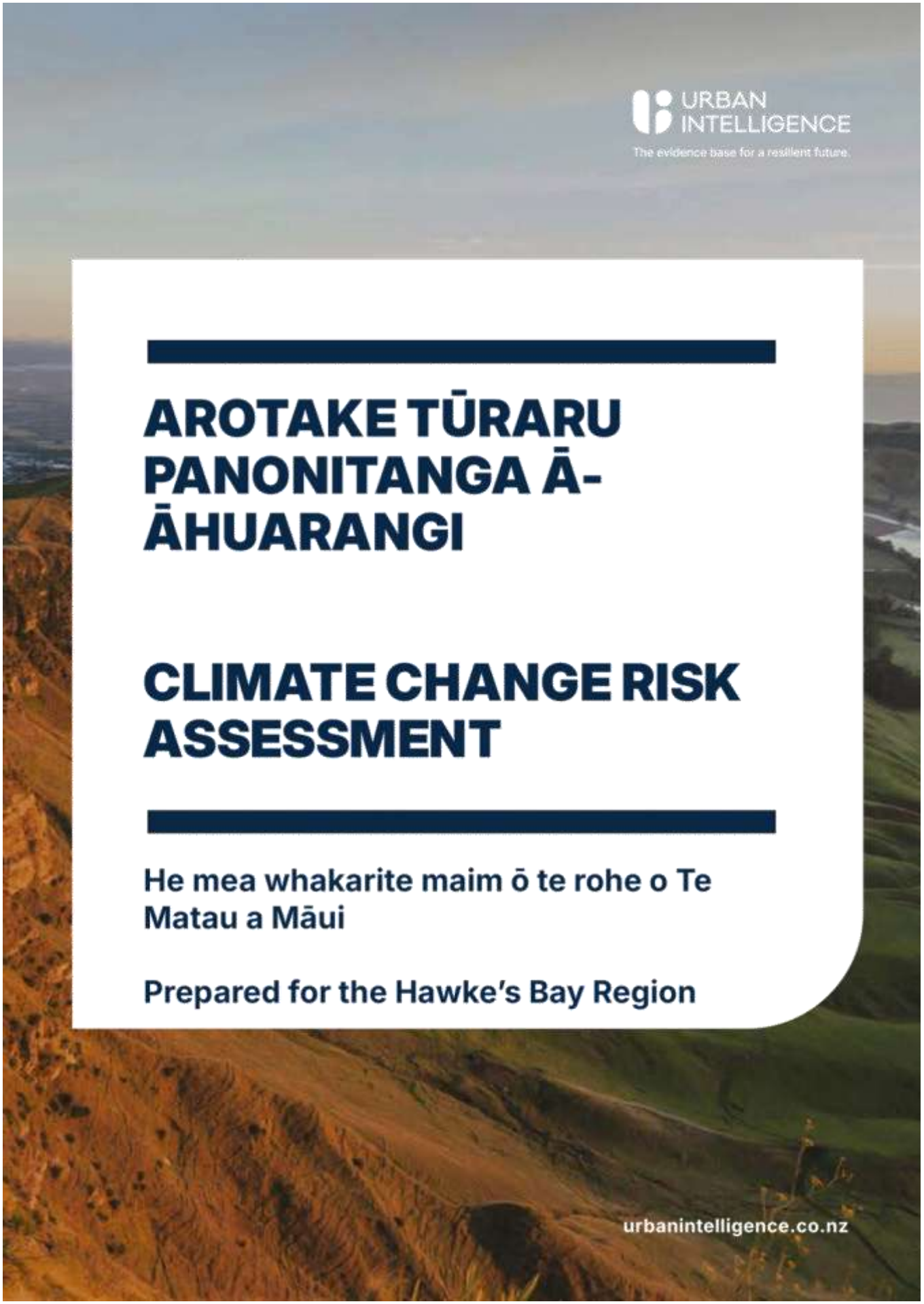
HBRC has expressed concerns about the potential for development at Riverbend given the site's susceptibility to flooding risk and other natural hazards. There is well documented evidence of flooding affecting the site (for example, recent events in November 2020 and February 2023). The low-lying topography means the site is vulnerable to runoff and flooding, including from the existing neighbouring residential area.

Significant site-specific engineering works would be required to manage stormwater and flooding effects arising from development at Riverbend, including to maintain important environmental values to an acceptable level. Additional land will be required to manage these effects outside of the existing identified NC4b area if mitigation works cannot be achieved onsite. This is acknowledged in a footnote to Table 3 of the FDS.

The inclusion of Riverbend NC4b in the FDS does not predetermine the outcome of subsequent planning process, including structure planning, plan changes, and resource consent applications.

As part of any application for consent or rezoning proposal to develop the Riverbend NC4b site, further detailed work will need to be undertaken to ensure the site's suitability for development and necessary mitigation of stormwater and flooding impacts. This should include consideration of 'residual risks' (i.e. circumstances where events may exceed design and construction capacity of stormwater mitigation works) as has been recommended in the 2024 Hawke's Bay Independent Flood Review Panel's report.

DRAFT


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Arotake Tūraru Panonitanga ā-Āhuarangi ki Te Matau-a-Māui

Hawke's Bay Regional Climate Change Risk Assessment

Prepared by Urban Intelligence

Revision	Description	Date
Version 0.1	Discussion Document	3 September 2024
Version 1.0	Draft Regional Climate Change Risk Assessment	13 January 2025
Version 2.0	Draft Regional Climate Change Risk Assessment, reflecting feedback from council staff review.	24 February 2025
Version 2.1	Minor updates and revisions. Figure updates.	17 March 2025
Version 2.2	Minor updates and revisions.	24 March 2025
Version 2.3	Updating executive summary and minor word changes	14 April 2025
Version 2.4	Updates to references	5 May 2025

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Whakarāpopototanga Matua | Executive Summary

Whakarāpopototanga Matua | Executive Summary

This report presents the findings of a regional climate change risk assessment for the Hawke's Bay region. It aims to increase understanding of the broad range of climate change risks the region faces, now and over the longer term. It is a report for everyone; councils, iwi/hapū, local communities, sectors, businesses and individuals.

This first pass risk assessment is a starting point. It brings together best available, suitable information and evidence to provide a comprehensive snapshot in time about how the impacts of a changing climate will likely be experienced across the region. This report includes an overview of risks at a regional and district level, using a consistent analytical approach while acknowledging the variations in underlying data. The findings of this assessment therefore provide a foundational, evidence base to support risk-informed decisions and adaptation planning across the region.

This report is the first regional assessment of climate change risks for Hawke's Bay. It synthesises existing data and knowledge with expert analysis to provide a comprehensive understanding of how natural hazards and climate change may affect the region. While understanding of climate change will continue to evolve, this assessment provides a foundation for managing these risks while identifying knowledge gaps that can be addressed through future work.

Adaptation is a locally-led process of managing risks over time. It is a continuous process, one of assessing risks, planning, implementing, monitoring and adjusting as needed. This regional assessment identifies hazards and a broad range of climate-related risks; assessing risks is an important foundation for adaptation action (Figure 1.1). Yet, as the Climate Change Commission acknowledged in 2024, Aotearoa New Zealand is not moving at the pace required to address the critical climate issues facing our communities. This risk assessment provides the communities of Hawke's Bay an opportunity to take decisive steps toward addressing these critical climate-related challenges.

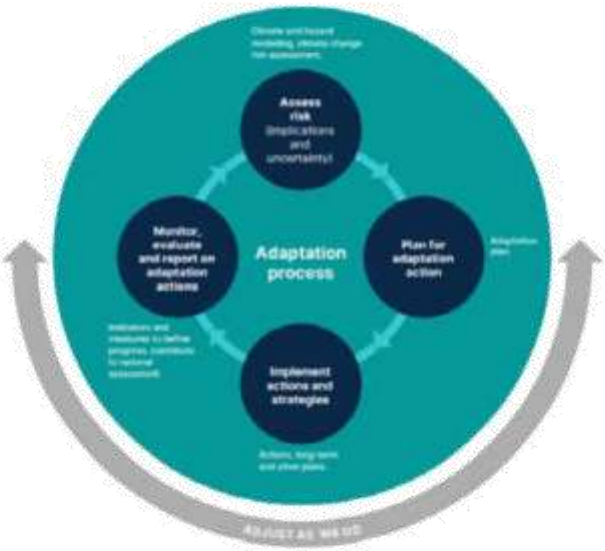


Figure 1.1. The Adaptation Process.

Risk Informed Decision Making

Climate change poses significant and increasing risks to communities and to the built and natural environments across Hawke's Bay. Councils and communities are familiar with managing risk posed by natural hazards, but climate change is impacting many of the assumptions underpinning our way of life, including how and where we live.

Risk arises when there is uncertainty about how something a community or individual cares about might be affected, recognising that different individuals and communities may have diverse priorities and objectives. That is, risk is the potential for and severity of consequences in the presence of uncertainty. Following best practices as outlined by the Ministry for the Environment's guidance and international standards, this assessment incorporates both quantitative and qualitative methods and includes:

- consideration of multiple hazards (including coastal flooding, river and rainfall flooding and landslide)
- use of the latest climate projections and sea-level rise scenarios. Following recommendations from the First National Adaptation Plan and updated Coastal Hazards and Climate Change Guidance, SSP2-4.5 and SSP5-8.5 scenarios were applied and projected out to 2040 and 2090, and 2130
- assessment of elements such as residential, commercial and industrial buildings, roads, three waters infrastructure, socioeconomic metrics including deprivation index, employment and GDP contribution
- incorporation of local knowledge and values, and
- assessment of risks across value domains (Natural Environment, Built Environment, Human, Economic, Governance and Iwi/Māori).

This risk assessment is also based on current information about the present state i.e. it does not account for future changes in land-use, investment in risk reduction measures or population changes. This is why risk assessments must be periodically undertaken as part of the iterative adaptation process whereby risks change over time[1].

This assessment provides a foundation for understanding climate risks while highlighting opportunities to enhance hazard modelling, climate information, and other related data. Currently, hazard modelling varies significantly between districts in methodology, coverage, and how it accounts for risk reducing measures (e.g. flood protection). This variability in datasets means it is not possible to make direct comparisons of findings in this assessment between different districts.

[1] For example, the National Climate Change Risk Assessment is undertaken every six years.

Hazard Data Limitations and Opportunities

This assessment provides a foundation for understanding climate risks while identifying data limitations that present opportunities for improvement. Currently, hazard modelling varies significantly between districts in methodology, coverage, and how it accounts for risk-reducing measures (e.g., flood protection).

As shown in Table 1-1, the availability and quality of hazard data differs across the region, with some districts having detailed information for certain hazards while others have gaps. This being the case, the assessment should not be used to compare risk between the districts. Instead, it identifies risks within each district that need attention.

Developing consistent, comprehensive climate-related hazard modelling would strengthen future risk assessments and enable more nuanced vulnerability analysis beyond the exposure assessment presented here. This presents a key opportunity for regional collaboration to build a stronger evidence base for adaptation planning and prepare for the changing climate.

Table 1-1. Summary of Hazard Data Availability and Suitability Across Hawke's Bay Districts

Hazard	Central Hawke's Bay	Hastings	Napier	Wairoa	Regional Consistency
Coastal Flooding	Limited (extent only)	Moderate (multiple datasets)	Moderate (multiple datasets)	Limited (extent only)	Varying methodologies and timeframes
River & Rainfall Flooding	Moderate (includes climate scenario)	Low (limited coverage, no climate scenarios)	Moderate (flood depths, single timeframe)	Low (2007 data, no climate scenarios)	Incompatible return periods and scenarios
Shallow Groundwater	No suitable data	No suitable data	Moderate (current day only)	No suitable data	Substantial data gap
Landslides	Moderate (susceptibility mapping)	Moderate (susceptibility mapping)	Moderate (susceptibility mapping)	Moderate (susceptibility mapping)	Consistent approach, but lacking climate change
Coastal Erosion	No suitable data	High (detailed mapping)	High (detailed mapping)	No suitable data	No suitable data available for Central Hawke's Bay or Wairoa
Liquefaction	No suitable data	Moderate (three scenarios)	High (three scenarios)	No suitable data	No suitable data available for Central Hawke's Bay or Wairoa
Tsunami	Low (extent only)	High (multiple scenarios)	High (multiple scenarios)	Low (extent only)	Varying detail and scenarios
Wildfire	No suitable data	No suitable data	No suitable data	No suitable data	No suitable data

Suitability ratings: "High" indicates comprehensive data suitable for adaptation planning; "Moderate" indicates partial data with some limitations; "Low" indicates minimal data with significant limitations; "No suitable data" indicates absence of data appropriate for adaptation planning.

Key Regional Assessment Findings

Climate Change is projected to substantially alter meteorological patterns and environmental conditions in the Hawke's Bay Region in the coming decades, with significant implications for the human, built and natural environments. Ex-tropical cyclones are likely to become more intense, packing stronger winds and heavier rainfall. Fire seasons will get longer and more dangerous, with increased risks of wildfires. Droughts will become more common, putting additional stress on primary industries and water resources. The region will see more hot days and fewer overnight frosts. This means warmer temperatures overall, which will affect everything from farming to local wildlife.

Natural Environment. Climate change will exacerbate existing threats to Hawke's Bay biodiversity. These can include increased pressures from mammalian predators, faster spread of invasive species, accelerated habitat loss and fragmentation, and increased sedimentation in waterways following extreme rainfall events. Native species already under pressure will face additional stresses as temperature and rainfall patterns shift. Marine environments will experience rising temperatures, ocean acidification, and sea level rise, affecting coastal habitats and marine species.

Built Environment. Some of the region's buildings and infrastructure face increasing risks from multiple hazards. Coastal flooding will progressively impact more assets as sea levels rise, particularly in low-lying urban areas. River and rainfall flooding poses immediate and increasing risks to commercial, residential, and industrial buildings across all districts. Infrastructure networks including transportation, electricity distribution, and three waters systems show substantial exposure, with potential for cascading failures during extreme events.

Human Domain. Climate change will impact community wellbeing through both direct exposure to hazards and indirect effects on social systems. Vulnerable populations, including those in areas of higher socioeconomic deprivation, face disproportionate risks from flooding and isolation. Mental health impacts are expected to increase from both acute disaster events and chronic stressors like drought or recurring floods. Community cohesion may be challenged as climate impacts affect liveability in certain areas. Access to essential services could be compromised during hazard events, with isolation risks particularly high in rural areas.

Economic Domain. The regional economy faces significant disruption from climate change, with both direct damage to assets and broader challenges to tourism, industries, manufacturing and the service sector region wide. Primary industries including agriculture, horticulture and forestry will experience shifting seasonal patterns affecting production cycles, increased water stress during critical growing periods, and greater risks from extreme weather events. Manufacturing, retail, and service sectors face substantial risks from infrastructure disruption and isolation, potentially affecting supply chains and workforce availability. Tourism may experience both challenges from extreme events and opportunities from longer summer seasons.

Governance Domain. Climate change presents complex challenges for the region's governance domain. Unmitigated climate impacts may be perceived by communities as a failure of authorities to protect property and life, eroding trust in governing institutions. This erosion will be accelerated where impacts exacerbate existing socioeconomic inequities. Key governance challenges include balancing immediate priorities with long-term planning, working across traditional disciplinary boundaries, and maintaining progress through political cycles. The potential for misalignment between national policy frameworks and local implementation capacity creates additional complexity, as councils must translate broad strategic direction into practical local actions with limited resources. The increasing frequency of emergency response operations further strains governance capacity and potentially diverts resources and funds from adaptation planning.

Iwi/Māori Domain. Māori in the region face unique exposure, risks and sensitivities to climate change. Key hazards as identified in this assessment are river, rainfall, and coastal flooding. The harms associated with being exposed to these hazards can be exacerbated by the existing health and socioeconomic inequities that many Māori experience. Such hazards can undermine Māori cultural wellbeing through the degradation of and/or loss of connection to the natural environment and damage and/or loss of cultural sites and associated practices.

Key Findings for the Central Hawke's Bay District

- **River and rainfall flooding risk is the most severe hazard influenced by climate change for Central Hawke's Bay** with commercial properties and residential properties exposed.
- **Three waters infrastructure is susceptible to flooding,** with stormwater pipes exposed.
- **Limited direct exposure to landslides**, with the greatest risk being to industrial buildings. Isolation associated with landslides, however, is a risk for residents.
- **Multiple sectors face disruption and damage from climate-related events**
  - The agriculture sector faces isolation risk from landslides
  - The transport sector shows exposure to river and rainfall flooding
  - The manufacturing sector is vulnerable to multiple hazards, including landslide isolation risk.
- **Increasing risk of economic shocks and disruption from seasonal variability,** with a 3.0–3.5°C temperature increase by 2081-2100 under SSP3-7.0 and significant seasonal rainfall changes affecting primary industries.
- **Areas of high-moderate deprivation are more exposed to flooding and isolation risks**. Areas of lower deprivation (NZDep1-4) are more exposed to landslides and isolation associated with landslides.

Key Findings for the Hastings District

- **River and rainfall flooding risk is the most severe hazard for Hastings**, with commercial properties, and residential properties exposed and a high proportion of the population at risk of isolation.
- **Notable exposure of three waters infrastructure**, with the wastewater treatment plant, stormwater infrastructure and wastewater infrastructure directly exposed to more than 10cm of flooding from river and rainfall.
- **Coastal flooding exposure is increasing** with climate change, affecting residential properties
- **Landslides** are a significant source of isolation risk, with the potential to isolate residents, largely in rural areas. Landslide exposure is concentrated in less deprived areas, with the majority of exposed properties located in NZDep1-2 areas.
- **River and rainfall flooding poses the greatest risk to local economic activity**, with commercial and service sectors facing the greatest risk of direct exposure and isolation.
- **Areas of high deprivation are more exposed to flooding and isolation risks,** with those living in areas of high deprivation (NZDep7-10) the most directly exposed to more than 10cm of river and rainfall flooding, and at greatest risk of isolation.
- **Increasing risks to communities and primary sector industry from an increase in temperatures,** with a projected **3.1°C temperature increase** by 2100 under SSP3-7.0, leading to more hot days (>25°C) annually and a decrease in winter rainfall.

Key Findings for Napier City

- **Coastal flooding is a significant and increasing risk.**
- **River and rainfall flooding also poses a significant risk** to the built environment including lifeline infrastructure, residential properties, commercial properties and industrial buildings.
- **Three waters infrastructure is significantly vulnerable to all types of flooding**, particularly water supply in a 1% AEP river and rainfall flood event, and wastewater exposure to coastal flooding by 2100 (SSP2-4.5).
- **High risk of business isolation during river, rainfall, and coastal flooding**, with the potential for significant disruption to Napier's economy, even in areas not directly flooded.
- **Increasing risk of economic shocks and disruptions from seasonal variability** with a 3.0–3.5°C temperature increase by 2081-2100 under SSP3-7.0, and increased water stress affecting primary industries.
- **Areas of high deprivation are more exposed to flooding and isolation risks**, with those living in areas of high deprivation (NZDep7-10) the most directly exposed to more than 10cm of river and rainfall flooding and coastal flooding.

Key Findings for the Wairoa District

- **River and rainfall flooding is the most severe hazard**, affecting residential properties and the manufacturing sector.
- **High risk of business isolation during landslide events**, particularly for primary industries and mining operations.
- **Three waters infrastructure** (including pipes and components such as pump stations) **is significantly exposed to river and rainfall flooding**.
- **Increasing risk of economic shocks and disruption from seasonal variability**, and significant seasonal rainfall changes affecting primary industries.
- **High population vulnerability to hazard impacts** and cascading risks due to low-income levels, dispersed population and isolation exposure. Significant number of residents exposed to more than 10cm of river and rainfall flooding. High proportion of residents exposed to more than 10cm of coastal flooding (by 2130 SSP5-8.5) are living in areas of high deprivation (NZDep9-10).
- **Limited natural hazards modelling** makes climate change adaptation planning challenging.

Next Steps and Opportunities for Further Action

This assessment provides a foundation for understanding climate risks in Hawke's Bay while highlighting opportunities for continued development of the region's climate adaptation capacity. Key opportunities include:

Enhancing the regional evidence base: Developing consistent hazard modelling across districts would substantially strengthen future risk assessments and adaptation planning. Priorities include comprehensive flood modelling, coastal assessments, groundwater monitoring, and improved understanding of infrastructure vulnerabilities.

Supporting infrastructure resilience: Continued collaboration with lifeline providers and the Hawke's Bay Lifelines Group to examine interdependencies between critical systems will strengthen regional resilience planning.

Enabling Māori-led adaptation: The findings can support climate adaptation and resilience kaupapa across the region by weaving together mātauranga Māori with technical assessments to strengthen understanding of climate risks.

Integrating climate risk considerations: Councils and organisations can embed climate risk considerations into operations and long-term strategies through regional guidelines, monitoring frameworks, and collaborative initiatives.

Empowering locally-led action: Each district can deepen their understanding through local assessments of vulnerable infrastructure and community engagement to define adaptation priorities and risk tolerances that reflect local values.

This risk assessment marks a critical starting point in Hawke's Bay's climate adaptation journey. By identifying risks and data gaps, it creates a foundation for coordinated, evidence-based action across the region. As the Climate Change Commission acknowledged in 2024, Aotearoa New Zealand is not moving at the pace required to address the critical climate issues facing our communities. This risk assessment provides the communities of Hawke's Bay an opportunity to take decisive steps toward addressing these critical climate-related challenges. Through combining regional leadership with locally-led adaptation planning—informed by consistent, high-quality hazard data and meaningful community engagement—Hawke's Bay can build the resilience needed to thrive in a changing climate.

02

Kupu whakataki
Introduction

1 Introduction

1.1 Purpose and scope

This report presents the findings of the first regional climate change risk assessment for the Hawke's Bay region. It aims to increase understanding of the broad range of climate change risks the region faces, now and over the longer term. It is a report for everyone; councils, iwi/hapū, local communities, sectors, businesses, and individuals.

This first pass risk assessment is a starting point. It synthesises the best available suitable information and evidence and aims to provide a comprehensive snapshot in time of what is known right now about the ways that the impacts of a changing climate will likely be experienced across the region. The report includes an overview of risks at a regional and district level, with selected hazards analysed using a consistent methodology while recognising the variations in data quality and coverage between districts. The findings of this assessment therefore are the first step in providing a foundational evidence base to support risk-informed decisions as well as adaptation planning and asset management planning across the region.

While there are key findings for each district, this initial assessment is focused on establishing a **structured approach to climate risk assessment to enable and accelerate further risk assessment and adaptation planning at both local and regional levels.** As such, this first pass assessment does not compare or prioritise the risks identified at regional and district levels, nor does it identify risks at a more localised or property scale. This report also does not extend to the next step of making recommendations for councils or communities on what the appropriate adaptation responses are to address risks discussed in this report.

The nature of the information available to inform this first assessment means the focus is on the exposure of people and assets to climate-exacerbated natural hazard events. This focus does not cover all natural hazard events, for example earthquakes, tsunami, volcanoes and is limited by available information in others such as wildfire. Nor does it provide detailed exposure and vulnerability analysis of ecosystems, including how ecosystem services will be affected by climate change and what impacts that will have on people and assets.

Despite variations in available datasets for each district, a consistent approach has been taken to assess risk. Coastal flooding, river and rainfall flooding, and landslides were selected as the hazards to analyse at a district level. Specifically, this assessment:

- evaluates the exposure and potential impacts to selected climate hazards on elements within the Hawke's Bay region
- considers both current and future risks under different climate change scenarios, including relative sea-level change projections specific to the Hawke's Bay region (where data is available)
- assesses social and environmental implications alongside physical and economic impacts.

While a consistent approach has been taken to assess risk, the variability of available hazard data means that the district-level findings in this report cannot be directly compared.



Figure 1.1. The Adaptation Process

1.2 The role of climate change risk assessments

Risk assessments provide decision-makers with an evidence base to support and inform future planning, identifying what is known as well as what is unknown. The findings of this risk assessment will support councils and communities within Hawke's Bay to make decisions about prioritisation of risks, and adaptation actions to reduce these risks. It will also support the region to capitalise on adaptation opportunities that arise in the process of adjusting to a changing climate.

Adaptation: A locally-led process

Adapting to climate change is a process of managing risk over time – of identifying hazards, putting in place plans to address prioritised risks, implementing adaptative plans (including adaptation solutions or options) and evaluating how effective action has been in reducing risks over time (Figure 1.1).

Understanding risk is an ongoing process because information about hazards and the trajectory of climate change continues to change. This assessment builds on previous work on climate hazards, including coastal hazards, flooding risks and climate projections for the region. It integrates this information with other sources to form a greater understanding of the range of climate risks for Hawke's Bay. As more data is gathered, and actions are taken to reduce risks over time, the regional and district risk profiles are expected to change.

While national-level planning and frameworks are crucial for enabling adaptation, climate impacts are felt locally, and effective adaptation ultimately requires local action. The Climate Change Commission's 2024 report on adaptation progress emphasises that "existing legislative, planning, and decision-making frameworks are not well-suited to planning for and dealing with changing and uncertain risks from climate change" [1]. In this context, local risk assessments and adaptation planning become even more critical.

This first assessment is a key step in the region's journey of adapting to the impacts of climate change and is an important example of local-level action in the face of global and national-level challenges.

Why conduct risk assessments?

Risk assessments help communities and decision-makers understand what is at stake, where vulnerabilities exist, and what they need to know more about. By systematically evaluating hazards and their potential impacts, they highlight priorities and reveal important knowledge gaps. This information provides a foundation for local climate adaptation planning.

While often presented as sequential steps, the Ministry for the Environment's (MfE) ten-step decision cycle (Figure 1.2) is best understood as an iterative process where steps can overlap and be revisited as understanding deepens [2]. The cycle begins with setting context and preparing (Step 1) and assessing hazards (Step 2), and these initial assessments are typically refined through community engagement about values and objectives (Step 3) which then inform more detailed risk assessments (Step 4).



Figure 1.2. MfE's 10-step decision cycle for climate and coastal adaptation planning [2].

This report addresses elements of Steps 1 through 4. It provides a robust technical foundation by systematically analysing available hazard information and evaluating potential impacts across the region. However, it is recognised that further community engagement will be needed to fully understand local values, vulnerabilities, and priorities.

The findings presented here should therefore be viewed as a living document that will evolve as:

- detailed local hazard information becomes available
- communities share their knowledge and priorities
- understanding of vulnerabilities deepens through engagement
- adaptation planning progresses through later steps in the cycle
- implementation of adaptation plans reduce risk.

This approach allows for immediate progress on understanding and addressing climate risks while acknowledging that adaptation planning is an ongoing process that requires regular review and adjustment as circumstances change.

2 Context

2.1 Risk in a climate change context

Describing risk

Climate change poses significant and increasing risks to communities and natural environments across Hawke's Bay. Councils and communities are familiar with managing risk posed by natural hazards, but climate change is impacting many of the assumptions underpinning our way of life, including how and where we live.

Extreme weather events like flooding, ex-tropical cyclones and other climate-related natural hazards are expected to worsen over time, with changes in frequency and increases in severity. Climate change also poses other challenges, like slow on-set changes (such as sea-level rise) and shifts in seasonal weather patterns and variability (such as hotter days, longer wet seasons). Understanding the different risks posed by climate change is critical to knowing where, when, and how to take action to prepare for a changing climate. These changes require proactive planning and adaptation to reduce their negative impacts and maximise opportunities.

Risk arises when something of value may be impacted. That risk is the potential for and severity of consequences in the presence of uncertainty [3]. Figure 2.1 illustrates how hazards/changes can impact elements or assets that a community cares about, and how they might intervene to reduce or manage the risk.

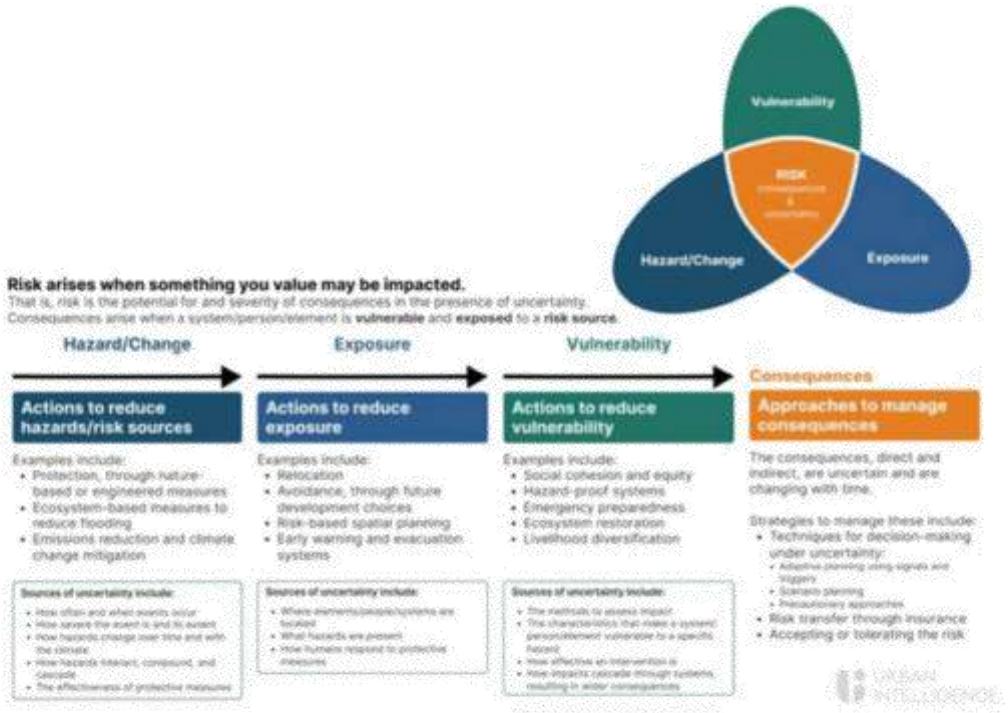


Figure 2.1. Risk arises when something valued could be impacted. That risk is the combination of consequences and uncertainty. In a natural hazards and climate change context, consequences arise when something that is vulnerable is exposed to a hazard or change. Risk can be reduced by intervening at each of these stages or it can be accepted or managed.

Elements, exposure and vulnerability

For physical hazards, risk for an event is assessed as a function of an element's exposure to a hazard, the intensity of that exposure, and the element's characteristics that make it vulnerable. In simplified terms, risk exists when an element you care about may be impacted by a hazard or change. Both qualitative and quantitative information can be used to assess the exposure and vulnerability of elements from different climate hazards.

- **"Elements"** is a catch-all term for things of value: people, built assets, taonga, species, ecosystems, or sectors
- An element is **exposed** when it is in the presence of a hazard or change
- An element is **vulnerable** when its characteristics make it more likely to be adversely impacted by a hazard/change, due to increased sensitivity or lack of adaptive capacity.

Direct and indirect impacts

This risk assessment assesses both **direct** risks and impacts and **indirect, cascading or compounding** risks/impacts (Figure 2.2). These secondary risks and impacts are complex and multi-dimensional and often correlate to how vulnerable natural and human systems are, rather than the original hazard. The distribution of direct and indirect impacts between socio-demographic groups and economic sectors



Figure 2.2. Illustration of different types of climate risks. Direct risks are immediate impacts from a hazard (e.g. flood damage to a road), while indirect risks are secondary effects (e.g. communities being isolated due to the damaged road). Cascading risks show how impacts can trigger chain reactions across different systems (e.g. road damage leading to community isolation, which affects access to healthcare and essential services). Compounding risks occur when multiple hazards or impacts overlap and interact to create more severe consequences (e.g. a storm surge coinciding with heavy rainfall and high tide).

helps to evaluate intervention options. These groups have varying sensitivity and adaptive capacities to the hazards they may experience, which needs to be considered when prioritising adaptation actions.

Cascading risks refer to the chain reactions of impacts that can occur across different domains and systems, often resulting in consequences that are far more severe and wide-reaching than the initial impact. For example, one quantitative way of capturing indirect risk is if a road is damaged, then the potential isolation of communities is considered.

The indirect and cascading risks in this first pass risk assessment were further evaluated through workshops with technical experts from councils and lifeline representatives. The potential implications of these identified direct and indirect risks being realised, including how they may interact and cascade through other domains, has been explored at a high-level in this first pass assessment.

Cascading impacts can be orders of magnitude higher than direct risk alone and often relate to what communities' value most. This means that actions and priorities may change significantly when cascading risks are taken into account.

As noted in MfE guidance [2], assessment of climate risks is inherently complex and uncertain. Local government needs to cope with rising risks that cascade and compound at a distance from the hazard drivers and those emerging in many different areas simultaneously. This approach to risk assessment, considering cascading impacts, allows for a more comprehensive understanding of potential climate change impacts and informs more effective adaptation strategies.

2.2 International context

Aotearoa New Zealand is a signatory to several international agreements that support action to reduce vulnerability and enhance resilience, including:

- the Sendai Framework for Disaster Risk Reduction 2015-2030 [4]
- the 2030 Agenda for Sustainable Development [5]
- agreements under the United Nations Framework Convention on Climate Change (UNFCCC), including the Paris Agreement. [6]

The Paris Agreement, in seeking to strengthen the global response to climate change, reaffirms the goal of limiting global temperature increase to well below 2 degrees Celsius, while pursuing efforts to limit the increase to 1.5 degrees [6]. Article 7 of the Paris Agreement defines a global goal on adaptation to enhance adaptive capacity and resilience and to reduce vulnerability, with a view to contributing to sustainable development. The Agreement requires all Parties to engage in adaptation planning and implementation.

2.3 National context

Legislative frameworks for adaptation

Successfully addressing climate risks requires coordinated progress across multiple sectors and levels of government. This assessment aligns with the existing national legislative and policy framework for climate adaptation. It provides councils with an evidence base for reporting requirements and demonstrates consistency with national frameworks for adaptation action.

- **The Resource Management Act 1991** [7] requires local authorities to have particular regard to the effects of climate change in relation to managing the use, development, and protection of natural and physical resources [1]. When preparing or changing a regional policy statement, regional plan or district plan, councils must have regard to any emissions reduction and national adaptation plan produced under the Climate Change Response Act 2002. There are also requirements relating to the management of significant risks from natural hazards[1].
- **The Climate Change Response Act 2002** [8] sets out New Zealand's legislative framework for

[1] Where required, "having regard" means giving the matter genuine attention before deciding on how to reflect the matter in planning decisions, and in most cases, providing a reason for how the matter was considered.

developing and implementing climate change policies in line with international commitments. It requires the Government to develop and implement policies for climate change mitigation and adaptation, including by producing National Climate Change Risk Assessments to identify New Zealand's most significant risks, and developing National Adaptation Plans that respond to these risks.

- **Section 5ZW of the Climate Change Response Act 2002** [8] specifically requires local authorities to provide information on climate change adaptation, when requested by the Minister of Climate Change, including risks and opportunities arising from climate change, the processes used to identify, assess and manage risks and effects, and the metrics and targets used in related processes.
- **The Local Government Act 2002** [9] requires councils to prepare 30-year infrastructure strategies to manage its infrastructure assets, by identifying and managing natural hazard risks and making appropriate financial provision for those risks.
- **The New Zealand Coastal Policy Statement 2010 (NZCPS)** [10] requires local authorities to identify areas in the coastal environment that are potentially affected by coastal hazards and assess these risks looking out to at least 100 years in the future, having regard to the effects of climate change.
- **The National Policy Statement for Urban Development 2020** [11] includes an objective that New Zealand's urban environments are resilient to the current and future effects of climate change.
- **The National Climate Change Risk Assessment 2020 (NCCRA)** [12] identifies priority climate change risks for New Zealand over a six-year period across five value domains (natural environment, human, economy, built environment and governance).
- **The National Adaptation Plan 2022 (NAP)** [13] contains New Zealand's national adaptation strategy and sets out the government's six-year plan (actions) in response to the risks identified in the NCCRA. This NAP includes a long-term adaptation strategy including national adaptation goals and, in addition to setting out the government's work programme, directs councils to use climate scenarios and downscaled climate projections to stress-test plans, policies and strategies.

2.4 Regional context

The Hawke's Bay Climate Action Joint Committee

The Climate Action Joint Committee was established after the 2022 local body elections to drive regional leadership and collaboration for climate action, including supporting the region to adapt to a changing climate. The Terms of Reference for the Joint Committee include overseeing the development of this regional climate change risk assessment as a key objective.

Other Hawke's Bay regional or joint committees with responsibilities for and governance oversight of climate related initiatives, include the:

- Regional Transport Committee
- Hawke's Bay Civil Defence Emergency Management (HBCDEM) Group Joint Committee
- Clifton to Tangoio Coastal Hazards Strategy Joint Committee
- Napier-Hastings Future Development Strategy Joint Committee.
- Ahuriri Regional Park Joint Committee.

Overview of current council-led climate adaptation work programmes

Hawke's Bay councils are working to respond to a changing climate through the delivery of regional and district-level work programmes, and support for community-led action. This includes several significant collaborative work programmes, including the Regional Water Security Programme, which is focused on ensuring long-term water security for the region, and the North Island Weather Event (NIWE) Flood Resilience Programme, which is delivering infrastructure repairs and upgrades following Cyclone Gabrielle in 2023. Flood scheme reviews and local stormwater/drainage upgrade projects are also underway to reduce direct flooding risks to assets and communities. NIWE funding is also enabling repairs and upgrades to bridges and roads to address isolation.

AROTAKE TŪRARU PANONITANGA Ā-ĀHUARANGI KI TE MATAU-A-MĀUI

The development of the Clifton to Tangoio Coastal Hazards Management Strategy 2120 [14] showcases how adaptation planning can address short, medium and long-term coastal hazard challenges, including sea-level rise. Biodiversity programmes, which include pest control, riparian planting, habitat restoration, and ongoing public education and engagement encourage community involvement in addressing climate challenges. Councils are also embedding climate change considerations in their Long-Term and Strategic Plans, Infrastructure Strategies, and Regional/District Plans, in addition to their operational decision-making and work programmes.



3 Method overview

This risk assessment follows best practices outlined in the MfE guidance and international standards, incorporating both quantitative and qualitative methods. Key components include:

- use of the latest climate projections and sea-level rise scenarios
- consideration of multiple hazards (including coastal flooding, landslide, and river and rainfall flooding)
- incorporation of local knowledge and values, and
- assessment of risks across value domains (natural environment, built environment, economy, human/social, and governance).

A detailed description of the methodology can be found in Appendix A1.

3.1 Use of future climate scenarios and projections

To understand potential future risks, the assessment uses internationally recognised climate scenarios that combine socioeconomic pathways (SSPs) with different greenhouse gas emission levels (RCPs). These scenarios help us explore how different social and economic developments might affect future climate change and our ability to adapt.

The scenarios range from optimistic futures with a strong sustainability focus to more challenging scenarios with higher emissions, as shown in Table 3-1. Most guidance documents discourage the use of the SSP1-1.9 scenario, as, while aspirational, it is not useful for planning coastal adaptation as emissions have surpassed the associated future warming range.

Table 3-1. The Shared Socioeconomic Pathways.

Scenario	Description	Estimated warming by 2100 (°C)
SSP1 – 1.9	A world that shifts towards a more sustainable path, focusing on inclusive development and respecting environmental boundaries.	1.0 – 1.8
SSP1 – 2.6	Similar to SSP1-1.9, but with slightly higher emissions. Still represents a sustainable pathway.	1.3 – 2.4
SSP2 – 4.5	A "middle of the road" future where trends broadly follow historical patterns.	2.1 – 3.5
SSP3 – 7.0	A future with regional rivalries, where countries focus on domestic issues due to concerns about security and competitiveness.	2.8 – 4.6
SSP5 – 8.5	A world that relies heavily on fossil fuels, with rapid technological progress and development of human capital.	3.3 – 5.7

3.2 Evidence base

This risk assessment focuses on the physical risk associated with climate change and does not address transitional risks associated with the shift to a low-emissions, climate-resilient society (such as changing migration patterns, shifts in supply chains, reduced international travel, and changes in consumer preferences) or external factors (such as geopolitical tensions, disruptions to supply chains due to climate change, migration or climate refugees, and other impacts beyond the borders of Hawke's Bay).

Direct and indirect risks are considered (Section 2.1) to provide an initial picture of what could happen and why it matters. For example, a flooded road might lead to isolated communities, which could then affect access to essential services and economic activity. This approach helps identify where adaptation efforts might be most needed and most effective.

Data collection and suitability

Urban Intelligence worked with Hawke's Bay Regional Council, the four District Councils and the Civil Defence Emergency Management (CDEM) Group to collect data for this assessment. While both regional and territorial authorities hold and maintain relevant datasets, under the Resource Management Act 1991 (RMA), regional councils have primary responsibility for natural hazards identification and modelling to inform land use planning. District councils often develop complementary hazard data for specific purposes such as stormwater management, though this data is not intended for broader natural hazard and resource management purposes due to differences in modelling parameters, coverage, or objectives.

To enable district-level analysis using a consistent methodology, coastal flooding, river and rainfall flooding, and landslides were selected as the hazards to analyse at a district level, based on data availability across the region.

Hazard data suitable for adaptation planning would ideally include:

1. Complete spatial coverage of the entire region or district
2. Detailed impact information showing hazard severity (e.g. flood depths, flow velocities)
3. Sufficient geographic detail enabling property-level decision making
4. Multiple environmental change increments rather than specific timeframes - this helps planners understand how hazards evolve with different levels of change rather than being tied to specific years, providing more flexibility in adaptation pathways
5. A range of event likelihoods from frequent to rare events - this spectrum helps communities make informed decisions about acceptable risk levels for different assets and functions
6. Sophisticated modelling approaches that accurately represent physical processes
7. Current data reflecting recent scientific understanding and physical conditions

Dataset Limitations

Variations exist in data quality and coverage across districts for use within risk assessment and long-term adaptation planning. For example, river and rainfall flood modelling approaches vary considerably in methodology and coverage (Table 3-2), making regional-scale comparison and analysis challenging. For instance, whether and how flood protection infrastructure is accounted for varies between the available models. This variation in modelling approaches means that the exposure figures presented for buildings and infrastructure should be interpreted as indicating areas of potential risk rather than as predictions of outcomes during specific flood events. Dataset variability means that direct comparisons cannot be made between the district-level findings.

These inconsistencies and data gaps highlight the need for coordinated investment in modelling and data collection to support future adaptation planning and decision-making. The available hazard data for each district provided for this assessment is further summarised in

Table 3-3. A comprehensive regional approach to flood and other natural hazard modelling would enable more effective adaptation planning and help ensure consistent standards of risk assessment across all districts (see Section 17 Next Steps and Further Opportunities).

This risk assessment is also based on current information about the present state i.e. it does not account for future changes in land-use, investment in risk reduction measures or population changes. This is why risk assessments must be periodically undertaken as part of the iterative adaptation process where risks change over time[1].

Table 3-2. Current river and rainfall flood modelling availability and suitability for climate change adaptation and natural hazard mitigation planning.

District	Coverage	Event Likelihood (Return Period)	Environmental Change or Scenario and Timeframe	Suitability for Adaptation Planning
Napier City	District-wide stormwater modelling	1%, 2%, and 10% AEP event	2100 RCP8.5	Moderate – only provides a single time period
Hastings District	Four centres	2% AEP	Present Day	Low - limited geographic coverage and scenarios
Wairoa District	Wairoa township	1% and 2% AEP events	Present Day	Low – modelling completed in 2007
Central Hawke's Bay	Three towns	1% and 10% AEP	Present Day & 2100 RCP8.5	Moderate - includes future scenarios but limited coverage

[1] For example, the National Climate Change Risk Assessment is undertaken every six years.

Table 3-3. Hazard data availability for selected hazards by district.

Council	Hazard	Event Likelihood (Return Period)	Environmental Change or Scenario and Timeframe
Napier City	Coastal flooding	1% AEP	0-2m SLR
	River and rainfall flooding	1% AEP	2100 RCP8.5
	Landslides	Susceptibility	Present Day
Hastings District	Coastal flooding	1% AEP	0-2m SLR
	River and rainfall flooding	2% AEP	Present Day
	Landslides	Susceptibility	Present Day
Wairoa District	Coastal flooding	1% AEP	0-2m SLR
	River and rainfall flooding	1% AEP	Present Day
	Landslides	Susceptibility	Present Day
Central Hawke's Bay	Coastal flooding	1% AEP	0-2m SLR
	River and rainfall flooding	1% AEP	Present Day & 2100 RCP8.5
	Landslides	Susceptibility	Present Day

Using spatial information to assess district-level risks

District-level risks are identified in this assessment by assessing the exposure of various elements to mapped hazards. Exposure analysis provides the first step of understanding potential impacts on residents, businesses, and economic activity. It is important for identifying areas that need attention to determine the sensitivity and adaptive capacity to these hazards, before estimating the potential consequences [2]. An element is exposed if it intersects with the spatial extent of a hazard. For flood models, water depths exceeding 10cm are considered for exposure. The exposure is calculated by overlaying element data with hazard maps.

To represent vulnerability in the human domain, this assessment incorporates the New Zealand Deprivation Index (NZDep)—a widely used composite indicator of relative socioeconomic disadvantage. NZDep combines data from the national census (including income, employment, housing, and education) to assign a deprivation score to small geographic areas (e.g. meshblocks or SA1s). Higher deprivation is understood to be associated with increased sensitivity to hazards and reduced adaptive capacity, making it a useful proxy for understanding where communities may experience greater hardship and face more challenges in recovering from climate-related impacts.

Exposure doesn't automatically equate to damage. Some exposed assets may be designed to withstand certain hazard levels without damage or disruption. For example, a building on raised foundations may be exposed to shallow flooding but experience no significant impacts. The vulnerability of each asset—its sensitivity to hazards and capacity to cope—determines whether exposure translates to actual harm.

This methodology identifies direct hazard exposure to infrastructure, but further work in identifying interdependencies is required to understand how a reduction in service here can affect unexposed infrastructure. For example, severe flooding may collapse bridges carrying fibre optic cables, resulting in the failure of otherwise unexposed cell phone towers.

Incorporation of local knowledge

The Hawke's Bay Climate Action Joint Committee Technical Advisory Group and relevant staff from across the five councils and CDEM provided valuable local knowledge and guidance throughout this assessment. Initial engagement with technical staff and lifelines representatives helped validate findings and identify regional and district-level risks. This assessment creates a foundation to accelerate future engagement by providing consistent baseline information to enable meaningful discussion about local impacts. The framework is designed to readily incorporate local knowledge, mātauranga Māori, and sector expertise as regional and local work programmes develop.

4 Papa kupu | Glossary

Term	Definition
Accommodate	Modifications to existing assets or systems to reduce their vulnerability to hazards while keeping them in place.
Accept	Consciously acknowledging certain risks without specific intervention, based on risk tolerance, cost-benefit considerations, or resource prioritisation.
Adaptation	The process of adjustment to actual or possible climate change and its effects. In human systems, adaptation seeks to moderate or avoid harm or exploit beneficial opportunities [15].
Adaptation Options (Risk Treatments)	Specific interventions, strategies, or approaches that may reduce risk, including avoid, retreat, accommodate, protect, and accept.
Adaptation Pathways	Sequences of adaptation actions over time that maintain flexibility to respond to changing conditions and new information.
Adaptive Capacity	The ability of systems, institutions, humans, and other organisms to adjust to potential or actual climate impacts, take advantage of opportunities, or respond to consequences. This includes access to resources, information, skills, and social networks that enable adaptation actions [15].
AEP	Annual Exceedance Probability. The probability that an event of a certain size will occur in a given year. Note that a 1% AEP event has approximately a 1-in-4 (26%) chance of occurring at least once within a 30-year period.
ANZSIC	A classification used across New Zealand and Australia to group together common types of industrial activity allowing comparison across sectors.
Avoid	Land-use planning and regulatory approaches that prevent new development or infrastructure in hazard-prone areas.
Built Environment Domain	The set and configuration of physical infrastructure, transport, and buildings.
Cascading Consequences	Consequences that propagate through interconnected systems, triggering impacts across different sectors, geographical areas, or timeframes beyond those initially affected.
Cascading Hazards	A sequence of hazards where an initial hazard triggers or exacerbates subsequent hazards, creating a chain reaction of events.
Cascading Risk	Risk that travels across interconnected systems, sectors, or geographies through chains of cause and effect, often amplifying in scope and scale beyond the initial

Term	Definition
	impact, over time. Cascading risk is much more representative of how hazards and climate change will affect communities.
Compound Hazards	The occurrence of multiple hazards affecting the same region simultaneously or in close succession, potentially creating impacts greater than the sum of individual hazards.
Compound Risk	Risk that arises when an element is exposed and vulnerable to multiple hazards or changes occurring simultaneously or in close succession.
Compounding Consequences	Consequences that intensify as multiple impacts interact, creating effects that are more severe than if each impact occurred in isolation.
Consequences	The outcome of an event or change, which may be positive or negative, direct or indirect.
Criticality	The relative importance of a system aspect (e.g. road, electrical substation, etc.) to the desired function or level of service.
Deep Uncertainty	A state of knowledge where experts or stakeholders cannot know or agree on the appropriate models that describe relationships among key forces in a system, the probabilities representing uncertainty about important variables, and/or how to evaluate and prioritise different possible outcomes. Deep uncertainty extends beyond regular uncertainty by involving fundamental disagreements about how systems function, the likelihood of different futures, and which outcomes are most desirable.
Direct Risk	Risk that arises when an element of value is directly exposed and vulnerable to a specific hazard or change.
Domain	A grouping or categorisation of our world and things we value within it. Often referred to as wellbeing or value domains which are a hybrid of the NZ Treasury's Living Standards Framework.
Economic Domain	The set and arrangement of inter-related production, distribution, trade, and consumption that allocate scarce resources.
Element	The assets, taonga, people, places, and specific systems that may be at risk.
Exposure	The state or condition of being subjected to or encountering a risk source, which can occur in a binary manner where one is either exposed or not, or in a continuous manner where the level or intensity of exposure varies.
Fluvial Flooding (River Flooding)	Flooding caused by rivers overflowing their banks due to heavy or prolonged rainfall, snowmelt, or blockages in river channels. For the purpose of this report, an asset is considered exposed to river flooding when the depth is more than 10cm.
Fragility	The system's likelihood to experience negative consequences, given some amount of exposure.

AROTAKE TŪRARU PANONITANGA Ā-ĀHUARANGI KI TE MATAU-A-MĀUI

Term	Definition
Governance Domain	The governance architecture and processes in and between governments, and economic and social institutions. Institutions hold the rules and norms that shape interactions and decisions, and the agents that act within their frameworks.
Growing Degree Days	The accumulated daily temperature above a base threshold (5°C and 10°C) per year. Indicates the amount of warmth available for plant growth.
Hazard	A potential source of harm, which may be a natural process or phenomenon or human activity that may cause loss of life, injury, or other health impacts, property damage, social and economic disruption, or environmental degradation.
Human Domain	People's skills, knowledge, and physical and mental health (human); the norms, rules, and institutions of society (social); and the knowledge, heritage, beliefs, arts, morals, laws, and customs that infuse society, including culturally significant buildings and structures (cultural).
IPCC	The Intergovernmental Panel on Climate Change
Isolation	The state of property temporarily or permanently losing access to one or more essential services (e.g. school, hospital, or fire station) due to hazard/change impacts on the transportation network.
Iwi/Māori Domain	The whānau, hapū, and iwi networks; Māori businesses and economic assets; and taonga (inherited treasures), including whenua, wai, and ecosystems, central to Māori identity, well-being, and kaitiakitanga.
Maladaptation	Actions or interventions that inadvertently increase a system's exposure or vulnerability to natural hazard impacts.
Mitigation (Climate Change)	The process of reducing the severity of climate change through emissions reduction or carbon sequestration. Contrast with: Risk Mitigation.
NAP	National Adaptation Plan
Natural Environment Domain	All aspects of the natural environment that support the full range of our indigenous species, he kura taiao (living treasures), and the ecosystems in terrestrial, freshwater, and marine environments.
NCCRA	National Climate Change Risk Assessment
NZDep	New Zealand Deprivation Index. An area-based index of socioeconomic deprivation based on census information, with 1 representing the least deprived areas and 10 representing the most deprived areas. It combines census variables including income, employment, qualifications, and housing. In this report, it is used as a proxy for community vulnerability, with higher deprivation scores likely indicative of reduced adaptive capacity and increased sensitivity to climate-related hazards.

Term	Definition
Path Dependency	Refers to the influence of past decisions on future societal processes and outcomes, shaping adaptation strategies and hindering the implementation of alternative solutions.
PED	Potential evapotranspiration deficit (PED) is a drought index. It is the gap between water demand and water availability, and it affects the moisture retained in soil and plant growth. An increase in PED indicates an increase in drought severity.
Pluvial Flooding (Rainfall Flooding)	Flooding caused by intense rainfall that exceeds the drainage capacity of the land, stormwater systems, or urban surfaces, leading to localised water accumulation. For the purpose of this report, an asset is considered exposed to rainfall flooding when the depth is more than 10cm.
Protect	Structural or non-structural interventions that shield assets or areas from hazards, such as seawalls, dikes, or ecosystem-based approaches.
RCP	A suite of future scenarios of additional radiative heat forcing at the Earth's surface by 2100 (in Watts per square metre), which is the net change in the balance between incoming solar radiation and outgoing energy, radiated back up in the atmosphere. Each RCP can be expressed as a greenhouse gas concentration (not emissions) trajectory.
Relative Sea-level Rise (RSLR)	The increase in sea level relative to a local land benchmark, incorporating both global sea-level rise and local land movement.
Resilience	The capacity of social, economic, and environmental systems to absorb disturbances and reorganise while maintaining essential function, identity, and structure, as well as the capacity for adaptation and transformation.
Resilient	"A state where a system can withstand, recover from, and adapt to climate hazards and stresses while maintaining its essential functions and structure. A resilient system has sufficiently reduced vulnerability and enhanced adaptive capacity to manage climate risks at levels deemed acceptable by stakeholders.
Retreat	The planned relocation of assets, infrastructure, or communities away from areas of high risk.
Risk	The potential for and severity of consequences on things we value in the presence of uncertainty [3]. Risk exists when there is uncertainty about how something we care about might be affected, recognising that different individuals and communities may have diverse priorities and objectives.
Risk Mitigation	The process of identifying, assessing, and prioritising risks, followed by the coordinated application of resources to minimise, monitor, and control the probability or impact of adverse events. Risk mitigation strategies include avoidance, reduction, transfer, and acceptance of risks. Contrast with: Mitigation (Climate Change).
Risk Source	An action, sub-activity, component, system, or event which alone or in combination with other elements has the potential to give rise to some specified consequences

AROTAKE TŪRARU PANONITANGA Ā-ĀHUARANGI KI TE MATAU-A-MĀUI

Term	Definition
	(typically undesirable consequences) [3]. Often referred to within this report as hazard/change.
Scenario	A plausible description or representation of future events, conditions, or situations used for analysis or planning.
Sensitivity	The degree to which a system is affected, either adversely or beneficially, by a hazard or climate-related stimuli
Shock	A sudden, disruptive event that affects a system, community, or asset, typically occurring with limited warning and requiring immediate response. Examples include floods, storms, and heatwaves.
Signals	Observable changes that indicate conditions are shifting, serving as early warnings that action may be needed.
Significant	In this report, the term *significant*, is used in its plain English sense – referring to risks or consequences that are notable, considerable, or meaningful in the context of climate change impacts. It is **not** used in the legal sense defined under any New Zealand legislation. Where legal significance is intended, it is explicitly stated.
Social Vulnerability	The susceptibility of social groups to the adverse impacts of hazards and changes, influenced by factors such as socioeconomic status, age, disability, housing characteristics, and access to resources.
SSP	Shared Socioeconomic Pathways. Scenarios of projected socioeconomic global changes up to 2150 and 2500, used to analyse how societal choices will affect greenhouse gas emissions and climate change mitigation challenges.
Stressor	A chronic or ongoing pressure that gradually affects a system, community, or asset over an extended period. Examples include sea-level rise, changing rainfall patterns, and increasing temperatures.
Sustainable	The capacity to endure and thrive over time, balancing social, economic, and environmental considerations.
Three waters	The collective term used to describe drinking water, wastewater, and stormwater infrastructure and services. This includes the physical networks of pipes, pump stations, treatment plants and other components that manage these three water systems.
Threshold	A level of magnitude of a process at which sudden or rapid change occurs, beyond which certain impacts become significant or intolerable.
Triggers	Pre-determined decision points based on signals that initiate a shift from one adaptation option or pathway to another.
Uncertainty	A state of incomplete knowledge that can result from multiple sources: natural variability or randomness in systems being studied, limitations in our current knowledge that could be reduced with more research, and differing interpretations of available information. It may arise from imprecise data, measurement limitations,

Term	Definition
	ambiguously defined concepts or terminology, or the inherent unpredictability of complex human and natural systems.
Values	What communities care about and want to protect or enhance; the qualities, principles, or assets considered important or beneficial.
Vulnerability	The propensity or predisposition to be adversely affected, encompassing sensitivity to harm and lack of capacity to cope and adapt.
Vulnerable Populations	Individuals or collectives that have characteristics that would traditionally represent a lower adaptive capacity or ability to cope and respond to different events. Also referred to as underserved populations. Vulnerability exists across all segments of society, as climate hazards can affect anyone, though in different ways and to varying degrees.

03

Te Arotakenga ā-Rohe Regional Assessment

5 Regional Overview

5.1 Hawke's Bay / Te Matau-a-Māui regional summary

The Hawke's Bay region is located on the east coast of the North Island, Aotearoa New Zealand (Figure 5.1). The following information provides a snapshot of the region, with data synthesised from the Hawke's Bay Regional Council's Three Year Plan 2024-2027, the Hawke's Bay Regional Land Transport Plan 2024-2034, and Statistics New Zealand [16] [17] [18]:

The Hawke's Bay Region

- **Population of 185,400** with two major cities Hastings and Napier, three main towns Wairoa, Waipawa and Waipukurau and other smaller settlements throughout the region
- 11 iwi, 91 hapū and 79 marae
- **14,200km² land area** 80% of land is hill country or mountainous terrain with 12% flat to gently rolling terrain
- **165,000 ha of plantation forestry** with the Napier Port handling 2.9 million tonnes of logs in 2024
- **353 km coastline** includes cliffs, sandy beaches, dunes, rocky reefs, and estuaries, and **1,600 km rivers and streams** spread over 8 catchments, 41 lakes and 2 groundwater sources
- **60% of New Zealand's apples** are produced in the region and the wider horticulture sector provides $1.2 billion to the national GDP
- **One of the top 12 wine capitals in the world** including 3,600 ha of the Heretaunga Plains dedicated to viticulture
- **Critical highway connections include SH2 North** providing lifelines to Wairoa and Gisborne, **SH2 South** linking Napier and Hastings to Central Hawke's Bay and on to Wellington, and **SH5** connecting Napier to SH1 at Taupō
- **Mean annual rainfall 800-2000mm**, and **2,200 hours of annual sunshine** in coastal areas



Figure 5.1 Map of the Hawke's Bay Region

5.2 Experiences with natural hazards in Hawke's Bay

Understanding a community's lived experiences with natural hazards is crucial when assessing and communicating climate change risks. People think about risk through the lens of their cultural and personal experiences [19]. These perspectives also influence the acceptance of risk-reducing actions and behavioural changes. Hawke's Bay's experiences with natural hazards therefore provide important context for this risk assessment and future adaptation planning conversations. An overview of natural hazards experienced in Hawke's Bay is provided in the following sub-sections.

Earthquakes

Hawke's Bay is at high risk of earthquakes. The Hikurangi subduction zone is an active source of seismic activity, with the potential to generate severe earthquakes and associated tsunami events, as well as slow slip movement of land over longer periods of time. Parts of Hawke's Bay such as the Heretaunga Plains and Napier City are particularly vulnerable to liquefaction associated with earthquakes given its geology.

The deadly 1931 earthquake significantly altered the Hawke's Bay shoreline and subsequently the region's risk to coastal flooding [20]. Nearly 2 metres of uplift allowed for new development in the north, along with backshore infill and construction of a seawall eliminating what had been frequent coastal flooding in downtown Napier [20]. However, other areas south of Napier experienced a 1 metre drop in elevation during the earthquake. Over time, this has resulted in coastal erosion that has caused significant damage to beachfront properties, particularly at Te Awanga and Haumoana [20]. Future major earthquakes are considered more likely to result in land subsidence rather than uplift, potentially exacerbating the threat of coastal erosion [21].

Coastal hazards

Coastal erosion is also increasing due to slow land subsidence and rising sea levels, resulting in barrier overtopping and damage to some beachfront properties [22]. Notable coastal storms include those in 1974, 2002, 2008, 2010, 2011, 2015, and 2017. Communities in Hawke's Bay are aware of, and concerned with, the increasing risk posed by coastal hazards. A 2016 survey of public perceptions regarding coastal hazards and hazard management found a majority of respondents (69%) believed coastal hazards were already being experienced in the region [23]. Coastal erosion was the coastal hazard of greatest concern. Rising sea levels also pose a risk to areas such as Napier, with the potential to raise the already high-water table that often sits close to the surface [24]. Coastal cliffs in Hawke's Bay are relatively unpopulated but many of the cliff shorelines are vulnerable to erosive and landslip forces.

Drought

The Hawke's Bay region is also subject to droughts, which are being exacerbated by changing rainfall patterns that increase evapotranspiration deficits, particularly in the south of the region [25]. Notable historical droughts have included those in 1982-83, 1997-98, 2012-13, and most recently in 2020. Such droughts resulted in challenging horticultural growing conditions leading to reduced yields and quality and the cessation of pasture growth, in turn leading to the need to prematurely dry off, cull, and/or sell off stock, with significant economic implications [26]. Droughts and drought-like conditions also exacerbate fire risk which threatens people, property, and livelihoods, such as during the 2017 Waimārama fire [27].

Flooding and storm events

Flooding and storms are the most frequently experienced hazard within Hawke's Bay [28]. Despite warnings, European settlers built on land known by Māori to be at high risk of flooding [29]. Prior to the arrival of pākehā, Māori in the Hawke's Bay used land seasonally and therefore were more able to move away from flood-prone areas during wetter periods. With the arrival of European settlement, land purchases and raupatu (land confiscation), Māori landholdings were often confined to low-lying areas next to rivers, putting them at a higher risk of flooding [30].

Notable historical events include major floods in 1867, 1893, 1897, and 1924 which led to multiple fatalities, substantial damage, and deposited large amounts of silt onto farmlands [29]. In February 1938, flash flooding at the Kōpuawhara Stream near Māhia, killed 21 at a Ministry of Works site north of Wairoa [31]. Just months later in April, prolonged heavy rainfall led to flooding in the Esk River with an estimated peak flow of 2,200 m^3/s [30]. The result was near total devastation in Tangoio and, along with flooding in 1963, caused many whānau and residents to permanently leave the area.

A spate of flood events also occurred throughout the 1940s-1960s. This included notable events in 1956 and 1963 which saw considerable rainfall and inundation in areas such as the Tangoio Valley that resulted in slips, damage to property, road closures, loss of power and communications, crop damage,

heavy livestock losses, and substantial silt deposits [30]. Cyclone Bola in 1988 produced considerable damage, particularly in the Wairoa area, where Wairoa's main bridge collapsed, causing the town to split in two [32]. The town's water supply was also destroyed, and two people were killed [32].

Landslide associated with storm events is also a frequently experienced hazard within Hawke's Bay. State Highway 2 north has a long history of closure due to slips and to a lesser degree State Highway 5.

Flood and storm events have continued to cause damage, livestock loss, and service disruptions throughout the 1990's and beyond. In 2011, Central Hawke's Bay experienced severe flooding that led to power outages, boil water notices, and extensive damage to roads, properties, and farms [33]. A flood event, initially estimated at one-in 250 year and later revised to about one-in-100 year event, in Napier in November 2020 affected 589 properties and coincided with COVID-related lockdowns, compounding challenges in emergency response and recovery [34] [35].

In January 2023 the region was impacted by numerous rainfall events, including ex-tropical Cyclone Hale. These collectively resulted in the region receiving between 400-500% of the January average, saturating soils, activating slips and setting

Impacts of Cyclone Gabrielle Across the Region

The impacts of Cyclone Gabrielle throughout the region with data synthesised from the Hawke's Bay Regional Three-Year Plan 2024-2027, the Hawke's Bay Regional Land Transport Plan 2024-2034, the Report of the Hawke's Bay Independent Flood Review, and news reports:

- **546 mm of rain** with the storm, most of which came in intensive bursts of 56mm per hour
- **12 deaths** associated with the Cyclone in Hawke's Bay
- **300,000 landslides** along the East Coast of the North Island
- **300 million tonnes of sediment** deposited in floodplains with **5.7 million tonnes of silt** in the Esk Valley
- **100 million tonnes of silt** deposited in the Wairoa District
- **Agriculture sector losses estimated at $1.7 billion,** damage to crops and inability to plant/produce during 2023 as plantings, fencings, irrigation systems, stock, feed and crops destroyed
- **$4.918 billion in overall costs** of recovery for the region
- **12,000 tonnes of woody debris** on the beaches and reserves in the Wairoa District
- **Residents isolated as up to 30 roads closed** during the event, with the Wairoa District effectively cut off from the North, South and West. A full three months passed before roads fully reopened, with power and communications also inoperable.
- In Napier **70,000 people isolated without power, water, communications, health services and road connectivity for several days**
- **Boil water notice** in almost 20% of Central Hawke's Bay, lasting for 26 days in Ōtāne and Waipawa
- The Redclyffe, Brookfields, Waitangi Rail Bridge and Puketapu **bridges damaged or destroyed** with rail links between the Napier Port and Hastings severed and repairs taking months
- **Napier Wastewater Treatment Plant in Awatoto and associated industrial area,** including the Ravensdown fertilizer plant, Bremworth textile mill and Ziwi factory were inundated, exposing the neighbouring communities to potential contaminants.

many rivers and streams into flood state. The arrival of ex-tropical Cyclone Gabrielle in February 2023 generated extreme rainfall levels on top of saturated soils that resulted in the largest flood flows ever recorded for many of the region's rivers [30]. The resulting flooding caused widespread destruction, with almost 1,700 properties assessed for damage, nearly 6 km of stop banks breached, and a further 28km weakened, major roads and bridges washed away, multiple marae, papakāinga and urupā severely damaged, and power outages to 40,000 properties (Figure 4.2) [16], [17], [30]. Tragically, twelve[36]] people died in the region. Financial losses were estimated to exceed $5 billion [30]. More recently, June 2024 saw severe flooding in Wairoa resulting from a combination of heavy rainfall, rising river levels, spring tides, storm surges, and river mouth conditions through the bar. Over 400 properties were affected by flooding and damages were estimated at $40 million [37]. An independent review found "that the flood event was caused by a combination of factors" and "highlighted shortcomings around planning and management of the river mouth and bar" [38], [39].

The region contains a wide variety of active geological features, from mountain ranges in the west, to erodible coastal hills and plains in the east. The ranges intercept the predominant westerly winds, resulting in prolonged periods of dry weather while also confining occasional north-easterly flows of moisture, leading to highly variable rainfall and periodic flooding. Major rivers drain the catchments and their sediments from the hills to the fertile floodplains below. These floodplains are where the region's famous fruit growing takes place and where the largest population centres have been established, resulting in an ongoing need for flood protections. Measures to reduce flood risk in Hawke's Bay have been implemented over time, with river boards first established in the 1880s and several flood protection schemes undertaken, including significant modifications to the Ngaruroro and Tukituki Rivers in the 1930s-1980s [34]. More recently, Napier City Council set aside more than $40 million for remediation work following the 2020 flood [34]. However, this work was not able to be fully implemented before Cyclone Gabrielle in 2023. This highlights the challenge posed by increasingly frequent events, which undermine the ability of communities to recover and successfully implement hazard management strategies.

Community experiences with natural hazards and adaptation planning responses

Experience of such events and awareness of local natural hazard risk can be traumatic and unsettling for residents. Future weather events can trigger "flashbacks" and increase community anxiety, reducing people's sense of safety and comfort [40]. Feelings of powerlessness can sometimes result in community tension and loss of trust in authorities. Increased frequency of extreme weather events can compound these negative experiences, potentially undermining future resilience as social and governance risks can be barriers to adaptation progress. This risk will only be exacerbated as extreme weather events become more frequent and severe with climate change.

Understanding this context is important for several reasons:

1. **Risk perception:** a community's recent experiences will significantly influence how they perceive future risk information and adaptation strategies and their risk appetite.
2. **Trust and communication:** past events, and the response to them, will affect the community's trust in authorities and their receptiveness to future communications about climate risks
3. **Adaptation planning:** a community's lived experiences provide valuable insights into vulnerabilities and potential adaptation measures that may be more readily accepted
4. **Psychological impacts:** the ongoing stress and anxiety related to experiences with hazards and most recently flood risk need to be considered in any adaptation planning, as mental health and wellbeing are crucial components of community resilience.

As Hawke's Bay moves forward with adaptation planning, these historical experiences will continue to influence how future risk communication and adaptation efforts will be received by communities.

The need for proactive adaptation planning

It is also critical to consider the potential pitfalls of disaster-driven responses to natural hazards, rather than proactive adaptation planning. Disaster events often trigger management responses based on immediate demands for those affected. While these reactive responses may provide short-term relief, they have the potential to produce inefficient or even maladaptive outcomes over the longer term [41].

Recent reviews of responses to Cyclone Gabrielle have identified a series of recommendations to improve the region's long-term resilience to flood events. This includes an acknowledgment that measures such as stopbanks can be overtopped in major events and therefore need to be designed to produce predictable and manageable outcomes when their capacity is exceeded, supported by measures such as designated spillways [30]. Ignoring the limitations of hard engineering solutions can increase harm, for example, where the presence of stopbanks can create a false sense of security that encourages further development in flood-prone areas.

To maximise the effectiveness of both immediate and long-term adaptation responses, it is important for decision-makers and communities to ensure that work to minimise climate and natural hazard risks:

- integrates short-term interventions with long-term adaptation plans
- assesses potential unintended consequences of interventions
- considers flexibility in design solutions to include environmental solutions and accommodate future climate scenarios
- includes engagement with a diverse range of stakeholders to capture a range of perspectives and needs, including working collaboratively with communities to draw on their local knowledge and build trust
- allows for reviews and adjustment of strategies based on new climate data and adaptation research and evidence.

As Hawke's Bay proceeds with work programmes that reduce risks and build resilience to natural hazard events, it will be critical to balance the community's immediate needs and lived experiences with long-term solutions that consider the full range of risks posed by a changing climate. Figure 5.2 contextualises the type of actions that communities and councils may take when reducing risks identified in this and subsequent assessments.

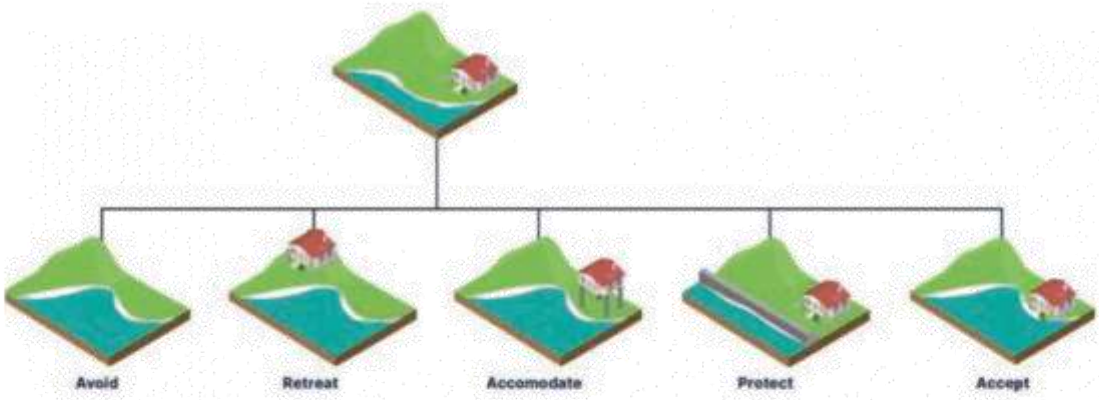


Figure 5.2. Adaptation options - avoid, retreat, accommodate, protect, and accept.

5.3 Overview of future climate and natural hazard projections and impacts for Hawke's Bay

The Hawke's Bay region is exposed to multiple natural hazards that are likely to intensify with climate change, including sea-level rise, shifting precipitation patterns, changing groundwater dynamics, and increased landslide risks.

The region's coastal, hydrological, and geological systems are highly susceptible to a changing climate. The most critical challenge lies in their interconnections and dependencies, where impacts in one system can cascade through others. Sea-level rise and groundwater changes, for example, can dramatically increase an area's susceptibility to liquefaction. These complex interactions underscore the importance of developing comprehensive multi-hazard adaptation strategies that consider a range of risks and actions to enhance community resilience to climate change.

This section provides a high-level overview of how various Hawke's Bay natural hazards may change under different climate scenarios. Consistent with the recommendations of the NAP [13] and updated MfE Coastal Hazards and Climate Change Guidance [2], this section of the assessment applies SSP2-4.5 and SSP5-8.5 scenarios, projected out to 2040 and 2090 (see Section 3.1 for a fuller description of climate scenarios). It's important to note the significant uncertainties inherent in these projections, particularly for long-term and high-emission scenarios. Local variations within the region and individual districts may also introduce considerable variability. Continuous monitoring and iterative modelling will be crucial for refining these projections over time.

Projections used in this assessment have been synthesised from:

- Victoria University and NZSeaRise, improved sea-level rise projections for New Zealand [42]
- The National Institute of Water and Atmospheric Research (NIWA) regional snapshot of projected climate changes and hazards, zone 3 [43]
- MfE, Climate Change Projections for New Zealand [44].

Climatic conditions

Climate change is projected to substantially alter meteorological patterns and environmental conditions in Hawke's Bay, with significant implications for the human, built and natural environments. Ex-tropical cyclones are likely to become more intense, bringing stronger winds and heavier rainfall. Fire seasons will get longer and more dangerous, with increased risks of wildfires. Droughts will become more common, putting additional stress on agriculture and water resources.

Compared to a historic baseline between 1995-2014, the region will see more hot days and fewer overnight frosts. This means warmer temperatures overall, which will affect everything from farming to local wildlife. A snapshot of the predicted climate changes and potential hazards is provided Appendix A3. These changes aren't just numbers on a chart – they represent real changes and associated challenges for the communities of Hawke's Bay.

Extreme Temperatures Both hot days and cold snaps can pose risks. Projections indicate an increase in hot days with up to 60 more hot days (>25°C) by 2090 with spring and autumn frost-free land expected to triple by 2080, under the high emissions scenario.

Wildfire The risk of wildfires is expected to increase with hotter, drier summer conditions, coinciding with longer fire seasons and an expected additional 48 days of fire risk.

Increased Storminess and Extreme Wind and Rainfall Events The intensity of ex-tropical cyclones is projected to increase with the most severe ex-tropical cyclones becoming even stronger. The region is also projected to experience a 10% increase in extreme wind speeds, with increased rainfall intensity and an increase in the number of very extreme daily precipitation events.

Marine Temperature Ocean temperatures are projected to increase, which can have significant impacts on marine ecosystems and coastal processes. Marine heatwaves are expected to increase with a sea surface temperature rise of 16 - 20% for most New Zealand marine waters.

Ocean Acidification As atmospheric CO2 levels rise, more CO2 is absorbed by the ocean, leading to increased acidity. This can have severe impacts on marine life, particularly organisms with calcium carbonate shells or skeletons. Additionally, a reduction in surface mixed layer depth with fewer micronutrients can be expected leading to a decrease in net primary production. An anticipated increase in dissolved iron will further alter phytoplankton compositions affecting coastal ecosystems.

Appendix A3 contains more detailed information on projected changes in temperature, hot days, frost days, wildfire risk, wind, hail, marine temperatures and ocean acidification.

Coastal hazard projections

Sea-level rise is a key driver of coastal hazards. In Hawke's Bay, relative sea level rise projections indicate a rise of 0.24-0.28m by 2040 and 0.55-0.79m by 2090 under high emissions scenarios (SSP5-8.5) (Figure 5.3) compared to 2005 [42]. These measures of relative sea-level rise factor in vertical land movement (VLM), for example, where landmass may be naturally sinking.

Coastal Flooding Coastal flooding occurs when sea levels rise above normal high tide levels due to weather events, flowing onto low-lying land. These events range from minor nuisances to widespread, costly inundation. With sea-level rise, the frequency, duration, and extent of coastal flooding is expected to increase, with the potential to overwhelm existing coastal infrastructure.

Coastal Erosion Coastal erosion occurs when waves erode land, causing shoreline retreat. While a natural process, it can be accelerated by human activities including climate change. Rising sea levels are likely to intensify erosion as high-energy waves reach further inland.

Appendix A3 contains more detailed information on projected changes in sea-level rise and coastal erosion.

Hydrological projections

Climate change is expected to alter precipitation patterns in the Hawke's Bay region, affecting various hydrological processes. Appendix A3 show the projected changes in rainfall and number of rainy days across the district.

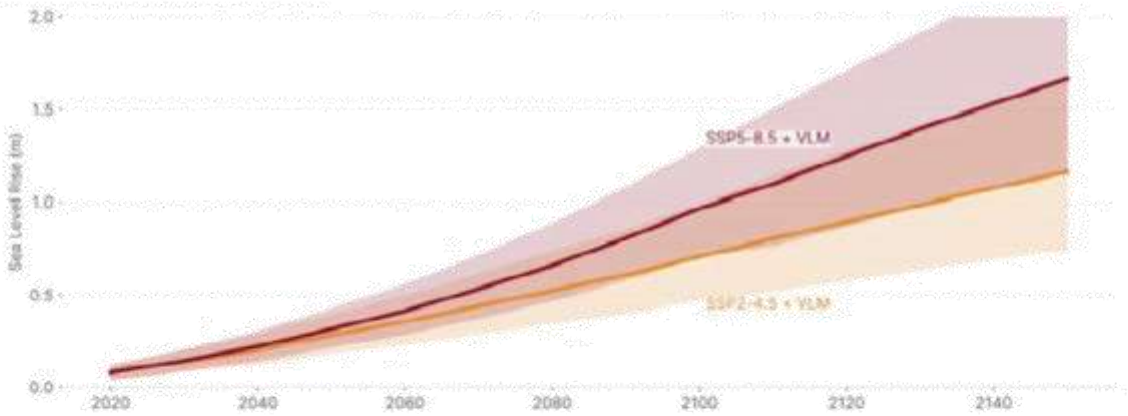


Figure 5.3. How sea level rise is projected to change across the region compared to 2005. Source: NZSeaRise [39].

River (fluvial) Flooding River flooding occurs when rivers overflow their banks, typically during heavy rainfall events. Climate change is expected to increase the frequency and intensity of extreme rainfall events, potentially overwhelming the designed capacity of existing flood protection measures.

Rainfall (pluvial) Flooding Rainfall flooding occurs when extreme rainfall overwhelms drainage systems. The intensity of extreme rainfall events is projected to increase with climate change, potentially exceeding the designed capacity of existing stormwater infrastructure more frequently.

Groundwater Changes Sea-level rise can lead to rising groundwater levels in some coastal areas and saltwater intrusion into coastal aquifers. Conversely, increased drought conditions can lead to falling groundwater levels inland.

Drought The region is projected to experience 5-8 more dry days per year by 2040 under both the SSP2-4.5 and SSP5-8.5 scenarios. By 2090, the region can expect 5-15 more dry days annually under the lower emissions scenario and 10-20 more dry days annually under the high emissions scenarios.

The intensity of future ex-tropical cyclones is also projected to increase by 2040 with the most severe ex-tropical cyclones expected to strengthen by 2090.

Appendix A3 contains more detailed information on projected changes in rainfall, dry days, storminess and extreme winds.

Geological projections

Geological hazards can be influenced by both tectonic activity and climate-related factors. Climate change is expected to exacerbate certain geological risks, particularly those sensitive to changes in rainfall and groundwater conditions.

Landslides Landslides involve the downward movement of rock, soil, and debris on slopes. While already common in New Zealand, landslide risk is expected to increase with more frequent, intense rainfall events predicted under climate change scenarios and fire occurrence that will exacerbate soil erosion.



URBAN INTELLIGENCE

5.4 Risk Value Domains

This risk assessment has structured the regional-level assessment around value domains (Figure 5.4), consistent with MfE's guidance [45] and the approach taken to the first National Climate Change Risk Assessment [12].

These domains provide a framework for assessing our complex and interconnected world. The interdependencies between the domains highlights the critical need to understand not only the direct risks arising from climate change, but the indirect, cascading and compounding risks as well. Notably, risks in the natural environment domain in particular can have cascading impacts into the human, built environment, economic, governance, and iwi/Māori domains. See Section 2.1 for a more in-depth discussion of indirect, compounding and cascading impacts.

Refer to Appendix A1 for further detail on the methodology for assessing risks at a regional scale.



Natural Environment: All aspects of the natural environment that support the full range of our indigenous species, he kura taiao (living treasures), and the ecosystems in terrestrial, freshwater, and marine environments.

Built Environment: The set and configuration of physical infrastructure, transport, and buildings.

Human: People's skills, knowledge, and physical and mental health (human); the norms, rules, and institutions of society (social); and the knowledge, heritage, beliefs, arts, morals, laws, and customs that infuse society, including culturally significant buildings and structures (cultural).

Economic: The set and arrangement of inter-related production, distribution, trade, and consumption that allocate scarce resources.

Governance: The governance architecture and processes in and between governments, and economic and social institutions. Institutions hold the rules and norms that shape interactions and decisions, and the agents that act within their frameworks.

Iwi/Māori: The whānau, hapū, and iwi networks; Māori businesses and economic assets; and taonga (inherited treasures), including whenua, wai, and ecosystems, central to Māori identity, well-being, and kaitiakitanga.

Figure 5.4 Value domains used to categorise regional risk as used within the New Zealand National Climate Change Risk Assessment

6 Natural Environment Domain

The Natural Environment domain encompasses all aspects of the natural environment that support the full range of indigenous species, he kura taiao (living treasures), and the ecosystems in terrestrial, freshwater, estuary and marine environments. The natural environment holds immense cultural, recreational, and spiritual significance for the people of Hawke's Bay, fostering a deep sense of connection to the land and its unique biodiversity.

Hawke's Bay's natural landscape

The Hawke's Bay region boasts a rich and varied natural landscape. Its diverse environment includes coastal ecosystems such as estuaries, beaches, and rocky reefs. The terrain ranges from lowlands and rolling hill country to the dramatic Ruahine and Kaweka mountain ranges. Hydrological features are prominent, with numerous streams, lakes — including the nationally significant Lake Waikaremoana — and rivers threading through the landscape. The region's diversity is further enhanced by indigenous and exotic forests, complemented by the productive agricultural lands of the Heretaunga Plains.

These natural systems are already under significant stress from human activities. This will be further intensified by climate change, with anticipated increased temperatures, changes in rainfall patterns, reduced snow and ice cover, sea-level rise, coastal inundation, flooding, extreme weather events, storm surges, drought, ocean acidification, and marine heatwaves [46]. As meteorological conditions shift, anticipated challenges include increased plant and animal pest incursions, elevated sediment and nutrient loads, accelerated habitat loss, and declining water quality [46].

Sediment intrusion into waterways is already a key stressor in Hawke's Bay's waterways. Increased sedimentation from climate change will likely exacerbate the degradation of water quality, as ex-tropical cyclones become more severe, increasing the incidence of landslides leading to further degradation terrestrial, freshwater, and marine ecosystems [47].

Biodiversity is critical for adapting to a changing climate

This section is informed by the Hawke's Bay Biodiversity Strategy, with the vision "working together, Hawke's Bay's biodiversity is enhanced, healthy and functioning". The multi-agency Strategy recognises that declining biodiversity is something that affects us all and only by working together can we make a difference.

Before humans settled here, almost the entire lowlands and hill country of the Hawke's Bay region would have been covered in dense forests, rich in bird life [48].

Hawke's Bay's present day lowland ecosystems are largely reduced to small, fragmented remnants with poor connectivity, many of which are on private land. The Hawke's Bay Regional Council's Priority Ecosystem Programme provides support for landowners to protect these remnant ecosystems. The current focus is to 'secure from extinction' 675 sites selected across the region that represent the full range of indigenous ecosystems. Enduring management, including deer fencing and pest control will ensure these high value sites are protected into the future with multiple benefits including helping to address soil erosion and improve water quality

The success of this programme is threatened by an increasingly volatile climate, as climate change is expected to bring warmer and drier conditions, with stronger ex-tropical cyclones to the Bay. This will put these high value biodiversity sites under additional pressure. **"The most serious threats to biodiversity however will likely be caused by interactions between climate change and other pre-existing threats"** [47].

The following section examines the expected effects of a changing climate on Hawke's Bay's natural environment, with a focus on biodiversity and related risks to:

- freshwater systems
- wetlands
- coastal and marine systems
- terrestrial and forest ecosystems.

Risks to freshwater ecosystems

For freshwater ecosystems, including wetlands, the most significant climate risks arise from changing water temperatures, and variations in water availability particularly because habitats are already highly fragmented [46]. The Hawke's Bay Regional Council currently monitors 43 wetlands and results have shown all the monitored wetlands are under a range of different pressures, particularly from predation and exotic plant invasion. Hawke's Bay is home to 15 of the 54 native freshwater fish species found in New Zealand, with most species migrating between salt water and freshwater ecosystems [49]. Changing temperatures, increasing sedimentation and altered flow from shifting rainfall patterns will reduce distribution and impact reproductive cues of fish [46]. Freshwater invertebrates support stream ecosystems by processing organic material, contributing to nutrient cycling, and serving as an important food source for fish, birds, and other wildlife. These invertebrates are sensitive to changes in water quality and vulnerable to climate change, particularly if they are already impacted from stressors like sedimentation.

Regular bird surveys commissioned by the Hawke's Bay Regional Council illustrate how the potential for negative impacts is no longer purely hypothetical. This work has quantified bird populations, their density and distribution for river-bed nesting birds for the years 2019-2021.

The Regional Council commissioned a fourth survey after Cyclone Gabrielle to quantify its impacts on riverbed-nesting birds. Significant declines were observed for several shorebird species, including a 15% decline in pohowera/banded dotterels and 30% decline in black-fronted dotterels.

"This survey demonstrate[s] for the first time that extreme weather events exacerbated by human-induced climate change can lead to large scale, severe declines in regional, national and global populations of riverbed-nesting shorebirds in New Zealand. The severity of these declines indicate that as local and central government agencies develop climate change adaptation plans to safeguard New Zealand's communities, economies, property and infrastructure, measures will also need to be taken to mitigate adverse impacts on our natural ecosystems" [47].

Any increase in sedimentation and alterations to nutrient concentration, as is expected under climate change scenarios, pose real threats to the capacity of estuarine systems to function.

Risks to coastal and marine ecosystems

Estuaries play a critical role in protecting coastal marine waters from the effects of land-based activities by filtering and processing cumulative discharges from the land, particularly nitrogen [49]. Highly valued by tāngata whenua for mahinga kai, estuarine areas are also home to a number of bird species and fish [49]. Recognising the importance of these estuarine systems, Hawke's Bay Regional Council actively monitors the health of estuaries [50].

Marine and coastal ecosystems in the region face critical challenges from projected climate change, with primary risks emerging from sea-level rise, increasing water temperatures, and ocean acidification. Projected environmental shifts are expected to have profound and interconnected impacts on marine biodiversity and ecosystem functionality.

Sea-level rise poses a particular threat to all shallow coastal and intertidal species. Coastal structures created to reduce saltwater intrusion on land limit the ability for these species and communities to move inland. Other impacted species include migratory fish

like whitebait, which depend critically on the spring tide zone for spawning [46]. As these habitable areas are projected to shrink, the reproductive capabilities of such species could be severely compromised. The consequences extend beyond individual species, potentially disrupting entire marine food webs and ecological networks. The NCCRA lists, "risks to coastal ecosystems, including the intertidal zone, estuaries, dunes, coastal lakes and wetlands, due to ongoing sea-level rise and extreme weather events," as the **top natural environment risk** in New Zealand.

Ocean acidification has already demonstrated significant ecological impacts across marine organisms, including microbes, sponges, corals, molluscs, echinoderms, and fish [46]. Observed effects include decreased growth and survival rates, as well as lower reproductive success.



Marine heatwaves are expected to compound these pressures, further reducing survival and reproductive rates of key marine species. The cumulative effect of these environmental stressors threatens to destabilise marine ecosystems and their functions.

Rocky intertidal platforms, which are crucial marine habitats also vulnerable to a changing climate, provide essential ecosystem services. These dynamic environments offer critical shelter, serve as nursery grounds, and support feeding areas for marine life [49]. Beyond supporting biodiversity, they play a vital role in coastal protection — stabilising shorelines, buffering against wave action, and providing habitats for kai moana species [49].

Risks to terrestrial and forest ecosystems

Terrestrial and forest ecosystems host a wide variety of plant and animal species, a number of threatened species endemic to New Zealand. Climate change poses significant threats to these delicate ecosystems. Warming winters and increasing drought frequency are expected to have profound ecological consequences, potentially leading to declining species survival rates, alterations in plant and tree distributions, and the loss of critical habitat for indigenous fauna [46].

Climate change is also likely to exacerbate biodiversity challenges posed by invasive species. Hymenoptera wasps and Argentine ants are expected to expand their territories, while invasive flora will spread more readily into new areas [46]. These invasive species often possess adaptive advantages that outcompete indigenous species, resulting in further ecological disruption. The proliferation of existing weeds and the emergence of new weed species will likely intensify, compounding the environmental stress.

The NCCRA lists, "risks to indigenous ecosystems and species from the enhanced spread, survival and establishment of invasive species due to climate change," as the **second most important natural environment risk** in New Zealand.

Biosecurity risks will also increase with climate change [51]**.** For example, more frequent mast events—periods of abundant seed production—could trigger population explosions in rodent species [46]. Such increases would further undermine current biodiversity conservation and predator control efforts, creating a cascading effect of ecological imbalance in the Hawke's Bay region.


"The results of this survey demonstrate for the first time that extreme weather events exacerbated by human-induced climate change can lead to large scale, severe declines in regional, national and global populations of riverbed-nesting shorebirds in New Zealand."
- Hawke's Bay Regional Council

7 Built Environment Domain

The Built Environment Domain encompasses the physical infrastructure that supports daily life in Hawke's Bay, including buildings, transport networks, and three waters assets. This infrastructure forms an interconnected system that is critical to the region's functionality and resilience.

This assessment focuses primarily on council-owned and managed infrastructure, drawing on datasets provided by the region's territorial authorities. While engagement with other infrastructure providers - including the Napier Port, Hawke's Bay Airport, telecommunications companies, and electricity distributors - has been ongoing throughout this process, the timing of data availability and commercial sensitivities have meant that detailed analysis of these assets is not included in this first pass regional climate risk assessment. These organisations are conducting their own detailed risk assessments, and ongoing collaboration will ensure alignment in understanding regional risks and adaptation approaches.

The following sections present risk findings related to residential property and council infrastructure exposed to regional hazards including coastal flooding, river and rainfall flooding, and landslides. The assessment also considers potential groundwater changes in Napier, though it is noted that significant data limitations exist for several of these hazards. Due to data limitations, particularly for river and rainfall flooding, the exposure numbers presented likely underestimate the overall risk. However, exposure also doesn't equate with damage as some exposed assets may be designed to withstand the level of exposure they experience.

Hawke's Bay Airport:

- **Third busiest regional airport in the North Island**
- **Jointly owned by Hastings District Council, Napier City Council and the Crown.**

Napier Port (2024):

- **571 ships carrying 5 million tonnes of cargo, 230,000 TEU containers and 2.9 million tonnes of log exports**
- **Linked to 27,000 jobs across the region**
- **Critical for horticulture and forestry exports.**

An assessment of lifeline utilities and critical regional infrastructure remains a priority for future work, as outlined in Section 17 (Next Steps). This will build on the engagement and relationships established through this initial assessment process. This will involve collaboration with the Hawke's Bay Lifelines Group and their existing work programme, which includes an ongoing Lifelines Vulnerability study.

Risk to physical infrastructure from coastal flooding

Coastal flooding poses a significant and increasing risk to buildings and infrastructure in Hawke's Bay. The analysis informing this assessment examined exposed to more than 10cm of coastal flooding in a 1% AEP event under different sea-level rise scenarios. Figure 7.1 provides a visual representation of how exposure increases with sea-level rise, while Table 7-1 presents the detailed numbers across different infrastructure types.

Risk to Residential Buildings

Of the approximately 56,500 residential buildings in Hawke's Bay, about 3,300 (5.9%) are currently exposed to more than 10cm of coastal flooding during a 1% AEP event. This exposure increases substantially with sea-level rise, reaching 5,379 buildings (9.5%) with 20cm of rise and 11,652 buildings (20.6%) with 1m of rise (see Figure 5.3 for potential timeframes for how sea levels may rise). It's important to note that exposure does not necessarily mean these buildings would be severely damaged or uninhabitable - the actual impact would depend on factors like floor height and construction type, and the specific flood depth at each location.

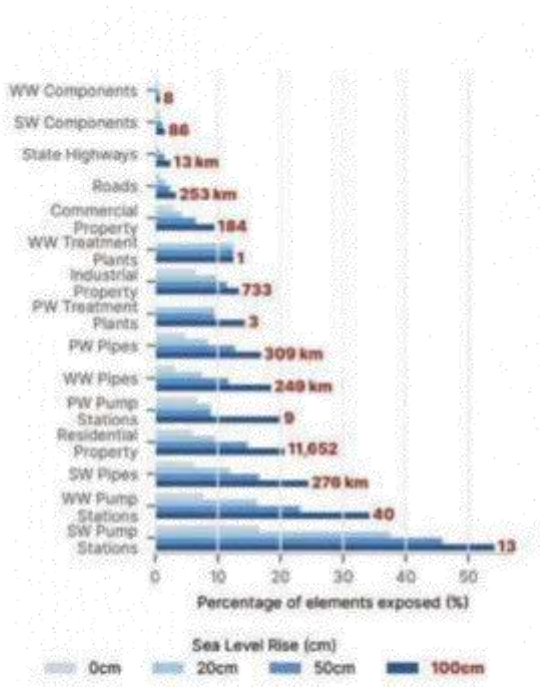


Figure 7.1. The number/length of each infrastructure type that would be flooded in a 1% coastal flood, given different amounts of sea level rise.

Risk to the Regional Transport System

The region's transport network includes 7,733 km of roads, as defined by Land Information New Zealand (LINZ) including "any form of all-weather route suitable for the passage of any vehicle". Currently, 62 km of roads are exposed to more than 10cm of coastal flooding, including 1.6 km of state highway. With 20cm of sea-level rise, exposure increases to 128 km of roads (including 4.1 km of state highway), and at 1m of sea-level rise, 253 km of roads (including 13 km of state highway) would be exposed. While these numbers may seem relatively small, even shallow flooding can make roads impassable - passenger vehicles can begin to float in just 15-30cm of water.

This means that even limited flooding of transport routes can significantly impact connectivity and emergency response capabilities and isolate properties and communities.

Additionally, coastal flooding also presents risks to strategic transport system infrastructure, such as Napier Port and Hawke's Bay Airport. Flooding could inundate these strategic assets, significantly impacting the ability to get goods, services, and people in and out of the region. Essentially, it could sever two critical transport links for a period of time.

Risk to Water Infrastructure

Water infrastructure shows increasing exposure with sea-level rise across all three networks. Currently, 88 km (4.8%) of potable water pipes, 69 km (6.2%) of stormwater pipes, and 42 km (4.1%) of wastewater pipes are exposed to more than 10cm of coastal flooding. With 20cm of sea-level rise, these numbers increase significantly, particularly for stormwater infrastructure where exposure nearly doubles to 12% of the network.

The region's pump stations are particularly exposed, with 40% of stormwater pump stations, 16% of wastewater pump stations, and 9% of potable water pump stations exposed with just 20cm of sea-level rise. At 1m of rise, these percentages increase to over 50%, 33%, and 20% respectively. Of the region's treatment plants, two of the 21 potable water treatment plants and one of the eight wastewater treatment plants would be exposed to a 1% AEP coastal flooding event with 20cm of sea-level rise.

This assessment does not evaluate exposure of non-council-provided water supplies, stormwater infrastructure and wastewater systems (e.g. individual on-site and community-scale wastewater schemes).

Table 7-1. The length/number of each infrastructure exposed to a 1% AEP coastal flood event, with different amounts of sea level rise. Note that exposed does not necessarily mean "damaged." This is where the vulnerability (characteristics of the asset that makes it prone to damage) is important.

Built infrastructure	Baseline sea level (2005)	20cm of sea level rise (2025 – 2050)	1m of sea level rise (2070 – 2150)
Residential Buildings	3,323 (5.9%)	5,379 (9.5%)	11,652 (20.6%)
Roads	62 km (0.8%)	128 km (1.7%)	253 km (3.3%)
State Highway	1.6 km (0.3%)	4.1 km (0.8%)	13 km (2.4%)
Potable Water (PW) Pipes	88 km (4.8%)	154 km (8.4%)	309 km (16.8%)
Stormwater (SW) Pipes	69 km (6.2%)	135 km (12%)	276 km (24.4%)
Wastewater (WW) Pipes	42 km (4.1%)	101 km (7.5%)	249 km (18.5%)



Risk to physical infrastructure from river and rainfall flooding

River and rainfall flooding pose both immediate and long-term risks to Hawke's Bay's built environment. To analyse flood risk across the region, this assessment applies a consistent methodology to the best available, suitable flood modelling from each district, while acknowledging the variation between these models. This includes 1% AEP present-day modelling for Wairoa and Central Hawke's Bay, 1% AEP 2100 RCP8.5 (high emissions) modelling for Napier City, and 2% AEP present-day modelling for Hastings District (Table 3-3). For all models, exposure is defined as intersection with flood waters exceeding 10cm in depth (Table 7-2; Figure 7.2).

Buildings and structures show substantial exposure to flooding, with particularly high risk to commercial areas. Of the region's building stock, 918 commercial buildings (47.2%) show potential exposure to flooding, along with 9,781 residential buildings (17.3%) and 710 industrial buildings (12.9%). These numbers highlight the potential for significant economic disruption during flood events.

Three waters infrastructure shows substantial exposure across all networks. Approximately 386 km (21.0%) of potable water pipes, 261 km (23%) of stormwater pipes, and 211 km (16%) of wastewater pipes intersect with modelled flood areas. Critical facilities like pump stations also show significant exposure, with 25% of stormwater pump stations, 18% of wastewater pump stations, and 13% of potable water pump stations potentially affected. However, no treatment plants are within currently modelled flood zones.

These figures represent minimum exposure levels based on currently available data. The actual number of exposed assets is likely higher, particularly in areas where detailed flood modelling has not yet been completed. However, a granular risk assessment also requires evaluation of asset vulnerability and the severity of exposure to evaluate if and to what extent the assets could be damaged.

Table 7-2. Regional infrastructure exposure to river and surface (rainfall) flooding. Values combine flood modeling using different AEP scenarios across districts. Note that exposure indicates potential contact with floodwater exceeding 10cm depth but does not necessarily indicate damage.

Built infrastructure	Combined Flood Exposure (mixed scenarios)
Residential Buildings	9,781 (17.3%)
Commercial Buildings	918 (47.2%)
Industrial Buildings	710 (12.9%)
Roads	233 km (3.0%)
State Highway	11 km (2.0%)
Potable Water (PW) Pipes	386 km (21.0%)
Stormwater (SW) Pipes	261 km (23%)
Wastewater (WW) Pipes	211 km (16%)

Note: Regional totals combine 1% AEP flood modelling from Napier City (2100, RCP8.5), Wairoa (today's conditions), and Central Hawke's Bay (today's conditions) with 2% AEP modelling from Hastings District (today's conditions). Due to these different modelling approaches and limited spatial coverage, these numbers should be considered indicative only.

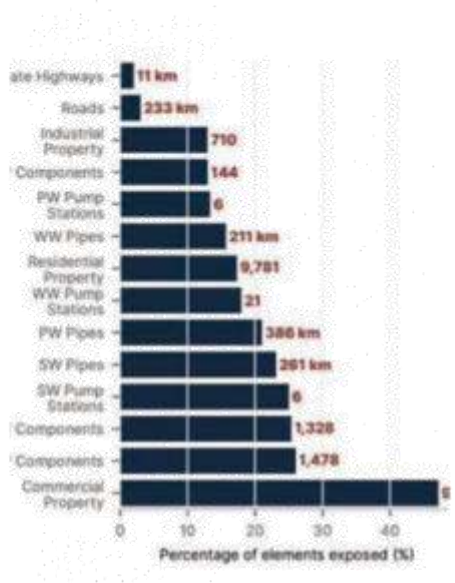


Figure 7.2. Regional infrastructure potentially exposed to more than 10cm of river and rainfall flooding across Hawke's Bay. Data uses the best estimate of today's flood risk, which requires combining different flood scenarios across districts (1% AEP for Wairoa, and Central Hawke's Bay; 2% AEP for Hastings District; and 1% AEP for Napier in 2100 under a high emission scenario).

Risk to physical infrastructure from landslides

Landslide risk assessment across Hawke's Bay shows that while most infrastructure has relatively low exposure at the regional scale (Table 7-3; Figure 7.3), the data may not capture all localised risks. For instance, while this assessment shows residential exposure at 1.2% (666 buildings), detailed GNS Science analysis of landslide risk for areas like Napier Hill was not able to be included in this assessment.

Industrial properties show notably higher exposure at 5.1% (280 buildings), while commercial buildings show minimal exposure (0.1%). The transport network has 152 km (2.0%) of local roads and 6 km (1.1%) of state highway in areas identified in region-wide modelling as being susceptible to landslides. This exposure is particularly concerning in hill country areas where landslides can sever critical access routes, leading to community isolation and delayed emergency response.

Three waters infrastructure shows relatively low direct exposure to landslides, with less than 1% of pipes affected across all networks. However, some critical facilities are located in landslide-prone areas, including one potable water treatment plant and two pump stations (one each for potable water and wastewater systems).

While the risk of landslides affecting the built environment is relatively low at a regional scale, this can mask the potential severity of cascading impacts such as isolation, as even localised landslides can have significant consequences for network connectivity and community access, particularly in inland and rural communities. This risk is explored in more detail in the district-level chapter.

Residential Building	666 (1.2%
State Highwa	6 km (1.1%
Wastewater (WW) Pipe	1.3 km (0.1%

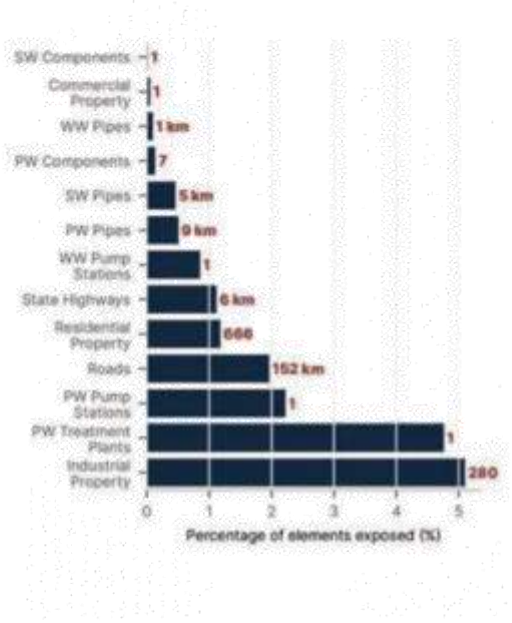


Figure 7.3. Regional infrastructure exposed to landslides across Hawke's Bay.

Risk to physical infrastructure from increasing temperatures

The built environment faces additional risks from projected temperature increases. Hawke's Bay is expected to experience between 5-25 more hot days (>25°) annually by 2040 (SSP2-4.5 and SSP5-8.5) and 5-40 more hot days annually by 2090. A summary of risks posed by increasing temperatures is shown in Table 7-4.

Risk to physical infrastructure from groundwater rise

While shallow groundwater data is currently only available for Napier, rising groundwater levels present an emerging risk to infrastructure across low-lying areas of Hawke's Bay. Potential risks include:

- **Building foundations:** rising groundwater can compromise structural integrity, leading to foundation damage and increased dampness
- **Underground infrastructure:** buried pipes and cables may face increased corrosion and buoyancy issues
- **Road substructures:** higher groundwater levels can weaken road bases, leading to more frequent maintenance needs
- **Wastewater systems:** elevated groundwater can infiltrate sewer systems, potentially causing system failures
- **Increased liquefaction risk**: higher groundwater levels can increase the risk of soil liquefaction during seismic events.

Table 7-4. Likely impacts of increased temperature on built infrastructure.

Built infrastructure type	Likely impacts from projected temperature increases
Transport network infrastructure	• Increased thermal expansion of bridge joints and rail tracks, potentially leading to buckling. • Accelerated degradation of road surfaces, particularly asphalt pavements. • Higher maintenance requirements and costs for transportation infrastructure.
Building systems	• Increased stress on cooling systems and potential overheating in buildings not designed for higher temperatures. • Higher energy demand for cooling, potentially straining electrical infrastructure. • Accelerated degradation of building materials, particularly those exposed to direct sunlight.
Urban heat island	• Amplification of temperature impacts in urban areas due to heat-absorbing surfaces. • Potential thermal stress on underground infrastructure, particularly in urban centres. • Increased risk of material fatigue in exposed infrastructure.
Water infrastructure	• Increased stress on water supply systems due to higher demand during hot periods. • Potential impacts on water quality in storage and distribution systems. • Higher maintenance requirements for exposed water infrastructure.



8 Human Domain

The Human Domain encompasses the social and cultural environments and elements that shape the region's identity and resilience. People's skills, knowledge, and physical and mental health are foundational aspects of the human domain, all of which contribute to the region's wellbeing. These aspects are complemented by the norms, rules, and institutions of society, which govern behaviour, facilitate cooperation, and promote social cohesion. Māori culture also enriches the human domain, with traditional practices, values, and knowledge systems providing the foundation for the region's identity and heritage.

Hawke's Bay's demographic profile contributes to the risk posed by natural hazards. Some groups may be more or less vulnerable during and following a hazard, due to physical, social and/or economic factors. For example, those who are older are more likely to have existing health conditions and mobility issues that increase their vulnerability. Conversely, those who are on higher household incomes are more likely to be financially resilient following an event.

Ageing Population: 19% of the region's population is aged 65 and older [46].

Children: 14.1% of the population is less than 14 years old, which is lower than the national average of 18.5% [46]

Ethnicity: 73.3% of the region's population identifies as European. A total of 28.6% identify as Māori, an increase of 11.5% since 2018 [46].

Summarising exposure of people to modelled hazards

This report highlights significant hazard across Hawke's Bay which poses both direct and indirect risk to the region's population (Table 8-1, Figure 8.1; Figure 8.2; Figure 8.3; and Figure 8.4. The complete set of results are presented in Appendix 3.5). Findings are based on current understanding and assumptions about land use and population data as per the methodology (Section 3).

Coastal flooding exposure is projected to increase substantially over time, with potential to exacerbate existing inequities. More than three-quarters of those exposed to more than 10cm of coastal flooding live in areas with greater than average deprivation (Deprivation index scores of more than 5), and this pattern intensifies over time (Figure 8.1). As shown in Table 8-1, by 2050, over 25% of those affected by coastal flooding live in highly deprived areas (Deprivation index scores of 9-10), increasing to more than one-third of affected populations by 2130 under a high emissions scenario.

River and rainfall flooding currently affects a significant portion of the population, with more than half the region at risk of isolation (Table 8-1). These risks disproportionally affect residents who are already considered deprived - of those directly exposed to more than 10cm of river and rainfall flooding, over half (54%) live in areas with higher-than-average deprivation scores (Figure 8.3).

Landslide risk shows a notably different pattern (Figure 8.4). While overall exposure is lower (Table 8-1), those affected are more likely to live in areas with low deprivation scores (Deprivation index scores of 1-2). This distinct pattern likely reflects historical development patterns, with more affluent neighbourhoods often located in hillside areas.

Table 8-1. Population Exposure to Natural Hazards. *Deprivation pattern indicates the relative proportion of a subpopulation group is over-represented in the impacted group (i.e. identifying which socio-economic groups are disproportionally impacted).

Hazard Type	Timeframe	Scenario	Direct Exposure	Isolation Risk	Deprivation Pattern*
Coastal Flooding	2050	SSP2-4.5	18,000 (10%)	21,200 (12%)	>25% highly deprived
Coastal Flooding	2130	SSP5-8.5	40,600 (23%)	43,200 (25%)	>33% highly deprived
River and Surface Flooding	Present	Current	16%	55%	54% in higher deprivation areas
Landslides	Present	Current	1.3%	8%	Greater proportion in least deprived areas

The risk to the human domain can be both direct and indirect

Although more difficult to quantify, the indirect risks may be significant as they cascade from risks to other domains, particularly the built environment. The elements at risk in the human domain are described in greater detail below. Each of the domains is interconnected, recognising how human health and wellbeing is influenced by factors that span physical, mental, emotional, cultural, spiritual and social aspects.

Risks to physical human health

Climate change can pose a risk to physical human health in a variety of direct and indirect ways.

Risk to life can occur through direct exposure to heatwaves and extreme events (e.g. river and rainfall flooding, wind and coastal inundation), while indirect exposure can occur through exposure to contaminated water, increased exposure to vector-borne and zoonotic diseases, and health-related risks associated with access to water and food driven by changes in temperature, rainfall patterns and extreme events [52].

Climate change hazards can also have significant cascading effects on physical health through changes in housing quality. For example, flooding and rising groundwater tables can contribute to cold, damp living conditions in affected homes [53]. This creates a reinforcing cycle where poor housing quality influences heating costs and heat retention, leading to persistent dampness, rot, and mould growth. These conditions can result in a wide range of physical health issues, particularly respiratory and cardiovascular illnesses [54], [55]. Given that residents of the Hawke's Bay region will be increasingly exposed to natural hazards and climate-related changes, risk to physical human health is expected to increase over time.

In general, older people, young children, those with existing health conditions and people of lower socio-economic means are more vulnerable to climate-related health risks than the general population [56]. Within Hawke's Bay, children and those aged 65 and over may be more vulnerable due to physiological factors and limited mobility, including higher reliance on others to access essential goods and services. Those living in areas exposed to hazards and classified as being highly deprived, such as parts of the Wairoa District and Napier City, may be more susceptible to negative health impacts arising from living in damaged and lower quality housing,

particularly if they do not have sufficient financial resources to repair their homes or find suitable alternative accommodation.

Cyclone Gabrielle highlighted the impacts of an extreme weather event on physical human health in Hawke's Bay, with extensive reports of cyclone-related injuries, contact with contaminated silt and water, physical exhaustion, challenges accessing healthcare services, and the deaths of 12 people in the region [57], [58]. Psychological impacts of that event continue to be experienced by some people in the community two-years on.

Risks to mental health, identity, connections to place and nature

A changing climate has a range of implications for the mental health and personal wellbeing of Hawke's Bay residents.

Implications include increased incidence of stress, anxiety and trauma associated with [12], [49]:

- experiencing an extreme event (e.g. flood, coastal storm)
- loss and damage to property or places of value
- disruption to everyday life and coping with change (e.g. isolation or loss of services)
- loss of livelihood
- displacement
- feelings of helplessness and loss of autonomy
- fear and uncertainty regarding the future as the climate continues to change [12], [49].

People with pre-existing mental health conditions are more likely to be impacted by an event than others [59]. However, stress and anxiety are likely to increase in general as more people experience trauma, loss, and disruption to daily life linked to climate change. Insights from the 2020 Napier flood and Cyclone Gabrielle events illustrate the mental toll of extreme events on the Hawke's Bay community, including stories of ongoing stress and anxiety, exacerbated over time by subsequent heavy rainfall events [59], [60].

Risks of exacerbating existing inequities

The impacts of climate change will be distributed in inequitable ways. In general, groups within society that are already marginalised or at an economic disadvantage are more vulnerable to climate hazards and risks. This is often due to inequitable access to the services and resources required to maintain and support wellbeing (e.g. stable employment, financial stability, insurance cover, reliable drinking water, warm and dry homes). All of these factors impact people and communities' adaptive capacity.

In some cases, more deprived households may already be located within known hazard areas because the property or rent is cheaper than in areas less exposed to known risk. An example of this in Hawke's Bay is several communities who will be most affected by future coastal inundation that are already classified as experiencing higher levels of deprivation.

New inequities may be created or existing inequities exacerbated through the response to a changing climate. Inaction (or maladaptation) that fails to reduce risk may create a trend of ongoing loss and damage which erodes access to the goods, services, places, economic opportunities and social networks that support wellbeing. It may also result in new areas experiencing climate hazards and/or associated isolation from essential services that have previously been considered low risk. Over time, those with greater access to resources will be more likely to leave at-risk areas, compared to those with less resources. This could exacerbate inequitable outcomes for those who remain in areas of higher risk.

Risks to social cohesion and community wellbeing

Wellbeing is experienced not only by the individual and household, but also at the community level. Important aspects of community wellbeing include social cohesion and connection to place. Cohesion is described as the bonds that link communities and people together, including physical place-based, cultural or social connections.

Risks to social cohesion can arise due to changes over time or post-event when communities are stressed or experience a decline in their sense of safety. For example, the numerous reports of looting following Cyclone Gabrielle led to widespread concern within various communities across Hawke's Bay, and anger towards authorities who some perceived to be downplaying the prevalence of the issue [61], [62]. Risks to cohesion are indirect risks that are driven by physical changes to communities from a changing climate and/or severe weather events (e.g. to homes, property, businesses and facilities) that erode the desire or ability of people to remain in place. There are two components to this risk; first, the risk associated with those who experience displacement and second, the risk to those left behind [12].

Displacement can cause trauma linked to disruption and dislocation from familiar surroundings and breaking of social and cultural bonds, and the challenges of resettlement. Conflict may arise between existing residents and relocated households as disagreements about social norms and practices emerge. With less ties to support networks and opportunities, there is a risk of poorer health and wellbeing outcomes amongst those displaced.

Those remaining in affected communities may experience a decrease in local population as affected residents relocate or are relocated. Alternatively, at-risk properties may be increasingly occupied by those who can't afford to live anywhere else, exacerbating inequities. Those who remain within affected communities may experience feelings of loss and abandonment as the community diminishes. If there is a net reduction in the size of an affected community, essential services may be slowly withdrawn over time (e.g. health services, education facilities, job opportunities, community services). Investment in affected communities may also be reduced. Similar to displaced households, those who remain may experience trauma due to the breaking of family, social and cultural bonds, resulting in poorer health and wellbeing outcomes.

The breakdown of communities and associated social bonds and connections to place is an important risk to consider because fractured, less cohesive communities can result in conflict, loss of trust in government, feelings of isolation and loss, and negative health and equity outcomes.

Risks to social infrastructure and amenity

Social infrastructure and amenity in this context means:

- the infrastructure that keeps society functioning and supports daily patterns of life (e.g. shopping or travelling to work, education, engaging in recreation, community or cultural activities)
- social support structures (e.g. churches, supermarkets, community facilities, healthcare services, early childhood centres)
- the recreational spaces and facilities that afford visitors and residents the opportunity to enjoy and participate in exercise, organised sport and time spent outside
- the aesthetics and amenity of the places people live in and the spaces they utilise, and whether changes to these can be tolerated by those who live there.

Isolation caused by increasing frequency and severity of flooding and landslides is considered likely to negatively impact the wellbeing of Hawke's Bay communities by restricting access to the goods, services, and social networks that support residents' health and wellbeing.

Over time, repeated isolation from social infrastructure and a loss of amenity will begin to erode the liveability of communities because residents are not able to access the services they need for daily life. Frequent isolation in affluent communities may result in those residents leaving the community over time for less exposed locations and

increasing inequities for those who remain in at-risk locations.

Risks of conflict, disruption and loss of trust in government

Disruptions to everyday life caused by exposure to hazards, changes in the value of assets, and difficulty accessing critical resources (e.g. clean water, emergency management services, insurance, safe land for homes) may generate conflict and competition between different social groups and erode trust in central and local government. Disagreements about how (or not) to respond to climate change can further exacerbate these tensions.

Any competition for scarce resources that may arise will disadvantage already marginalised or deprived groups and individuals, exacerbating inequities. A full understanding of risks associated with a loss of trust in government is explored in Section 10: Risk to Governance.



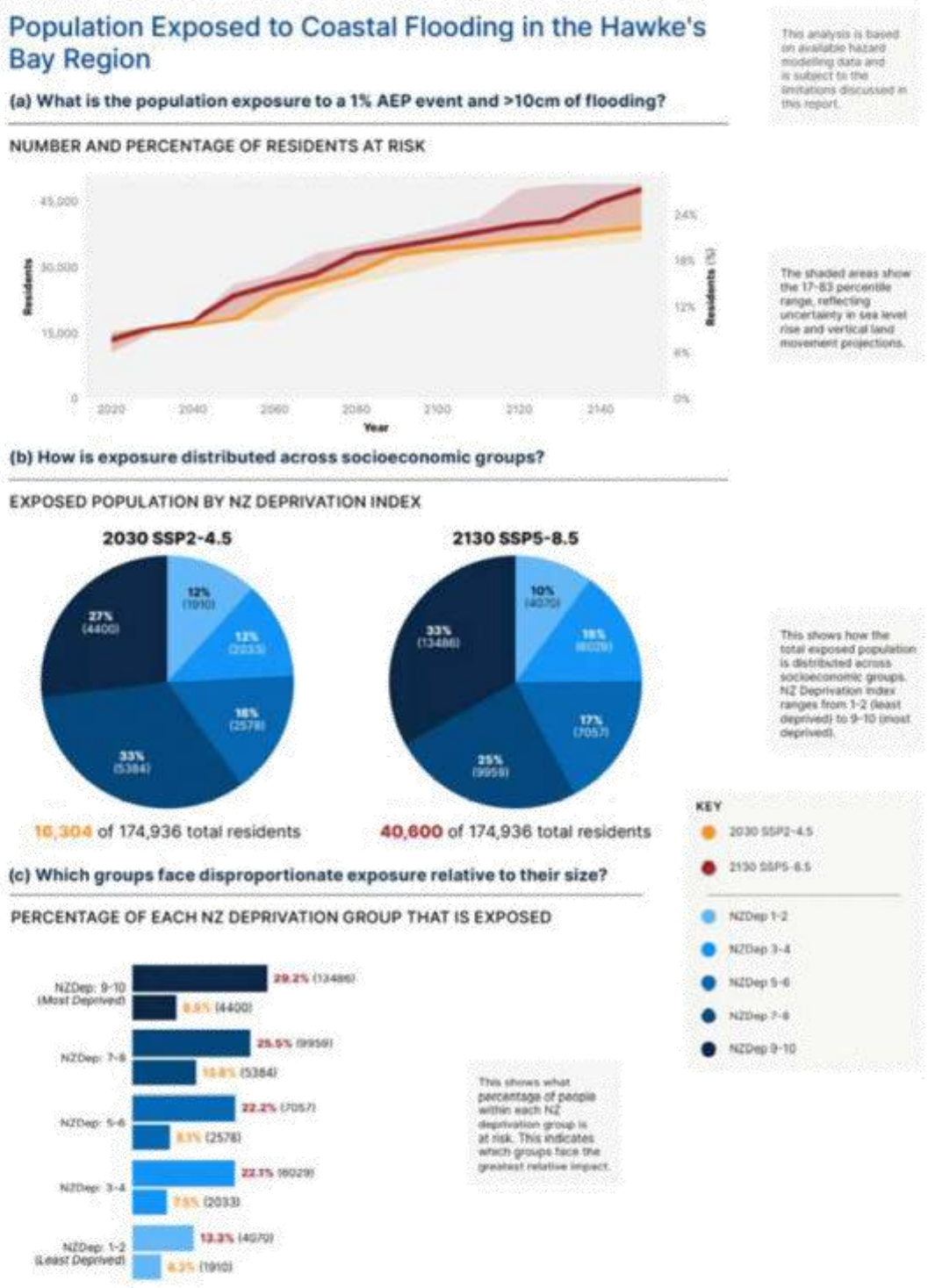


Figure 8.1. Risk to residents in the Hawke's Bay Region living in property directly exposed to coastal flooding and projections over time.

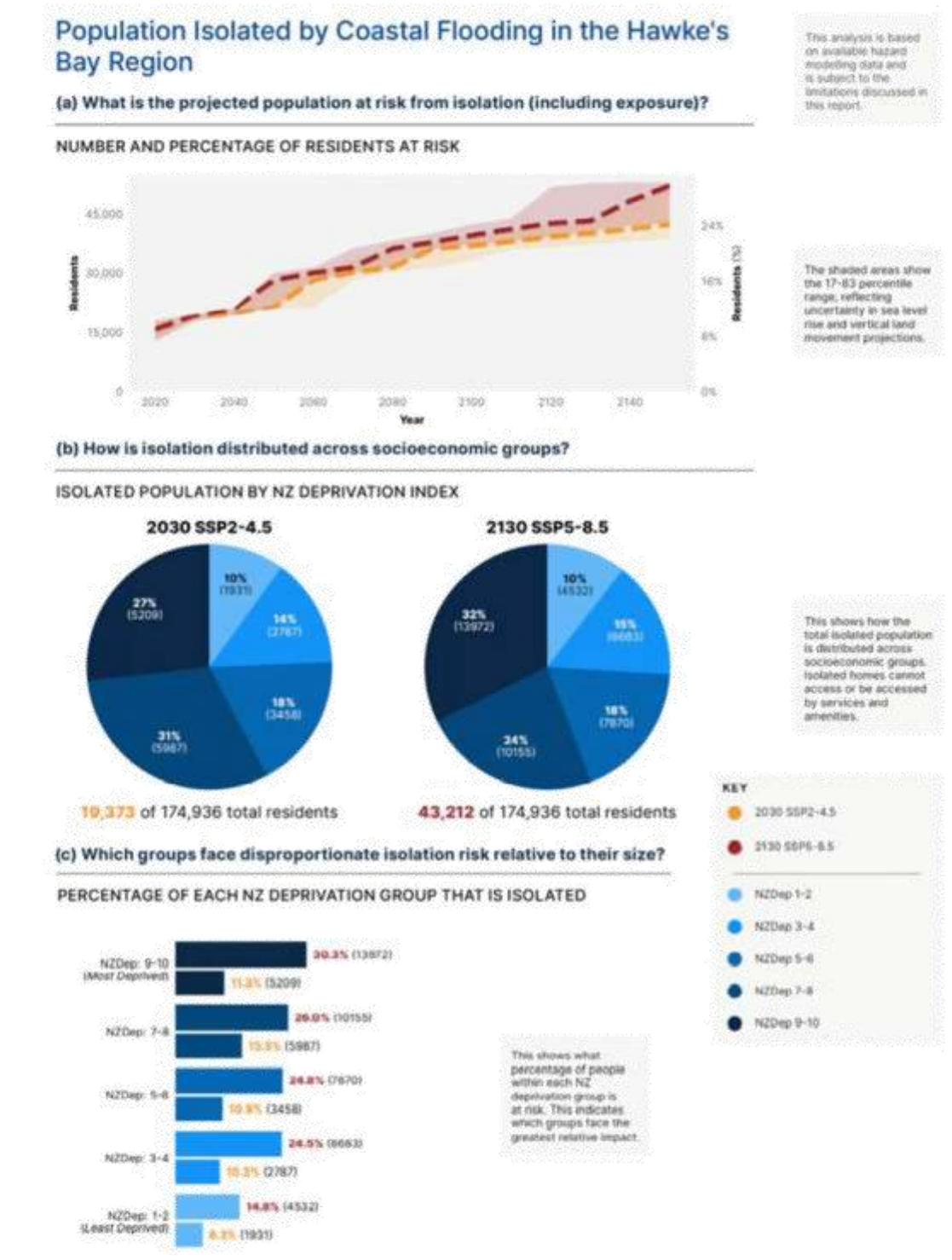


Figure 8.2. Isolation risk to residents in the Hawke's Bay Region from coastal flooding and projections over time.

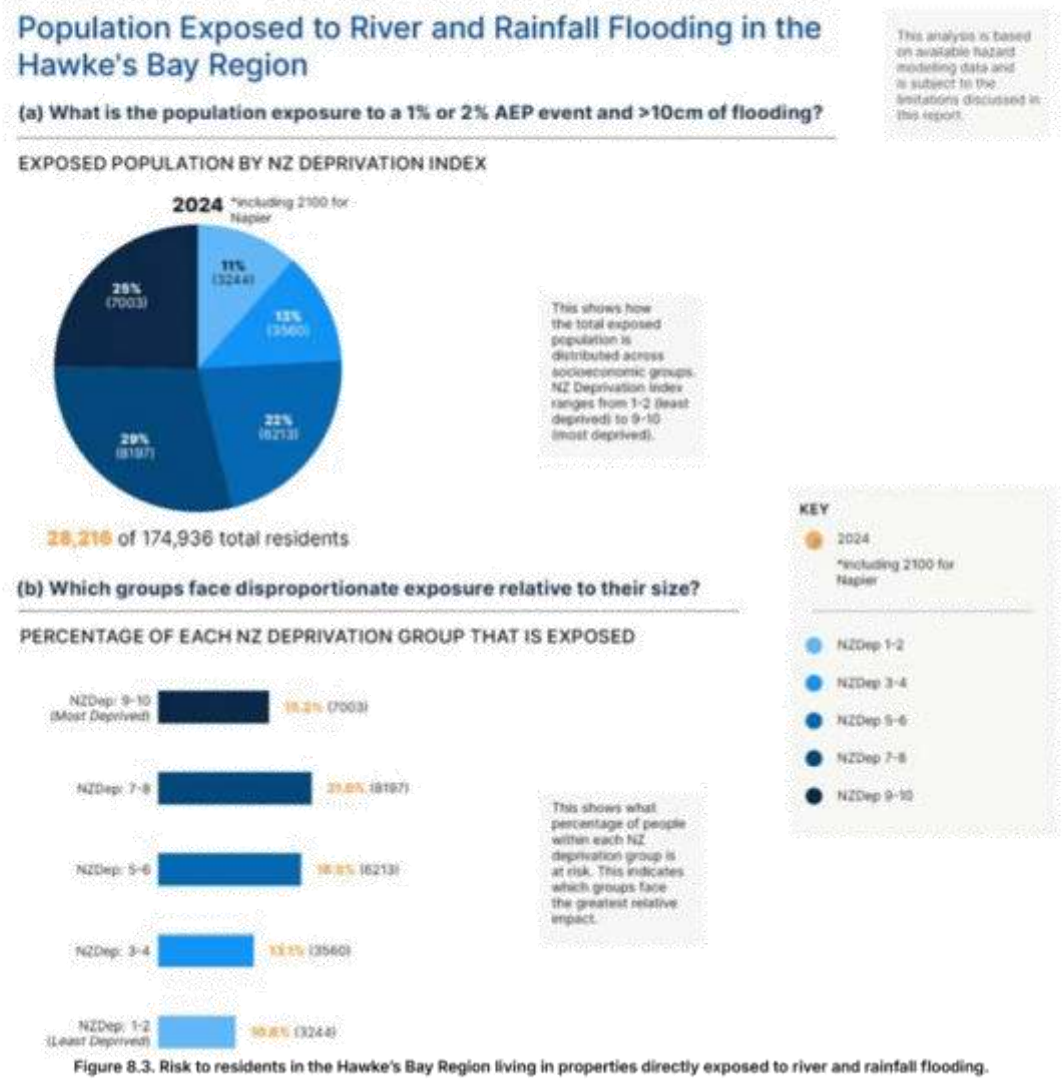


Figure 8.3. Risk to residents in the Hawke's Bay Region living in properties directly exposed to river and rainfall flooding.

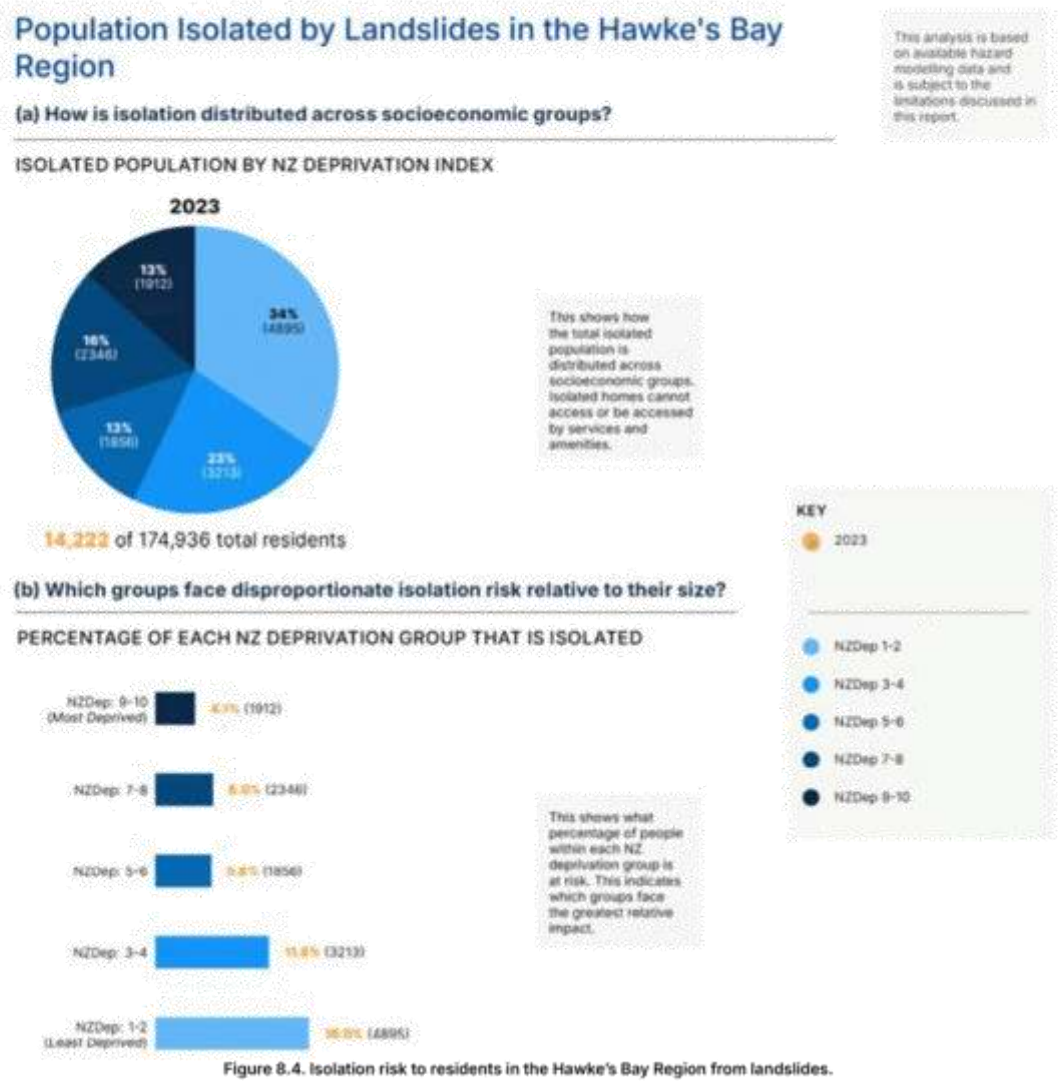


Figure 8.4. Isolation risk to residents in the Hawke's Bay Region from landslides.


"Mental outlook is important for health but repeated stresses from extreme weather and other impacts of climate change may take a toll on our well-being"
– Royal Society Te Apārangi

9 Economic Domain

This assessment uses the Australian and New Zealand Standard Industrial Classification (ANZSIC) to report economic risks. ANZSIC is the official framework used to classify economic activities across New Zealand. For instance, horticulture and viticulture is included within the broader category of "Agriculture, Forestry, and Fishing". This classification ensures consistency when reporting employment, GDP contribution, and sector-based exposure to climate-related hazards.

Manufacturing, Agriculture, Forestry & Fishing, and Health Care & Social Assistance have the greatest contributions to regional GDP. Construction, and Retail Trade are also significant employers (Table 9-1).

Climate change will impact the regional economy through direct, indirect and chronic impacts.

Direct impacts refer to physical damage to industrial or commercial properties and assets caused by a hazard such as flooding or landslides.

Indirect impacts are the loss of function experienced by a business or industry due to disruption to the things upon which it relies such as power, water, transport, goods supply or staffing.

Chronic impacts refer to the changes over time in key operating conditions such as temperature, soil

Table 9-1. Employment and Economic Contribution by Economic Sector in Hawke's Bay.

ANZSIC Division	Contribution to Regional GDP (%)	Percentage of total regional workforce employed (%)
Manufacturing	12	12
Agriculture, Forestry and Fishing	9	12
Health Care and Social Assistance	8	12
Rental, Hiring and Real Estate Services	7	2
Construction	7	10
Professional, Scientific and Technical Services	7	6
Retail Trade	6	9
Wholesale Trade	4	3
Transport, Postal and Warehousing	4	4
Public Administration and Safety	4	4
Education and Training	3	7
Administrative and Support Services	2	5
Financial and Insurance Services	2	1
Electricity, Gas, Water and Waste Services	2	1
Accommodation and Food Services	2	6
Other Services	1	4
Information Media and Telecommunications	1	1
Arts and Recreation Services	1	1
Mining	0	0

ANZSIC Division refers to classification system jointly developed by Statistics New Zealand and the Australian Bureau of Statistics to allow comparisons across industries between the two countries.

moisture, salinity etc. These have the most direct impact on primary industries.

In this assessment, GDP derived from exposure data for industrial and commercial property and associated sector employment data is used to indicate the relative level of direct exposure, and isolation as a proxy for indirect impacts. Chronic impacts are discussed based on qualitative assessments. Figures used are intended to enable comparison of the impacts of different hazards at different time periods, not as an indication of loss.

Overview of hazards with potential direct impacts on the regional economy

Coastal flooding poses a risk to industrial and commercial properties contributing to 10% ($830m) of the region's annual GDP in 2050, rising to 15% ($1242m) by 2130 (Figure 9.2). The greatest exposure across both time periods is to the Manufacturing and Wholesale Trade sectors. Isolation impacts 10% in 2050, rising to 16% by 2130 (Figure 9.3). Again, Manufacturing and Wholesale Trade are the most impacted sectors along with Transport, Postal and Warehousing.

Direct impacts from landslides are not significant economically, however isolation is a risk for commercial and industrial properties contributing to 6% of the region's GDP (Figure 9.4). The Agriculture, Forestry and Fishing sector is the most heavily affected with buildings contributing 49% of the sector's GDP at risk of isolation due to landslide susceptible land (Figure 9.4).

River and rainfall flooding poses a risk to industrial and commercial properties contributing to 32% ($2642m) of the region's annual GDP (Figure 9.5). The greatest exposure is to the Manufacturing, Health Care & Social Assistance and Retail Trade sectors. Isolation due to river and rainfall flooding impacts properties contributing 39% ($3260m) of the region's annual GDP. Again Manufacturing, Health Care and Social Assistance and Retail Trade are the sectors with the greatest exposure.

Coastal, river, and rainfall flooding can both have significant economic impacts beyond the direct damage and isolation impacts. Repeated events can undermine business confidence in the area and lead to capital flight.

All figures showing the results of the mapped natural hazard impact on property contributing to economic activity are presented in Appendix 3.5. Note that hazard model coverage is often focused on urban areas, limiting the sufficiency of exposure analysis for rural areas and rural-based sectors.

Risks to primary production

Hawke's Bay's primary sector faces significant climate-related risks and opportunities through mid-century, with varying impacts across the region's districts. Agriculture, Forestry and Fishing contributes 9% of the annual regional GDP and employs 12% of the total workforce. Impacts on viticulture specifically also flow on to tourism, given the significance of the wine and food sector in attracting visitors to the region. This sector will be affected by both acute (storms) and chronic climate change effects. Under SSP3-7.0 projections for 2041-2060, all districts will experience mean annual temperature increases of approximately 1.4°C, though with distinct local variations in associated impacts.

The Hastings District, currently the region's primary horticultural area, faces particular challenges. Projections indicate 23.8 additional hot days (>25°C) annually and a notable decrease in spring rainfall (14.9%). These changes, combined with increasing Potential Evapotranspiration Deficit (PED) of 57.9mm annually, suggest increasing water stress for fruit production. However, reduced frost risk (-9.9 days annually) may benefit some crop types. See Section 14 for more information on risk assessment findings for the Hastings District.

The Central Hawke's Bay District shows similar trends but with slightly more pronounced temperature effects, projecting 25.2 more hot days annually. The district's PED increase of 45.9mm annually, while significant, is less severe than Hastings. This could present opportunities for horticultural expansion, particularly for crops that benefit from warmer conditions and can manage periodic water stress. See Section 14 for more information on risk assessment findings for the Central Hawke's Bay District.

The Wairoa District's projections suggest potential opportunities for new horticultural development. The area is expected to experience a reduction in windy days and significant increase in growing degree days (406.7 GDD increase annually). While Wairoa faces similar challenges regarding spring rainfall reduction (-11.9%) and increased PED (51.7mm), its projected decrease in frost risk (-7.5 days annually) could open new areas for fruit production. See Section 17 for more information on risk assessment findings for the Wairoa District.

Biosecurity incursions are expected to increase with significant impacts on primary production. For example, Chilean needle grass, an invasive weed established in sheep and beef pastures throughout Hawke's Bay reduces the productivity and market value of sheep inhabiting pastures with needle grass present [63]. Climate change is expected to increase the potential habitat for this invasive species by 60%, leading to potential economic losses in the hundreds of millions [63].



Figure 9.1. Chilean needle grass - an invasive weed.

Key economic implications for the sector include:

- Increased irrigation infrastructure requirements and operating costs across all districts, along with potential conflict over water allocations
- potential shifts in variety selection and timing of key operations
- geographic diversification opportunities, particularly in Wairoa and Central Hawke's Bay
- rising importance of heat and water stress management in Hastings' existing orchards
- changes to fruit quality and yield affecting market returns
- changes in efficacy and cost of pest management resulting from increased biosecurity incursions.

These changes will require significant adaptation investment but may also present opportunities for regional diversification of horticultural production. Success will depend heavily on water availability, infrastructure development, and adoption of climate-resilient growing practices.

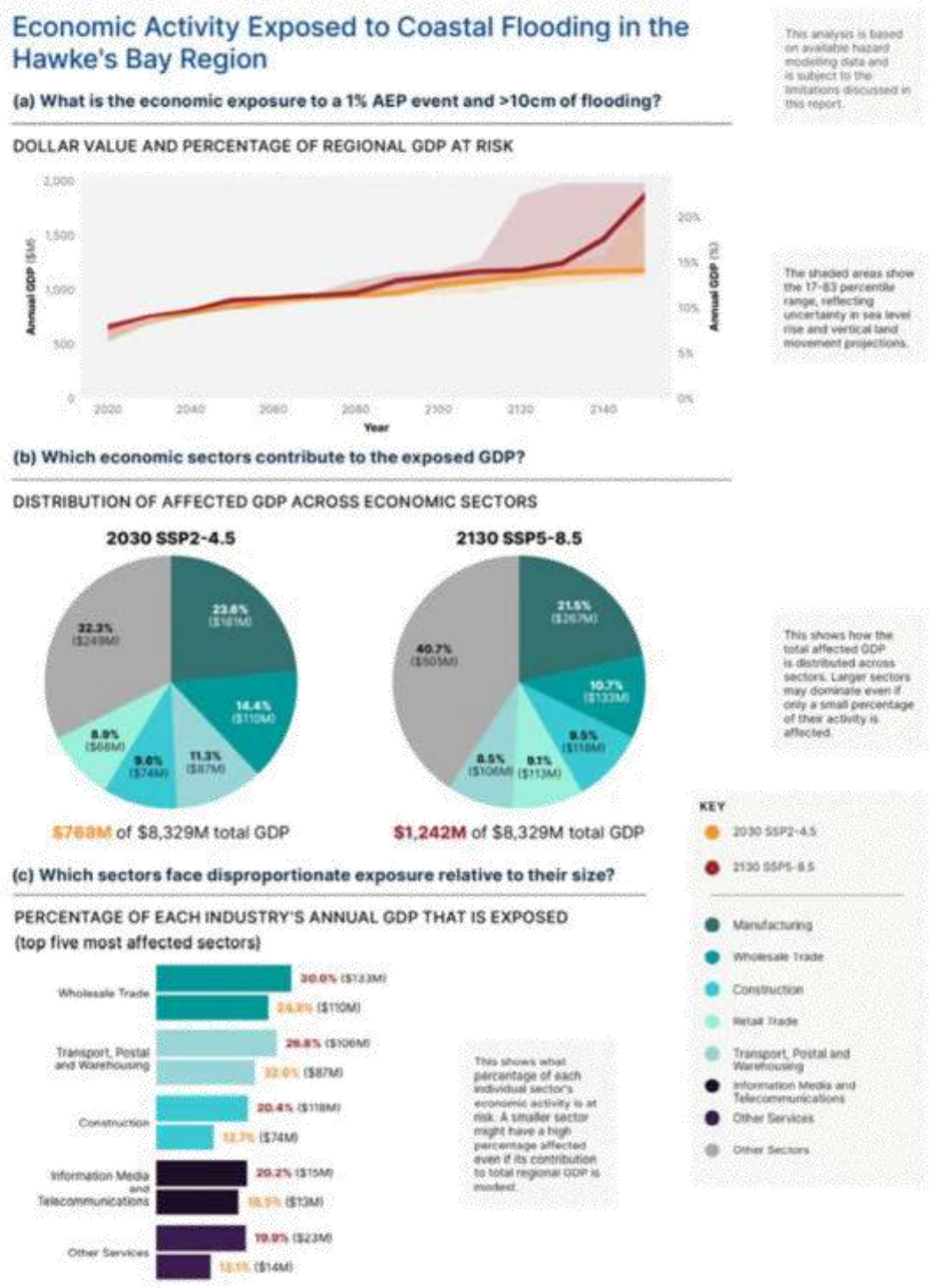


Figure 9.2. Risk to economic sectors in the Hawke's Bay Region from 1% AEP coastal flooding.

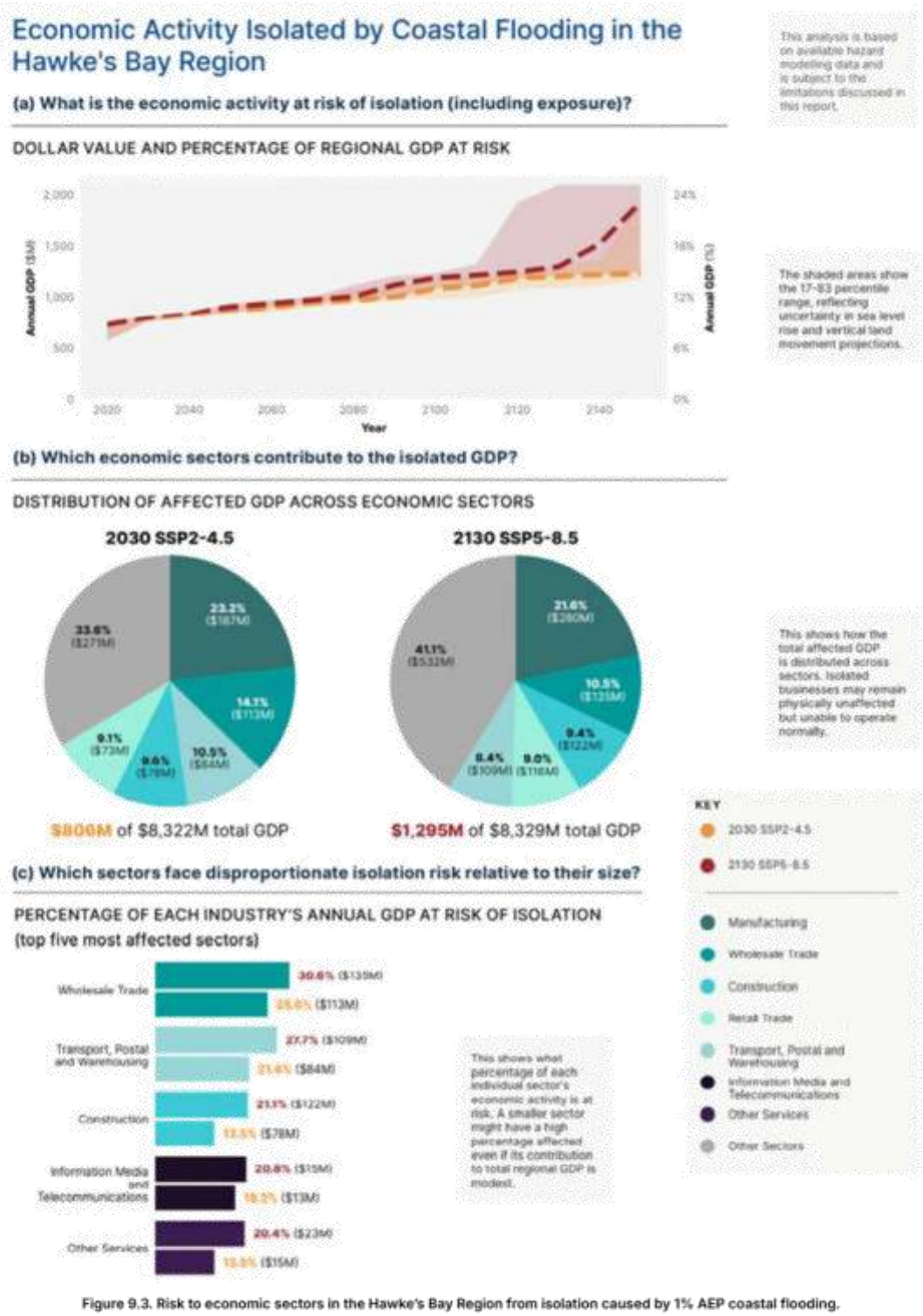


Figure 9.3. Risk to economic sectors in the Hawke's Bay Region from isolation caused by 1% AEP coastal flooding.

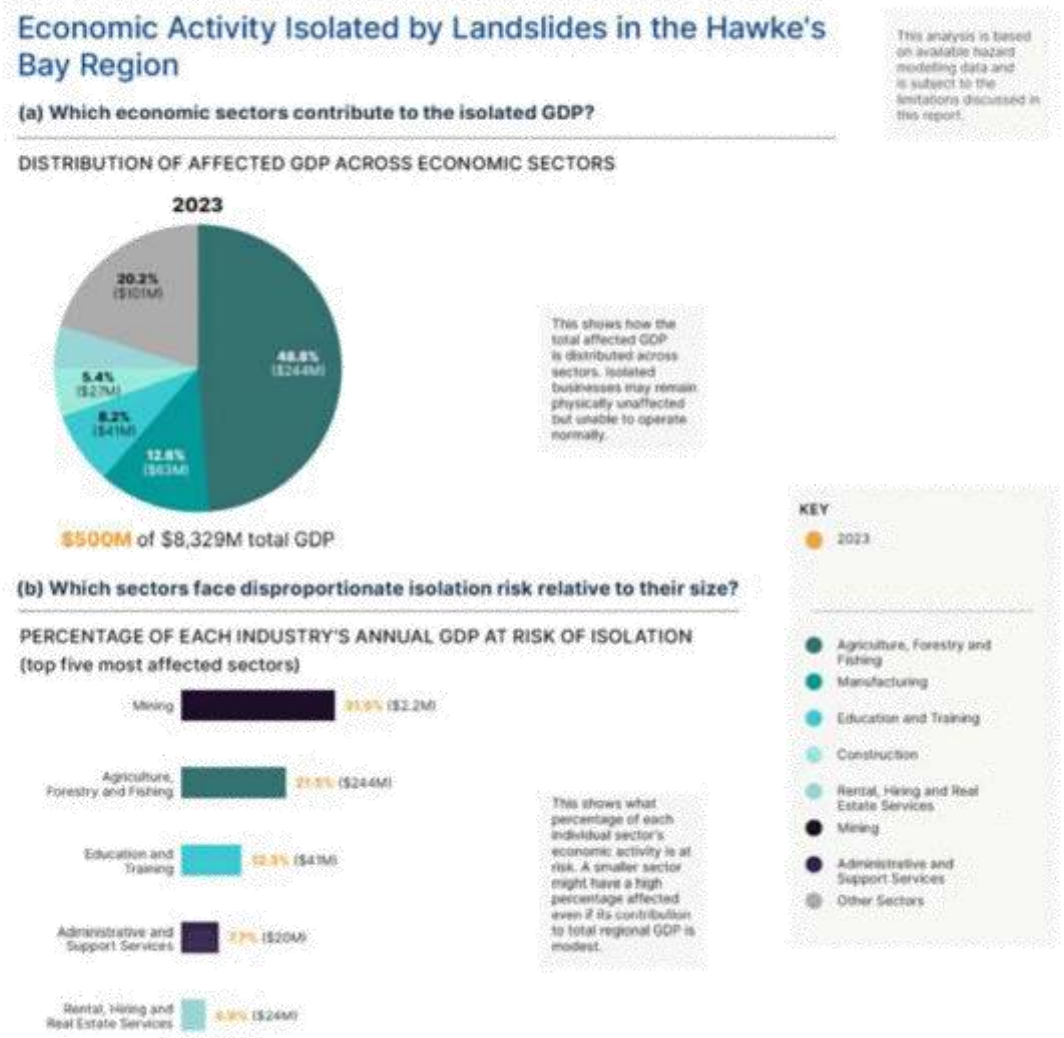


Figure 9.4. Isolation risk to economic sectors in the Hawke's Bay Region from landslides.

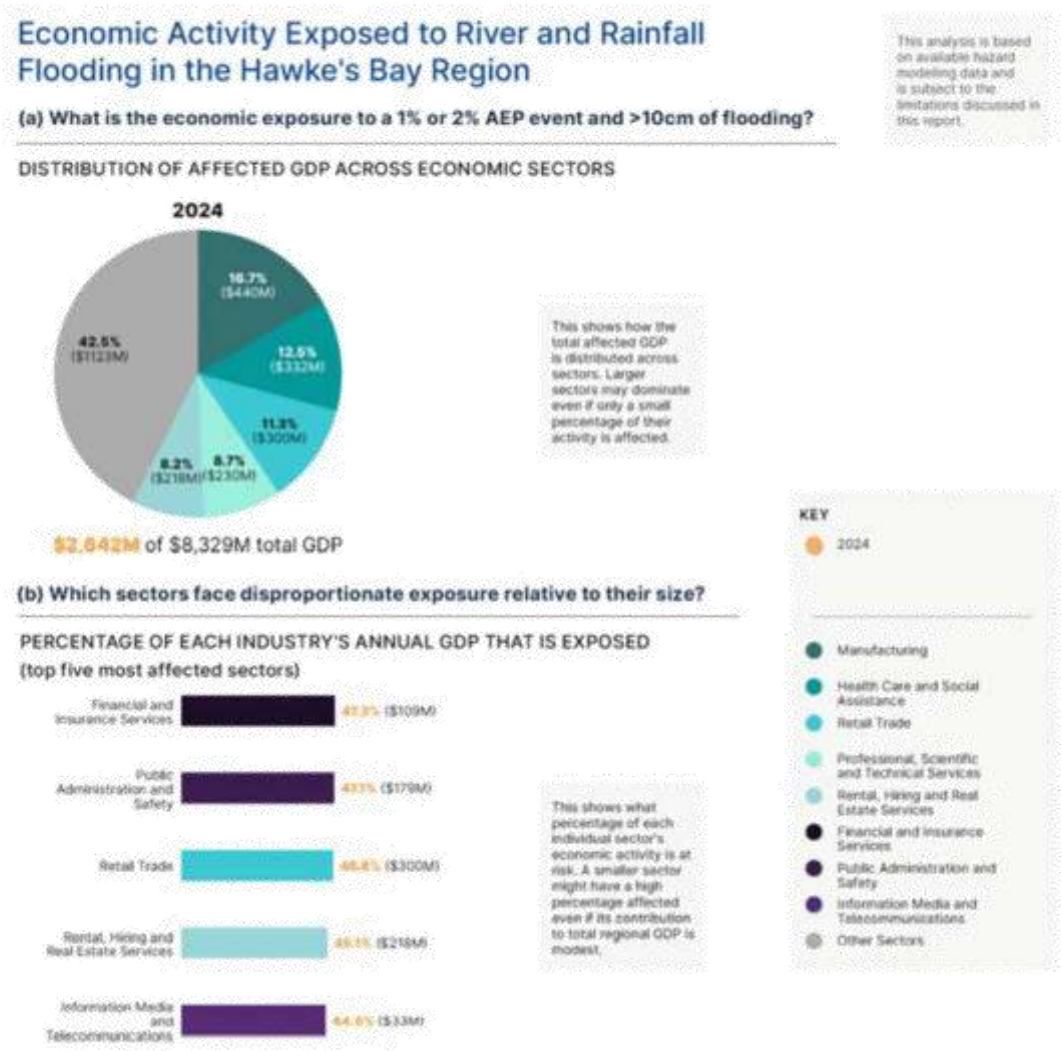


Figure 9.5. Risk to economic sectors in the Hawke's Bay Region from direct exposure to river and rainfall flooding.

10 Governance Domain

The capacity of the region to continue to govern effectively is both dependent on the effects of climate change (e.g. on rate payers, financial systems, institutional assets, businesses) and by what is done (by governing authorities) to reduce the effects of climate change in the first place. This circular causation makes it challenging and complex to evaluate.

In this analysis, governance risks have been evaluated using expert judgement. The governance domain is broken down into sub-sections that have been adapted from those used in the National Climate Risk Assessment [12]. These sections are grouped into 'risks to' governance and 'risks arising from' governance.

Regional governance risks exist within a broader national context. The Climate Change Commission's assessment of the National Adaptation Plan (NAP) has identified "Insufficient/Significant gaps" in governance progress nationally (Section 10). However, beyond these structural challenges, research indicates that all levels of government are likely to face challenges in addressing climate risks, particularly those that cascade across multiple domains or emerge over longer time horizons [64]. These challenges aren't unique to any specific council or region but rather reflect the inherent complexity of climate adaptation governance.

Common governance challenges include balancing immediate priorities with long-term planning, working across traditional disciplinary boundaries, and maintaining progress through political cycles [65]. Misalignment between national policy frameworks and local implementation capacity creates additional complexity, as councils must translate broad strategic direction into practical local actions with limited resources [66].

Addressing these governance challenges represents a significant opportunity for the Hawke's Bay region to strengthen its adaptation effectiveness through approaches to cross-sector collaboration, community engagement, and long-term planning frameworks.

Risks to governance

Loss of community trust and buy-in

There is a general sense that New Zealanders' trust in key institutions is declining, and the 2023 General Social Survey confirmed an overall downward trend [67], [68]. Unmitigated climate impacts may be perceived by communities as a failure of authorities to protect property and life. Loss of trust will be accelerated where the impacts of climate impacts exacerbate socio-economic inequities. This perception can erode trust in governing institutions.

Inadequate emergency management responses

The increasing frequency and scale of emergency events will challenge the region's small, specialised Civil Defence and Emergency Management workforce, which is currently rebuilding following Cyclone Gabrielle. While Hawke's Bay can utilise surge support from across the country, there is a high risk of insufficient resources if other councils are simultaneously responding to more frequent events. Cyclone Gabrielle's impacts across the upper North Island illustrated the limited capacity of emergency management both within the region and across New Zealand [59]. With more major events expected annually by 2030, and a potentially greater percent of the population and Emergency Management staff impacted, the current system could be overwhelmed, potentially further eroding community trust in governance processes. Steps to strengthen the current system such as those undertaken in the Hawke's Bay Civil Defence Emergency Management Transformation Strategy are important for supporting community resilience and trust in governance processes [12].

Failure of democratic process

Any increased frequency of disruption events will likely inhibit the community's ability to engage in the democratic process. Hawke's Bay currently has moderate civic engagement, with a voter turn-out on average across the region of 42% in local elections (national average 47%) and 80% in both electorates for central government elections (national average of

77%). The risk to the democratic process is likely to increase as a result.

Staff within local councils are also likely to be overloaded, particularly through periods of recovery from severe weather events. This may reduce their capacity to comprehensively engage with communities. Regular emergency responses may lead to an increase in non-consultative decision making under emergency powers.

Additionally, during recovery times after an event, there is often increased levels of engagement given the number of difficult decisions that need to be made. Sustained levels of increased engagement can result in engagement fatigue, draining the resources of the community. This fatigue can evolve into broader disengagement between events if prior consultation doesn't translate into visible action. Additionally, iwi representatives may not have sufficient resources to engage in council-led engagement processes while also supporting their communities through event recoveries.

Democratic processes are also likely to be more challenging as social cohesion reduces, undermining constructive civic debate about issues [69]. This is particularly relevant in climate adaptation contexts, where decisions often involve difficult trade-offs and long-term commitments that span political cycles. Increasing disruption events and associated pressure on housing and community services may accelerate this polarisation, making democratic consensus-building and decision-making more difficult.

Impacts on existing government work programmes

The need to respond to emergency events diverts council and central government attention and resources. This can lead to disruption and delays in completing existing work programmes, such as those relating to building and upgrading lifeline infrastructure, policy development and community development projects. These time delays can cause additional stress for council and government staff, and frustration within the communities they serve. There may also be financial implications, with delays leading to increased costs which are then borne by ratepayers. The need to undertake hazard-related repairs and recovery also increases councils' costs, which can lead to increased rates and reprioritisation of work programmes [12], [70].

Increased litigation

As more individuals and businesses are affected by climate impacts, the risk of litigation increases. Litigation proceedings (irrespective of any claims being upheld) will require significant resources and will divert resources away from mitigation and adaptation efforts. The consequence of litigation in the future will be dependent on how relevant legislation evolves, how liability is assigned and the merits of legal proceedings. Increased litigation from mana whenua for the Crown's breaches of Te Tiriti o Waitangi is also a possibility.

Litigation may also arise in response to Councils or other institutions' efforts to proactively manage risk. This may generate a fear of actions to reduce risk and lead to a reluctance to take steps that may lead to legal challenges and expose ratepayers to further burdens.

Breaching Te Tiriti/Treaty obligations

There are a number of culturally significant sites that will be affected under the climate change scenarios discussed in this report. Many of these important sites are under Crown ownership. A lack of action by the Crown or other agencies for protection of such sites could be perceived as a breach of Te Tiriti/Treaty obligations. There is also a risk that iwi do not have the resources for engagement and involvement in local adaptation projects led by the Crown.

Risks arising from governance

Maladaptation due to a failure to account for uncertainty and long-term climatic change

Current governance processes often fail to adequately account for uncertainty and long-term change, focusing instead on current and shorter-term conditions. Most approaches do not account for data uncertainty or future changes in critical assumptions, such as insurance availability.

A tendency towards predictive, rather than adaptive planning, heightens the risk of maladaptation as decisions are bound by current understanding. There is a shortage of tools to assist council staff and

elected members in incorporating futures thinking. The pace and scale of decision-making during ongoing recovery from disasters, such as the recent extreme weather events, further exacerbates the challenge of risk-informed long-term planning. Financial and other resource constraints, as well as a desire to rapidly restore services to what they were before an event, dominates decision making processes.

Lack of institutional support for climate adaptation

Collaboration across organisations and agencies to address climate change is in its infancy. Constrained finances, lack of clarity around climate change funding, slow regulatory processes, rigid procedures, unaligned priorities and siloed thinking across domains all present challenges. Collaboration between central government agencies, the regional council, all territorial authorities and critical lifelines is particularly crucial for the region's long term adaptation planning.

Maladaptation due to knowledge and capacity gaps

There is varying expertise across councils in regard to climate change risk, mitigation, and adaptation. This makes it challenging to integrate climate change risk thinking across all council areas and both district and regional level work programmes. Staff are stretched dealing with day-to-day roles and recovery from prior events, creating a challenging environment to advance complex and sometimes contested issues.

Institutions also have a role bridging knowledge gaps within communities. Disinformation and misinformation amongst community members is a challenge in climate adaptation. Greater transparency of and accessibility to climate data could support collective behaviour change. Accessibility is required in terms of both physical access but also communication of data. Skills in risk communication and engagement are essential to build community capacity and knowledge around risks and adaptation

Path dependency/sunk cost fallacy

A wide range of planning decisions and community and social investments, both historical and current, will impact how the region, and each district, adapts to climate change. The location of recent or planned housing developments, health facilities, stop banks, and river protection could lead to path dependency, where further investment is required to protect existing assets. Path dependency will increase as financial resources are further constrained.

Inaction due to political challenges

The benefits of climate change adaptation are often not immediately visible, making it politically challenging to prioritise. Many climate adaptation decisions require a long-term mindset which can conflict with present-day challenges and resource allocation discussions, further heightened by the three-year electoral cycle. Political cycles and changing institutional/community priorities significantly impact the scale and pace of action to address the long-term impacts and range of risks posed by a changing climate. This is especially heightened by the current focus on helping affected communities recover effectively from Cyclone Gabrielle.


"On top of
nflation, the
:ost of cleaning
ıp after Cyclone
Gabrielle has left
:ouncils with a
ıefty bill."
· NZ Herald,
2025

11 Iwi/Māori Domain

Hawke's Bay has a long history of Māori settlement, dating back to approximately 1250–1300 CE [71]. The region is home to 91 hapū and 11 iwi groups, of which Ngāti Kahungunu is the largest [16]. Hawke's Bay has a high proportion of people who identify as Māori (28.6% of the total population) compared to the New Zealand average (17.8%) [16]. Many of the historical Te Tiriti/Treaty claims in Hawke's Bay have been settled and a growing number of post-settlement governance entities (PSGEs) have been established. The region's Māori population is growing, with 50,076 of the usually resident population identifying as Māori, compared to 44,931 in 2018 and 34,662 in 2013[72]. Across the region, 79 marae provide sites for Māori community and tūrangawaewae. Additionally, over 11% of Hawke's Bay's 1.42 million hectares of land area is Māori freehold land [16].

Although specific, in-depth engagement with iwi, hapū or whānau has not informed this first pass risk assessment, risks to Māori and Māori interests described in the NCCRA [12] and Māori-led research offer useful insights which are drawn on here[1] [73]. Furthermore, the recent Government Inquiry into the severe weather events of 2023 notes the impacts of these events on Māori (particularly in the Hawke's Bay region), the subsequent function Māori community served in the immediate event response, and the necessity for deeper inclusion of Māori with local and regional government in the preparation and planning for future hazard events. [74] Research from Te Puni Kōkiri highlights the necessity for more detailed risk assessments that reflect the place-based cultural practices, knowledge systems and behaviours of iwi, hapū and whānau, including the development of mana enhancing approaches that are situated and sensitive to the adaptive capacity of mana whenua.

Summary of exposure to hazards

Māori in the Hawke's Bay region face unique exposure, risks and sensitivities to climate change. Key hazards as identified in this assessment are river, rainfall, and coastal flooding (Figure 11.1). The harms associated with being exposed to these hazards can be exacerbated by the existing health and socioeconomic inequities that Māori experience. Further, such hazards can undermine Māori cultural wellbeing through the degradation of and/or loss of connection to the natural environment and damage and/or loss of important cultural sites and associated practices.

Table 11-1. Risk to Māori Population from Natural Hazards.

Hazard Type	Timeframe	Scenario	Direct Exposure (% of Māori residents)	Risk of Isolation (% of Māori residents)
River and Rainfall Flooding	Present	Current	15.4%	57%
Landslides	Present	Current	1%	7%
Coastal Flooding	2020	Current	8.5%	10%
Coastal Flooding	2050	SSP2-4.5	10.8%	12.6%
Coastal Flooding	2050	SSP5-8.5	15.5%	19.8%
Coastal Flooding	2100	SSP2-4.5	22%	23.5%
Coastal Flooding	2100	SSP5-8.5	23%	24.7%

Table 11-1 presents the findings regarding hazard exposure and isolation risk for Māori in Hawke's Bay.

It is noted that the data informing this first pass risk assessment does not necessarily express the true lived experience of mana whenua and their marae in previous recorded events. Several marae that were flooded during Cyclone Gabrielle are not showing as exposed based on available flood modelling. This gap between lived experience and available data highlights the need for investment in further modelling and ground-truthing with mana whenua to enable a fuller understanding of how climate impacts are expected to affect iwi, hapū and whanau in the region. It can also reveal that in some instances, lived experience is of an event that exceeds modelling parameters and/or design of mitigation works (e.g. recorded flood flows could be in excess of a 200-year event, whereas modelling may only be available at that location for a 50 or 100-year event).

Analysis shows varying levels of risk to Māori communities across different hazard types. While exposure to landslides is relatively low at 1%, flooding presents more significant challenges. Currently, 15.4% of the region's Māori population is exposed to more than 10cm of river and rainfall flooding, with 57% at risk of isolation during such events. This high isolation risk indicates that a significant portion of the region's Māori population could face challenges in accessing essential services and maintaining community connections.

Coastal flooding risk is projected to increase substantially over time. While current exposure affects 8.5% of the Māori population, this could more than double by 2100 under both moderate (SSP2-4.5) and high (SSP5-8.5) emissions scenarios. The risk of isolation follows a similar pattern of increase.

When compared to the overall regional population, Māori face similar levels of risk across most hazards. For river and rainfall flooding, Māori currently face slightly lower exposure risk (15.4%) compared to the regional average (16.1%), but slightly higher isolation risk (57% versus 54.5%).

Risks to social, cultural and spiritual wellbeing

Risks to Māori extend beyond exposure and isolation. Climate change impacts threaten not only physical safety and access to services but also pose a risk to interconnected aspects of social, cultural, spiritual and economic wellbeing.

Drawing on national evidence, these risks are expected to be particularly acute for Māori because of the reciprocal relationship and kinship connections between people and places at the centre of Te Ao Māori [75], [76]. As such, there is a risk to the spiritual and cultural attachment to place that is essential for maintaining lived connections to whenua and traditional practices that are fundamental for Māori wellbeing and Te Ao Māori. The National Climate Change Risk Assessment (NCCRA) also highlights the risk of exacerbating existing inequities and creating new ones due to the differential distribution of climate change impacts [12]. For Māori, this risk is particularly salient given historical and ongoing socioeconomic disparities [77].

From a cultural and spiritual wellbeing perspective, climate change is likely to negatively affect Māori via degradation of the natural environment, including loss of taonga species, as well as risks to wāhi tapu and other sites of cultural significance such as mahinga kai and kaimoana. These impacts have the potential to undermine the ability of Māori to physically connect with the whenua and their tūrangawaewae (place where one has the right to stand, where one feels strong and at home), as well as their ability to practice tikanga (correct procedures, lore, practices), undertake manaakitanga (care, give hospitality), engage in kaitiakitanga (environmental stewardship), and pass on mātauranga Māori to the next generation [75], [76]. These impacts may affect the ability of Māori to express their mana (authority, dignity, governance), with implications for cultural, spiritual, emotional, mental, and social wellbeing [75].

Moreover, the potential isolation of Māori communities due to climate change hazards could also have profound impacts on the ability to connect with one another and undertake cultural practices that are central to wellbeing. Access to cultural sites of significance, such as marae, urupā, and other wāhi

tapu could be compromised, affecting the community's ability to maintain traditional practices, gather for important events, and connect kanohi ki te kanohi (face-to-face).

Risks to economic wellbeing and the Māori economy

In terms of the economic impacts of climate change, potential disruptions to primary and outdoor-based industries could disproportionately affect Māori communities that are heavily employed or invested in them [75], [78]. For example, 9.4% of employed Māori who live in the Hawke's Bay Region work in the agriculture, forestry or fishing industries, compared with 5.7% of those who live in New Zealand [72]. As of 2020, the 303 Māori-owned businesses in the Hawke's Bay were heavily invested in sectors potentially directly exposed to the impacts of climate change and associated hazards: Transport, Postal and Warehousing (22% of Māori-owned businesses); Construction (14%); Agriculture, Forestry and Fisheries (13%) [79]. Additionally, and importantly, both slow onset climate changes and climate related hazards and/or significant events may threaten cultural practices of mahinga kai and mara kai.

To understand risks to Māori economic wellbeing, it's important to look beyond standard economic measures. We need to recognise a broader view of economic activity—one that includes the connections between people, land, water, and culture. This means considering how iwi, hapū and whānau care for and use natural resources, and how these relationships support wellbeing, livelihoods, and identity.

Risks to marae

Data used in this assessment shows six marae in the region are exposed to more than 10cm of river (fluvial) flooding, and one marae exposed to more than 10cm of coastal flooding.

Damage to marae may have significant implications for wellbeing, given the importance of marae as places where culture is practiced and connections with people, land, and ancestors are experienced and maintained. Disrupted access to marae may also negatively impact the ability of Māori to engage in cultural practices and to connect kanohi ki te kanohi, important for supporting social connections. Marae which rely on water tanks or groundwater may be negatively affected if there is damage to these systems or they become contaminated, compromising water quality. Where Māori-owned land is categorised as being unsafe to live on, as in areas of Tangoio that have been categorised as Category 3 following Cyclone Gabrielle [80], this may have implications for further development or re-development (e.g. for building papakāinga) to support Māori aspirations.

Minimising these risks will require the development of adaptation strategies and/or support for implementation of marae adaptation plans already developed by mana whenua. Led by mana whenua, local and regional authorities can also support work aimed at reducing risk to physical safety and improving access to services to preserve and strengthen Māori cultural practices and community resilience. Engagement and collaboration with iwi, hapū and whānau will be important for providing more nuanced, locally specific understandings of the impacts of climate change hazard exposure for Māori, which can then support the development and/or updating of mana whenua-led adaptation plans.

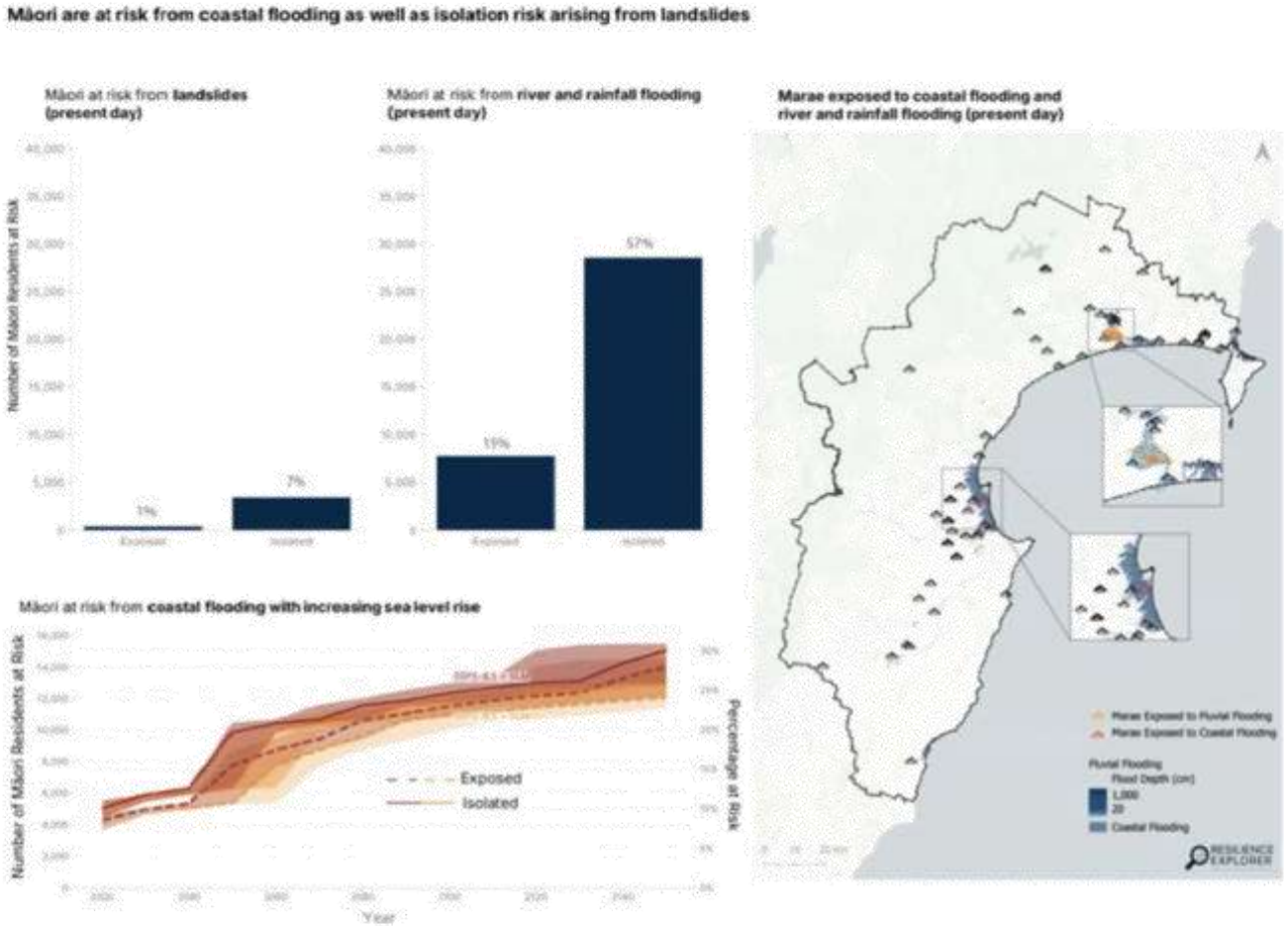


Figure 11.1. Risk to Māori from landslide, coastal, river and surface flooding.

URBAN INTELLIGENCE

AROTAKE TŪRARU PANONITANGA Ā-ĀHUARANGI KI TE MATAU-A-MĀUI



12 The National Context

While this report focuses on climate change risks specific to the Hawke's Bay region, these risks do not exist in a vacuum. The region's vulnerability and resilience are interconnected with broader national and even global systems. Effective risk management and adaptation strategies must therefore consider factors beyond the region's borders.

Successfully addressing climate risks requires coordinated progress across multiple sectors and levels of government. The first National Adaptation Plan 2022-2028 (NAP) is a six year all-of-government plan focused on enabling better risk-informed decisions, ensuring climate-resilient development occurs in the right locations and embedding climate resilience across government.

However, recent assessments suggest that national-level adaptation planning in New Zealand has significant room for improvement. The Climate Change Commission's first review of the NAP found substantial gaps in addressing key risks across various domains [1]. Many critical actions have been delayed or discontinued, including essential reforms to resource management and water services. Other actions lack clear implementation pathways or dedicated funding (Table 12-1).

The Climate Change Commission's 2024 assessment identifies several critical areas where national progress is urgently needed to enable effective local adaptation:

- uncertain roles and responsibilities between different levels of government
- no clear framework for sharing adaptation costs
- limited support for iwi/Māori-led adaptation aligned with tikanga
- gaps in data and tools for decision-making
- insufficient consideration of equity impacts
- workforce capacity constraints.

The Commission found "limited evidence that the first national adaptation plan is driving adaptation at the scale or pace needed." These gaps in national progress create specific challenges for resilience planning in Hawke's Bay:

- infrastructure resilience depends in part on actions by central government agencies and crown entities
- access to data and decision-support tools relies on national research and science systems
- emergency response capability is tied to national emergency management reforms
- major adaptation funding decisions require central government frameworks.

Table 12-1 Climate Change Commission's assessment of how well the National Adaptation Plan is responding to climate change risks.

Domain	Progress on Most Significant Risks	Progress on Other Risks	Overall Progress Assessment
Natural Environment	Moderate gaps	Moderate gaps	Moderate gaps
Human	Insufficient	Insufficient	Insufficient
Economy	Significant gaps	Significant gaps	Significant gaps
Built Environment	Significant gaps	Significant gaps	Significant gaps
Governance	Insufficient/ Significant gaps	Significant gaps	Significant gaps

This underscores why regional adaptation planning must account for gaps in national progress while also identifying opportunities for local action. The Hawke's Bay region faces particular urgency in this regard. Napier City ranks first nationally for property exposure to coastal flooding, with over 25% of properties at risk under a 1% AEP event with 20cm of sea-level rise (Figure 12.1). In the same scenario, Napier City, Hastings and Central Hawke's Bay are amongst the 30 districts most at risk of isolation based on the number of properties potentially cut off from essential services [1].

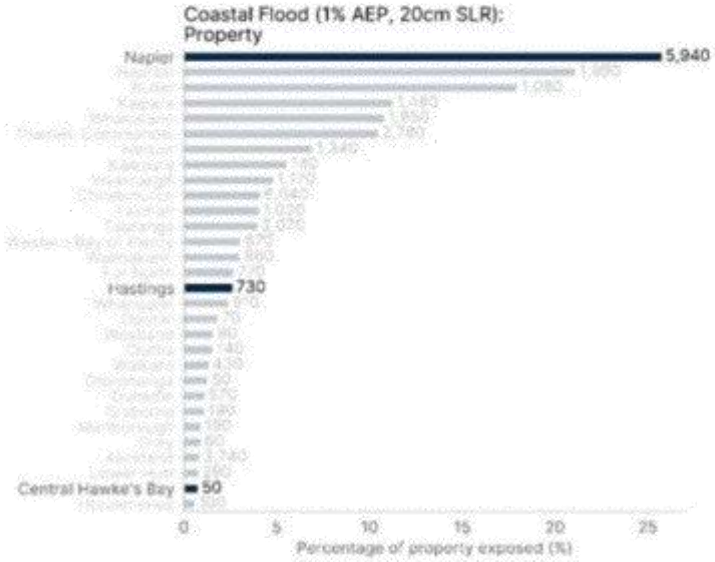
Hawke's Bay's climate risks are also influenced by:

1. national policies and frameworks for climate adaptation
2. actions (or inaction) of central government and agencies operating within the region
3. neighbouring councils' risk management strategies and respective priorities
4. private sector resilience planning, particularly for critical infrastructure and services.

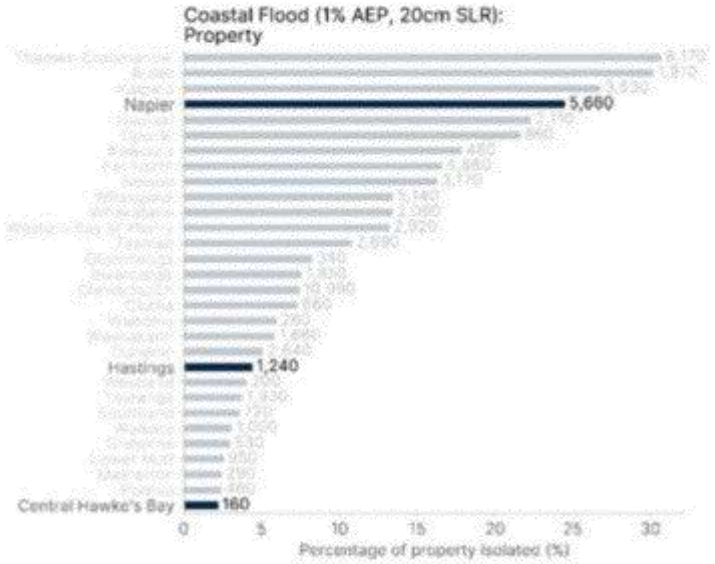
The following chapter examines how these regional climate risks manifest at the district level, recognising that while risks and challenges are shared across Hawke's Bay, each district faces unique combinations of hazards, vulnerabilities, and adaptation priorities.

"Communities have rallied together, often centred around marae, to help those affected and to develop plans for the future. Genuine collaboration and partnership is needed between local and central government and communities, mana whenua and businesses to evaluate and progress options for better managing flood risk in the future"

- Hawke's Bay Independent Flood Review [28]

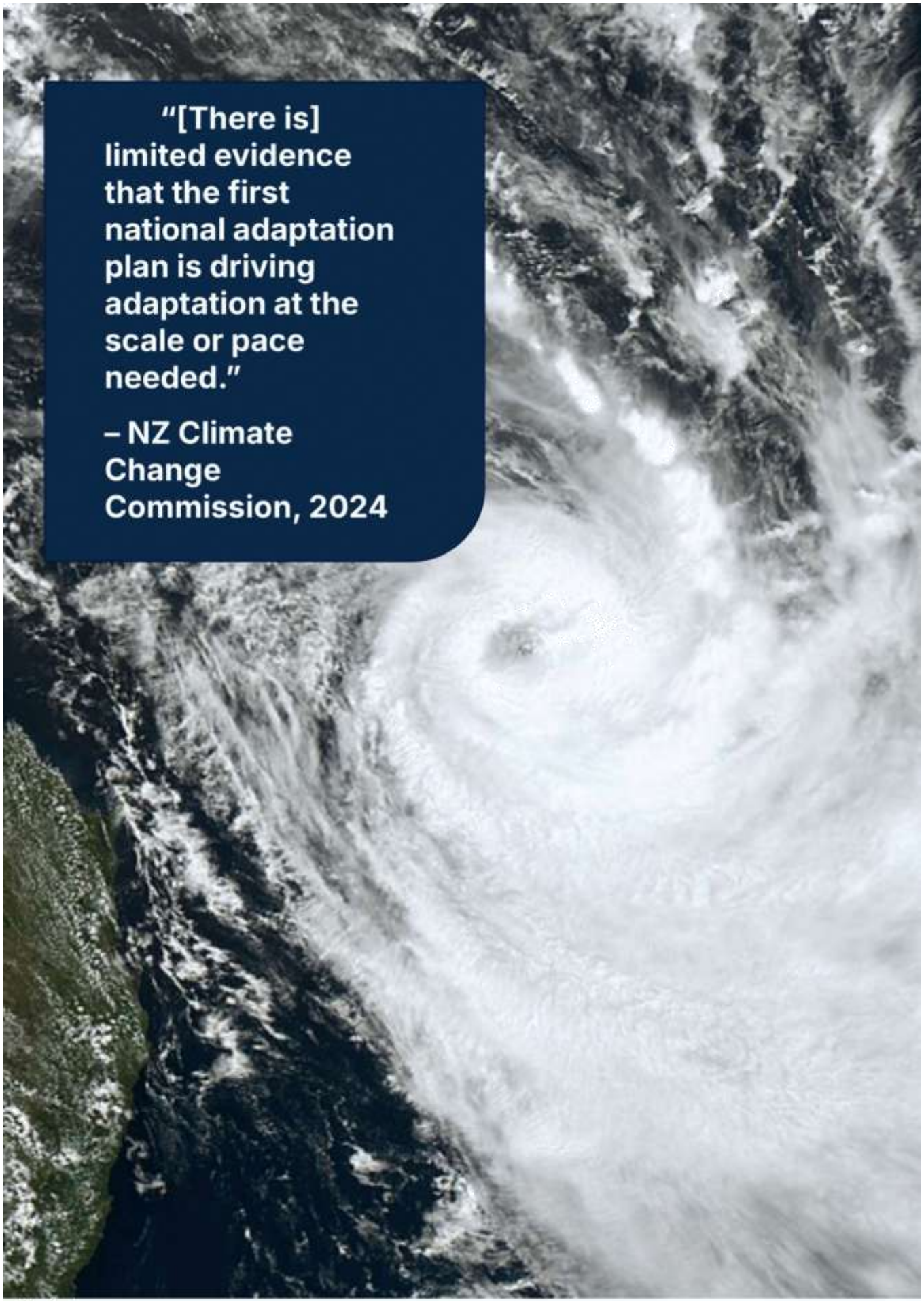


(a) Properties exposed to coastal flooding.



(b) Properties at risk from isolation due to coastal flooding.

Figure 12.1. The exposure and isolation of properties to coastal flooding in Aotearoa New Zealand, ranked by the percentage of property affected. The 30 most exposed or isolated districts, by percentage, are shown. Source: [1].


"[There is] limited evidence that the first national adaptation plan is driving adaptation at the scale or pace needed."
– NZ Climate Change Commission, 2024

04

Ngā Arotakenga ā-Takiwā | District Assessments

13 District Assessments

13.1 Introduction to the district level assessments

Adaptation planning is inherently a localised process that demands robust, area-specific risk evidence. Spatial information is critical in prioritising adaptation efforts across different areas and identifying the specific hazards that adaptation planning must address. This approach enables decision-makers to allocate resources efficiently and develop targeted strategies that respond to the unique vulnerabilities of each district.

This section presents detailed risk assessment findings for each territorial authority area within the Hawke's Bay region: Central Hawke's Bay District, Hastings District, Napier City, and Wairoa District. Delineating local assessments by known geographical areas enables the use of employment and census demographic data (Figure 13.1; Table 13-1).

Using the district-level assessment findings

The district assessments and findings in this report can form the basis for localised risk assessments, community engagement, and adaptation planning and action. It can inform community conversations to better understand local views and risk tolerances, increase understanding of community vulnerabilities and risk perceptions, and enable risk prioritisation. Adaptation plans can then be developed that are tailored to the unique characteristics and challenges of each area while recognising the interconnections between neighbouring communities.



Figure 13.1. The districts within the Hawke's Bay region for which risk is reported and how adaptation planning could be managed.

Table 13-1. Cities, towns, and villages within each District.

District	Cities, Towns and Villages
Central Hawke's Bay District Council	Waipukurau, Waipawa, Ōtane
Hastings District Council	Hastings, Havelock North, Flaxmere, Clive
Napier City Council	Napier
Wairoa District Council	Wairoa, Mahia, Maungataniwha-Raupunga

These stages of the adaptation process help to build community confidence and demonstrate institutional commitment to transparency in hazard and risk management. By involving communities in adaptation planning and presenting a structured approach, uncertainty can be reduced and resilience built at both individual and community levels. This engagement builds a nuanced understanding of climate risks facing the Hawke's Bay region, enabling the development of targeted strategies that benefit both individuals and the wider community.

13.2 Approach to assessing district-level risks

This section outlines the approach for assessing the exposure of elements to mapped hazards at a district-level. The district-level assessments were undertaken based on existing hazard datasets available and suitable for this assessment (

Table 3-3). The following subsections present the findings of a detailed first-pass risk assessment for each district. These assessments focus on exposure of people and assets to these hazards.

Exposure analysis is the first step to understanding potential climate impacts on residents, businesses, and economic activity. It is important for identifying areas that need attention to determine the sensitivity and adaptive capacity to these hazards, before estimating the potential consequences [2].

An element is exposed if it intersects with the spatial extent of a hazard. Estimations of impact on residents and business/sectors include the following information:

- Property exposure.
- Property land use classification.
- Residential property information (including 2018 census data and the NZ Deprivation Index).
- Sector specific employment exposure information.
- GDP contribution estimations.
- Isolation and community isolation ("Island") assessment.

14 Central Hawke's Bay District

Snapshot of the Central Hawke's Bay District

Information on Central Hawke's Bay District taken from local plans and reports, the Central Hawke's Bay District Council, and Census 2023.

- **3,333km²** of land stretching from Pukehou in the north to Whangaehu in the south, and Ruahine ranges in the west to the eastern coast
- **Population 15,480** (2023)
- **25.2% of the population identify as Māori and 27.9% are of Māori descent**
- **21.2% of the population is aged 65 years or older**
- **$81,100 median household income**
- **$564,269 average house price**
- **$758 million GDP** in 2023, with the main industries being Agriculture, Forestry and Fishing (contributing 24% to the district's GDP) and Manufacturing (13%)
- **Nine marae** located across the district
- **Waipukurau and Waipawa** are the main urban centres (towns)

Central Hawke's Bay summary

Central Hawke's Bay geographic profile

Central Hawke's Bay District (Figure 14.1) sits in the southern end of the Hawke's Bay region and encompasses a diverse landscape from the Ruahine ranges in the west to the eastern coast. There are several recognised outstanding natural features and landscapes across the district [81].

The district is predominantly rural, with the main urban centres of Waipukurau and Waipawa serving as key service hubs. The District includes a number of smaller townships including Otāne, Takapau, Tikokino, Pōrangahau and Ongaonga; as well as several beach townships including Kairakau, Pourerere, Aramoana, Blackhead and Te Paerahi. The built environment of Central Hawke's Bay reflects its rural character, with infrastructure and development concentrated around the main towns while supporting extensive agricultural operations across the wider district.



Figure 14.1. Central Hawke's Bay District in Hawke's Bay.

Table 14-1 Employment and Economic Contribution by Economic Sector (greater than 5%) in Central Hawke's Bay.

ANZSIC06 Division	Contribution to District GDP (%)	Percentage of total District workforce employed (%)
Agriculture, Forestry and Fishing	24	29
Manufacturing	13	17
Construction	7	10
Rental, Hiring and Real Estate Services	6	2
Retail Trade	5	8
Professional, Scientific and Technical Services	5	5

Central Hawke's Bay population

The population of Central Hawke's Bay is 15,480 (2023). Those identifying as European make up 79% of the district's population, followed by 25% who identify as Māori. In total, 44% of the district's population is aged 30-64, followed by 21% aged 65 years or older. The district has a median household income of $81,100 and average house value of $564,269. The district's cultural landscape includes nine marae that form important focal points for local communities.

Central Hawke's Bay local economy

Central Hawke's Bay's GDP was $758 million in 2023 (7.3% of the regional GDP). Analysis of economic activity (Table 14-1) shows the district's strong dependence on primary industries, with Agriculture, Forestry, and Fishing contributing 24% to the district's GDP and employing 29% of the workforce. Manufacturing forms the second-largest sector, contributing 13% to GDP and employing 17% of workers. Other significant sectors include Construction (7% GDP, 10% employment), Rental and Real Estate Services (6% GDP), Retail Trade (5% GDP,

Table 14-2 Summary and suitability for adaptation planning of hazard information available in Central Hawke's Bay District

Hazard/Change	Suitability	Description
Coastal Flooding	Low	Nationwide dataset with extent only (no depth) for 1% AEP with 0-2m sea level rise in 10cm increments.
River & Rainfall Flooding	Moderate	Available for three towns for the purpose of stormwater modelling. Includes multiple return periods and a future climate change scenario.
Shallow Groundwater		No suitable mapped data available
Landslides	Moderate	Region-wide shallow landslide susceptibility mapping.
Coastal Erosion		No suitable mapped data available
Liquefaction		No suitable mapped data available
Tsunami	Low	Two regional models showing tsunami extents. No depth information or climate change scenarios available.
Wildfire		No suitable mapped data available

8% employment), and Professional Services (5% GDP, 5% employment)Overview of hazard data availability and suitability

The assessment of climate-related risks in Central Hawke's Bay is constrained by limited availability of hazard data appropriate for this level of assessment (Table 14-2). While some hazards like landslides have moderate data suitability, others including coastal erosion and shallow groundwater lack mapped data entirely. This data limitation affects the comprehensiveness of risk assessment and adaptation planning capabilities.

Risks from coastal flooding

Current data on coastal flooding in Central Hawke's Bay is limited to NIWA's nationwide coastal flooding assessment. This data shows flood extent for 1% AEP events under various sea-level rise scenarios but lacks information about flood depths necessary for a vulnerability assessment.

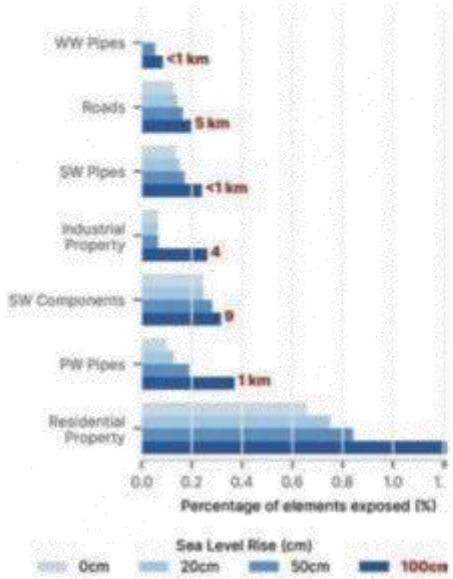


Figure 14.2. Infrastructure exposed to more than 10cm of coastal flooding with different amounts of sea level rise.

able 14-3. The length/number of each infrastructure exposed in Central Hawke's Bay to 1% AEP coastal flood, with different amounts of sea vel rise. Note that exposed does not necessarily mean "damaged" as the characteristics of the assets influence whether they are vulnerable.

esidential Buildings	43 (0.8%)	49 (0.9%)	1.5%)
oads	3.1 km (0.2%)	3.4 km (0.2%)	(0.2%)
otable Water (PW) Pipes	0.3 km (0.1%)	3.4 km (0.2%)	m (0.5%)

Physical Infrastructure Exposure

Analysis shows low exposure to coastal flooding across all infrastructure types, both currently and with projected sea-level rise (Figure 14.2; Figure 14.3; Table 14-3). Under current conditions, exposure is limited to 43 residential buildings (0.8%) and 1 industrial building (0.1%), with no commercial buildings affected. With 1m of sea-level rise, residential exposure increases to 83 buildings (1.5%) and industrial exposure to 4 buildings (0.3%).

Infrastructure networks show minimal exposure across all scenarios. Roads show consistent exposure at 0.2% across all scenarios, though increasing in length from 3.1km to 4.8km with 1m sea-level rise. Three waters infrastructure shows very limited exposure, with all networks below 0.5% exposure even with 1m sea-level rise.

Cascading Impacts on Communities

By 2130, under the highest emissions scenario (SSP5-8.5), 0.9% of residents (142 people) could be directly exposed to flooding, while 2.1% (328 people) could face isolation risks (Figure A - 19; Figure A - 20).

Of all residents exposed to more than 10cm of coastal flooding by 2130, 79% are within areas of lower deprivation (NZDep3-4), compared to 8% in areas of high deprivation (NZDep9-10). For isolation risk, 60% are in areas of lower deprivation and 31% in areas of high deprivation. When examining exposure as a proportion of residents within each deprivation classification, 2.8% of those in NZDep3-4 areas are exposed to flooding, while 5.6% of residents in NZDep9-10 areas face isolation risk.

Of the 142 residents exposed to flooding, 86% identify as European, 18% as Māori, 3% as Asian, and 1% as Pacific peoples. Of the 328 residents at risk of isolation, 83% identify as European, 28% as Māori, 3% as Asian, and 2% as Pacific peoples.

Those aged 65 and over make up 20.5% of those exposed to flooding and 27.6% of those at risk of isolation. Of the district's population aged 65 years and over, less than 1% are directly exposed and 2.7% are at risk of isolation. This population may face additional challenges during flood events due to mobility issues or existing health conditions.

Economic Impacts

Given the minimal exposure of commercial and industrial buildings (no commercial buildings and only four industrial buildings affected even with 1m sea-level rise), the GDP impacts from coastal flooding are negligible in Central Hawke's Bay.



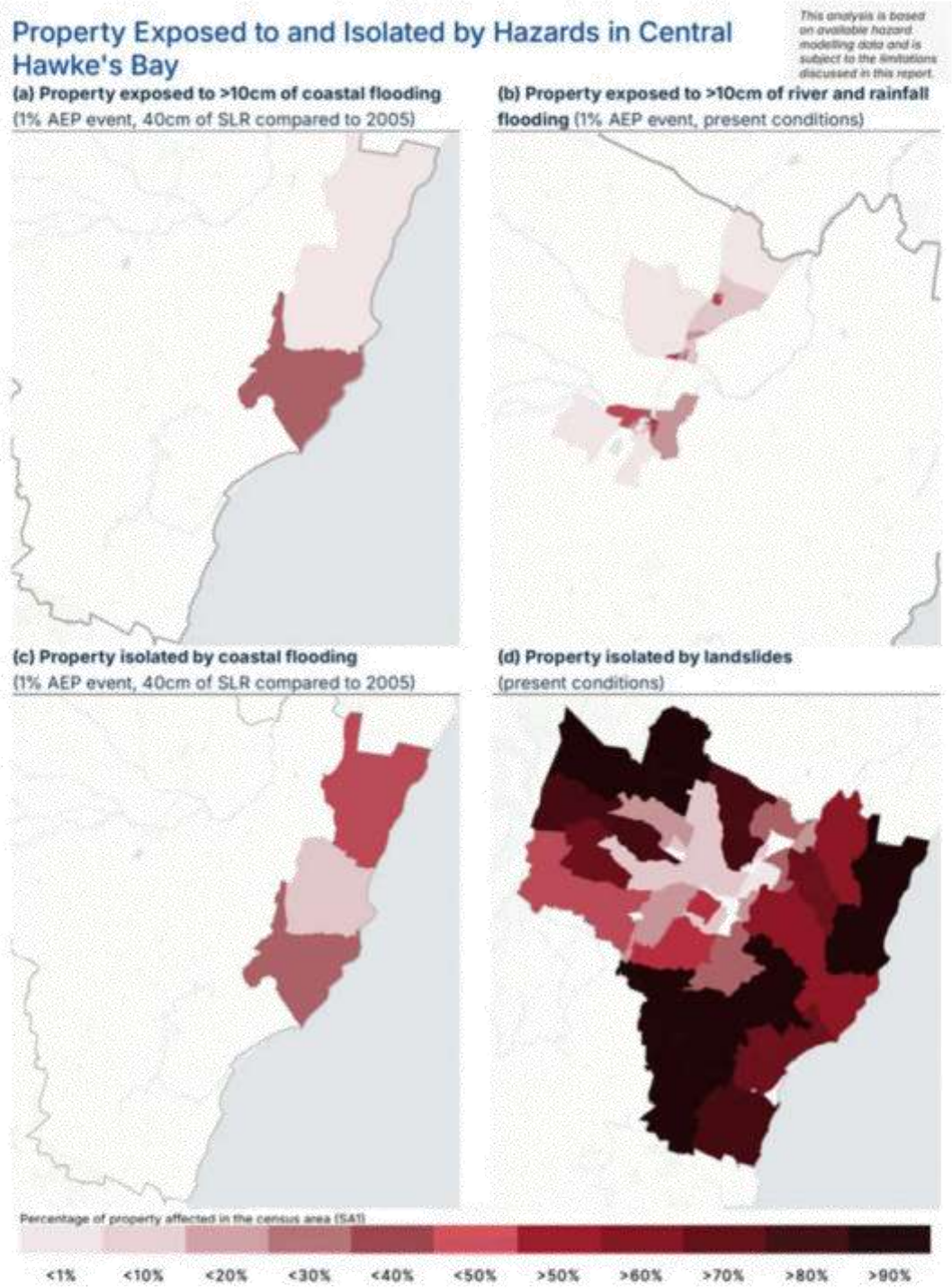


Figure 14.3. Areas with high percentage property risk in Central Hawke's Ba

Risks from river and rainfall flooding

River and rainfall flooding poses a significant risk in Central Hawke's Bay. This assessment examined two scenarios: present-day conditions and projected flooding under a high emissions scenario for 2100 (Figure 14.3; Figure 14.4; Table 14-4). Both scenarios consider flood events that have a 1% chance of occurring each year (1% AEP).

The extent to which flood protection infrastructure (such as stopbanks) is incorporated varies between models, and this assessment does not include detailed analysis of infrastructure vulnerability based on design standards or condition of flood mitigation measures. Currently, flood risk modelling is only available for urban areas.

Physical Infrastructure Exposure

The commercial sector faces substantial exposure to flooding, with 43.7% of commercial properties located in flood-prone areas. Residential property also shows significant exposure, with 12.6% of properties in flood hazard zones. Industrial property has lower but still notable exposure at 5.1%.

Three waters infrastructure shows varying levels of exposure. Currently, 23.7% of stormwater pipes are within flood hazard zones, while wastewater and drinking water networks show lower exposure at 9.6% and 7.5% respectively. Three wastewater pump stations (23%) are currently exposed to flooding, and under the 2100 high emissions scenario, one of the district's six wastewater treatment plants would be at risk.

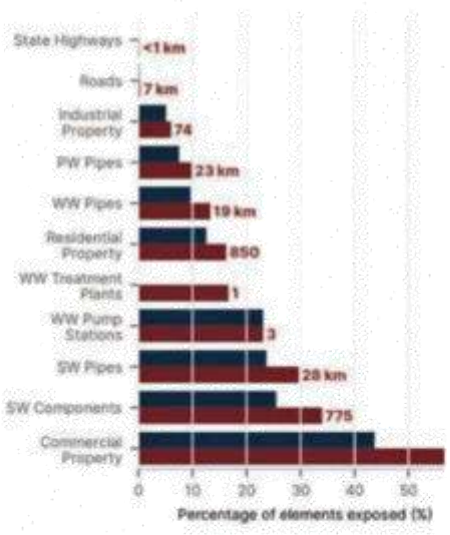


Figure 14.4. Infrastructure exposed to more than 10cm of river and rainfall flooding now and in 2100.

ıle 14-4. The length/number of each infrastructure exposed in Central Hawke's Bay to 1% AEP river and rainfall flood. Note that expose not necessarily mean "damaged" as the characteristics of the assets influence whether they are damage prone (vulnerable).

Commercial Buildings	3.7%)	93 (58.8%)
Roads	n (0.2%)	6.7 km (0.3%)
Stormwater (SW) Pipes	‹m (23.7%)	27.9 km (30.0%)

Transportation networks show relatively low direct exposure in the modelled flood areas. However, this analysis does not capture the full risk to bridges, as this report focuses on exposure, whereas the Resilience Explorer® is provided at the asset level to provide consequence assessments based on vulnerability data (such as design standards and condition assessments). The experience of Cyclone Gabrielle demonstrated that bridges in Central Hawke's Bay are vulnerable not only to flood waters but also to damage from forestry slash and debris, highlighting risks that are not captured in standard flood exposure assessments.

Cascading Impacts on Communities

A 1% AEP river flood event under today's conditions could create widespread disruption through both direct exposure and isolation effects. Direct flood exposure affects 12.1% of the district's population (1,870 residents), while isolation impacts extend to 16.8% (2,599 residents) due to disrupted road access (Figure 14.5; Figure A - 22).

Of all residents exposed to flooding, 43% are in areas with deprivation scores of 7-8 and 30% are in areas with moderate deprivation (NZDep5-6). For those at risk of isolation, 32% are within areas of moderate-high deprivation (NZDep7-8), followed by 26% in areas with deprivation scores of 5-6.

Of the 1,870 residents exposed to flooding, 81% identify as European, 28% as Māori, 4% as Asian, and 4% as Pacific peoples. Of the 2,599 residents at risk of isolation, 82% identify as European, 27% as Māori, 4% as Asian, and 4% as Pacific peoples. When examining exposure by ethnicity, Asian residents face the highest relative exposure at 15.3% of their population, compared to European residents at 11.7%. Similarly, Asian residents show the highest relative isolation risk at 24.2%, compared to European residents at 16.4%.

Those aged 65 and over constitute 23.8% of all those exposed to flooding, and 24.5% of those at risk of isolation. Of the district's population aged 65 years and over, 13.4% are directly exposed and 19.2% are at risk of isolation. This population may face additional challenges during flood events due to mobility issues or existing health conditions.

Economic Impacts

The economic impacts of river and rainfall flooding (Figure 14.6; Figure A - 24) could be substantial for the Central Hawke's Bay District. Industrial and commercial properties contributing to 18% ($110M) of the district's annual GDP are currently exposed to the direct impacts of river and rainfall flooding. This rises to 24% ($142M) by 2130. Retail Trade is the most exposed sector (15%), followed by Construction (13%), Manufacturing (11%) and Electricity, Gas, Water and Waste Services (10%). By 2100, over 60% of several sectors are directly exposed, based on known flood risk. These sectors are Retail, Financial and Insurance, Electricity, Gas, Water and Waste Services.

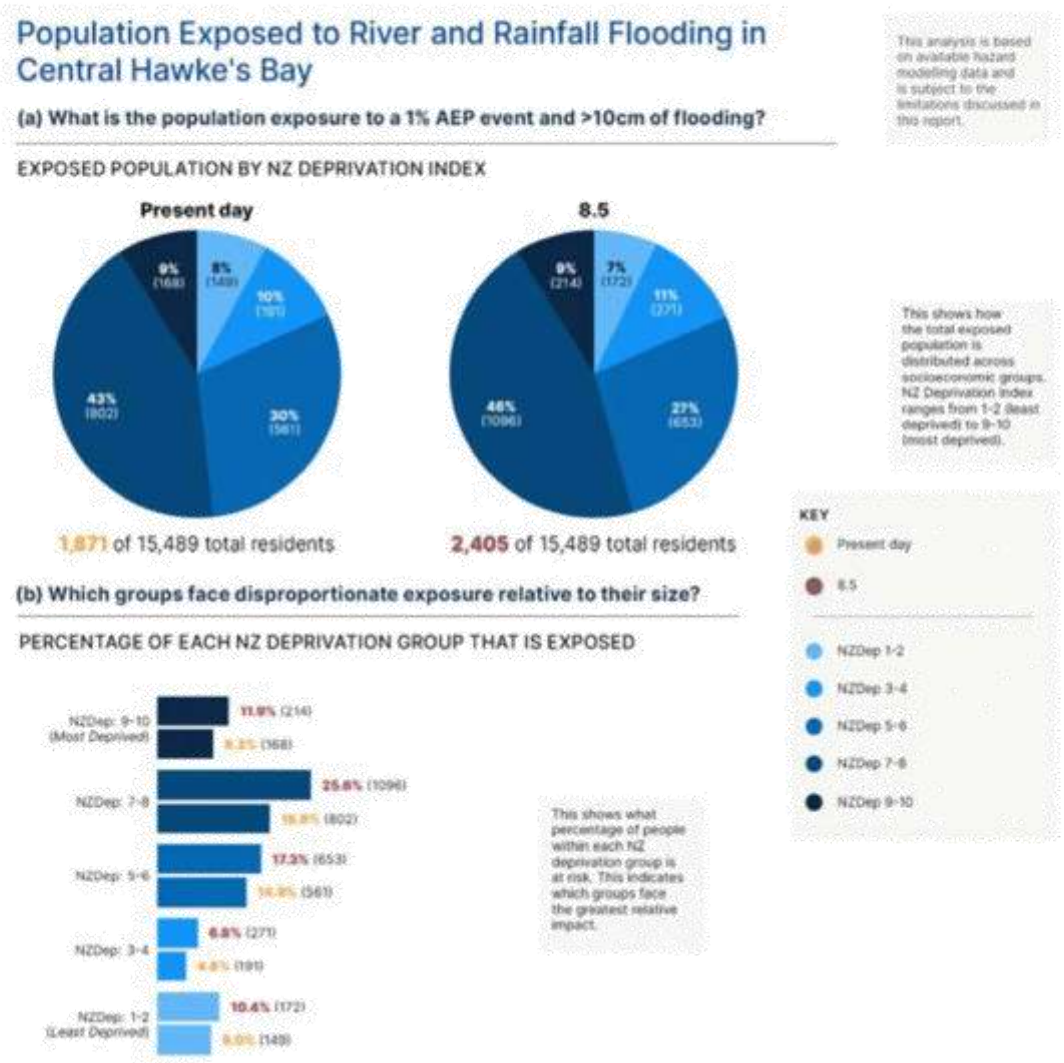


Figure 14.5. Risk to residents in Central Hawke's Bay from exposure to 1% AEP river and rainfall flooding.

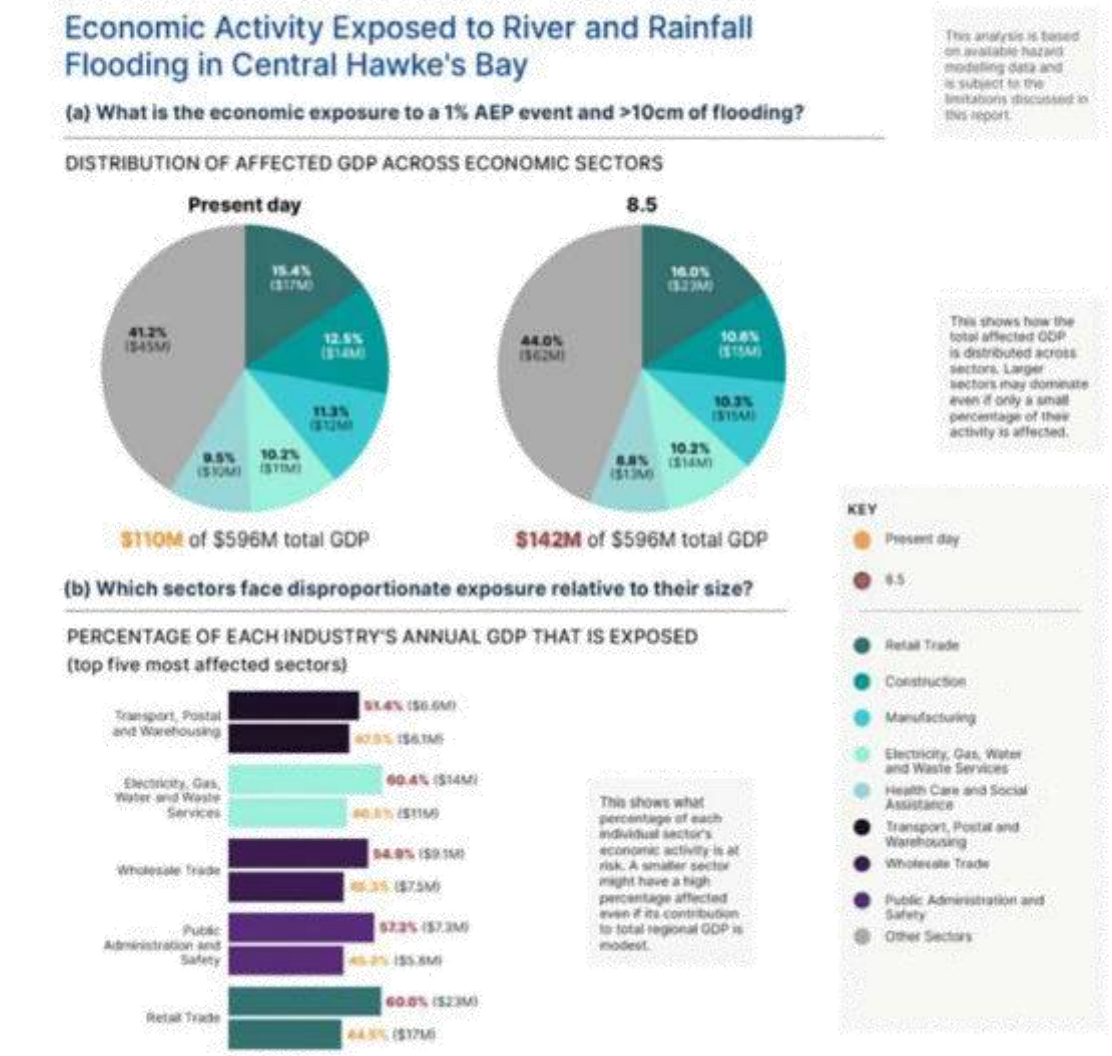


Figure 14.6. Risk to economic sectors in Central Hawke's Bay from 1% AEP river and rainfall flooding.

Risks from landslides

The analysis uses region-wide shallow landslide susceptibility mapping to assess exposure across the assets (Figure 14.3; Figure 14.7; Table 14-5) and the indirect impacts onto communities and sectors.

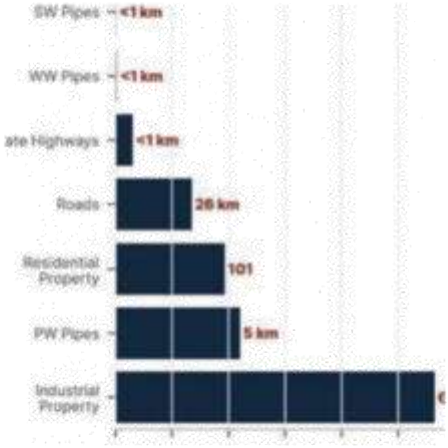


Figure 14.7. Infrastructure exposed to landslides.

Physical Infrastructure Exposure

Analysis shows varying exposure across different infrastructure types. In the building sector, 101 residential properties (1.9%) and 69 industrial buildings, including those on agricultural and horticultural properties, (5.6%) face direct landslide risk, while no commercial properties are exposed.

Infrastructure networks show limited direct exposure. Potable water systems are most affected with 5.1km (2.2%) of pipes at risk. Transportation networks face modest exposure with 0.3km (0.3%) of state highways and 26km (1.3%) of local roads susceptible to landslides. Stormwater and wastewater networks show negligible exposure.

Cascading Impacts on Communities

While 2.1% of the district's population (318 residents) faces direct exposure to landslides, isolation effects reach much further, affecting 20% (3,087 residents). This significant difference highlights how landslides can create widespread access challenges even for communities not directly affected (Figure 14.8; Figure A - 25).

Of all residents exposed to landslides, 47% are within areas of lower deprivation (NZDep3-4), followed by 27% in areas with low deprivation (NZDep1-2). For isolation risk, 42% are within areas of lower deprivation (NZDep3-4), followed by 26% in moderately deprived areas (NZDep5-6).

When examining exposure by deprivation level, those in areas of low deprivation (NZDep1-2) show the highest relative exposure at 5.2% and highest isolation risk at 34.7%. Those in moderately deprived areas (NZDep3-4) show 3.8% exposure and 32.6% isolation risk. By contrast, highly deprived areas (NZDep9-10) show lower rates, with 0.5% exposure and 6.3% isolation risk.

Residential Buildings	(1.9%)
Roads	) km (1.3%)
Stormwater (SW) Pipes	km (0.0%)

Of the 318 residents exposed to landslides, 89% identify as European, 19% as Māori, 2% as Asian, and 3% as Pacific peoples. Of the 3,087 residents at risk of isolation, 89% identify as European, 19% as Māori, 2% as Asian, and 2% as Pacific peoples. When examining exposure by ethnicity, European residents show slightly higher relative exposure at 2.2% compared to Pacific (1.7%), Asian (1.6%), and Māori (1.5%) residents. European residents also show the highest relative isolation risk at 21.2%, compared to Māori (14.9%), Asian (13.9%), and Pacific residents (10.7%).

Those aged 65 and over make up 18.7% of residents directly exposed to landslides and 17% of those at risk of isolation. Of all residents aged 65 and over in the district, 1.8% are directly exposed and 15.9% face isolation risk.

Economic Impacts

Economic impact analysis (Figure 14.9; Figure A - 27) reveals significant sectoral variations in both direct exposure and isolation effects. The primary sector faces the most substantial risks, with Agriculture, Forestry, and Fishing showing 6.10% direct exposure (affecting approx. $13 million in GDP) and approx. 45% isolation risk (putting $91.68 million GDP at risk). This high exposure reflects both the sector's spatial distribution and its dependence on vulnerable transport networks.

Industrial and commercial properties contributing to 4% ($22M) of the district's annual GDP are directly exposed to landslides. Isolation due to landslides is more significant with properties representing 23% ($135M) of annual GDP at risk of isolation. The most impacted sector is Agriculture, Forestry and Fishing (68%).

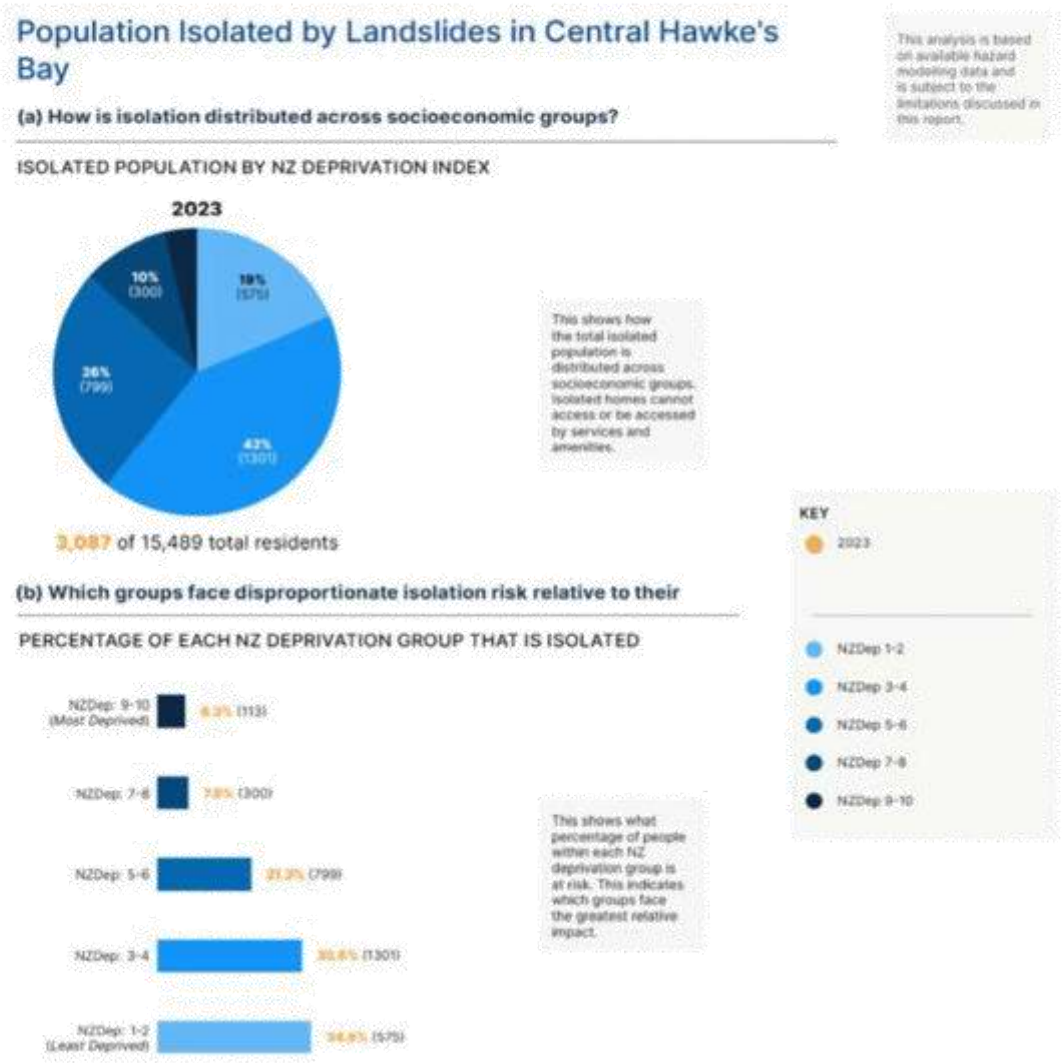


Figure 14.8. Risk of isolation to residents in Central Hawke's Bay from landslides.

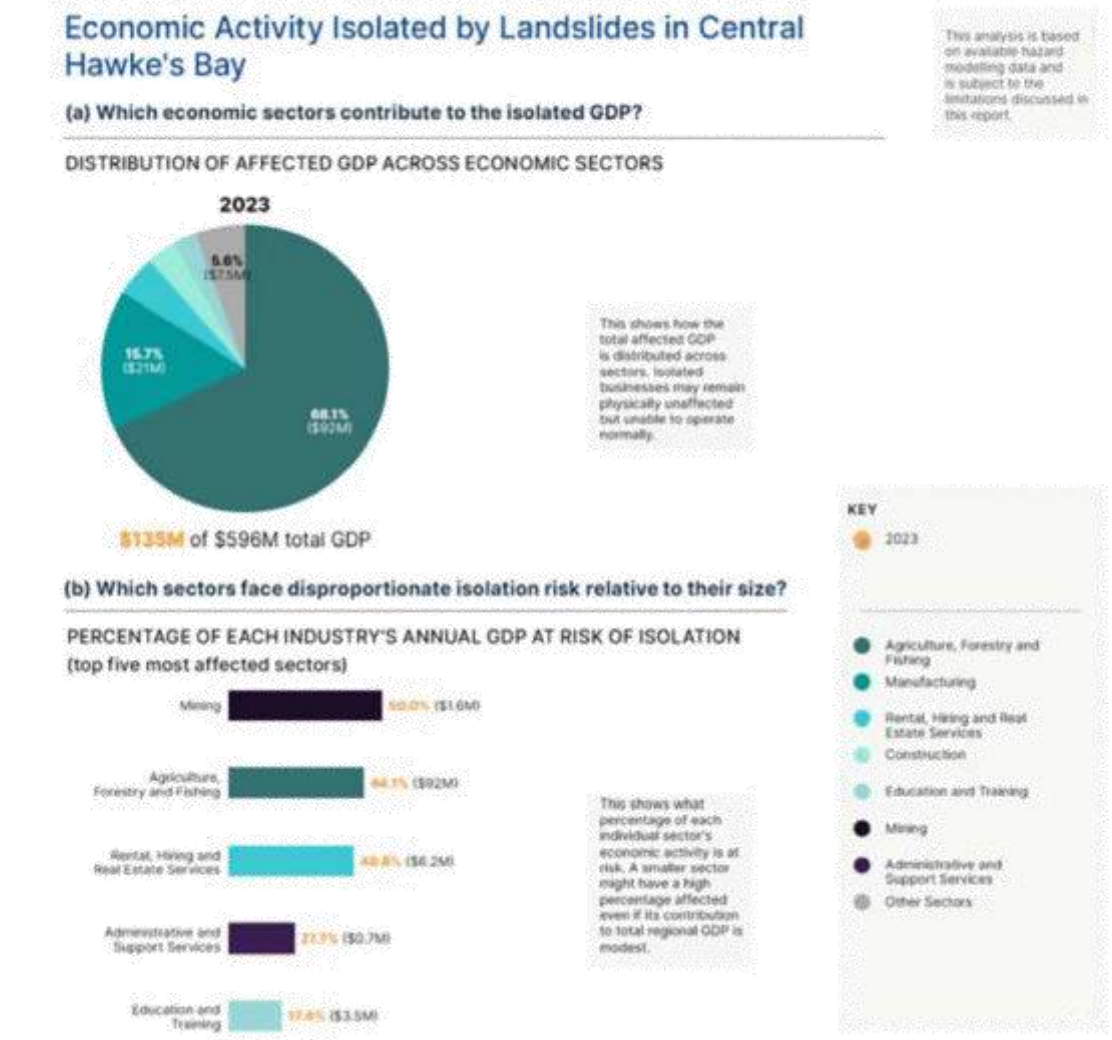


Figure 14.9. Risk by economic sector in Central Hawke's Bay from landslides.

Risks from climatic (temperature and seasonal) change

Climate projections for Central Hawke's Bay (Appendix A3) indicate significant changes that will affect infrastructure, communities, and economic activities across the district. Under a high emissions scenario (SSP3-7.0) by 2081-2100, temperature increases of 3.0–3.5°C coupled with more hot days (increasing from 18.6 to 56.5 days above 25°C annually), and changing rainfall patterns are expected to have the following impacts.

Infrastructure Impacts

- Increased stress on road surfaces and rail infrastructure from thermal expansion.
- Higher cooling demands on electrical infrastructure and telecommunications equipment.
- Accelerated deterioration of building materials and increased maintenance requirements.
- Greater pressure on water infrastructure due to increased demand during hot periods, particularly with PED increasing by 94.2mm.
- Reduced winter maintenance requirements with frost days decreasing by 13.9 days annually.
- Health risks from extreme heat, particularly with very hot days (>30°C) increasing from 2.3 to 12.2 days annually.
- Changed seasonal patterns affecting traditional activities and cultural practices.
- Reduced winter heating needs but increased summer cooling requirements.
- Growing water security concerns with annual rainfall decreasing by 6.5% overall, particularly in spring (-14.3%) and winter (-15.4%).
- Disproportionate impacts on vulnerable populations, particularly older residents and those in poorly adapted housing.

Economic Impacts

- Agriculture and horticulture face significant changes:
  - longer growing seasons with growing degree days increasing by 899 units annually
  - increased water stress with PED rising by 94.2mm
  - changed pest and disease pressures
  - potential opportunities from warmer conditions, though limited by water availability.
- Primary sector vulnerability to seasonal changes:
  - summer rainfall increasing by 6.3% while winter decreases by 15.4
  - more dry days annually (+8.2 days) affecting soil moisture and production timing
  - reduced frost risk benefiting some crops but potentially affecting others requiring winter chilling.
- Construction and outdoor work will need adaptation:
  - more very hot days affecting worker safety and productivity
  - reduced windy days (-12.0 annually) potentially benefiting some operations
  - changed seasonal rainfall patterns affecting work scheduling.

These climate changes will interact with and potentially amplify the coastal flooding, river and rainfall flooding, and landslide risks described in this district level assessment. Higher temperatures and changed rainfall patterns could increase erosion susceptibility in landslide-prone areas, while more intense summer rainfall combined with winter drying could exacerbate both flood and drought risks. The district's strong dependence on primary industries makes it particularly vulnerable to these compounding climate impacts.

Key findings for Central Hawke's Bay

- **River and rainfall flooding risk is the most severe hazard influenced by climate change for Central Hawke's Bay** with commercial properties and residential properties exposed.
- **Three waters infrastructure is susceptible to flooding,** with stormwater pipes exposed.
- **Limited direct exposure to landslides**, with the greatest risk being to industrial buildings. Isolation associated with landslides, however, is a risk for residents.
- **Multiple sectors face disruption and damage from climate-related events**
  - The agriculture sector faces isolation risk from landslides
  - The transport sector shows exposure to river and rainfall flooding
  - The manufacturing sector is vulnerable to multiple hazards, including landslide isolation risk.
- **Increasing risk of economic shocks and disruption from seasonal variability,** with a 3.0–3.5°C temperature increase by 2081-2100 under SSP3-7.0 and significant seasonal rainfall changes affecting primary industries.
- **Areas of high-moderate deprivation are more exposed to flooding and isolation risks**,. Areas of lower deprivation (NZDep1-4) are more exposed to landslides and isolation associated with landslides.

15 Hastings District

Snapshot of the Hastings District

Information on the Hastings District taken from local plans and reports, the Hastings District Council, and Census 2023.

- **5,229km²** land area
- **Population** 85,965 (2023)
- **28.4% of the population identify as Māori and 30.4% are of Māori descent**
- **17.9% of the population is aged 65 years or older**
- **$90,300 median household income**, the highest in Hawke's Bay region
- **$771,382 average house price**
- **$5,554 million GDP** in 2023, with the main industries being Manufacturing (contributing 13.29% to the district's GDP), Healthcare and Social Assistance (9.75%), and Agriculture, Forestry and Fishing (9%)
- **Twenty-three marae** located across the district
- Key connection between Heretaunga Plains (producers of apples, pears and stone fruit) and Napier City
- Hastings, Havelock North, Flaxmere and Clive are main urban centres

Hastings District summary

Hastings District geographic profile

Hastings District (Figure 15.1), positioned in the heart of Hawke's Bay, covers 5,229km² and serves as a crucial agricultural and economic centre for the region. The district has a diverse landscape, with a mix of urban and rural areas that span from the district's significant stretches of eastern coastline to the Heretaunga Plains and Te Mata Hills in the south-east, and Kaweka Forest Park in the north-west. With a population of 85,965 (2023) and an annual GDP of $5,554 million, the district plays a vital role in connecting the productive Heretaunga Plains—renowned for its apple, pear, and stone fruit production and viticulture—with Napier City. This strategic position makes the district's resilience to climate change and natural hazards particularly important for regional food security and economic stability.



Figure 15.1. Hastings District in Hawke's Bay.

Table 15-1 Employment and Economic Contribution by Economic Sector (greater than 5%) in Hastings

ANZSIC06 Division	Contribution to District GDP (%)	Percentage of total District workforce employed (%)
Manufacturing	13.29	13.11
Health Care and Social Assistance	9.75	14.24
Agriculture, Forestry and Fishing	9.00	13.62
Construction	6.74	9.20
Professional, Scientific and Technical Services	6.69	5.93
Rental, Hiring and Real Estate Services	5.84	1.87
Retail Trade	5.27	7.51
Manufacturing	13.29	13.11

The district faces multiple climate-related challenges that vary across its diverse landscape, from coastal hazards along its eastern margins to flooding risks across the Heretaunga Plains and landslide susceptibility in its hillier regions. Figure 5.15 and Figure 5.14 illustrate the spatial distribution of exposed properties and infrastructure across the district, highlighting areas of particular vulnerability that are examined in more detail in the following sections.

Hastings District population

The population of the Hastings District is 85,965 (2023). Those identifying as European make up 65.2% of the district's population, followed by 28.4% who identify as Māori. 30.4% of the population are of Māori descent. In total, 17.9% are aged 65 years or older, slightly higher than the national average (16.6%). 75% of the district's population lives within the urban areas of Hastings, Havelock North, Flaxmere, and Clive. The district's cultural landscape includes twenty-three marae that form important focal points for local communities. The district has a median household income of $90,300, the highest in Hawke's Bay region, and an average house value of $771,382, though these averages mask considerable socio-economic variation across different parts of the community.

Hastings District local economy

Hasting District's GDP in 2023 was $5,554 million. The district's economic profile is characterised by a strong Manufacturing sector, contributing 13.29% to the district's GDP and employing 13.11% of the workforce (Table 15-1). Healthcare and Social Assistance (9.75% GDP, 14.24% employment) and Agriculture, Forestry and Fishing (9% GDP, 13.62% employment) form the other major economic pillars.

Overview of hazard data availability and suitability

Table 15-2 below provides a summary of available hazards data for the Hastings District at the time of this assessment. The data is classified by suitability, relating to how much confidence there is in the modelling and its applicability for adaptation planning.

Hastings District has varying levels of hazard data quality and coverage. While coastal erosion and tsunami hazard data are considered highly suitable for adaptation planning, river and rainfall flooding data has significant limitations, with coverage restricted to four major towns (Clive, Flaxmere, Hastings, Havelock North). Notably, there is no suitable mapped data available for shallow groundwater, which represents a significant data gap. Variability in data quality and coverage needs to be considered when interpreting

risk assessments and developing adaptation strategies.

Risks from coastal flooding

Coastal flooding is an evolving risk to Hastings District, with exposure increasing with higher sea levels (Figure 15.2; Figure 15.3; Table 15-3).

Physical Infrastructure Exposure

Analysis of critical infrastructure exposure to a 1% AEP coastal flood event shows varying levels of vulnerability that increase substantially with sea-level rise. Under current conditions, exposure is relatively limited with less than 0.1% of most infrastructure affected. However, with 1m of sea-level rise, residential exposure increases to 4% (1,032 buildings), while commercial and industrial building exposure rises to 3.7% and 2.1% respectively.

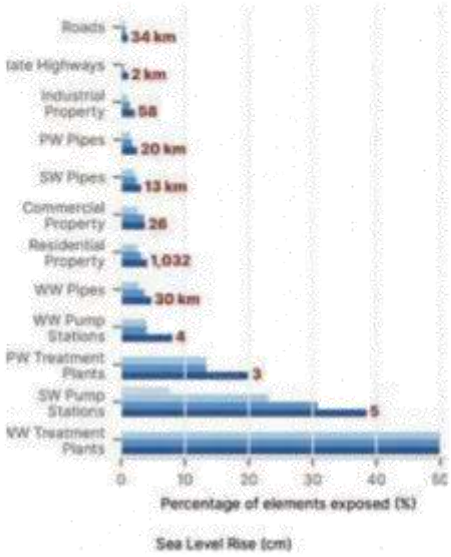


Figure 15.2. Infrastructure exposed to 1% AEP coastal flood event with different amounts of sea level rise.

zard/Change	tability	Description
		(2015) for 1% AEP with 0m, 0.5m, and 1m SLR; (3) NIWA nationwide coastal flooding showing extent for 1% AEP wi 0-2m SLR in 10cm increments.
		change scenarios available. Stormwater capacity data supplied by HDC was never intended to be used for flood modelling and as such, should be considered with caution Data intended for preliminary assessments and general planning purposes only.
ndslides	derate	Region-wide shallow landslide susceptibility mapping.
uefaction	derate	Susceptibility mapping for three earthquake scenarios (1% 4%, and 0.2% AEP). Coverage extends to most, but not al district.
unami	h	Multiple return periods (100, 500, 1000, 2500 ARI) modelle with various sea-level rise scenarios (0cm, 65cm, 1m, 2m)

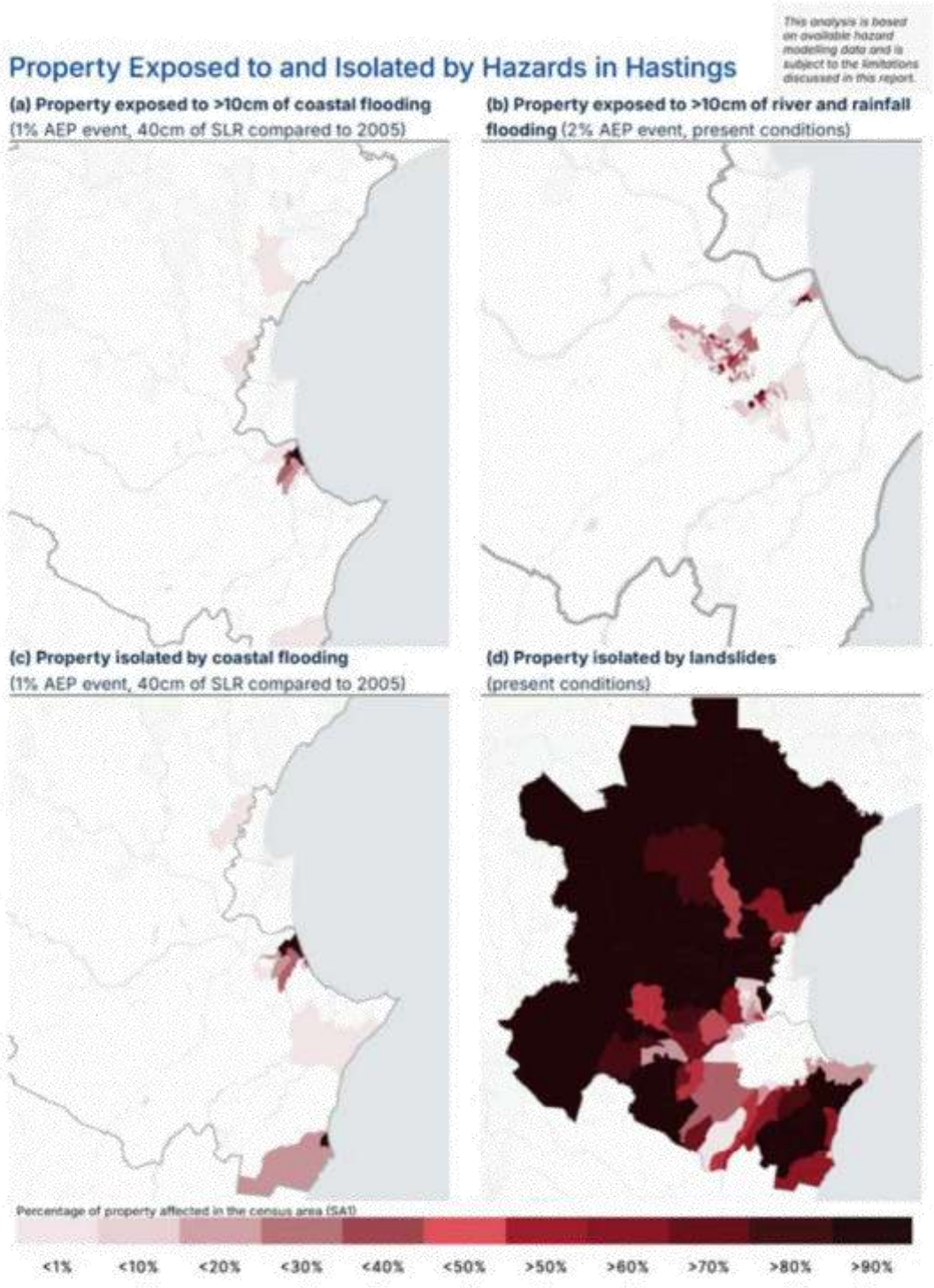


Figure 15.3. Areas with high percentage property risk in Hastings.

Infrastructure networks show similar patterns of increasing exposure. Wastewater infrastructure shows the highest relative exposure under 1m sea-level rise, with 4.7% of pipes affected and the primary

wastewater treatment plant at East Clive. Stormwater and potable water networks show moderate exposure at 3.1% and 2.5% of pipes respectively. Transportation networks face relatively limited direct exposure even with 1m sea-level rise, though 2.5km (1.1%) of state highways and 34.2km (1.0%) of local roads would be affected.

Cascading Impacts on Communities

By 2130 under a high emissions scenario (SSP5-8.5), coastal flooding is projected to have community impacts through both direct exposure and isolation effects. Approximately 4.24% of the total Hastings District population (3,650 residents) could be directly exposed to more than 10cm of coastal flooding, and up to 5.20% (4,470 residents) could face isolation risks due to road network disruption (Figure 15.4; Figure A - 30).

The impacts of exposure and isolation may be experienced more acutely by groups who are more vulnerable to harm, though in this scenario many experience similar, or lower, risk compared with the district's total population.

Those aged 65 and over make up 18.4% of all those exposed to more than 10cm of coastal flooding, and 19.0% of those at risk of isolation. Of all residents aged 65 and older in the district, 4.4% are directly exposed and 5.3% are at risk of isolation.

Of the 3,650 residents exposed to coastal flooding, 82% identify as European, 25% as Māori, 4% as Asian, and 3% as Pacific peoples. Similarly, of the 4,475 residents at risk of isolation, 82% identify as European, 26% as Māori, 4% as Asian, and 3% as Pacific peoples. When examining exposure as a proportion of each ethnic group's total population, European residents show the highest relative exposure at 5%, compared to 3.8% for Māori residents and 1.6% for Pacific peoples.

By 2130, of all residents exposed to coastal flooding, 37% are in areas of lower deprivation (NZDep3-4), 23% are in areas of moderate deprivation (NZDep5-6), and 18% are in areas of high-moderate deprivation. In terms of those at risk of isolation, 33% are in areas of lower deprivation (NZDep3-4), 27% are in areas of moderate deprivation (NZDep5-6), and 17% are in areas of low deprivation.

As a proportion of all residents within each deprivation classification, those living in areas of lower deprivation (NZDep3-4) show the highest

Table 15-3. The length/number of each infrastructure exposed in Hastings to 1% AEP coast flood event, with different amounts of sea level rise. Note that exposed does not necessarily mean "damaged" as the characteristics of the assets influence whether they are damage prone (vulnerable).

Built infrastructure	Baseline sea level (2005)	20cm of sea level rise (2025 – 2050)	1m of sea level rise (2070 – 2150)
Residential Buildings	33 (0.1%)	633 (2.5%)	1032 (4%)
Commercial Buildings	1 (0.1%)	18 (2.5%)	26 (3.7%)
Industrial Buildings	1 (0.0%)	28 (1.0%)	58 (2.1%)
Roads	1.4 km (0.0%)	17.1 km (0.5%)	34.2 km (1.0%)
State Highway	0	0.4 km (0.2%)	2.5 km (1.1%)
Potable Water (PW) Pipes	0.8 km (0.1%)	11.9 km (1.5%)	20.5 km (2.5%)
Stormwater (SW) Pipes	0.4 km (0.1%)	8.4 km (2.0%)	12.8 km (3.1%)
Wastewater (WW) Pipes	0.4 km (0.1%)	17.9 km (2.8%)	30.5 (4.7%)

relative direct exposure (10.7%) and risk of isolation (11.8%), compared to 1.1% exposure and 1.5% risk of isolation of those most deprived (NZDep9-10).

Economic Impacts

Direct exposure of commercial and industrial property to coastal flooding is low, with exposed properties contributing to less than 2% of the district's annual GDP exposed or isolated in 2130 (Figure A - 31; Figure A - 32).



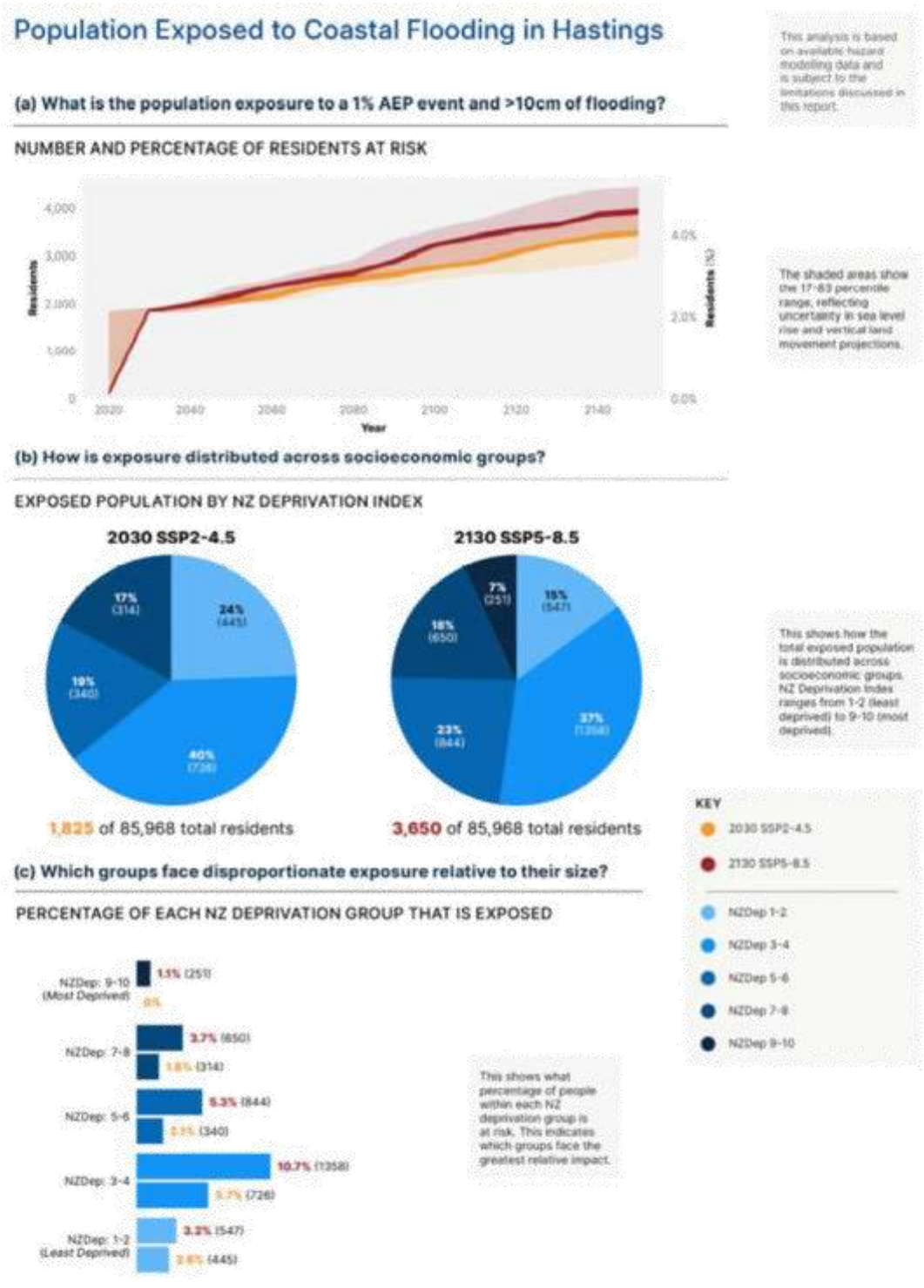


Figure 15.4. Risk to Hastings residents from direct exposure to coastal flooding.

Risks from river and rainfall flooding

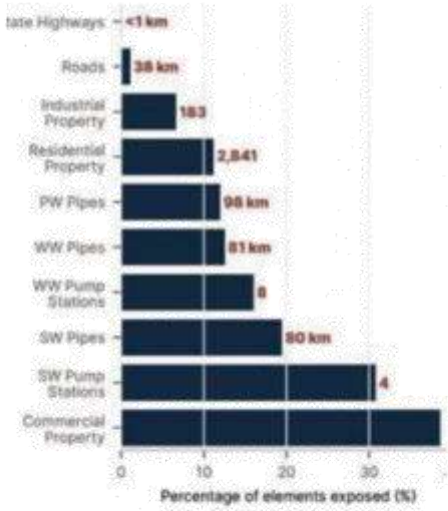
River and rainfall flooding presents significant current risks to Hastings District, with analysis based on a 2% AEP flood event. Note that this is inconsistent with the return period analysed for the other districts, due to inconsistent regional hazard modelling. While data coverage is limited to four major centres (Clive, Flaxmere, Hastings, Havelock North), the available analysis indicates substantial exposure across the district (Figure 15.3; Figure 15.5; Table 15-4).

The extent to which flood protection infrastructure (such as stopbanks) is incorporated varies between models, and this assessment does not include detailed analysis of infrastructure vulnerability based on design standards or condition of flood mitigation measures.

Physical Infrastructure Exposure

The exposure analysis shows varying levels of risk across different infrastructure types. Commercial properties show the highest proportional exposure at 38.5%, affecting 269 buildings, while 2,841 residential properties (11.2%) and 183 industrial buildings (6.6%) are also at risk.

Three waters infrastructure shows notable levels of exposure, with stormwater systems particularly vulnerable - 19.4% of pipes and 30.8% of pump stations face exposure. Wastewater networks show similar vulnerability, with 12.5% of pipes and 16% of pump stations at risk, while 12.0% of potable water pipes are exposed, though treatment plants show no direct exposure.



Figur flooding.

sidential Buildings	l (11.2%)
ads	<m (1.1%)
table Water (PW) Pipes	<m (12.0%)

Transportation network exposure varies significantly by classification. Local roads show modest exposure at 1.1%, while state highways have minimal risk with only 0.06% exposed. This pattern suggests greater potential resilience in major transport corridors compared to local access routes.

Cascading Impacts on Communities

Flooding impacts could create widespread disruption through both direct exposure and isolation effects (Figure 15.6; Figure A - 33). While 9.8% of the population (8,447 residents) faces direct exposure to flooding, a much larger proportion—48.6% (41,765 residents)—could face isolation due to disrupted road access.

The impacts of exposure and isolation may be experienced more acutely by groups who are more susceptible to harm, though many experience similar risk compared with the district's total population.

Older residents may face additional challenges evacuating or be more susceptible to harm arising from direct exposure to flooding. Within Hastings, 10.3% of those aged 65 and older are at risk of direct exposure and 43.8% are at risk of isolation. Of all exposed residents, 18.7% are aged 65 or older, and this age group represents 16.1% of all isolated residents.

Of the 8,447 residents exposed to flooding, 69% identify as European, 26% as Māori, 11% as Asian, and 8% as Pacific peoples. Of the 41,759 residents at risk of isolation, 64% identify as European, 33% as Māori, 9% as Asian, and 11% as Pacific peoples. When examining exposure as a proportion of each ethnic group's total population, Asian residents show the highest direct exposure at 14.5% and 56.6% at risk of isolation. Pacific residents show a different pattern, with lower direct exposure (9%) but the highest isolation risk at 63.1%.

The flood exposure varies across areas with different levels of socioeconomic deprivation. Of all residents exposed to flooding, 49% are within areas of high deprivation (NZDep7-10) and 24% are in areas with Deprivation scores of 5-6. In terms of all those at risk of isolation, 57% are within areas of high deprivation (NZDep7-10) and 17% are in areas classified as least deprived (NZDep1-2).

As a proportion of all residents within each deprivation classification, those living in areas of moderate-high deprivation (NZDep7-8) show the highest direct exposure at 13.1%, while the most deprived areas (NZDep9-10) face the highest isolation risk at 70.6%. Those living in less deprived areas (NZDep1-2) generally show lower vulnerability, with 7.4% facing exposure and 40.3% facing isolation risk.

Economic Impacts

Currently, commercial and industrial property contributing 25% ($1133M) of the area's annual GDP are exposed to modelled river and rainfall flooding with a 2% AEP (Figure 15.7). Businesses contributing 32% of the GDP can be expected to be isolated with a 2% AEP modelled river and rainfall flooding event. The Manufacturing, Health Care and Social Assistance and Retail Trade sectors are most exposed to both direct damage and isolation. Over 50% of the Retail Trade and the Financial and Insurance Services sector are at risk of isolation which may have significant implications for the pace of recovery following any flooding (Figure A - 36).

These exposure patterns indicate vulnerability in the district's commercial and service sectors, with isolation effects substantially amplifying the economic impacts beyond directly flooded areas. However, hazard data coverage limits the assessment of rural-based sectors such as horticulture. The high isolation risks across multiple sectors suggest potential for significant disruption to Hastings' economic function, even in areas not directly flooded.

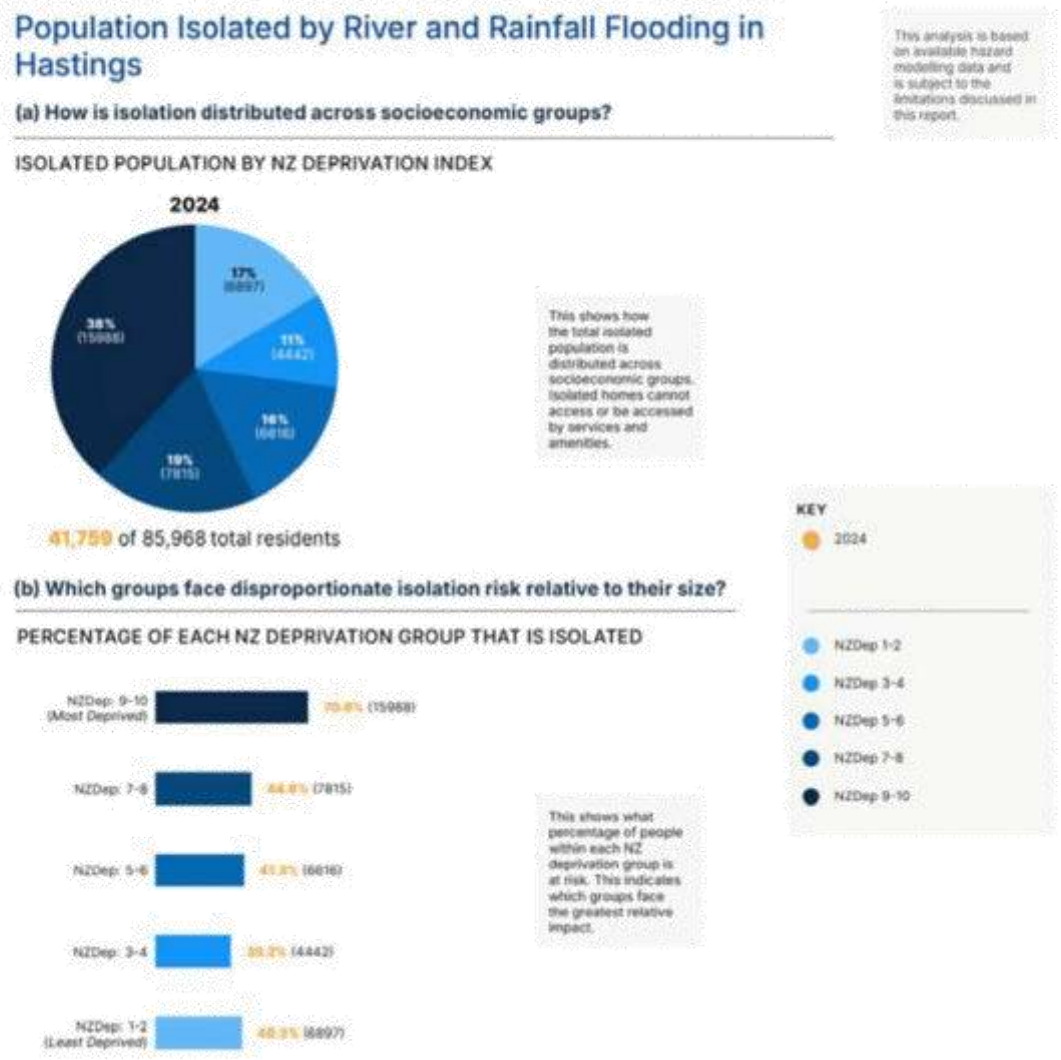


Figure 15.6. Risk of isolation to residents in Hastings due to a 2% AEP river and rainfall flood event.

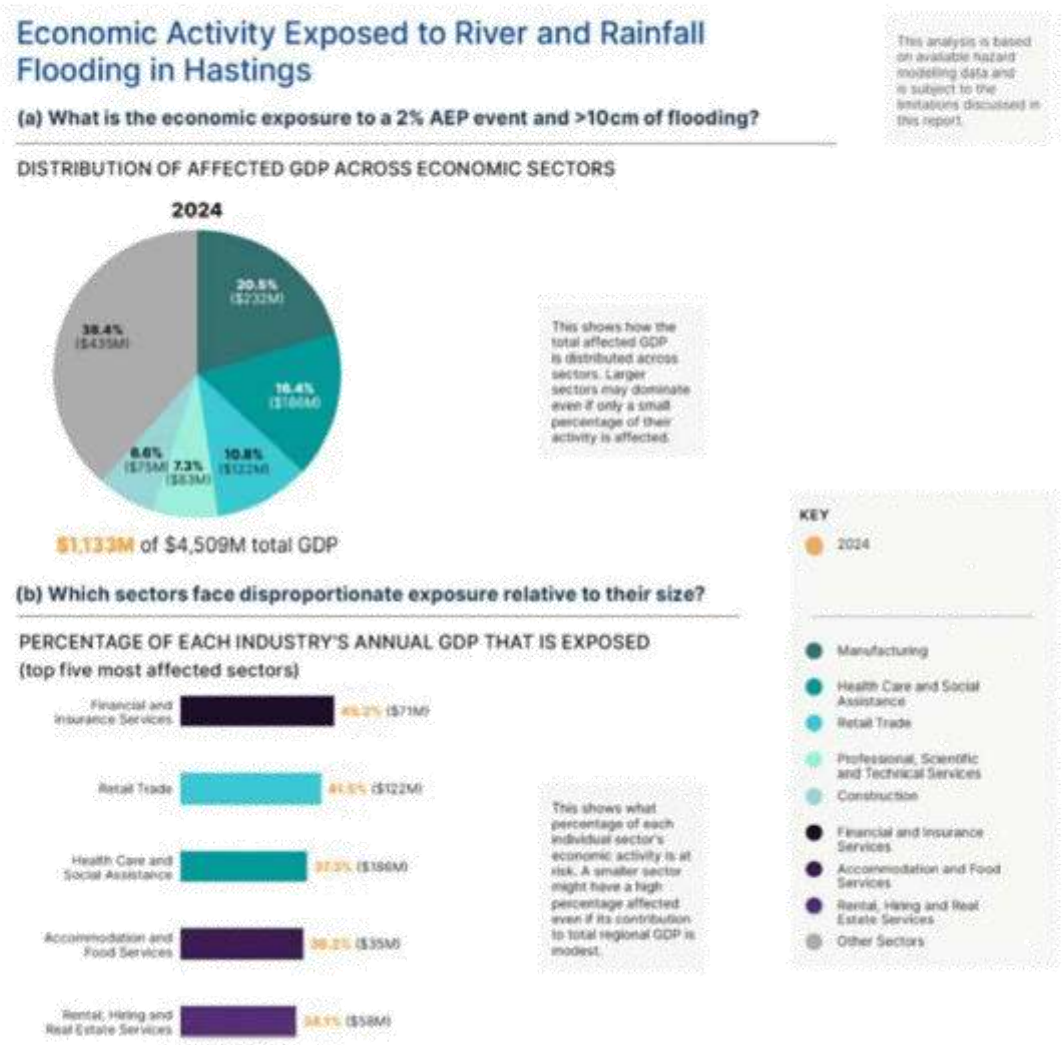


Figure 15.7. Risk to economic sectors in Hastings from 2% AEP river and rainfall flooding.

Risks from landslides

Landslide susceptibility in Hastings District shows concentrated risk areas affecting both infrastructure and communities (Figure 15.3; Figure 15.8; Table 15-5).

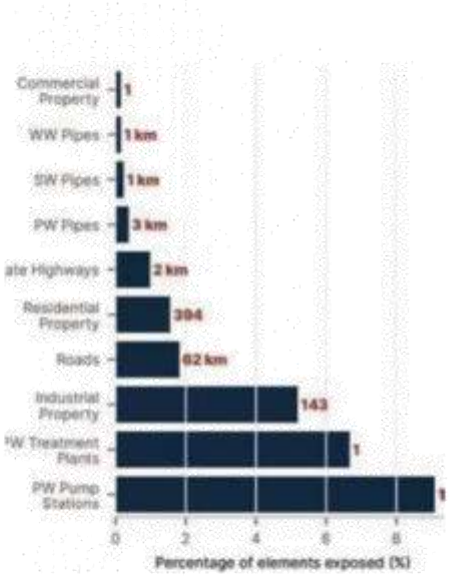


Figure 15.8. Infrastructure exposed to landslides.

Physical Infrastructure Exposure

Infrastructure exposure to landslides varies across asset types. Industrial properties show the highest building exposure at 5.2%, with 143 buildings at risk, while residential exposure is more limited at 1.6% (394 properties). Commercial properties show minimal exposure at 0.1% (1 building).

Infrastructure networks show limited direct exposure, with the exception of a water supply treatment plant and pumpstation being exposed. For the transportation network, 1.0% of state highways and 1.8% of local roads are exposed.

Cascading Impacts on Communities

While direct exposure to landslides affects 1.6% of the population (1,360 residents; Figure A - 37), isolation effects could impact 9.2% (7,910 residents) through disrupted access routes (Figure 15.9).

Landslide risk has different impacts across socioeconomic groups. Of all residents exposed to landslides, 55% are within areas of lower deprivation (NZDep1-2) and 24% are in areas with Deprivation scores of 3-4. In terms of those at risk of isolation, 46% are within areas of lower deprivation (NZDep1-2) and 22% are in areas classified as NZDep3-4.

As a proportion of all residents within each deprivation classification, those living in areas of lower deprivation (NZDep1-2) show the highest relative direct exposure at 4.4% and isolation risk at 21.1%. This contrasts sharply with the most deprived

Residential Buildings	(1.6%)
Roads	km (1.8%)
Potable Water (PW) Pipes	km (0.4%)

areas (NZDep9-10) which show much lower relative exposure (0.1%) and isolation risk (1.6%).

Of the 1,364 residents exposed to landslides, 91% identify as European, 15% as Māori, 2% as Asian, and 1% as Pacific peoples. Of the 7,912 residents at risk of isolation, 90% identify as European, 17% as Māori, 1% as Asian, and 1% as Pacific peoples.

Those aged 65 and over make up 17.6% of all those exposed to landslides, and 16% of those at risk of isolation. Of the 15,351 residents aged 65 and older in Hastings District, 1.6% are directly exposed to landslides, and 8.2% could face isolation issues.

Economic Impacts

The economic impacts of landslides (Figure 15.10; Figure A - 39) are likely to be primarily felt through the effects of isolation rather than direct exposure.

Direct exposure of commercial and industrial property to landslides is low (>1%). Property contributing 4% of the area's GDP may be impacted by isolation. Sectors most at risk of isolation are Agriculture, Forestry and Fishing and Manufacturing, potentially affecting $68.6 million in economic activity.

The analysis suggests that while physical damage from landslides may be limited, access disruption could create significant operational challenges across multiple sectors, particularly affecting the district's agricultural and transport activities. More detailed analysis of indirect economic impacts of road closures (such as costs of route detours) is not included in this assessment.

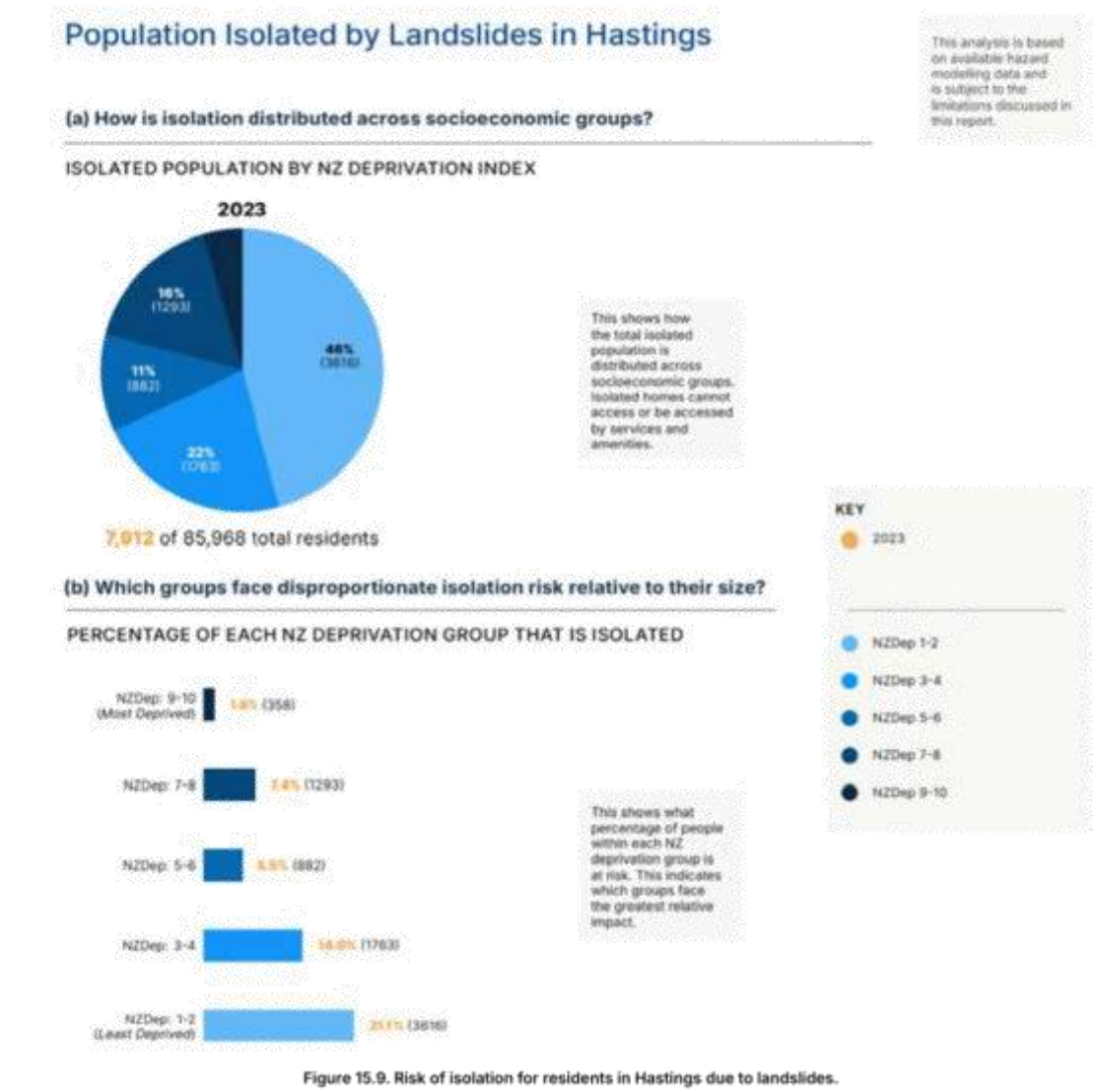


Figure 15.9. Risk of isolation for residents in Hastings due to landslides.

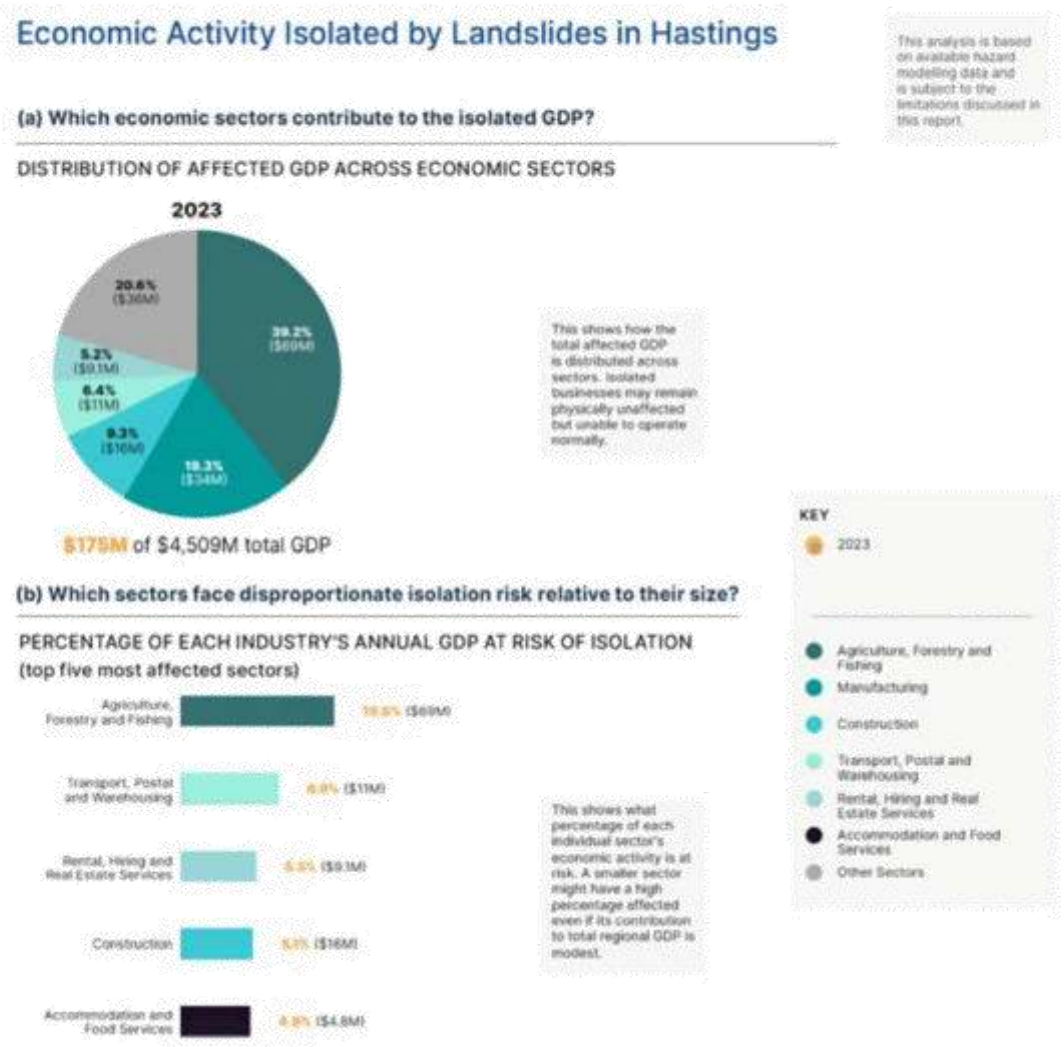


Figure 15.10. Risk to economic sectors in Hastings from landslides.

Risks from climatic (temperature and seasonal) change

Climate projections for Hastings District indicate substantial changes by 2081-2100, particularly under the high emissions scenario (SSP3-7.0), which will affect infrastructure, communities, and economic activities across the district. Temperature increases of 3.1°C (range 2.9-3.2°C) annually, with summer increases of 3.6°C (range 3.4-3.8°C) and projected changes in rainfall patterns create multiple adaptation challenges. The impacts of these projected climatic changes are outlined below.

Infrastructure Impacts

- Increased thermal stress on road surfaces, rail infrastructure and building materials, requiring more frequent maintenance and potential design adaptations.
- Higher cooling demands on electrical systems and telecommunications equipment, particularly with hot days (>25°C) increasing by 55.1 days annually.
- Greater pressure on water infrastructure due to increased PED (96.0mm increase) and reduced winter rainfall.
- Need for upgraded stormwater systems to handle changing rainfall patterns, with more intense summer rainfall (+6.9%) despite overall annual decrease (-7.7%).

Community Impacts

- Increased heat stress risks, particularly with very hot days (>30°C) increasing by 10.4 days annually.
- Reduced winter heating needs (frost days decreasing by 17.8 days) but substantially increased summer cooling requirements.
- Growing water security concerns with significant seasonal rainfall changes (winter rainfall decreasing by 17.0%, while summer rainfall increases by 6.9%).
- Increased vulnerability for agricultural workers and outdoor labourers due to increased number of hot days.
- Potential health impacts from changing disease patterns and extreme weather events.

Economic Impacts

- Agricultural and horticultural sectors face complex changes:
  - extended growing seasons (significant increase in growing degree days)
  - increased water stress from higher PED and reduced winter rainfall
  - potential impacts on fruit production from reduced winter chilling
  - changed pest and disease pressures affecting crop management.
- Manufacturing sector (13.29% of GDP) may face increased cooling costs and potential disruption from extreme weather.
- Construction sector (6.74% of GDP) will need to adapt work practices for more very hot days.

Healthcare sector (9.75% of GDP) may face increased demand from climate-related health impacts These climate changes will interact with the district's existing hazard exposure, potentially amplifying risks from flooding, landslides, and coastal inundation. The combined effects of higher temperatures and changing rainfall patterns may particularly affect the district's agricultural productivity and water security, while creating new challenges for infrastructure resilience and community adaptation.

Refer to Appendix A3 for detailed climate projections for the Hastings District.

Key findings for the Hastings District

- **River and rainfall flooding risk is the most severe hazard for Hastings**, with commercial properties, and residential properties exposed and a high proportion of the population at risk of isolation.
- **Notable exposure of three waters infrastructure**, with the wastewater treatment plant, stormwater infrastructure and wastewater infrastructure directly exposed to more than 10cm of flooding from river and rainfall events.
- **Coastal flooding exposure is increasing** with climate change, affecting residential properties
- **Landslides** are a significant source of isolation risk, with the potential to isolate residents, largely in rural areas. Landslide exposure is concentrated in less deprived areas, with the majority of exposed properties located in NZDep1-2 areas.
- **River and rainfall flooding poses the greatest risk to local economic activity**, with commercial and service sectors facing the greatest risk of direct exposure and isolation.
- **Areas of high deprivation are more exposed to flooding and isolation risks,** with those living in areas of high deprivation (NZDep7-10) the most directly exposed to more than 10cm of river and rainfall flooding, and at greatest risk of isolation.
- **Increasing risks to communities and primary sector industry from an increase in temperatures,** with a projected **3.1°C temperature increase** by 2100 under SSP3-7.0, leading to more hot days (>25°C) annually and a decrease in winter rainfall.

16 Napier City

Snapshot of Napier City

Information on Napier City taken from local plans and reports, the Napier City Council, and Census 2023.

- **105 km²** land area, surrounded by Hastings District
- **Population** 64,695 (2023)
- **24.2% of the population identify as Māori and 26.2% are of Māori descent**
- **21.1% of the population is aged 65 or older**
- **$82,900 median household income** (Dec 2024)
- **$753,155 average house price** (Jan 2025)
- **$3.6B GDP**, with the main industries being Manufacturing (contributing 10% to the district's GDP), Rental, Hiring & Real Estate Services (9%), and Professional, Scientific & Technical Services (8%)
- **Six traditional marae** affiliate to Ahuriri but sit within the Hastings District Council boundary. One marae (Pukemokimoki) sits within Napier City for community and tangata whenua of Ahuriri
- Extensive coastal frontage including beaches and Te Whanganui ā Orotu (Ahuriri Estuary), bounded by rivers to the north and south

Napier City summary

Napier City geographic profile

Napier City, situated on the eastern coast of New Zealand's North Island, covers 105 km² of land area and is a significant urban centre within Hawke's Bay. The city's urban footprint covers about one-third of its land area, with the remaining two-thirds being rural or semi-rural. Napier is surrounded by Hastings District, with its strategic location providing vital connections between the productive Heretaunga Plains — renowned for its apple, pear and stone fruit production and viticulture — and the coast. The city is characterised by long stretches of beach front, a river network, and Te Whanganui ā Orotu (the Ahuriri Estuary), which holds significant cultural value for tangata whenua and supports diverse ecological systems.



Figure 16.1. Napier City in Hawke's Bay.

Table 16-1 Employment and Economic Contribution by Economic Sector (greater than 5%) in Napier.

ANZSIC06 Division	Contribution to District GDP (%)	Percentage of total District workforce employed (%)
Manufacturing	10	10
Rental, Hiring and Real Estate Services	9	3
Professional, Scientific and Technical Services	8	7
Retail Trade	7	11
Construction	7	10
Health Care and Social Assistance	6	10
Transport, Postal and Warehousing	6	5
Public Administration and Safety	5	6
Agriculture, Forestry and Fishing	5	4

The city faces multiple climate-related challenges that vary across its diverse landscape. These range from coastal hazards along its eastern boundary to flooding risks in its low-lying areas, particularly those reclaimed from the 1931 earthquake. Figure 16.2 illustrates the spatial distribution of properties exposed to various climate hazards across Napier City.

The built environment of Napier includes significant infrastructure and 27,200 rating units concentrated in areas that face increasing climate risks. The Hawke's Bay Airport and Napier Port are important critical infrastructure also at risk of climate hazards, connecting the central and lower North Island to both national and international markets. As shown in Figure 16.3 physical infrastructure across the city has varying degrees of exposure to multiple hazards influenced by climate change, particularly flooding and coastal inundation.

Napier City population

Based on Census 2023 data, the city has a population of 64,695, making it the tenth most populous city in the country. Those identifying as European make up 79% of the city's population (higher than the national average of 67.8%), followed by 24.2% who identify as Māori (higher than the national average of 17.8%). In total, 43.3% of the city's population is aged 30-64, followed by 21.1% aged 65 or older. The district has a median household income of $82,900 and average house value of $753,155. Given the size of its population, Napier City serves as a crucial economic and social hub for the region.

Napier City local economy

Napier City's GDP in 2023 was $3,605 million. The city's economy is relatively diverse (Table 15.1). Manufacturing, Rental, Hiring & Real Estate Services, and Professional, Scientific & Technical Services are the main industries, collectively contributing 27% to the district's GDP. In terms of the percentage of workforce employed, Retail Trade, Construction, Manufacturing, and Health Care & Social Assistance are the biggest employers, collectively providing 41% of employment.

Table 16-2 Summary and suitability for adaptation planning of hazard information available in Napier.

Hazard/Change	Suitability	Description
Coastal Flooding	Moderate	Multiple datasets available: (1) Clifton-Tangoio modelling (2020) with 1% and 2% AEP for 2100; (2) T+T extent mapping (2015) for 1% AEP with 0m, 0.5m, and 1m SLR; (3) NIWA nationwide coastal flooding showing extent for 1% AEP with 0-2m SLR in 10cm increments.
River & Rainfall Flooding	Moderate	Modelling of 10%, 2%, 1% AEP flood depths. Only a single time period (e.g. the modelling is not incorporating sea level rise or other changes).
Shallow Groundwater	Moderate	Current day groundwater levels mapped. No future scenarios incorporating sea-level rise or rainfall changes.
Landslides	Moderate	Region-wide shallow landslide susceptibility mapping.
Coastal Erosion	High	District-wide mapping showing areas susceptible to coastal erosion for 2016, 2065, and 2100.
Liquefaction	High	Susceptibility mapping for three earthquake scenarios (1%, 4%, and 0.2% AEP).
Tsunami	High	Multiple return periods (100, 500, 1000, 2500 ARI) modelled with various sea-level rise scenarios (0cm, 65cm, 1m, 2m).
Wildfire		No suitable mapped data available

Overview of hazard data availability and suitability

Napier City faces multiple climate-related hazards, with varying levels of data quality and availability to support risk assessment and adaptation planning. Table 15.2 provides a summary of the suitable hazard data for the Napier District. The data is classified by suitability, relating to how much confidence there is in the modelling and its applicability for adaptation planning.

Risks from coastal flooding

Coastal flooding presents a significant and increasing risk to Napier City. The exposure analysis considers multiple sea-level rise scenarios from present day to 2150, with flooding potential extending inland through connections to estuaries and other water sources (Figure 16.2; Figure 16.3; Table 16-3)

Physical Infrastructure Exposure

Current coastal flooding exposure is already substantial, with 14.4% of residential buildings (3,242), 5.6% of commercial buildings (56), and 40% of industrial buildings (356) at risk. With 1m of sea-level rise, this exposure increases dramatically to 46.6% of residential, 15.9% of commercial, and 74.9% of industrial buildings.

Infrastructure networks show similarly high exposure levels. Under current conditions, three waters infrastructure exposure ranges from 8.4-13% of pipes and 13-27% of pump stations, increasing to 43-47% of pipes and 40-72% of pump stations with 1m of sea-level rise. Transportation networks show 10.2% of local roads and 3.5% of state highways currently exposed, rising to 37.8% and 22.6% respectively with 1m of sea-level rise.

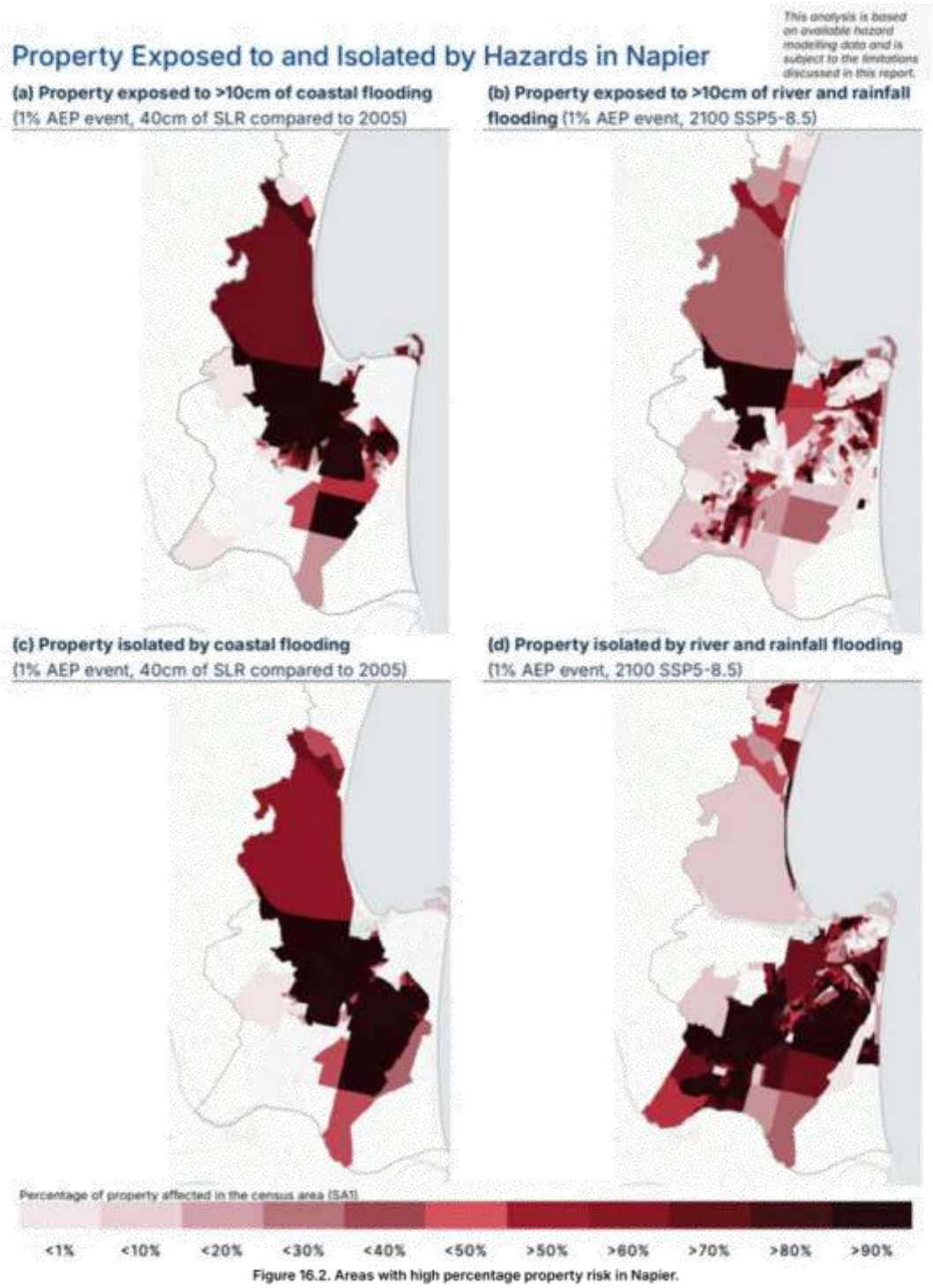


Figure 16.2. Areas with high percentage property risk in Napier.

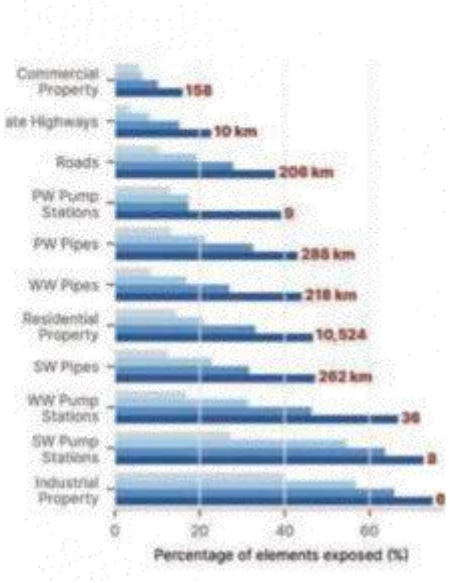


Figure 16.3. Infrastructure exposed to a 1% AEP coastal flood with different amounts of sea level rise.

Cascading Impacts on Communities

By 2130, under a high emissions scenario (SSP5-8.5), 57% of the total population (36,729 residents) could be directly exposed to flooding (Figure 16.4), and up to 59% (38,019 residents) could face isolation risks due to road network disruption (Figure A - 42).

Of all residents exposed to more than 10cm of coastal flooding, 61% are within areas of high deprivation (NZDep7-10). Similarly, 60% of those at risk of isolation are in areas of high deprivation. As a proportion of residents within each deprivation classification, those in areas of high deprivation face the most severe impacts, with 86.8% of residents in NZDep9-10 areas exposed and 87% at risk of isolation.

Of the 36,729 residents exposed to flooding, 73% identify as European, 31% as Māori, 7% as Asian, and 6% as Pacific peoples. Of the 38,019 residents at risk of isolation, 74% identify as European, 30% as Māori, 7% as Asian, and 6% as Pacific peoples. When examining exposure by ethnicity, Pacific and Māori residents show the highest relative exposure at 78% and 73% respectively of their populations, with similar proportions at risk of isolation (79% and 74%).

Over 48% of residents aged 65 and older could face isolation issues. Of all residents directly exposed to flooding, 16.7% are aged 65 and older. Similarly, 17.4% of all residents isolated are aged 65 and older.

Economic Impacts

The combination of direct flooding and isolation creates cascading effects throughout Napier's economy (Figure 16.5; Figure A - 44). By 2050, industrial and commercial properties contributing to 29% ($829M) of the city's annual GDP are directly

uilt infrastructure	Baseline sea level (2005)	20cm of sea level rise (2025 – 2050)	of sea level ris 70 – 2150)
ndustrial Buildings	356 (40.0%)	505 (56.7%)	(74.9%)
tate Highway	1.6 km (3.5%)	3.7 km (8.1%)	km (22.6%)
Vastewater (WW) Pipes	41.7 km (8.4%)	33.2 km (16.8%)	0 km (44.0%)

exposed to more than 10cm of coastal flooding. Sectors most at risk are Manufacturing, Wholesale Trade and Transport, Postal and Warehousing. Over 70% of the Wholesale Trade sector is at risk indicating potential for significant flow on impacts on other sectors reliant on wholesale products.

By 2130, properties contributing to 43% ($1229M) of the city's annual GDP are directly exposed. Retail Trade joins Manufacturing, Wholesale and Transport, Postal and Warehousing in the most at risk sectors. Over 80% of the Manufacturing and Wholesale Trade sectors are exposed to direct impact.

The spatial concentration of economic activity, particularly around coastal and low-lying industrial areas, means that flood impacts could simultaneously affect multiple sectors and their supporting infrastructure, creating compound effects that amplify beyond direct losses. This interconnected vulnerability highlights the need for adaptation strategies that consider both direct exposure and the complex web of dependencies that characterize Napier's community and economic systems. More detailed analysis of indirect economic impacts of road closures (such as costs of route detours) is not included in this assessment.

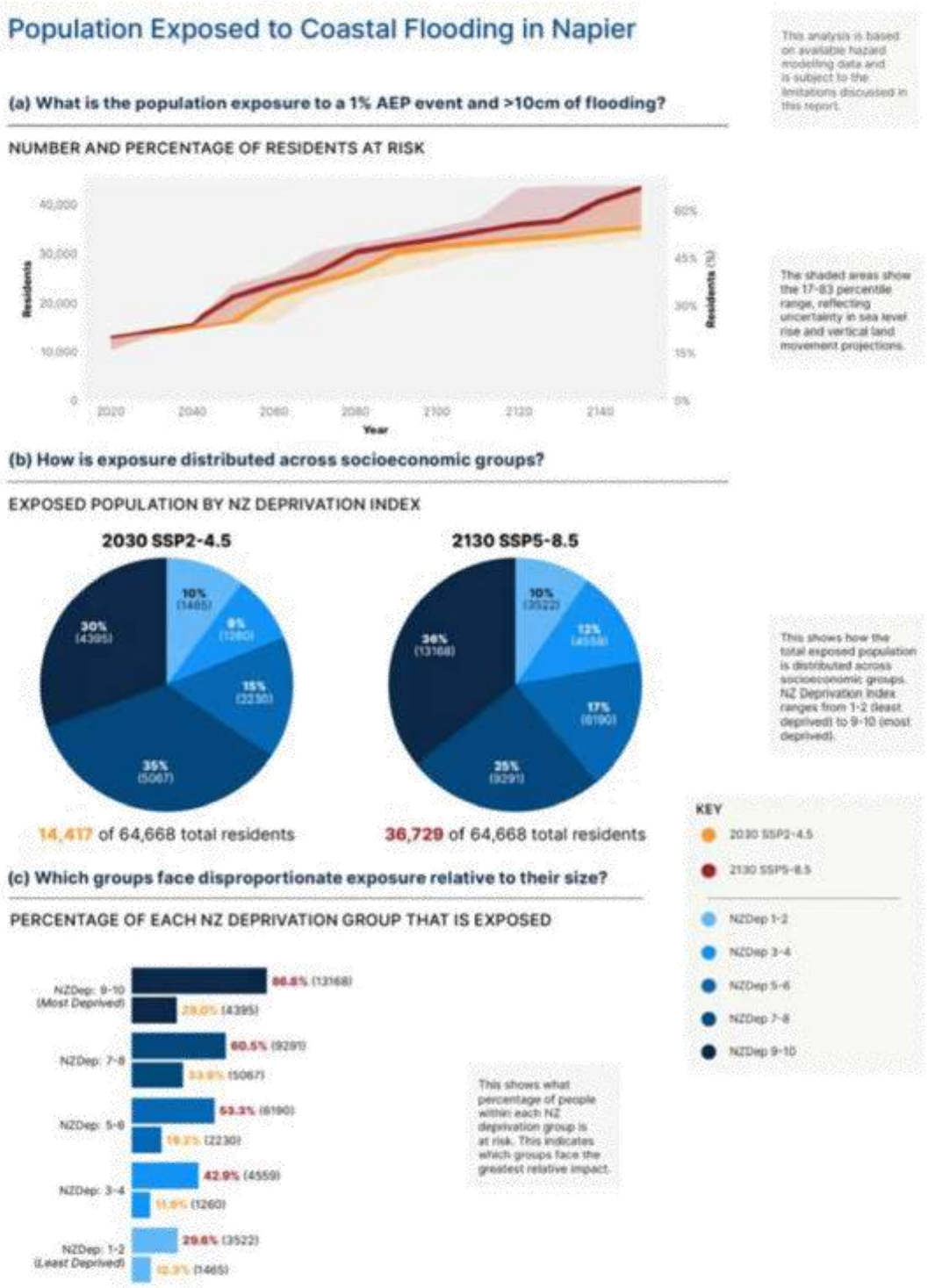


Figure 16.4. Risk to residents in Napier from 1% AEP coastal flooding.

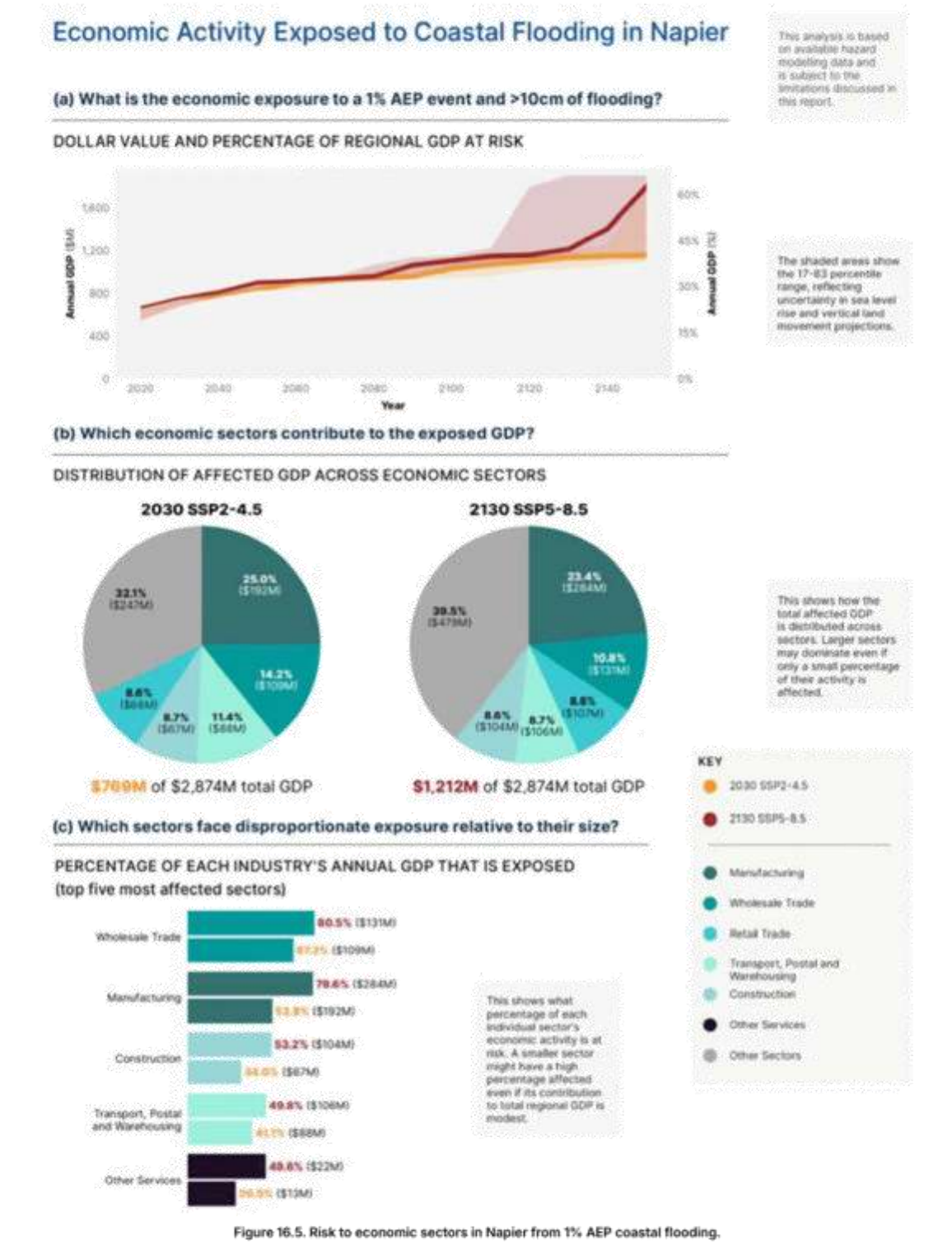


Figure 16.5. Risk to economic sectors in Napier from 1% AEP coastal flooding.

Risks from river and rainfall flooding

River and rainfall flooding poses risks to Napier City, with this analysis based on a 1% AEP storm event modelled for 2100 climate conditions. While this represents future projected conditions rather than current day scenarios, flooding is already a present-day challenge for Napier as demonstrated by recent events (Figure 16.2; Figure 16.6; Table 16-4).

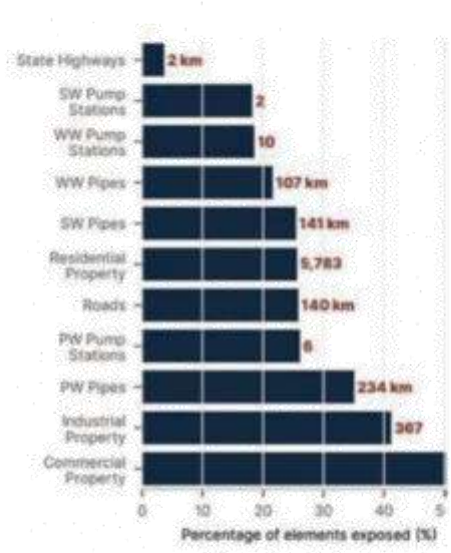
The extent to which flood protection infrastructure (such as stopbanks) is incorporated varies between models, and this assessment does not include detailed analysis of infrastructure vulnerability based on design standards or condition of flood mitigation measures.

Physical Infrastructure Exposure

Analysis shows high exposure levels across multiple infrastructure types. Commercial properties face the highest exposure at 52.8% (525 buildings), followed by industrial buildings at 41.2% (367 buildings). Residential exposure is also substantial, with 5,783 properties (25.6%) at risk.

Three waters infrastructure shows significant exposure, with potable water networks most affected at 35% of pipes and 26% of pump stations. Stormwater and wastewater networks show similar exposure levels at 26% and 22% of pipes respectively and 18% of pump stations exposed for both systems.

Transportation networks show varying exposure, with 26% of local roads at risk, while state highways show lower exposure at 3.6%.



Fi ...er and ...rainfall flooding for 2100 under SSP5-8.5.

Cascading Impacts on Communities

A 1% AEP flood event would create widespread disruption, with 25.4% of the population (16,401 residents) facing direct exposure to flooding (Figure 16.7). The isolation impacts are substantially more widespread, with 75.9% (49,113 residents) potentially

'able 16-4. The length/number of each infrastructure exposed in Napier to 1% AEP river and rainfall flood event. Note that exposed does not necessarily mean "damaged" as the characteristics of the assets influence whether they are damage prone (vulnerable).

ilt infrastructure	sure to 1% AEP event
mmercial Buildings	52.8%)
ıte Highway	n (3.6%)
ıstewater (WW) Pipes	km (21.6%)

cut off from essential services due to flooded roads (Figure 16.8).

Of all residents exposed to flooding, 53% are in areas of high deprivation (NZDep7-10), and 52% of those at risk of isolation are in these same areas. As a proportion of residents within each deprivation classification, those living in the most deprived areas (NZDep9-10) face the highest isolation risk at 87.2%, significantly higher than the 62% in least deprived areas (NZDep1-2). Direct flooding exposure shows similar but less pronounced differences, affecting 31% of those in medium-high deprivation areas (NZDep5-8) compared to 15.2% in least deprived areas.

Of the 16,401 residents exposed to flooding, 79% identify as European, 24% as Māori, 8% as Asian, and 4% as Pacific peoples. Of the 49,113 residents at risk of isolation, 77% identify as European, 26% as Māori, 7% as Asian, and 5% as Pacific peoples. When examining exposure by ethnicity, Pacific and Māori residents face higher isolation risk (85.5% and 82.3% respectively) compared to the city's total population (75.9%). Asian residents also show elevated risk with 80.4% at risk of isolation and 29.2% directly exposed to flooding.

Those aged 65 and over make up 20.1% of all those exposed to flooding, and 20.2% of those at risk of isolation. Of the 13,686 residents aged 65 and older in Napier City, nearly three-quarters (72.6%) could face isolation issues, while 24.1% are directly exposed to flooding.

Economic Impacts

River and rainfall flooding in Napier creates both direct exposure and isolation risks across the city's economy. Most sectors face greater isolation impacts than direct flooding exposure, creating significant challenges for business continuity and economic resilience (Figure 16.9; Figure A - 48).

Industrial and commercial properties contributing to 44% ($1,278M) of the city's annual GDP are exposed to direct river and rainfall flooding, based on projected flood risk for the year 2100. Several major sectors show over 10% of their GDP contribution at risk, including:

- Rental Hiring and Real Estate
- Retail Trade
- Professional Scientific and Technical Services
- Manufacturing
- Health Care and Social Assistance.

When examining exposure as a proportion of each sector's total activity, Public Administration and Safety is most affected with 63% exposed. Other highly exposed sectors (over 50% at risk) include:

- Rental Hiring and Real Estate
- Retail Trade
- Professional Scientific and Technical Services
- Health Care and Social Assistance
- Financial and Insurance
- Information Media and Telecommunications
- Electricity, Gas, Water and Waste Services.

Isolation impacts are even more extensive, affecting properties that contribute 56% ($1,613m) of the city's annual GDP. Over 70% of several sectors face isolation risk, including:

- Retail Trade
- Public Administration and Safety
- Information Media and Telecommunications
- Electricity, Gas, Water and Waste Services.

This widespread economic exposure indicates that flooding impacts extend well beyond directly affected areas. The high isolation risks across multiple sectors highlight potential disruption to Napier's economic function, even in areas not directly flooded. This creates particular challenges for business continuity planning and emphasises the importance of maintaining critical transport links during flood events.

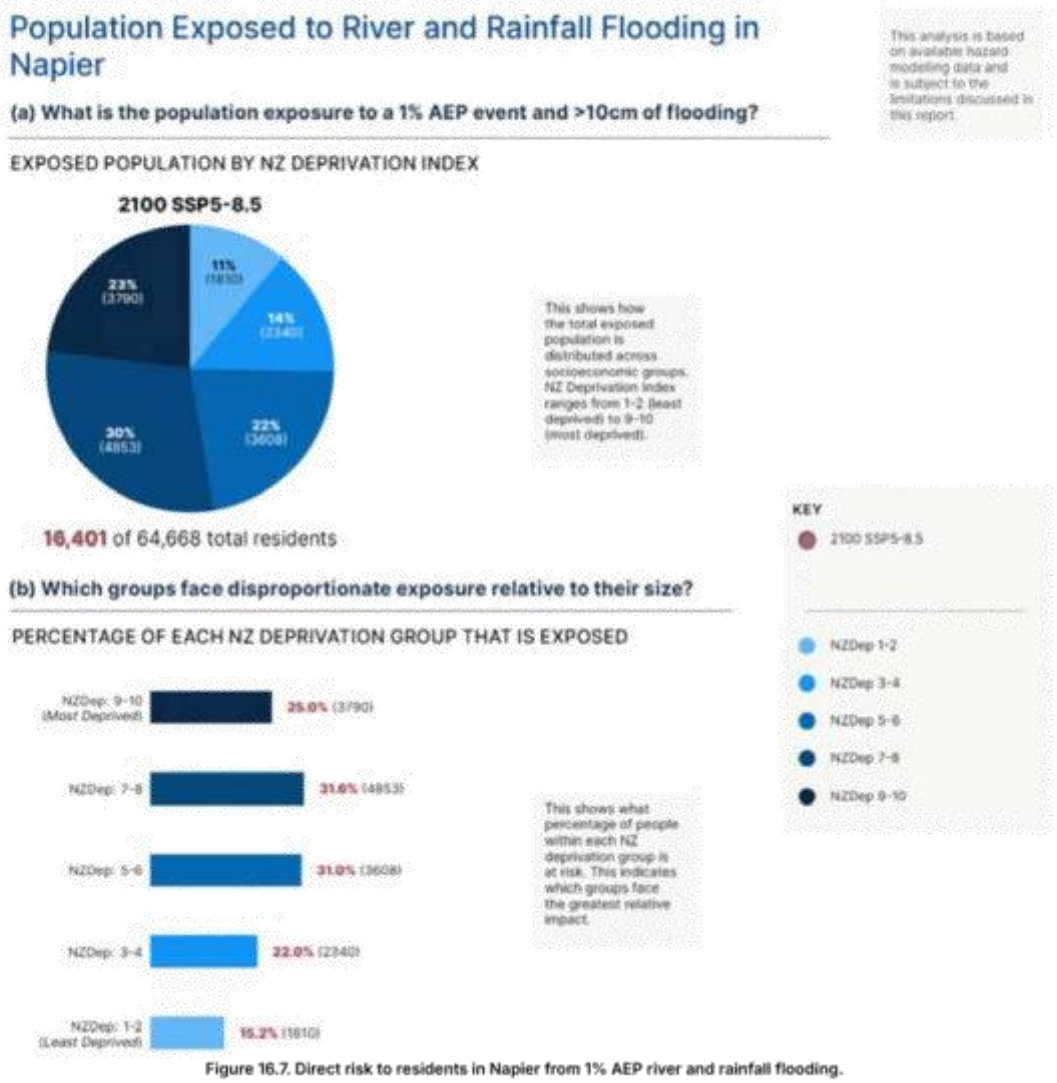


Figure 16.7. Direct risk to residents in Napier from 1% AEP river and rainfall flooding.

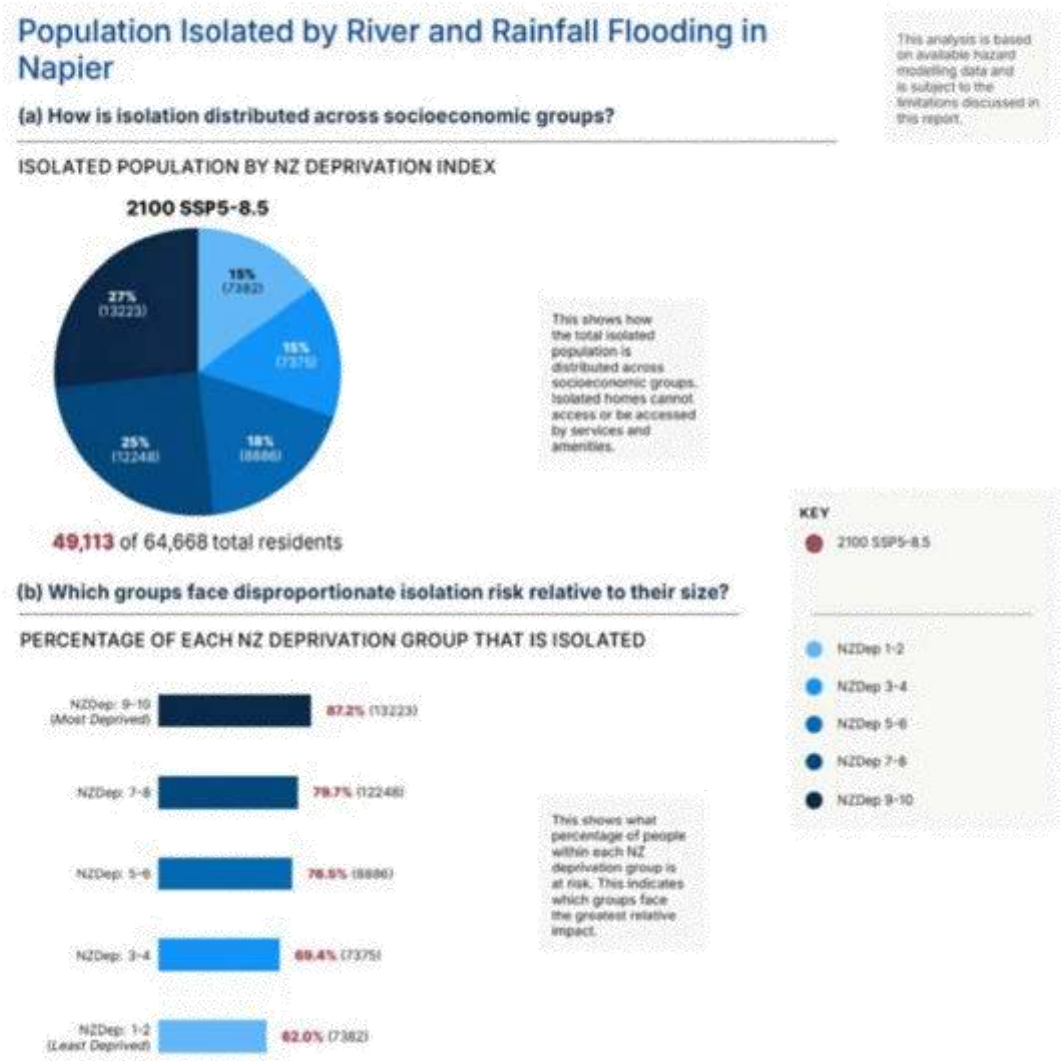


Figure 16.8. Isolation risk to residents from a 1% AEP river and rainfall event modelled for 2100.

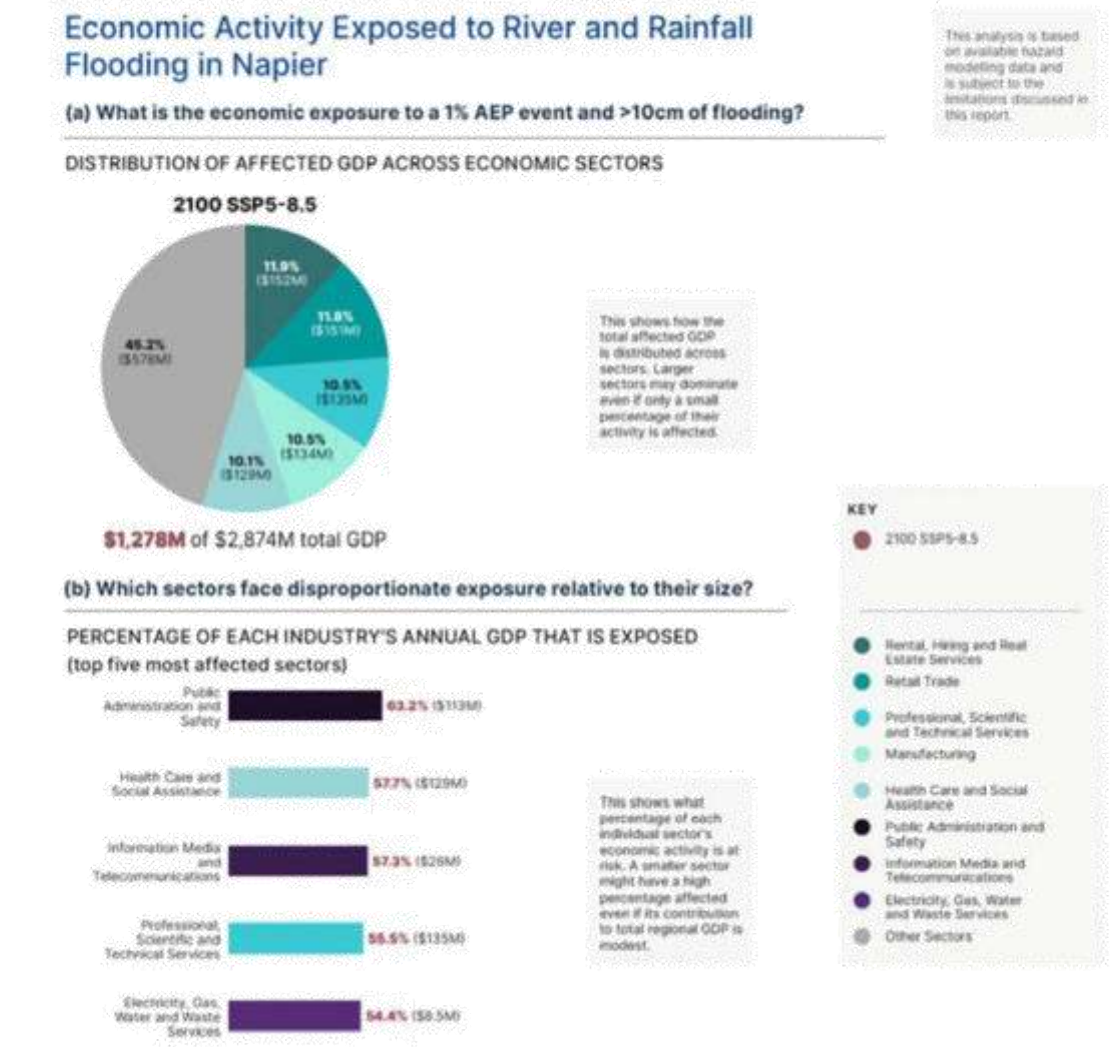


Figure 16.9. Direct risk to economic sectors in Napier from 1% AEP river and rainfall flooding in 2100.

Risks from landslides

Note that this assessment does not include detailed GNS Science analysis of landslide risk for areas like Napier Hill. While the city-scale analysis in this assessment shows relatively low exposure, localised risks may be significantly higher in some areas.

Physical Infrastructure Exposure

Based on available regional-scale data, landslides affect a smaller portion of Napier than flooding, presenting localised risks particularly in hillside areas. Analysis shows limited direct exposure to built infrastructure, with 119 residential properties (0.5%) and 5 industrial buildings (0.6%) in landslide susceptible areas. Infrastructure networks show minimal direct exposure, with small sections of three waters infrastructure affected: wastewater at 1.9% of pipes, stormwater at 0.8%, and potable water at 0.1%. Road exposure is limited to 2.6km (0.5%) of local roads, with <10m of state highways directly affected (Figure 16.10; Table 16-5).

Cascading Impacts on Communities

Direct exposure affects less than 1% of Napier's total population (380 residents), while isolation effects could impact up to 930 residents (1.4%) through disruption to access routes.



Of a... residents exposed to landslides, 76% are in areas of low deprivation (NZDep1-2). Similarly, 76% of those at risk of isolation are within these same areas. As a proportion of residents within each deprivation classification, those living in areas of low deprivation show the highest exposure at 2.2%, with isolation potentially affecting up to 5.9% of this population.

Built infrastructure	gth/number Exposed
Industrial Buildings	1.6%)
Potable Water (PW) Pipes	km (0.1%)

Those aged 65 and over make up 22.5% of all those exposed to landslides, and 21.9% of those at risk of isolation. Of the 13,686 residents aged 65 and older, 0.6% are directly exposed to landslides, and 1.5% could face isolation issues.

Economic Impacts

Economic impacts from landslides are primarily caused by isolation rather than direct exposure. Administrative and Support Services and Education and Training have the highest potential for disruption, with approximately 20% of each sector potentially affected by isolation. This suggests that while physical damage from landslides may be limited, access disruption could create significant operational challenges for certain sectors.

These findings show that while landslide risk may affect a relatively small portion of Napier's population and infrastructure, its impacts are concentrated in particular areas and sectors. This spatial concentration creates potential for significant localised disruption, particularly where landslides could affect access routes or critical infrastructure

Risks from climatic (temperature and seasonal) change

Climate projections for Napier (Appendix A3) indicate changes that will affect infrastructure, communities, and economic activities across the district. By 2081-2100, under SSP3-7.0, temperature increases of 3.0–3.5°C coupled with more hot days (increasing from 24 to 71 days above 25°C annually) and changes in rainfall patterns will create a range of adaptation challenges. The impacts of these projected climatic changes are outlined below.

Infrastructure Impacts

- Increased stress on road rainfalls and rail infrastructure from thermal expansion.
- Higher cooling demands on electrical and telecommunications infrastructure.
- Accelerated deterioration of building materials and increased maintenance requirements.
- Greater pressure on water infrastructure due to increased demand during hot periods.

Community Impacts

- Health risks from extreme heat, particularly with very hot days (>30°C) increasing from 5 to 22 days annually.
- Changes in human disease patterns and potential emergence of new health risks.
- Reduced winter heating needs (frost days decreasing by 7.4 days) but increased summer cooling requirements.
- Growing water security concerns with seasonal rainfall changes (winter rainfall decreasing by 14.4% while summer rainfall increases by 8.4%).
- Disproportionate impacts on vulnerable populations, particularly older residents and those in poorly adapted housing.

Economic Impacts

- Agriculture and horticulture will face both opportunities and challenges:
  - longer growing seasons (growing degree days increasing by nearly 1000 units)
  - increased water stress (PED increasing by 114.5mm)
  - changed pest and disease pressures.
- Tourism may benefit from warmer conditions but face disruption from extreme weather events.
- Construction and outdoor work will need to adapt to more very hot days and changing rainfall patterns.
- Increased cooling costs for commercial and industrial operations.
- Insurance and financial services may face pressure from increased climate risks.

These climate changes will interact with and potentially amplify the flood risks described above, creating compound challenges for adaptation planning. For example, increased summer rainfall intensity combined with sea-level rise could exacerbate flooding impacts, while higher temperatures could increase the vulnerability of isolated communities during flood events.

Key findings for Napier City

- **Coastal flooding is a significant and increasing risk.**
- **River and rainfall flooding also poses a significant risk** to the built environment including lifeline infrastructure, residential properties, commercial properties and industrial buildings.
- **Three waters infrastructure is significantly vulnerable to all types of flooding**, particularly water supply in a 1% AEP river and rainfall flood event, and wastewater exposure to coastal flooding by 2100 (SSP2-4.5).
- **High risk of business isolation during river, rainfall, and coastal flooding**, with the potential for significant disruption to Napier's economy, even in areas not directly flooded.
- **Increasing risk of economic shocks and disruptions from seasonal variability** with a 3.0–3.5°C temperature increase by 2081-2100 under SSP3-7.0, and increased water stress affecting primary industries.
- **Areas of high deprivation are more exposed to flooding and isolation risks**, with those living in areas of high deprivation (NZDep7-10) the most directly exposed to more than 10cm of river and rainfall flooding and coastal flooding.

17 Wairoa District

Snapshot of the Wairoa District

Information on the Wairoa District taken from local plans and reports, the Wairoa District Council, and Census 2023.

- **4,077km² land area**
- **Population 8,826** (2023) over half of which live in the Wairoa township between Napier and Gisborne
- **68.5% of the population identify as Māori and 69% are of Māori descent**
- **18.6% of the population are aged 65 years and over**
- **$65,800 median household income** (Dec 2024), the lowest in the Hawke's Bay
- **$405, 927 average house price** (Jan 2025)
- **$404 million GDP** in 2023, with the main industries being Agriculture, Forestry and Fishing (contributing 20% to the district's GDP), Manufacturing (13%), Construction (8%)
- **Thirty-seven marae** located across the district
- Mahia Peninsula home to Rocket Lab
- Wairoa township is the urban centre, surrounded by small rural settlements and land use

Wairoa District summary

Wairoa District geographic profile

The Wairoa District covers 4,077km² of diverse terrain between Napier and Gisborne (Figure 17.1). The landscape is characterised by a mixture of native forests (approximately 45% of the total area) in the north-west, agricultural grassland (42%) towards the south-east, plantation forestry (9%), and a small but significant horticultural presence (<1%) near the coastal areas. The district's population of 8,826 (2023) is primarily concentrated in the Wairoa township, with the remainder dispersed across rural areas and coastal settlements including the Mahia Peninsula, notable as the location of Rocket Lab's launch facility [16, 61, 70, 71].



Figure 17.1. Wairoa District in Hawke's Bay.

Table 17-1 Employment and Economic Contribution by Economic Sector (greater than 5%) in Wairoa

ANZSIC06 Division	Contribution to District GDP (%)	Percentage of total District workforce employed (%)
Agriculture, Forestry and Fishing	20	22
Manufacturing	13	17
Construction	8	9
Rental, Hiring and Real Estate Services	6	2
Health Care and Social Assistance	5	8
Retail Trade	5	7

Wairoa District population

Wairoa District has distinct local demographic and socioeconomic characteristics that may influence its adaptive capacity and vulnerability to natural hazards. The district has the lowest median household income in Hawke's Bay at $65,800, and 68.5% of the population identify as Māori, representing one of the highest proportions of Māori residents in any New Zealand district. In total, 18.6% of the population is aged 65 years or older, which is slightly higher than Hastings District (17.9%) and lower than Central Hawke's Bay District (21.4%) and Napier City (21.1%). These demographic and economic factors are particularly relevant when considering the community's capacity to prepare for, respond to, and recover from natural hazards events.

Wairoa District local economy

Wairoa District's GDP in 2023 was $404 million. The district's economy is predominantly based on primary industries, with Agriculture, Forestry and Fishing contributing 20% to the district's total GDP and employing 22% of the workforce (Table 16-1). Manufacturing and Construction also play significant roles, together accounting for 21% of GDP and providing 26% of employment. These economic activities are distributed across the district's varied landscape, reflecting the close relationship between the natural environment and local livelihoods.

Overview of hazard data availability and suitability

Wairoa District faces various climate-related hazards, though the availability and quality of hazard data to support risk assessment and adaptation planning is generally limited. The assessment of climate-related risks in the Wairoa District is constrained by limited availability of hazard data appropriate for this level of assessment.

Table 17-2 provides a summary of the suitable hazards data available at the time this assessment was undertaken. The data is classified by suitability, relating to how much confidence there is in the modelling and its applicability for adaptation planning.

The following sections outline the findings of the district-level assessment for Wairoa.

Table 17-2 Summary and suitability for adaptation planning of hazard information available in Wairoa District.

zard/Change	Suitability	Description
ɾer & Rainfall Flooding	Low	2007 modelling for 1% and 2% AEP flood extents present day scenario. No climate change scenaric available.
ndslides	Moderate	2023 Manaaki Whenua region-wide shallow lands susceptibility mapping.
ɹuefaction		No suitable mapped data available
ldfire		No suitable mapped data available

Risks from coastal flooding

While direct exposure to coastal flooding affects a relatively small portion of Wairoa District's built environment, the potential for isolation of people and services is more substantial, particularly in the long-term under a higher emissions scenario. The concentration of exposure of infrastructure systems combined with the isolation risks warrant consideration in adaptation planning for the district. The following results describe exposure for a 1% AEP event.

Physical Infrastructure Exposure

Coastal flooding in Wairoa District primarily affects three waters infrastructure networks and a small number of residential and industrial buildings (Figure 17.2; Figure 17.3; Table 17-3). Under current sea levels, approximately 0.2% of residential buildings (5 buildings) are exposed to more than 10cm of coastal flooding. This exposure increases to 0.4% (13 buildings) with 1m of sea level rise. While no commercial buildings are directly exposed across the scenarios examined, industrial building exposure increases from zero under current conditions to 0.6% (4 buildings) with 1m of sea level rise.

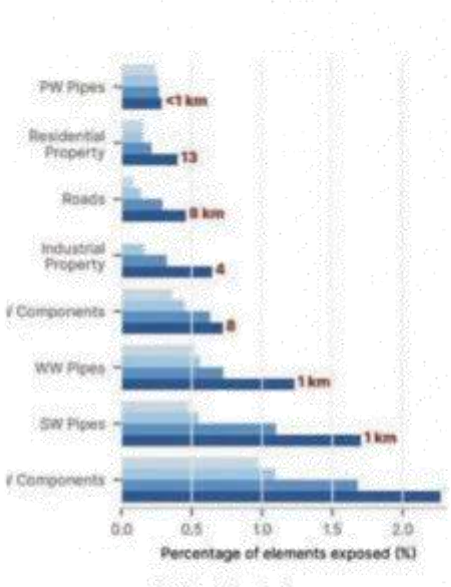


Figure 17.2. Infrastructure exposed to a 1% AEP coastal flood with different amounts of sea level rise (SLR).

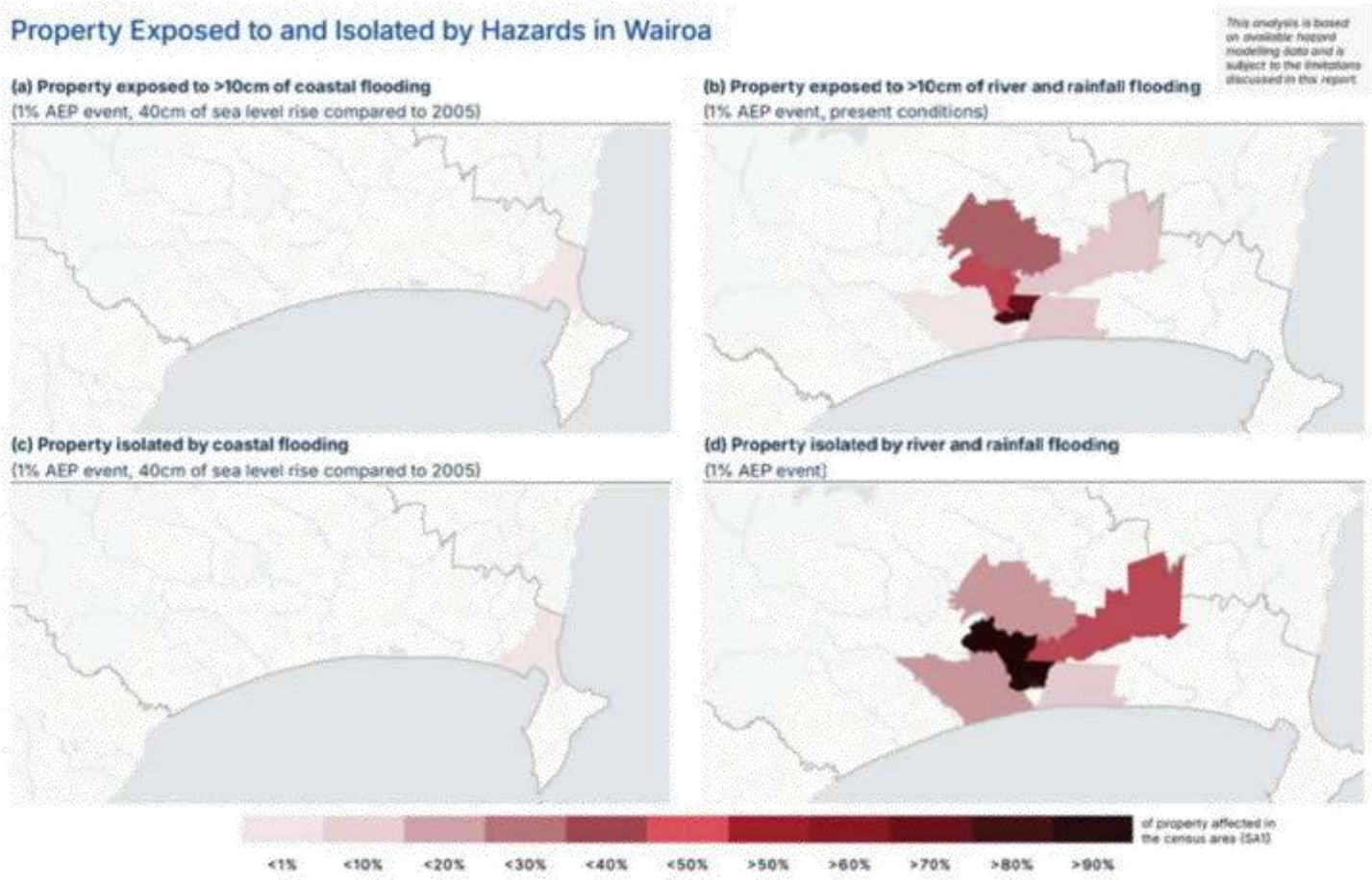


Figure 17.3. Areas with high percentage property risk in Wairoa.

URBAN INTELLIGENCE

Infrastructure networks also show minor levels of exposure, as detailed in Table 17-3. Road exposure increases from 1.6km (0.1%) currently to 8.5km (0.5%) with 1m of sea level rise, though state highways remain unexposed across all scenarios. Three waters infrastructure also shows varying levels of exposure across the scenarios, with stormwater networks showing the highest relative exposure at 1.7% under 1m of sea level rise.

Cascading Impacts on Communities

The demographic exposure statistics indicate varying levels of vulnerability across different population groups living in Wairoa (Figure 17.4; Figure A - 50). Based on current levels of deprivation and residential development, by the year 2130, 70% of those exposed to more than 10cm of coastal flooding under SSP5-8.5 would be living in areas considered high deprivation (NZDep9-10), and 24% in areas of moderate-high deprivation (NZDep7-8).

In terms of isolation, those in areas of higher deprivation would also be disproportionally affected. Under the same scenario, 68% of those at risk of exposure and isolation would be living in areas considered highly deprived (NZDep9-10), followed by 26% in areas of moderate-high deprivation (NZDep7-8).

Māori and Pacific peoples face disproportionate exposure and isolation risks. Of those directly exposed to coastal flooding, 72% identify as Māori or Pacific peoples (57 out of 79 people). Similarly, of those at risk of isolation, 72% identify as Māori or Pacific peoples (280 out of 390 people).

Approximately 1% of Wairoa District's population aged 65 or older is at risk of coastal flooding exposure by 2130, but this represents 20.4% of the district's total exposed population. Similarly, only 5% of Wairoa District's population aged 65 or older is at risk of isolation. However, this 5% represents 21.6% of the total population at risk of isolation. Older people are more vulnerable to risks of isolation given an increased likelihood of mobility issues and/or other existing health conditions. The district's older population is therefore also considerably vulnerable to cascading risks associated with isolation, including restricted access to essential goods and services.

Table 17-3. The length/number of each infrastructure exposed in Wairoa to 1% AEP coastal flood event, with different amounts of sea level rise. Note that exposed does not necessarily mean "damaged" as the characteristics of the assets influence whether they are damage prone (vulnerable).

Built infrastructure	Baseline sea level (2005)	20cm of sea level rise (2025 – 2050)	1m of sea level rise (2070 – 2150)
Residential Buildings	5 (0.2%)	5 (0.2%)	13 (0.4%)
Commercial Buildings	0	0	0
Industrial Buildings	0	1 (0.2%)	4 (0.6%)
Roads	1.6 km (0.1%)	2.5 km (0.1%)	8.5 km (0.5%)
State Highway	0	0	0
Potable Water (PW) Pipes	0.3 km (0.2%)	0.3 km (0.3%)	0.3 km (0.3%)
Stormwater (SW) Pipes	0.3 km (0.5%)	0.4 km (0.5%)	1.2 km (1.7%)
Wastewater (WW) Pipes	0.3 km (0.5%)	0.3 km (0.6%)	0.8 km (1.2%)

Economic Impacts

The findings of this assessment show minor economic impacts from direct exposure and isolation (Figure 17.5; Figure A - 51). The impact of direct exposure of commercial and industrial property to coastal flooding on the district's GDP is low. By 2130 (SSP5-8.5), direct exposure is projected to affect 1% of the area's annual GDP. By increasing the risk of isolation of commercial and industrial properties, coastal flooding is projected to affect 3% of the district's GDP under the same scenario. Isolation risk as a result of coastal flooding may present a greater challenge for certain sectors, with higher proportions impacted by isolation:

- Rental, hiring and real estate services (23.1% of sector)
- Professional, scientific and technical services (13.2% of sector).



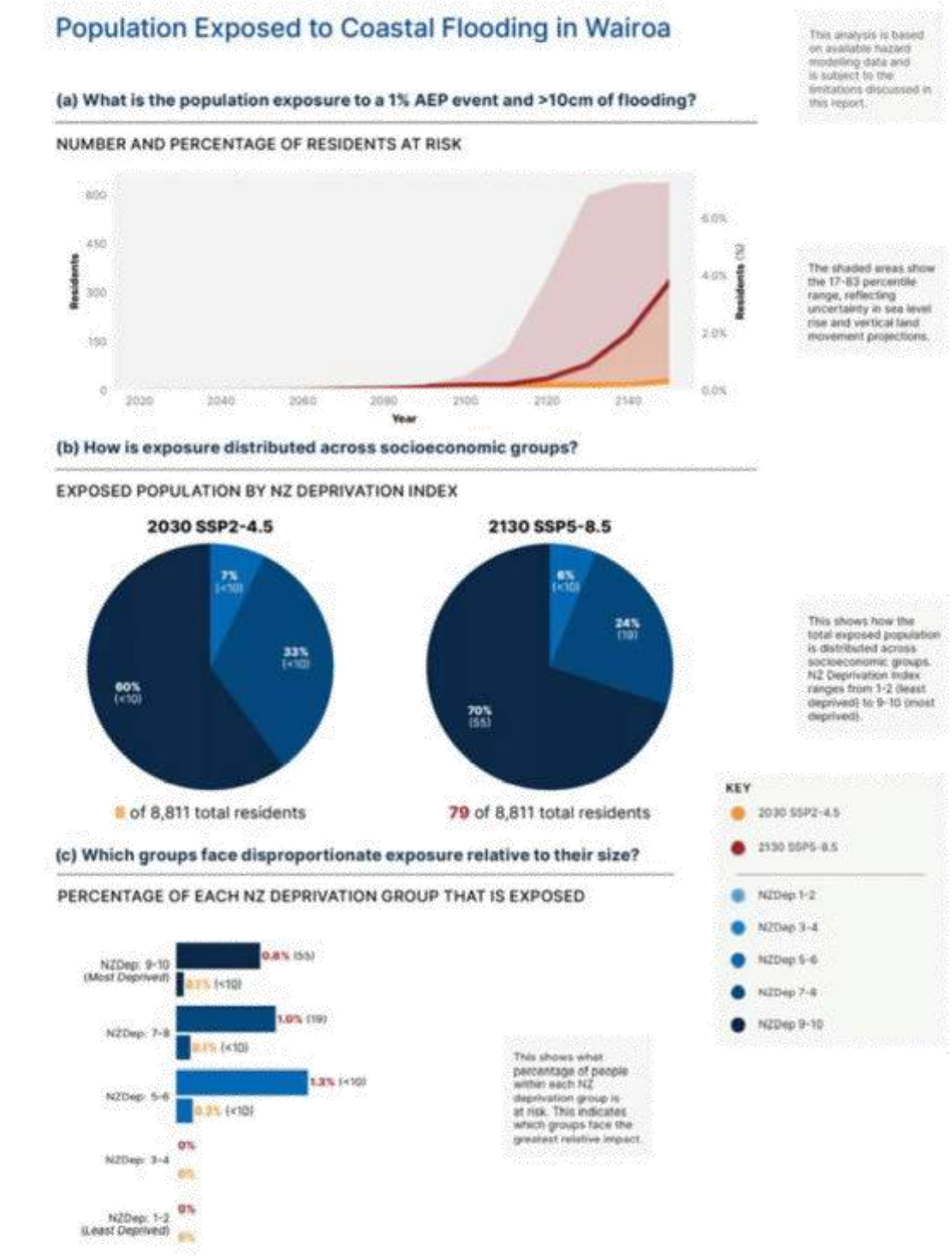


Figure 17.4. Risk to residents being exposed in Wairoa from 1% AEP coastal flooding.

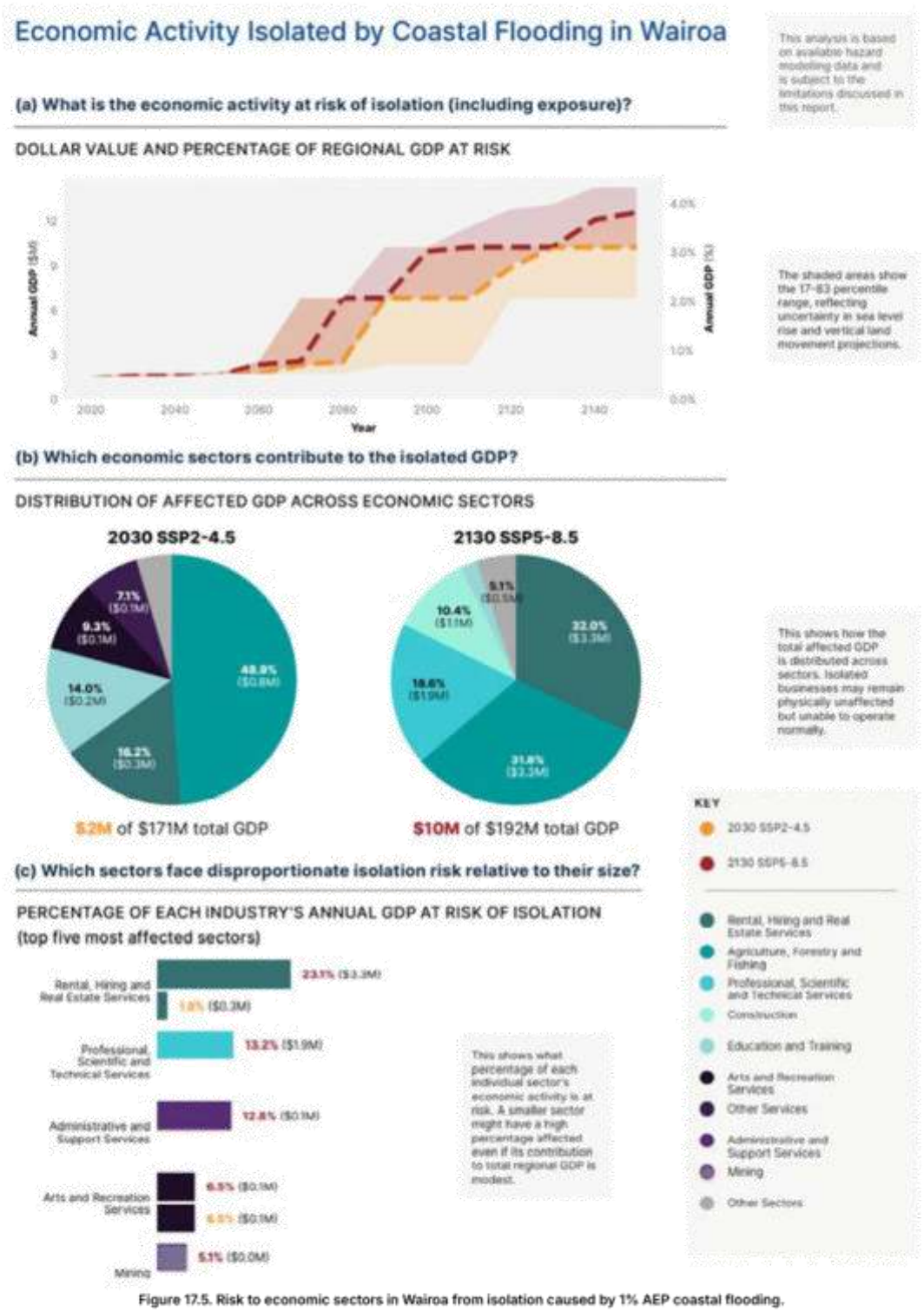


Figure 17.5. Risk to economic sectors in Wairoa from isolation caused by 1% AEP coastal flooding.

Risks from river and rainfall flooding

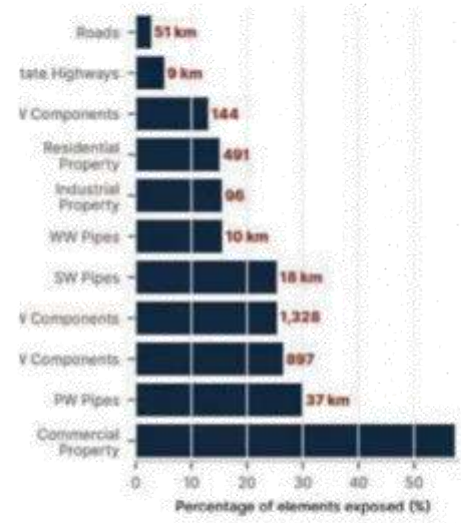
River and rainfall flooding in Wairoa District presents significant risks to infrastructure, businesses, and communities, with extensive exposure across multiple sectors (Figure 17.3; Figure 17.6; Table 17-4).

The extent to which flood protection infrastructure (such as stopbanks) is incorporated varies between models, and this assessment does not include detailed analysis of infrastructure vulnerability based on design standards or condition of flood mitigation measures.

Physical Infrastructure Exposure

Based on the available 1% AEP flood event modelling, which is confined to parts of the Wairoa River, analysis shows substantial direct exposure of built infrastructure, with 491 residential properties (15%) and 55 commercial buildings (57%) at risk. Industrial properties also show notable exposure, with 96 buildings (15%) potentially affected. River and rainfall flooding risk in other areas such as Nuhaka and Mahia, is not modelled.

Infrastructure networks demonstrate widespread exposure to river and rainfall flooding. Of particular concern is the exposure of three waters infrastructure, with 30% of potable water pipes, 25% of stormwater pipes, and 15.5% of wastewater pipes at risk. Transportation networks also face notable exposure, with 8.8km (5.1%) of state highways and 51km (2.7%) of local roads at risk.



Fi er and

Built infrastructure	osure to a 1% AEP river rainfall flood (2007)
Industrial Buildings	15%)
Potable Water (PW) Pipes	5 km (30%)
Wastewater (WW) Pipes	km (15.5%)

Cascading Impacts on Communities

Of all residents exposed to current modelled river and rainfall flooding, 82% are in areas of high deprivation (NZDep9-10), and 17% are in areas with high-moderate deprivation (NZDep7-8) (Figure 17.7). In terms of those at risk of isolation, 79% are in areas of high deprivation (NZDep9-10), and 19% are in areas with high-moderate deprivation (NZDep7-8) (Figure A - 54).

As a proportion of all residents within each deprivation classification, those living in areas of high deprivation (NZDep9-10) show the highest relative direct exposure (18% of all those living in NZDep9-10 areas are exposed), and highest isolation risk at 23%. Those living in high-moderately deprived areas (NZDep7-8) also show high relative vulnerability with 14% facing direct exposure and 19% facing isolation risk.

The ethnic composition of those exposed to current modelled river and rainfall flooding shows disproportionate impacts. Of the 1,470 residents exposed, 69% identify as Māori, 47% as European, and 5% as Pacific peoples. Similarly, of the 1,885 residents at risk of isolation, 67% identify as Māori, 49% as European, and 5% as Pacific peoples.

The district's older population has similar risk of exposure and isolation to the general population, with 16.3% of those aged 65 and older directly exposed and 21.6% potentially isolated. As a proportion of all those exposed to flooding, 18.1% are aged 65 or older, while 18.7% of those at risk of isolation are aged 65+.

Economic Impacts

Direct exposure of commercial and industrial property to river and rainfall flooding is significant for the Wairoa District (Figure 17.8; Figure A - 56). Commercial and industrial properties contributing 37% ($123M) to the region's annual GDP are directly exposed to more than 10cm of river and rainfall flooding and 39% ($128M) to cascading isolation risks. The sector most affected is Manufacturing, with over 90% of the sector directly exposed.

The proportion of specific sectors at risk of isolation is highly significant, with 97% of manufacturing, 78% of wholesale trade and 60% of the construction sector at risk of short-term isolation from a flooding event. These findings indicate that river and rainfall flooding presents a more extensive risk to Wairoa township (and wider district) than coastal flooding, with widespread exposure across infrastructure, communities, and economic sectors. The concentration of exposure in both critical infrastructure and key economic sectors, combined with significant isolation effects, highlights the importance of comprehensive flood risk management strategies. However, the age and limited spatial extent of the available flood modelling (2007) and lack of climate change scenarios creates uncertainty around future risk levels in the face of a changing climate.

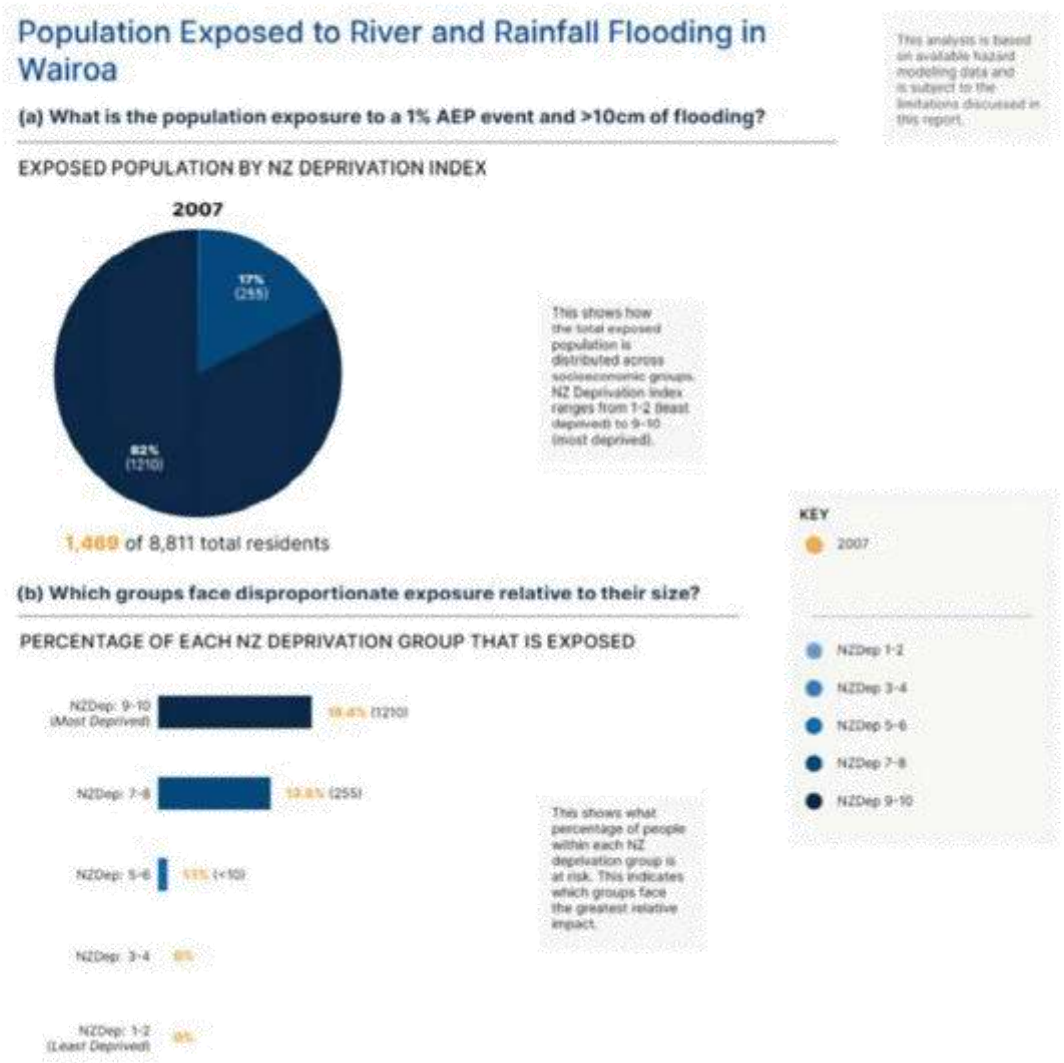


Figure 17.7. Risk to residents in Wairoa from 1% AEP river and rainfall flooding.

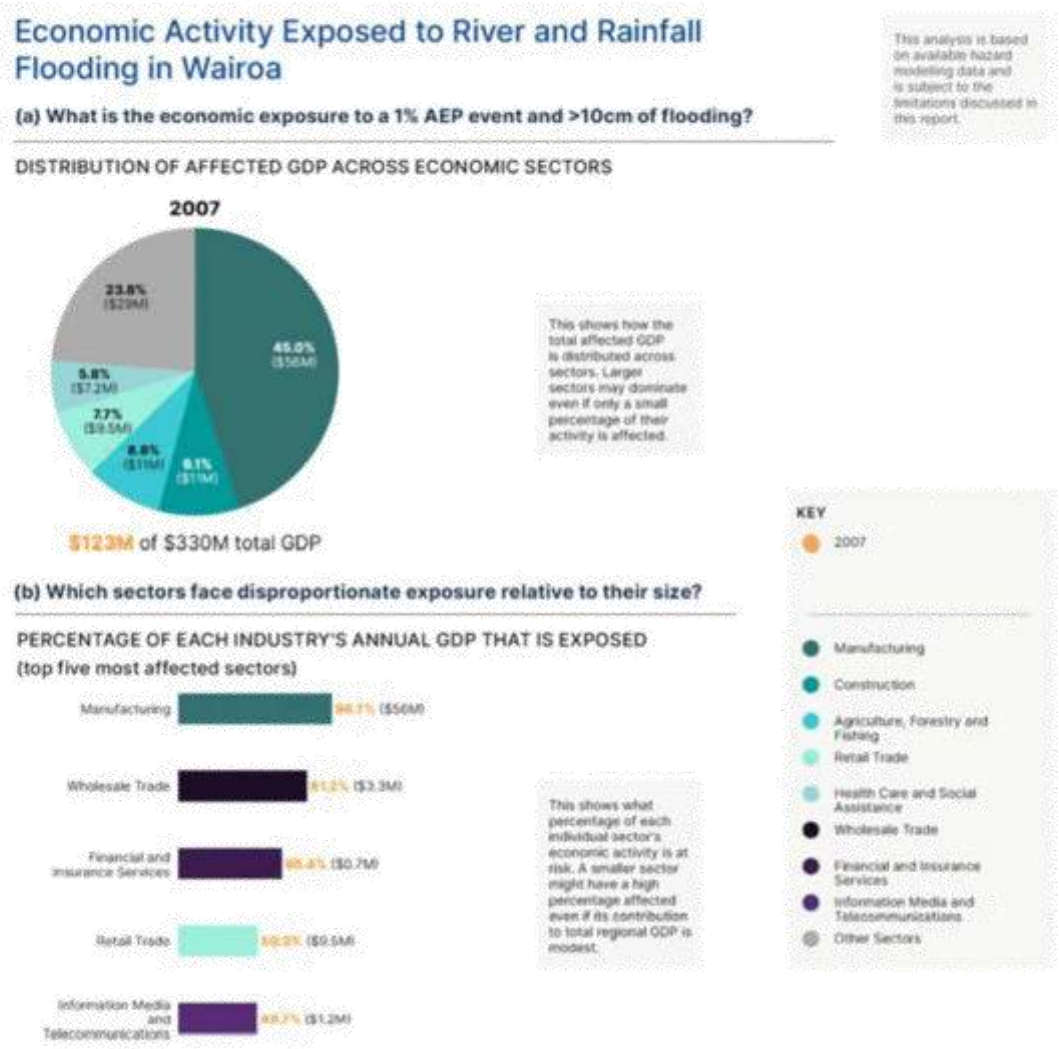


Figure 17.8. Risk to economic sectors in Wairoa from 1% AEP river and rainfall flooding.

Risks from landslides

While direct landslide risks have the potential to affect a relatively small portion of Wairoa's built environment, they present significant indirect risks through isolation effects and disruption to access routes (Table 17-5; Figure 17.9).

Physical Infrastructure Exposure

The assessment shows moderate direct exposure of built infrastructure, with 52 residential buildings (1.6%) and 63 industrial buildings (10.1%) in landslide-susceptible areas. 2.0% of state highways and 3.3% of local roads likely affected.

Infrastructure networks generally show limited direct exposure, with most utilities showing less than 0.5% exposure. Potable water systems are the most exposed among utilities, though still modest at 0.1% of components and 0.3% of pipes exposed. Stormwater and wastewater systems show minimal direct exposure, all below 0.1%.

Cascading Impacts on Communities

While only 1.8% of the Wairoa District's population is directly exposed to landslides (Figure A - 57), 26% is at risk from isolation resulting from landslides (Figure A - 58).

Of all residents exposed to landslides, 58% are in areas of high deprivation (NZDep9-10), and 32% are in areas with high-moderate deprivation (NZDep7-8).

In terms of those at risk of isolation, 63% are in areas of high deprivation (NZDep9-10), and 32% are in areas with high-moderate deprivation (NZDep7-8).

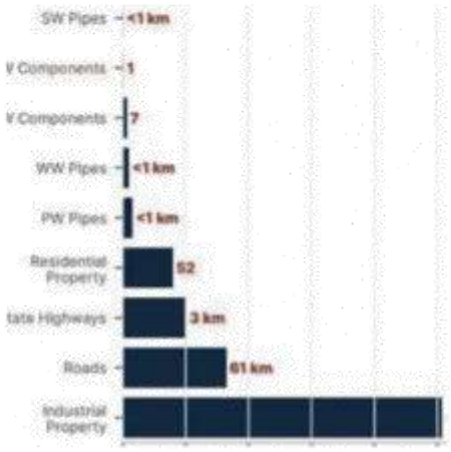


Figure 17.9. Infrastructure exposure to landslides.

As a proportion of all residents within each deprivation classification, those living in areas of moderate deprivation (NZDep5-6) show the highest relative direct exposure (4.2% of all those living in NZDep5-6 areas are exposed), while areas of high deprivation (NZDep9-10) show lower relative exposure at 1.4%. However, isolation effects present a more significant challenge, with up to 39.2% of residents in NZDep7-8 areas isolated, 31% of

Built infrastructure	gth/number Exposed
Industrial Buildings	10%)
Potable Water (PW) Pipes	m (0.3%)

residents in NZDep5-6 areas isolated, and 22% in NZDep9-10 areas affected by isolation.

Of the 162 residents living in property directly exposed to landslides, 54% identify as European, 54% as Māori, and 4% as Pacific peoples. The isolation risk affects a much larger population of 2,293 people, comprising 1,409 Māori, 1,246 European, and 83 Pacific peoples.

The district's older population has similar risk of exposure and isolation to the general population, with 1.7% of those aged 65 and older directly exposed and 25.6% potentially isolated. As a proportion of all those exposed to flooding, 17.7% are aged 65 or older, while 18.3% of those at risk of isolation are aged 65+.

Economic Impacts

Economic impacts demonstrate clear links between direct exposure and indirect isolation effects (Figure A - 59; Figure A - 60). There are no commercial buildings known to be exposed to landslides, but there are 10% of the industrial buildings. However, businesses contributing to 38% of the region's annual GDP face potential isolation risks. The sectors most exposed to isolation risks include:

- agriculture, forestry and fishing (81.6% of sector GDP at risk)
- mining operations (74.9% of sector GDP at risk)
- rental, hiring and real estate services (50.1% of sector GDP at risk)
- electricity, gas, water and waste services (45.0% of sector GDP at risk).

These findings highlight that while direct exposure to landslides affects a relatively small portion of Wairoa's population and infrastructure, the potential of cascading isolation risk (and the economic impacts associated with this risk) is substantial. The concentration of isolation risk in the agricultural and primary industry sectors is particularly significant given their importance to the local economy. The extensive potential for access disruption suggests that resilience planning for the district should focus on maintaining critical access routes and developing contingency plans for isolated communities and businesses.

These findings about isolation risk are particularly significant given Wairoa's recent experience during Cyclone Gabrielle in February 2023, when the town was completely cut off after the destruction of the Waikare Gorge Bridge and multiple slips along State Highway 2 [84] This event demonstrated the vulnerability identified in the analysis - while direct damage from hazards may be manageable, isolation through infrastructure disruption can create significant challenges for the community.

The high proportion of businesses potentially affected by isolation (particularly in the agricultural sector, at 81.6%) and the substantial portion of residents who could be cut off (up to 39.2% in some areas) suggests that strengthening network resilience and developing robust access contingency plans is of critical importance for the district to reduce these risks.

Risks from climatic (temperature and seasonal) change

Climate projections for Wairoa District (Appendix A3) indicate significant changes that will affect infrastructure, communities, and economic activities across the district.

By 2081-2100, under a high emissions scenario (SSP3-7.0), the Wairoa District can expect temperature increases of 3.1°C coupled with more hot days (increasing from 16.6 to 55.4 days above 25°C) and changes in annual rainfall patterns annually are expected. The sections below outline the expected impacts of these projected changes.

Infrastructure Impacts

- Increased stress on road surfaces and bridge structures from thermal expansion, particularly significant given Wairoa's reliance on key transport routes.
- Higher cooling demands on electrical infrastructure and telecommunications equipment, critical for maintaining connectivity given the district's recent experience with isolation during extreme events.

- Accelerated deterioration of building materials and increased maintenance requirements.
- Greater pressure on water infrastructure due to increased demand during hot periods, with PED increasing by 91.0mm annually.

Community Impacts

- Health risks from extreme heat, particularly concerning with very hot days (>30°C) increasing from 1.1 to 8.1 days annually.
- Reduced winter heating needs (frost days decreasing by 13.4 days) but increased summer cooling requirements.
- Growing water security concerns with significant seasonal rainfall changes (winter rainfall decreasing by 14.2% while summer rainfall increases slightly by 2.7%).
- Disproportionate impacts on vulnerable populations, particularly low socio-economic and rural communities due to Wairoa's high deprivation levels and dispersed rural communities.
- Existing social inequities may be increased as levels of service are eroded by repeat events.
- Increased risk of isolation events due to transport network and infrastructure disruption. Increased frequency of periods of isolation will likely reduce the desirability of the district as a place to live or operate a business. This may also create risks for social cohesion.
- Failure to address risk of isolation leading to the erosion of services will generate risks of loss of trust in government.
- Risk to mental health due to isolation or ongoing damage to homes and social infrastructure, as well as loss of valued land, taonga, environmental degradation and changes in access to mahinga kai.
- In areas affected by repeat flood events or frequent coastal flooding, risks to community/social cohesion may arise.

Economic Impacts

- Agriculture and forestry, the district's primary economic drivers, face significant changes:
  - longer growing seasons (growing degree days increasing by 916.2 units)
  - increased water stress from higher PED and reduced winter rainfall
  - changed pest and disease pressures affecting both agriculture and forestry
  - potential impacts on forestry harvest and planting schedules from seasonal rainfall changes.
- Tourism and space industry operations at Mahia may face disruption from extreme weather events and changing wind patterns.
- Construction and outdoor work will need to adapt to more very hot days and changed seasonal rainfall patterns.
- Increased cooling costs for commercial and industrial operations.
- Transport and logistics face greater disruption risk, particularly significant given Wairoa's reliance on key transport routes.

Changes in the climate will interact with and potentially amplify the flood and landslide risks described in this district-level assessment. For example, while total annual rainfall is projected to decrease by 7.4%, the increase in summer rainfall intensity combined with drier winters could increase both flood and landslide risks. This is particularly significant given Wairoa's recent experience with extreme events and isolation, suggesting a need for integrated adaptation strategies for sectors and communities that consider both gradual climate changes and extreme event impacts.

Refer to the Appendix A3 for detailed climate projections for the Wairoa District.

Key findings for the Wairoa District

- **River and rainfall flooding is the most severe hazard**, affecting residential properties and the manufacturing sector.
- **High risk of business isolation during landslide events**, particularly for primary industries and mining operations.
- **Three waters infrastructure** (including pipes and components such as pump stations) **is significantly exposed to river and rainfall flooding**.
- **Increasing risk of economic shocks and disruption from seasonal variability**, and significant seasonal rainfall changes affecting primary industries.
- **High population vulnerability to hazard impacts** and cascading risks due to low-income levels, dispersed population and isolation exposure. Significant number of residents exposed to more than 10cm of river and rainfall flooding. High proportion of residents exposed to more than 10cm of coastal flooding (by 2130 SSP5-8.5) are living in areas of high deprivation (NZDep9-10).
- **Limited natural hazards modelling** makes climate change adaptation planning challenging.

18 Next Steps and Opportunities For Further Action

This first pass risk assessment provides a snapshot of climate change risk based on available and accessible information at the time of writing. It is a foundational piece for understanding vulnerability and risks posed by a changing climate for the Hawke's Bay region, while highlighting opportunities for further work.

This section outlines potential next steps for councils and communities to build on the findings of this assessment and take action to address the risks and impacts of climate change. In line with best practice, ongoing engagement with communities, iwi/hapū and other stakeholders is necessary to ensure adaptation planning reflects local values, priorities and knowledge.

In particular, ongoing collaboration between lifeline providers, infrastructure/asset management planners and councils is important for establishing a single, shared data and evidence base for all stakeholders working to adapt to a changing climate. This unified approach is important to eliminate siloed information systems and enable more effective decision-making across local government, private sector entities and by communities.

The following section outlines opportunities at regional and local levels to build on this assessment.



Regionally-led action

Regionally-led action will require sustained investment in both technical understanding and collaboration/relationship building. Four key areas of opportunity have been identified below.

1. Regional Data and Evidence

Development of consistent climate-related hazard modelling across districts will assist in improving the evidence base for adaptation planning, and future climate change risk assessments. Through this work there are opportunities to establish regional data standards, consistent with any relevant central government direction. Other opportunities include data sharing agreements and shared platforms for understanding risk, including co-funding opportunities between public and private sector partners. Future regional climate change risk assessments would benefit from additional data and information inputs that were limited or unavailable for this first pass assessment. This includes:

Hazard modelling

- comprehensive flood modelling (fluvial and pluvial) across all districts, under different climate scenarios and timeframes
- detailed coastal flooding and erosion assessments for Wairoa and Central Hawke's Bay
- additional stormwater system capacity analysis for urban areas
- groundwater modelling for Wairoa, Central Hawke's Bay and Hastings.

Other climate risk information

- asset and infrastructure vulnerability characteristics
- climate impacts on agricultural and horticultural productivity
- economic implications for key primary sectors
- regional ecosystem climate scenario modelling for terrestrial, freshwater, and marine species and habitats
- emerging biosecurity risks to regional production.

This expanded evidence base would enable transition from exposure-based risk assessment to detailed vulnerability analysis, supporting more effective adaptation planning across the region.

2. Supporting Infrastructure Resilience

Further work to inform critical lifelines risk and resilience planning will strengthen future risk assessments. An updated lifeline vulnerability assessment is currently underway by the Hawke's Bay Lifelines Group, examining interdependencies between electricity networks, communication systems, and transport hubs.

3. Supporting Māori-Led Adaptation

The findings of this assessment can be used to support Māori climate adaptation and resilience kaupapa across the region. Weaving together mātauranga Māori with this, and other technical assessments, can strengthen understanding of climate risks and support Māori-led (iwi, hapū, marae) action to reduce risks and seize opportunities from a changing climate.

4. Climate Risk Integration

This assessment can be used as a basis for councils and other organisations to embed climate risk considerations into daily operations and long-term strategies and decisions. There are opportunities to ensure this occurs in a consistent way across the region and at different levels of decision-making, such as through the development of regional guidelines and standards, monitoring and reporting, and ongoing

Locally-led action

This assessment provides each district with a baseline understanding of their climate risks within the regional context. **Hawke's Bay councils have an opportunity to deepen this understanding through further local assessment and engagement with communities.** Work programmes led by councils around the country may provide insights and learnings on approaches to progress this work.

- Local assessments could, for example, examine specific vulnerabilities of council infrastructure, facilities, or priority areas. Where regional or local hazard data isn't yet available, councils could consider targeted assessments of their highest identified 'at risk' areas.
- Community engagement could focus on defining local adaptation priorities and risk tolerances. This work needs to align with existing council planning processes while creating space for communities, including iwi and hapū to lead place-based adaptation responses.
- Community groups and sectors can also use the information in this assessment to inform localised/targeted community or sector-led adaptation planning, such as the development of adaptation plans and strategies.

Using this risk assessment as the foundation for future more targeted and localised work will enable coordinated regional action while empowering locally-led adaptation. Both sustained regional leadership combined with dedicated resources within each council is critical to driving adaptation action needed to reduce the broad range of climate risks identified in this assessment.

Ngā Tohutoro | References

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05

Ngā Āpitihanga
Appendices

A1. Method

1.1 Risk Assessment Framework

Risk arises when there are possible outcomes that are uncertain related to something of value - that is, risk is the potential for and severity of consequences that are uncertain. In climate adaptation planning, consequences occur when a system, person, or element is both vulnerable and exposed to a hazard or environmental change (Figure A - 1).

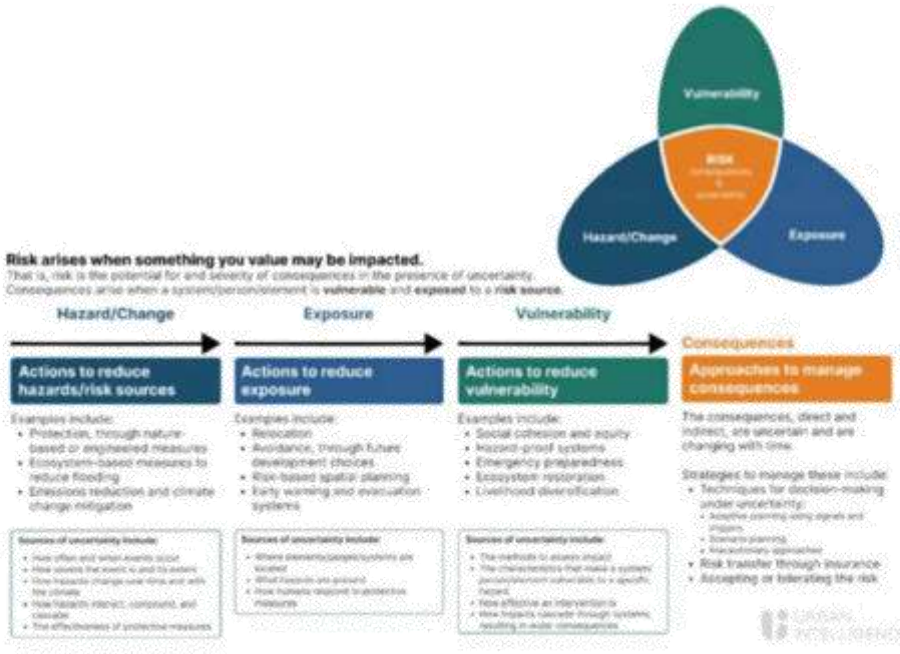


Figure A - 1. Risk arises when something you value could be impacted. That is, it's the combination of consequences and uncertainty. In a natural hazards and climate change context, consequences arise when something that is vulnerable is exposed to a hazard or change. Risk can be reduced by intervening at each of these stages or it can be accepted or managed.

This assessment examines risks across six interconnected value domains aligned with the Ministry for the Environment guidance:

- Te Taiao (Natural Environment): Indigenous species, he kura taiao, and terrestrial, freshwater and marine ecosystems
- Taiao Hanga (Built Environment): Physical infrastructure, transport networks, and buildings
- Pāpori (Human): Social systems, cultural values, and community wellbeing
- Ohaoha (Economic): Production, distribution, and economic activities
- Mana Whakahaere (Governance): Institutional frameworks and decision-making processes
- Iwi/Māori Domain: The whānau, hapū, and iwi networks; Māori businesses and economic assets; and taonga (inherited treasures), including whenua, wai, and ecosystems, central to Māori identity, well-being, and kaitiakitanga.

Understanding cascading impacts is critical - risks often flow between domains creating compound effects. For example, a flooded road (Built Environment) may isolate communities (Human), disrupt business operations (Economic), and stress emergency response systems (Governance). Within these six domains, risk is considered across three primary risk components:

- Direct Exposure: physical presence in hazard areas
- Indirect Effects: disruption to critical services and networks
- Cascading Impacts: flow-on consequences between domains

This framework enables systematic analysis of both immediate physical risks and the broader social, cultural and economic implications of climate change. It supports identification of both vulnerabilities and opportunities for building resilience through coordinated action across domains.

1.2 Quantitative Assessment

The quantitative analysis used in this assessment examines both direct exposure to hazards and indirect impacts that cascade through communities (See Table A 0.1). The methodology uses spatial analysis and dasymetric mapping techniques to understand risk at multiple scales.

Direct Exposure Analysis: The assessment identifies exposed elements by intersecting hazard extents with asset locations. For flood hazards, exposure depths exceeding 10cm are considered within this assessment. Building footprints are intersected with hazard extents and aggregated to property titles, with properties then categorised as residential or commercial/industrial (including agricultural and horticultural) using council land use data. This provides the foundation for understanding physical exposure across the region.

Population Impact Analysis: To understand community exposure, the assessment uses dasymetric mapping to distribute 2023 Statistical Area 1 (SA1) census data across individual properties. This enables the estimation of exposed populations within hazard areas while maintaining privacy. Social vulnerability is assessed using the NZ Deprivation Index, providing an evaluation into which communities may have reduced adaptive capacity. This analysis helps identify areas where targeted support may be needed.

First-Pass Economic Impact Analysis: The economic assessment allocates 2023 business demography data to individual properties and calculates exposure by industry sector using the ANZSIC06 classification. Regional GDP contributions are estimated using Infometrics data to understand potential economic disruption. This provides an initial view of business exposure, though detailed business continuity impacts would require site-specific assessment.

Cascading Impact Analysis: Network analysis examines how hazard impacts may cascade through infrastructure systems. The assessment identifies properties at risk of losing access to critical services like schools, hospitals, and fire stations. Areas vulnerable to transport network disruption are mapped to understand potential isolation risks. This helps identify communities where coordinated planning may be needed to maintain critical services during hazard events.

1.3 Workshops & Literature Review

The quantitative analysis was supported by structured engagement with technical experts and review of existing research to provide context and validate findings.

Domain-Specific Workshops: Two region-wide workshops were held in Hawke's Bay during November 2024, bringing together technical experts and practitioners across relevant disciplines. Participants included representatives from local and regional councils, CDEM Group and the Hawke's Bay Lifelines Group. The workshops focused on understanding hazard impacts and identifying potential cascading effects between domains. This localised technical knowledge helped validate the quantitative analysis and identify both data sources and opportunities for further investigation.

Technical Advisory Group: A Technical Advisory Group consisting of council staff provided ongoing guidance throughout the assessment process. The group reviewed methodologies, validated findings, and ensured the assessment aligned with regional priorities. Their expertise helped integrate local knowledge and expertise into the risk assessment framework, ensuring the analysis reflected both technical, local, and cultural understanding of risk.

Literature Review: The assessment builds on existing research and regional strategies, drawing from MfE guidance, regional biodiversity plans, infrastructure studies, and previous hazard assessments. This foundation of existing work was enhanced through the examination of social impact studies and climate change projections specific to Hawke's Bay.

The combination of technical analysis, local knowledge, and existing research provides a robust evidence base for adaptation planning. This structured engagement process ensured the assessment captured both measurable impacts and local perspectives, creating a more complete understanding of climate risk across the region.

Table A .0 1 Data Used In Quantitative Assessment

Layer	Creator	Coverage	Date
Coastal Flooding	NIWA	New Zealand	2023
Pluvial Flooding Depth	Stantec [85]	Ōtane	2019
Pluvial Flooding Depth	Stantec [86]	Waipawa	2023
Pluvial Flooding Depth	WSP [87], [88]	Waipukurau	2022
Pluvial Flooding Depth	Hastings District Council (HDC Stormwater Model Results-uncalibrated)	Clive, Flaxmere, Hastings and Havelock North	2024
Pluvial Flooding Depth	Hawke's Bay Regional Council	Wairoa	2007
Pluvial Flooding Depth	Napier City Council [89]	Napier	2024
Landslide Susceptibility	Manaaki Whenua	Te Matau-a-Māui Hawke's Bay	2023

Layer	Creator	Coverage	Date
Climate Projections	NIWA	Zone Three	2024
Marae	Te Puni Kōkiri	Aotearoa New Zealand	2024
LINZ Building Outlines	Toitū Te Whenua Land Information New Zealand	Aotearoa New Zealand	2024
LINZ Unit of Property	Toitū Te Whenua Land Information New Zealand	Aotearoa New Zealand	2024
Road Centrelines	Toitū Te Whenua Land Information New Zealand	Aotearoa New Zealand	2024
State Highways	Waka Kotahi	Aotearoa New Zealand	2024
Potable Water, Stormwater and Wastewater Infrastructure	Local Councils	Local Councils	
Economic Data	HBREDA	Hawke's Bay Region	2023
Population Data	Stats NZ	Aotearoa New Zealand	2023
NZ Deprivation Index	EHINZ	Aotearoa New Zealand	2023

A2. Resilience Explorer®

Adaptation planning is inherently local and requires robust, area-specific risk evidence. Spatial information is essential for identifying, prioritising, and communicating adaptation needs across different communities and hazard types. While this report presents a point-in-time snapshot of regional risks, it cannot capture the full detail needed for day-to-day local decision-making.

To support this, the Resilience Explorer® (REx) platform was used to conduct the quantitative analysis underpinning this assessment. REx is a sophisticated web-based tool designed for internal use by councils and organisations. It enables consistent, scalable, and repeatable risk assessments across hazards, assets, and communities, and supports exploration of both direct and indirect impacts—including isolation risks from infrastructure disruption.

The Resilience Explorer automates complex geospatial analysis and risk modelling. New hazard layers can be uploaded and automatically assessed for consequences across key domains such as infrastructure, economy, and social vulnerability. The platform is designed to evolve as new data becomes available, ensuring users stay up to date with emerging risks and can efficiently integrate new modelling and scenarios.

Beyond assessment, REx is a decision support and operational tool. It helps staff explore detailed, location-specific risk information, supporting adaptation planning, infrastructure investment, and strategic decision-making across council work programmes.

Should they wish, councils and organisations in Hawke's Bay can access the Resilience Explorer as an internal tool, with functions including:

- Spatial Analysis: view and analyse exposure of assets and infrastructure to climate hazards across different scenarios and timeframes, enabling examination of risks at both regional and local scales
- Location-Specific Information: generate detailed risk information for specific areas of interest, helping inform place-based planning and decision-making
- Vulnerability Assessment: overlay hazard information with social and demographic data to better understand community vulnerability and support equitable adaptation planning
- Current Evidence Base: access regularly updated hazard and asset information, ensuring decisions are based on the most recent available data
- Adaptation Support: identify priority areas for adaptation planning and evaluate potential interventions using consistent regional evidence
- Community and Stakeholder Engagement: support discussions with communities through clear visual representations of local climate risks and adaptation considerations.

A3. Detailed Climate and Hazard Projections

3.1 Regional

Table A. 1. Projected Coastal Conditions for Hawke's Bay Region [42], [43]. Projections are relative to a 1995-2014 'baseline' (where 2005 is considered the mid-point (zero).

Hazard	2040	2090
Sea Level Rise	0.24m (SSP2-4.5)	0.55m (SSP2-4.5)
	0.28m (SSP5-8.5)	0.79m (SSP5-8.5)
Coastal Erosion	Land subsidence will exacerbate the effects of SLR; Highly variable erosion, depends on geology, tidal range, geomorphology and exposure; Areas with small tidal range more sensitive to erosion than large tidal range	

Table A. 2. Projected Hydrological Conditions for the Hawke's Bay [43]. Projections are relative to a 198-2005 'baseline'.

Hazard	2040	2090
Rainfall	Minimal change in annual rainfall with most change seen at seasonal scale (SSP2-4.5 and SSP5-8.5)	Localised 5% decrease in annual rainfall seasonally for Napier (SSP2-4.5) with regional annual rainfall decrease of 5%-15% (SSP5-8.5).
Dry Days (<1mm rainfall)	5-8 more dry days annually under both (SSP2-4.5 and SSP5-8.5)	5-15 more dry days annually (SSP2-4.5); 10-20 more dry days annually, probability of drought up 50-70% with low river thresholds reached earlier, and decrease of ~5% in relative humidity (SSP5-8.5)
Increased Storminess and Extreme Winds	Extreme wind speeds increase up to 10% with intensity of ex-tropical cyclones projected to increase (SSP2-4.5) and the most severe ex-tropical cyclones expected to be stronger (SSP5-8.5)	Extreme wind events expected to increase by 10% with increased frequency in winter and decreased frequency in summer (SSP2-4.5); most severe ex-tropical cyclones expected to be stronger (SSP5-8.5)

Table A. 3. Projected Climatic Conditions for Hawke's Bay (Zone 3) [43]. Projections are relative to a 1986-2005 'baseline'.

Hazard	2040	2090
Temperature	Increase in annual average temperature of 0.7-0.9°C (SSP2-4.5)	Increase in annual average temperature of 1.3-1.4°C (SSP2-4.5)
	Increase in annual average temperature of 0.8-1.1°C (SSP5-8.5)	2.8-3.1°C increase in annual temperature (SSP5-8.5)
Hot Days (>25°C)	5-15 more hot days annually (SSP2-4.5)	5-25 more hot days annually (SSP2-4.5)
	5-25 more hot days annually (SSP5-8.5)	30-40 more hot days annually (SSP5-8.5)
Frost Days (<0°C)	10-25 fewer frost days annually (SSP2-4.5)	10-25 fewer frost days (SSP2-4.5)
	10-25 fewer frost days (SSP5-8.5)	25-50 fewer frost days (SSP5-8.5)
Wildfire	Increased risk with 0-400% increase in days with very high and extreme fire danger (SSP2-4.5)	Increased risk with 0-400% increase in days with very high and extreme fire danger 0-700% (SSP2-4.5)
	Increased fire risk with seasonal severity of an additional 30%-50% (SSP5-8.5)	Increase in days with very high and extreme fire danger of 44-48 more days (SSP5-8.5)
Wind	Up to 10% increase in extreme wind and intensity of ex-tropical cyclones projected to increase (SSP2-4.5)	Poleward shift of midlatitude and possible small reduction in frequency, with most severe ex-tropical cyclones expected to be stronger (SSP2-4.5)
	Frequency of extreme winds is likely to increase in winter and decrease in summer with mean westerly flow of wind to increase 20% in spring and 70% in winter and decrease 20% in summer and autumn (SSP5-8.5)	The most severe ex-tropical cyclones are expected to be stronger, with conditions conducive to storm development projected to increase by 3-6% (SSP5-8.5)
Marine Temperature	1.1°C increase in sea surface temperatures (SSP2-4.5)	1.3°C increase in sea surface temperatures (SSP2-4.5)
	1.5°C increase in sea surface temperatures (SSP5-8.5)	3.3°C increase in sea surface temperatures (SSP5-8.5)
Ocean Acidification	pH decrease to 7.98 with no significant decrease in surface macronutrient concentrations (SSP2-4.5)	pH decrease to 7.98 with significant decrease of surface macronutrient concentrations, net primary production to decrease by 1.2% (SSP2-4.5)
	pH to decrease to 7.93 with no significant decrease in surface macronutrient concentrations and net primary production (SSP5-8.5)	pH decrease to 7.77 with 7.5-20% decrease in macronutrients and 4.5% decrease in primary production (SSP5-8.5)
Hail	Although storm intensity is expected to increase, there is limited understanding of changes to hail	

How windiness could change in the Hawke's Bay. These maps show change in the number of days with wind above 10m/s by 2080-2100 under SSP2-4.5 compared to 1995-2014

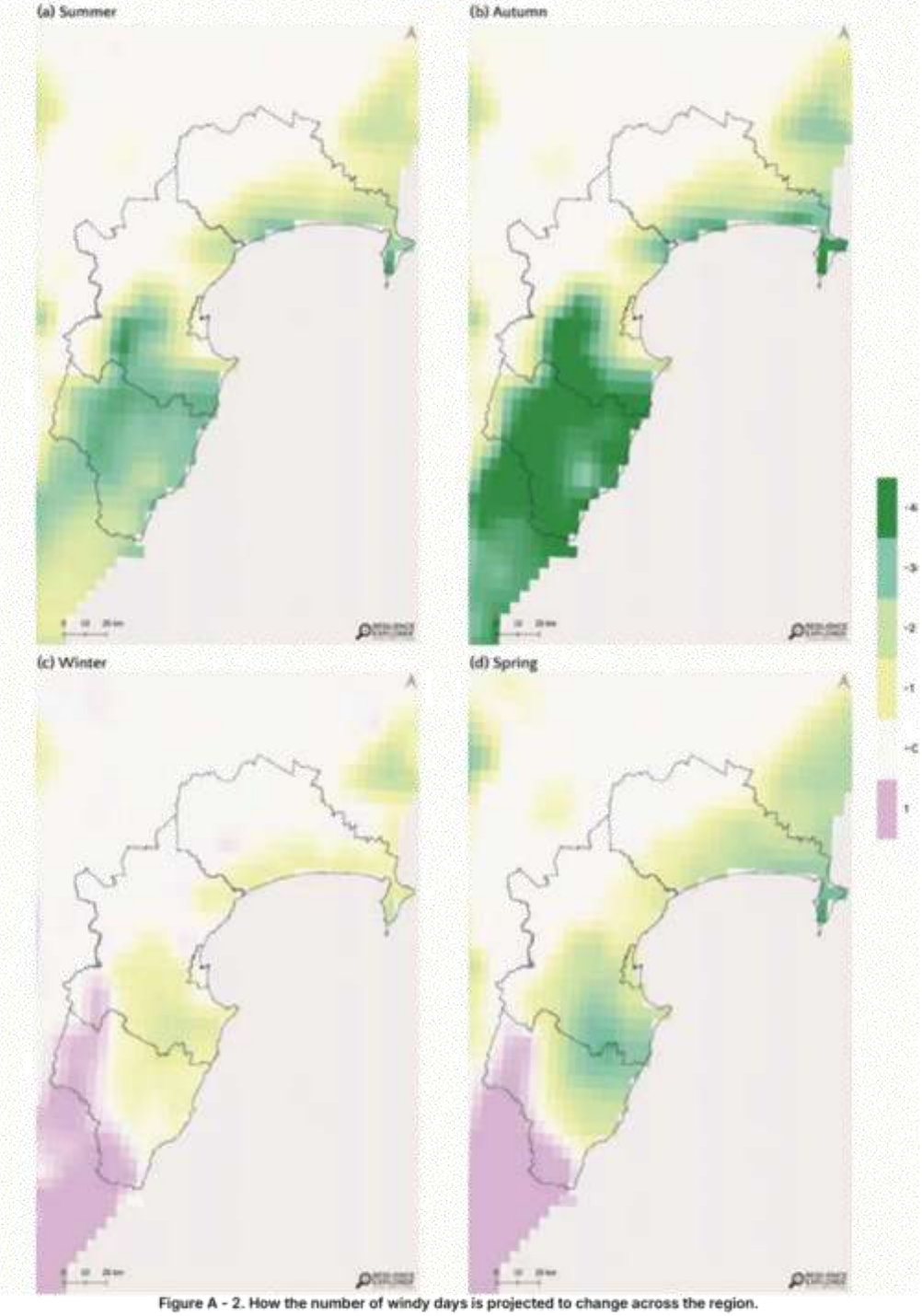


Figure A - 2. How the number of windy days is projected to change across the region.

How the number of dry days could change in Hawke's Bay. These maps show change in the number of days with less than 1mm of rainfall by 2080–2100 under SSP2-4.5 compared to 1995–2014

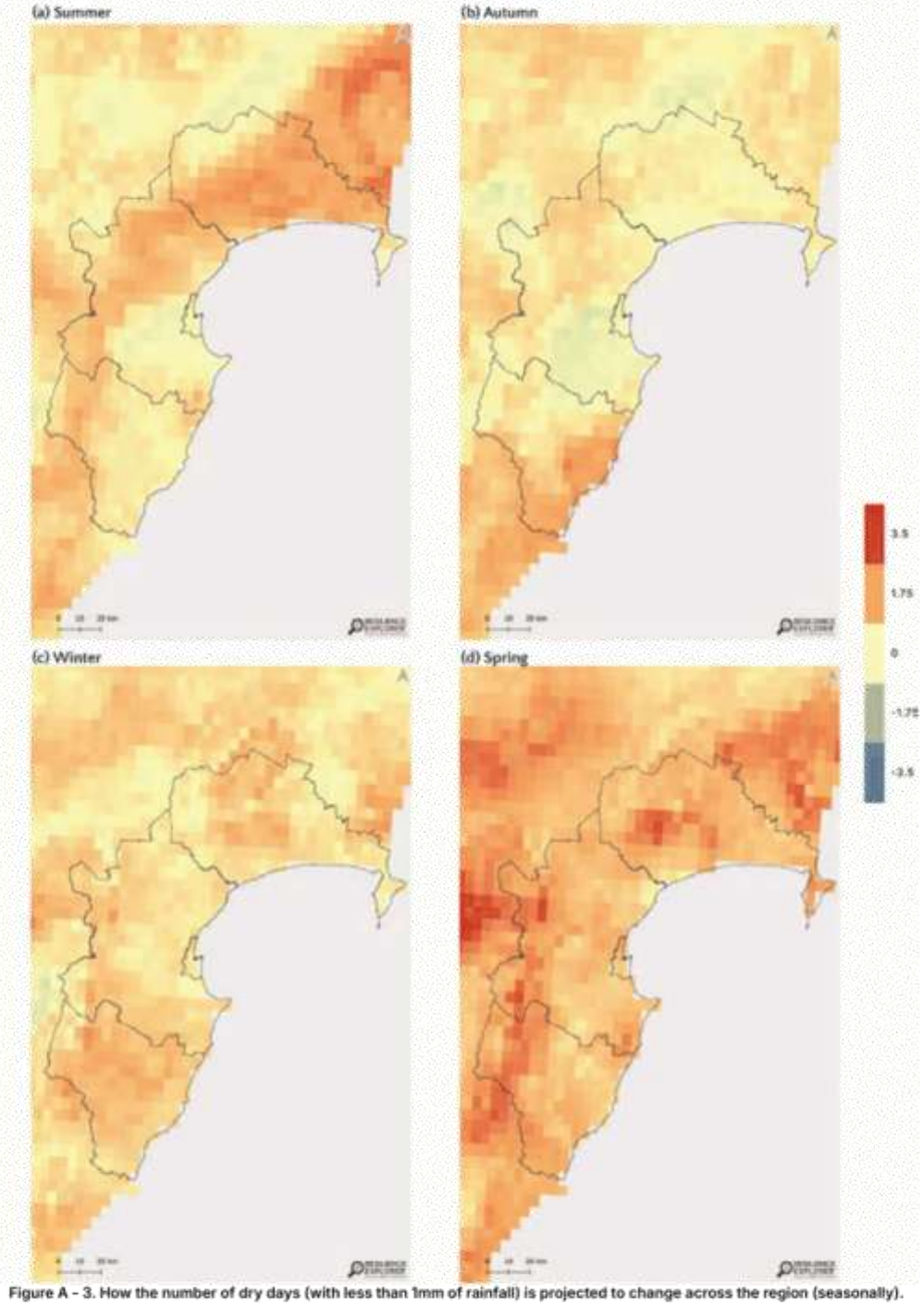


Figure A - 3. How the number of dry days (with less than 1mm of rainfall) is projected to change across the region (seasonally).

How rainfall could change in the Hawke's Bay. These maps show projected % change in rainfall by 2080-2100 under SSP2-4.5 compared to 1995-2014

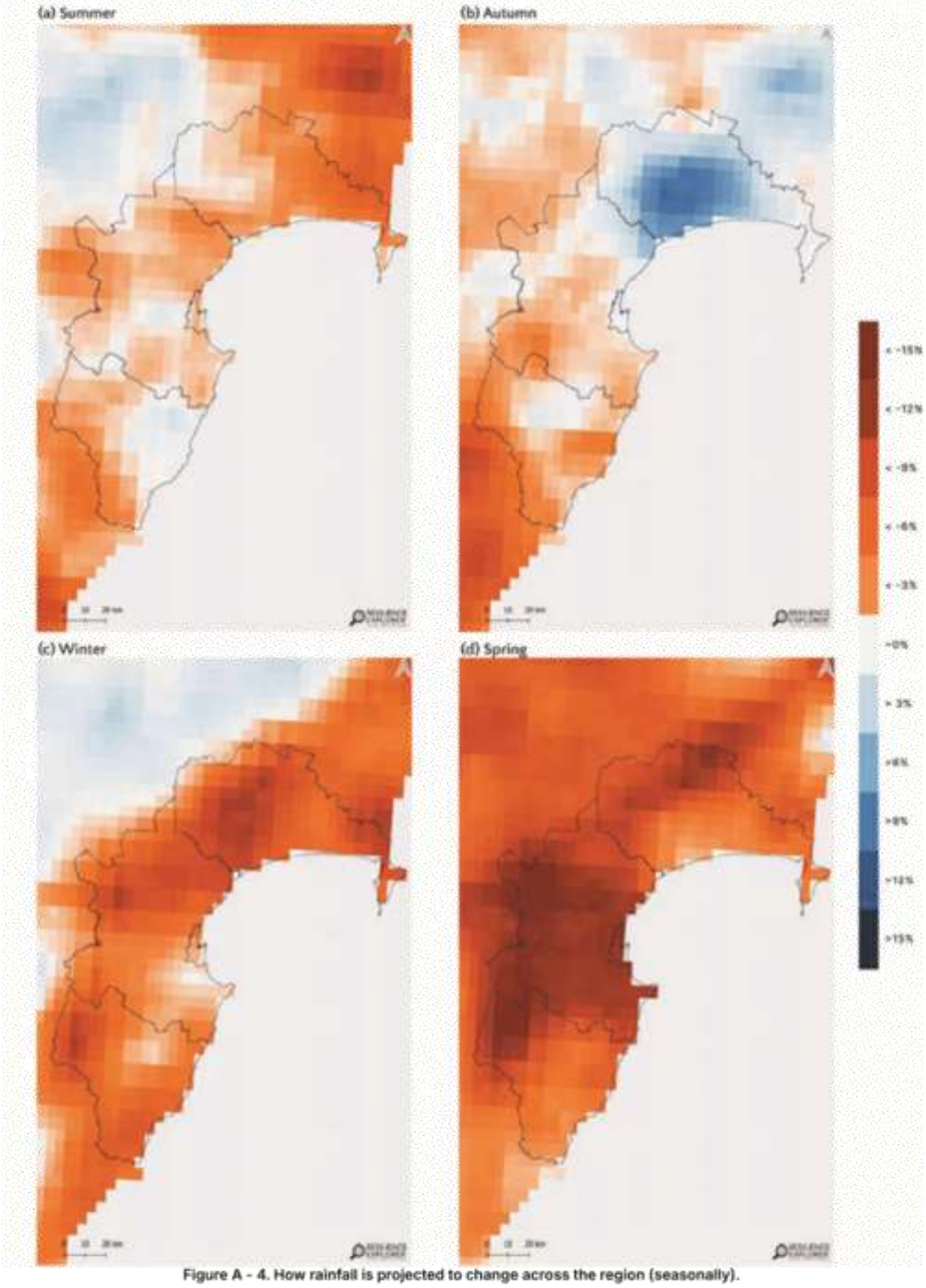


Figure A - 4. How rainfall is projected to change across the region (seasonally).

How rainfall patterns could change in Hawke's Bay. These figures show change in the number of days with more than 25mm of rain by 2080-2100 under SSP2-4.5 compared to 1995-2014

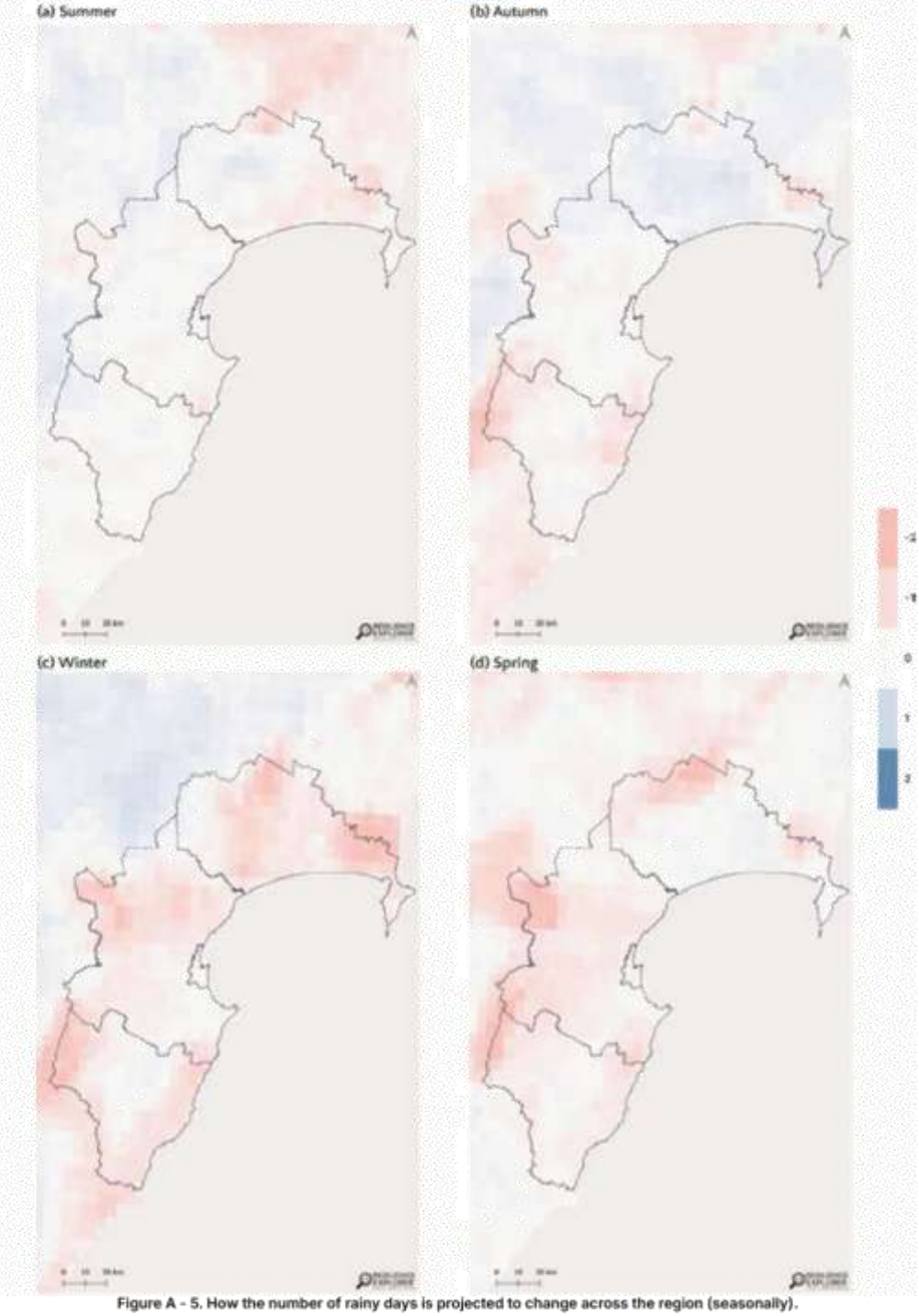


Figure A - 5. How the number of rainy days is projected to change across the region (seasonally).

How temperature could change in the Hawke's Bay. These maps show projected change in average temperature by 2080-2100 under SSP2-4.5 compared to 1995-2014

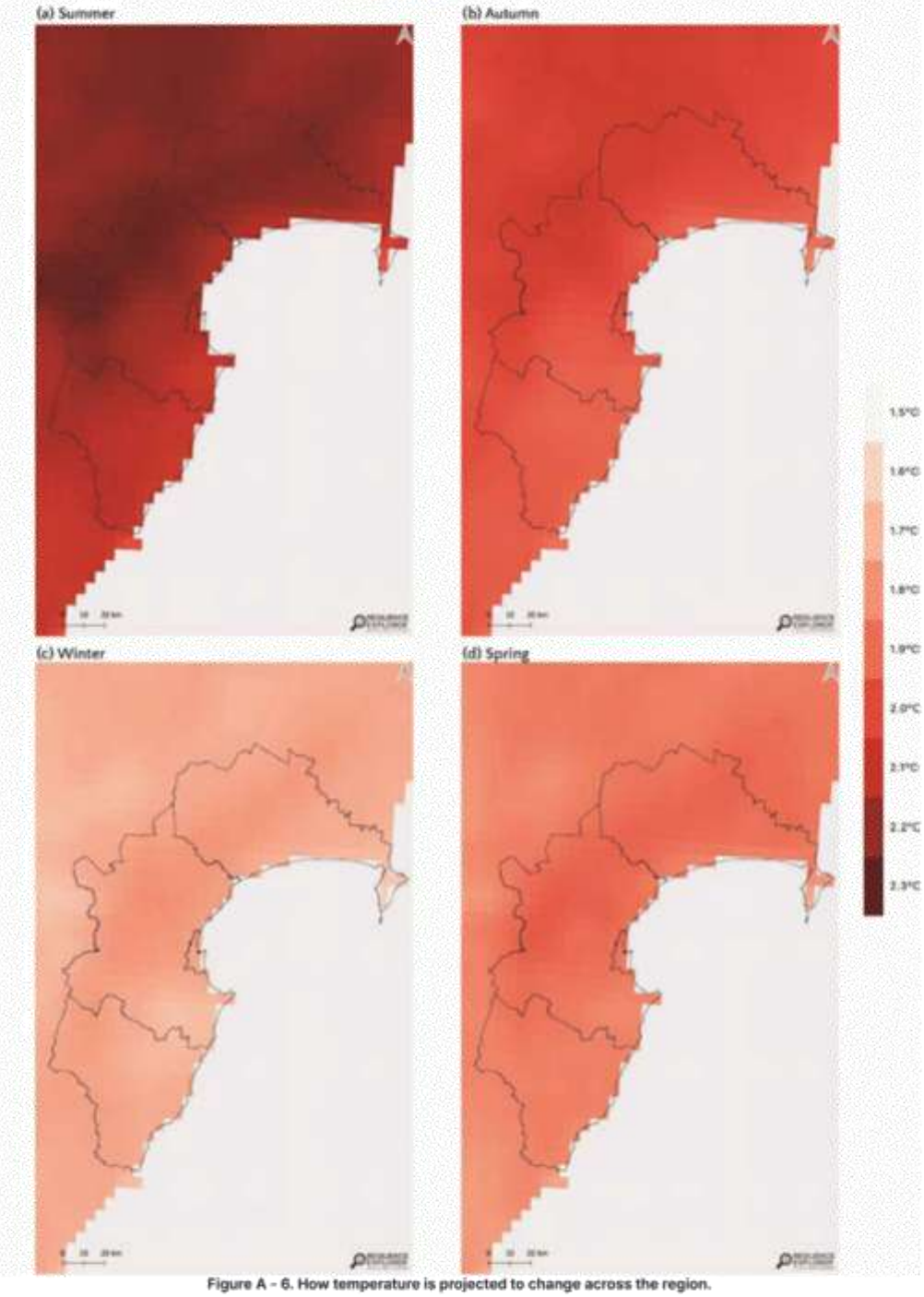


Figure A - 6. How temperature is projected to change across the region.

3.2 Central Hawke's Bay

Table A. 4. Climate projections for Central Hawke's Bay District (2041-2060 and 2081-2100). The table shows average (min, max) change values for selected climate variables using downscaled AR6 climate data [44]. Projections are relative to a 1995-2014 'baseline'.

Season	SSP2-4.5 2041-2060	SSP2-4.5 2081-2100	SSP3-7.0 2041-2060	SSP3-7.0 2081-2100
Average daily air temperature: Tmean (°C)				
Annual	1.1 (1.1, 1.2)	2.0 (2.0, 2.1)	1.4 (1.3, 1.4)	3.0 (2.9, 3.1)
Summer	1.3 (1.2, 1.4)	2.3 (2.2, 2.4)	1.7 (1.6, 1.8)	3.5 (3.4, 3.7)
Autumn	1.2 (1.1, 1.3)	2.1 (2.0, 2.1)	1.3 (1.3, 1.4)	3.0 (3.0, 3.1)
Winter	0.9 (0.9, 1.0)	1.8 (1.7, 1.8)	1.2 (1.2, 1.2)	2.7 (2.5, 2.7)
Spring	1.1 (1.1, 1.1)	1.9 (1.9, 2.0)	1.4 (1.3, 1.4)	2.9 (2.8, 3.0)
Growing degree days (base 10°C) (GDDs)				
Annual	321.3 (150.9, 359.0)	577.4 (271.6, 647.0)	394.9 (191.5, 438.6)	899.0 (459.2, 995.2)
Number of dry days (<1mm) (days)				
Annual	1.0 (-2.8, 3.4)	4.0 (1.8, 6.6)	1.3 (-2.9, 5.5)	8.2 (4.4, 11.2)
Summer	-0.2 (-1.7, 1.0)	0.6 (0.1, 1.7)	0.1 (-0.7, 1.5)	0.5 (-0.3, 1.3)
Autumn	0.2 (-0.8, 1.0)	0.8 (-0.5, 2.2)	-0.1 (-1.1, 0.6)	1.6 (0.1, 2.6)
Winter	-0.2 (-1.7, 0.5)	1.1 (-0.1, 2.0)	-0.3 (-2.0, 0.6)	2.9 (2.1, 4.0)
Spring	1.1 (-0.4, 2.5)	1.5 (0.5, 2.6)	1.5 (-0.5, 3.2)	3.0 (1.3, 4.9)
Number of frost days (<0°C) (days)				
Annual	-7.1 (-21.8, -1.8)	-11.1 (-38.1, -2.3)	-8.2 (-25.5, -1.9)	-13.9 (-49.7, -2.6)
Summer	-0.0 (-1.7, 0.0)	-0.1 (-2.4, 0.0)	-0.0 (-1.8, 0.0)	-0.1 (-2.9, 0.0)
Autumn	-1.3 (-6.4, -0.1)	-1.8 (-8.7, -0.2)	-1.2 (-6.0, -0.1)	-2.1 (-11.6, -0.2)
Winter	-4.8 (-8.3, -1.6)	-7.6 (-16.1, -1.9)	-5.6 (-10.6, -1.6)	-9.8 (-21.4, -2.1)
Spring	-1.0 (-5.5, -0.1)	-1.7 (-10.9, -0.2)	-1.3 (-7.1, -0.1)	-2.0 (-13.9, -0.2)
Number of hot days (>25°C) (days)				
Annual	18.6 (0.1, 22.8)	35.5 (0.4, 44.0)	25.2 (0.2, 31.5)	56.5 (2.6, 67.1)
Summer	12.5 (0.1, 14.9)	22.6 (0.4, 25.4)	17.0 (0.2, 19.6)	33.9 (2.4, 39.7)
Autumn	3.9 (0.0, 5.6)	8.6 (0.0, 11.7)	5.1 (0.0, 7.2)	13.4 (0.1, 18.1)
Winter	0.0 (0.0, 0.0)	0.0 (0.0, 0.1)	0.0 (0.0, 0.0)	0.0 (0.0, 0.1)

Season	SSP2-4.5 2041-2060	SSP2-4.5 2081-2100	SSP3-7.0 2041-2060	SSP3-7.0 2081-2100
Spring	1.9 (0.0, 4.0)	4.4 (0.0, 8.4)	3.0 (0.0, 5.8)	8.9 (0.0, 15.5)
Number of very hot days (>30°C) (days)				
Annual	2.3 (-0.0, 4.5)	5.2 (0.0, 9.8)	2.7 (0.0, 5.8)	12.2 (0.0, 20.3)
Summer	2.0 (-0.0, 4.0)	4.5 (0.0, 8.3)	2.4 (0.0, 5.1)	10.3 (0.0, 16.9)
Autumn	0.2 (0.0, 0.4)	0.6 (0.0, 1.2)	0.2 (0.0, 0.6)	1.4 (0.0, 2.6)
Winter	0	0	0	0
Spring	0.1 (0.0, 0.2)	0.1 (0.0, 0.5)	0.0 (-0.0, 0.3)	0.3 (0.0, 0.9)
Number of windy days (>10m/s) (days)				
Annual	-3.5 (-6.1, -0.1)	-7.0 (-11.7, -0.0)	-4.5 (-7.5, -0.5)	-12.0 (-18.8, -0.4)
Summer	-1.6 (-2.2, -0.0)	-2.6 (-3.5, -0.0)	-2.8 (-3.5, 0.0)	-4.9 (-6.1, -0.2)
Autumn	-2.0 (-2.8, -0.0)	-3.6 (-4.6, -0.0)	-2.4 (-3.2, 0.0)	-4.7 (-5.8, -0.1)
Winter	0.0 (-0.7, 1.2)	-0.0 (-1.3, 1.2)	0.9 (-0.1, 1.5)	-1.8 (-4.5, 0.5)
Spring	0.0 (-1.7, 1.7)	-0.7 (-3.3, 2.0)	-0.1 (-2.1, 2.2)	-0.6 (-3.6, 3.0)
Potential Evapotranspiration Deficit (PED) (mm)				
Annual	33.2 (7.0, 51.0)	68.8 (12.6, 96.8)	45.9 (9.0, 65.9)	94.2 (25.0, 139.0)
Total rainfall (%)				
Annual	-1.9 (-6.0, 1.9)	-5.2 (-9.5, -1.1)	-2.8 (-7.2, 0.2)	-6.5 (-12.4, -2.2)
Summer	3.9 (-2.6, 9.6)	-1.3 (-6.1, 2.9)	4.0 (-0.0, 8.9)	6.3 (0.3, 12.7)
Autumn	-0.2 (-4.9, 3.8)	-2.9 (-7.7, 2.0)	3.9 (-1.4, 7.6)	1.9 (-8.8, 8.7)
Winter	-2.2 (-5.2, 1.5)	-6.9 (-12.7, -1.2)	-3.9 (-9.7, 0.4)	-15.4 (-21.3, -11.5)
Spring	-6.8 (-12.9, -3.1)	-8.9 (-16.8, -3.9)	-13.2 (-20.8, -9.8)	-14.3 (-22.3, -9.4)

3.3 Hastings

Table A. 5. Climate projections for Hastings District (2041-2060 and 2081-2100). The table shows average (min, max) change values for selected climate variables using downscaled AR6 climate data [44]. Projections are relative to a 1995-2014 'baseline'.

Season	SSP2-4.5 2041-2060	SSP2-4.5 2081-2100	SSP3-7.0 2041-2060	SSP3-7.0 2081-2100
Average daily air temperature: Tmean (°C)				
Annual	1.2 (1.1, 1.2)	2.1 (2.0, 2.1)	1.4 (1.4, 1.5)	3.1 (2.9, 3.2)
Summer	1.4 (1.3, 1.5)	2.4 (2.2, 2.5)	1.8 (1.6, 1.9)	3.6 (3.4, 3.8)
Autumn	1.2 (1.2, 1.3)	2.1 (2.0, 2.2)	1.4 (1.3, 1.5)	3.1 (3.0, 3.2)
Winter	1.0 (0.9, 1.0)	1.8 (1.7, 1.9)	1.2 (1.1, 1.2)	2.7 (2.5, 2.8)
Spring	1.1 (1.1, 1.2)	2.0 (1.9, 2.1)	1.4 (1.3, 1.5)	3.0 (2.9, 3.1)
Growing degree days (base 10°C) (GDDs)				
Annual	316.5 (162.8, 371.3)	568.6 (298.5, 668.4)	393.7 (211.5, 461.6)	887.2 (498.3, 1021.9)
Number of dry days (<1mm) (days)				
Annual	1.0 (-2.8, 3.4)	3.1 (0.3, 6.3)	1.6 (-1.8, 5.0)	6.8 (3.3, 10.4)
Summer	0.1 (-1.4, 1.2)	0.8 (-0.5, 1.9)	0.4 (-0.7, 1.4)	0.5 (-0.7, 1.3)
Autumn	0.2 (-0.9, 1.2)	0.2 (-0.8, 1.1)	-0.2 (-1.1, 0.9)	0.8 (-0.2, 2.0)
Winter	-0.3 (-1.7, 0.8)	0.7 (-0.1, 1.9)	0.0 (-1.9, 1.4)	2.4 (1.3, 4.3)
Spring	0.9 (-0.2, 2.1)	1.4 (0.2, 3.0)	1.2 (-0.4, 3.8)	2.9 (1.4, 5.5)
Number of frost days (<0°C) (days)				
Annual	-8.4 (-20.5, -2.9)	-13.6 (-36.2, -4.0)	-9.9 (-23.8, -3.6)	-17.8 (-48.4, -4.8)
Summer	-0.1 (-1.4, 0.0)	-0.1 (-1.8, 0.0)	-0.1 (-1.4, 0.0)	-0.1 (-2.2, 0.0)
Autumn	-1.7 (-6.2, -0.2)	-2.3 (-8.7, -0.3)	-1.6 (-6.2, -0.2)	-2.7 (-10.7, -0.3)
Winter	-5.3 (-8.6, -2.5)	-8.8 (-16.5, -3.6)	-6.4 (-10.4, -3.1)	-11.9 (-22.2, -4.2)
Spring	-1.3 (-5.4, -0.2)	-2.4 (-10.6, -0.2)	-1.8 (-7.2, -0.2)	-3.1 (-14.4, -0.2)
Number of hot days (>25°C) (days)				
Annual	17.0 (0.3, 25.8)	33.8 (0.9, 49.7)	23.8 (0.4, 35.7)	55.1 (3.1, 74.7)
Summer	11.6 (0.3, 19.8)	21.7 (0.7, 33.1)	15.9 (0.4, 25.8)	33.8 (2.9, 48.4)
Autumn	3.2 (0.0, 6.5)	7.5 (0.0, 13.9)	4.5 (0.0, 8.6)	12.0 (0.1, 20.2)
Winter	0.0 (0.0, 0.0)	0.0 (0.0, 0.1)	0.0 (0.0, 0.1)	0.0 (0.0, 0.3)

Season	SSP2-4.5 2041-2060	SSP2-4.5 2081-2100	SSP3-7.0 2041-2060	SSP3-7.0 2081-2100
Spring	2.1 (0.0, 5.4)	4.7 (0.0, 10.8)	3.2 (0.0, 7.7)	9.2 (0.1, 18.9)
Number of very hot days (>30°C) (days)				
Annual	1.9 (-0.0, 5.9)	4.6 (0.0, 12.7)	2.7 (0.0, 8.1)	10.4 (0.0, 24.7)
Summer	1.7 (-0.0, 5.0)	3.8 (0.0, 10.1)	2.3 (0.0, 6.5)	8.6 (0.0, 19.5)
Autumn	0.1 (0.0, 0.7)	0.5 (0.0, 2.0)	0.2 (-0.0, 1.0)	1.2 (0.0, 3.7)
Winter	0	0	0	0
Spring	0.1 (0.0, 0.3)	0.2 (0.0, 1.0)	0.1 (-0.0, 0.6)	0.5 (0.0, 1.9)
Number of windy days (>10m/s) (days)				
Annual	-2.1 (-6.3, 0.1)	-4.2 (-11.9, 0.0)	-2.7 (-7.3, 0.0)	-7.0 (-19.0, 0.1)
Summer	-0.8 (-2.7, 0.1)	-1.2 (-3.9, 0.0)	-1.1 (-3.6, 0.1)	-2.1 (-6.5, 0.0)
Autumn	-0.9 (-2.7, 0.2)	-1.6 (-4.6, 0.0)	-1.1 (-2.8, 0.0)	-2.1 (-5.8, 0.0)
Winter	-0.1 (-0.9, 0.6)	-0.4 (-1.6, 0.8)	0.4 (-0.0, 1.3)	-1.6 (-5.0, 0.3)
Spring	-0.4 (-1.7, 0.4)	-1.0 (-3.2, 0.1)	-0.8 (-2.0, 0.0)	-1.2 (-4.0, 0.1)
Potential Evapotranspiration Deficit (PED) (mm)				
Annual	40.4 (9.9, 63.1)	70.6 (21.2, 89.8)	57.9 (14.9, 84.9)	96.0 (29.6, 127.2)
Total rainfall (%)				
Annual	-3.0 (-5.7, 0.6)	-5.4 (-9.1, -2.4)	-5.4 (-9.6, -1.5)	-7.7 (-12.6, -2.9)
Summer	2.0 (-3.4, 8.1)	-1.9 (-5.4, 1.7)	0.7 (-3.6, 7.2)	6.9 (1.6, 11.3)
Autumn	-1.9 (-4.3, 3.1)	-1.2 (-6.2, 7.8)	3.2 (-3.6, 8.7)	-0.1 (-7.9, 6.5)
Winter	-3.2 (-6.9, -0.4)	-6.6 (-12.4, 0.1)	-8.8 (-11.3, -3.6)	-17.0 (-20.8, -11.2)
Spring	-7.8 (-13.9, -4.1)	-13.3 (-18.9, -7.8)	-14.9 (-21.7, -10.8)	-17.3 (-25.9, -10.7)

3.4 Napier

Table A. 6. Climate projections for Napier City (2041-2060 and 2081-2100). The table shows average (min, max) change values for selected climate variables using downscaled AR6 climate data [44]. Projections are relative to a 1995-2014 'baseline'.

Season	SSP2-4.5 2041-2060	SSP2-4.5 2081-2100	SSP3-7.0 2041-2060	SSP3-7.0 2081-2100
Average daily air temperature: Tmean (°C)				
Annual	1.1	2.0 (2.0, 2.0)	1.4	3.0 (3.0, 3.0)
Summer	1.3	2.3 (2.3, 2.3)	1.7 (1.7, 1.7)	3.5 (3.5, 3.5)
Autumn	1.2 (1.2, 1.2)	2.1 (2.1, 2.1)	1.4	3.1
Winter	1	1.8 (1.8, 1.8)	1.2 (1.2, 1.2)	2.7 (2.7, 2.7)
Spring	1.1 (1.1, 1.1)	2.0 (2.0, 2.0)	1.4	3.0 (2.9, 3.0)
Growing degree days (base 10°C) (GDDs)				
Annual	360.3 (358.5, 361.3)	657.3 (652.9, 660.2)	451.1 (448.9, 452.2)	998.0 (991.2, 1003.3)
Number of dry days (<1mm) (days)				
Annual	0.6 (0.1, 1.1)	1.7 (1.3, 1.9)	1.6 (1.1, 2.4)	5.6 (5.4, 5.8)
Summer	-0.2 (-0.5, 0.1)	0.1 (-0.1, 0.2)	-0.1 (-0.2, -0.0)	0.3 (0.1, 0.5)
Autumn	-0.3 (-0.6, -0.1)	-0.2 (-0.3, -0.0)	-0.6 (-0.9, -0.2)	0.7 (0.4, 0.9)
Winter	-0.5 (-0.8, -0.2)	0.5 (0.2, 0.7)	0.7 (0.4, 1.0)	2.0 (1.8, 2.1)
Spring	1.4 (1.1, 1.7)	1.3 (1.1, 1.5)	1.4 (1.3, 1.6)	2.4 (2.0, 2.7)
Number of frost days (<0°C) (days)				
Annual	-4.2 (-4.7, -3.8)	-6.1 (-7.0, -5.6)	-5.2 (-5.8, -4.9)	-7.4 (-8.4, -6.8)
Summer	0	0	0	0
Autumn	-0.4 (-0.5, -0.4)	-0.5 (-0.6, -0.5)	-0.5 (-0.5, -0.4)	-0.6 (-0.7, -0.5)
Winter	-3.5 (-3.9, -3.2)	-5.3 (-5.9, -4.8)	-4.5 (-4.9, -4.2)	-6.4 (-7.2, -6.0)
Spring	-0.2 (-0.3, -0.2)	-0.3 (-0.4, -0.3)	-0.3 (-0.3, -0.3)	-0.4 (-0.4, -0.3)
Number of hot days (>25°C) (days)				
Annual	24.6 (24.2, 24.9)	47.3 (46.5, 48.2)	33.7 (33.3, 34.1)	71.0 (69.5, 72.2)
Summer	13.1 (12.9, 13.3)	23.7 (23.1, 24.3)	17.8 (17.4, 18.3)	32.6 (31.7, 33.5)
Autumn	5.9 (5.8, 6.0)	13.2 (12.9, 13.6)	8.4 (8.2, 8.5)	19.8 (19.5, 20.0)
Winter	0	0	0.0 (0.0, 0.0)	0.2 (0.2, 0.2)

Season	SSP2-4.5 2041-2060	SSP2-4.5 2081-2100	SSP3-7.0 2041-2060	SSP3-7.0 2081-2100
Spring	5.2 (5.1, 5.5)	10.4 (10.3, 10.6)	7.3 (7.1, 7.4)	18.4 (18.1, 18.5)
Number of very hot days (>30°C) (days)				
Annual	2.3 (-0.0, 4.5)	5.2 (0.0, 9.8)	2.7 (0.0, 5.8)	12.2 (0.0, 20.3)
Summer	2.0 (-0.0, 4.0)	4.5 (0.0, 8.3)	2.4 (0.0, 5.1)	10.3 (0.0, 16.9)
Autumn	0.2 (0.0, 0.4)	0.6 (0.0, 1.2)	0.2 (0.0, 0.6)	1.4 (0.0, 2.6)
Winter	0	0	0	0
Spring	0.1 (0.0, 0.2)	0.1 (0.0, 0.5)	0.0 (-0.0, 0.3)	0.3 (0.0, 0.9)
Number of windy days (>10m/s) (days)				
Annual	5.2 (4.9, 5.4)	11.9 (11.3, 12.3)	7.9 (7.5, 8.1)	22.3 (22.1, 22.6)
Summer	4.4 (4.3, 4.5)	9.2 (9.0, 9.4)	6.3 (6.1, 6.4)	17.0 (16.8, 17.2)
Autumn	0.5 (0.4, 0.6)	1.7 (1.4, 1.9)	0.9 (0.8, 1.0)	3.4 (3.2, 3.6)
Winter	0	0	0	0
Spring	0.3 (0.2, 0.3)	1.0 (0.8, 1.1)	0.6 (0.5, 0.7)	1.8 (1.6, 1.9)
Potential Evapotranspiration Deficit (PED) (mm)				
Annual	49.4 (48.9, 49.7)	86.1 (85.9, 86.4)	65.3 (63.7, 67.1)	114.5 (111.4, 117.5)
Total rainfall (%)				
Annual	-2.3 (-2.3, -2.3)	-4.0 (-4.4, -3.8)	-4.1 (-4.5, -3.8)	-4.9 (-6.1, -4.0)
Summer	3.1 (2.8, 3.4)	-2.3 (-2.5, -2.2)	1.9 (1.5, 2.3)	8.4 (6.0, 10.2)
Autumn	-1.0 (-1.7, -0.5)	1.0 (0.2, 1.5)	5.2 (4.8, 5.4)	3.1 (2.7, 3.4)
Winter	-2.3 (-2.8, -1.4)	-3.9 (-5.4, -2.6)	-8.2 (-8.7, -7.7)	-14.4 (-15.7, -13.5)
Spring	-8.3 (-9.3, -7.6)	-13.8 (-14.0, -13.7)	-13.6 (-14.4, -13.2)	-13.3 (-14.6, -12.0)

3.5 Wairoa

Table A. 7. Climate projections for Wairoa District (2041-2060 and 2081-2100). The table shows average (min, max) change values for selected climate variables using downscaled AR6 climate data [44]. Projections are relative to a 1995-2014 'baseline'.

Season	SSP2-4.5 2041-2060	SSP2-4.5 2081-2100	SSP3-7.0 2041-2060	SSP3-7.0 2081-2100
Average daily air temperature: Tmean (°C)				
Annual	1.2 (1.0, 1.2)	2.1 (1.9, 2.1)	1.4 (1.3, 1.5)	3.1 (2.7, 3.2)
Summer	1.4 (1.2, 1.4)	2.4 (2.1, 2.5)	1.8 (1.5, 1.8)	3.7 (3.1, 3.8)
Autumn	1.2 (1.1, 1.3)	2.1 (1.9, 2.2)	1.4 (1.3, 1.5)	3.1 (2.8, 3.2)
Winter	1.0 (0.9, 1.0)	1.8 (1.6, 1.9)	1.2 (1.1, 1.2)	2.7 (2.4, 2.8)
Spring	1.1 (1.0, 1.2)	2.0 (1.8, 2.0)	1.4 (1.2, 1.5)	3.0 (2.6, 3.1)
Growing degree days (base 10°C) (GDDs)				
Annual	327.3 (220.6, 384.9)	584.6 (396.2, 686.2)	406.7 (278.0, 478.2)	916.2 (644.9, 1062.5)
Number of dry days (<1mm) (days)				
Annual	0.6 (-2.2, 4.5)	3.6 (0.3, 6.8)	0.7 (-2.5, 4.8)	7.8 (4.1, 11.1)
Summer	0.6 (-0.8, 1.4)	1.3 (-0.4, 2.1)	0.7 (-0.8, 1.8)	1.1 (0.2, 1.9)
Autumn	-0.3 (-1.6, 0.9)	0.3 (-0.4, 1.1)	-0.6 (-1.4, 0.3)	0.7 (-0.1, 1.8)
Winter	-0.7 (-1.9, 0.5)	0.8 (-0.3, 1.8)	-0.7 (-1.7, 0.6)	2.5 (1.6, 3.5)
Spring	0.9 (-1.1, 2.4)	1.4 (0.2, 3.0)	1.2 (-0.7, 3.5)	3.5 (1.1, 5.8)
Number of frost days (<0°C) (days)				
Annual	-6.4 (-17.2, -0.2)	-10.5 (-29.7, -0.3)	-7.5 (-20.3, -0.2)	-13.4 (-39.6, -0.3)
Summer	-0.0 (-0.5, 0.0)	-0.0 (-0.6, 0.0)	-0.0 (-0.5, 0.0)	-0.0 (-0.6, 0.0)
Autumn	-1.2 (-4.6, 0.0)	-1.6 (-6.3, -0.0)	-1.1 (-4.6, -0.0)	-1.9 (-8.0, -0.0)
Winter	-4.2 (-8.8, -0.2)	-7.1 (-16.2, -0.3)	-5.0 (-10.5, -0.2)	-9.2 (-22.5, -0.3)
Spring	-1.0 (-4.3, 0.0)	-1.8 (-7.7, 0.0)	-1.3 (-5.6, 0.0)	-2.3 (-10.2, 0.0)
Number of hot days (>25°C) (days)				
Annual	16.6 (1.3, 28.9)	32.8 (3.2, 52.1)	23.1 (1.5, 38.2)	55.4 (11.1, 77.7)
Summer	12.4 (1.1, 20.3)	22.9 (2.8, 33.3)	16.8 (1.5, 26.1)	36.6 (10.1, 48.3)
Autumn	2.7 (0.0, 7.2)	6.5 (0.2, 14.0)	4.0 (0.0, 9.6)	11.3 (0.6, 21.4)
Winter	0.0 (0.0, 0.1)	0.0 (0.0, 0.1)	0.0 (0.0, 0.1)	0.0 (0.0, 0.2)

Season	SSP2-4.5 2041-2060	SSP2-4.5 2081-2100	SSP3-7.0 2041-2060	SSP3-7.0 2081-2100
Spring	1.4 (0.1, 4.7)	3.4 (0.2, 9.9)	2.1 (0.1, 6.2)	7.3 (0.3, 18.9)
Number of very hot days (>30°C) (days)				
Annual	1.1 (-0.0, 4.2)	3.0 (0.0, 10.6)	1.5 (-0.0, 6.5)	8.1 (0.2, 24.7)
Summer	1.0 (-0.0, 3.8)	2.6 (0.0, 9.2)	1.3 (-0.0, 5.6)	7.1 (0.2, 21.0)
Autumn	0.0 (-0.0, 0.2)	0.2 (0.0, 1.0)	0.1 (0.0, 0.5)	0.6 (0.0, 2.6)
Winter	0	0	0	0
Spring	0.1 (0.0, 0.2)	0.1 (0.0, 0.5)	0.1 (0.0, 0.3)	0.3 (0.0, 1.1)
Number of windy days (>10m/s) (days)				
Annual	-1.6 (-8.7, 0.0)	-3.1 (-14.2, 0.0)	-2.2 (-9.7, 0.0)	-5.2 (-23.3, 0.1)
Summer	-0.7 (-2.9, 0.0)	-0.8 (-3.7, 0.0)	-0.7 (-3.7, 0.0)	-1.3 (-5.8, 0.1)
Autumn	-0.7 (-3.4, 0.0)	-1.1 (-5.2, -0.0)	-0.8 (-3.0, 0.0)	-1.4 (-6.2, 0.0)
Winter	0.0 (-0.6, 0.5)	-0.2 (-1.9, 0.3)	0.4 (-0.0, 1.3)	-1.2 (-6.4, 0.1)
Spring	-0.3 (-2.0, 0.4)	-1.0 (-3.6, 0.0)	-1.0 (-3.7, 0.0)	-1.2 (-5.0, 0.0)
Potential Evapotranspiration Deficit (PED) (mm)				
Annual	38.5 (5.6, 59.5)	59.0 (5.5, 87.5)	51.7 (9.8, 74.5)	91.0 (18.6, 131.9)
Total rainfall (%)				
Annual	-1.6 (-5.0, 1.6)	-3.5 (-7.2, -0.8)	-3.5 (-6.8, -0.5)	-7.4 (-11.2, -3.5)
Summer	-0.9 (-5.5, 4.2)	-3.5 (-8.7, 0.9)	0.2 (-5.5, 5.4)	2.7 (-4.2, 8.1)
Autumn	2.4 (-2.4, 6.1)	5.2 (-1.1, 11.9)	3.6 (-3.4, 9.2)	0.3 (-7.2, 6.8)
Winter	-1.4 (-6.6, 5.5)	-9.0 (-12.9, 0.0)	-5.3 (-11.1, 0.3)	-14.2 (-20.4, -8.0)
Spring	-6.6 (-11.7, -2.9)	-8.3 (-14.6, -2.1)	-11.9 (-17.5, -7.6)	-17.1 (-22.9, -10.9)

A4. Quantitative Risk Assessment Figures

4.1 Regional Assessment

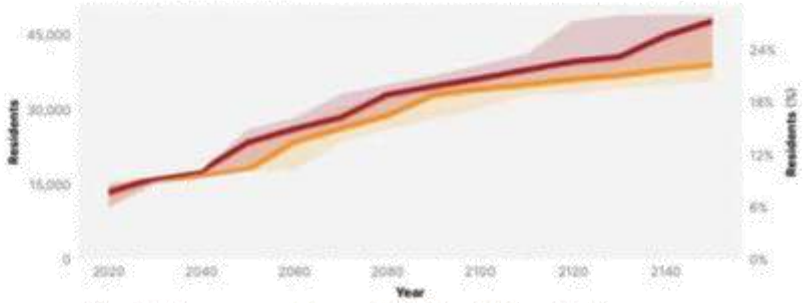
Figure A - 7 to Figure A - 18 illustrates the risk to residents and economic activity across Hawke's Bay based on exposure to and isolation resulting from coastal flooding, river and rainfall flooding, and landslides. These visualisations include both direct exposure and potential isolation effects across different socioeconomic groups and industry sectors. The assessment methodology is detailed in Section 3 and Appendix A1.

Population Exposed to Coastal Flooding in the Hawke's Bay Region

This analysis is based on available hazard modelling data and is subject to the limitations discussed in this report.

(a) What is the population exposure to a 1% AEP event and >10cm of flooding?

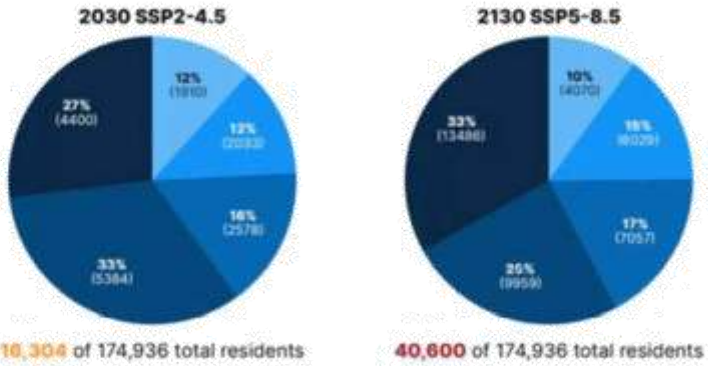
NUMBER AND PERCENTAGE OF RESIDENTS AT RISK



The shaded areas show the 17-83 percentile range, reflecting uncertainty in sea level rise and vertical land movement projections.

(b) How is exposure distributed across socioeconomic groups?

EXPOSED POPULATION BY NZ DEPRIVATION INDEX



16,304 of 174,936 total residents

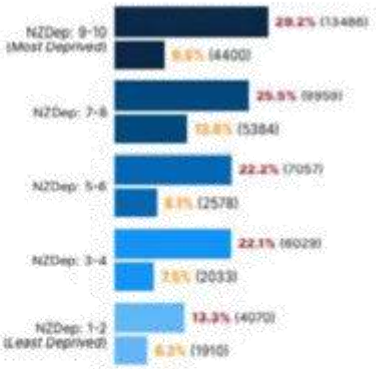
40,600 of 174,936 total residents

This shows how the total exposed population is distributed across socioeconomic groups. NZ Deprivation Index ranges from 1-2 (least deprived) to 9-10 (most deprived).

KEY
- 2030 SSP2-4.5
- 2130 SSP5-8.5
- NZDep 1-2
- NZDep 3-4
- NZDep 5-6
- NZDep 7-8
- NZDep 9-10

(c) Which groups face disproportionate exposure relative to their size?

PERCENTAGE OF EACH NZ DEPRIVATION GROUP THAT IS EXPOSED



This shows what percentage of people within each NZ deprivation group is at risk. This indicates which groups face the greatest relative impact.

Figure A - 7.

URBAN INTELLIGENCE

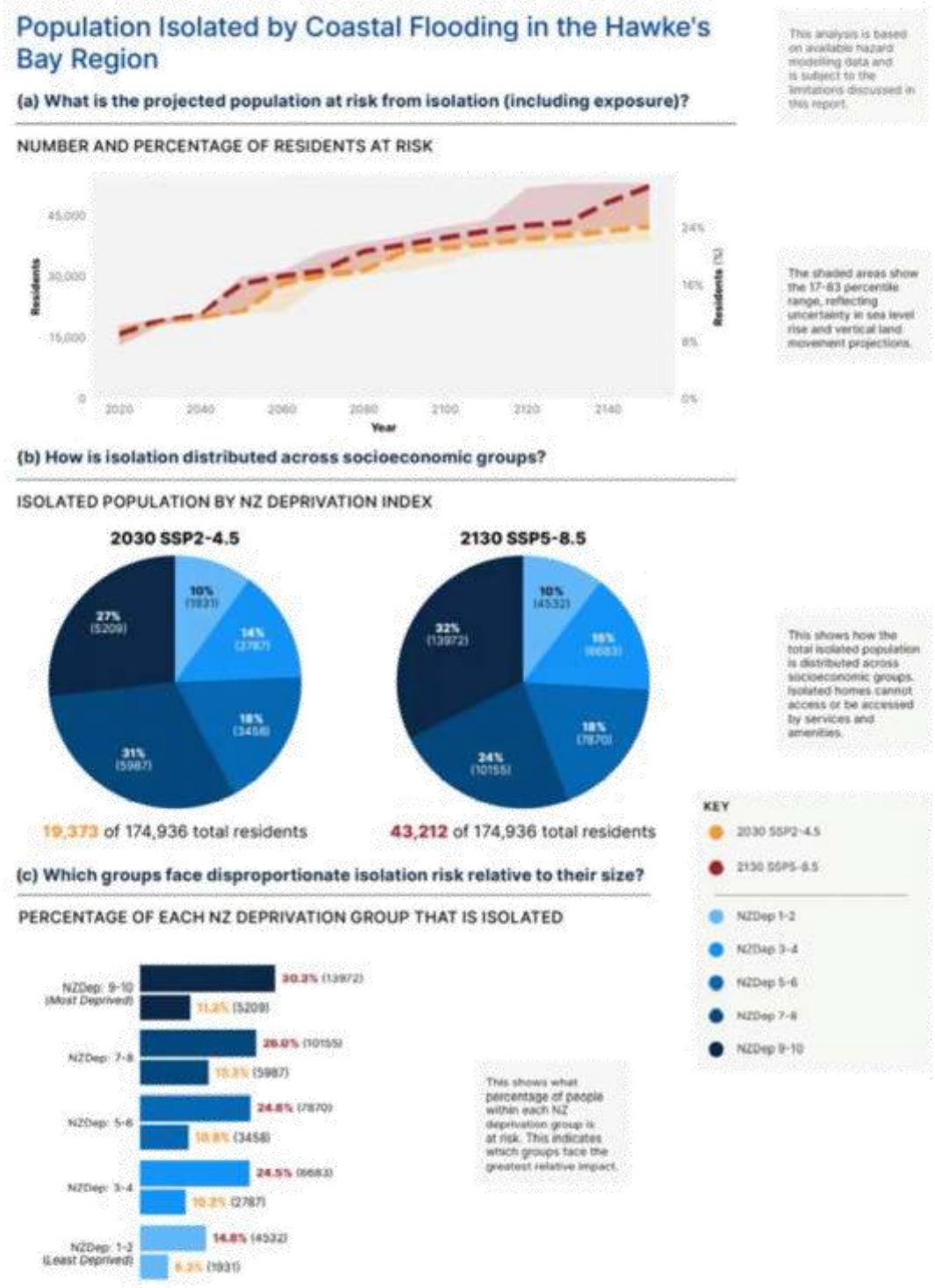

Population Isolated by Coastal Flooding in the Hawke's Bay Region
This analysis is based on available hazard modelling data and is subject to the limitations discussed in this report.
(a) What is the projected population at risk from isolation (including exposure)?
NUMBER AND PERCENTAGE OF RESIDENTS AT RISK
45,000
30,000
15,000
0
Residents
24%
16%
8%
0%
Residents (%)
2020
2040
2060
2080
2100
2120
2140
Year
The shaded areas show the 17-83 percentile range, reflecting uncertainty in sea level rise and vertical land movement projections.
(b) How is isolation distributed across socioeconomic groups?
ISOLATED POPULATION BY NZ DEPRIVATION INDEX
2030 SSP2-4.5
10% (1931)
14% (2787)
18% (3456)
31% (5987)
27% (5209)
19,373 of 174,936 total residents
2130 SSP5-8.5
10% (14532)
15% (6683)
18% (7870)
24% (10155)
32% (13972)
43,212 of 174,936 total residents
This shows how the total isolated population is distributed across socioeconomic groups. Isolated homes cannot access or be accessed by services and amenities.
KEY
2030 SSP2-4.5
2130 SSP5-8.5
NZDep 1-2
NZDep 3-4
NZDep 5-6
NZDep 7-8
NZDep 9-10
(c) Which groups face disproportionate isolation risk relative to their size?
PERCENTAGE OF EACH NZ DEPRIVATION GROUP THAT IS ISOLATED
NZDep: 9-10 (Most Deprived)
30.3% (13972)
11.3% (5209)
NZDep: 7-8
26.0% (10155)
15.3% (5987)
NZDep: 5-6
24.6% (7870)
10.8% (3456)
NZDep: 3-4
24.5% (6683)
10.3% (2787)
NZDep: 1-2 (Least Deprived)
14.8% (4532)
6.3% (1931)
This shows what percentage of people within each NZ deprivation group is at risk. This indicates which groups face the greatest relative impact.

Figure A - 8.

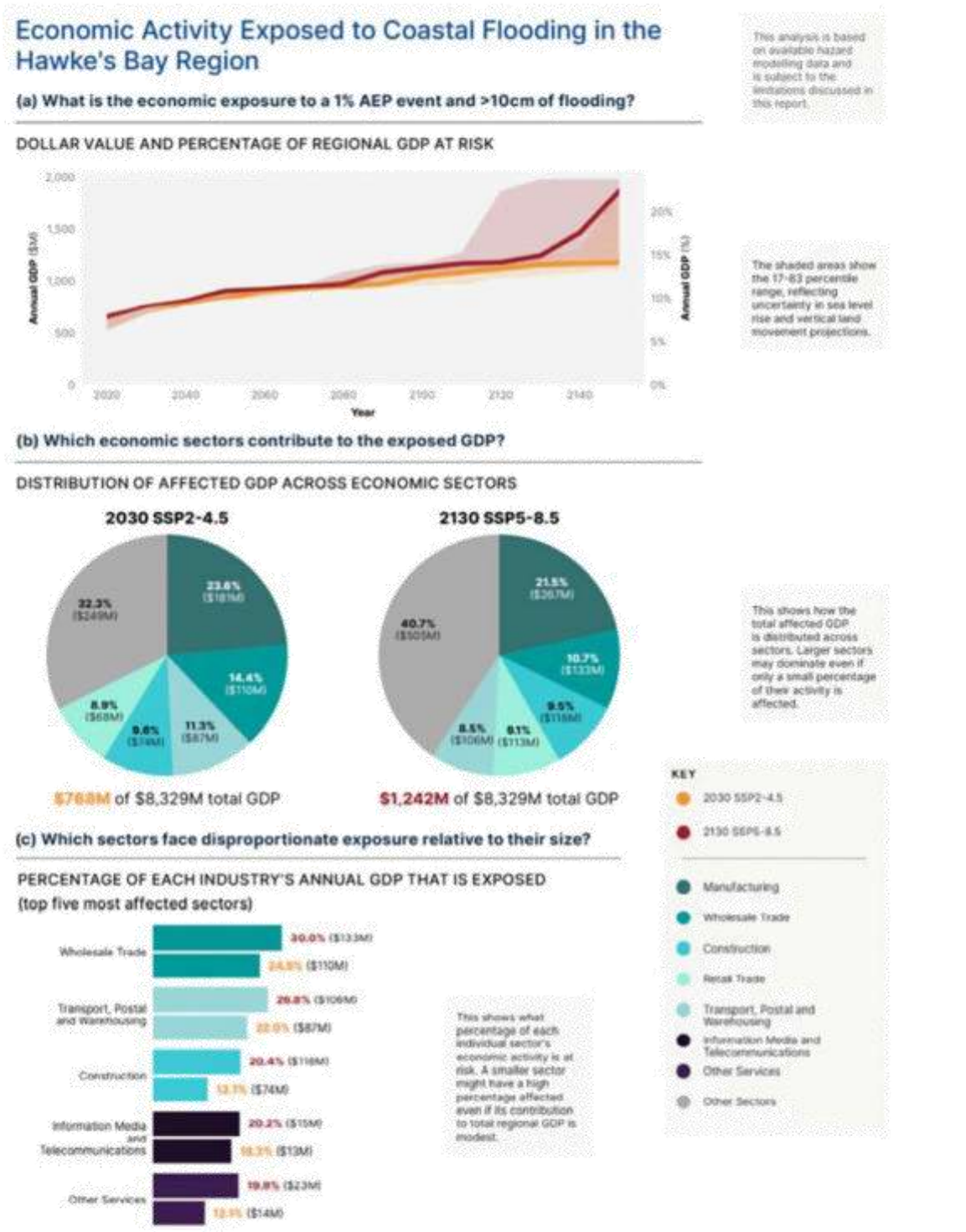

Economic Activity Exposed to Coastal Flooding in the Hawke's Bay Region
This analysis is based on available hazard modelling data and is subject to the limitations discussed in this report.
(a) What is the economic exposure to a 1% AEP event and >10cm of flooding?
DOLLAR VALUE AND PERCENTAGE OF REGIONAL GDP AT RISK
Annual GDP ($M)
Annual GDP (%)
Year
The shaded areas show the 17-83 percentile range, reflecting uncertainty in sea level rise and vertical land movement projections.
(b) Which economic sectors contribute to the exposed GDP?
DISTRIBUTION OF AFFECTED GDP ACROSS ECONOMIC SECTORS
2030 SSP2-4.5
2130 SSP5-8.5
$768M of $8,329M total GDP
$1,242M of $8,329M total GDP
This shows how the total affected GDP is distributed across sectors. Larger sectors may dominate even if only a small percentage of their activity is affected.
KEY
2030 SSP2-4.5
2130 SSP5-8.5
Manufacturing
Wholesale Trade
Construction
Retail Trade
Transport, Postal and Warehousing
Information Media and Telecommunications
Other Services
Other Sectors
(c) Which sectors face disproportionate exposure relative to their size?
PERCENTAGE OF EACH INDUSTRY'S ANNUAL GDP THAT IS EXPOSED
(top five most affected sectors)
Wholesale Trade
30.0% ($133M)
($110M)
Transport, Postal and Warehousing
26.8% ($106M)
($87M)
Construction
20.4% ($116M)
($74M)
Information Media and Telecommunications
20.2% ($15M)
($13M)
Other Services
19.8% ($23M)
($14M)
This shows what percentage of each individual sector's economic activity is at risk. A smaller sector might have a high percentage affected even if its contribution to total regional GDP is modest.

Figure A - 9.

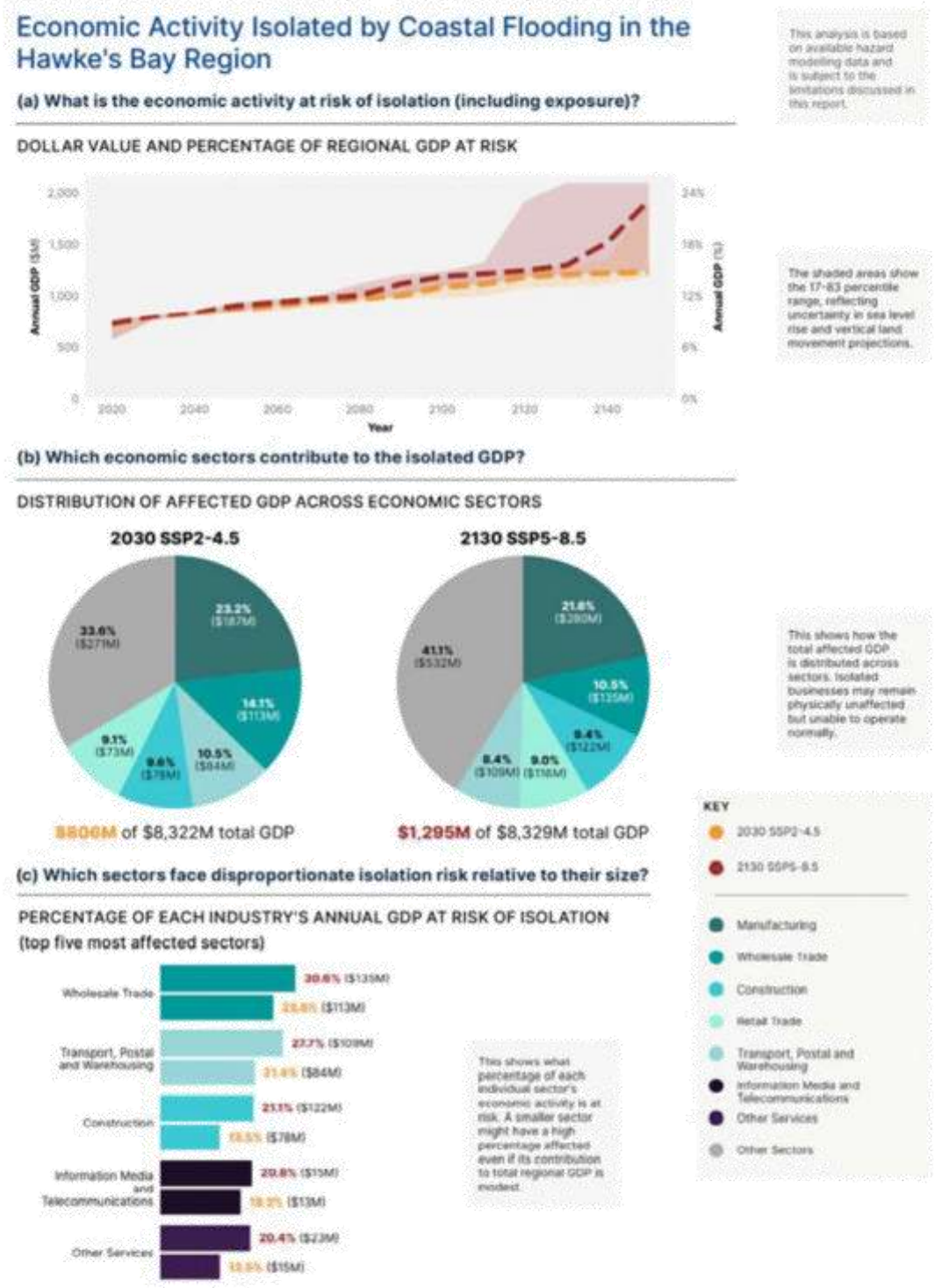

Economic Activity Isolated by Coastal Flooding in the Hawke's Bay Region
This analysis is based on available hazard modelling data and is subject to the limitations discussed in this report.
(a) What is the economic activity at risk of isolation (including exposure)?
DOLLAR VALUE AND PERCENTAGE OF REGIONAL GDP AT RISK
Annual GDP ($M)
Annual GDP (%)
Year
The shaded areas show the 17-83 percentile range, reflecting uncertainty in sea level rise and vertical land movement projections.
(b) Which economic sectors contribute to the isolated GDP?
DISTRIBUTION OF AFFECTED GDP ACROSS ECONOMIC SECTORS
2030 SSP2-4.5
2130 SSP5-8.5
$506M of $8,322M total GDP
$1,295M of $8,329M total GDP
This shows how the total affected GDP is distributed across sectors. Isolated businesses may remain physically unaffected but unable to operate normally.
KEY
2030 SSP2-4.5
2130 SSP5-8.5
Manufacturing
Wholesale Trade
Construction
Retail Trade
Transport, Postal and Warehousing
Information Media and Telecommunications
Other Services
Other Sectors
(c) Which sectors face disproportionate isolation risk relative to their size?
PERCENTAGE OF EACH INDUSTRY'S ANNUAL GDP AT RISK OF ISOLATION
(top five most affected sectors)
Wholesale Trade
Transport, Postal and Warehousing
Construction
Information Media and Telecommunications
Other Services
This shows what percentage of each individual sector's economic activity is at risk. A smaller sector might have a high percentage affected even if its contribution to total regional GDP is modest.

Figure A - 10.

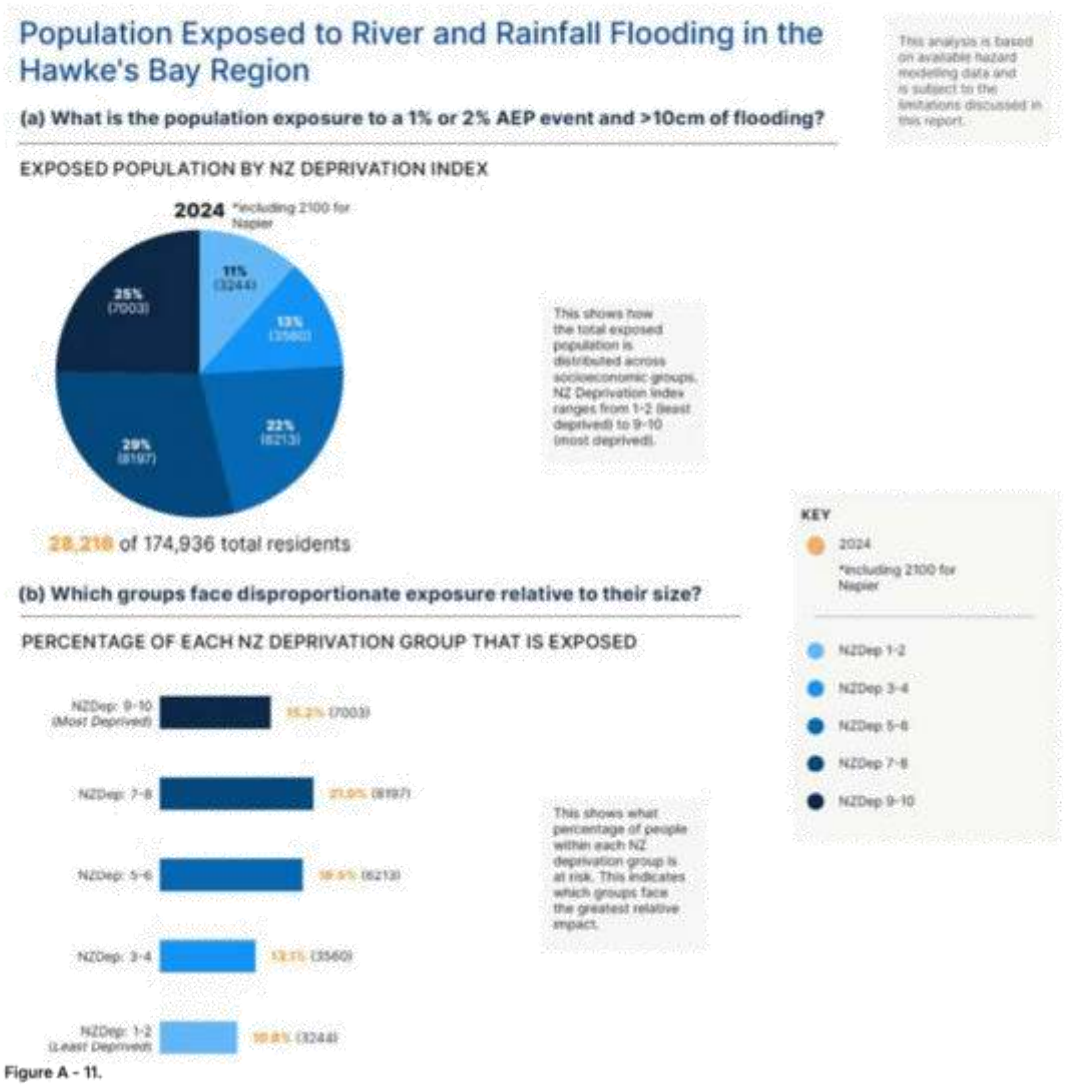

Population Exposed to River and Rainfall Flooding in the Hawke's Bay Region
This analysis is based on available hazard modelling data and is subject to the limitations discussed in this report.
(a) What is the population exposure to a 1% or 2% AEP event and >10cm of flooding?
EXPOSED POPULATION BY NZ DEPRIVATION INDEX
2024 *including 2100 for Napier
11% (3244)
13% (3560)
22% (6213)
29% (8197)
25% (7003)
This shows how the total exposed population is distributed across socioeconomic groups. NZ Deprivation Index ranges from 1-2 (least deprived) to 9-10 (most deprived).
28,218 of 174,936 total residents
KEY
2024
*including 2100 for Napier
NZDep 1-2
NZDep 3-4
NZDep 5-6
NZDep 7-8
NZDep 9-10
(b) Which groups face disproportionate exposure relative to their size?
PERCENTAGE OF EACH NZ DEPRIVATION GROUP THAT IS EXPOSED
NZDep: 9-10 (Most Deprived)
NZDep: 7-8
NZDep: 5-6
NZDep: 3-4
NZDep: 1-2 (Least Deprived)
This shows what percentage of people within each NZ deprivation group is at risk. This indicates which groups face the greatest relative impact.

Figure A - 11.

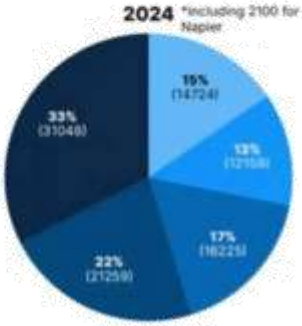
AROTAKE TŪRARU PANONITANGA Ā-ĀHUARANGI KI TE MATAU-A-MĀUI

Population Isolated by River and Rainfall Flooding in the Hawke's Bay Region

This analysis is based on available hazard modelling data and is subject to the limitations discussed in this report.

(a) How is isolation distributed across socioeconomic groups?

ISOLATED POPULATION BY NZ DEPRIVATION INDEX



95,414 of 174,936 total residents

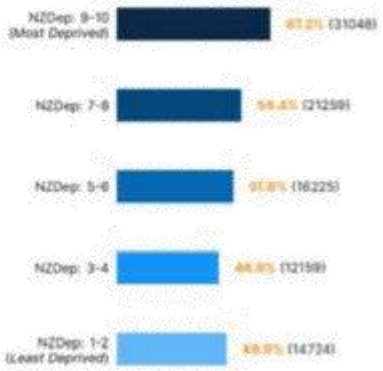
This shows how the total isolated population is distributed across socioeconomic groups. Isolated homes cannot access or be accessed by services and amenities.

KEY

- 2024 *including 2100 for Napier
- NZDep 1-2
- NZDep 3-4
- NZDep 5-6
- NZDep 7-8
- NZDep 9-10

(b) Which groups face disproportionate isolation risk relative to their size?

PERCENTAGE OF EACH NZ DEPRIVATION GROUP THAT IS ISOLATED



This shows what percentage of people within each NZ deprivation group is at risk. This indicates which groups face the greatest relative impact.

Figure A - 12.

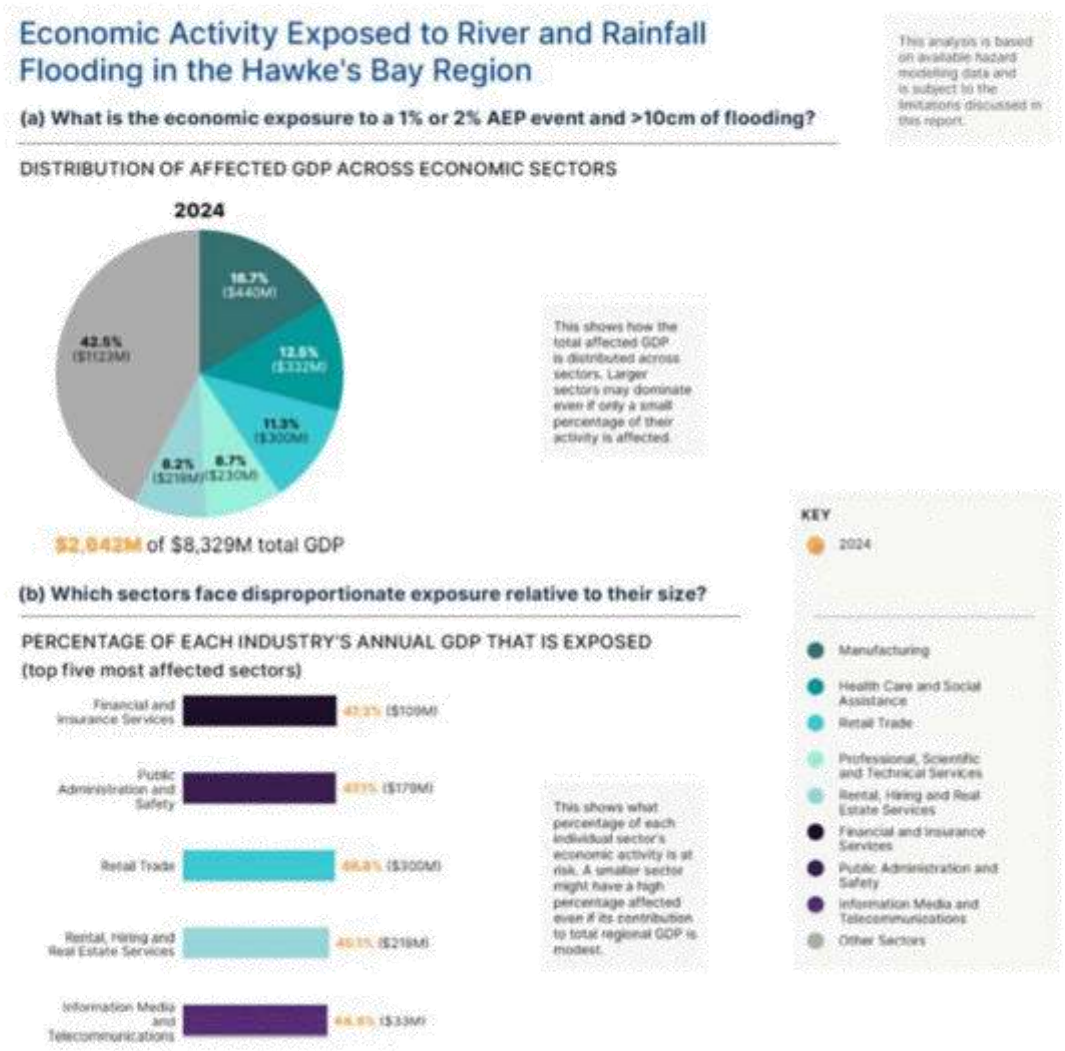

Economic Activity Exposed to River and Rainfall Flooding in the Hawke's Bay Region
This analysis is based on available hazard modelling data and is subject to the limitations discussed in this report.
(a) What is the economic exposure to a 1% or 2% AEP event and >10cm of flooding?
DISTRIBUTION OF AFFECTED GDP ACROSS ECONOMIC SECTORS
2024
18.7% ($440M)
12.6% ($332M)
11.3% ($300M)
8.7% ($230M)
8.2% ($216M)
42.5% ($1123M)
This shows how the total affected GDP is distributed across sectors. Larger sectors may dominate even if only a small percentage of their activity is affected.
$2,642M of $8,329M total GDP
KEY
2024
Manufacturing
Health Care and Social Assistance
Retail Trade
Professional, Scientific and Technical Services
Rental, Hiring and Real Estate Services
Financial and Insurance Services
Public Administration and Safety
Information Media and Telecommunications
Other Sectors
(b) Which sectors face disproportionate exposure relative to their size?
PERCENTAGE OF EACH INDUSTRY'S ANNUAL GDP THAT IS EXPOSED
(top five most affected sectors)
Financial and Insurance Services
Public Administration and Safety
Retail Trade
Rental, Hiring and Real Estate Services
Information Media and Telecommunications
This shows what percentage of each individual sector's economic activity is at risk. A smaller sector might have a high percentage affected even if its contribution to total regional GDP is modest.

Figure A - 13.

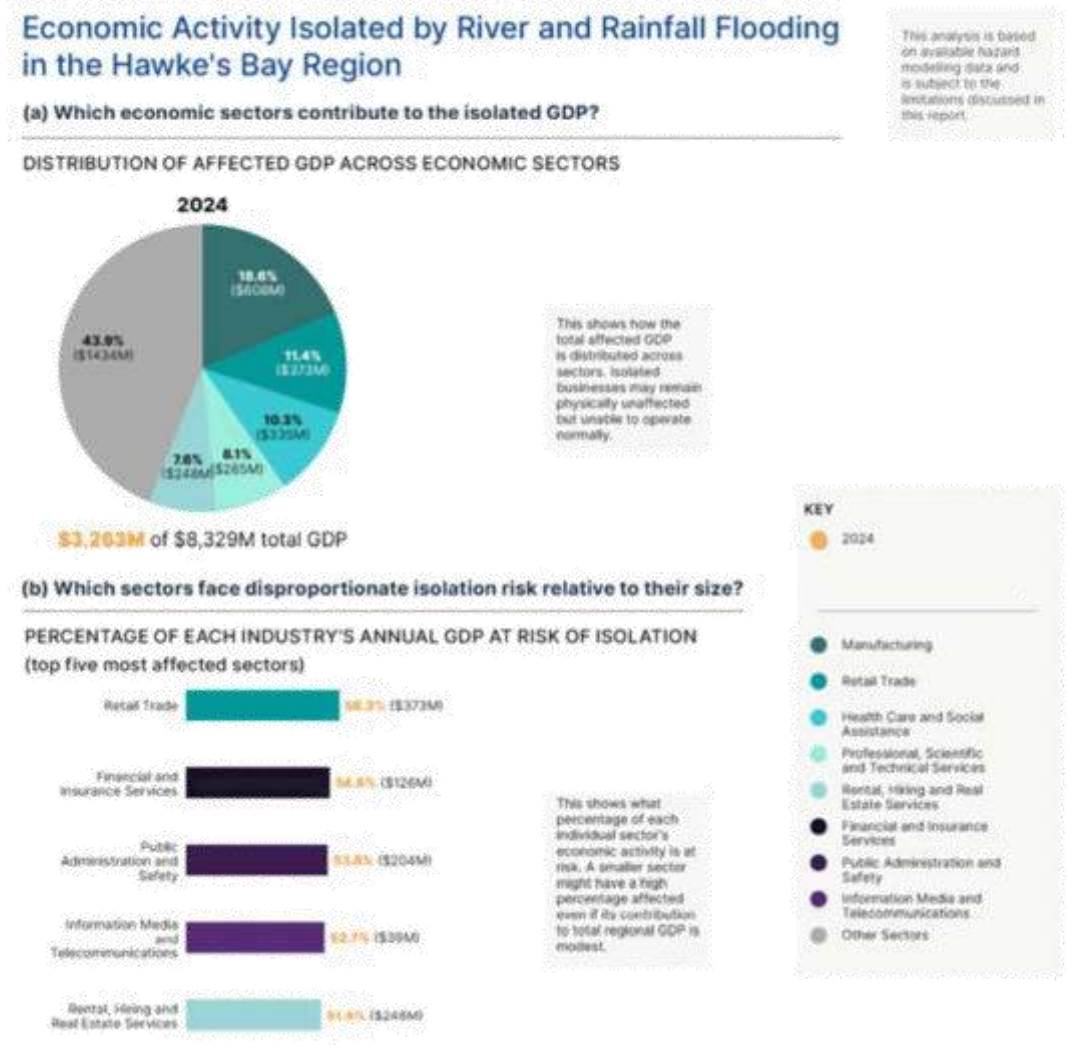

Economic Activity Isolated by River and Rainfall Flooding in the Hawke's Bay Region
This analysis is based on available hazard modelling data and is subject to the limitations discussed in this report.
(a) Which economic sectors contribute to the isolated GDP?
DISTRIBUTION OF AFFECTED GDP ACROSS ECONOMIC SECTORS
2024
18.6% ($608M)
11.4% ($373M)
10.3% ($335M)
8.1% ($265M)
7.6% ($246M)
43.9% ($1434M)
This shows how the total affected GDP is distributed across sectors. Isolated businesses may remain physically unaffected but unable to operate normally.
$3,203M of $8,329M total GDP
KEY
2024
Manufacturing
Retail Trade
Health Care and Social Assistance
Professional, Scientific and Technical Services
Rental, Hiring and Real Estate Services
Financial and Insurance Services
Public Administration and Safety
Information Media and Telecommunications
Other Sectors
(b) Which sectors face disproportionate isolation risk relative to their size?
PERCENTAGE OF EACH INDUSTRY'S ANNUAL GDP AT RISK OF ISOLATION
(top five most affected sectors)
Retail Trade
Financial and Insurance Services
Public Administration and Safety
Information Media and Telecommunications
Rental, Hiring and Real Estate Services
This shows what percentage of each individual sector's economic activity is at risk. A smaller sector might have a high percentage affected even if its contribution to total regional GDP is modest.

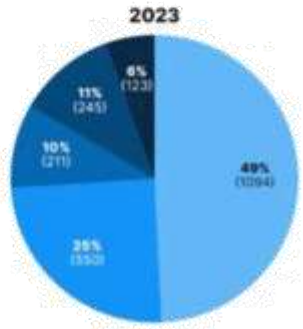
Figure A - 14.

Population Exposed to Landslides in the Hawke's Bay Region

This analysis is based on available hazard modelling data and is subject to the limitations discussed in this report.

(a) What is the population exposure?

EXPOSED POPULATION BY NZ DEPRIVATION INDEX



This shows how the total exposed population is distributed across socioeconomic groups. NZ Deprivation Index ranges from 1-2 (least deprived) to 9-10 (most deprived).

2,223 of 174,936 total residents

(b) Which groups face disproportionate exposure relative to their size?

PERCENTAGE OF EACH NZ DEPRIVATION GROUP THAT IS EXPOSED



This shows what percentage of people within each NZ deprivation group is at risk. This indicates which groups face the greatest relative impact.

KEY

- 2023
- NZDep 1-2
- NZDep 3-4
- NZDep 5-6
- NZDep 7-8
- NZDep 9-10

Figure A - 15.

URBAN INTELLIGENCE

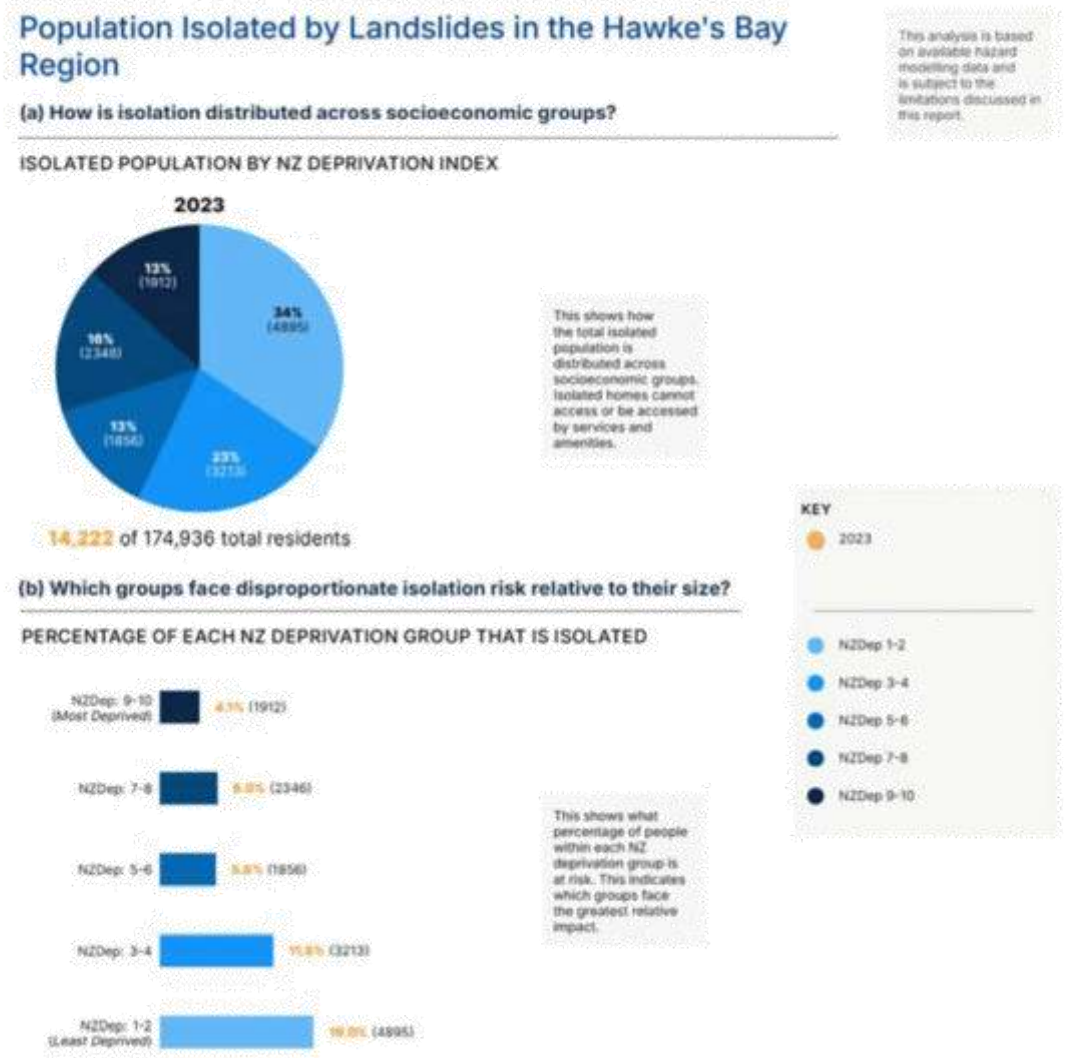

Population Isolated by Landslides in the Hawke's Bay Region
This analysis is based on available hazard modelling data and is subject to the limitations discussed in this report.
(a) How is isolation distributed across socioeconomic groups?
ISOLATED POPULATION BY NZ DEPRIVATION INDEX
2023
34% (4895)
23% (3213)
13% (1856)
16% (2346)
13% (1912)
This shows how the total isolated population is distributed across socioeconomic groups. Isolated homes cannot access or be accessed by services and amenities.
14,222 of 174,936 total residents
KEY
2023
NZDep 1-2
NZDep 3-4
NZDep 5-6
NZDep 7-8
NZDep 9-10
(b) Which groups face disproportionate isolation risk relative to their size?
PERCENTAGE OF EACH NZ DEPRIVATION GROUP THAT IS ISOLATED
NZDep: 9-10 (Most Deprived)
4.1% (1912)
NZDep: 7-8
6.8% (2346)
NZDep: 5-6
5.8% (1856)
NZDep: 3-4
15.8% (3213)
NZDep: 1-2 (Least Deprived)
19.0% (4895)
This shows what percentage of people within each NZ deprivation group is at risk. This indicates which groups face the greatest relative impact.

Figure A - 16.

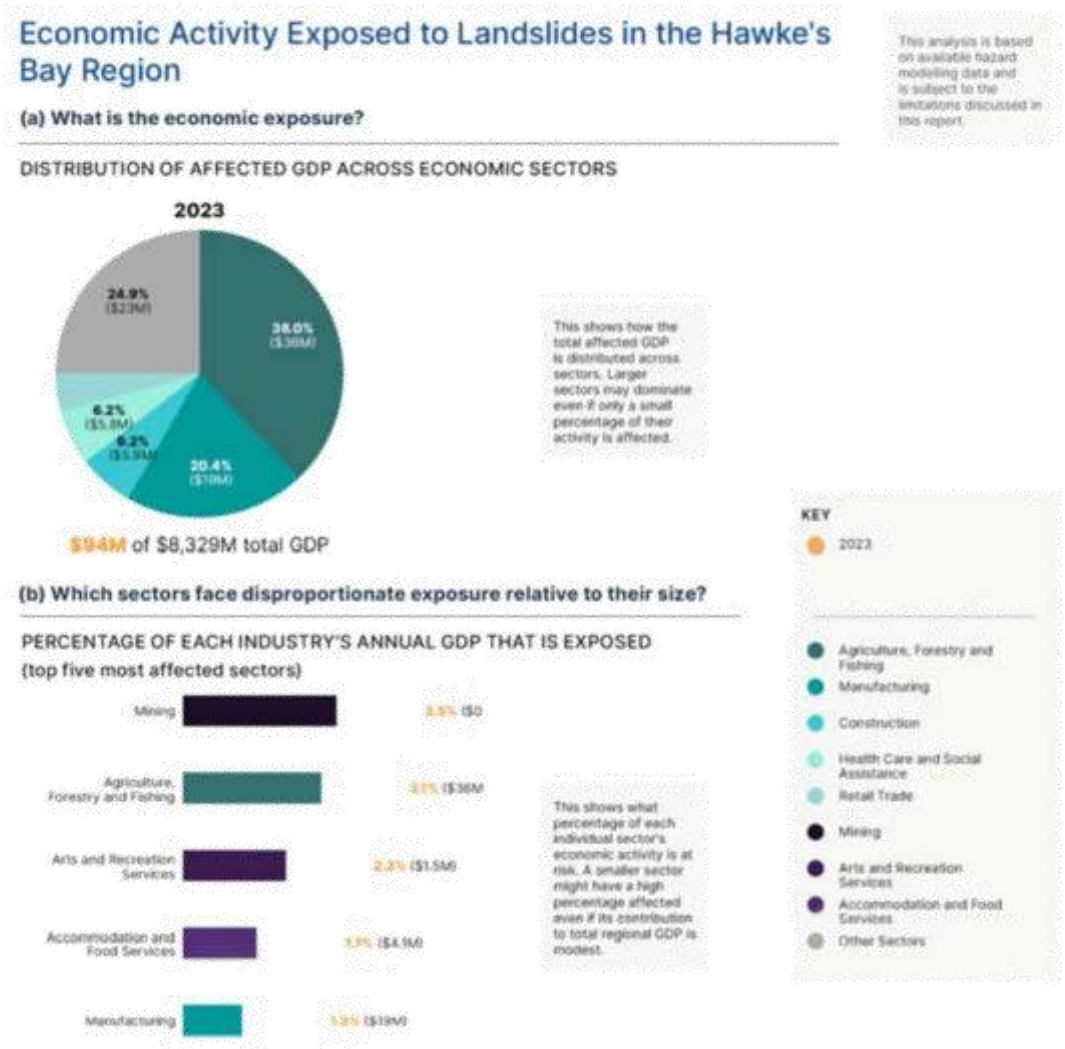

Economic Activity Exposed to Landslides in the Hawke's Bay Region
This analysis is based on available hazard modelling data and is subject to the limitations discussed in this report.
(a) What is the economic exposure?
DISTRIBUTION OF AFFECTED GDP ACROSS ECONOMIC SECTORS
2023
24.9%
($23M)
38.0%
($36M)
6.2%
($5.8M)
6.2%
($5.8M)
20.4%
($19M)
This shows how the total affected GDP is distributed across sectors. Larger sectors may dominate even if only a small percentage of their activity is affected.
$94M of $8,329M total GDP
KEY
2023
Agriculture, Forestry and Fishing
Manufacturing
Construction
Health Care and Social Assistance
Retail Trade
Mining
Arts and Recreation Services
Accommodation and Food Services
Other Sectors
(b) Which sectors face disproportionate exposure relative to their size?
PERCENTAGE OF EACH INDUSTRY'S ANNUAL GDP THAT IS EXPOSED
(top five most affected sectors)
Mining
3.5% ($0
Agriculture, Forestry and Fishing
3.1% ($36M
Arts and Recreation Services
2.3% ($1.5M)
Accommodation and Food Services
1.7% ($4.1M)
Manufacturing
1.3% ($19M)
This shows what percentage of each individual sector's economic activity is at risk. A smaller sector might have a high percentage affected even if its contribution to total regional GDP is modest.

Figure A - 17.

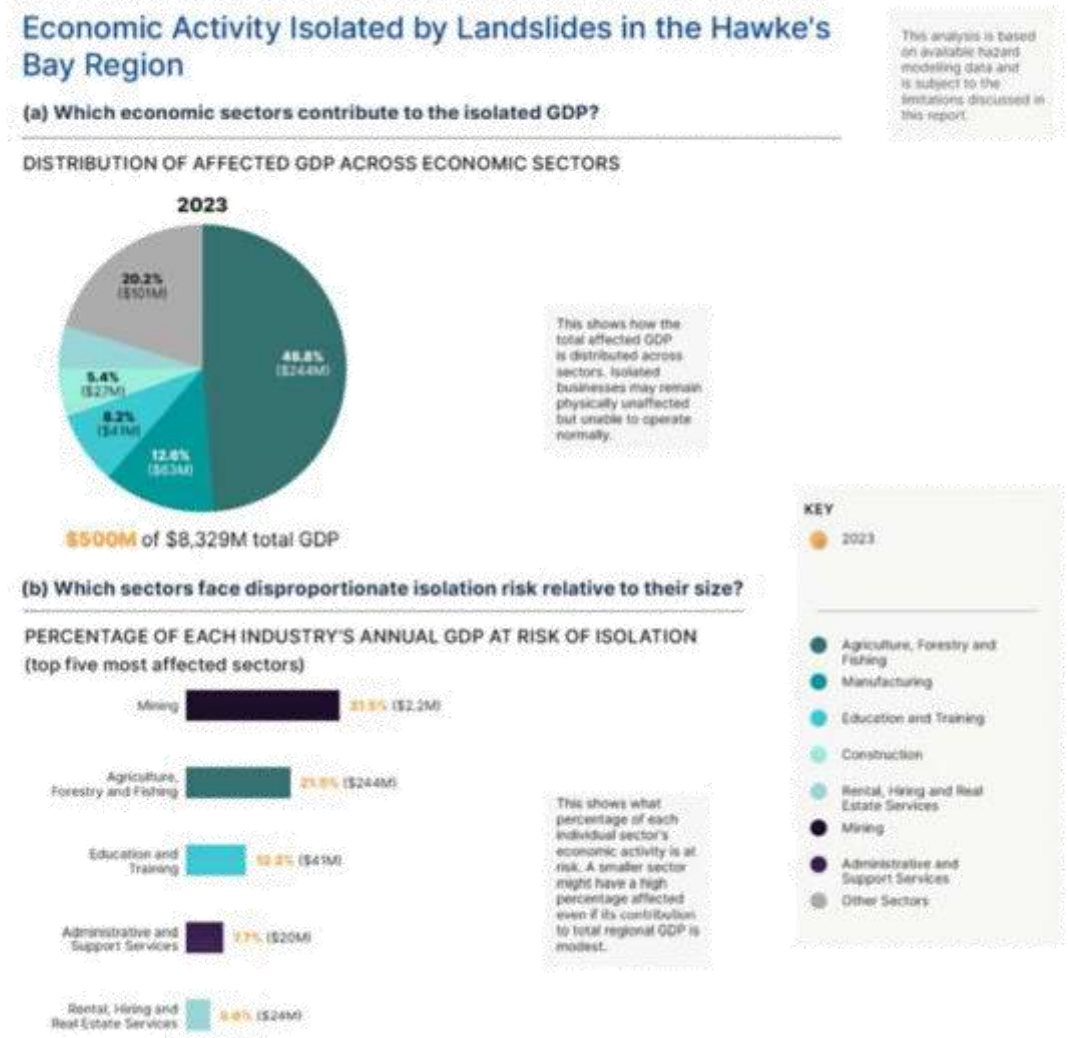

Economic Activity Isolated by Landslides in the Hawke's Bay Region
This analysis is based on available hazard modelling data and is subject to the limitations discussed in this report.
(a) Which economic sectors contribute to the isolated GDP?
DISTRIBUTION OF AFFECTED GDP ACROSS ECONOMIC SECTORS
2023
20.2% ($101M)
46.8% ($244M)
5.4% ($27M)
8.2% ($41M)
12.6% ($63M)
This shows how the total affected GDP is distributed across sectors. Isolated businesses may remain physically unaffected but unable to operate normally.
$500M of $8,329M total GDP
KEY
2023
Agriculture, Forestry and Fishing
Manufacturing
Education and Training
Construction
Rental, Hiring and Real Estate Services
Mining
Administrative and Support Services
Other Sectors
(b) Which sectors face disproportionate isolation risk relative to their size?
PERCENTAGE OF EACH INDUSTRY'S ANNUAL GDP AT RISK OF ISOLATION
(top five most affected sectors)
Mining
Agriculture, Forestry and Fishing
Education and Training
Administrative and Support Services
Rental, Hiring and Real Estate Services
This shows what percentage of each individual sector's economic activity is at risk. A smaller sector might have a high percentage affected even if its contribution to total regional GDP is modest.

Figure A - 18.

4.2 Central Hawke's Bay

Figure A - 19 to Figure A - 28 illustrates the risk to residents and economic activity in Central Hawke's Bay based on exposure to and isolation resulting from coastal flooding, river and rainfall flooding, and landslides. These visualisations include both direct exposure and potential isolation effects across different socioeconomic groups and industry sectors. The assessment methodology is detailed in Section 3 and Appendix A1.

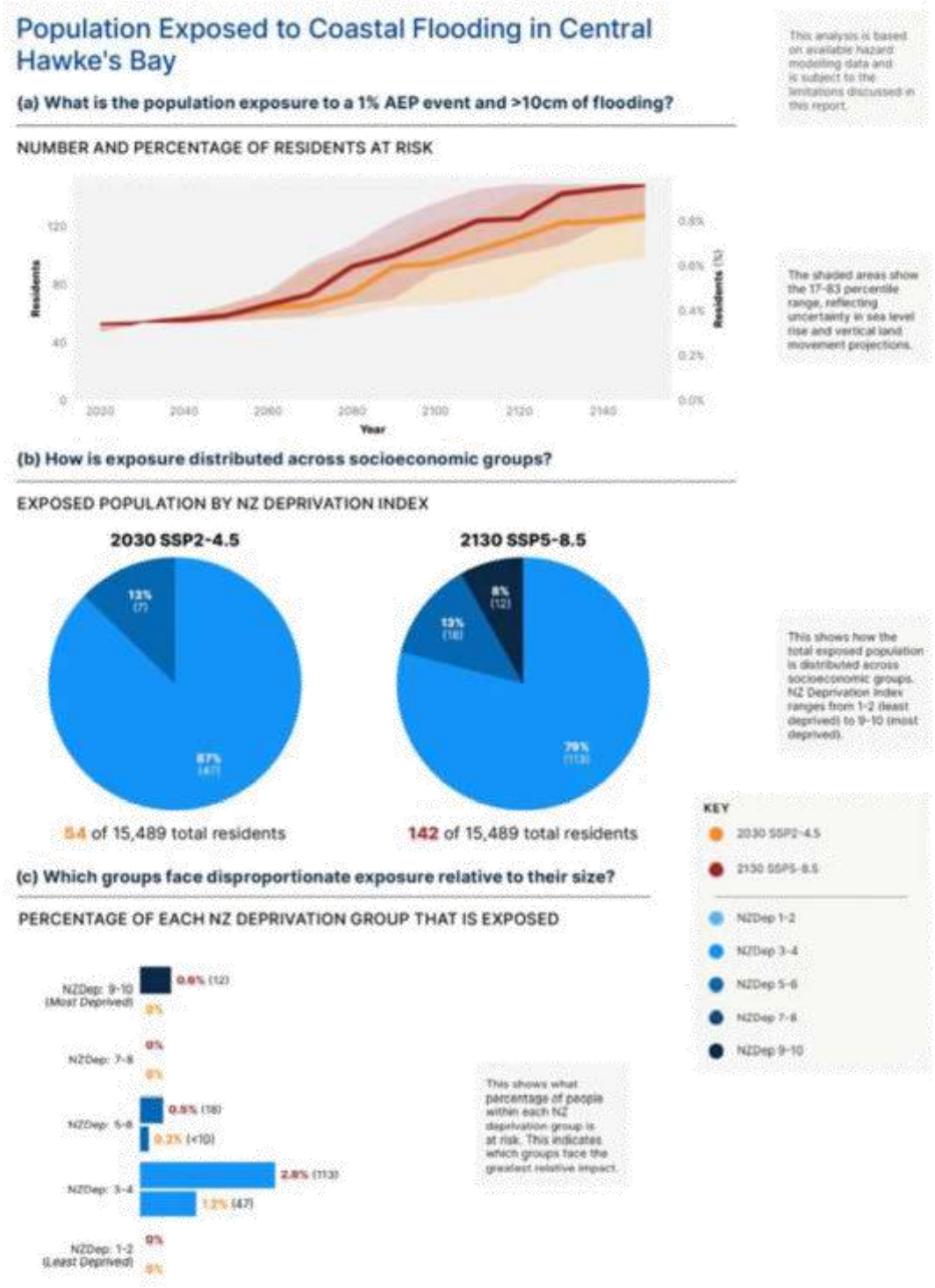

Population Exposed to Coastal Flooding in Central Hawke's Bay
This analysis is based on available hazard modelling data and is subject to the limitations discussed in this report.
(a) What is the population exposure to a 1% AEP event and >10cm of flooding?
NUMBER AND PERCENTAGE OF RESIDENTS AT RISK
Residents
Residents (%)
Year
The shaded areas show the 17-83 percentile range, reflecting uncertainty in sea level rise and vertical land movement projections.
(b) How is exposure distributed across socioeconomic groups?
EXPOSED POPULATION BY NZ DEPRIVATION INDEX
2030 SSP2-4.5
2130 SSP5-8.5
13%
87%
8%
13%
79%
54 of 15,489 total residents
142 of 15,489 total residents
This shows how the total exposed population is distributed across socioeconomic groups. NZ Deprivation index ranges from 1-2 (least deprived) to 9-10 (most deprived).
KEY
2030 SSP2-4.5
2130 SSP5-8.5
NZDep 1-2
NZDep 3-4
NZDep 5-6
NZDep 7-8
NZDep 9-10
(c) Which groups face disproportionate exposure relative to their size?
PERCENTAGE OF EACH NZ DEPRIVATION GROUP THAT IS EXPOSED
NZDep: 9-10 (Most Deprived)
0.6% (12)
NZDep: 7-8
0%
NZDep: 5-6
0.5% (18)
0.3% (<10)
NZDep: 3-4
2.8% (113)
1.2% (47)
NZDep: 1-2 (Least Deprived)
0%
This shows what percentage of people within each NZ deprivation group is at risk. This indicates which groups face the greatest relative impact.

Figure A - 19.

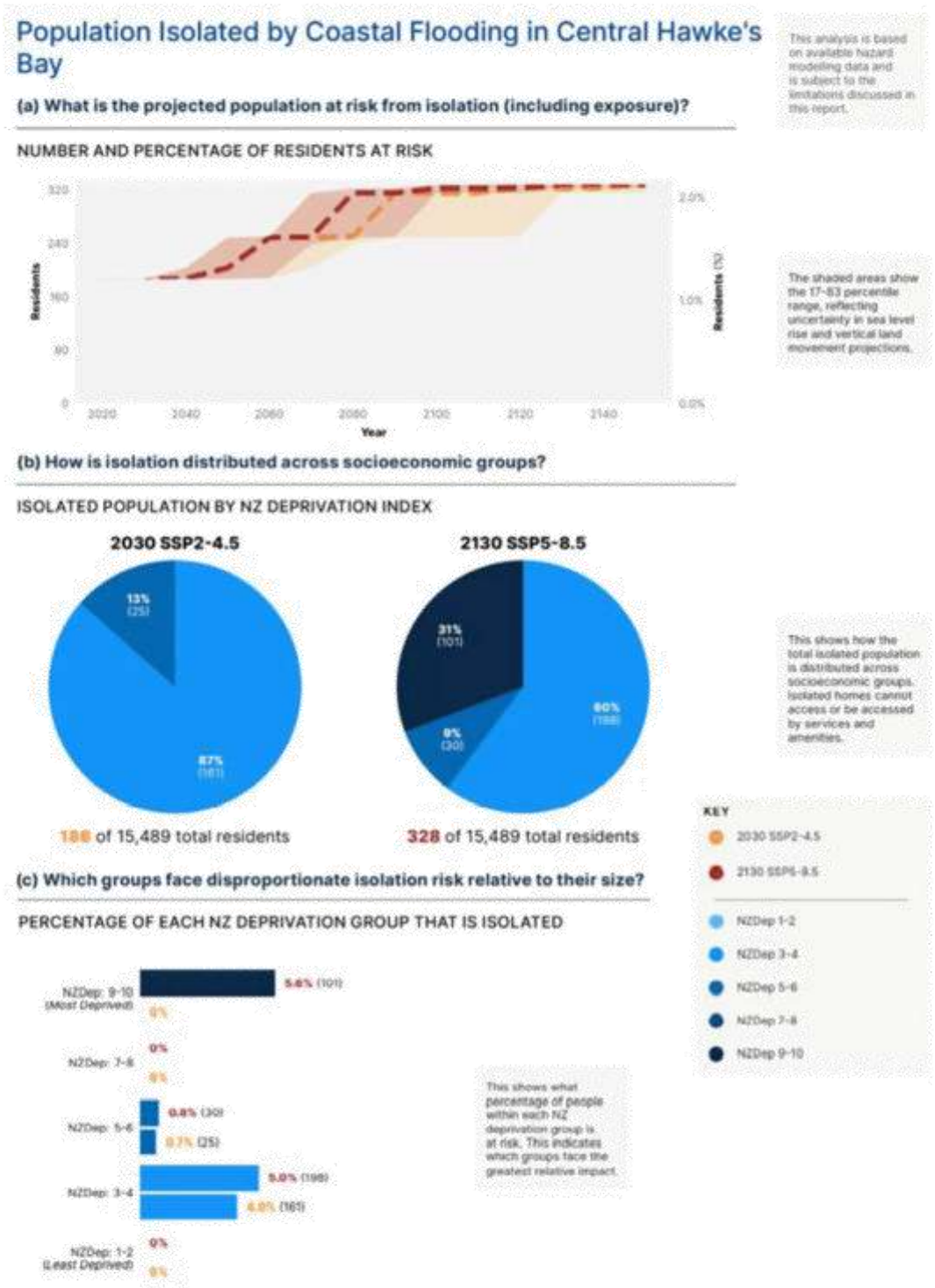


Figure A - 20.

URBAN INTELLIGENCE

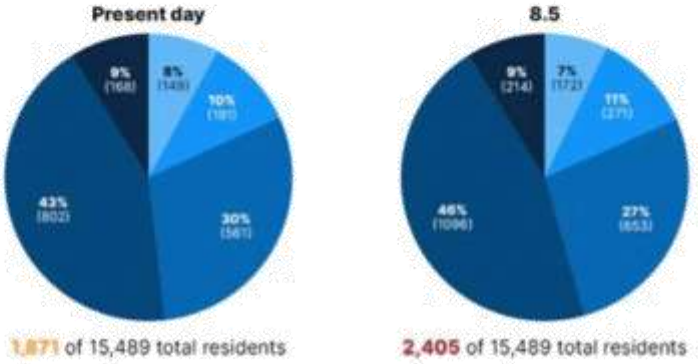
AROTAKE TŪRARU PANONITANGA Ā-ĀHUARANGI KI TE MATAU-A-MĀUI

Population Exposed to River and Rainfall Flooding in Central Hawke's Bay

This analysis is based on available hazard modelling data and is subject to the limitations discussed in this report.

(a) What is the population exposure to a 1% AEP event and >10cm of flooding?

EXPOSED POPULATION BY NZ DEPRIVATION INDEX



1,871 of 15,489 total residents

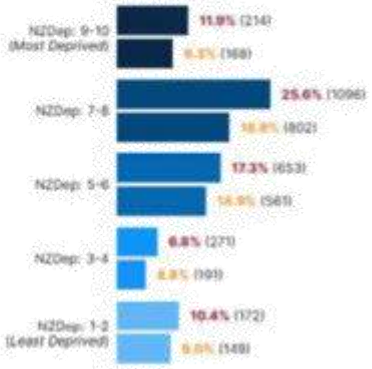
2,405 of 15,489 total residents

This shows how the total exposed population is distributed across socioeconomic groups. NZ Deprivation Index ranges from 1-2 (least deprived) to 9-10 (most deprived).

KEY
- Present day
- 8.5
- NZDep 1-2
- NZDep 3-4
- NZDep 5-6
- NZDep 7-8
- NZDep 9-10

(b) Which groups face disproportionate exposure relative to their size?

PERCENTAGE OF EACH NZ DEPRIVATION GROUP THAT IS EXPOSED



This shows what percentage of people within each NZ deprivation group is at risk. This indicates which groups face the greatest relative impact.

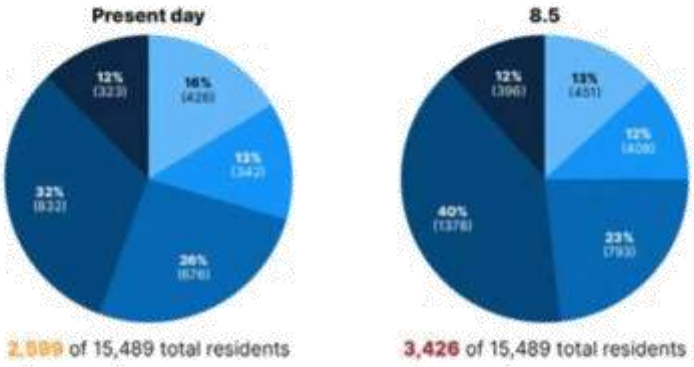
Figure A - 21.

Population Isolated by River and Rainfall Flooding in Central Hawke's Bay

This analysis is based on available hazard modelling data and is subject to the limitations discussed in this report.

(a) How is isolation distributed across socioeconomic groups?

ISOLATED POPULATION BY NZ DEPRIVATION INDEX



2,599 of 15,489 total residents

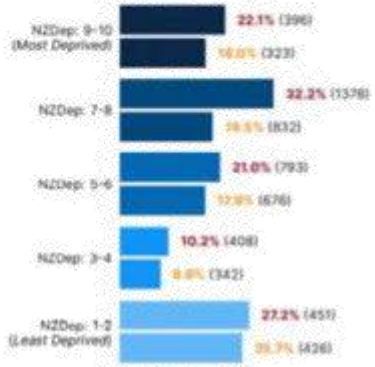
3,426 of 15,489 total residents

This shows how the total isolated population is distributed across socioeconomic groups. Isolated homes cannot access or be accessed by services and amenities.

KEY
- Present day
- 8.5
- NZDep 1-2
- NZDep 3-4
- NZDep 5-6
- NZDep 7-8
- NZDep 9-10

(b) Which groups face disproportionate isolation risk relative to their size?

PERCENTAGE OF EACH NZ DEPRIVATION GROUP THAT IS ISOLATED



This shows what percentage of people within each NZ deprivation group is at risk. This indicates which groups face the greatest relative impact.

Figure A - 22.

URBAN INTELLIGENCE

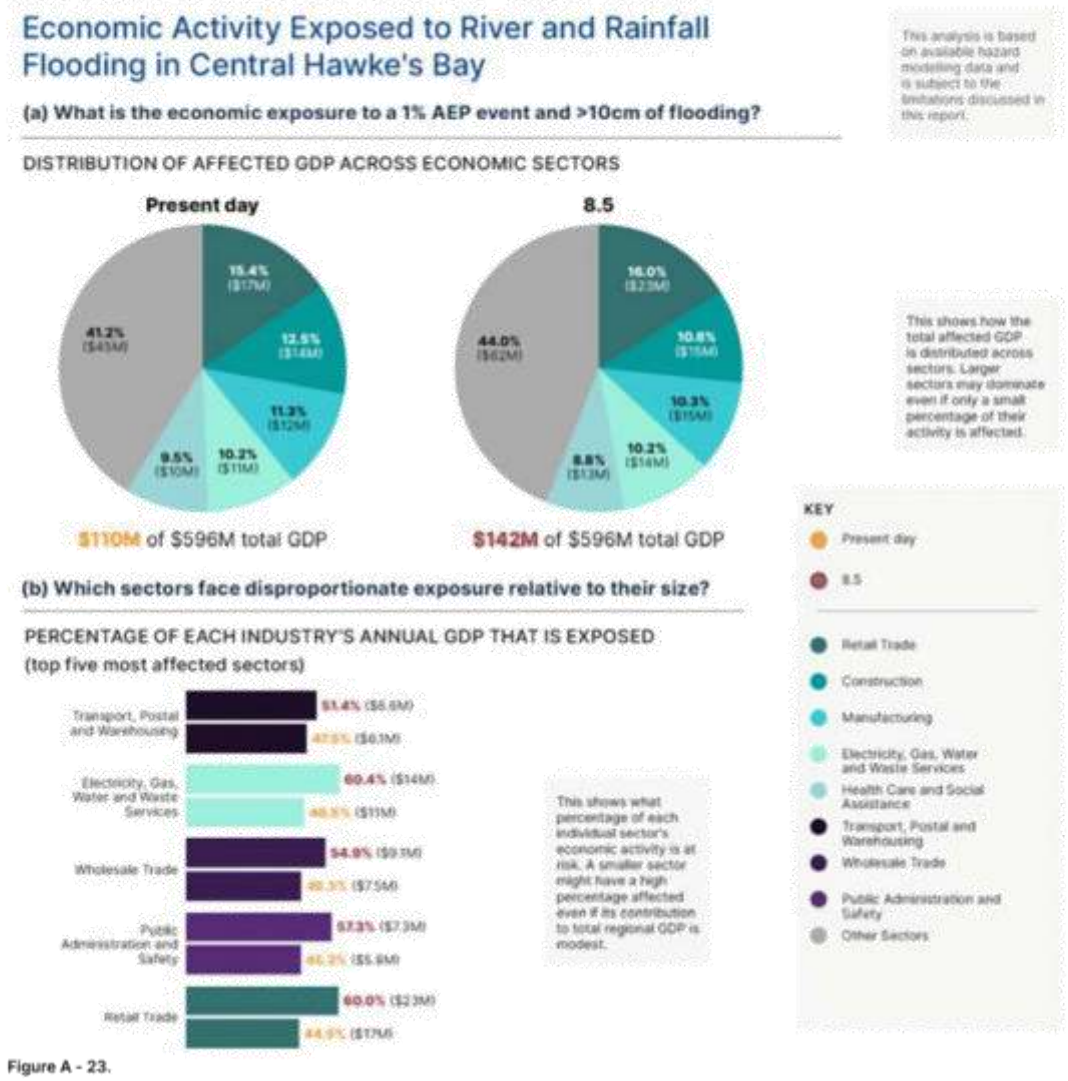

Economic Activity Exposed to River and Rainfall Flooding in Central Hawke's Bay
(a) What is the economic exposure to a 1% AEP event and >10cm of flooding?
This analysis is based on available hazard modelling data and is subject to the limitations discussed in this report.
DISTRIBUTION OF AFFECTED GDP ACROSS ECONOMIC SECTORS
Present day
8.5
15.4% ($17M)
12.5% ($14M)
11.3% ($12M)
10.2% ($11M)
9.5% ($10M)
41.2% ($45M)
16.0% ($23M)
10.8% ($15M)
10.3% ($15M)
10.2% ($14M)
8.8% ($13M)
44.0% ($62M)
This shows how the total affected GDP is distributed across sectors. Larger sectors may dominate even if only a small percentage of their activity is affected.
$110M of $596M total GDP
$142M of $596M total GDP
KEY
Present day
8.5
Retail Trade
Construction
Manufacturing
Electricity, Gas, Water and Waste Services
Health Care and Social Assistance
Transport, Postal and Warehousing
Wholesale Trade
Public Administration and Safety
Other Sectors
(b) Which sectors face disproportionate exposure relative to their size?
PERCENTAGE OF EACH INDUSTRY'S ANNUAL GDP THAT IS EXPOSED
(top five most affected sectors)
Transport, Postal and Warehousing
51.4% ($6.6M)
47.5% ($6.1M)
Electricity, Gas, Water and Waste Services
60.4% ($14M)
48.3% ($11M)
Wholesale Trade
54.9% ($9.1M)
45.3% ($7.5M)
Public Administration and Safety
57.3% ($7.3M)
43.3% ($5.6M)
Retail Trade
60.0% ($2.3M)
44.9% ($17M)
This shows what percentage of each individual sector's economic activity is at risk. A smaller sector might have a high percentage affected even if its contribution to total regional GDP is modest.

Figure A - 23.

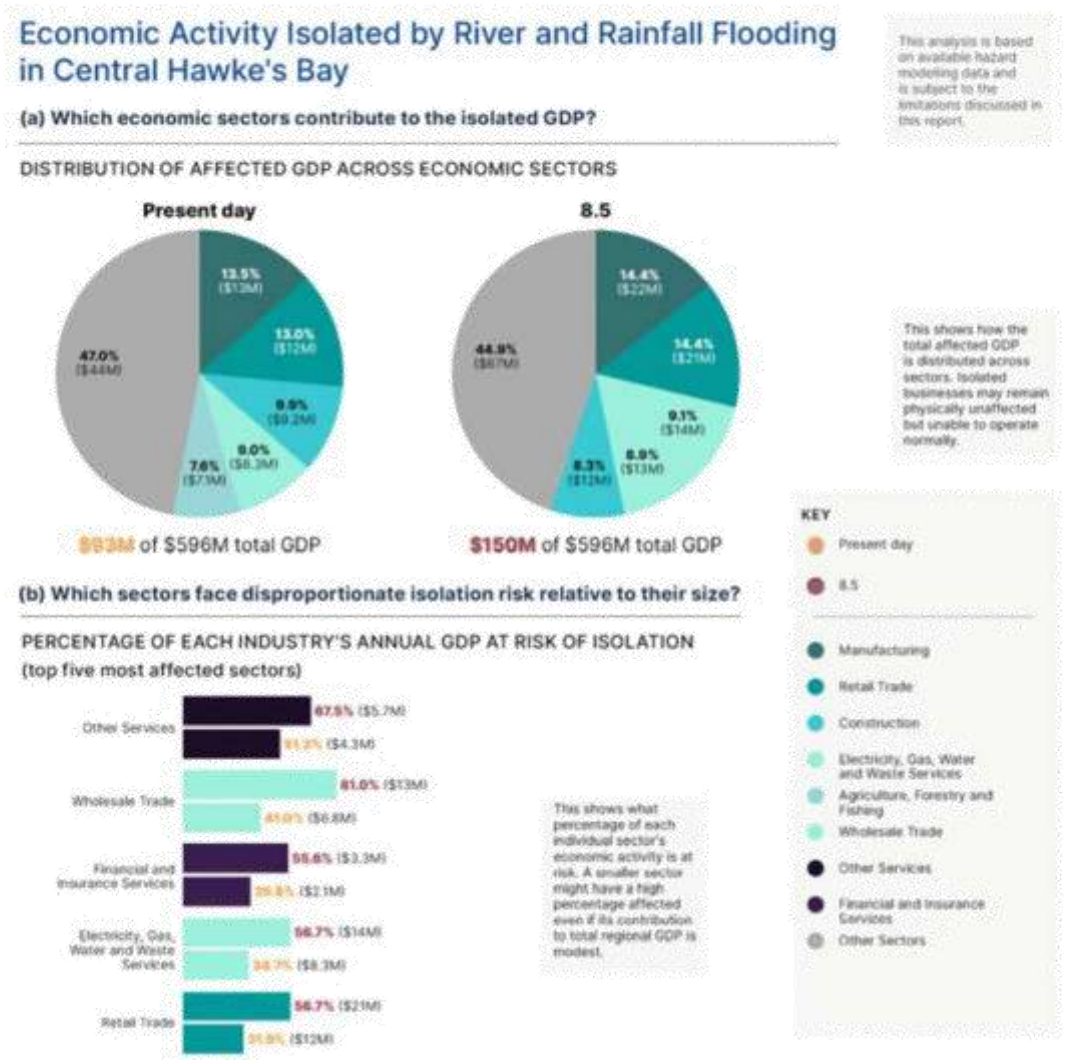

Economic Activity Isolated by River and Rainfall Flooding in Central Hawke's Bay
This analysis is based on available hazard modelling data and is subject to the limitations discussed in this report.
(a) Which economic sectors contribute to the isolated GDP?
DISTRIBUTION OF AFFECTED GDP ACROSS ECONOMIC SECTORS
Present day
8.5
13.5% ($13M)
13.0% ($12M)
8.9% ($9.2M)
9.0% ($8.3M)
7.6% ($7.1M)
47.0% ($44M)
14.4% ($22M)
14.4% ($21M)
9.1% ($14M)
8.9% ($13M)
8.3% ($12M)
44.9% ($67M)
This shows how the total affected GDP is distributed across sectors. Isolated businesses may remain physically unaffected but unable to operate normally.
$93M of $596M total GDP
$150M of $596M total GDP
KEY
Present day
8.5
Manufacturing
Retail Trade
Construction
Electricity, Gas, Water and Waste Services
Agriculture, Forestry and Fishing
Wholesale Trade
Other Services
Financial and Insurance Services
Other Sectors
(b) Which sectors face disproportionate isolation risk relative to their size?
PERCENTAGE OF EACH INDUSTRY'S ANNUAL GDP AT RISK OF ISOLATION
(top five most affected sectors)
Other Services
67.5% ($5.7M)
51.3% ($4.3M)
Wholesale Trade
61.0% ($13M)
41.0% ($6.8M)
Financial and Insurance Services
55.6% ($3.3M)
35.5% ($2.1M)
Electricity, Gas, Water and Waste Services
56.7% ($14M)
34.7% ($8.3M)
Retail Trade
56.7% ($21M)
31.9% ($12M)
This shows what percentage of each individual sector's economic activity is at risk. A smaller sector might have a high percentage affected even if its contribution to total regional GDP is modest.

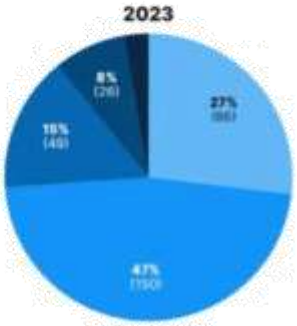
Figure A - 24.

Population Exposed to Landslides in Central Hawke's Bay

This analysis is based on available hazard modelling data and is subject to the limitations discussed in this report.

(a) What is the population exposure?

EXPOSED POPULATION BY NZ DEPRIVATION INDEX



318 of 15,489 total residents

This shows how the total exposed population is distributed across socioeconomic groups. NZ Deprivation Index ranges from 1-2 (least deprived) to 9-10 (most deprived).



(b) Which groups face disproportionate exposure relative to their size?

PERCENTAGE OF EACH NZ DEPRIVATION GROUP THAT IS EXPOSED



This shows what percentage of people within each NZ deprivation group is at risk. This indicates which groups face the greatest relative impact.

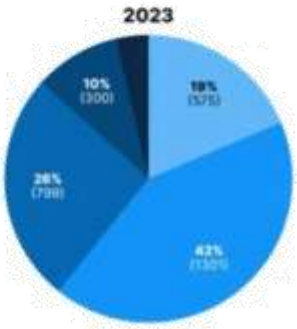
Figure A - 25.

Population Isolated by Landslides in Central Hawke's Bay

This analysis is based on available hazard modelling data and is subject to the limitations discussed in this report.

(a) How is isolation distributed across socioeconomic groups?

ISOLATED POPULATION BY NZ DEPRIVATION INDEX

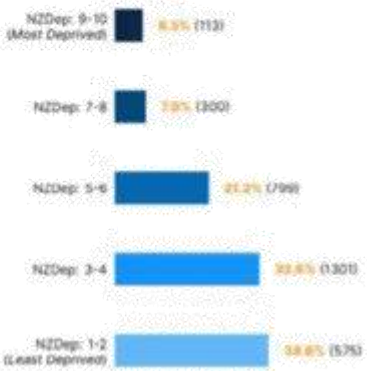


This shows how the total isolated population is distributed across socioeconomic groups. Isolated homes cannot access or be accessed by services and amenities.

3,087 of 15,489 total residents

(b) Which groups face disproportionate isolation risk relative to their size?

PERCENTAGE OF EACH NZ DEPRIVATION GROUP THAT IS ISOLATED



This shows what percentage of people within each NZ deprivation group is at risk. This indicates which groups face the greatest relative impact.

KEY

- 2023
- NZDep 1-2
- NZDep 3-4
- NZDep 5-6
- NZDep 7-8
- NZDep 9-10

Figure A - 26.

URBAN INTELLIGENCE

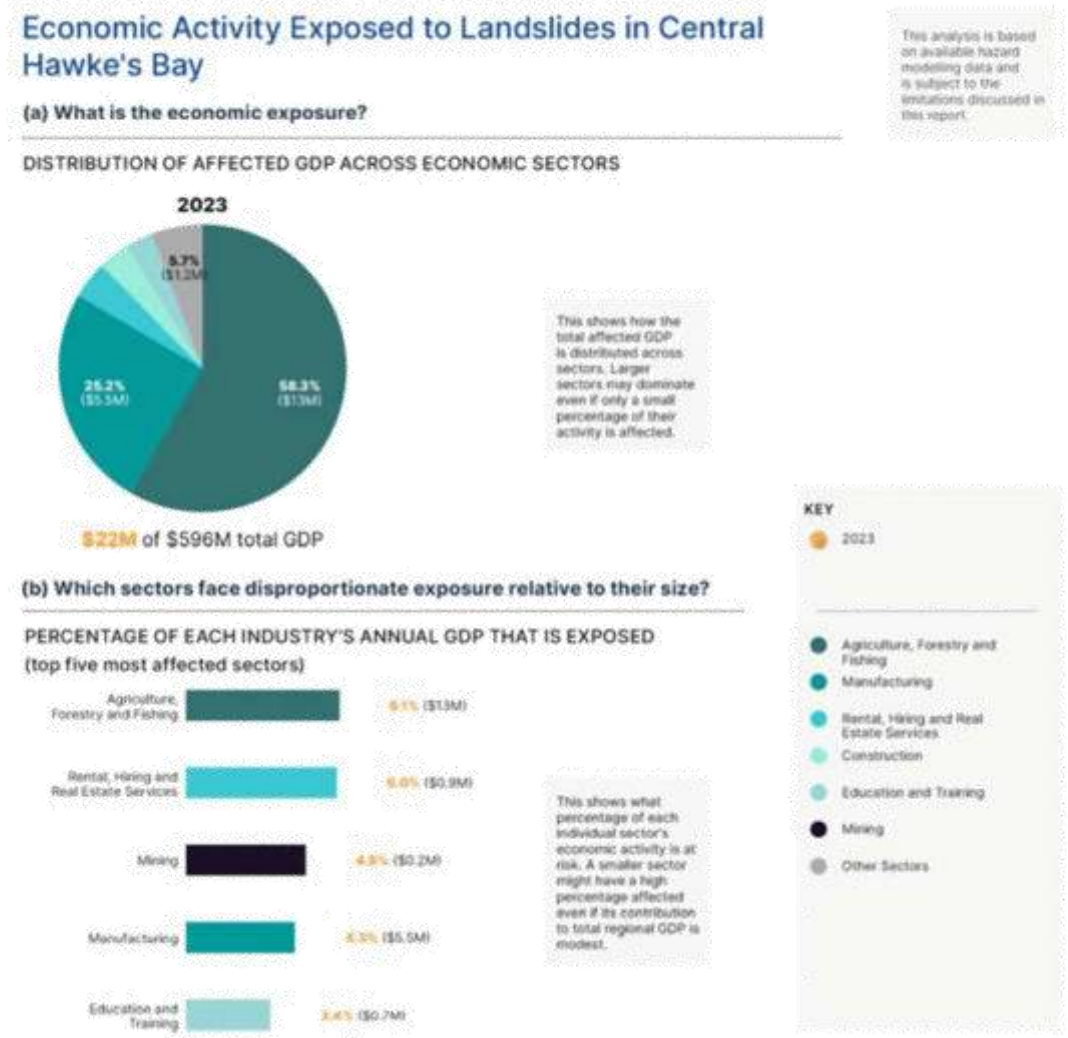

Economic Activity Exposed to Landslides in Central Hawke's Bay
This analysis is based on available hazard modelling data and is subject to the limitations discussed in this report.
(a) What is the economic exposure?
DISTRIBUTION OF AFFECTED GDP ACROSS ECONOMIC SECTORS
2023
5.7% ($1.2M)
26.2% ($5.5M)
68.1% ($13M)
This shows how the total affected GDP is distributed across sectors. Larger sectors may dominate even if only a small percentage of their activity is affected.
$22M of $596M total GDP
KEY
2023
Agriculture, Forestry and Fishing
Manufacturing
Rental, Hiring and Real Estate Services
Construction
Education and Training
Mining
Other Sectors
(b) Which sectors face disproportionate exposure relative to their size?
PERCENTAGE OF EACH INDUSTRY'S ANNUAL GDP THAT IS EXPOSED
(top five most affected sectors)
Agriculture, Forestry and Fishing
6.1% ($13M)
Rental, Hiring and Real Estate Services
6.0% ($0.9M)
Mining
4.9% ($0.2M)
Manufacturing
3.3% ($5.5M)
Education and Training
3.4% ($0.7M)
This shows what percentage of each individual sector's economic activity is at risk. A smaller sector might have a high percentage affected even if its contribution to total regional GDP is modest.

Figure A - 27.

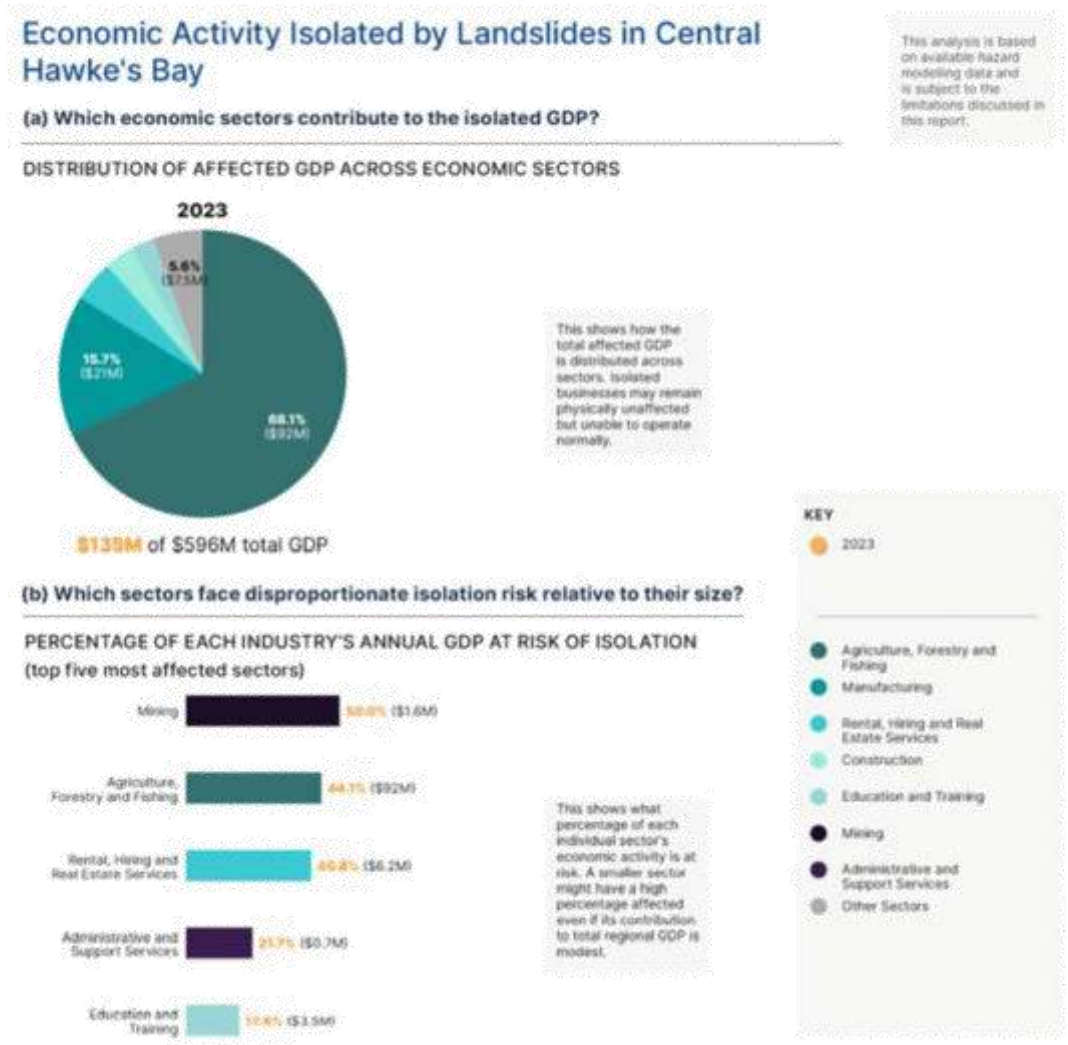

Economic Activity Isolated by Landslides in Central Hawke's Bay
This analysis is based on available hazard modelling data and is subject to the limitations discussed in this report.
(a) Which economic sectors contribute to the isolated GDP?
DISTRIBUTION OF AFFECTED GDP ACROSS ECONOMIC SECTORS
2023
5.6% ($7.5M)
15.7% ($21M)
68.1% ($92M)
This shows how the total affected GDP is distributed across sectors. Isolated businesses may remain physically unaffected but unable to operate normally.
$139M of $596M total GDP
KEY
2023
Agriculture, Forestry and Fishing
Manufacturing
Rental, Hiring and Real Estate Services
Construction
Education and Training
Mining
Administrative and Support Services
Other Sectors
(b) Which sectors face disproportionate isolation risk relative to their size?
PERCENTAGE OF EACH INDUSTRY'S ANNUAL GDP AT RISK OF ISOLATION
(top five most affected sectors)
Mining
Agriculture, Forestry and Fishing
44.1% ($92M)
Rental, Hiring and Real Estate Services
Administrative and Support Services
Education and Training
This shows what percentage of each individual sector's economic activity is at risk. A smaller sector might have a high percentage affected even if its contribution to total regional GDP is modest.

Figure A - 28.

4.3 Hastings District

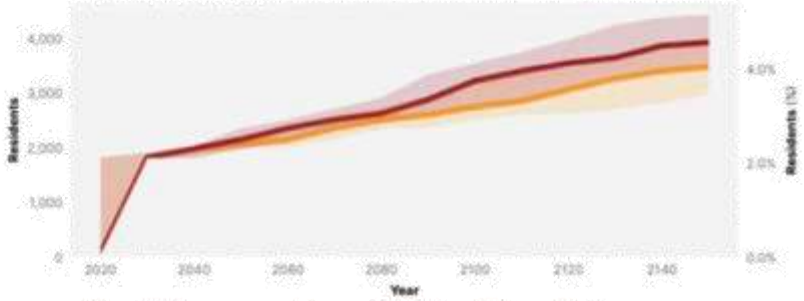
Figure A - 29 to Figure A - 40 illustrates the risk to residents and economic activity in Hastings based on exposure to and isolation resulting from coastal flooding, river and rainfall flooding, and landslides. These visualisations include both direct exposure and potential isolation effects across different socioeconomic groups and industry sectors. The assessment methodology is detailed in Section 3 and Appendix A1.

Population Exposed to Coastal Flooding in Hastings

This analysis is based on available hazard modelling data and is subject to the limitations discussed in this report.

(a) What is the population exposure to a 1% AEP event and >10cm of flooding?

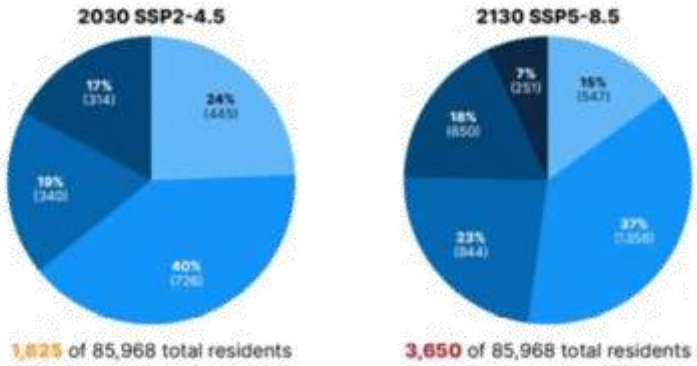
NUMBER AND PERCENTAGE OF RESIDENTS AT RISK



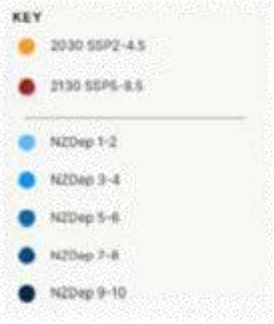
The shaded areas show the 17–83 percentile range, reflecting uncertainty in sea level rise and vertical land movement projections.

(b) How is exposure distributed across socioeconomic groups?

EXPOSED POPULATION BY NZ DEPRIVATION INDEX

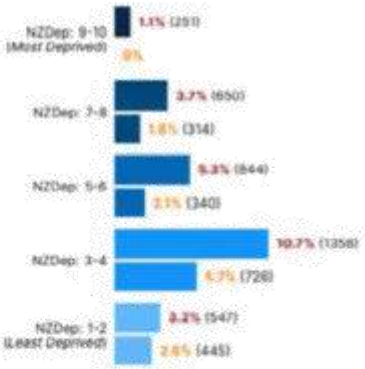


This shows how the total exposed population is distributed across socioeconomic groups. NZ Deprivation Index ranges from 1-2 (least deprived) to 9-10 (most deprived).



(c) Which groups face disproportionate exposure relative to their size?

PERCENTAGE OF EACH NZ DEPRIVATION GROUP THAT IS EXPOSED



This shows what percentage of people within each NZ deprivation group is at risk. This indicates which groups face the greatest relative impact.

Figure A - 29.

URBAN INTELLIGENCE

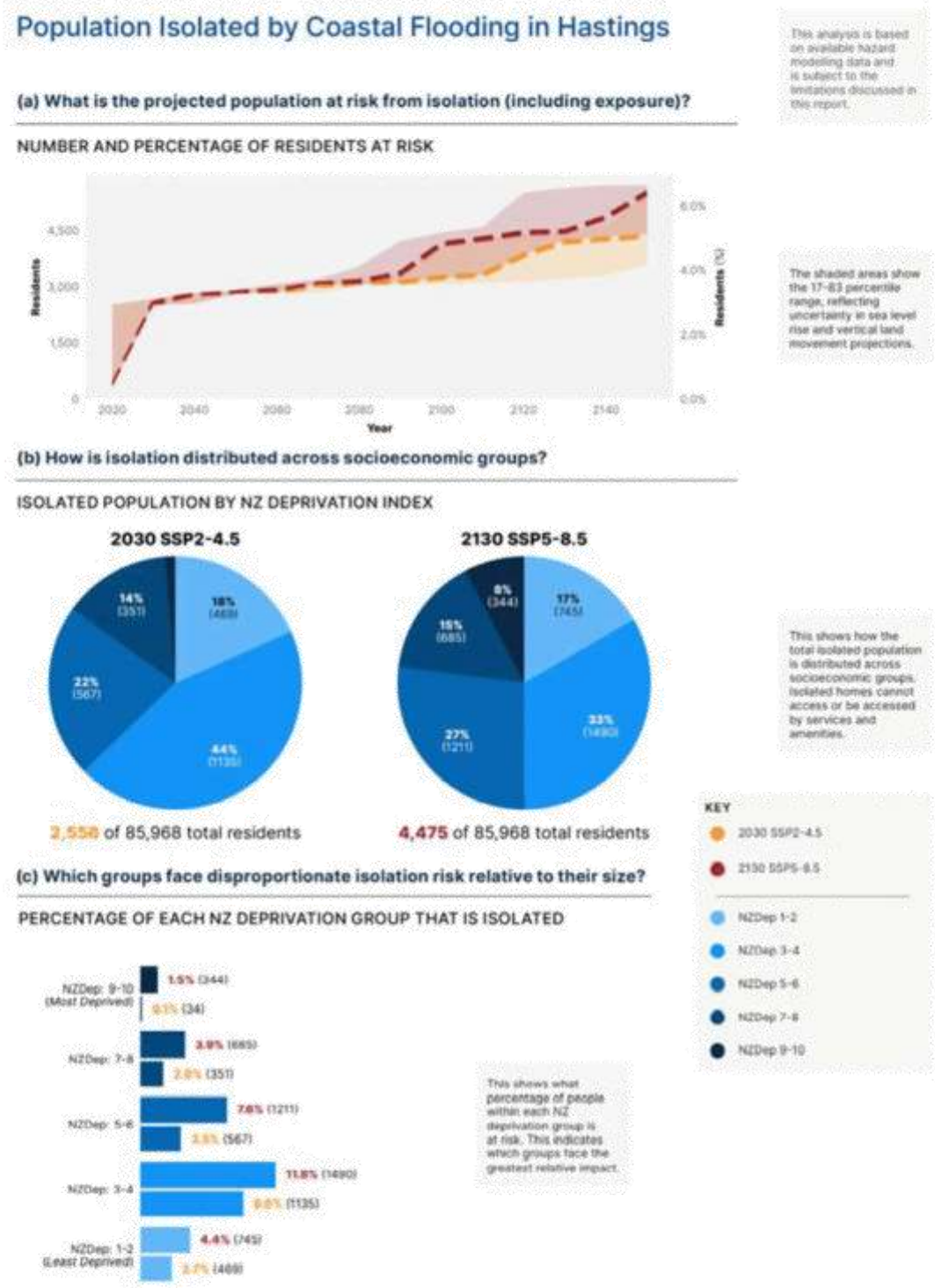

Population Isolated by Coastal Flooding in Hastings
This analysis is based on available hazard modelling data and is subject to the limitations discussed in this report.
(a) What is the projected population at risk from isolation (including exposure)?
NUMBER AND PERCENTAGE OF RESIDENTS AT RISK
Residents
Residents (%)
Year
The shaded areas show the 17-83 percentile range, reflecting uncertainty in sea level rise and vertical land movement projections.
(b) How is isolation distributed across socioeconomic groups?
ISOLATED POPULATION BY NZ DEPRIVATION INDEX
2030 SSP2-4.5
2130 SSP5-8.5
2,550 of 85,968 total residents
4,475 of 85,968 total residents
This shows how the total isolated population is distributed across socioeconomic groups. Isolated homes cannot access or be accessed by services and amenities.
KEY
2030 SSP2-4.5
2130 SSP5-8.5
NZDep 1-2
NZDep 3-4
NZDep 5-6
NZDep 7-8
NZDep 9-10
(c) Which groups face disproportionate isolation risk relative to their size?
PERCENTAGE OF EACH NZ DEPRIVATION GROUP THAT IS ISOLATED
NZDep: 9-10 (Most Deprived)
NZDep: 7-8
NZDep: 5-6
NZDep: 3-4
NZDep: 1-2 (Least Deprived)
This shows what percentage of people within each NZ deprivation group is at risk. This indicates which groups face the greatest relative impact.

Figure A - 30.

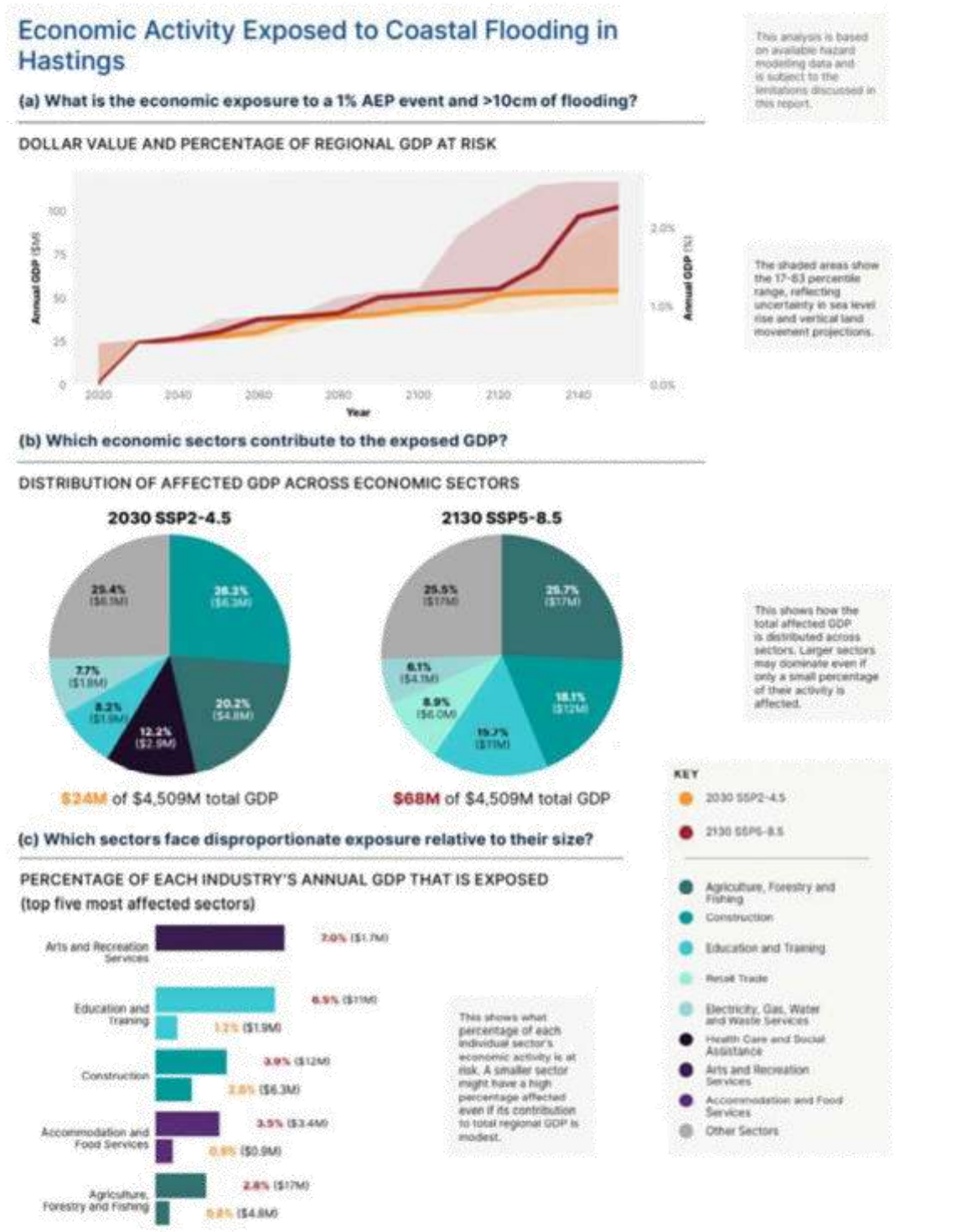

Economic Activity Exposed to Coastal Flooding in Hastings
This analysis is based on available hazard modelling data and is subject to the limitations discussed in this report.
(a) What is the economic exposure to a 1% AEP event and >10cm of flooding?
DOLLAR VALUE AND PERCENTAGE OF REGIONAL GDP AT RISK
Annual GDP ($M)
Annual GDP (%)
Year
The shaded areas show the 17-83 percentile range, reflecting uncertainty in sea level rise and vertical land movement projections.
(b) Which economic sectors contribute to the exposed GDP?
DISTRIBUTION OF AFFECTED GDP ACROSS ECONOMIC SECTORS
2030 SSP2-4.5
2130 SSP5-8.5
$24M of $4,509M total GDP
$68M of $4,509M total GDP
This shows how the total affected GDP is distributed across sectors. Larger sectors may dominate even if only a small percentage of their activity is affected.
KEY
2030 SSP2-4.5
2130 SSP5-8.5
Agriculture, Forestry and Fishing
Construction
Education and Training
Retail Trade
Electricity, Gas, Water and Waste Services
Health Care and Social Assistance
Arts and Recreation Services
Accommodation and Food Services
Other Sectors
(c) Which sectors face disproportionate exposure relative to their size?
PERCENTAGE OF EACH INDUSTRY'S ANNUAL GDP THAT IS EXPOSED
(top five most affected sectors)
Arts and Recreation Services
Education and Training
Construction
Accommodation and Food Services
Agriculture, Forestry and Fishing
This shows what percentage of each individual sector's economic activity is at risk. A smaller sector might have a high percentage affected even if its contribution to total regional GDP is modest.

Figure A - 31.

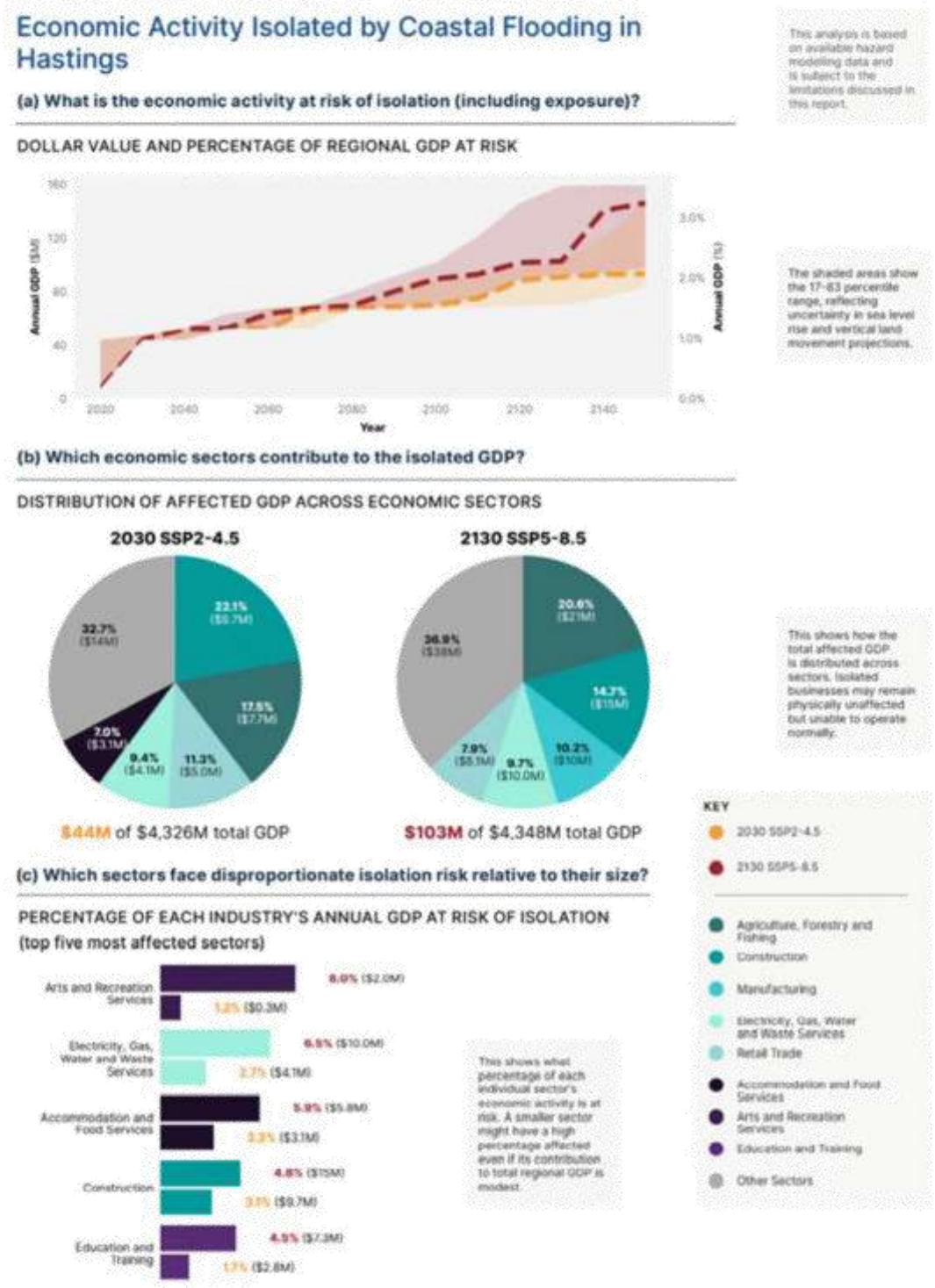

Economic Activity Isolated by Coastal Flooding in Hastings
This analysis is based on available hazard modelling data and is subject to the limitations discussed in this report.
(a) What is the economic activity at risk of isolation (including exposure)?
DOLLAR VALUE AND PERCENTAGE OF REGIONAL GDP AT RISK
Annual GDP ($M)
Annual GDP (%)
Year
The shaded areas show the 17-83 percentile range, reflecting uncertainty in sea level rise and vertical land movement projections.
(b) Which economic sectors contribute to the isolated GDP?
DISTRIBUTION OF AFFECTED GDP ACROSS ECONOMIC SECTORS
2030 SSP2-4.5
2130 SSP5-8.5
$44M of $4,326M total GDP
$103M of $4,348M total GDP
This shows how the total affected GDP is distributed across sectors. Isolated businesses may remain physically unaffected but unable to operate normally.
KEY
2030 SSP2-4.5
2130 SSP5-8.5
Agriculture, Forestry and Fishing
Construction
Manufacturing
Electricity, Gas, Water and Waste Services
Retail Trade
Accommodation and Food Services
Arts and Recreation Services
Education and Training
Other Sectors
(c) Which sectors face disproportionate isolation risk relative to their size?
PERCENTAGE OF EACH INDUSTRY'S ANNUAL GDP AT RISK OF ISOLATION
(top five most affected sectors)
Arts and Recreation Services
Electricity, Gas, Water and Waste Services
Accommodation and Food Services
Construction
Education and Training
This shows what percentage of each individual sector's economic activity is at risk. A smaller sector might have a high percentage affected even if its contribution to total regional GDP is modest.

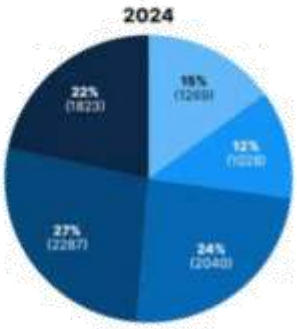
Figure A - 32.

Population Exposed to River and Rainfall Flooding in Hastings

This analysis is based on available hazard modelling data and is subject to the limitations discussed in this report.

(a) What is the population exposure to a 2% AEP event and >10cm of flooding?

EXPOSED POPULATION BY NZ DEPRIVATION INDEX

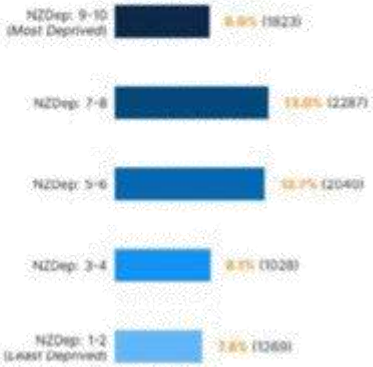


8,447 of 85,968 total residents

This shows how the total exposed population is distributed across socioeconomic groups. NZ Deprivation Index ranges from 1-2 (least deprived) to 9-10 (most deprived).

(b) Which groups face disproportionate exposure relative to their size?

PERCENTAGE OF EACH NZ DEPRIVATION GROUP THAT IS EXPOSED



This shows what percentage of people within each NZ deprivation group is at risk. This indicates which groups face the greatest relative impact.

KEY

- 2024
- NZDep 1-2
- NZDep 3-4
- NZDep 5-6
- NZDep 7-8
- NZDep 9-10

Figure A - 33.

URBAN INTELLIGENCE

AROTAKE TŪRARU PANONITANGA Ā-ĀHUARANGI KI TE MATAU-A-MĀUI

Population Isolated by River and Rainfall Flooding in Hastings

This analysis is based on available hazard modelling data and is subject to the limitations discussed in this report.

(a) How is isolation distributed across socioeconomic groups?

ISOLATED POPULATION BY NZ DEPRIVATION INDEX



(b) Which groups face disproportionate isolation risk relative to their size?

PERCENTAGE OF EACH NZ DEPRIVATION GROUP THAT IS ISOLATED

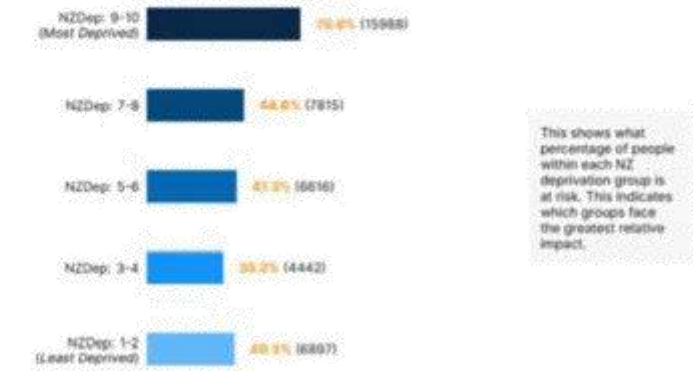


Figure A - 34.

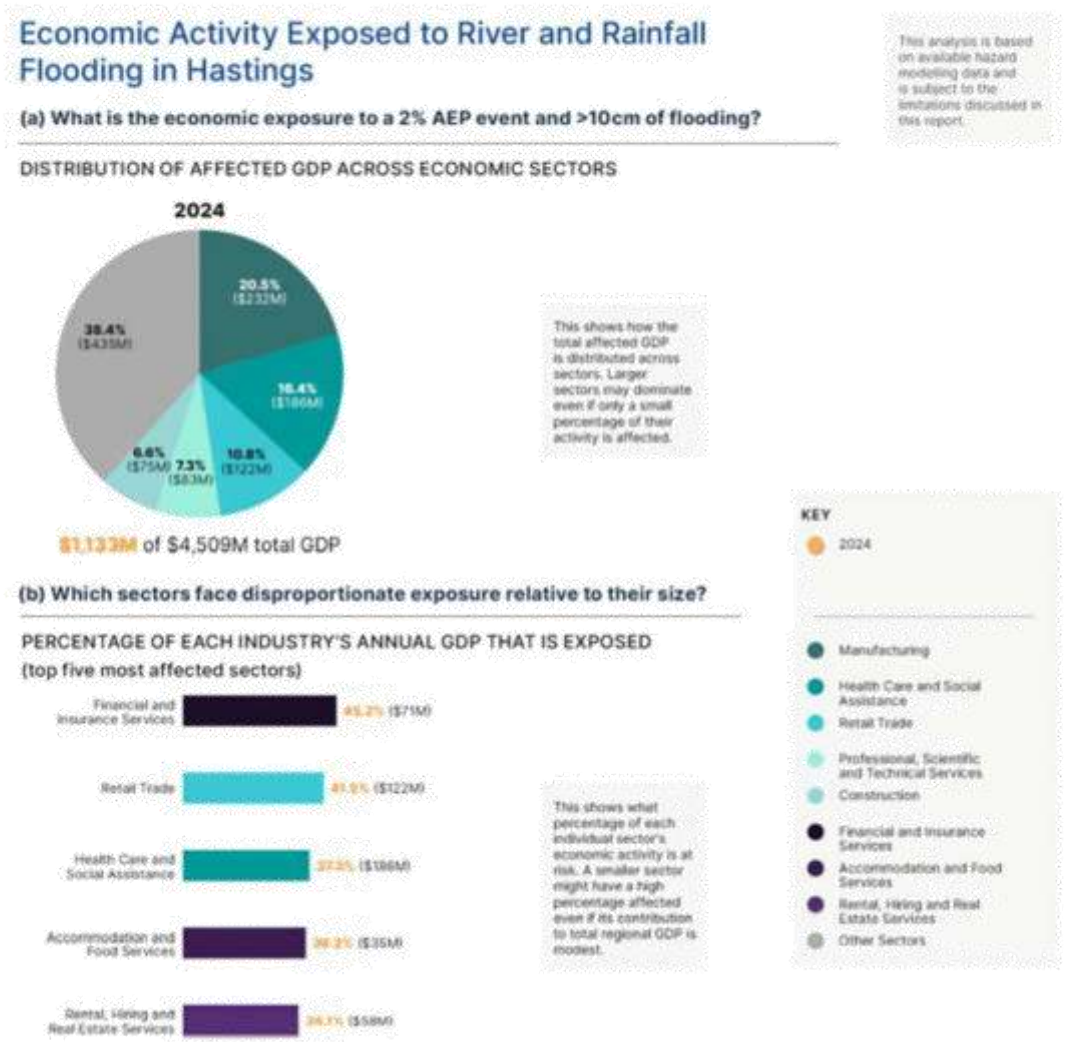

Economic Activity Exposed to River and Rainfall Flooding in Hastings
This analysis is based on available hazard modelling data and is subject to the limitations discussed in this report.
(a) What is the economic exposure to a 2% AEP event and >10cm of flooding?
DISTRIBUTION OF AFFECTED GDP ACROSS ECONOMIC SECTORS
2024
20.5% ($232M)
16.4% ($186M)
10.8% ($122M)
7.3% ($83M)
6.6% ($75M)
38.4% ($435M)
This shows how the total affected GDP is distributed across sectors. Larger sectors may dominate even if only a small percentage of their activity is affected.
$1,133M of $4,509M total GDP
KEY
2024
Manufacturing
Health Care and Social Assistance
Retail Trade
Professional, Scientific and Technical Services
Construction
Financial and Insurance Services
Accommodation and Food Services
Rental, Hiring and Real Estate Services
Other Sectors
(b) Which sectors face disproportionate exposure relative to their size?
PERCENTAGE OF EACH INDUSTRY'S ANNUAL GDP THAT IS EXPOSED
(top five most affected sectors)
Financial and Insurance Services
45.2% ($71M)
Retail Trade
41.9% ($122M)
Health Care and Social Assistance
37.5% ($186M)
Accommodation and Food Services
36.2% ($35M)
Rental, Hiring and Real Estate Services
36.1% ($58M)
This shows what percentage of each individual sector's economic activity is at risk. A smaller sector might have a high percentage affected even if its contribution to total regional GDP is modest.

Figure A - 35.

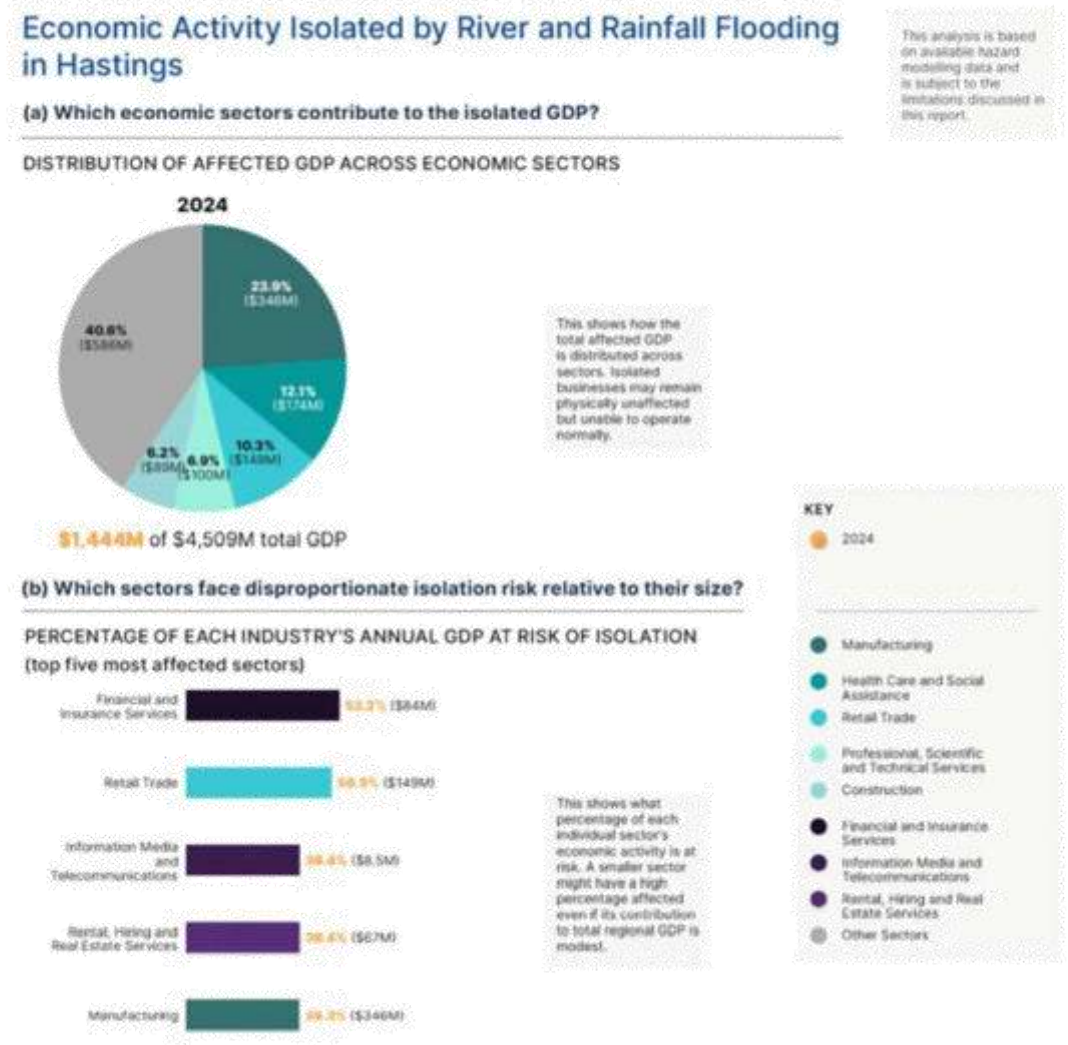

Economic Activity Isolated by River and Rainfall Flooding in Hastings
This analysis is based on available hazard modelling data and is subject to the limitations discussed in this report.
(a) Which economic sectors contribute to the isolated GDP?
DISTRIBUTION OF AFFECTED GDP ACROSS ECONOMIC SECTORS
2024
23.9% ($346M)
40.6% ($586M)
12.1% ($174M)
10.3% ($149M)
6.9% ($100M)
6.2% ($89M)
This shows how the total affected GDP is distributed across sectors. Isolated businesses may remain physically unaffected but unable to operate normally.
$1,444M of $4,509M total GDP
KEY
2024
Manufacturing
Health Care and Social Assistance
Retail Trade
Professional, Scientific and Technical Services
Construction
Financial and Insurance Services
Information Media and Telecommunications
Rental, Hiring and Real Estate Services
Other Sectors
(b) Which sectors face disproportionate isolation risk relative to their size?
PERCENTAGE OF EACH INDUSTRY'S ANNUAL GDP AT RISK OF ISOLATION
(top five most affected sectors)
Financial and Insurance Services
Retail Trade
Information Media and Telecommunications
Rental, Hiring and Real Estate Services
Manufacturing
This shows what percentage of each individual sector's economic activity is at risk. A smaller sector might have a high percentage affected even if its contribution to total regional GDP is modest.

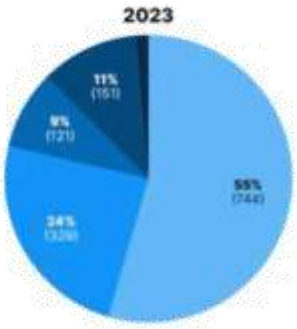
Figure A - 36.

Population Exposed to Landslides in Hastings

This analysis is based on available hazard modelling data and is subject to the limitations discussed in this report.

(a) What is the population exposure?

EXPOSED POPULATION BY NZ DEPRIVATION INDEX



This shows how the total exposed population is distributed across socioeconomic groups. NZ Deprivation index ranges from 1-2 (least deprived) to 9-10 (most deprived).

1,364 of 85,968 total residents

(b) Which groups face disproportionate exposure relative to their size?

PERCENTAGE OF EACH NZ DEPRIVATION GROUP THAT IS EXPOSED



This shows what percentage of people within each NZ deprivation group is at risk. This indicates which groups face the greatest relative impact.



Figure A - 37.

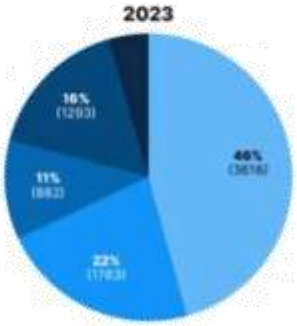
URBAN INTELLIGENCE

Population Isolated by Landslides in Hastings

This analysis is based on available hazard modelling data and is subject to the limitations discussed in this report.

(a) How is isolation distributed across socioeconomic groups?

ISOLATED POPULATION BY NZ DEPRIVATION INDEX

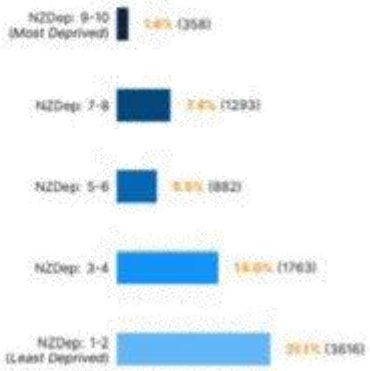


This shows how the total isolated population is distributed across socioeconomic groups. Isolated homes cannot access or be accessed by services and amenities.

7,012 of 85,968 total residents

(b) Which groups face disproportionate isolation risk relative to their size?

PERCENTAGE OF EACH NZ DEPRIVATION GROUP THAT IS ISOLATED



This shows what percentage of people within each NZ deprivation group is at risk. This indicates which groups face the greatest relative impact.

KEY

- 2023
- NZDep 1-2
- NZDep 3-4
- NZDep 5-6
- NZDep 7-8
- NZDep 9-10

Figure A - 38.

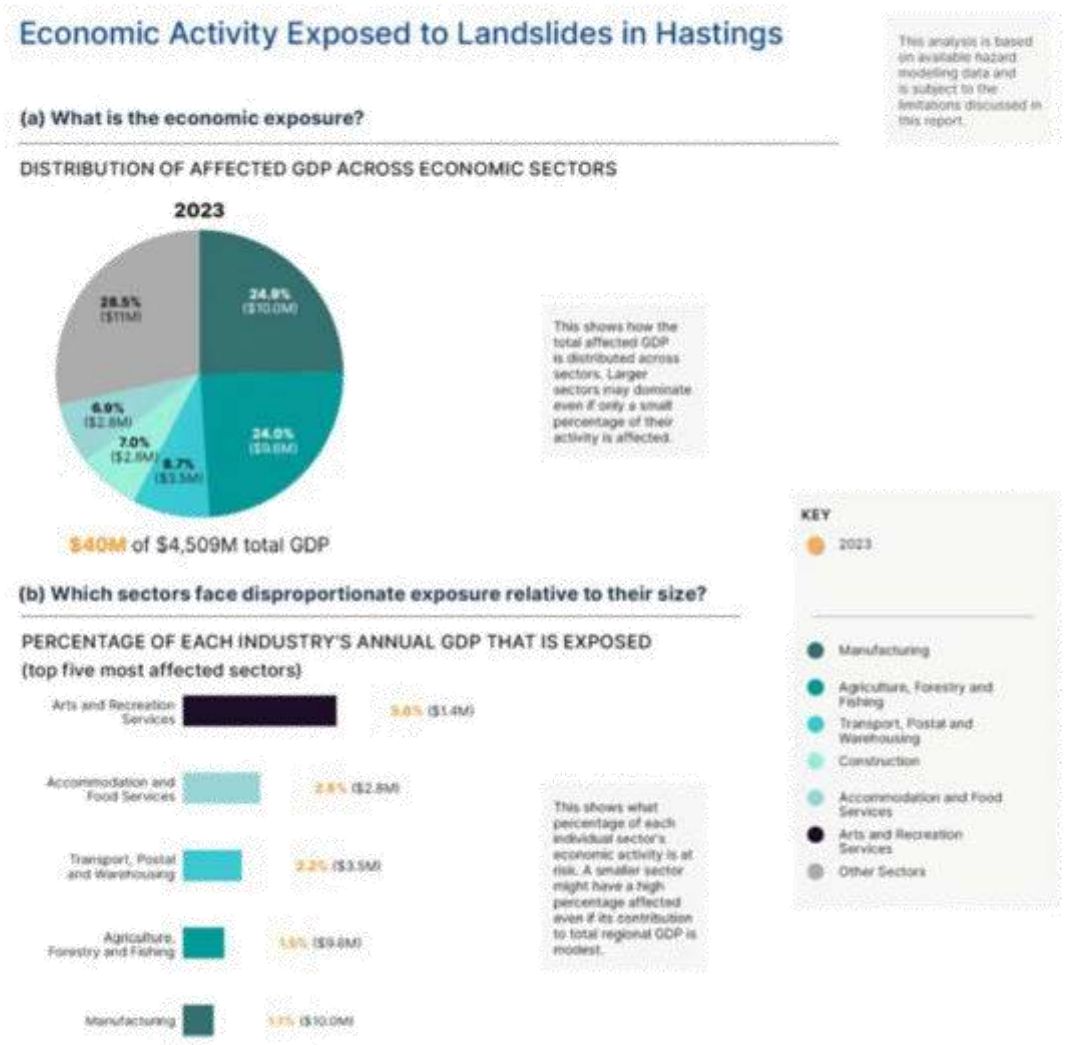

Economic Activity Exposed to Landslides in Hastings
This analysis is based on available hazard modelling data and is subject to the limitations discussed in this report.
(a) What is the economic exposure?
DISTRIBUTION OF AFFECTED GDP ACROSS ECONOMIC SECTORS
2023
24.9%
($10.0M)
24.0%
($9.6M)
8.7%
($3.5M)
7.0%
($2.8M)
6.9%
($2.8M)
28.5%
($11M)
This shows how the total affected GDP is distributed across sectors. Larger sectors may dominate even if only a small percentage of their activity is affected.
$40M of $4,509M total GDP
KEY
2023
Manufacturing
Agriculture, Forestry and Fishing
Transport, Postal and Warehousing
Construction
Accommodation and Food Services
Arts and Recreation Services
Other Sectors
(b) Which sectors face disproportionate exposure relative to their size?
PERCENTAGE OF EACH INDUSTRY'S ANNUAL GDP THAT IS EXPOSED
(top five most affected sectors)
Arts and Recreation Services
9.6% ($1.4M)
Accommodation and Food Services
2.8% ($2.8M)
Transport, Postal and Warehousing
2.2% ($3.5M)
Agriculture, Forestry and Fishing
1.5% ($9.6M)
Manufacturing
1.1% ($10.0M)
This shows what percentage of each individual sector's economic activity is at risk. A smaller sector might have a high percentage affected even if its contribution to total regional GDP is modest.

Figure A - 39.

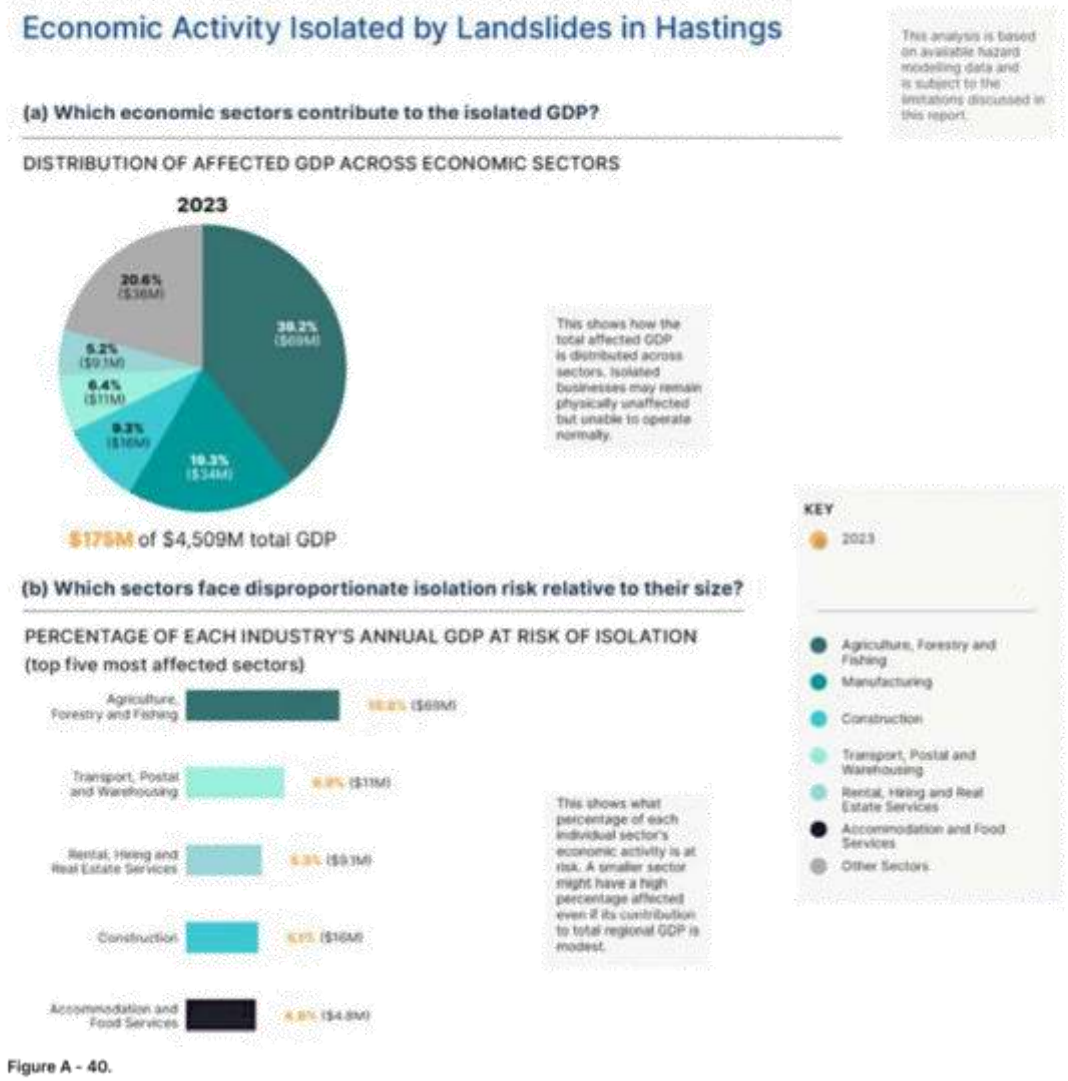

Economic Activity Isolated by Landslides in Hastings
This analysis is based on available hazard modelling data and is subject to the limitations discussed in this report.
(a) Which economic sectors contribute to the isolated GDP?
DISTRIBUTION OF AFFECTED GDP ACROSS ECONOMIC SECTORS
2023
20.6% ($36M)
38.2% ($69M)
5.2% ($9.1M)
6.4% ($11M)
9.3% ($16M)
10.3% ($34M)
This shows how the total affected GDP is distributed across sectors. Isolated businesses may remain physically unaffected but unable to operate normally.
$175M of $4,509M total GDP
KEY
2023
Agriculture, Forestry and Fishing
Manufacturing
Construction
Transport, Postal and Warehousing
Rental, Hiring and Real Estate Services
Accommodation and Food Services
Other Sectors
(b) Which sectors face disproportionate isolation risk relative to their size?
PERCENTAGE OF EACH INDUSTRY'S ANNUAL GDP AT RISK OF ISOLATION
(top five most affected sectors)
Agriculture, Forestry and Fishing
Transport, Postal and Warehousing
Rental, Hiring and Real Estate Services
Construction
Accommodation and Food Services
This shows what percentage of each individual sector's economic activity is at risk. A smaller sector might have a high percentage affected even if its contribution to total regional GDP is modest.

Figure A - 40.

4.4 Napier City

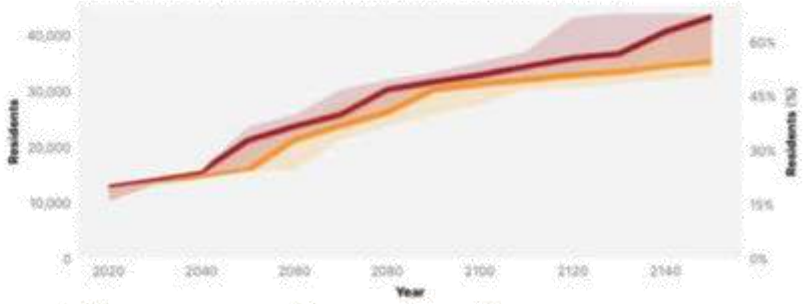
Figure A - 41 to Figure A - 48illustrates the risk to residents and economic activity in Napier based on exposure to and isolation resulting from coastal flooding, and river and rainfall flooding. Due to limited landslide data provided/available for this assessment, landslide results are not included. These visualisations include both direct exposure and potential isolation effects across different socioeconomic groups and industry sectors. The assessment methodology is detailed in Section 3 and Appendix A1.

Population Exposed to Coastal Flooding in Napier

This analysis is based on available hazard modelling data and is subject to the limitations discussed in this report.

(a) What is the population exposure to a 1% AEP event and >10cm of flooding?

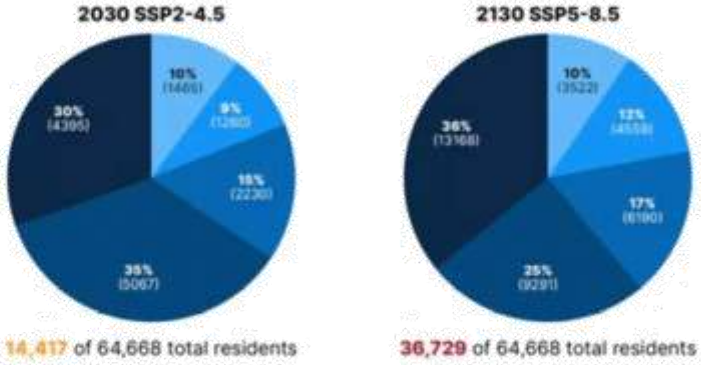
NUMBER AND PERCENTAGE OF RESIDENTS AT RISK



The shaded areas show the 17-83 percentile range, reflecting uncertainty in sea level rise and vertical land movement projections.

(b) How is exposure distributed across socioeconomic groups?

EXPOSED POPULATION BY NZ DEPRIVATION INDEX



14,417 of 64,668 total residents

36,729 of 64,668 total residents

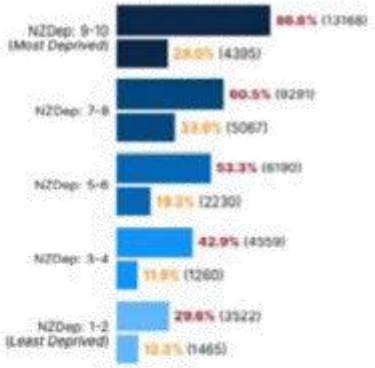
This shows how the total exposed population is distributed across socioeconomic groups. NZ Deprivation Index ranges from 1-2 (least deprived) to 9-10 (most deprived).

KEY

- 2030 SSP2-4.5
- 2130 SSP5-8.5
- NZDep 1-2
- NZDep 3-4
- NZDep 5-6
- NZDep 7-8
- NZDep 9-10

(c) Which groups face disproportionate exposure relative to their size?

PERCENTAGE OF EACH NZ DEPRIVATION GROUP THAT IS EXPOSED



This shows what percentage of people within each NZ deprivation group is at risk. This indicates which groups face the greatest relative impact.

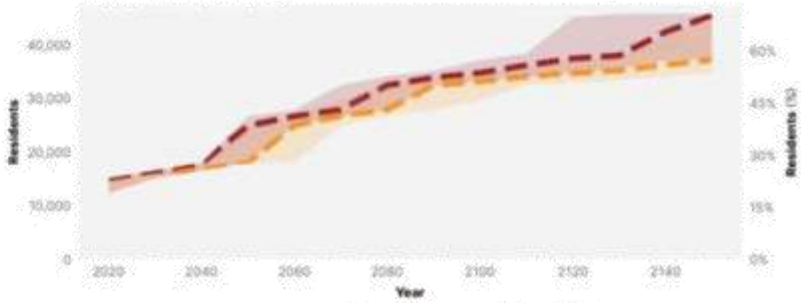
Figure A - 41.

Population Isolated by Coastal Flooding in Napier

This analysis is based on available hazard modelling data and is subject to the limitations discussed in this report.

(a) What is the projected population at risk from isolation (including exposure)?

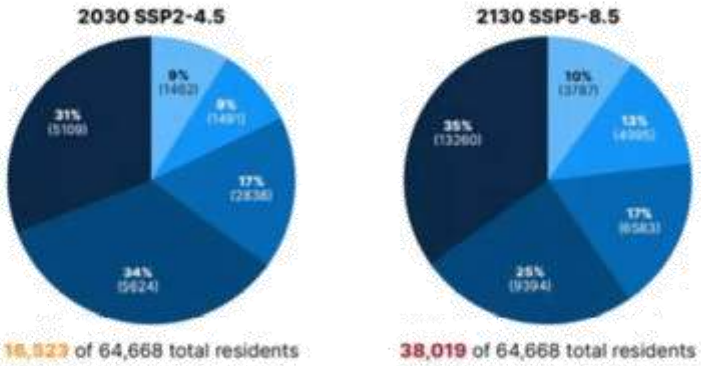
NUMBER AND PERCENTAGE OF RESIDENTS AT RISK



The shaded areas show the 17-83 percentile range, reflecting uncertainty in sea level rise and vertical land movement projections.

(b) How is isolation distributed across socioeconomic groups?

ISOLATED POPULATION BY NZ DEPRIVATION INDEX



16,523 of 64,668 total residents

38,019 of 64,668 total residents

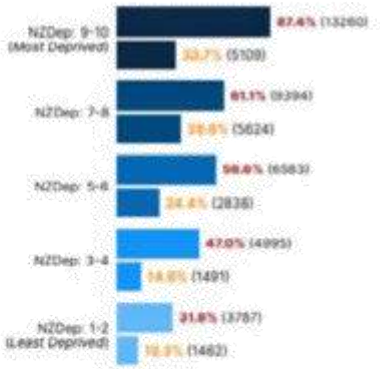
This shows how the total isolated population is distributed across socioeconomic groups. Isolated homes cannot access or be accessed by services and amenities.

KEY

- 2030 SSP2-4.5
- 2130 SSP5-8.5
- NZDep 1-2
- NZDep 3-4
- NZDep 5-6
- NZDep 7-8
- NZDep 9-10

(c) Which groups face disproportionate isolation risk relative to their size?

PERCENTAGE OF EACH NZ DEPRIVATION GROUP THAT IS ISOLATED



This shows what percentage of people within each NZ deprivation group is at risk. This indicates which groups face the greatest relative impact.

Figure A - 42.

URBAN INTELLIGENCE

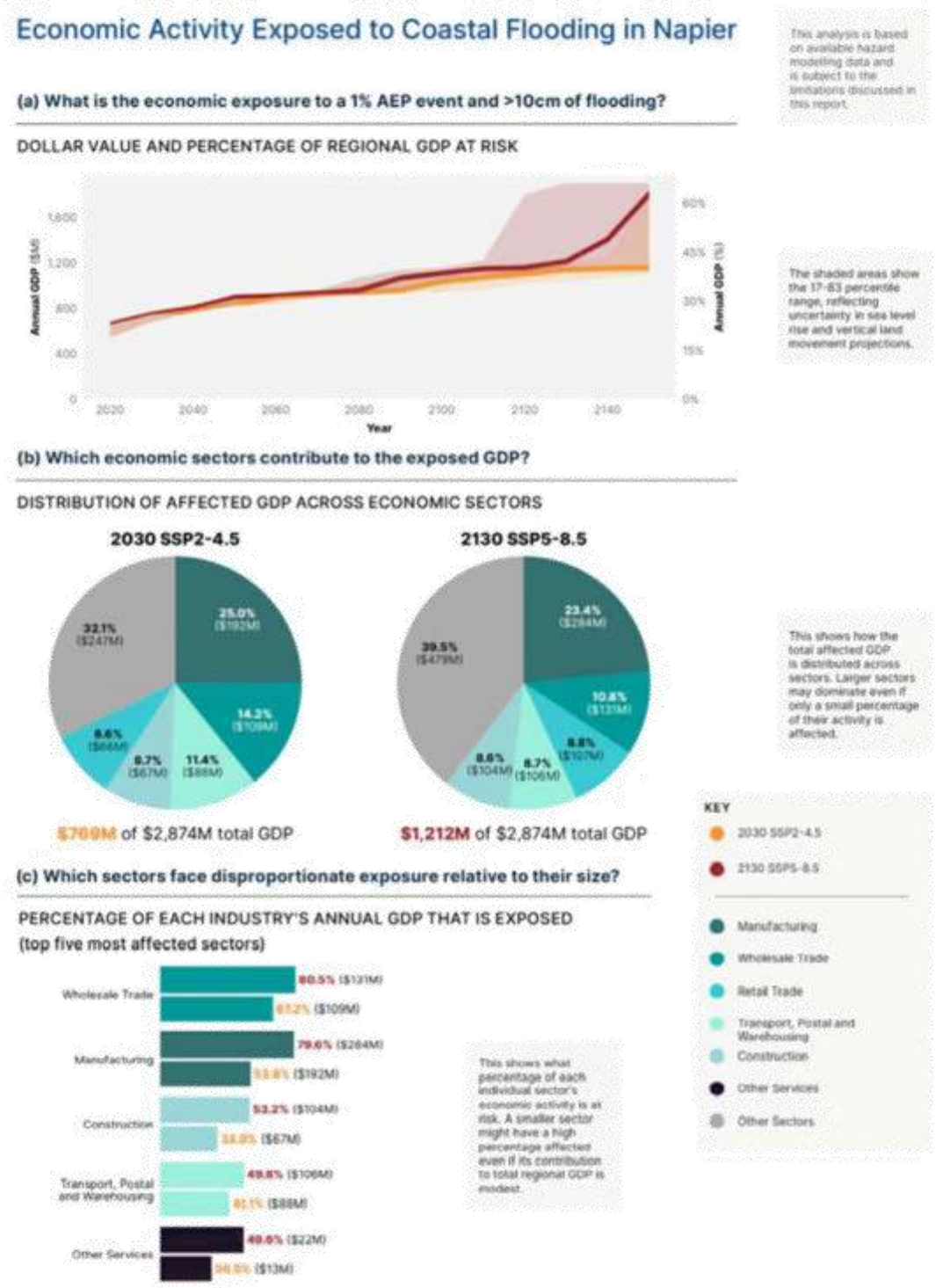

Economic Activity Exposed to Coastal Flooding in Napier
This analysis is based on available hazard modelling data and is subject to the limitations discussed in this report.
(a) What is the economic exposure to a 1% AEP event and >10cm of flooding?
DOLLAR VALUE AND PERCENTAGE OF REGIONAL GDP AT RISK
Annual GDP ($M)
Annual GDP (%)
Year
The shaded areas show the 17-83 percentile range, reflecting uncertainty in sea level rise and vertical land movement projections.
(b) Which economic sectors contribute to the exposed GDP?
DISTRIBUTION OF AFFECTED GDP ACROSS ECONOMIC SECTORS
2030 SSP2-4.5
2130 SSP5-8.5
$709M of $2,874M total GDP
$1,212M of $2,874M total GDP
This shows how the total affected GDP is distributed across sectors. Larger sectors may dominate even if only a small percentage of their activity is affected.
KEY
2030 SSP2-4.5
2130 SSP5-8.5
Manufacturing
Wholesale Trade
Retail Trade
Transport, Postal and Warehousing
Construction
Other Services
Other Sectors
(c) Which sectors face disproportionate exposure relative to their size?
PERCENTAGE OF EACH INDUSTRY'S ANNUAL GDP THAT IS EXPOSED
(top five most affected sectors)
Wholesale Trade
Manufacturing
Construction
Transport, Postal and Warehousing
Other Services
This shows what percentage of each individual sector's economic activity is at risk. A smaller sector might have a high percentage affected even if its contribution to total regional GDP is modest.

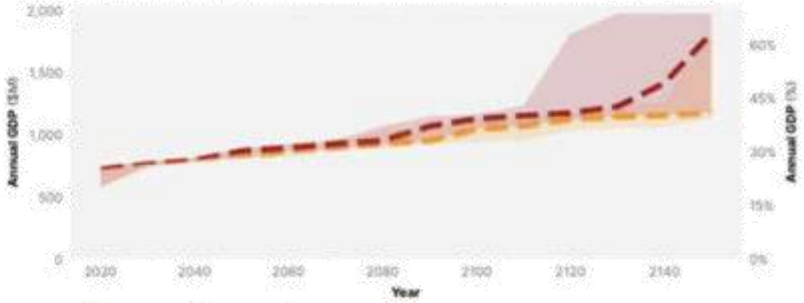
Figure A - 43.

Economic Activity Isolated by Coastal Flooding in Napier

This analysis is based on available hazard modelling data and is subject to the limitations discussed in this report.

(a) What is the economic activity at risk of isolation (including exposure)?

DOLLAR VALUE AND PERCENTAGE OF REGIONAL GDP AT RISK



The shaded areas show the 17-83 percentile range, reflecting uncertainty in sea level rise and vertical land movement projections.

(b) Which economic sectors contribute to the isolated GDP?

DISTRIBUTION OF AFFECTED GDP ACROSS ECONOMIC SECTORS



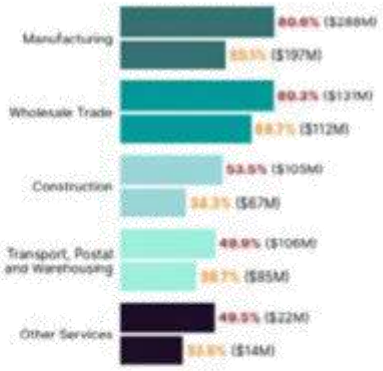
$786M of $2,874M total GDP

$1,229M of $2,874M total GDP

This shows how the total affected GDP is distributed across sectors. Isolated businesses may remain physically unaffected but unable to operate normally.

(c) Which sectors face disproportionate isolation risk relative to their size?

PERCENTAGE OF EACH INDUSTRY'S ANNUAL GDP AT RISK OF ISOLATION
(top five most affected sectors)



This shows what percentage of each individual sector's economic activity is at risk. A smaller sector might have a high percentage affected even if its contribution to total regional GDP is modest.

KEY

- 2030 SSP2-4.5
- 2130 SSP5-8.5
- Manufacturing
- Wholesale Trade
- Retail Trade
- Transport, Postal and Warehousing
- Construction
- Other Services
- Other Sectors

Figure A - 44.

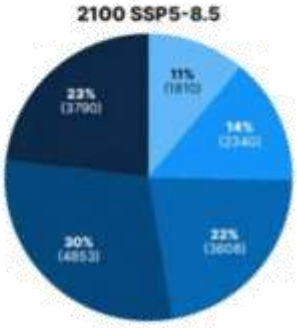
URBAN INTELLIGENCE

Population Exposed to River and Rainfall Flooding in Napier

This analysis is based on available hazard modelling data and is subject to the limitations discussed in this report.

(a) What is the population exposure to a 1% AEP event and >10cm of flooding?

EXPOSED POPULATION BY NZ DEPRIVATION INDEX



This shows how the total exposed population is distributed across socioeconomic groups. NZ Deprivation Index ranges from 1-2 (least deprived) to 9-10 (most deprived).

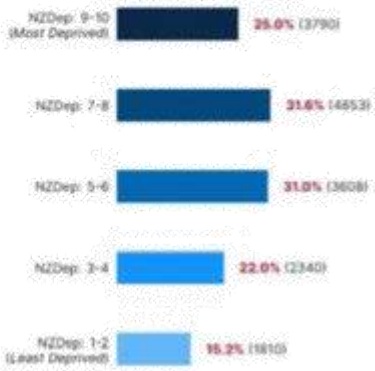
16,401 of 64,668 total residents

KEY

- 2100 SSP5-8.5
- NZDep 1-2
- NZDep 3-4
- NZDep 5-6
- NZDep 7-8
- NZDep 9-10

(b) Which groups face disproportionate exposure relative to their size?

PERCENTAGE OF EACH NZ DEPRIVATION GROUP THAT IS EXPOSED



This shows what percentage of people within each NZ deprivation group is at risk. This indicates which groups face the greatest relative impact.

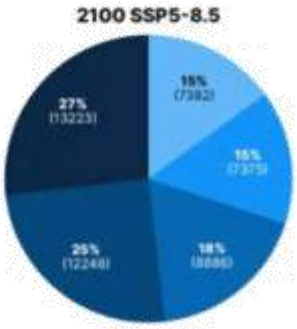
Figure A - 45.

Population Isolated by River and Rainfall Flooding in Napier

This analysis is based on available hazard modelling data and is subject to the limitations discussed in this report.

(a) How is isolation distributed across socioeconomic groups?

ISOLATED POPULATION BY NZ DEPRIVATION INDEX



This shows how the total isolated population is distributed across socioeconomic groups. Isolated homes cannot access or be accessed by services and amenities.

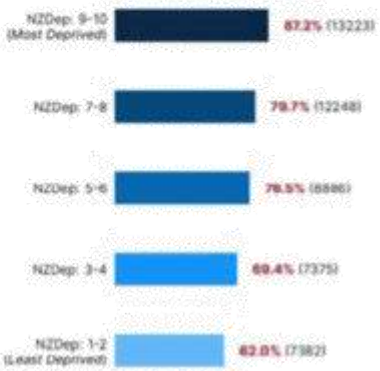
49,113 of 64,668 total residents

KEY

- 2100 SSP5-8.5
- NZDep 1-2
- NZDep 3-4
- NZDep 5-6
- NZDep 7-8
- NZDep 9-10

(b) Which groups face disproportionate isolation risk relative to their size?

PERCENTAGE OF EACH NZ DEPRIVATION GROUP THAT IS ISOLATED



This shows what percentage of people within each NZ deprivation group is at risk. This indicates which groups face the greatest relative impact.

Figure A - 46.

URBAN INTELLIGENCE

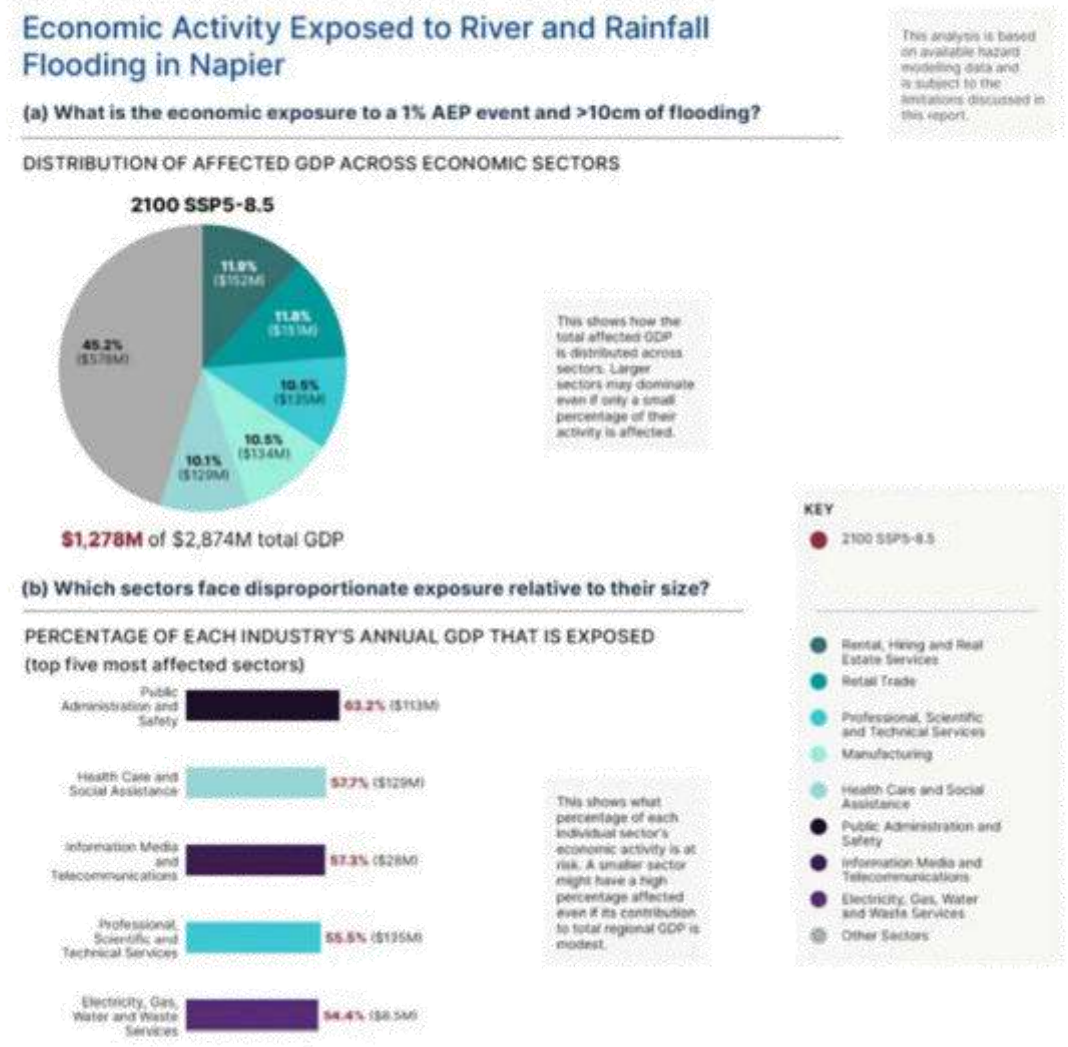

Economic Activity Exposed to River and Rainfall Flooding in Napier
This analysis is based on available hazard modelling data and is subject to the limitations discussed in this report.
(a) What is the economic exposure to a 1% AEP event and >10cm of flooding?
DISTRIBUTION OF AFFECTED GDP ACROSS ECONOMIC SECTORS
2100 SSP5-8.5
11.9% ($152M)
11.8% ($151M)
10.5% ($135M)
10.5% ($134M)
10.1% ($129M)
45.2% ($578M)
This shows how the total affected GDP is distributed across sectors. Larger sectors may dominate even if only a small percentage of their activity is affected.
$1,278M of $2,874M total GDP
KEY
2100 SSP5-8.5
Rental, Hiring and Real Estate Services
Retail Trade
Professional, Scientific and Technical Services
Manufacturing
Health Care and Social Assistance
Public Administration and Safety
Information Media and Telecommunications
Electricity, Gas, Water and Waste Services
Other Sectors
(b) Which sectors face disproportionate exposure relative to their size?
PERCENTAGE OF EACH INDUSTRY'S ANNUAL GDP THAT IS EXPOSED
(top five most affected sectors)
Public Administration and Safety
63.2% ($113M)
Health Care and Social Assistance
57.7% ($129M)
Information Media and Telecommunications
57.3% ($28M)
Professional, Scientific and Technical Services
55.5% ($135M)
Electricity, Gas, Water and Waste Services
54.4% ($8.5M)
This shows what percentage of each individual sector's economic activity is at risk. A smaller sector might have a high percentage affected even if its contribution to total regional GDP is modest.

Figure A - 47.

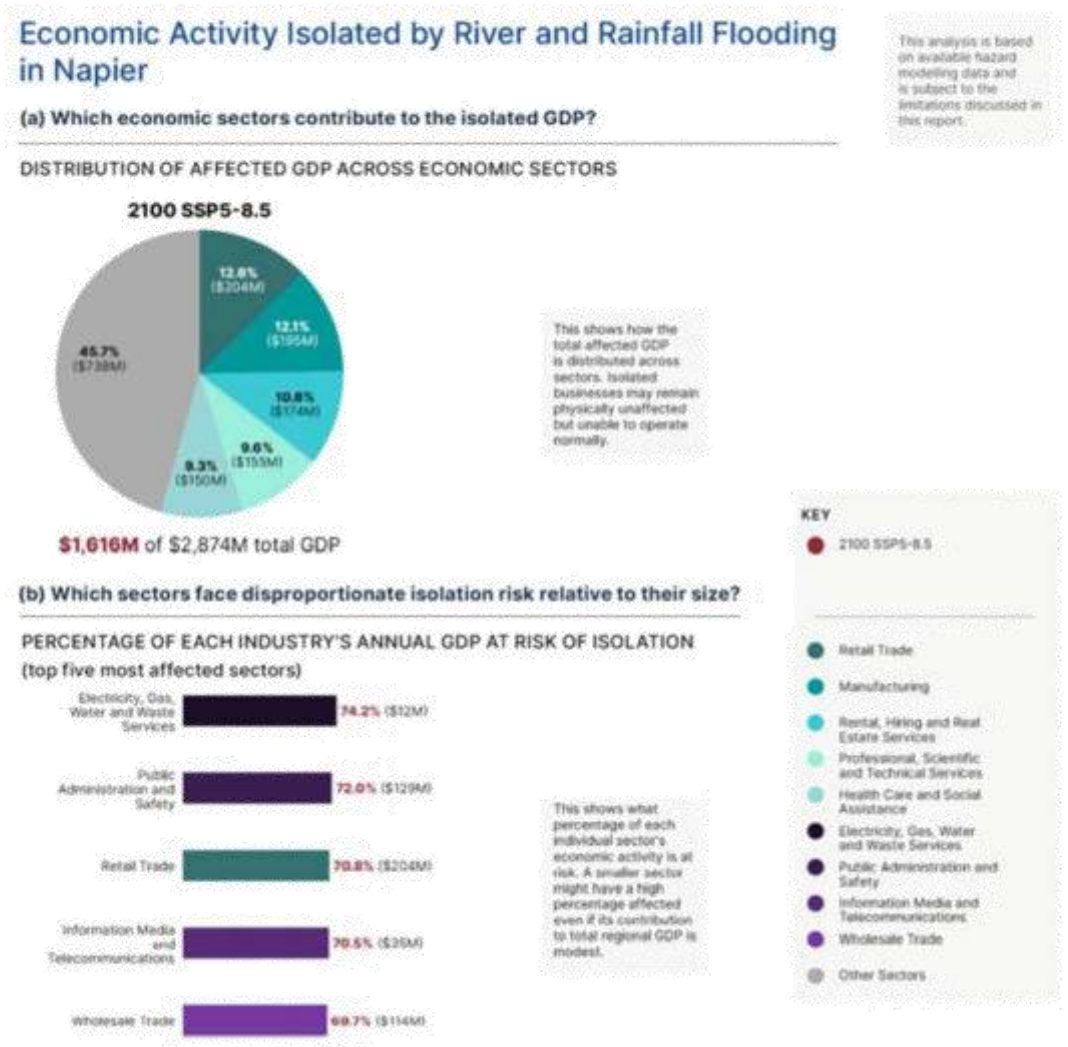

Economic Activity Isolated by River and Rainfall Flooding in Napier
This analysis is based on available hazard modelling data and is subject to the limitations discussed in this report.
(a) Which economic sectors contribute to the isolated GDP?
DISTRIBUTION OF AFFECTED GDP ACROSS ECONOMIC SECTORS
2100 SSP5-8.5
12.6% ($204M)
12.1% ($195M)
10.8% ($174M)
9.6% ($155M)
9.3% ($150M)
45.7% ($738M)
This shows how the total affected GDP is distributed across sectors. Isolated businesses may remain physically unaffected but unable to operate normally.
$1,616M of $2,874M total GDP
KEY
2100 SSP5-8.5
Retail Trade
Manufacturing
Rental, Hiring and Real Estate Services
Professional, Scientific and Technical Services
Health Care and Social Assistance
Electricity, Gas, Water and Waste Services
Public Administration and Safety
Information Media and Telecommunications
Wholesale Trade
Other Sectors
(b) Which sectors face disproportionate isolation risk relative to their size?
PERCENTAGE OF EACH INDUSTRY'S ANNUAL GDP AT RISK OF ISOLATION
(top five most affected sectors)
Electricity, Gas, Water and Waste Services
74.2% ($12M)
Public Administration and Safety
72.0% ($129M)
Retail Trade
70.8% ($204M)
Information Media and Telecommunications
70.5% ($35M)
Wholesale Trade
69.7% ($114M)
This shows what percentage of each individual sector's economic activity is at risk. A smaller sector might have a high percentage affected even if its contribution to total regional GDP is modest.

Figure A - 48.

4.5 Wairoa District

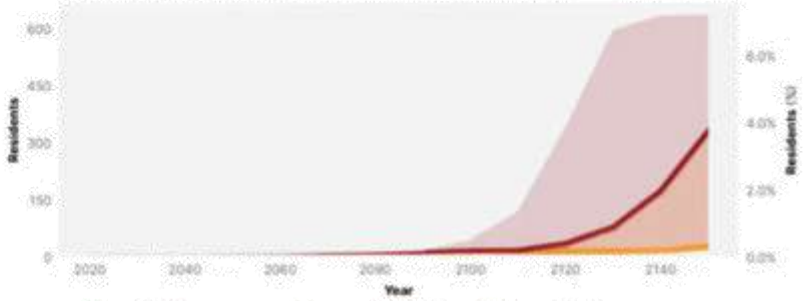
Figure A - 49 to Figure A - 60 illustrates the risk to residents and economic activity in Wairoa based on exposure to and isolation resulting from coastal flooding, river and rainfall flooding, and landslides. These visualisations include both direct exposure and potential isolation effects across different socioeconomic groups and industry sectors. The assessment methodology is detailed in Section 3 and Appendix A1.

Population Exposed to Coastal Flooding in Wairoa

This analysis is based on available hazard modelling data and is subject to the limitations discussed in this report.

(a) What is the population exposure to a 1% AEP event and >10cm of flooding?

NUMBER AND PERCENTAGE OF RESIDENTS AT RISK



The shaded areas show the 17-83 percentile range, reflecting uncertainty in sea level rise and vertical land movement projections.

(b) How is exposure distributed across socioeconomic groups?

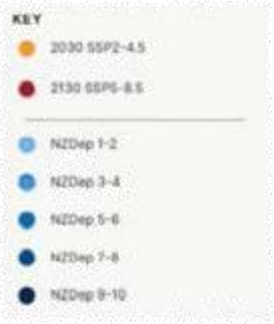
EXPOSED POPULATION BY NZ DEPRIVATION INDEX



8 of 8,811 total residents

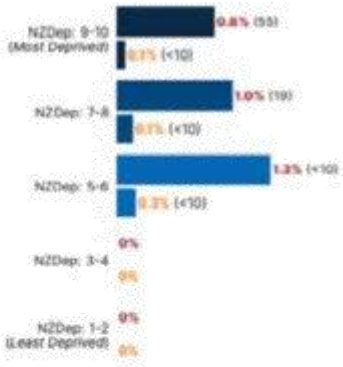
79 of 8,811 total residents

This shows how the total exposed population is distributed across socioeconomic groups. NZ Deprivation Index ranges from 1-2 (least deprived) to 9-10 (most deprived).



(c) Which groups face disproportionate exposure relative to their size?

PERCENTAGE OF EACH NZ DEPRIVATION GROUP THAT IS EXPOSED



This shows what percentage of people within each NZ deprivation group is at risk. This indicates which groups face the greatest relative impact.

Figure A - 49.

URBAN INTELLIGENCE

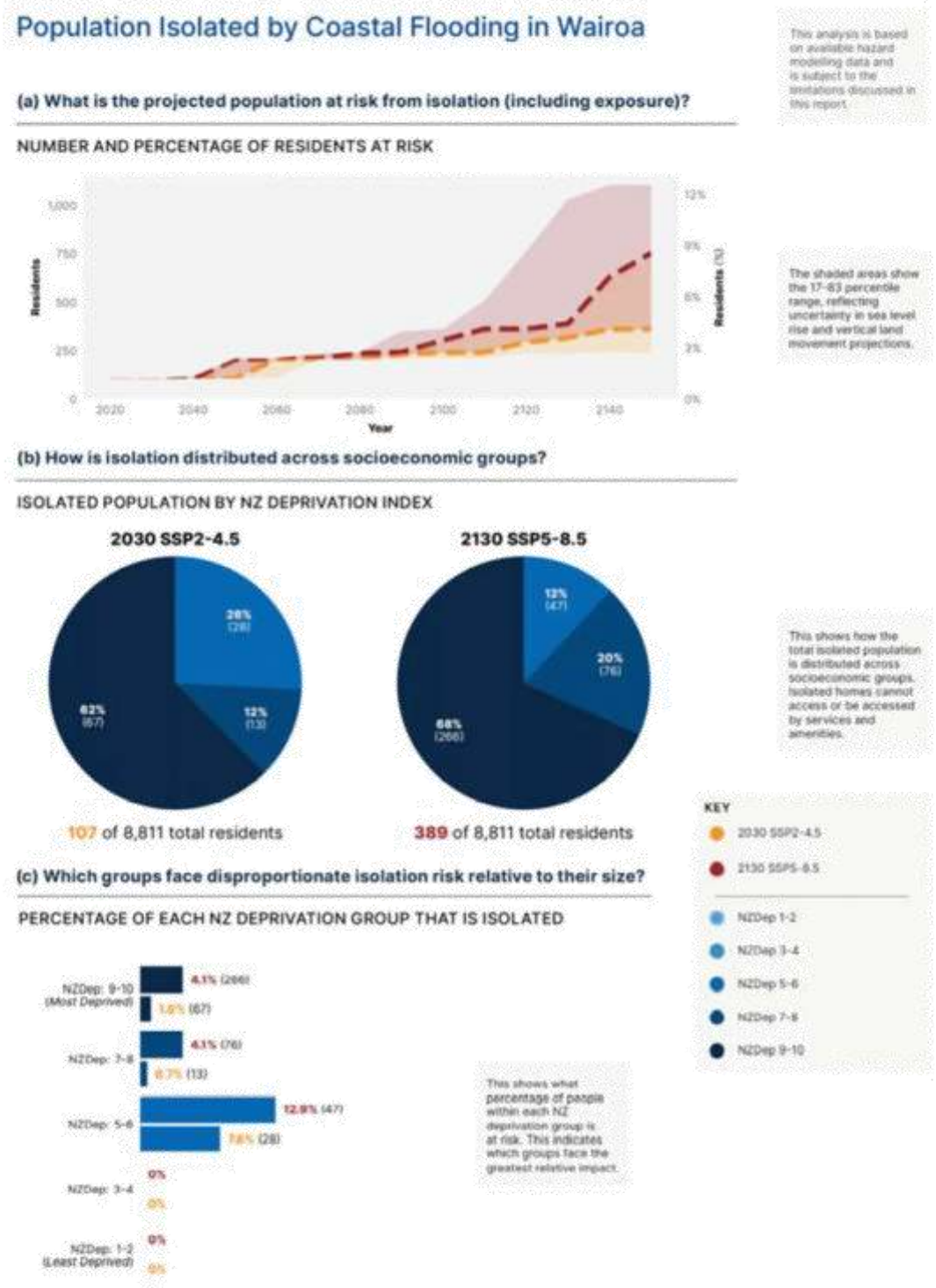

Population Isolated by Coastal Flooding in Wairoa
This analysis is based on available hazard modelling data and is subject to the limitations discussed in this report.
(a) What is the projected population at risk from isolation (including exposure)?
NUMBER AND PERCENTAGE OF RESIDENTS AT RISK
Residents
Residents (%)
Year
The shaded areas show the 17-83 percentile range, reflecting uncertainty in sea level rise and vertical land movement projections.
(b) How is isolation distributed across socioeconomic groups?
ISOLATED POPULATION BY NZ DEPRIVATION INDEX
2030 SSP2-4.5
2130 SSP5-8.5
107 of 8,811 total residents
389 of 8,811 total residents
This shows how the total isolated population is distributed across socioeconomic groups. Isolated homes cannot access or be accessed by services and amenities.
KEY
2030 SSP2-4.5
2130 SSP5-8.5
NZDep 1-2
NZDep 3-4
NZDep 5-6
NZDep 7-8
NZDep 9-10
(c) Which groups face disproportionate isolation risk relative to their size?
PERCENTAGE OF EACH NZ DEPRIVATION GROUP THAT IS ISOLATED
NZDep: 9-10 (Most Deprived)
NZDep: 7-8
NZDep: 5-6
NZDep: 3-4
NZDep: 1-2 (Least Deprived)
This shows what percentage of people within each NZ deprivation group is at risk. This indicates which groups face the greatest relative impact.

Figure A - 50.

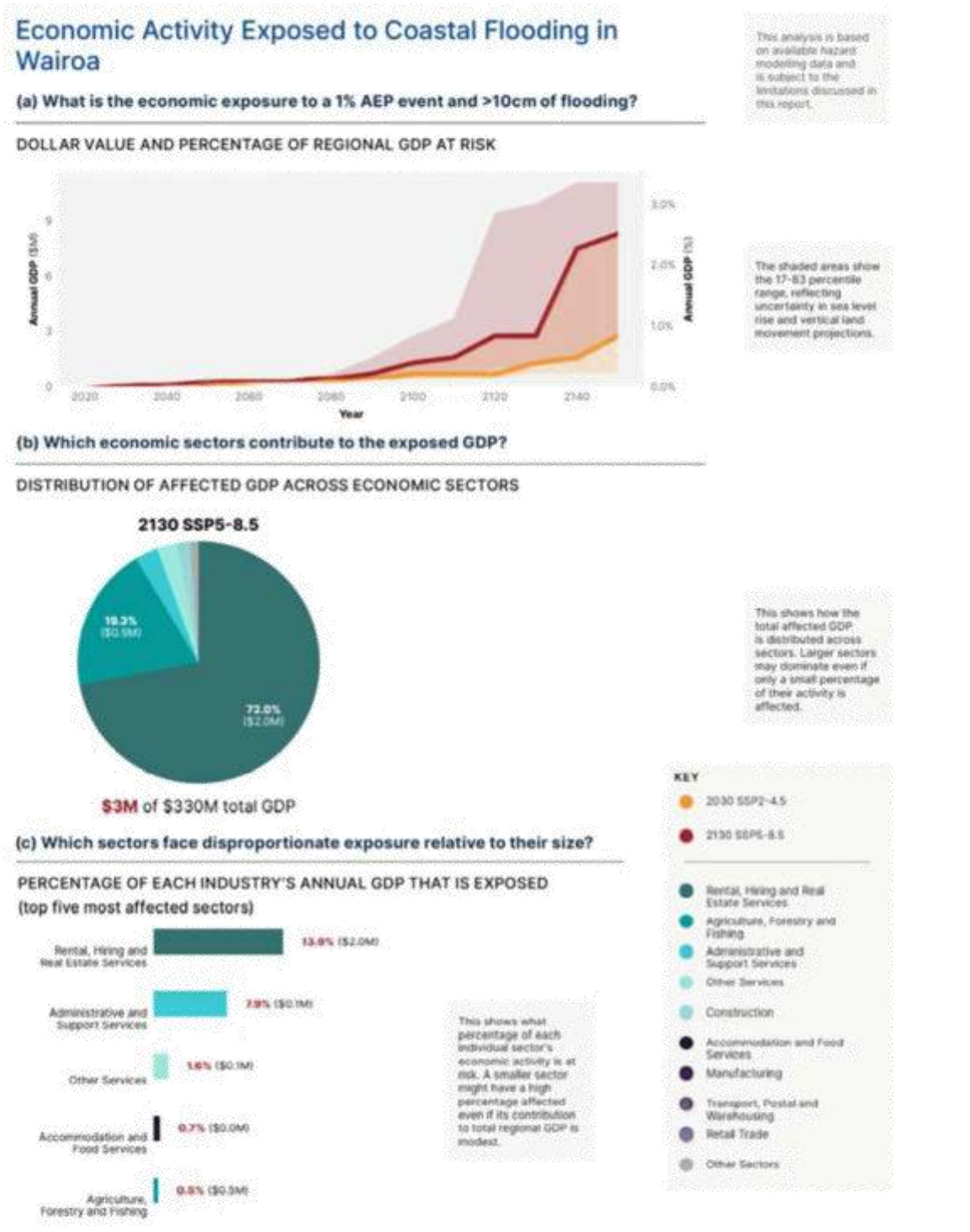


Figure A - 51.

URBAN INTELLIGENCE

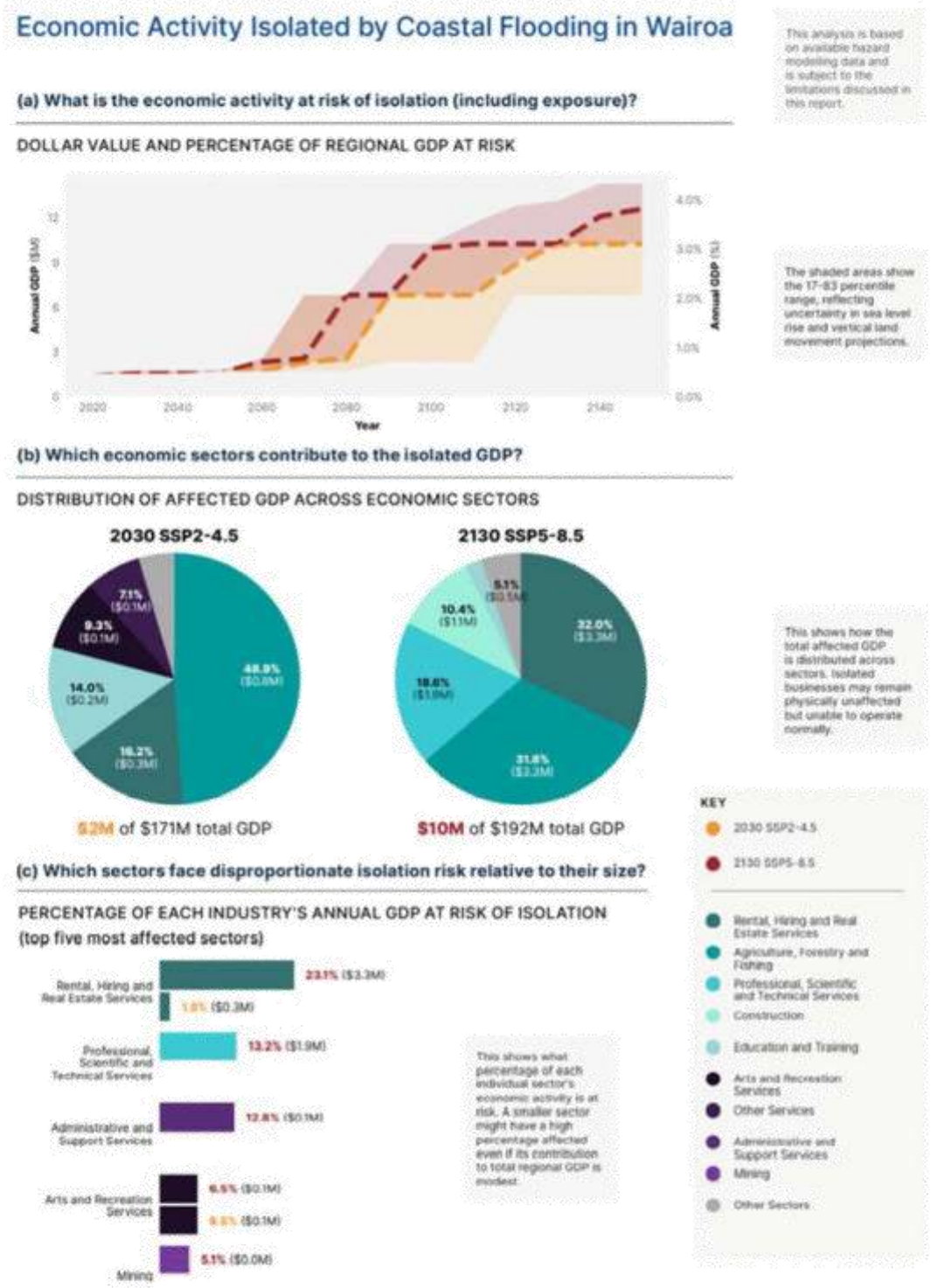

Economic Activity Isolated by Coastal Flooding in Wairoa
This analysis is based on available hazard modelling data and is subject to the limitations discussed in this report.
(a) What is the economic activity at risk of isolation (including exposure)?
DOLLAR VALUE AND PERCENTAGE OF REGIONAL GDP AT RISK
Annual GDP ($M)
Annual GDP (%)
Year
2020
2040
2060
2080
2100
2120
2140
The shaded areas show the 17-83 percentile range, reflecting uncertainty in sea level rise and vertical land movement projections.
(b) Which economic sectors contribute to the isolated GDP?
DISTRIBUTION OF AFFECTED GDP ACROSS ECONOMIC SECTORS
2030 SSP2-4.5
2130 SSP5-8.5
7.1% ($0.1M)
9.3% ($0.1M)
14.0% ($0.2M)
16.2% ($0.3M)
48.9% ($0.8M)
10.4% ($1.1M)
5.1% ($0.5M)
32.0% ($3.3M)
18.6% ($1.9M)
31.8% ($3.2M)
$2M of $171M total GDP
$10M of $192M total GDP
This shows how the total affected GDP is distributed across sectors. Isolated businesses may remain physically unaffected but unable to operate normally.
KEY
2030 SSP2-4.5
2130 SSP5-8.5
Rental, Hiring and Real Estate Services
Agriculture, Forestry and Fishing
Professional, Scientific and Technical Services
Construction
Education and Training
Arts and Recreation Services
Other Services
Administrative and Support Services
Mining
Other Sectors
(c) Which sectors face disproportionate isolation risk relative to their size?
PERCENTAGE OF EACH INDUSTRY'S ANNUAL GDP AT RISK OF ISOLATION
(top five most affected sectors)
Rental, Hiring and Real Estate Services
23.1% ($3.3M)
1.8% ($0.3M)
Professional, Scientific and Technical Services
13.2% ($1.9M)
Administrative and Support Services
12.8% ($0.1M)
Arts and Recreation Services
6.5% ($0.1M)
6.5% ($0.1M)
Mining
5.1% ($0.0M)
This shows what percentage of each individual sector's economic activity is at risk. A smaller sector might have a high percentage affected even if its contribution to total regional GDP is modest.

Figure A - 52.

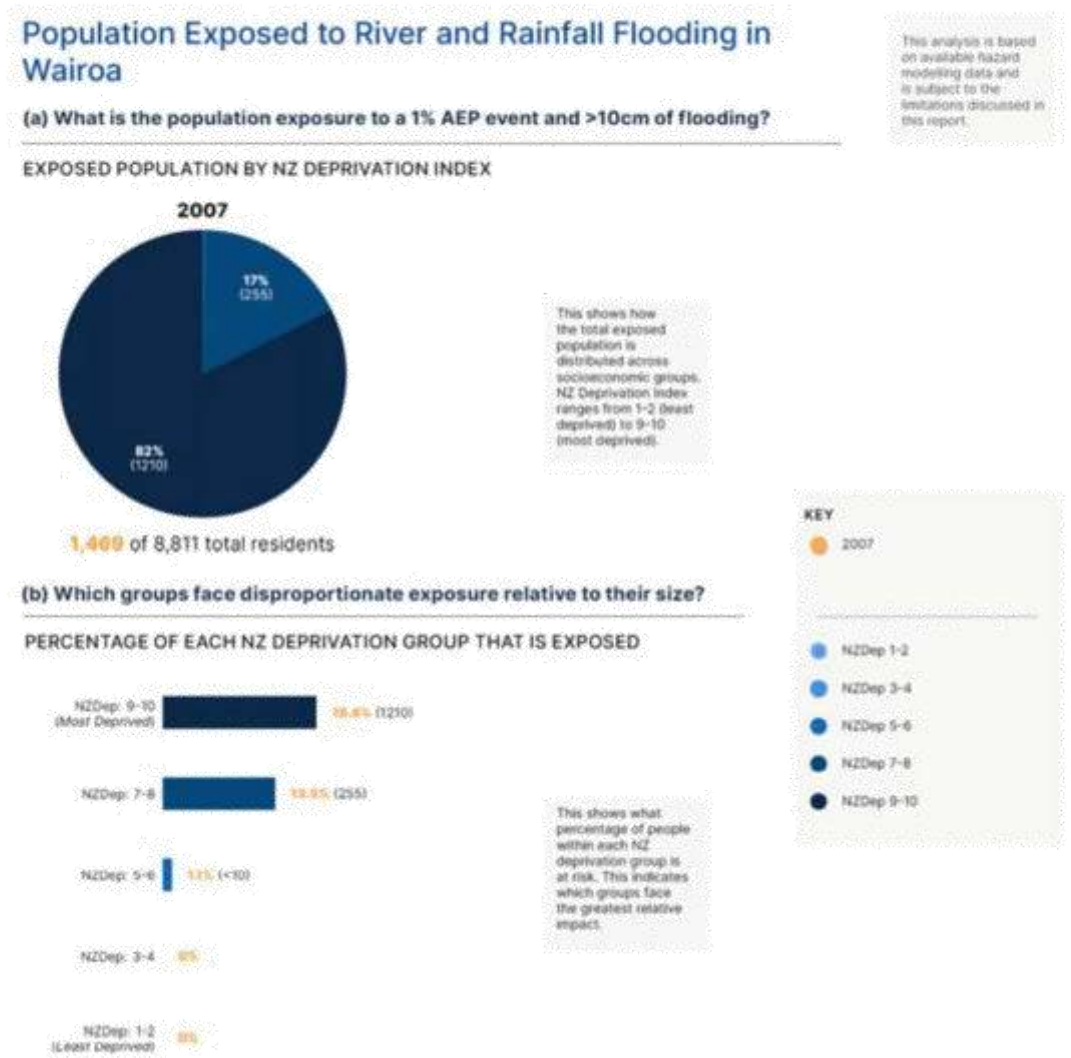

Population Exposed to River and Rainfall Flooding in Wairoa
This analysis is based on available hazard modelling data and is subject to the limitations discussed in this report.
(a) What is the population exposure to a 1% AEP event and >10cm of flooding?
EXPOSED POPULATION BY NZ DEPRIVATION INDEX
2007
17% (255)
82% (1250)
1,469 of 8,811 total residents
This shows how the total exposed population is distributed across socioeconomic groups. NZ Deprivation Index ranges from 1-2 (least deprived) to 9-10 (most deprived).
KEY
2007
NZDep 1-2
NZDep 3-4
NZDep 5-6
NZDep 7-8
NZDep 9-10
(b) Which groups face disproportionate exposure relative to their size?
PERCENTAGE OF EACH NZ DEPRIVATION GROUP THAT IS EXPOSED
NZDep: 9-10 (Most Deprived)
NZDep: 7-8
NZDep: 5-6
NZDep: 3-4
NZDep: 1-2 (Least Deprived)
This shows what percentage of people within each NZ deprivation group is at risk. This indicates which groups face the greatest relative impact.

Figure A - 53.

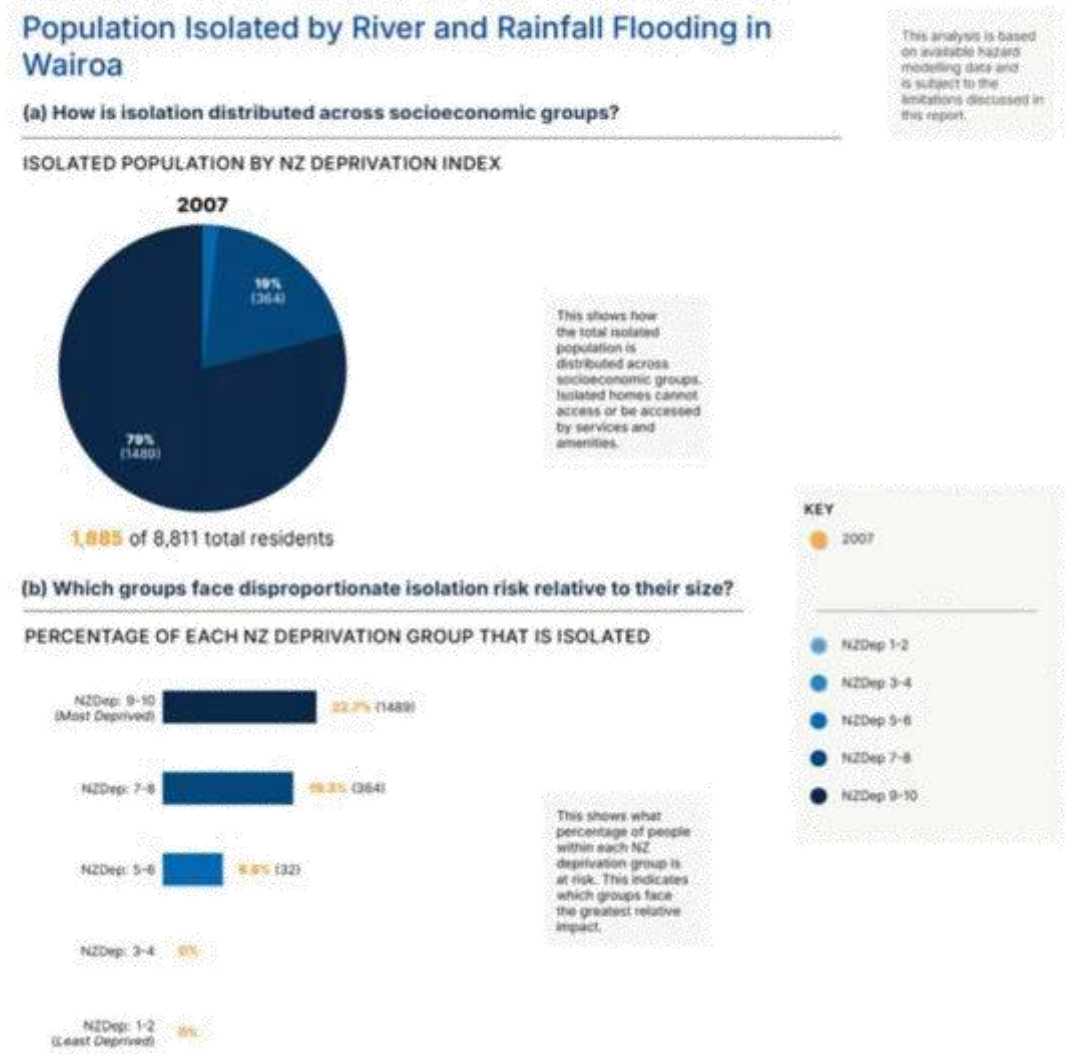

Population Isolated by River and Rainfall Flooding in Wairoa
This analysis is based on available hazard modelling data and is subject to the limitations discussed in this report.
(a) How is isolation distributed across socioeconomic groups?
ISOLATED POPULATION BY NZ DEPRIVATION INDEX
2007
19% (364)
79% (1480)
1,885 of 8,811 total residents
This shows how the total isolated population is distributed across socioeconomic groups. Isolated homes cannot access or be accessed by services and amenities.
KEY
2007
(b) Which groups face disproportionate isolation risk relative to their size?
PERCENTAGE OF EACH NZ DEPRIVATION GROUP THAT IS ISOLATED
NZDep: 9-10 (Most Deprived)
NZDep: 7-8
NZDep: 5-6
NZDep: 3-4
NZDep: 1-2 (Least Deprived)
NZDep 1-2
NZDep 3-4
NZDep 5-6
NZDep 7-8
NZDep 9-10
This shows what percentage of people within each NZ deprivation group is at risk. This indicates which groups face the greatest relative impact.

Figure A - 54.

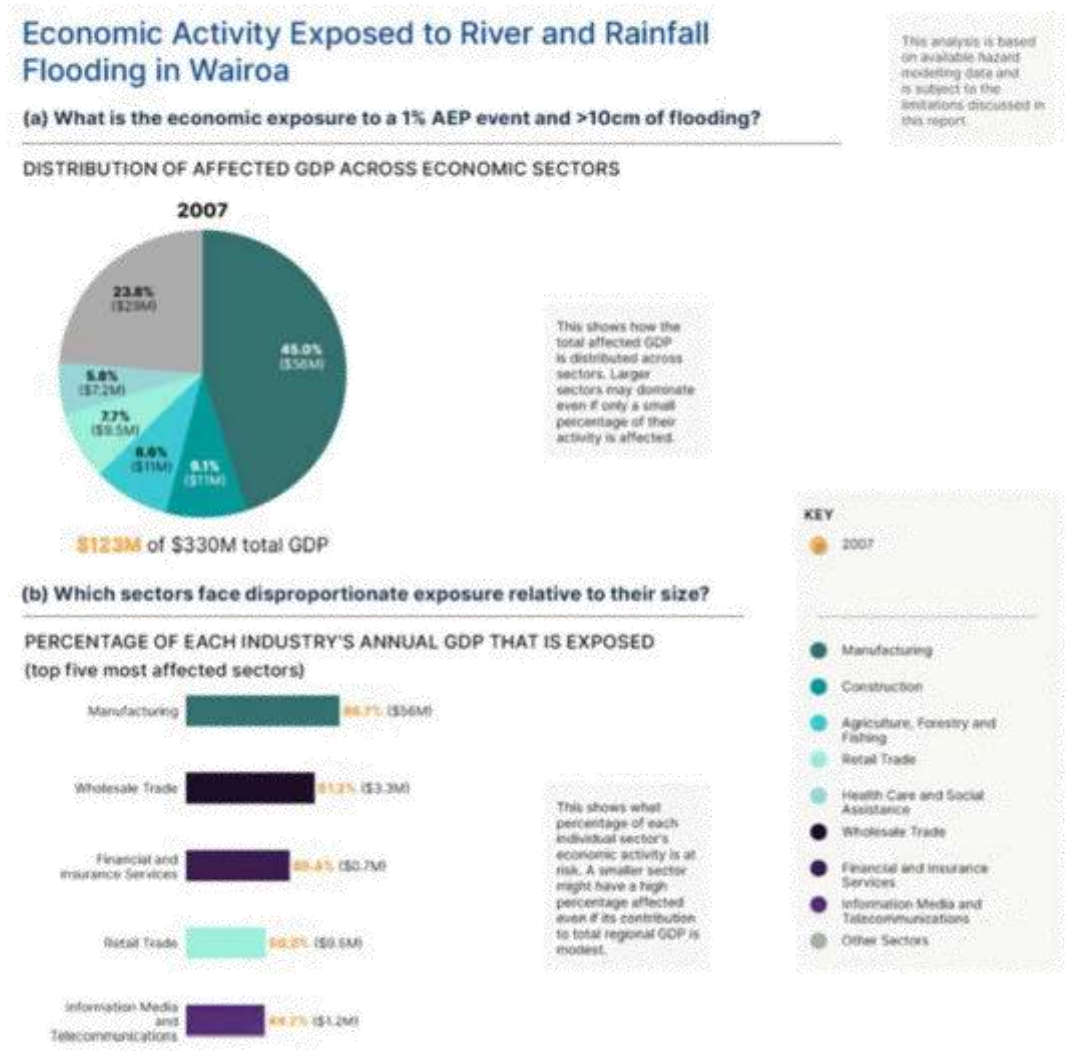

Economic Activity Exposed to River and Rainfall Flooding in Wairoa
This analysis is based on available hazard modelling data and is subject to the limitations discussed in this report.
(a) What is the economic exposure to a 1% AEP event and >10cm of flooding?
DISTRIBUTION OF AFFECTED GDP ACROSS ECONOMIC SECTORS
2007
23.8% ($29M)
45.0% ($56M)
5.8% ($7.2M)
7.7% ($9.5M)
8.6% ($11M)
9.1% ($11M)
This shows how the total affected GDP is distributed across sectors. Larger sectors may dominate even if only a small percentage of their activity is affected.
$123M of $330M total GDP
KEY
2007
(b) Which sectors face disproportionate exposure relative to their size?
PERCENTAGE OF EACH INDUSTRY'S ANNUAL GDP THAT IS EXPOSED
(top five most affected sectors)
Manufacturing
Wholesale Trade
Financial and Insurance Services
Retail Trade
Information Media and Telecommunications
This shows what percentage of each individual sector's economic activity is at risk. A smaller sector might have a high percentage affected even if its contribution to total regional GDP is modest.
Manufacturing
Construction
Agriculture, Forestry and Fishing
Retail Trade
Health Care and Social Assistance
Wholesale Trade
Financial and Insurance Services
Information Media and Telecommunications
Other Sectors

Figure A - 55.

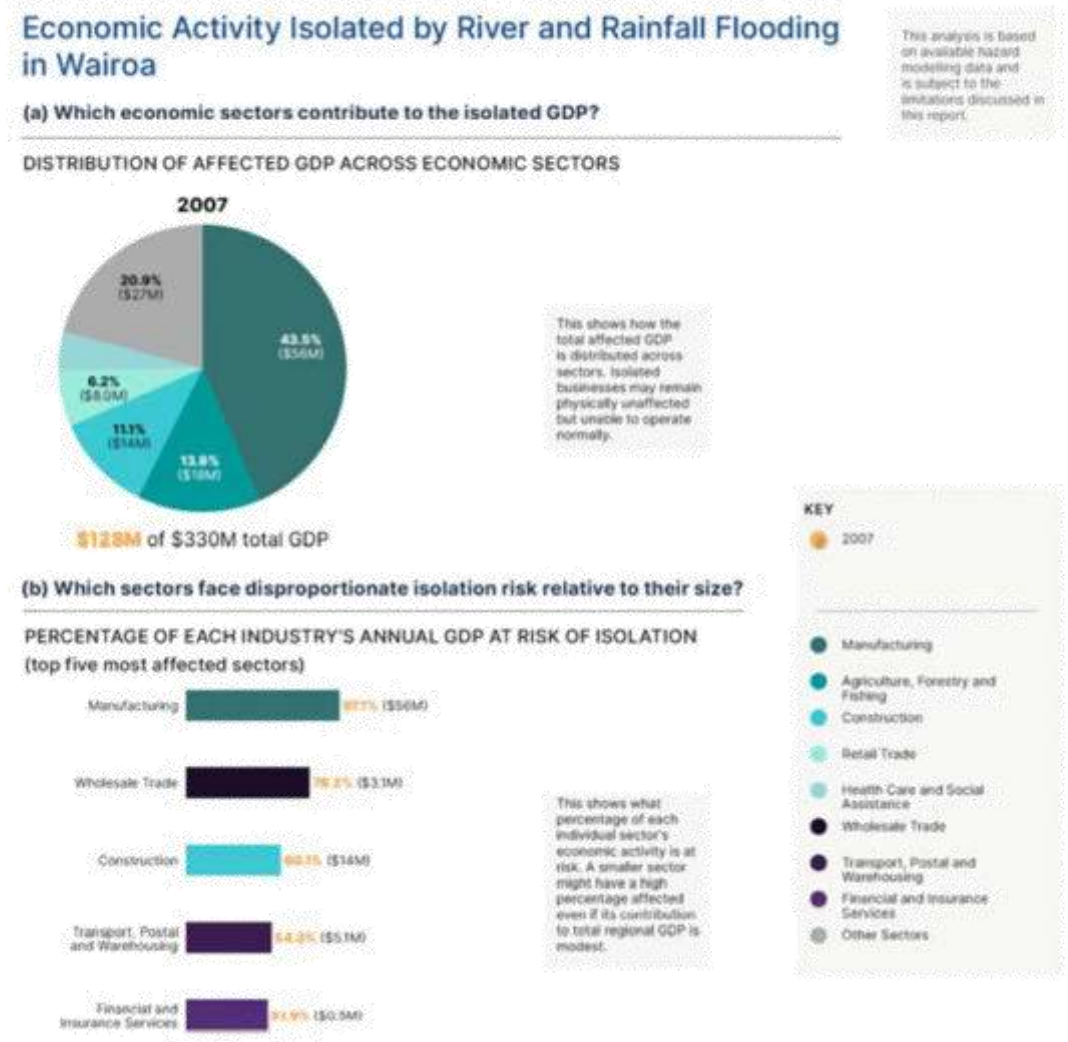

Economic Activity Isolated by River and Rainfall Flooding in Wairoa
This analysis is based on available hazard modelling data and is subject to the limitations discussed in this report.
(a) Which economic sectors contribute to the isolated GDP?
DISTRIBUTION OF AFFECTED GDP ACROSS ECONOMIC SECTORS
2007
20.9% ($27M)
43.5% ($56M)
6.2% ($8.0M)
11.1% ($14M)
13.8% ($18M)
This shows how the total affected GDP is distributed across sectors. Isolated businesses may remain physically unaffected but unable to operate normally.
$128M of $330M total GDP
KEY
2007
(b) Which sectors face disproportionate isolation risk relative to their size?
PERCENTAGE OF EACH INDUSTRY'S ANNUAL GDP AT RISK OF ISOLATION
(top five most affected sectors)
Manufacturing
Wholesale Trade
Construction
Transport, Postal and Warehousing
Financial and Insurance Services
This shows what percentage of each individual sector's economic activity is at risk. A smaller sector might have a high percentage affected even if its contribution to total regional GDP is modest.
Manufacturing
Agriculture, Forestry and Fishing
Construction
Retail Trade
Health Care and Social Assistance
Wholesale Trade
Transport, Postal and Warehousing
Financial and Insurance Services
Other Sectors

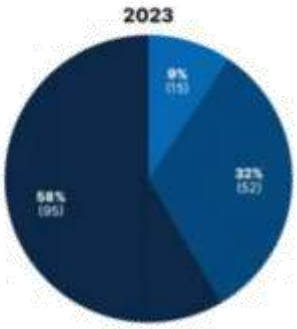
Figure A - 56.

Population Exposed to Landslides in Wairoa

This analysis is based on available hazard modelling data and is subject to the limitations discussed in this report.

(a) What is the population exposure?

EXPOSED POPULATION BY NZ DEPRIVATION INDEX

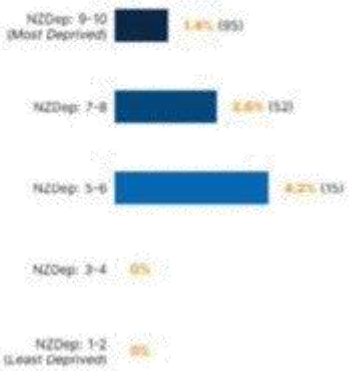


162 of 8,811 total residents

This shows how the total exposed population is distributed across socioeconomic groups. NZ Deprivation Index ranges from 1-2 (least deprived) to 9-10 (most deprived).

(b) Which groups face disproportionate exposure relative to their size?

PERCENTAGE OF EACH NZ DEPRIVATION GROUP THAT IS EXPOSED



This shows what percentage of people within each NZ deprivation group is at risk. This indicates which groups face the greatest relative impact.



Figure A - 57.

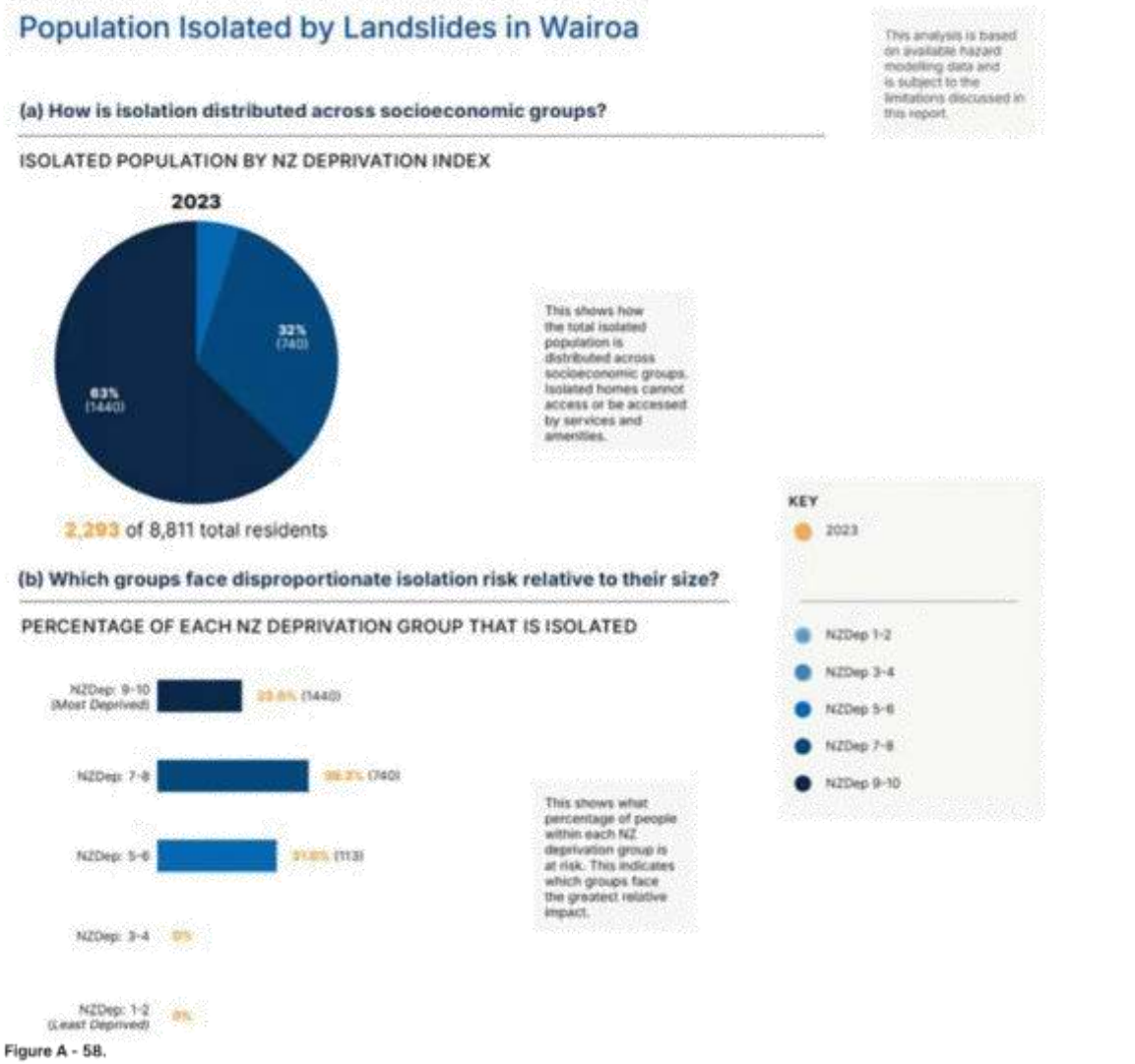

Population Isolated by Landslides in Wairoa
This analysis is based on available hazard modelling data and is subject to the limitations discussed in this report.
(a) How is isolation distributed across socioeconomic groups?
ISOLATED POPULATION BY NZ DEPRIVATION INDEX
2023
32% (740)
63% (1440)
This shows how the total isolated population is distributed across socioeconomic groups. Isolated homes cannot access or be accessed by services and amenities.
2,293 of 8,811 total residents
KEY
2023
NZDep 1-2
NZDep 3-4
NZDep 5-6
NZDep 7-8
NZDep 9-10
(b) Which groups face disproportionate isolation risk relative to their size?
PERCENTAGE OF EACH NZ DEPRIVATION GROUP THAT IS ISOLATED
NZDep: 9-10 (Most Deprived)
(1440)
NZDep: 7-8
(740)
NZDep: 5-6
(113)
NZDep: 3-4
0%
NZDep: 1-2 (Least Deprived)
0%
This shows what percentage of people within each NZ deprivation group is at risk. This indicates which groups face the greatest relative impact.

Figure A - 58.

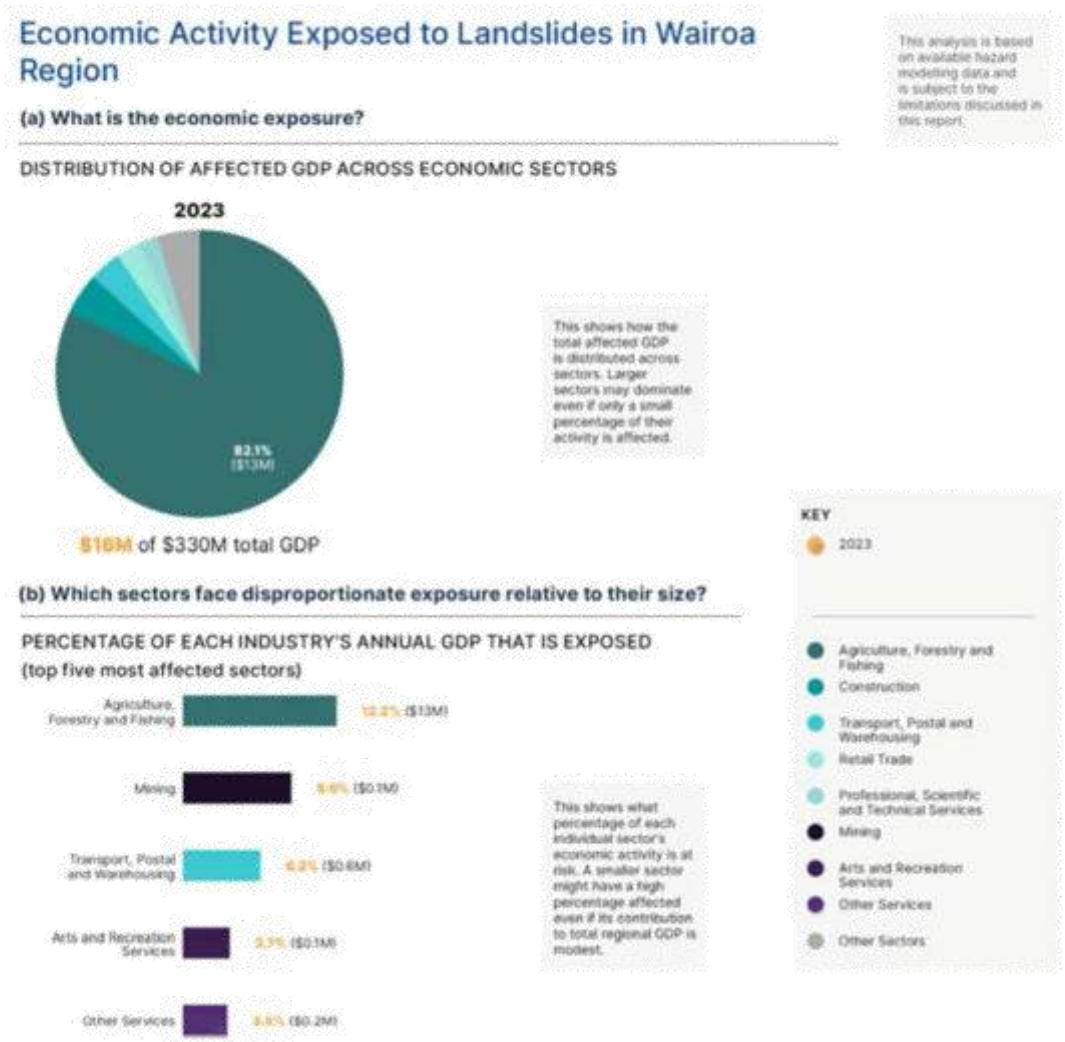

Economic Activity Exposed to Landslides in Wairoa Region
This analysis is based on available hazard modelling data and is subject to the limitations discussed in this report.
(a) What is the economic exposure?
DISTRIBUTION OF AFFECTED GDP ACROSS ECONOMIC SECTORS
2023
82.1%
($13M)
This shows how the total affected GDP is distributed across sectors. Larger sectors may dominate even if only a small percentage of their activity is affected.
$16M of $330M total GDP
KEY
2023
Agriculture, Forestry and Fishing
Construction
Transport, Postal and Warehousing
Retail Trade
Professional, Scientific and Technical Services
Mining
Arts and Recreation Services
Other Services
Other Sectors
(b) Which sectors face disproportionate exposure relative to their size?
PERCENTAGE OF EACH INDUSTRY'S ANNUAL GDP THAT IS EXPOSED
(top five most affected sectors)
Agriculture, Forestry and Fishing
12.2% ($13M)
Mining
5.6% ($0.1M)
Transport, Postal and Warehousing
4.2% ($0.6M)
Arts and Recreation Services
3.3% ($0.1M)
Other Services
3.0% ($0.2M)
This shows what percentage of each individual sector's economic activity is at risk. A smaller sector might have a high percentage affected even if its contribution to total regional GDP is modest.

Figure A - 59.

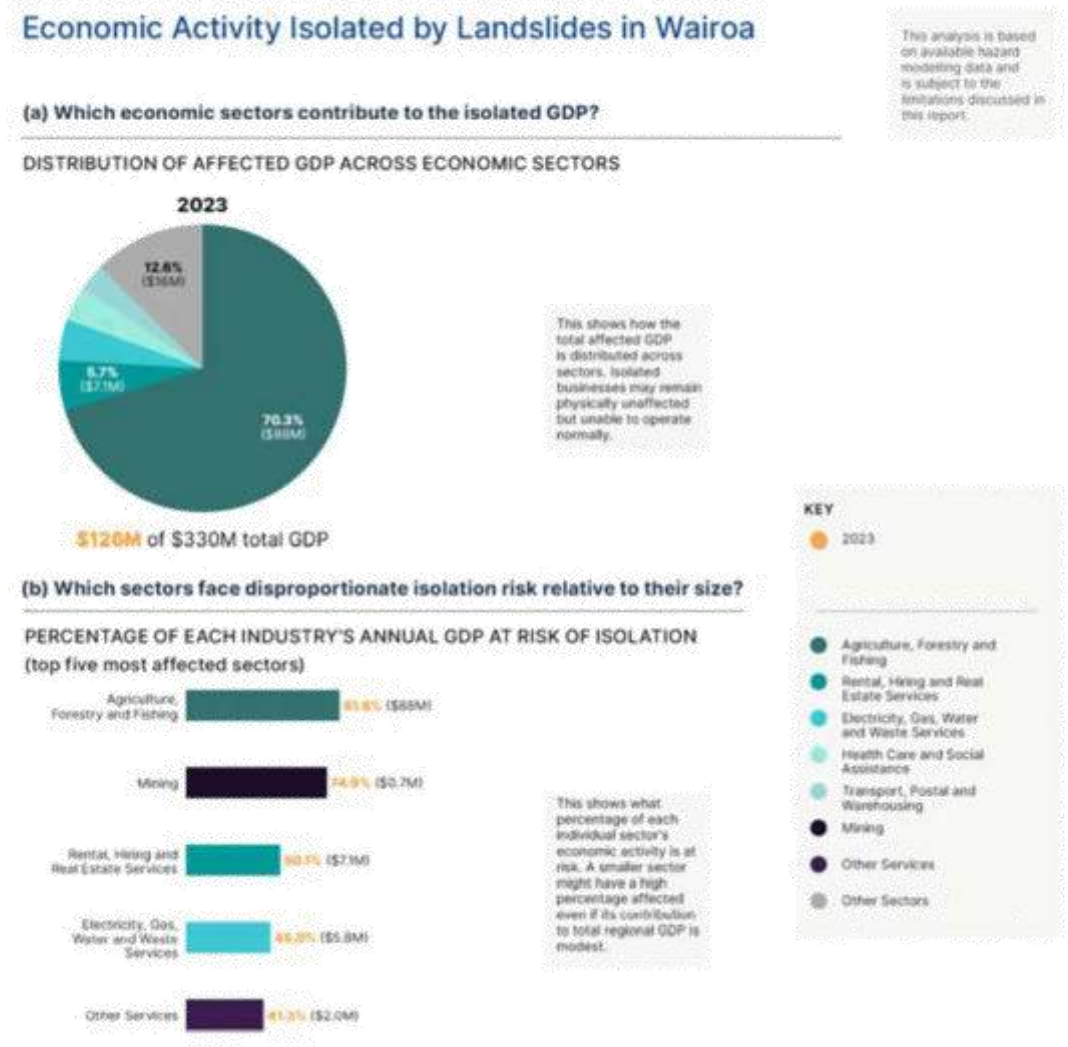

Economic Activity Isolated by Landslides in Wairoa
This analysis is based on available hazard modelling data and is subject to the limitations discussed in this report.
(a) Which economic sectors contribute to the isolated GDP?
DISTRIBUTION OF AFFECTED GDP ACROSS ECONOMIC SECTORS
2023
12.6% ($36M)
5.7% ($7.1M)
70.3% ($88M)
This shows how the total affected GDP is distributed across sectors. Isolated businesses may remain physically unaffected but unable to operate normally.
$120M of $330M total GDP
KEY
2023
Agriculture, Forestry and Fishing
Rental, Hiring and Real Estate Services
Electricity, Gas, Water and Waste Services
Health Care and Social Assistance
Transport, Postal and Warehousing
Mining
Other Services
Other Sectors
(b) Which sectors face disproportionate isolation risk relative to their size?
PERCENTAGE OF EACH INDUSTRY'S ANNUAL GDP AT RISK OF ISOLATION
(top five most affected sectors)
Agriculture, Forestry and Fishing
Mining
Rental, Hiring and Real Estate Services
Electricity, Gas, Water and Waste Services
Other Services
This shows what percentage of each individual sector's economic activity is at risk. A smaller sector might have a high percentage affected even if its contribution to total regional GDP is modest.

Figure A - 60.

URBAN INTELLIGENCE

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2025 Remits

// 01 Security System Payments

Proposed by: **Far North District Council and Central Otago District Council**

Supported by: **Zone 6 and Zone 1**

Remit: *That LGNZ advocates for security system payments to be included as an allowance under the Local Government Members Determination, in line with those afforded to Members of Parliament.*

Why is this remit important?

The importance of safety for elected members has become more apparent in recent times. With an increase in animosity towards "government figures," both online and in person, the time has come to address this. Recent examples of elected members being threatened, harassed and abused, including incidents occurring at or near their home address, highlights the need for changes to the Local Government Act to be updated. The ability for security system payments to be made as an allowance would go some way towards encouraging actual and perceived safety for existing elected members, as well as ensuring future candidates can feel safer while representing their communities.

Background and Context

Democracy worldwide is currently considered a "tinderbox" according to multiple news sites. In 2024, 37 candidates for election were murdered in Mexico. While this may seem extreme – our own Electoral Commission in NZ has a page dedicated to "security advice" for potential candidates. The rise of fringe groups, anonymity of online forums, general mistrust of government figures and polarising coverage of worldwide democratic outcomes has been creating a platform for those with singular or disaffected viewpoints. While we recognise that some of the sentiment is online, there have been instances of this spilling over into daily life for our elected members. Much of "being safe" is about "feeling safe."

The Members of Parliament Determination 2023 (Section 48) allows for up to $4500 to install a security system at a member's primary place of residence, along with up to $1000 per year to monitor this.

LGNZ's own research carried out last year identified three quarters of elected members had suffered abuse or harassment at public meetings, a third at the supermarket or school pick up, and that half of EM's felt it was worse than a year ago. Supporting new anti-stalking and harassment Legislation is a good start, but this is something that could immediately help our elected members to feel safer at home.

Some councils are already supporting elected members in personal safety. Central Otago District has paid for a member to install a camera at their home address where they live with young kids following an obnoxious campaign including items being left in their letterbox. There will be multiple other examples where councils are promoting personal safety, wellbeing initiatives and also installing or providing additional security measures at homes and council offices.

Far North and Central Otago Districts are just two examples of our huge, remote areas. Overnight Central Otago, all 9,968 square kilometres of it, is covered by two on-call Police officers, based 30km

apart. Feeling safe plays a big role in actual safety. Expectations of safety will be different for an older female to a young dad with kids, a large family or a person living alone, and they are also different between rural and urban areas.

This election, we want to ensure worry about how safe someone is in their own home is not a barrier to putting their hand up to fulfil a wonderful role for our communities.

How does this remit relate to LGNZ's current work programme?

Ties into the research on safety that LGNZ carried out last year, and also the support of the Crimes Legislation (Stalking and Harassment) Amendment Bill.

How will the proposing council help LGNZ to make progress on this remit?

Connect with Minister Mark Patterson (Minister for Rural Communities) for support

Investigate the possibility for a partnership with a national retailer/supplier of home security systems and/or trail cams

Timeframe - depends how quickly things could progress before the election?

// 02 Improving Joint Management Agreements

Proposed by: Northland Regional Council

Supported by: LGNZ Zone 1

Remit: *That LGNZ advocate to Government for: a) legislative change to make the Joint Management Agreement (JMA) mechanism more accessible for councils to use with iwi/hapū, b) for the provision of technical, legal and financial support to facilitate the use of JMAs for joint council and iwi/hapū environmental governance, and c) for a mechanism such as JMAs to be included in the Government's new resource management legislation.*

Why is this remit important?

JMAs are a valuable tool for councils and iwi / hapū to work together on environmental governance. Many councils support stronger partnerships with tangata whenua, but the statutory and practical barriers to formalising JMAs have severely limited their uptake by councils and iwi/hapū. There is thus a need to address the limitations of the current mechanism under the RMA, to make it more accessible to councils and tangata whenua, as well as to ensure a mechanism such as JMAs is included in the Government's new resource management legislation.

Recommended improvements include a) simplification or modification of the JMA statutory requirements and criteria; b) provision of a customisable JMA template and detailed guidance on when JMAs might be appropriate and how to establish them; c) explanation of the legal implications for the parties, and the Health & Safety obligations; d) making JMAs mandatory in appropriate circumstances in addition to Treaty settlements; and e) provision of funding to support iwi/hapū capacity to develop and implement JMAs.

Background and Context

JMAs under the Resource Management Act 1991 (RMA) provide for agreement between a local authority and an iwi authority and/or groups representing hapū to jointly perform or exercise any local authority functions, powers or duties under the RMA relating to a natural or physical resource.

Since inclusion as a mechanism under sections 36B-E of the RMA in 2005, only two JMAs have been established, apart from their mandatory use in some Treaty settlements.

For a JMA to be developed, the local authority must be satisfied that the agreement is an "efficient" method of exercising the function, power or duty. However, if a JMA were to require more funds and resources to support administrative costs and extra person-hours than what council would itself expend, the "efficiency" criterion might not be satisfied. Thus, "efficiency" could compel an iwi/hapū to contribute its own resources to the collaborative management process if it wished to conclude a JMA. A lack of financial resources is repeatedly identified by iwi/hapū as being the most significant barrier to their full participation under the RMA.

Another requirement of s36B is that the local authority must be satisfied that the other party to the JMA has the "technical or special capability or expertise to perform or exercise the function, power,

or duty jointly with the local authority". Many (especially unsettled) iwi/hapū are under-resourced, often having to relying on voluntary contributions of resources and expertise; thus funding and technical support may be needed to facilitate iwi/hapū participation in JMAs.

Another deterrent to JMA uptake is that the agreement can be cancelled by either party at any time. If conflict arises, the local authority will always have the "upper hand" because the function(s) shared under the JMA will revert exclusively to local authority control. More stringent cancellation requirements could be introduced that give JMA parties greater assurance of continuation.

Only those JMAs created as part of Treaty Settlements are currently mandatory for local authorities. A similar mandatory requirement under the RMA for councils to enter into JMAs in appropriate circumstances would facilitate uptake.

Currently there is very little information available on the legal implications of JMAs, and on the process and considerations for developing and implementing such an agreement. There is also no template provided for such agreements. Technical guidance from central government would further facilitate uptake.

In summary, very low uptake of JMAs reflects the high barriers to their uptake by councils and iwi/hapū. They remain a potentially useful tool if sufficient guidance, resourcing and technical support is provided, and if criteria for developing them are made more enabling.

How does this remit relate to LGNZ's current work programme?

This remit aligns with LGNZ's strategy, in particular the long-term goal that Te Tiriti partnerships between local government and Māori are authentic, strong and respected. We are not aware of any existing or planned work to advocate for improved legislative mechanisms and implementation support for Joint Management Agreements.

How will the proposing council help LGNZ to make progress on this remit?

We can provide some technical expertise to support analysis of specific options to improve how JMAs function and some advocacy support.

// 03 Alcohol Licensing Fees

Proposed by: Far North District Council

Supported by: LGNZ Zone 1

Remit: *That LGNZ advocates for the government to update the Sale and Supply of Alcohol (Fees) Regulations 18 December 2013 to account for inflation and include a mechanism for automatic annual inflation adjustments.*

Why is this remit important?

If a local council does not have a bylaw that sets alcohol licensing fees and charges it must default to the schedule of fees in the Sale and Supply of Alcohol (Fees) Regulations 2013. These default fees were set 12 years ago and, with the impact of inflation over this period, no longer enable local councils to reasonably recover the costs to administer the alcohol licensing system. This has led to increasing ratepayer subsidisation of these costs. Currently the only way that councils can increase these fees and charges is to make an Alcohol Fees Bylaw under an Order in Council associated with the Sale and Supply of Alcohol Act 2012. This is an inefficient and expensive way for councils to raise their alcohol licensing fees and charges, when this issue could be simply resolved by the government updating the schedule of fees in the Regulations.

Background and Context

Objectives relating to the setting of alcohol licensing fees were listed in the review of the Supply of Alcohol (Fees) Regulations 2013 conducted by the Ministry of Justice in 2017. These objectives include: - recovering the total reasonable costs incurred by local councils and ARLA in administering the alcohol licensing system - ensuring that those who create the greatest need for regulatory effort bear the commensurate costs.

Alcohol licensing fees and charges are intended to cover the reasonable costs of administering the alcohol licensing system via a 'user pays' approach. The fees and charges set in the Sale and Supply of Alcohol (Fees) Regulations 2013 are now 12 years out of date and have not been updated since 2013, despite two reviews of these fees conducted in 2018 and 2022 as required by section 404 of the Sale and Supply of Alcohol Act. With inflation since 2013, costs to manage alcohol licenses cannot be recovered through the fees prescribed in these Regulations. This means that every time Council processes an alcohol licence it costs more than the fee paid by the licensee and the difference must be covered by general rates.

To increase these fees and charges in their districts, local councils can make Alcohol Fees Bylaws under the Sale and Supply of Alcohol (Fee-setting Bylaws) Order 2013. However, making a bylaw is a relatively costly and inefficient way to address this issue as it involves: - time and effort to research and draft the bylaw - costs for public consultation - the need to regularly review the fees and charges set in the bylaw. A better solution would be for the government to update the fees and charges listed in the 2013 Regulations to reflect current costs. The schedule of fees in the revised Regulations should also allow for an annual CPI increase and allow cost recovery for hearings objections to District Licensing Committee decisions.

How does this remit relate to LGNZ's current work programme?

This remit sits within the Funding and Financing advocacy area within LGNZ's Advocacy Work Programme. Specifically, this relates to: - Advocating for changes to local government funding and financing - Building and working with a coalition of the willing to support LGNZ's advocacy for changes to local government funding and financing. Fees and charges are also specifically mentioned in LGNZ's funding and finance toolbox. We understand that the regulation of alcohol fees is not currently part of this Work Programme.

How will the proposing council help LGNZ to make progress on this remit?

We can provide detailed evidence of the current income received by FNDC from licensing fees based on applying the outdated fee schedule in the 2013 Regulations, compared with the costs to administer the alcohol licensing system. In summary, in the 2023/24 financial year FNDC received $410,000 in income from licence application fees compared with costs of $581,000. This means there was a shortfall of $171,000 which has to be recovered from general rates. In 2023/24 licence application fees covered 71% of costs for the Council. By contrast, the 2017 Review of the 2013 Regulations reported that cost recovery across all local councils was 108%.

// 04 Aligning public and school bus services

Proposed by: Nelson City Council

Supported by: LGNZ Regional Sector

Remit: *That LGNZ advocate for the reform of the Ministry of Education funded school bus services to provide an improved service for families and to better integrate the services with council provided public transport services, including the option of Public Transport Authorities (e.g. regional and unitary councils) managing such services (with appropriate government funding), noting that:*

a. councils better know their local communities; and

b. the potential to reduce congestion from better bus services for schools; and

c. the efficiency gains realised from integrating these two publicly funded bus services

d. the outdated and inflexible rules of the current centralised school bus system

Why is this remit important?

The quality and efficiency of school and public bus services is compromised by school and public bus services being funded through two different arms of Government. Some services are funded through the New Zealand Transport Agency and councils, and others are through the Ministry of Education School Bus Transport Service. This remit proposes to align those functions by transferring the funding and management to Regional Public Transport authorities which are better placed to understand and respond to local transport needs. By improving our bus services for students, we can also reduce congestion which is noticeably less during the school holidays in towns and cities around New Zealand.

Background and Context

There are essentially two drivers for this reform. The first is that it makes no sense to have two different arms of Government separately planning and contracting publicly funded bus services. The second is that decisions about bus services are best made locally.

The co-ordination and contracting of public bus services, whether for getting students to school or for other passengers, is a complex job. Decisions about the routes, frequency, bus size and convenient bus stops are difficult, requiring the juggling the objectives of making the service as convenient as possible, maximising usage, managing costs and ensuring safety. These decisions are inherently local.

The centralised school bus transport system is a huge source of frustration to communities and councils all over New Zealand. It is governed centrally by archaic, rigid rules that date back nearly 100 years, and are unchanged to this day.

The Ministry of Education officials do the best they can within the current policy, but the system is fundamentally outdated and broken. It makes no sense for education officials to be running transport services, and it is impossible to run a community focused, flexible school transport system over thousands of schools and communities from Wellington.

One of the big opportunities of this reform is to reduce congestion by improving our bus service for students. The potential is highlighted in towns and cities all over New Zealand during school holidays when there is much less congestion. An improved bus service with timetables and routes tailored to students' needs would be a wise investment for the overall transport network.

Regional councils, unitary authorities and Auckland Transport are all public transport authorities with delegated responsibility for the development, planning and delivery of public transport services in New Zealand.

The current system has perverse incentives in that if a public transport authority uses rates to improve public transport service to an area, the Ministry of Education withdraws its service. The current system discourages councils to provide public transport services on routes and times that work for students.

Nelson/Tasman are exploring trialling the integration of the management of public and school transport services. We believe there is the opportunity to provide a more responsive service to families of school aged children, to expend our public transport network and to get efficiency gains from contracting for both types of services. If successful, the trial may result in wider reforms.

This is a significant proposal currently involving more than $125 million of annual public expenditure on school bus services that would need to be transferred to public transport authorities. It would be a complex reform that requires careful attention to detail and consultation with parents, schools, bus service providers and councils. The prize is a better bus services in places like Nelson, less congestion on our roads and more efficient use of public money.

How does this remit relate to LGNZ's current work programme?

Transport is a critical issue facing all councils and we need to be proactively looking for way to better deliver services. This remit goes to the heart of LGNZ's vision of localism in that it proposes to localise the delivery of school bus services. This remit also compliments LGNZ's strategic relationship with Government in that it proposes reforms that improve efficiency, and is not just asking for more funding in fiscally constrained times. It also supports LGNZ's sustainability goals by providing opportunities for expansion of public transport services.

How will the proposing council help LGNZ to make progress on this remit?

Nelson City Council is keen to help advance the case for this reform. We have already engaged with the Ministry of Education, the Minister of Education and the Minister of Transport who are interested in the reforms and keen to trial this alternative approach for the delivery of school bus services. We also commit to sharing our experiences should Nelson Tasman proceed to trialling this reform.

// 05 Review of local government arrangements to achieve better balance

Proposed by: **Tauranga City Council**

Supported by: LGNZ Metro Sector

Remit: *That LGNZ works with the Government and Councils to review current local government arrangements, including the functions and structure of local government, to achieve a better balance between the need to efficiently and effectively deliver services and infrastructure, while enabling democratic local decision-making and action by, and on behalf of communities.*

Why is this remit important?

Efficient and effective local democracy and associated decision making is paramount.

Background and Context

A number of local government reviews undertaken previously, have concluded that the current structure and arrangement of the local government sector, is not conducive to ensuring that infrastructure and services delivered to communities, are always done so in a cost effective and efficient manner.

Current sector arrangements are a legacy, and do not always reflect how our communities have expanded, nor how modern services are delivered.

Central government is underway with key policy and legislations changes that both directly and indirectly significantly impact the local government sector. This will require an agile and well planned response by the sector.

How does this remit relate to LGNZ's current work programme?

This is an important issue for local government as the sector responds to the current central government policy and legislation changes and reforms underway. Seeks advocacy for a work programme between central government, local government and LGNZ, to undertake this review, and ensuring local communities are well considered.

This remit sits within the principles of the Local Government Act 2002 in that it would give local government a tool to provide services more efficiently. While this is not currently part of LGNZ's work programme, engaging with central government will be essential to making progress in this area.

How will the proposing council help LGNZ to make progress on this remit?

Metro sector councils will provide support and resource to participate and work on the programme established.

Rates capping AGM paper

Purpose of this paper

- To update members on the Government's approach to rates capping and seek agreement on LGNZ's direction of travel.

Recommendations

- That the AGM **approves** the direction of travel set out in this paper.
- That the AGM **notes** members will agree the next phase at a Special General Meeting after the 2025 elections (in March 2026 or earlier if needed).

Background

What is rates capping and what is being proposed?

Rates capping sets a limit on how much councils can increase rates. Often the cap is indexed to economic measures such as consumer inflation, local government inflation or population.

All rates capping policies effectively transfer local fiscal decisions from local communities to central government politicians or bureaucracies.

In August 2024, the then Local Government Minister set out a Local Government Forward Work Programme. This programme included a proposal to investigate a rates cap on "non-core" expenditure by councils. This policy was to be modelled on similar policies in Australian states New South Wales and Victoria.

The Government plans to distinguish between core and non-core spending, applying the cap only to non-core expenditure. Core services may be identified in the soon-to-be-reinstated Section 11A of the Local Government Act 2002 and new purpose of local government. It's still unclear how the Government will enable the cap to apply only to non-core expenditure as this is not a feature of other rate caps overseas. The distinction is likely to be unworkable at a practical level and generate significant bureaucracy. It is unclear for instance how support activities which are used across all councils services, such as call centres and human resource functions would be defined in such a cap.

What rates capping looks like in other countries

Rates capping looks slightly different in each jurisdiction. In NSW, rates capping extends to charges like development contributions. An independent authority decides the rates cap level and considers exemptions to it. However, in Victoria, the essential services commission provides advice to the state's Minister of Local Government who then decides the level of the rate cap.

LGNZ has engaged with local government experts from New South Wales and Victoria to understand how rates capping has affected their councils. They told us rates capping has led to negative outcomes for councils and communities, including:

- Degraded infrastructure and service delivery;
- Financial instability among councils;
- Severe infrastructure backlogs;
- Bureaucratic and expensive processes to approval rates above the cap;
- Reduced local economic growth; and
- Diminished local voice in council investment and revenue decisions.

NSW and Victoria's experience also suggests that once rates caps are in place, removing them is very challenging politically. NSW and Victorian councils also say that impacts worsen over time. Initially councils in those states were able to sell assets, and reduce services and staffing, to offset impacts of the rates cap. After several years, this is no longer an option.

LGNZ's advocacy so far

LGNZ's top advocacy priority (as set by members) is better local government funding and financing. Rates capping directly constrains local government funding and financing. Rates capping also runs counter to localism. Locally elected representatives – who are directly accountable to communities – are better placed than Wellington to make local taxation and investment decisions. Rates capping is not primarily about rates increases: it's about who decides what rates increases should be.

So far, LGNZ has communicated our views on rates capping in conversations and meetings with politicians and officials, via submissions, and through media. Some elected members around the country have publicly spoken out against the policy of their own accord.

Our advocacy needs to step up a gear

If we don't strengthen our advocacy, the Government is likely to implement rates capping. The Government is likely to introduce legislation next year. However, it is still politically possible to prevent rates capping. LGNZ successfully opposed a similar proposal in 2009. More recently, South Australia has held off a rates cap through lobbying and a strong public campaign.

Others will campaign for rates capping

Pressure group the Taxpayers Union has launched a campaign in support of rates capping that features anti-council rhetoric ("ballooning staff numbers and vanity project spending see councils delivering fewer core services"). This campaign is targeting particular councils and Mayors ahead of the local government elections.

Without balance, supportive voices will capture the public narrative around rates capping.

How we could stop rates capping

We would develop a comprehensive advocacy plan

This plan would draw on the strategies from LGNZ's 2009 advocacy and South Australia's successful campaign. We anticipate that public intensity would need to build as key policy milestones are passed (for example, when the Bill is introduced).

Being louder publicly would be essential

To argue that councils are better placed than central government to make rates decisions, we must boost public trust and confidence in local government. This would be one prong of our campaign, including highlighting popular council services and infrastructure that would be threatened by rates capping. A campaign centred on what the public would lose to a rate cap – and who has the right to decide – is more likely to succeed than one focussed on technicalities.

LGNZ sets the tone for rate capping advocacy. We know other groups and organisations oppose this policy but given this sits squarely in our space, no one will stick their neck out more than we do. Visible advocacy from LGNZ would be required to activate a "coalition of the willing".

The consequences of being louder

We also need to consider what political consequences might result from strongly and vocally opposing rates capping. Misinformation about LGNZ's political neutrality already exists. While we do (and will continue to) work closely with the Government on many other policies and portfolios, opposing specific proposals gains more attention.

However, other membership bodies talk loudly and publicly to the Government when certain lines are crossed. For example, Federated Farmers' "SOS: Save Our Sheep" campaign is aggressively calling on the Government to stop carbon forestry and preserve the sheep industry. Playing out across billboards, social media and media. It's important to note that opposing a policy does not prevent us from working constructively with the Government on other policy areas.

We need a mandate from members

The paper and the AGM 2025 vote are about confirming our direction of travel rather than agreeing explicit actions.

If the AGM agrees to the direction of travel, we will continue our current approach while developing a plan for the next phase.

That next phase would go to a Special General Meeting for approval. This SGM would be held after the 2025 elections so that we have an explicit mandate from the next triennium's members. It would potentially be held in March 2026 (or earlier if necessary).

LGNZ is clear that a mandate is needed from members to proceed with a strong public campaign.

HAWKE'S BAY REGIONAL INVESTMENT COMPANY LTD

Statement of Intent

For the Year Ending 30 June 2026

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1 About Us

Hawkes Bay Regional Investment Company (HBRIC) is the investment management arm of the Hawkes Bay Regional Council (Council).

HBRIC was established in 2012 to provide appropriate separation of Council's investment assets from its core service functions. That establishment started with a shareholding in Napier Port Holdings Limited (the Napier Port).

Today, we operate under an expanded mandate, looking after both the investment assets of both Council and our own assets. HBRIC seeks to apply commercial investment expertise to these assets as a collective, providing the greatest overall benefit to the ratepayers of the Region through Council.

HBRIC is a majority shareholder in Napier Port, a significant infrastructure asset for our region. We also hold other financial and property investments, applying capital from a partial sale of the Napier Port shares in 2019.

In 2023, Council resolved to use HBRIC more fully, asking HBRIC to provide its investment management expertise across Councils own investment assets. The investment assets of the Council managed by HBRIC include financial and property assets,

The combination of both HBRIC and Council investments under one operating entity allows HBRIC to provide scale and a more strategic approach to both asset management and to returns to Council. In supporting this wider mandate, HBRIC has and is continuing to increase its commercial capabilities, including the move to a majority independent Board of Directors.

Collectively, HBRIC manages assets of approximately $502 million.

Asset	Owner	Strategic to Council?	31 Dec 24 Value ($000)
Napier Port Holdings Ltd	HBRIC	Strategic	282,700
Foodest-Haumako Ltd Partnership	HBRIC	Non-Strategic	3,470
Future Investment Funds (Managed Funds)	HBRIC/HBRC	Strategic	125,233
Long Term Investment Funds (Managed Funds)	HBRC	Non-Strategic	55,957
Property Assets Investments	HBRC	Non-Strategic	34,980
			502,341

The Council has determined that the shareholding in HBRIC, our majority holding in Napier Port, and the proceeds from the 2019 Napier Port partial sale are Strategic Assets of the Region.

HBRIC is a wholly owned subsidiary of the Council, and a Council Controlled Trading Organisation (CCTO) and is required to annually produce a Statement of Intent.

2 Our Operating Environment

The social, economic and environmental event of the past three years have altered the risk environment in which HBRIC operates.

Since 2020, our investments have had to cope directly with pandemics (Covid-19), natural disasters (Cyclone Gabrielle), and periods of higher inflation and interest rates that we have not seen for 15 years.

HBRIC's portfolio is not immune to such events, impacting both the current asset values, but also in some cases impacting the level of our cash earnings. Our objective is to provide Council as steadily growing cash flow, so support the ongoing service that Council provides. The events of the last three years have required a reset of expectations in terms of earning provided to Council to ensure that we preserve the assets for all generations.

Port of Napier has been impacted by each of these events, and the recovery back to 'normal' market conditions will take time, as the region rebuilds. We are pleased that the Port Board and Management performance throughout the recovery process continues to deliver solid results for HBRIC as shareholder.

HBRIC's investment portfolio remains heavily concentrated in Napier Port, which represents the largest single asset by value and revenue contribution. As of the date of this Statement of Intent, Napier Port accounts for approximately 80 % of HBRIC's total portfolio value and a significant proportion of HBRIC's annual cash distributions to Council. While this investment has provided historically stable returns, its dominance within the portfolio creates specific concentration risk that could impact HBRIC's ability to meet Council's long-term financial objectives. Risks include exposure to sectoral and operational factors unique to the port industry, as well as external events such as natural disasters, supply chain disruptions, and evolving regulatory frameworks.

Our shareholder, the Council too has been significantly impacted by the events of recent years. Cyclone Gabrielle has added a significant one off and ongoing costs to Council in its role of protecting the community and building wider environmental resilience for an increasingly uncertain climate future.

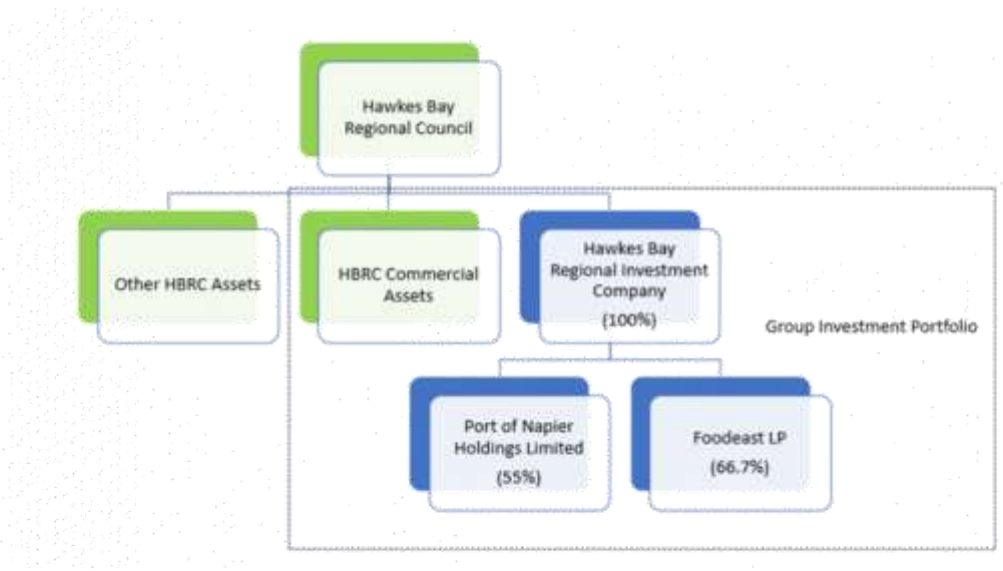
Such events emphasise the need for to continuously question how best to manage risk appropriately, and to look to create and take new opportunities that will ultimately benefit the Council and the ratepayers of today and tomorrow. To achieve this, the assets that HBRIC has today, may not be the assets of tomorrow, but rather will reflect a portfolio of assets that HBRIC believe will best achieve the Purpose and Objectives outlined in this Draft Statement of Intent.

It is against this operating environment backdrop that HBRIC has prepared its Draft Statement of Intent.

3 Our Group

This Draft Statement of Intent (SOI) is prepared in accordance with Section 64(1) of the Local Government Act 2002 (the Act).

It has been prepared following the consideration by the HBRIC Board of Directors of the Council Statement of Expectations.



The SOI covers the following:

- Hawkes Bay Regional Investment Company Limited and subsidiaries: HBRIC as an asset including its majority shareholding in the Port of Napier and Foodeast, plus other investments of HBRIC. Collectively, this is referred to as the 'HBRIC Group'.

- The Group Investment Portfolio: HBRIC has been appointed manager as Advisor and Investment Manager of Councils Commercial Assets in addition to the commercial assets owned by HBRIC. Collectively, these are referred to as the 'Group Investment Portfolio'.

Foodeast is a Limited Partnership and a CCTO in its own right and produces its own SOI for HBRIC. The Napier Port, while a subsidiary of HBRIC, is not required to produce a SOI given its listing on the New Zealand Exchange (NZX).

4 Our Mission

HBRIC mission is:

To optimise and grow the quantum and reliability of long-term financial returns to Council from its Group Investment Portfolio.

5 Our Objectives

The objectives of HBRIC Ltd are to:

- Provide Council with a consistent and growing long-term cash income stream to support their service delivery,
- Manage and grow the Groups Investment Portfolio as a long-term endowment for the region's ratepayers,
- Consider Social and Environmental Responsibility through how we manage our investments and how we deal with others,
- Be a trusted advisor to Council,
- Be a responsible manager of our shareholding in the Napier Port,
- Through prudent investment, manage investment risk and look to diversify the Groups Investment Portfolio,
- Be an investment manager of choice, attracting exceptional governance and top-tier support .
- Be a respected partner to current and future co-investors, including Tangata Whenua.

6 Our Role

The LGA requires that the Nature and Scope of Activities Undertaken be defined.

Our Collective Role in Management of the Group Investment Portfolio

- Generation of commercial returns and a consistently growing income stream to Council through the holding of a diversified Group Investment Portfolio.
- Manage the Group Investment Portfolio from an intergenerational perspective.
- Demonstrate excellence in Risk and Asset Management though the use of experts in governance and management.
- Management of Managed Funds in accordance with the Group Statement of Investment Policy and Objectives (SIPO).
- Ensure open dialogue exists between Council as shareholder and asset owner and HBRIC.
- Be a trusted advisor to Council in relation to Investment Assets.

Our Role as owner and manager of HBRIC Investment Assets

- Monitor the financial performance and corporate governance of the Napier Port as befits a majority shareholder.
- Evaluate, develop, and nurture commercial opportunities as they arise.

7 Our Corporate Governance

This section gives readers an overview of the company's main corporate governance policies, practices and processes adopted or followed by the HBRIC Ltd Board.

Role of the Board of Directors
The Board of Directors is responsible to Council for the strategic direction and control of HBRIC Ltd's activities. The Board is to guide and monitor the business and affairs of HBRIC Ltd in accordance with its mission and objectives as set out in this Statement of Intent.

Council has delegated responsibility for its Investment Assets to the HBRIC Board.

Management has been delegated responsibility for the day-to-day management of the company. HBRIC Ltd may make use of external advisers from time to time.

All directors are required to comply with a formal Code of Conduct, which is based on the New Zealand Institute of Directors' Principles of Best Practice.

Board Composition and Fees
Appointments to the HBRIC Ltd Board are made directly by Council in accordance with Council's Policy on Director Appointments.

Fees for the HBRIC Ltd Board will be set triennially in accordance with this same Council policy. HBRIC Ltd will affect an appropriate directors' and officers' liability insurance cover at the expense of HBRIC Ltd.

The Board meets regularly as required.

Subsidiary Companies
All subsidiary companies (not including Napier Port Holdings or those where HBRIC Ltd owns less than 50%) are required to submit an annual Statement of Intent to HBRIC Ltd, which will evaluate them and suggest changes as considered necessary, before finalisation by the company concerned. In the event of a new subsidiary company being established the first statement of Intent of the subsidiary company will be referred to the Council for comment.

Subsequently, if any material changes are proposed by subsidiaries, HBRIC Ltd will consult with Council on such changes.

Representatives of the subsidiary board and management will meet with HBRIC Ltd at least twice each year, to discuss the company's strategic direction and any significant issues that arise. The Board also receives other reports as are necessary to perform its monitoring function. HBRIC Ltd however, does not involve itself in the operational management of the subsidiary companies.

Board Appointments
All directors of subsidiary companies (and associate companies, if any) are selected in accord with Council's Appointments Policy. We seek an open, professionally managed process, targeting appropriate relevant expertise and aptitude in consultation with Council.

Director appointments of Napier Port are done in accordance with NZX guidelines. HBRIC Ltd has no director appointment rights for Napier Port.

Financial Results
Directors receive and review HBRIC Ltd parent company financial and other reports regularly and provide formal group and parent company financial statements to the shareholder annually – for the year ended 30 June.

Joint Ventures
Joint ventures not established as company entities will adhere to the reporting requirements specified for subsidiary companies above.

8 Our Responsibility to Our Shareholder

Statement of Expectation
Council has in accord with the Act, delivered a Statement of Expectation to HBRIC on 9 November 2023. This confirmed the expanded role that this SOI has been prepared in accordance with. That Statement of Expectation applied to the financial years 2025 to 2027 and is available on the Council website (www.hbrc.govt.nz). A supplementary amendment to dividend expectations for the 2025 and 2026 financial years was delivered to HBRIC on 4 June 2024.

Statement of Intent
In accordance with the Local Government Act 2002, each year by 1 March HBRIC Ltd will submit a draft Statement of Intent for the ensuing year to Council for its consideration. The SOI sets out HBRIC Ltd's overall objectives, intentions, and financial and performance targets. Having considered any comments on the SOI by Council, the final operative Statement of Intent is then delivered to Council (as shareholder) for its approval on or before 30 June each year.

Expense Reimbursement
It is anticipated that there will be instances where Council uses the service of HBRIC, and HBRIC uses the services of Council. Any such expenditure can be charged accordingly where it is agreed reasonable by Council and the Board of Directors. A Management Agreement will be created to outline specific costs that can be recovered as part of the enhanced role of HBRIC.

No Suprises
The relationship between HBRIC and its shareholder is based on Trust and Confidence. The Group therefore operates a "no surprises" policy between HBRIC and Council. Any significant variation form the Statement of Intent or Statement of Expectations will be informed at the soonest practical opportunity.

9 Our Shareholders Funds and Valuation

The estimated figures below reflect the 30 June positions of their respective years and take into account changes to asset values due to revaluations. HBRIC Ltd will keep council informed of performance against targets on a timely basis.

The values below represent the HBRIC Group, including the shareholding in the Napier Port at market value. The Napier Port is NZX listed, and its market value may differ from its accounting value under IFRS.

At the time of providing this forecast, HBRIC holds no material debt. The Group has the ability to take on debt to support the ongoing expansion of the Groups objectives.

Parent Company	2025	2026	2027
Shareholder's funds/total assets	>95%	>95%	>95%
Net debt ($m)	$0m	$0m	$0m
Shareholders' funds ($m) *	$300m	$309m	$319m

Valuation

HBRIC Ltd will monitor its own market value at 30 June in each financial year by undertaking an internal assessment of its ongoing capital value (including valuation of subsidiaries and associates). This will be used to assist the management of capital, debt, revenue, and expenditure streams to achieve the returns set out in Section 10 of this Statement of Intent.

The commercial value of HBRIC at the time of writing is $359m. (based on a Napier Port Share price of $2.57.)

10 Our Performance Targets

Performance Targets are effective for the year of this Statement of Intent. Targets will be measured and reported on in the Annual Report of HBRIC for the year to 30 June 2026.

The following Performance Targets are applicable to HBRIC only.

Portfolio	Objective	Measure
Napier Port	Maintain a majority holding in the Napier Port.	Hold greater than 50.1% shareholding. Council approval and community consultation through the Special Consultative Procedure set out in Section 93 of the Act and the relevant Council policy must be followed prior to any change to the current shareholding.
	Monitor and report on the performance of the Napier Port.	Two investor presentations by Napier Port representative to the HBRIC Board (or Council) annually.

Portfolio	Objective	Measure
Managed Funds	7% p.a. Total Investment Return, including 2.5% p.a. Capital Protection..	Total investment returns will be assessed as net of fees and tax, on a rolling five-year basis. Capital Protected return is reflected as Total Investment Returns less any cash distributions.
	Compliance with the Group SIPO.	Compliance with the Group SIPO, or notification to Council in advance of material breaches.
Other Investment Assets	Grow a portfolio of other investment assets for optimal long term commercial return in accordance with the HBRIC Group Investment Strategy	Annual performance review of Other Investment Asset.
Governance	Keep Council informed on a 'no surprises' basis through regular presentation to Council.	HBRIC Quarterly presentation to Corporate and Strategic Committee

The following Performance Targets are applicable to the Group Investment Portfolio

Portfolio	Objective	Measure
Managed Funds	7% p.a. Total Investment Return, Including 2.5% Capital Protection.	Total investment returns will be assessed as net of fees and tax, on a rolling five-year basis. Capital Protected return is reflected as Total Investment Returns less any cash distributions.
	Ensure all Managed Funds are in compliance with the Group SIPO.	Compliance with the Group SIPO, or notification to Council in advance of material breaches.
Other Investment Assets	Monitor, manage, and diversify the Group's portfolio of other Investment assets for optimal long term commercial return.	Annual review of HBRC other investment Assets by HBRIC (Wellington and Napier leasehold property,)
Dividend and Returns	Meet the distribution expectations set out in Council's Statement of Expectations.	meet Council's Group Investment Portfolio dividend expectations: • **FY26 Cash Dividend of $13.3m** • **FY26 2.5% growth on Managed Funds** • **Minimum Growth of Dividend Resilience Reserve of [$1,000,000] - subject to council drawdown.**
Governance	Ensure Group Investment strategy, SIPO and, policies are current and appropriate.	All policies and procedures reviewed no less than biennially by the HBRIC Board.

11 Financial Performance Targets

	FY26
Deliver shareholder cash expectations from Group Investments,	$13,300,000
Meet capital protection watermarks on the Group Managed Funds portfolio for the financial year	2.5% p.a.
Creation of dividend resilience reserve (subject to Council Drawdown)	>/=[$1,000,000] p.a.

12 Our Distributions to Shareholder

The Group is conscious of trying to ensure that Council receives a steadily increasing income stream from the Group Investment Portfolio. It is up to the Board of Directors of HBRIC to determine the portion of Distribution that is derived from HBRIC, and the level of cash income derived for Council from its own portfolio under HBRIC management.

HBRIC Ltd will pay dividends to the shareholder after taking into account its profitability, future investment, and cash management requirements. Dividends payable to the shareholder will be determined by the Board after consideration of the company's funding requirements and the requirement to meet the solvency test under the provisions of the Companies Act 1993. Dividends are forecast to be paid in regular instalments agreed with Council each financial year, with a minimum of two, six-monthly instalments. HBRIC Ltd expects a blend of growth and income across the portfolio to achieve the distribution forecast to Council and inflation adjusted asset growth. The cash return expectation to Council has historically been set at 3% of Managed Funds with other assets having their own return profiles. The level of actual distribution paid from HBRIC to Council, as a portion of the total cash earnings to Council from the Group Investment Portfolio, is set in the Statement of Expectations issued by Council to HBRIC from time to time.

Financial Year	2025	2026	2027
Distribution ($m) Total to Council from Group Investment Portfolio	$15.05m	$13.3m	$13.5m
Distribution proportion of above coming from HBRIC as a dividend	40% – 80% ($6m - $12m)	40% – 80% ($5.3m to $10.6m)	40% – 80% ($5.4m to $10.8m)

Cash expectations (for distribution) are assessed against annual return targets. Total investment returns will be assessed as gross on a rolling five-year basis. Inflation adjusted returns are reflected as net returns less distributions. For the purpose of managing reserves, inflation will been set at 2.5% per annum through the Long-Term Plan.

Council seeks to grow resilience over the life of the 2025 Three Year Plan. Council wishes to see HBRIC grow resilience equivalent to one year's dividend from the Port, through the retention of capital gains and any surplus cash from Investment Assets over and above the distribution proposed in the Long-Term Plan.

13 Our Reporting

Statutory information requirements

The company will provide an annual Statement of Intent in accordance with Section 64(1) of the Local Government Act 2002. The directors will include any other information they consider appropriate. Where appropriate, revised forecasts will be submitted to the shareholder.

HBRIC Ltd will submit a Consolidated Annual Report to the shareholder. The annual report will include audited financial statements, and such other details as are necessary to permit an informed assessment of the company's performance and financial position during the reporting period, and to comply with the requirements of the Companies Act and Financial Reporting Act.

HBRIC Ltd will provide a parent entity quarterly report to the shareholder within two months after the end of the first half of each financial year. The report will provide among other things, an update on the financial performance and investing activities of the company.

Other information to meet the needs of Council

The company will provide regular reports to Council on its activities and the results of its subsidiary companies. It will operate on a timely basis in respect of significant shareholder - related matters, to the fullest extent possible in the context of commercial sensitivity and confidentiality agreements.

14 Our Policy on Acquisition and Divestment

HBRIC Ltd will comply with Council's Investment Policy as set out in the Three-Year Plan (LTP) 2025-27 (or any successive LTPs) for acquisitions and divestments.

The Group has the ability to enter into new financial investments, or to dispose of existing financial investment, provided it is in accordance with this Statement of Intent and HBRIC working towards the long-term objectives of the Group.

HBRIC Ltd will periodically review its investments to ensure that continued ownership represents the best option for HBRIC Ltd and Council and will consult with Council prior to any material divestment or major restructuring of a subsidiary company.

Changes in investment assets such as Managed Funds must be in accordance with the Group SIPO. This includes adherence to the Groups position on Responsible Investment. Any change to the SIPO requires the approval of Council.

15 Our Activities for Which Compensation is Sought

HBRIC Ltd has lent Hawke's Bay Regional Council $16.63m. The loan is interest bearing with Council making scheduled payments to HBRIC Ltd. The loan term expires on 30 June 2025 but may be extended by agreement of the parties.

Currently HBRIC Ltd procures certain treasury, financial, accounting and other services from HBRC to support its operations. As a result of HBRIC's recently expanded mandate HBRIC Limited is reviewing its operating and resourcing model, which may result in HBRIC seeking compensation from Council in respect of management services and responsibilities in relation to HBRC-owned Investment Assets. Any proposed changes will need to first satisfy HBRC procurement and delegations' policies.

16 Our Accounting Policies

HBRIC Ltd will adopt accounting policies that are consistent with New Zealand International Financial Reporting Standards, generally accepted accounting practice and the policies adopted by the Hawke's Bay Regional Council group.

17 Our Directory

Postal Address:
Private Bag 6006, Napier 4142

Registered Address:
159 Dalton Street, Napier South, Napier 4110

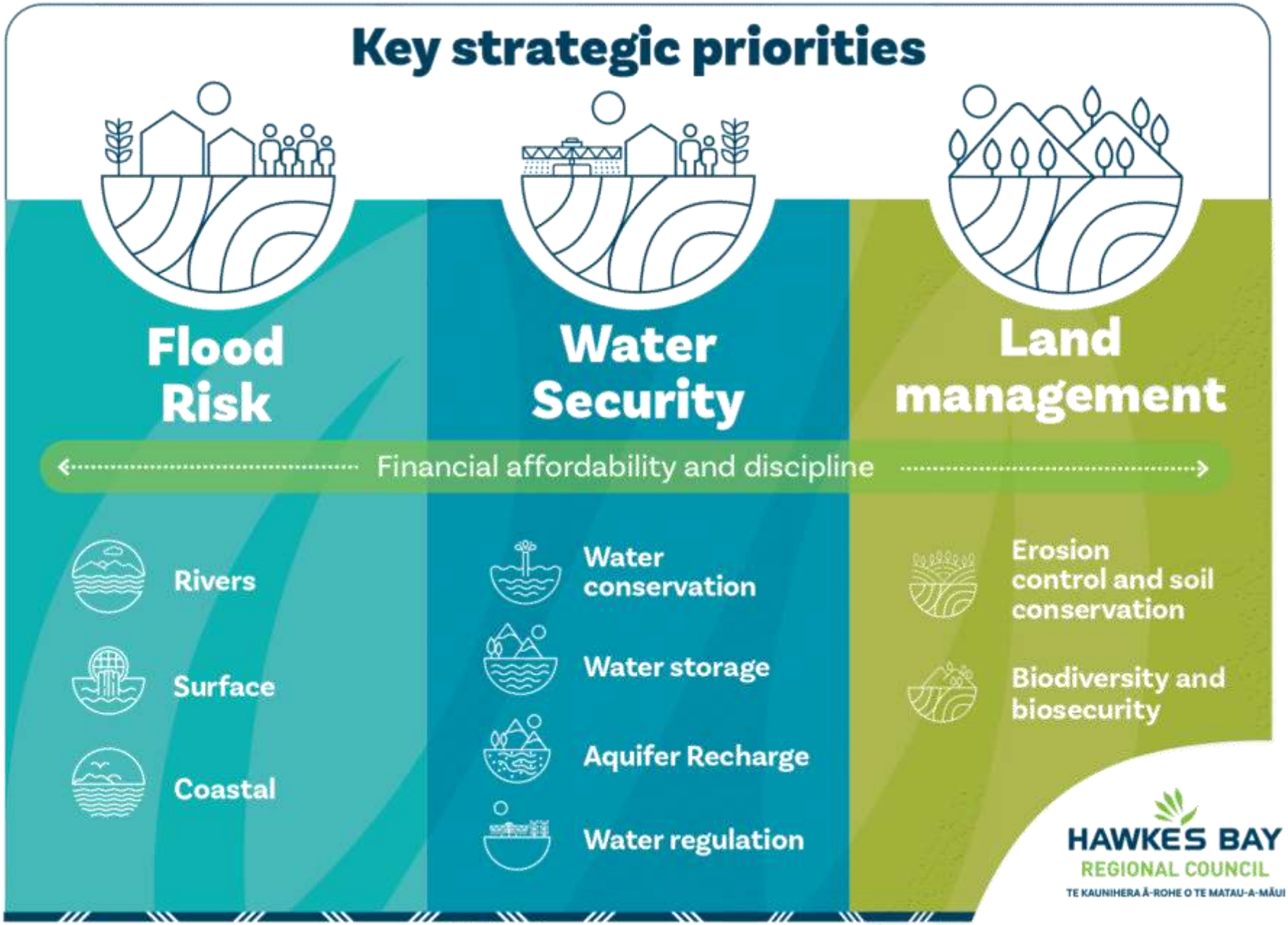
Board of Directors:

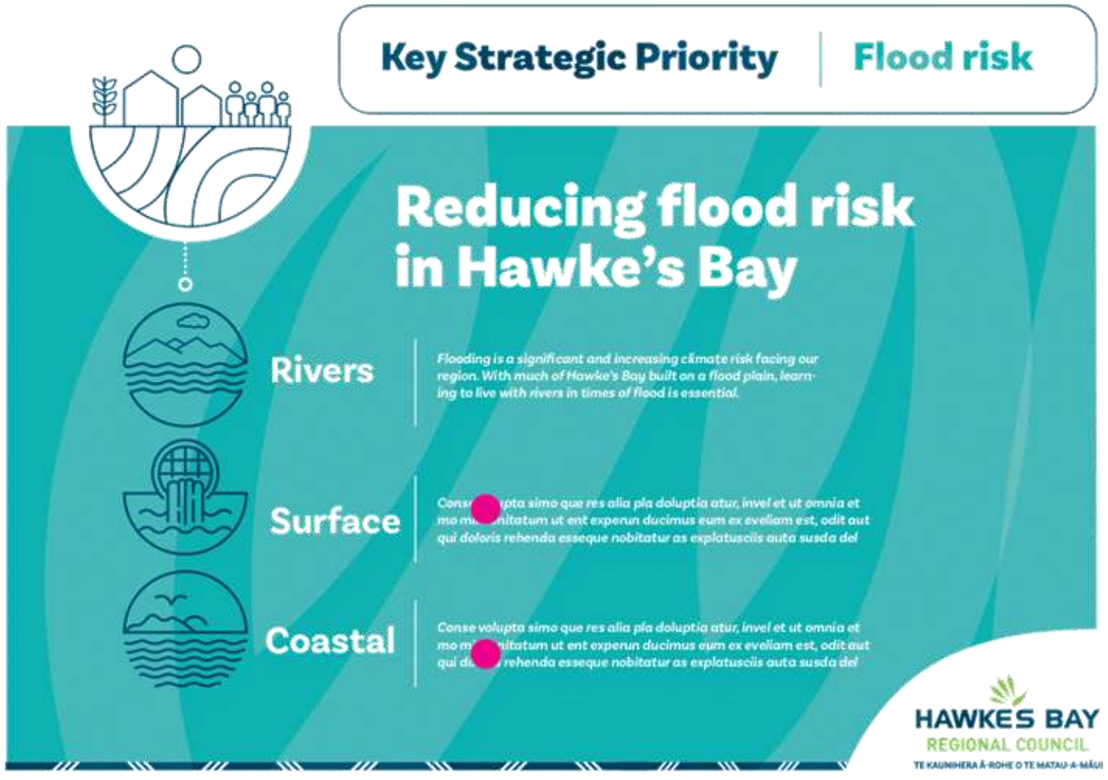
Mr Dan Druzianic	Independent Director and Board Chair
Mrs Debbie Birch	Independent Director
Mr Jonathan Cameron	Independent Director
Mr Will Foley	Director and HBRC Councillor
Mr Neil Kirton	Director and HBRC Councillor

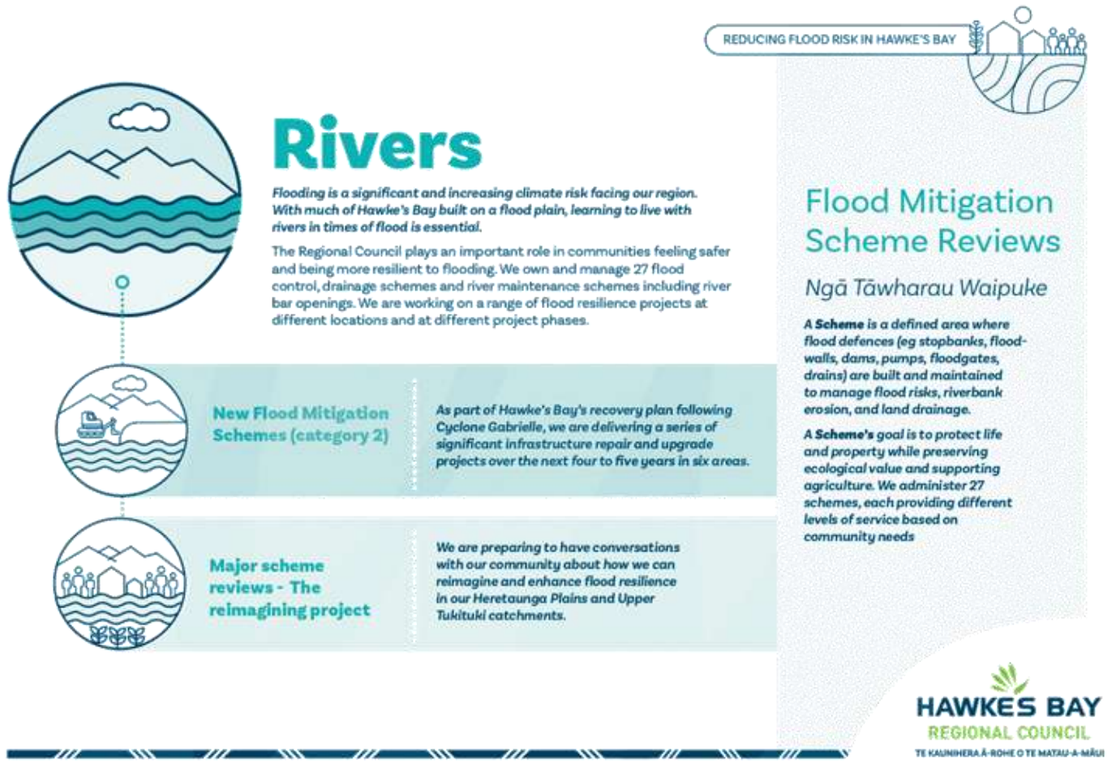
Executive:

Mr Tom Skerman	Commercial Manager

Contact email – tom.skerman@hbric.nz


Key strategic priorities
Flood Risk
Water Security
Land management
Financial affordability and discipline
Rivers
Surface
Coastal
Water conservation
Water storage
Aquifer Recharge
Water regulation
Erosion control and soil conservation
Biodiversity and biosecurity
HAWKES BAY
REGIONAL COUNCIL
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Key Strategic Priority
Flood risk
Reducing flood risk in Hawke's Bay
Rivers
Flooding is a significant and increasing climate risk facing our region. With much of Hawke's Bay built on a flood plain, learning to live with rivers in times of flood is essential.
Surface
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Coastal
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HAWKES BAY
REGIONAL COUNCIL
TE KAUNIHERA Ā-ROHE O TE MATAU-A-MĀUI


REDUCING FLOOD RISK IN HAWKE'S BAY
Rivers
Flooding is a significant and increasing climate risk facing our region. With much of Hawke's Bay built on a flood plain, learning to live with rivers in times of flood is essential.
The Regional Council plays an important role in communities feeling safer and being more resilient to flooding. We own and manage 27 flood control, drainage schemes and river maintenance schemes including river bar openings. We are working on a range of flood resilience projects at different locations and at different project phases.
New Flood Mitigation Schemes (category 2)
As part of Hawke's Bay's recovery plan following Cyclone Gabrielle, we are delivering a series of significant infrastructure repair and upgrade projects over the next four to five years in six areas.
Major scheme reviews - The reimagining project
We are preparing to have conversations with our community about how we can reimagine and enhance flood resilience in our Heretaunga Plains and Upper Tukituki catchments.
Flood Mitigation Scheme Reviews
Ngā Tāwharau Waipuke
A Scheme is a defined area where flood defences (eg stopbanks, floodwalls, dams, pumps, floodgates, drains) are built and maintained to manage flood risks, riverbank erosion, and land drainage.
A Scheme's goal is to protect life and property while preserving ecological value and supporting agriculture. We administer 27 schemes, each providing different levels of service based on community needs
HAWKES BAY
REGIONAL COUNCIL
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Reducing flood risk in Hawke's Bay



Big decisions ahead for all of us

We live in a flood prone region

We live in one of the most beautiful and bountiful regions of Aotearoa New Zealand. But the same things that make Hawke's Bay a great place to live, work and play – our hills, rivers, fertile plains, and our coastline – make it prone to flood risk.

Flooding can be river, surface or coastal. All three can happen at the same time, as we experienced in Cyclone Gabrielle in February 2023 with devastating impacts.

With climate change, the intensity and frequency of severe weather events will increase, and we know the levels of protection that we've had in the past won't be enough in the future.

This means there are choices we all need to make – protect, avoid, retreat, accommodate – and the choices we make will affect everyone, including our children and grandchildren and their children.

> *Flooding is one of the biggest climate challenges we face here in Hawke's Bay*



Protect

Staying in place and building defences, eg. stopbanks and sea walls



Avoid

Staying away from areas where the risk is too high, eg: restricting or preventing development and making changes to existing land



Retreat

Purposly moving away from areas where the risk is too high eg: red zoning, placing restrictions on land use and relocating community assets



Accommodate

Staying in place and making changes to building and infrastructure, to improve resilience

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REDUCING FLOOD RISK IN HAWKE'S BAY

Protecting through engineering solutions

Between now and our 2027 Long Term Plan, we want to have a conversation with our community about the engineering solutions we could invest in to reduce flood risk. This means the built features like spillways, drains and seawalls that work together to help defend against flooding.

These engineering solutions buy us time against increasing flood risks, but longer term, retreat may be the only option in some areas where assets like these are no longer cost-effective.

Examples of flood infrastructure assets

Rivers

stopbanks, spillways, floodwalls, floodgates

Surface

drains, culverts, detention dams, pumps

Coastal

groynes, seawalls, revetments, beach renourishment

These sorts of infrastructure assets are usually funded by ratepayers who benefit (directly and indirectly) and contribute to the need for such flood protections schemes.

The infrastructure we already have across Hawke's Bay is valued at $450m. By 2027, there will be another $200m of flood protection assets built to keep communities in place following Cyclone Gabrielle. The ongoing cost to operate and maintain these assets is a big cost to ratepayers.

We know there is a lot more we could do to reduce flooding risk across Hawke's Bay. But these things don't come cheap.

> *Deciding what to do, where, when and who should pay are big difficult decisions that needs everyone to get involved in.*

We want to help you understand the size and scale of the challenge to reduce flood risk in Hawke's Bay, ahead of the major decisions the Regional Council needs to make by mid-2027.

We need your help to make the right choices.

REDUCING FLOOD RISK IN HAWKE'S BAY

How much will reducing flood risk cost?

Each area within Hawke's Bay has different flood risks and different options to reduce those risks now and over time. Deciding how much additional flood protection we want beyond what we already have will, in the end, come down to how much we are all prepared to pay.

To make it more affordable and make sure at Regional Council we're able to deliver the additional protection levels, we need to spread the work over 20 plus years. Budgeting and delivering this work is a long-term challenge. There is no quick fix.

Estimating how this work will affect regional council rates is equally challenging. The rating impact depends on how much we forecast to spend each year, how many ratepayers the cost can be spread among, how much we can borrow and the interest rate, how much central government contribute, having the skilled people to deliver the work and, most importantly, how much ratepayers can afford.

To give you an idea the size of the challenge, if all known engineering solutions were delivered today, they would roughly cost $600m. If there was no central government contribution, loan and repayments were spread over 20 years at a 5% interest rate with maintenance at 1% of capital, the regional council would need double the rates it collects from $50M to $100M.

> *Under this scenario you would pay roughly double the rates you pay now.*

Deciding the most affordable options

If we want to reduce river, surface and coastal flood risk, deciding which extra engineering solutions to invest in, alongside other nature-based solutions, is the job that needs to be done between now and the next Long Term Plan in June 2027.

The big gnarly questions - what, where, when and who should pay - need to be worked through in detail, with the most affected people, and then with all regional ratepayers.

As the Regional Council we don't have all the answers and communities need to be involved in deciding.

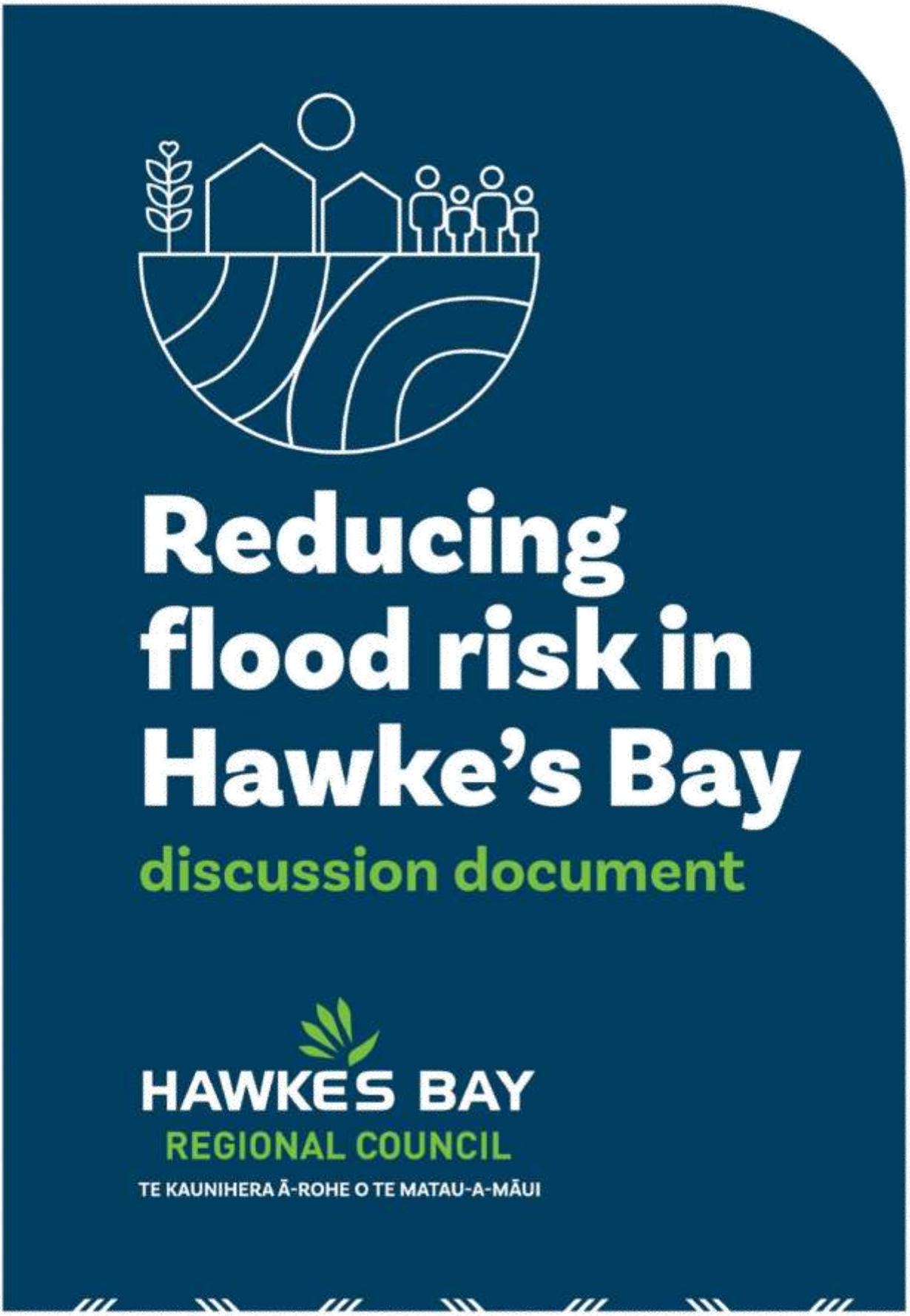
We know that engineering solutions like stopbanks and sea walls can make things safer, but they do not make it 100% safe. There will always be residual risk. Everyone has a role to play to understand that risk and make decisions in that knowledge.

There is a lot of work to do between now and the 2027 Long Term Plan to give our community real choices that balance reducing flood risk with affordability.

As these proposals are developed you can find out more by visiting *hbrc.govt.nz*, search: *#engagementhub*

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Reducing
flood risk in
Hawke's Bay
discussion document
HAWKE'S BAY
REGIONAL COUNCIL
TE KAUNIHERA Ā-ROHE O TE MATAU-A-MĀUI

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Part 1: Introduction

We live in a flood prone region

We live in one of the most beautiful and bountiful regions of Aotearoa New Zealand. But the same things that make Hawke's Bay a great place to live, work and play – our hills, rivers, fertile plains, and our coastline – make it prone to flood risk.

Flooding can be river, surface or coastal. All three can happen at the same time, as we experienced in Cyclone Gabrielle in February 2023 with devastating impacts.

Flooding is one of the biggest climate challenges we face here in Hawke's Bay.

For explanations on what we mean by levels of protection including annual exceedance probabilities (AEP) click on the *Flood Explainers at a* glance on the Extreme Weather Hub | Flood Hub.

Look out for pink links throughout the document to click on for more information

With climate change, the intensity and frequency of severe weather events will increase, and we know the levels of protection that we've had in the past won't be enough in the future.

1.1 Scope of this document

This discussion document focuses on engineering solutions we could invest in to reduce flood risk. That means built features like spillways, drains and seawalls that work together to increase resilience. These infrastructure assets are funded by ratepayers who benefit (directly and indirectly) and contribute to the need for such flood defences.

Table 1 gives examples of the types of flood infrastructure assets we focus on in this document. These assets buy us time but longer term, planned retreat may be required in some areas where assets like these are no longer cost-effective.

Table 1: Flood infrastructure assets

River	Surface	Coastal
Stopbanks, spillways, floodwalls, floodgates	drains, culverts, detention dams, pumps	groynes, seawalls, revetments, beach renourishment

The infrastructure we already have is valued at $450m. By 2027, there will be another $200m of flood mitigation assets built to keep communities in place following Cyclone Gabrielle. The ongoing cost to operate and maintain these assets is a big cost to ratepayers.

We know there is a lot more we could do to reduce flooding risk across Hawke's Bay. But these things don't come cheap.

Deciding what to do, where, when and who should pay are big difficult decisions that needs everyone to get involved in.

This discussion document is to help people understand the size and scale of the challenge to reduce flood risk in Hawke's Bay, ahead of the major decisions the Regional Council needs to make by mid 2027. We need your help to make the right choices.

1.2 How much will reducing flood risk cost?

Each area within Hawke's Bay has different flood risks and different options to reduce that risk now and overtime, as risks increase with climate change. As a region and as local communities, deciding how much additional flood protection we want beyond what we already have will, in the end, come down to how much we are all prepared to pay.

To make it more affordable and make sure at Regional Council we're able to deliver the additional protection levels we need to sequence and spread the work over 20 plus years. Budgeting and delivering this work is a long-term intergenerational challenge. There is no quick fix.

Estimating how this work will affect regional council rates is equally challenging. The rating impact depends on how much we forecast to spend each year, how many ratepayers the cost can be spread among (the rating footprint), how much we can borrow (our debt headroom) and the interest rate, how much central government contribute, having the skilled people to deliver the work and, most importantly how much ratepayers can afford.

To give you an idea of the size of the challenge, if all known engineering solutions were *delivered* today, they would roughly cost $600m. If there was no central government contribution, loan and repayments were spread over 20 years at a 5% interest rate, with maintenance at 1% of capital, the regional council would need to double the rates it currently collects from $50m to $100m. This means you would be pay roughly double what you pay now[1].

Deciding which of these engineering solutions as well as other nature-based solutions to invest in to reduce river, surface and coastal flood risk is the job that needs to be done between now and the next Long Term Plan in June 2027.

These big gnarly questions - what, where, when and who should pay - need to be worked through in detail with the most affected people, and then with all regional ratepayers.

There's a lot of work to do to give our community real choices that balance reducing flood risk with affordability. This document is a conversation starter.

1.3 Our role

Hawke's Bay Regional Council plays an important role in helping communities feel safer and more resilient to river, surface and coastal flooding.

We own and are responsible for:

- 27 flood control, drainage and river maintenance schemes**Error! Reference source not found.** i ncluding river mouth openings
- some urban waterway assets contributing to stormwater networks
- beach renourishment in response to coastal erosion.

[1] This includes the cumulative impact hitting the general rate that everyone pays regardless of where you live and no other changes to regional council activities.

We also have a Memorandum of Transition to manage existing and future infrastructure assets to respond to coastal hazard risks.

We are working on a range of flood resilience projects at different locations and at different project phases. More information on each of these is available on our Engagement Hub.

However, we don't do it alone. As the Regional Council we don't have all the answers and communities need to be fully involved in decision-making about their future. Recommendations of the *Hawke's Bay Independent Flood Review* and the *Review of the management of the Wairoa River bar* make it clear that we should make more and better use of local knowledge in the development and implementation of flood risk solutions.

Everyone has a part to play to reduce flooding risk

We know that infrastructure such as stopbanks and sea walls can make things safer, but they do not make it 100% safe. There will always be residual risk. Everyone has a role to play to understand that risk and make decisions in that knowledge.

House hunters, property owners and business operators can check whether their property is in a high-risk flood area (via the Hawke's Bay Hazard Portal)

Whānau and communities should have a plan and be prepared to manage on their own for a minimum of three days in a large-scale event.

Developers and councils have a role in avoiding and accommodating areas of high risk. We know that continuing to build in areas that need flood protection is not sustainable. Avoiding these areas is a crucial way to prevent people and property from being exposed to flooding.

Infrastructure owners such as KiwiRail, Waka Kotahi, design and build in concert with flood resilience infrastructure so it can work hand in hand. Influencing the timelines and priorities of national infrastructure owners is a challenge.

Banks and insurance companies will decide the locations they'll lend and cover for, taking into account areas of high risk.

The PARA framework (protect, avoid, retreat, accommodate) is commonly used to explain the types of actions people might take to adapt to the increasing risks posed by natural hazards.

Figure 2: PARA framework



Protect	Avoid	Retreat	Accommodate
Staying in place and building defences, eg, stopbanks and sea walls	Staying away from areas where the risk is too high, eg, restricting or preventing development and making changes to existing land use	Purposely moving away from areas where the risk is too high, eg, red zoning, placing restrictions on land use and relocating community assets	Staying in place and making changes to buildings and infrastructure, to improve resilience

Connection to Regional Council's other work

The Regional Council has other levers it can pull to reduce risk and build resilience. It takes a '*mountains to sea'* approach to reduce the destructive impact of flooding. It does this through ongoing work to:

- **Slow the flow** – through nature-based solutions to reduce flood peaks such as wetland and forest/understory restoration and creation, hill county erosion control, good land management practices, and making room for rivers
- **Keep development away from hazard prone land** – through spatial planning and land use planning rules. This means restricting development of housing and other vulnerable land use developments.
- **Share information** - through telemetry and trigger warnings, flood modelling and forecasting, and the hazard portal we help others make decisions and act.

These programmes work separately and together to reduce risk. Options for further investment in these work programmes is not discussed in this paper but needs to be considered in terms of best value for ratepayer money and the council's ability to deliver.

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Part 2: Regional view of flood risk management

This document discusses flood risk as river, surface and coastal flooding. This section describes how each of these risks manifest in Hawke's Bay and the infrastructure assets that the Hawke's Bay Regional Council manages on behalf of the region to reduce flood risk.

2.1 Types of flooding

River flooding or fluvial flooding occurs when a river or stream overflows its banks and floods normally dry land. Velocity of fluvial flooding can vary from gentle to extremely dangerous.

Most of the major rivers in Hawke's Bay have catchments in the foothills of the ranges. This means the rivers and their tributaries respond rapidly to rainfall, which can quickly lead to flood flows usually during rainfall with an easterly or northeasterly component. It may only take a few hours for flooding to reach populated areas of the region, including Wairoa, Havelock North, Hastings and Napier and communities on the Heretaunga Plains, and townships like Waipawa, Waipukurau and Pōrangahau in the south.

Lowland streams are mostly spring-fed, single channel, slow flowing streams. Flooding in and around these streams usually occurs during long rainfall events. Flooding often results from high water levels in these streams preventing the adjacent low-lying land from draining, rather than from direct breakouts or overflows. Some streams in our region, particularly in Wairoa can be more flashy. Lowland streams include the Karamū in Hastings, Taipo in Napier which have been extensively modified for drainage purposes as part of the wider Heretaunga Plains scheme. The streambed of lowland streams is often made up of fine gravel or sandy/silty substrate. This provides ideal growing conditions for aquatic plants (macrophytes) that need ongoing maintenance to maintain capacity.

Surface or pluvial flooding can occur almost anywhere and often happens quickly. During heavy rainfall events water can collect in low areas, historic flood flow channels, or where obstacles like raised roads, hedges, or irrigation features prevent water from moving down gradient.

While surface flooding doesn't originate from rivers, it will worsen the effects of river flooding in major rainfall events. High river levels can also make surface flooding worse by preventing water from draining away.

Surface flooding in urban areas is often referred to as stormwater flooding. Stormwater flooding occurs when the increased runoff from sealed surfaces like roads and driveways is greater than the capacity of stormwater systems to carry it away, or if they are not working properly because of blockages or pump failures.

Coastal, storm surge or seawater flooding, is most likely when high tides and large waves occur at the same time, causing the sea to drive up and over the natural beach crest or coastal stopbank. At river mouths, these forces can cause rivers to back up, increasing river flooding risks further inland. Parts of our coastline are vulnerable to coastal flooding. It can threaten coastal communities, endanger stock, and cause long-term damage to productive land.

Coastal erosion can remove or reduce beach crests, increasing these risks, while climate change is causing sea levels to increase and storms are expected to be more frequent and more intense.

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2.2 Our schemes

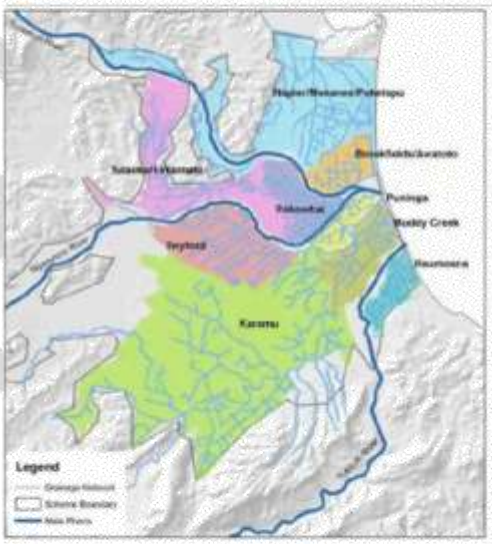
We administer three types of schemes, each providing different levels of service.

Flood Protection	Drainage	Rivers and stream maintenance
Heretaunga Plains	Brookfields/Awatoto	Central/Southern
Maraetotara	Clive and Muddy Creek	Esk
Upper Makara	Haumoana and Te Awanga	Kaikakau
Upper Tukituki	Karamū Drainage and Tributaries	Kopuawhara
	Karamū Enhancement	Porangahau
	Napier/Meeanee/ Pukatapu	Te Ngarue
	Ohuia Whakaki	Waipoa
	Opako	Whirinaki
	Paeroa	
	Pākōwhai	
	Poukawa	
	Puninga	
	Raupare and Twyford	
	Raupare Enhancement	
	Tūtaekuri/Waimarie/Moteo	

1. **Flood schemes** use stopbanks, deflection banks, groynes (low walls or barriers built out into the sea from a waterway), and erosion protection to manage river flows. Flood schemes have historically, been designed to convey flood waters up to 1% probability of being exceeded in any given year (1% AEP) safely to the sea. Some areas, including Taradale and Ngatarawa have been upgraded to be 0.2% AEP. The Taradale stopbank upgrade, completed in 2022 which cost approximately $4 million to complete saved 10,000 properties from flooding in Cyclone Gabrielle.

2. **Drainage schemes** use stopbanks, drains, detention dams, pump stations, control gates, and floodgates to manage floodwater and support land development. A drainage asset typically has a design standard to drain 32 mm of runoff in 24-hours from rural areas and 50mm of runoff in urban areas. This is nominally a 5-year or 20% AEP.

Figure 2-2: HBRCS Drainage Catchments



3. **River and stream maintenance schemes** focus on maintenance, clearing blockages, and minor erosion control. This includes river mouth management which directly impacts flood risk. Pro-active management is needed to manage the hydrodynamics of river mouths which are the result of a complex interaction between river flow, tidal conditions, and outlet geometry. Funding for river and stream maintenance including river mouth openings is from general rates. There has been a significant increase in spend over the over the last 2-3 years.

These schemes have progressively evolved and improved over many decades of works by the Regional Council and its predecessors – the Local River Boards in the late 1800s, through to the Hawke's Bay River Board, the Hawke's Bay Catchment Board, and since 1989, the Hawke's Bay Regional Council. Improvements have followed significant flooding events and specific catchment and asset reviews.

What do schemes cost and how are they paid for?

Each scheme has a different cost structure and budget. There are some costs that are common like insurance or pump station running costs, but each scheme has its own operating budget which is set, consulted on and approved in the Council's Long Term Plan.

Schemes are paid for through a combination of targeted and general rates. The amount depends on many factors including who benefits from the scheme, and if any 'reserved funding' which is collected targeted rates that have not been used yet.

Combined the annual operating cost for these schemes is 2024-25 was $16.8 million.

Regional Council is undertaking reviews of all its 27 flood, drainage and river/stream maintenance schemes. The recommendations from these reviews will be considered as part of the next Long Term Plan.

2.3 The Reimagining Project

The scheme reviews include our two major flood schemes – Heretaunga Plains and Upper Tukituki , known as The Reimagining Project.

Insert text from A3 poster.

Find out more at hbrc.govt.nz search: #engagementhub

2.4 Post-cyclone flood mitigation projects

Since the cyclone, we have focused on recovery and reducing risk to life. Insurance and a $250 million cost-share agreement with the Crown, enabled us to rapidly repair and upgrade our existing flood and drainage schemes and telemetry and to build new flood defences in Category 2 areas to keep communities in place in:

- Wairoa
- Whirinaki
- Heretaunga (Pākōwhai, Omāhu, Waiohiki)
- Havelock North (delivered by Hastings District Council)
- Pōrangahau

Together, the planned works will lift the overall standard of protection. They won't remove the risk of flooding – no system can – but they will buy critical time in a severe event, helping people get out safely and reducing the risk to homes, livelihoods, and lives.

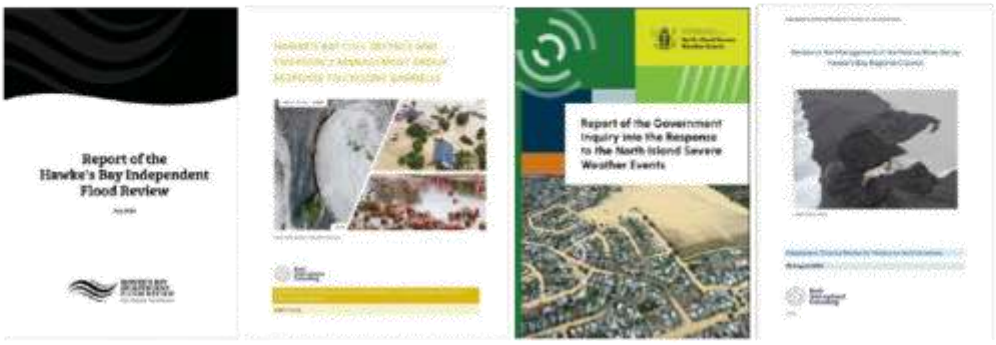
There are no guarantees of any similar cost-share arrangements with the Crown for any other infrastructure following future flooding events.

2.5 Implementing recommendations from independent reviews

The Regional Council is taking action on recommendations from four independent reviews, three related to Cyclone Gabrielle and one on the June 2024 Wairoa flood event.

- Hawke's Bay Independent Flood Review
- Government Inquiry into the Response to the North Island Severe Weather Events
- HBCDEM Response to Cyclone Gabrielle
- Review of the management of the Wairoa River bar

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We have made strong progress, with 46 of the 52 recommendations underway. For example, we have developed an **Extreme weather hub** , providing people with regularly updated webcam images of local river mouths, rainfall and river data maps giving communities the tools to make fast decisions in emergency situations.

We're also working with communities to refine trigger levels for alerts if rivers rise to enhance local capacity to act.

The Council allocated $1.7m for new flood resilience work through the 2025-26 Annual Plan for priority projects arising from the review recommendations.

2.6 Coastal hazard mitigations

Both regional and local councils have responsibilities in relation to natural hazards and climate change adaptation. Across the region there are examples of coastal hazard mitigations (e.g. groynes, rock revetment walls, a sea exclusion stopbank and beach renourishment) to reduce risk to public assets and private property in low-lying coastal locations.

In a first for the region, we have been working collaboratively with local councils and tangata whenua to develop the **Clifton to Tangoio Coastal Hazards Strategy 2120** since 2014 to develop a common understanding of the risks along this entire stretch of coastline and to respond to community concern about the effects of coastal hazards in a more coordinated and forward-looking way. This Strategy's dynamic adaptative pathway approach is seen as a potential model for the rest of Hawke's Bay.

Pathway	Short Term (0-20 years)	→	Medium Term (20-50 years)	→	Long Term (50-100 years)
UNIT E1: AWAROA PATHWAY 6	Status quo	→	Sea wall	→	Sea wall
UNIT E2: PANDORA PATHWAY 3	Status quo	→	Storm surge barrier	→	Storm surge barrier
UNIT D: WESTSHORE PATHWAY 3	Renourishment	→	Renourishment + control structures	→	Renourishment + control structures
UNIT C: BAYVIEW PATHWAY 3	Status quo / renourishment	→	Renourishment + control structures	→	Renourishment + control structures
UNIT B: WAIOHIKU PATHWAY 4	Status quo / renourishment	→	Renourishment + control structures	→	Sea wall
UNIT 1: CLIFTON PATHWAY 6	Status quo	→	Sea wall	→	Managed retreat
UNIT K2: TE AWANGA PATHWAY 3	Renourishment + groynes	→	Renourishment + groynes	→	Renourishment + groynes
UNIT K1: HAUMOANA PATHWAY 2	Renourishment + groynes	→	Renourishment + groynes	→	Planned retreat
UNIT A: CLIVE/EAST CLIVE PATHWAY 1	Status quo	→	Renourishment + groynes	→	Retreat the line/ managed retreat

The Strategy identifies nine priority units along the coastline from Clifton to Tangoio and proposes long term adaptive pathways for each. Over time, the Strategy will be reviewed and updated to develop pathways for additional units.

In the short- to mid-term, the Strategy's recommended pathways generally involve beach renourishment and/or the construction of coastal structures. This reduces erosion and increases the beach crest to reduce overtopping and inundation risks. The general approach of the Strategy is to "buy time" ahead of a longer term planned retreat in some locations.

The total cost of the works to implement the coastal hazard strategy is likely to be large, with high-level estimates from Tonkin and Taylor in 2016 putting the figure at $130 - $285 million over the Strategy's 100-year planning horizon. If nothing is done to reduce coastal hazards risks, the cost of planned retreat has been estimated at $2 billion.

Currently no funding is included in any council's long-term plan for strategy implementation.

The Regional Council is currently engaging on affordability and deciding how much is paid for by general rates and targeted rates for properties identified as 'beneficiaries' of works.

Find out more at hbrc.govt.nz search: #engagementhub

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Part 3: Stocktake by district

The following pages show the unique flooding risk and mitigation by district. This section is brief by design, referencing existing information sources. It is designed to be a living document that will be updated as the situation changes and new information comes to hand. A table shows what we are doing and know now (current state) and what we are finding out or could do in the future to reduce flood risk (future state).

3.1 Hastings



With a population of 85,965 (2023) Hastings District covers 5,229km^2 and serves as a crucial agricultural and economic centre for the region. The district has a diverse landscape, with a mix of urban and rural areas with significant stretches of eastern coastline. The Tūtaekurī, Ngaruroro and Karamu rivers meet the sea at the Waitangi estuary. This is a hotspot of infrastructure with rail and state highway bridges crossing the river as it reaches the estuary.

Key findings from Climate Change Risk Assessment include:

- Present day river and rainfall flooding risk (2%AEP) is the most severe hazard for the Hastings District, with 39% of commercial properties and 11% of residential properties exposed and 48% of the population at risk of isolation.
- Significant vulnerability of three waters infrastructure, with the major East Clive wastewater treatment plant, 19-31% of stormwater infrastructure, and 13-16% of wastewater infrastructure directly exposed to more than 10cm of river and rainfall flooding in a present day 2% AEP event.
- Coastal flooding exposure is increasing with climate change, affecting 4% of residential properties by 2130 (SSP5-8.5).

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Current state	Future state
Heretaunga Plains Flood Control Scheme (Hastings and Napier) The HPFCS covers the low-lying historic river plains of the Tutaekuri, Ngaruroro and lower Tukituki Rivers. Most of the HPFCS is designed to convey flood waters up to 1% AEP. Some densely populated areas, including an upgrade to the Ngatarawa stopbank have been upgraded to be 0.2% AEP. The total annual operating cost for the HPFCS is was $5.5 million ex GST in 2024-25. More information is available in the **Heretaunga Plains Flood Control and Drainage Asset Management Plan.** A small number of Hastings ratepayers contribute to the Upper Tukituki Flood Control Scheme and the Upper Makara Scheme	**Re-Imagining Project** Through this project the Reginal Council is reimagining the long term approach to the HPFCS as well as the Upper Tukituki Scheme. This will require healthy and challenging debate with communities on protection levels versus affordability and residual risk. Principles guiding the project include: • **Making room for rivers** – Designing secondary systems like spillways and storage areas to minimise community impact during extreme floods. • Mitigation options and revised scheme design to manage an **over-design event** in the future. • **Community collaboration** – Engaging mana whenua, local stakeholders, and residents in flood risk solutions. • **Local knowledge** – Integrating community insights into flood management planning. The project is in phase 2: stakeholder reference groups.

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Current state	Future state
Small Schemes There are several smaller flood, drainage and rivers/stream maintenance schemes in Hastings. • Maraetotara flood maintenance scheme • Whirinaki drainage • Esk River maintenance • Clive / Muddy Creek drainage • Haumoana drainage • Karamū drainage & enhancement • Puketapu drainage • Pākōwhai drainage • Poukawa drainage • Puninga draingage • Raupare Twyford drainage and enhancement • Tūtaekuri Waimate Moteo drainage • Te Ngarue Stream maintenance The Regional Council has an Environmental Code of Practice in place which provides clear standards of practice for river control and drainage works. The total combined annual operating costs for these schemes was $3.4m in 2024-25. There is also a small ($36K) Hastings ratepayer contribution to the Napier/Meeanee/Puketapu drainage scheme. Noting that annual opex may vary depending on reserves, loan and external funding.	**Small scheme reviews** The Regional Council is undertaking reviews to these schemes • Te Awanga / Maraetotara • Upper Makara (Hastings and CHB) • Esk / Whirinaki • Puninga / Clive / Muddy Creek • Haumoana • Karamū • Poukawa • Raupare / Twyford The reviews aim to assess how well these schemes are functioning, engage with local landowners, review the funding of the scheme and plan for the future. Key questions include: • Do they as work as intended? • Will they work in the future? • What will the costs implication be to scheme ratepayers? Outcomes of the reviews will be considered as part of the next Long Term Plan.

Current state	Future state
Post-Cyclone flood mitigation projects There are five significant infrastructure projects within HDC, to keep communities severely impacted by Cyclone Gabrielle in place. As part of the region's cost-share agreement, the Crown will pay 75% of the work and ratepayers will pay 25%. • Ōhiti Road, Ōmāhu $10m • Pākōwhai $50m • Whirinaki $23.05m • Waiohiki $9.42m • Havelock North $10m (delivered by HDC)	
Esk - Tangoio Following Cyclone Gabrielle, the government introduced a land categorisation framework to assess flood risks across the region. The Esk and Tangoio areas were classified as Category 3 because they are considered to have an unacceptable risk to life that could not be mitigated through community scale infrastructure.	

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<table>
<tr><th>Current state</th><th>Future state</th></tr>
<tr><td>Coastal Hazards
HBRC has a Memorandum of Transition to manage existing and future infrastructure assets to respond to coastal hazard risks related to the Clifton to Tangoio Coastal Hazards Strategy 2120.
Coastal erosion has been a known problem for a long time. Over the course of many years communities have proposed and sometimes implemented their own 'protective structures' for stretches of the coastline particularly along the Cape Coast. There are existing structures protecting community assets at Haumoana, Clifton, and Waimārama.</td><td>Haumoana and Te Awanga are two of four priority units in the Clifton to Tangoio Coastal Hazards Strategy 2120 that has recommended action in the short term (0-20 years).
There are two design variants for Te Awanga and Haumoana for coastal erosion and inundation in the strategy. Option A is a 20m extension of the Tukituki groyne. Option B is a 4 new groynes and a 10m Tukituki groyne extension. The costs for these options are estimated in the tables below noting these costs are out-of-date and current day estimates could be much higher. A further option being considered as part of engagement to reduce cost is to focus on erosion only.
The capital costs are estimated at:
<table>
<tr><th></th><th>Option A</th><th>Option B</th></tr>
<tr><td>Te Awanga</td><td>$6.2m</td><td>$22.8m</td></tr>
<tr><td>Haumoana</td><td>$5.1m</td><td>$11.4m</td></tr>
</table>
The annual operating costs are estimated:
<table>
<tr><th></th><th>Option A</th><th>Option B</th></tr>
<tr><td>Te Awanga</td><td>$2.3m</td><td>$3.0m</td></tr>
<tr><td>Haumoana</td><td>$1.3m</td><td>$1.5m</td></tr>
</table>
The Regional Council is currently engaging on affordability and deciding how much is paid for by general rates and targeted rates for properties identified as 'beneficiaries' of works.</td></tr>
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3.2 Napier

Napier City is the most urbanised land area within the Hawke's Bay region, covering 105km^2 with a population of 64,695 (Census 2023).



The city faces river, surface and coastal flooding risks given is location and topography. Much of Napier has been built on land that was uplifted during the 1931 earthquake or has been reclaimed since that time.

Nearly 8,000 homes are less than 150 centimetres above the spring high tide mark, and a considerable area of the city, including the airport, is less than 50 centimetres above the spring high tide mark. Coastal erosion is a significant hazard, as is coastal inundation.

The water table around Napier is often close to the surface and as such the city is vulnerable to any rise in groundwater, which compounds risks posed by the highly liquefiable soils found under much of Napier's low-lying suburbs. The high-water table and flat topography pose significant difficulties in moving stormwater from the city to the sea to prevent localised surface flooding of properties and businesses.

Flooding can come from:

- Overspill from the Tūtaekuri River including issues associated with the combined Ngaruroro-Tūtaekurī-Karamu river mouth
- Overspill of tributaries, such as the Taipo stream in the Ahuriri catchment
- Localised ponding in low-lying land behind the rivers and in rural areas where roadside drainage and waterways have less capacity that is the last to drain
- Surface flooding from heavy rain overwhelming urban stormwater networks; 75% of stormwater is pumped from below sea level land
- Coastal inundation or storm surge on the coast overtopping the beach crest or Ahuriri Inlet stopbanks, exacerbated by coastal erosion including from sea level rise.

Key findings from the 2025 Climate Change Risk Assessment include (amongst other things) that:

- Coastal flooding is a significant and increasing risk.
- River and rainfall flooding also poses a significant risk to the built environment including lifeline infrastructure, residential properties, commercial properties and industrial buildings.
- Three waters infrastructure is significantly vulnerable to all types of flooding, particularly water supply in a 1% AEP river and rainfall flood event, and wastewater exposure to coastal flooding by 2100 (SSP2-4.5).
- High risk of business isolation during river, rainfall, and coastal flooding, with the potential for significant disruption to Napier's economy, even in areas not directly flooded.

Hawke's Bay Airport and Napier Port are regional infrastructure at risk.

Napier Flood event

Photo

On 9 November 2020, intense rainfall fell in Napier city resulting in several suburbs either flooded or affected by landslides. Several homes were damaged beyond repair. This event classified as a 1 in 120-year event exceeded the design capacity of the city's drainage network (stormwater, overland flow paths, and pumped open waterway network). The worst affected areas were Napier South, Maraenui and Pirimai.

One of four recommendations resulting from review of this flood event was "*Napier City Council and Hawke's Bay Regional Council should review the existing arrangements for management of the flood scheme to ensure the most effective integration and coordination of the assets where possible*".

This is a live discussion between Regional Council and Napier City Council .

Current state	Future state
Heretaunga Plains Flood Control Scheme (Napier and Hastings) The HPFCS covers the low-lying historic river plains of the Tutaekuri, Ngaruroro and lower Tukituki Rivers. Most of the HPFCS is designed to convey flood waters up to 1% AEP. Some densely populated areas, including an upgrade to the Taradale stopbank have been upgraded to be 0.2% AEP. The total annual operating cost for the HPFCS was $5.5 million ex GST in 2024-25. HPFCS scheme ratepayers pay 70% of this cost with the balance funded via the general rate and reserves. More information is available in the Heretaunga Plains Flood Control and Drainage Asset Management Plan.	**Re-Imagining Project** Through this project the Reginal Council is reimagining the long term approach to the HPFCS as well as the Upper Tukituki Scheme. This will require healthy and challenging debate with communities on protection levels versus affordability and residual risk. Principles guiding the project include: • **Making room for rivers** – Designing secondary systems like spillways and storage areas to minimise community impact during extreme floods. • Mitigation options and revised scheme design to manage an **over-design event** in the future. • **Community collaboration** – Engaging mana whenua, local stakeholders, and residents in flood risk solutions. • **Local knowledge** – Integrating community insights into flood management planning. The project is in phase 2: stakeholder reference groups.

Current state	Future state
Small Schemes *Brookfields Awatoto Drainage Scheme* The total annual operating cost for the scheme was $250,000 ex GST in 2024-25. Napier ratepayers within the scheme footprint pay around 90% of this cost with the balance funded via the general rate and reserves.	A scheme review has been completed with options to increase the level of protection to 1 in 50 to match NCC urban drainage. These will be considered as part of the next long term plan. $30 million of Cyclone Gabrielle cost-share funding is earmarked for the replacement and improved capacity of pumpstations. There are two in this scheme - Mission (Awatoto), Brookfields.
Napier/Meeanee/Puketapu Drainage Scheme The total annual operating cost for the scheme was $1.7m ex GST in 2024-25. Napier ratepayers within the scheme footprint currently pay around $1.5 million. Hastings ratepayers paid $36k. The balance was funded via loan funding, the general rate and reserves.	A scheme review has been completed. The cost to improve stormwater and drainage to a 1 in 100-year level of protection for existing HBRC and NCC assets is estimated $200 million (under at 8.5 climate scenario to 2050). Of that $50 million would be investment by HBRC.
Awatoto industrial A Memorandum of Understanding (MoU) between the Awatoto Industrial Action Group (AIAG), Hawke's Bay Regional Council, and Napier City Council focuses on enhancing flood resilience for the Awatoto industrial area. This collaboration was formalised on October 4, 2024, in response to the significant flooding caused by Cyclone Gabrielle, which inundated the area with up to 2 meters of water and disrupted critical infrastructure, including Napier's wastewater treatment plant.	

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Current state	Future state
Coastal Hazards HBRC has a Memorandum of Transition to manage existing and future infrastructure assets to respond to coastal hazard risks related to the Clifton to Tangoio Coastal Hazards Strategy 2120. Napier ratepayers currently pay $400k for beach renourishment at Westshore (with a 50/50 split between NCC and HBRC) to manage erosion at Westshore to the 1986 line.	Westshore and Bay View are two of four priority units in the Clifton to Tangoio Coastal Hazards Strategy 2120 that have recommended action in the short term (0-20 years). This beach renourishment is estimated to cost $2 million in operational costs annually. Currently no funding is included in the Regional Council's or Napier City Council's long-term plan for this work Over time, as trigger levels are met more costs would be incurred for control structures in Westshore and Bay View as well as a sea wall in Ahuriri and a storm surge barrier in Pandora. The Regional Council is currently engaging on affordability and deciding how much is paid for by general rates and targeted rates for properties identified as 'beneficiaries' of works.

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3.3 Wairoa

The Wairoa District covers are large geographical area 4,077km^2. The district's population of 8,826 (2023) is primarily concentrated in the Wairoa township, with the remainder dispersed across rural areas and coastal settlements including the Mahia Peninsula. The geology of hill country in the district is prone to erosion and slipping, leading to high sediment loadings of streams and rivers in large rainfall events. The Wairoa River has the region's largest catchment of around 660 km^2.



Key findings from the 2025 **Climate Change Risk Assessment** include (amongst other things):

- River and rainfall flooding is the most severe hazard, affecting residential properties and the manufacturing sector.
- Three waters infrastructure (including pipes and components such as pump stations) is significantly exposed to river and rainfall flooding.

Wairoa District has experienced numerous heavy rainfall and flooding events over the past few decades. Most notable are Cyclone Bola (1988) and Cyclone Gabrielle (2023), June 2024 river mouth event. In 2022, there were two closely spaced weather events on 21-31 March and 12-14 April (Ex-Cyclone Fili). Cyclone Gabrielle was assessed as a 1-in-70 year flood event in Wairoa.

Current state	Future state
Category 2 flood mitigation project - North Clyde Wairoa was badly affected in Cyclone Gabrielle, resulting in over 600 properties identified as Category 2 under the Government's land categorisation framework. A similar area was flooded during Cyclone Bola in 1988. As part of the cost-share agreement the Government agreed to 100% fund the capital build of a new flood mitigation solution estimated at $70 million. Crown Manager, Lawrence Yule was appointed in August 2024 to assist the Regional Council and Wairoa District Council in achieving flood protection for the community as quickly as possible.	Once built, Wairoa ratepayers will pay 70% of the ongoing operations and maintenance of the new flood scheme, which is estimated to cost Wairoa ratepayers $110 (direct) and $10 (indirect) in annual operating costs. The remaining 30% will be funded via the general rate.
River mouth and Wairoa River bar management Mouths of rivers and streams in Wairoa District are in a relatively natural state of sand and gravelly materials with no man-made structures influencing their positions. Estuaries and	

lagoons with tidal influences also feature in a number of the district's larger rivers (e.g. Wairoa, Nuhaka, Maungawhio). HBRC has an active programme and protocol for river mouth openings, which involves input from local communities. Following the significant flooding event on 26 June 2024, affecting over 400 properties in the area adjacent to Kopu Road an operational review of Wairoa River Bar Management was commissioned by HBRC. A new plan for Wairoa River mouth openings was announced by HBRC on 23 May 2025.	**Small scheme reviews** The Regional Council is currently reviewing the future of: • Nuhaka • Wairoa The reviews aim to assess how well these schemes are functioning, engage with local landowners, review the funding of the scheme and plan for the future. Outcomes of the reviews will be considered as part of the next Long Term Plan.
Small Schemes There are five small schemes in Wairoa District. Three are drainage schemes Ohuia-Whakaki, Opoho, and Paeroa. Ratepayers within the scheme footprint pay 90% with the balance funded via the general rate. Two are river and maintenance schemes - Kopuawhara, and Wairoa. Funding of river and stream maintenance is funded from general rates. Most of those schemes were established in 1950s-2000. They are typically gravity-fed with some control structures and/or small pumping to alleviate impacts of flooding on adjacent land during relatively modest rainfall events. The combined total annual operating cost for the schemes was $660k ex GST in 2024-25.	
Coastal Hazards In Wairoa District, there are a number of dispersed communities along the coast. The largest is the community at Mahia Beach/Mahanga/Opoutama. Low-lying coastal settlements and infrastructure are exposed to flooding risks during large swell events and severe storms. HBRC does not currently hold any coastal mitigation assets for coastal flood management, other than river mouth maintenance works. There are several localised coastal protection works that property owners or roading asset managers maintain at their own costs.	

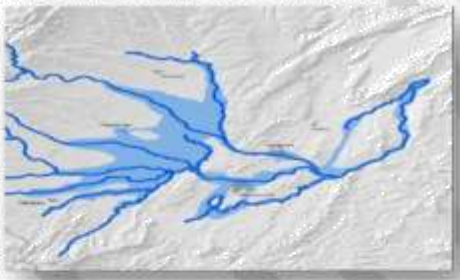
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3.4 Central Hawke's Bay

Central Hawke's Bay is a predominantly rural district in New Zealand's North Island, covering 3,332.91 km^2 with an estimated population of 16,050 (Census 2023). It is comprised of the Tukituki catchment and Pōrangahau and Southern Coast catchment where the land use is predominantly pastoral farming and cropping. The rivers that run through this region are an important source of water to farmers and orchardists.

Key findings from the 2025 Climate Change Risk Assessment include (amongst other things):

- River and rainfall flooding risk is the most severe hazard influenced by climate change for Central Hawke's Bay with commercial properties and residential properties exposed.
- Three waters infrastructure is susceptible to flooding, with stormwater pipes exposed.

Current state	Future state
Upper Tukituki Flood Scheme (CHB and Hastings ratepayers) The Upper Tukituki Flood Scheme aims to protect the river plains from frequent flooding of the Upper Tukituki River and its tributaries, the Waipawa, Makaretu, Mangaonuku and Tukipo Rivers.  The scheme protects approximately 24,750 hectares of productive farmland and the people who live within the scheme boundaries including the urban centres of Waipawa and Waipukurau and and Ōtāne. More information is available in the **Upper Tukituki Flood Control Scheme Asset Management Plan.**	**Re-Imagining Project** Through this project the Reginal Council is reimagining the long term approach to the HPFCS as well as the Upper Tukituki Scheme. This will require healthy and challenging debate with communities on protection levels versus affordability and residual risk. Principles guiding the project include: • **Making room for rivers** – Designing secondary systems like spillways and storage areas to minimise community impact during extreme floods. • Mitigation options and revised scheme design to manage an over-design event in the future. • **Community collaboration** – Engaging mana whenua, local stakeholders, and residents in flood risk solutions. • **Local knowledge** – Integrating community insights into flood management planning. The project is in phase 2: stakeholder reference groups.

Current state	Future state
Gravel extraction Gravel management is essential to maintain flood capacity in the Upper Tukituki River. With co-funding from Kānoa (the Government's Regional Economic Development & Investment Unit) as part of its Covid-19 recovery package, we have removed more than one million cubic metres from the Upper Tukituki Scheme over five years. This programme is expected to be completed by the end of June 2025, with the funding coming to an end. The overall project cost is $8m - $5.12m from Kānoa and a $2.88m loan funded through UTTFCS rates, following consultation with the UTT Scheme ratepayers during the 2021-31 Long Term Plan.	We will not be able to maintain this level of gravel extraction once this project comes to an end with current rating levels.
Makara Flood Scheme (CHB and Hastings ratepayers) This scheme was established in the 1980s to help improve the productivity and stability of 800 hectares of river flats following a series of severe flood events in the 1970s. It helps to protect the road network in the Makara valley and community assets around Elsthorpe. The scheme includes two detention dams as well as soil conservation planting programmes to reduce the silt run off from 2,225 hectares of hill country. The annual operating costs of the scheme was $161k excl GST in 2024-25.	Smaller scheme reviews The Regional Council is currently reviewing the future of: • Makara • Pōrangahau The reviews aim to assess how well these schemes are functioning, engage with local landowners, review the funding of the scheme and plan for the future. Outcomes of the reviews will be considered as part of the next Long Term Plan.
Category 2 flood mitigation project – Pōrangahau Pōrangahau has a long history of floods, and Cyclone Gabrielle reinforced the need for a resilient, long-term plan. The $14.59m project will help better protect homes and cultural sites and support the reclassification of 138 properties from category 2C to Category 1. Design work continues to take shape and will include a stopbank on the northern side of Pōrangahau River, a smaller protective ridge on the southern side, helping to shield the Kaiwhitikitiki Urupā, and raising, relocating – or protecting with small stopbanks – the most vulnerable homes south of the river. To address affordability for the small scheme footprint the initial capital build will be 100% general rate funded.	Once built, Pōrangahau ratepayers will pay 70% of the ongoing operations and maintenance of the new flood scheme, which is estimated to cost Wairoa ratepayers about $340 (direct) and $100 (indirect) in annual operating costs. The remaining 30% will be funded via the general rate.

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Current state	Future state
Waipawa River Waipawa was extensively inundated due to Cyclone Gabrielle, the Waipawa River had an estimated flood flow of 1,800 m^3/s during the Cyclone. This caused the river to overtop the stopbank and flood the township. As part of the level of service upgrades through the NIWE Flood Resilience program, the stopbank that runs 3km along the left side of the Waipawa River will receive upgrades to increase the height and width to meet 1% AEP post cyclone, plus 700mm freeboard. The estimated cost for this project is $9 million.  Map of the proposed structure upgrade (Photo/Supplied) In 2021, erosion control work was completed on the Waipawa riverbank near the State Highway bridge. This is part of the Resilient River Communities project that was funded by the COVID-19 Recovery and Response Fund which committed 64% of project costs, 30% co-funded from Waka Kotahi and the remaining 6% co-funded through the Regional Council. The aim of this project was to minimise erosion by deterring the water away from the banks. This was achieved by earthworks to realign the meandering braid, allowing for greater capacity by deepening and widening the bed, and armouring of the riverbanks.	
Coastal Hazards HBRC does not currently hold any coastal mitigation assets in CHB for coastal flood management, other than river mouth maintenance works. There may be localised coastal protection works that property owners or roading asset managers maintain at their own costs.	

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Water Security – Comparative options for improving water security

	High level order of magnitude of cost ($ Mil)	Timeframe to implement	Approximate volumetric water increases available (GL/yr)	Comment on any significant barriers to adoption, including any regional policy impediments	Comment on any non-financial co-benefits & synergies (e.g. biodiversity enhancement)	Comment on any key assumptions or uncertainties
Heretaunga Water Storage Project	Current estimate $225 million (at pre-feasibility) *Note: this will change with further project definition* **High** – Estimated $225m capital plus $6m p.a. ongoing operating costs. Requires substantial investment, but co-funding by users planned	Pre-construction – 2 years Construction/Fill – 3-4 years ~2030/31 **Long** – Feasibility by 2026, construction start mid-2027; operational early 2030s at best. Benefits then recurring each year over 50+ year lifespan.	27 million m^3 per annum **High** – ~27mm^3 storage; could release tens of millions m^3 in dry season annually. Transforms water availability in summer, benefiting rivers and users.	Resource Consenting needs to consider: • NPS-Freshwater Management (currently under review) • Resource Management Act (currently under review but anticipated to be more enabling for regional strategic infrastructure projects) • TANK plan which is to be lodged with the Environment Court in early 2026. A decision is unlikely to be provided before the Heretaunga project resource consent applications are lodged. The TANK Plan change anticipates water storage as a mechanism to help address constraints. Opportunities available: • Fast track consenting process *Policy & Regulation* • NPS-Freshwater Management • NPS Highly Productive Land • Proposed NPS Infrastructure • WCO • Fast track • RRMP/Kotahi • Navigation Bylaw • TANK plan developed on the basis that this kind of scheme would be created.	Provides strong in-stream flow benefits and increased resilience. Utilises existing infrastructure by leveraging the Heretaunga Aquifer as a natural distribution mechanism, keeping costs manageable.	Provides scaled solution (more cost effectively) to deliver broader range of outcomes enabling climate adaptation, regional resilience (for all water users) including enhanced environmental outcomes. Scaled community solution prevents further privatisation of water while delivering economic sustainability for current commercial users while unlocking for future growth opportunities.

Water use efficiency measures (including municipal water metering & industrial efficiency)	**High level order of magnitude of cost ($ Mil)**	**Timeframe to implement**	**Approximate volumetric water increases available (GL/yr)**	**Comment on any significant barriers to adoption, including any regional policy impediments**	**Comment on any non-financial co-benefits & synergies (e.g. biodiversity enhancement)**	**Comment on any key assumptions or uncertainties**
Irrigation Water Use Efficiency Develop programme to demonstrate the benefits and support the adoption of water saving technologies e.g. Dragonline, Autonomous Pivot and SMART Guns	**Moderate** – Costs borne by farmers for new tech (could be tens of thousands per farm for systems). Potential grants or subsidies would add to public costs. But many changes have good ROI (higher crop per drop).	**Medium** – Technology adoption can happen relatively quickly if incentivised however capital investment is weighed up against a range of priorities. Benefits are realised each growing season once implemented.	Not quantified as it relies on tech specs available and adoption of multiple tech distorts figures. **Low** – This is difficult to assess as it relies on different technology and application profiles. Heretaunga Plains, tends to have relatively efficient water use due to high value land use (representing good ROI per m^3). Expect that savings will be highly incentivised through the regulatory pressures already in place.	*Policy and Regulation* • How would this be required? Through a plan change like compliant fireplaces • How would we ensure compliance and who would this fall too?	May help sustain environmental flows in rivers.	-
Irrigation Water Use Efficiency Develop programme to improve performance of low performing system types e.g. irrigation guns		**Medium** – Technology adoption can happen relatively quickly if incentivised however capital investment is weighed up against a range of priorities. Benefits are realised each growing season once implemented.	Basic assessment estimated at approx. 10.7 million m^3 or 14.7% of irrigation water (all of HB)* *Based on the information we have to date. This report has not been formally accepted.*			-
Irrigation Water Use Efficiency Promote Irrigation system performance assessments as a method to improve system performance e.g. Distribution Uniformity		**Medium** – Technology adoption can happen relatively quickly if incentivised however capital investment is weighed up against a range of priorities. Benefits are realised each growing season once implemented.	Basic assessment estimated at approx. 8.45 million m^3 or 11% of irrigation water (all of HB)* *Based on the information we have to date. This report has not been formally accepted.* **Do not add these figures together – there will be overlap**			-

Water use efficiency measures (including municipal water metering & industrial efficiency)	**High level order of magnitude of cost ($ Mil)**	**Timeframe to implement**	**Approximate volumetric water increases available (GL/yr)**	**Comment on any significant barriers to adoption, including any regional policy impediments**	**Comment on any non-financial co-benefits & synergies (e.g. biodiversity enhancement)**	**Comment on any key assumptions or uncertainties**
Residential: Water meters	$28m to $35m ($260 per unit[1] plus $140 to $240 installation per unit). $10k to $20k per year for promotional campaigns etc. Tauranga City Council fund a water technician service free to households to advise on and fix domestic water leaks. An estimated 16% to 19% of residential water is lost through leaks, particularly in Napier. It is unclear how much of the cost to fix this would fall on property owner's vs the territorial authorities.	2029 - i2034	The average total residential water use is 26.9GL/yr. HDC municipal supply also includes some industrial use which HBRC has no oversight of. Average use in HB is high, at 421L/pp/pd[2] and on that basis, we can assume savings at the higher end of the scale (up to 30%[3] when allowing for some industrial use) is feasible. A 20% to 30% reduction equates to 5.38GL/yr to 8.07GL/yr in savings.	Previously political will was the barrier but it appears this has been overcome, therefore none known.	Installation will create ~2-4 fixed term jobs Metering in Tauranga has delayed estimated capital expenditure of $70m for more than 10 years, saving ~$1m in depreciation costs for every year delayed.	Reduction in water use through increasing consumer awareness, curbed demand, reduced water usage and reduced wastage through increased leak detection. Reductions will only be maintained if supported by complimentary measures such as promotional campaigns and educational programmes. It is unclear if there is an intention to charge for water usage. We understand that water metering may not be considered a priority by HDC.

[1] Saving money, creating jobs and more importantly: saving water - NZ Herald
[2] Hawke's Bay Region, Place and ethnic group summaries | Stats NZ
[3] Water Metering – Guidance Manual

Water use efficiency measures (including municipal water metering & industrial efficiency)	**High level order of magnitude of cost ($ Mil)**	**Timeframe to implement**	**Approximate volumetric water increases available (GL/yr)**	**Comment on any significant barriers to adoption, including any regional policy impediments**	**Comment on any non-financial co-benefits & synergies (e.g. biodiversity enhancement)**	**Comment on any key assumptions or uncertainties**
Industrial Water Use Recommendations as per Hawke's Bay Tier 3 Water Demand by Industrial and Territorial Water Users (Dan Bloomer; 2023): 1. Appoint a designated Water Efficiency Coordinator 2. Establish a Water Demand Management Forum (WDMF) 3. Resource research into water use and efficiency 4. Investigate wastewater repurposing 5. Support adoption of new technologies	Not assessed but options 1 to 4 are estimated to cost ~$200k (the cost of the average FTE for a year and some operating costs) to ~$300k (if research needs to be contracted out and external funding sources can't be found) The cost of option 5 will depend on the new technologies chosen, the approach to adoption and the Councils role in it. See also the water recycling option below. **Moderate** Metering estimated at approx. $28-35m [4] capital. Additional costs mainly associated with infrastructure upgrades (e.g., pipe repairs, network upgrades) and education. Hastings/Napier meter projects are multi-million but far less than new supply infrastructure. Yields savings year after year.	Not assessed, but most options could be initiated within months subject to funding availability/inclusion in LTP. **Short/Medium** – Some actions (fix leaks, install meters) within 1–5 years. Behaviour changes ongoing. Benefits immediate and compounding (earlier done, more cumulative savings).	Not quantified, but the average total industrial use is 14.06GL/yr and based on international literature, it is estimated initiatives could save up to 30%[5] or 4.22GL/yr, depending on which technologies are adopted and how widely they are adopted. This overlaps with the water recycling option below and the two should not be added together.	Lack of support/funds to invest in a new programme in the current environment	Will depend on the new technologies adopted but may include retaining ecological flows in rivers. **High** – Strongly aligns with conservation ethic and community values. Public likely supports once they see fairness (everyone doing their part). Overall seen as the *right thing to do* for sustainability. Caution: Estimated 'savings' need to be quantified as do the installation costs.	

[4] Estimate from Richard Wakelin table - $260 per unit plus $140-240 per unit installation
[5] GN 5.4: Water efficiency opportunities | Better Buildings Partnership

	High level order of magnitude of cost ($ Mil)	Timeframe to implement	Approximate volumetric water increases available (GL/yr)	Comment on any significant barriers to adoption, including any regional policy impediments	Comment on any non-financial co-benefits & synergies (e.g. biodiversity enhancement)	Comment on any key assumptions or uncertainties
Agricultural efficiency/conservation/ regenerative farming practices	Not quantified as each farming operation will require different types and various intensities of intervention. Costs of implementation are often offset by benefits. See comments regarding quantification.	A phased approach over 4/5 growing seasons targeting different land uses / cropping types or a percentage of the farm.	Estimated at 3.4 GL Savings are difficult to quantify as some farms might already be applying some of these interventions (see assumptions).	• Again, what would the requirement be to do so? Would these be industry lead or regulated. Would we run into issues with farm plans • Can we be more strict than national direction • No regulatory backing • How would we access the land for this to be done. • Individual pays cost • How would this be compensated	• Erosion Control – improved water quality • Enhanced biodiversity • Carbon sequestration • Flood mitigation • Improved soil health • Improved soil structure and Water Holding Characteristics • Builds long-term agricultural resilience • Reduced energy use (less pumping) • Improved resilience to drought • Lower fertiliser runoff (when fertigation is used)	*Comment on costing:* Difficult to quantify as each farming operation will require different types and various intensities of intervention. The six-year LandWISE Carbon Positive Project is trialling these inventions to quantify costs and gains in terms of water use, yield and co-benefits (soil health etc.) See: Carbon Positive - LandWISE - Promoting sustainable land management. This project will give more reliable figures in terms of local costs and benefits. *Assumptions on Water Savings:* Annual irrigation use across the Heretaunga and Ruataniwha plains is around 34 GL for surface and ground water abstractions (10-year avg.) While regen/ soil conservation studies show water savings between 20-60% is possible due to less evaporative demand, improved infiltration and reduced runoff. A conservative water saving of 20% was used to estimate a 6.8 GL saving across the plains this was halved to 3.4 GL assuming a 50% implementation rate across farms. Again, interventions will need to be tailored to land use and farming infrastructure / capability (cropping, orchards, dairy etc).

Water recycling & reuse *– including Wattie's/McCain wash water Lawrence Yule, Bruce McKay* *Recycling provides an opportunity for reuse of water to then repurpose for irrigation.*	**High level order of magnitude of cost ($ Mil)**	**Timeframe to implement**	**Approximate volumetric water increases available (GL/yr)**	**Comment on any significant barriers to adoption, including any regional policy impediments**	**Comment on any non-financial co-benefits and synergies (e.g. biodiversity enhancement)**	**Comment on any key assumptions or uncertainties**
	Piping only Will vary greatly depending on the volume of water to be moved and the distance but is likely to be in the tens of thousands to hundreds of thousands of dollars range. *With Storage* Likely tens of thousands to hundreds of thousands for a storage pond, depending on the size and specifications of the pond. *Treatment required* It is unclear what level of treatment may be required, and therefore the additional costs. Silver Fern farms run their wash water through several sieves. Other businesses may need to treat or filter their water more extensively before use.	Months – will vary depending on how far water is to be piped, the challenges involved, the availability of materials and negotiations with 3rd party landowners for use.	Total industrial water use in HB per year is 14.06GL/yr. HDC municipal supply also includes some industrial use which HBRC has no oversight of. Savings are estimated to range from 6.5% to 14% for the piping only option and 15% to 21% for the storage option (see below). These estimates have a high level of uncertainty. *Piping only* Assuming 50% to 70% of water that is available for recycling can be recaptured (depending on loss to steam/evaporation etc), and a steady rate of use throughout the year (which won't be the case for all), but direct irrigation is only needed for 4 to 6 months a year, **it is estimated that 0.93GL/yr to 1.97 GL/yr could be saved.** *With Storage* Assuming 50% to 70% of water used can be recaptured and 50% of this can be stored until it can be reused (due to space, cost, feasibility and weather restrictions), **it is estimated that an additional 1.4 to 1.96 GL/yr could be saved.**	Again, what would the requirement be to do so? Would these be industry lead or regulated. The cost is large and borne by a few, which is open to challenge. The logistics of storage (including space), piping, and the feasibility of the nearest irrigatable land often being owned by a third party.	Limited benefit to streams/rivers and water bodies but provides a valuable reuse of water that would otherwise flow out to sea.	Storage (for use when it is needed) and distribution of the water will be critical in determining the economic viability in comparison to a larger scale storage option in the upper catchment that amortises the costs across a broad demand area. Assumed only 40% of water taken for industrial use is available for new recycling: • Some will not be suitable for irrigation (HDC allow some 'trade waste' discharge into their sewerage system but HBRC does not have oversight of this) • Some will be too far away from irrigatable paddocks for it to be feasible (Heinz Watties, King Street site uses 3 GL/yr but is too far away from irrigatable properties for recycling to be feasible) • Some is already being recycled (Silver Fern Farms Takapau uses 1.029GL/yr) • Some is being discharged back into streams which helps maintain ecological flows, mitigate low flows and support aquifer recharge, depending on where it is discharged to, and diverting this water for recycling would be counterproductive • Some sites will not have room for storage, or it will not be feasible to store all of the water from when it is available until it is needed. Data is based on a brief literature survey using international data and prices with water usage figures pulled from HBRC and TA data. Assumptions will need to be tested, and feasibility more thoroughly investigated before deciding to proceed.

Nature based solutions – including any impact of change of land use or agronomy in headwaters of major catchments	High level order of magnitude of cost ($ Mil)	Timeframe to implement	Approximate volumetric water increases available (GL/yr)	Comment on any significant barriers to adoption, including any regional policy impediments	Comment on any non-financial co-benefits & synergies (e.g. biodiversity enhancement)	Comment on any key assumptions or uncertainties
Nature-based solutions are actions to protect, conserve, restore, sustainably use, and manage natural or modified terrestrial, freshwater, coastal and marine ecosystems, which address social, economic and environmental challenges effectively and adaptively, while simultaneously providing human well-being, ecosystem services and resilience and biodiversity benefits. For flood resilience, nature-based solutions could include restoring wetlands and coastal ecosystems, restoring and planting native forests in upper catchments and riparian planting.						
Constructed Wetlands	NZ$175k/Ha to NZ$280k/Ha to construct and plant (assuming the use of contractors at commercial rates but excludes resource consent costs) + NZ$2k to NZ$4k/Ha per year for maintenance, excluding land purchase costs[6],[7]. Land costs in HB can vary from NZ$7k to 8k/Ha for hill country to NZ$228k/Ha for horticulture.	Several months to a year, depending on the type, size, complexity, site conditions and resources available.	Data not available – will vary depending on the specific wetland and the environment, but it is likely that when well placed, and with considered planting, they can play a role in groundwater recharge	• No regulatory backing • How would we access the land for this to be done • Individual pays cost (loss of land etc) for collective gain How would this be compensated?	• Enhanced biodiversity • Carbon sequestration • Flood mitigation • Improved water quality through reduced: ○ sediment in waterways ○ nutrient runoff into waterways ○ bacteria levels • Support for cultural and recreational activities	Data was taken from a brief international literature review. Actual costs will depend on the option selected, the terrain it is to be applied to, the agreed quality or specifications, and NZ labour and equipment rates. We have a contract with WSP, due 30 June, to do modelling of the Tukituki catchment and Heretaunga plains, to determine where nature-based solutions might be suitable for, and their impact. Data was not available from the project at the time this table was prepared. Costings adjusted for inflation based on figures provided by canopy.govt.nz

[6] Constructed wetland practitioner guide-web -Final Rev1.1.pdf
[7] 1856-HBRC235-Constructed-Wetlands-to-meet-DIN-concentration-targets-in-Tukituki-Catchment.pdf

Nature based solutions – including any impact of change of land use or agronomy in headwaters of major catchments	High level order of magnitude of cost ($ Mil)	Timeframe to implement	Approximate volumetric water increases available (GL/yr)	Comment on any significant barriers to adoption, including any regional policy impediments	Comment on any non-financial co-benefits & synergies (e.g. biodiversity enhancement)	Comment on any key assumptions or uncertainties
Land Use Change native afforestation	Cost for native forest establishment is $20,000 / ha depending on the density of planting, species selected, size and grade of nursery stock and degree of site preparation and post-plant maintenance required.	Target 2-5% of key catchment areas per year, bottleneck could be the supply of native species and landowner finances.	New, preliminary research has found native tree species used proportionally similar rates of water as exotic tree species in NZ. Changes from pasture to native forest in headwaters could see a decrease in water availability. Water use dynamics via land use change, particularly afforestation has not been adequality quantified locally (see comments regarding forest flows)		• Enhanced biodiversity • Carbon sequestration • Flood & erosion mitigation • Increased water usage could potentially be offset by flood control via reduced runoff but mostly during winter. • Support for cultural & recreational activities	Costings based on Tāne's Tree Trust documents and calculators: https://docs.tanestrees.org.nz/ Water use change based on forest flow research programme : https://www.scionresearch.com/science/sustainable-forest-and-land-management/Forest-flows-research-programme
Land Use Change – commercial, exotic afforestation[8]:	Cost of forest establishment adjusted for inflation is $1800 per ha for the first year for 900 stems per hectare. Landings approximate cost is $5500, roading approximate cost is $75 000 (no area or length provided)	Target 2-5% of key catchment areas per year, dependant on landowner finances.	Current land use change trends indicate mainly pasture to afforestation. This change will increase water usage (+30% water usage by forests). Limiting large scale afforestation in the headwater might need to be investigated (not erosion-based planting).		• Increased water usage could potentially be offset by flood control via reduced runoff but mostly during winter. • Carbon sequestration • Flood and erosion mitigation	Cost of forest establishment adjusted for inflation is $1800 per ha for the first year for 900 stems per hectare. Landings approximate cost is $5500, roading approximate cost is $75 000 (no area or length provided)

[8] Costings adjusted for inflation based on figures provided by canopy.govt.nz

Nature Based Solutions	High level order of magnitude of cost ($ Mil)	Timeframe to implement	Approximate volumetric water increases available (GL/yr)	Comment on any significant barriers to adoption, including any regional policy impediments	Comment on any non-financial co-benefits & synergies (e.g. biodiversity enhancement)	Comment on any key assumptions or uncertainties
Room for Rivers *Lincoln Agritech – including opportunity to enhance Ngaruroro groundwater recharge by gravel and riverbed management in the unconfined and semi-confined aquifer*[9] https://lincolnagritech.co.nz/braided-river-management-can-limit-aquifer-recharge/	**Braided rivers: $3.0 mil**[10] $0.3-5.25 Mil[11]	This will vary greatly depending on the terrain, the agreed approach, the extent of the braiding, the length of the river section to be braided and the equipment/expertise available. There is likely also a seasonal element.	**16 GL/yr**[5] 3.4-23 GL/yr[12]	• Purchasing of surrounding land • Rebuilding of stopbanks • Ongoing maintenance associated with a wider riverbed (weeds and armouring) • Wider assessments to GW & SW resources require modelling updates. ***Policy and Regulation*** • Further investigation of this work required to understand downstream impacts • Report outlines further work need to be undertaken. • How would the land required for this be acquired and how would the cost be met • Would the fast-track legislation be considered?	• Increased aquifer recharge • Increased baseflow for springfed streams • Better bird habitat quality • Restored natural character • Greater flood resilience and attenuation	• Its unknown how quickly the system would adjust to changes. • Its unknown how much springfed streams would benefit • The model did not account for pumping and may overestimate the benefits • Increasing losses from the river may reduce river flow affecting aquatic habitat and security of supply. • The Nature-based solutions project is investigating a 'controlled' braided river, where the river only becomes braided when the volume of water in the river is above a certain level. This would increase costs somewhat, but it is more likely to maintain environmental flows and less likely to cause low flows than other methods. It relies on increasing recharge only when flows are high so it will be less effective at recharge than other methods.

[9] For further information "M:\E_Science\Projects\311 SW R&I Hydro\600_Ngaruroro\04 SW-GW Interaction\Braided Rivers Lincoln Agritech\EICC - Lincoln Agritech table.xlsx"
[10] Based on Moderate widening and 1.0m raise of river bed
[11] Varies depending on how much the rivers are widened and/or raised. Only assesses the cost of stopbank removal and reconstruction – sourced from (Tait et al., 2024).
[12] Varies depending on how much the rivers are widened and/or raised.

Te Tua water storage and Karamu augmentation project *(Delivers partially – augmentation to support Paritua/Karamu lowland streams)*	**High level order of magnitude of cost ($ Mil)**	**Timeframe to implement**	**Approximate volumetric water increases available (GL/yr)**	**Comment on any significant barriers to adoption, including any regional policy impediments**	**Comment on any non-financial co-benefits and synergies (e.g. biodiversity enhancement)**	**Comment on any key assumptions or uncertainties**
	$20-40M (smaller to larger) *Note: Scoping level indicative costing only (2020 figures).*	This could be a staged component of the Heretaunga Water Storage providing alternate distribution to key lowland streams or be considered independently. Pre-construction – 2years Construction – 18months – 2 years? ~2029/30	Enlarging an existing water storage facility from 0.5Mm3 storage: 2-5million m3 per annum	Cultural/mana whenua barriers have been the primary impediment to advancing this initiative.	Te Tua site is very well located to cost effectively release and augment flow to key streams supporting groundwater and surface water eco-systems.	Storage and distribution using existing te Tua site infrastructure remains within scope of the Heretaunga Water Storage project as a means to move water around the catchment to support key lowland streams and enable water users to offset their groundwater pumping impact during the dryer periods.

Tukituki Water Security Project (water storage on Makaroro, CHB) *(inter-catchment transfer delivers partially – piped distribution scenarios) – concept only.* *Economic, technical analysis from TWS project not available. Heretaunga Project undertaken high level scenario analysis.*	**High level order of magnitude of cost ($ Mil)**	**Timeframe to implement**	**Approximate volumetric water increases available (GL/yr)**	**Comment on any significant barriers to adoption, including any regional policy impediments**	**Comment on any non-financial co-benefits and synergies (e.g. biodiversity enhancement)**	**Comment on any key assumptions or uncertainties**
	High – Likely hundreds of millions for pipelines, pumps, etc., depending on distance and volume. Significant ongoing energy costs to pump if lift required. Only justified if local options insufficient.	**Long –** Planning, negotiations, consents would take years (5–10), construction similarly lengthy. Not a quick solution for near-term issues; rather a future contingency.	TBC – volume will be determined by demand/economic viability (i.e. distribution network viability) Likely that the volume required will not be a constraint but the demand/economic viability. **High –** Potentially large volumes (limited by source availability and pipe size). For example, a scheme could bring in 10–20 million m³/year if major infrastructure is built, far exceeding smaller interventions.	Key impediments to inter-catchment transfer include; • Resource consenting • Land access • Cultural values/impact	Inter-catchment transfer minimises the 'run of river' benefits comparative to a local solution in the upper catchment. This solution however can provide partial eco-system benefits depending on the distribution network and prioritisation of waterways.	