



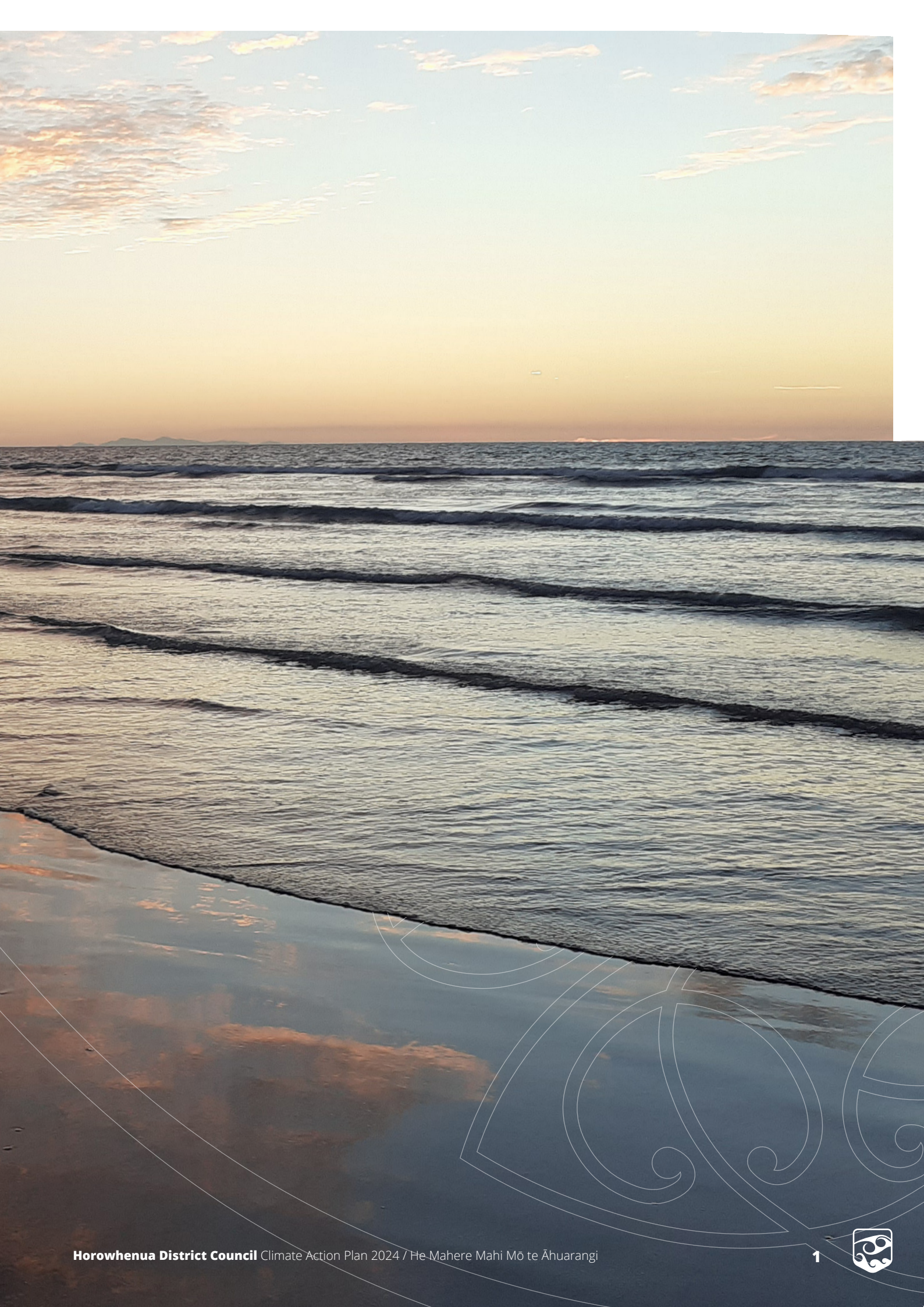
Climate Action Plan 2024

He Mahere Mahi Mō te Āhuarangi

A full-page background image showing a beach at sunset or sunrise. The sky is filled with soft, orange and pink clouds. The ocean has gentle waves washing onto a sandy beach. In the distance, a small, dark island is visible on the horizon. The overall mood is peaceful and contemplative.

**Ko au te taiao,
ko te taiao ko au.**

I am the environment,
the environment is me.



**Ki ngā atua, ngā tūpuna me ngā iwi o te rohe nei
kei te mihi, kei te mihi, kei te mihi**

**Ko te rohe tēnei e hora ai te whenua mai i ngā
pae maunga o Tararua ki Te Tai o Rehua.**

**He kanohi rau o ngā pae maunga o Tararua, arā,
he hukarere, he kāpuapua, te whitinga o te rā
me to rongo hoki i te kō a ngā manu.**

**Kei te take o ngā maunga te wāhi e nōho ai ngā
patupaiarehe i te Riu o Makahika.**

**He maringa nui nō tātou kia whai wāhi ki te
taha uru o Te Tai o Rehua, pēnā i te takutai o
Waitārere, te wāhi takoto o Okatia, te taniwha.**

**Ko ngā moana te wāhi e kitea ai te rātō hei
whakatau i te whatumanawa, ko ngā hua hoki
o te moana hei whāngai i ngā whānau.**

**Toro atu ki ngā tauārai o te rohe, ki te awa o
Ōhau, ki te awa o Manawatū, ki te wahapū o
Manawatū anō, te kohanga o ngā tini manu.**

**Piua ngā mata ki te rangi, ki ngā whetū ārahi
i a tātou, ki te wāhi i topa atu ai te Hōkioi ki
ngā rangi.**

**Hoki mai ki te whenua haumako, ki ngā wai
rērere, kei reira ngā kai hei oranga mō tātou.**

**Ko Mangaore te wāhi tākaro, te waioranga me
te tūhonotanga ki te whenua me ngā awa.**

**Mai i Tokomaru ki Te Awahou, ki Taitoko, ki
Manakau rā anō, e karapotitia ana tātou e ngā
pae maunga o Tararua ki te rāwhiti, ko tēnei
whenua, tōku kāinga.**

**I whakatipu ai tātou i te ahurea rangatira, te
manaakitanga me te ngākau mahana o ngā
tāngata o Horowhenua, koia nei tō tātou rohe.**

**Toitū te marae a Tāne
Toitū te marae a Tangaroa
Toitū te tangata**

Tihei mauri ora!

To the gods, the ancestors and the people of
the district

Thank you, thank you, thank you Boasting the shortest
distance from mountain to sea, the land flows all
the way from the majestic Tararua Ranges to the
Tasman Sea.

The Tararua Ranges show us many faces, from snow
kissed, to cloud cloaked, to sun drenched, to filled with
bird song.

In the foothills, the Patupaiarehe or fairy people were
said to have inhabited the Makahika Valley.

We are blessed by the spacious sandy west coast of
the Tasman Sea, such as Waitārere Beach where the
mighty taniwha, Okatia is said to rest.

Beaches with stunning sunsets to soothe the soul,
and plentiful kaimoana to feed the whānau.
Bordered by our treasured Ōhau and Manawatū
rivers, the latter of which features the Manawatū
estuary that beckons numerous species of birds
home to its abundant shores.

Wide open spaces to see the stars that guide us, and
where the powerful Hōkioi bird soared to the heavens.

Our unique rich fertile soil, along with our waterways,
boasts a plethora of foods nourishing all.

Mangaore area bestows a range of outdoor
recreational activities, strengthening our wellbeing,
and connection to the whenua and awa.

From Tokomaru, to Foxton, to Levin, to Manakau, and
surrounded by the Tararua Ranges to the east, ko tēnei
whenua, tōku kāinga (this land my home).

Built on the rich culture and natural hospitality and
warmth of the Horowhenua people, this is our
beloved rohe.

If the land is well
And the sea is well
The people will thrive

I sneeze the breath of life!



Contents

Ngā Ihirangi

| | |
|----------------------------------------------------------------------------------------|-----------|
| Message from the Mayor / He Karere Nā te Koromatua | 4 |
| Introduction / He Whakataki | 6 |
| Physical Climate Change Risk | 7 |
| Purpose / Te Pūtake | 8 |
| Our Objective / Te Whāinga | 9 |
| Our Approach / Te Kawenga | 10 |
| Our Emissions / Ā Tātou Puha Kino | 12 |
| Emissions Reduction | 12 |
| Horowhenua Emissions Profile | 12 |
| What are greenhouse gases? | 12 |
| Horowhenua District - Greenhouse gas emissions | 12 |
| Tree coverage | 13 |
| Our Partnerships / Ngā Hononga | 14 |
| Iwi and Hapū | 14 |
| Manawatū-Whanganui Climate Change Action Plan / | |
| Mahere Hurihanga Āhuarangi Manawatū-Whanganui | 15 |
| Wellington Regional Leadership Committee - Regional Emissions Reduction Plan, 2024 | 16 |
| Our Strategy for a Changing Environment / He Rautaki Mō te Āhuarangi Hurihuri | 18 |
| Reducing Our Impact: Mitigation | 18 |
| Responding to a Changing Climate: Adaption | 18 |
| Responding with a Focus on our Future: Sustainability | 18 |
| Changing Behaviours to Protect the Environment: Behaviour Change | 18 |
| Our Climate Actions / Ngā Kawenga Mahi Mō te Āhuarangi | 19 |
| Horowhenua Climate-based Actions | 19 |
| Monitoring and Review / Te Aroturuki me te Arotake | 25 |
| Resource | 25 |
| The Roles and Requirements of Local Government / Ngā Haepapa a te Kaunihera | 27 |
| National Direction | 27 |
| National Policy Statements | 28 |
| Council Plans | 29 |
| Case Study: Foxton Beach Dune Garden / He Rangahau: Te Māra Tāhuna o Te Awa Hou | 32 |
| Glossary / He Kuputaka | 34 |



Message from the Mayor

He Karere Nā te Koromatua

Kia ora,

This Climate Action Plan marks an important step towards implementing the Council's commitment to a thriving environment. By enhancing resilience, mitigating the effects of climate change, and promoting sustainability, we can work together to prepare for the challenges ahead.

We recognise that climate change can feel overwhelming. However, by having a clear plan, we can leverage the information available to address its impacts effectively. This is a priority for our community, as evidenced by the increasing frequency of weather events that have affected lives across New Zealand. In Horowhenua, we have experienced floods, droughts, tornadoes, and other extreme events that have necessitated emergency responses.

Through our engagement on the Community Wellbeing Strategy (He Hapori Pakari, Strong Communities), we identified Environment, Community Resilience, and Preparedness as key priorities contributing to the wellbeing of our residents. This plan reflects the aspirations, goals, and risks outlined in the Council's Long Term Plan 2024-2044.

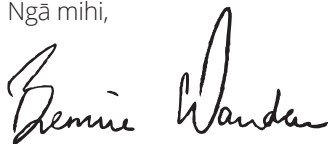
In 2024, the Council has identified 12 priorities to guide its work, with the eighth priority focusing on enriching our environment. This means dedicated efforts towards initiatives that preserve and enhance Horowhenua's natural surroundings. By promoting sustainability, improving waste management, and increasing resilience to climate change, the Council aims to foster a healthier environment for current and future generations. This reflects our commitment to responsible stewardship of natural resources and sustainable development.

The plan also prepares us for the impacts of a changing climate on our district, people, environment, and economy. Our lives are closely connected to our environment—Horowhenua is known as Aotearoa's 'Vegetable Bowl,' producing 29% of New Zealand's vegetables. Our outdoor recreation and enjoyment of beaches, parks, and townships are integral to daily life. The increasing frequency of extreme weather events highlights the urgency to act now.

This plan focuses on actions that ensure our community and district are prepared for both short-term and long-term changes. What can we do to ensure Horowhenua continues to thrive as a great place to live, work, and raise a family? I look forward to collaborating with our community to prioritise the wellbeing of our people while enhancing our environment.

Small actions make a difference—whether it's recycling more, driving less, or using reusable coffee cups and containers. I invite you all to reflect on this question - What can we each do to protect the Horowhenua we know and love?

Ngā mihi,



Mayor Bernie Wanden



Introduction

Whakatakinga

This action plan aims to unify local knowledge, science, and mātauranga Māori to empower the Horowhenua community and future generations. It draws on local insights and partnerships to effectively address the challenges posed by a changing climate.

The plan is a guide for Horowhenua District Council (Council), to work together with our communities to mitigate and adapt to the effects of climate change. Our objective is to inform climate actions to enable durable solutions to environmental change.

We look to engage in bold conversations with our partners, Tangata Whenua and Mana Whenua and community to guide the decision-making process, and act on the contents of this plan.

Embracing partnerships and perspectives, the plan will work to respond to climate risk and protect the environment. A thriving Horowhenua relies on a balanced relationship between Te Taiao (the environment) and its people. The plan outlines approach to safeguard our natural environment while preparing for the impacts of climate change on our community, infrastructure, and economy.

By adopting a kaitiakitanga (guardianship) approach, this plan supports the sustainability of our district for current and future generations, promoting collaboration that respects and values all voices in our community.

Taiao ora, Tangata ora.

If the natural world is healthy,
so too are the people.



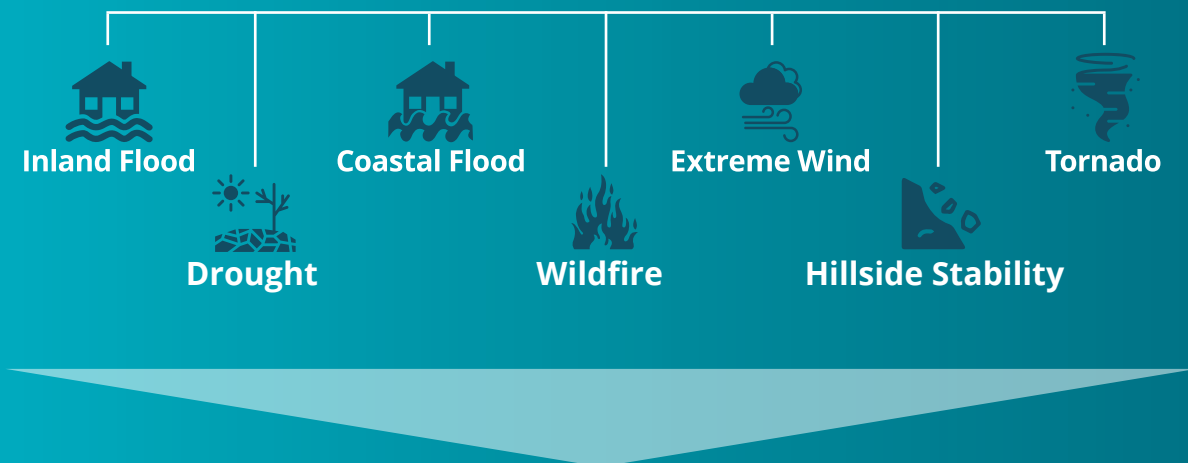
Physical Climate Change Risk

Physical climate change risks encompass both the increased frequency and severity of existing natural hazards and the emergence of new hazards due to climate change. These risks necessitate that the Council evaluate its resilience and preparedness for such events affecting our District.

Our preparedness and awareness of potential risks vary across different regions, communities, and households.

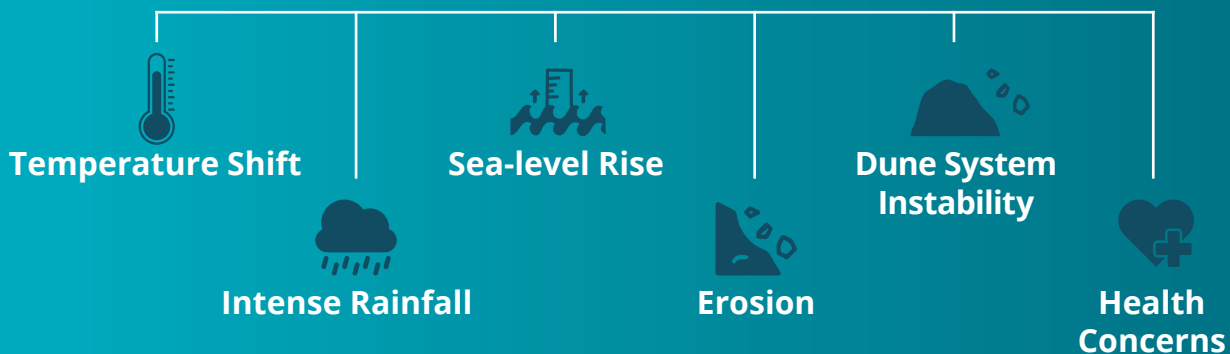
EVENT-RELATED RISK:

This includes hazards that occur suddenly or with short notice, such as inland flooding, coastal flooding, extreme wind, tornadoes, drought, wildfires, and hillside instability.



LONG-TERM RISK:

This includes risks that develop over an extended period, such as rising temperatures, sea-level rise, dune system instability, intense rainfall, erosion, and human health concerns.



Purpose

Te Pūtake

Local government plays a fundamental role in supporting central government to achieve the 2050 Emission Reduction targets. By addressing climate change impacts, we can better support our communities in adapting to environmental changes that may affect access to water, food, energy, and infrastructure.

Councils are responsible for a wide range of sectors and activities that will need to transition to low-carbon approaches. This includes local infrastructure and public services such as transportation, stormwater and waste management, drinking water supply, recycling, access to green spaces, and emergency response planning. Additionally, councils have key responsibilities in strategic direction setting, land use planning, and urban development.

Through this plan, the Council will engage with the community and partners to ensure an equitable

transition for the district. This involves understanding the varying impacts of climate change and climate action on different groups and taking steps to promote fairness in our responses. We will work on shared initiatives, bringing together local perspectives on our environment to collaboratively address these challenges.

In alignment with central government priorities, it is essential to establish clear expectations and budget allocations for effective climate action. The Council will utilise funding from the Long Term Plan to implement this strategy within existing budgets while integrating climate considerations into daily operations. We will also pursue external funding opportunities to enhance our climate initiatives.

This plan not only outlines the Council's actions in response to climate change but also highlights practical steps that individuals can take to reduce their carbon emissions and overall environmental impact.



Our Objective

Te Whāinga

Council commits to creating a fair and sustainable future by doing its part reducing emissions, protecting the environment, and improving our readiness for climate-related challenges. Council will focus on initiatives that enhance and preserve Horowhenua's natural

environment. This includes promoting sustainability, improving waste management, and building resilience to climate change for the benefit of both current and future generations.



Our Approach

Te Kawenga

To achieve our objectives, we will focus on a balanced transition to a sustainable future that addresses inequalities within our community. The actions outlined in this plan are designed to provide effective tools for Horowhenua to mitigate the impacts of environmental change. However, Council recognise that no single strategy can fully eliminate all hazards or risks.

Climate mitigation and adaptation present a pathway for Horowhenua to prepare for environmental changes that may strain our existing infrastructure. While some elements of this approach may require initial investment, careful planning and implementation of these strategies are intended to lead to long-term solutions that can ultimately reduce costs for the community.

Horowhenua District Council aim to do the following:

- Protect our outstanding environment
- Reduce our carbon emissions
- Prepare for the impacts of climate change, including by:
 - Sustaining our vibrant horticulture, agriculture and viticulture industries
 - Encouraging people and property to be ready for climate related hazard events
- Weave matauranga Māori across climate actions.
- Provide for increasing population growth, in line with achieving climate outcomes (including growth opportunities and delivery of key infrastructure).

- Ensure access to data, information and stories of Horowhenua environmental change.
- Reduce inequalities of climate impacts.

Achieving a sustainable transition requires us to prepare for the impacts of climate change while also reducing our impact on the environment. This plan will serve as a guide for decision-making, linking work programmes and projects with the goal of fostering a healthy environment. Our actions will focus on mitigation, adaptation, and improved environmental outcomes that can be pursued and implemented by the Council, our partners, stakeholders, and the wider community. This plan is a resource for addressing climate change in Horowhenua.

The Council is actively engaged in two climate-focused regional partnerships, collaborating with Horizons Regional Council and the Wellington Regional Leadership Committee. These partnerships have provided valuable resources and have facilitated the development of our localised Action Plan.

We recognise that our objectives cannot be achieved in isolation. Our actions will reflect the collective efforts of our partners and community members. Project resourcing will prioritise those most vulnerable to the impacts of climate change, ensuring that our ongoing initiatives align with environmental outcomes that benefit the entire community.





**Protect our
outstanding environment.**

CO²

Reduce carbon emissions.



**Sustaining vibrant horticulture,
agriculture and viticulture industry.**



**Encourage people to be ready for
climate related hazard events.**



**Weave mātauranga
Māori across actions.**



**Align planning for growth with
achieving climate outcomes.**



**Ensure access to data, information
and stories of Horowhenua
environment change.**



Our Emissions

Ā Tātou Puha Kino

Emissions reduction

Aotearoa New Zealand has long-term climate targets where all greenhouse gases (except methane emissions from waste and agriculture biological processes) are to reach net zero by 2050¹. To help Aotearoa get there, the Government has set targets on emission reduction over time and has within this plan, a long-term approach to keep this on track.

The purpose of an emissions reduction target is to contribute to global efforts to limit temperature rise to 1.5°C above pre-industrial levels. Both science and real-life events (e.g. extreme weather) highlight the need for urgent action. With more frequent storms and dry periods, flooding, and environmental degradation Council has signalled a need to contribute to national goals, while prioritising a thriving environment and economy in Horowhenua.

Further, the Climate Change Response Act 2003 requires Aotearoa to prepare for, and adapt to, the effects of climate change. The actions within this plan embody this process, to both reduce emissions but also build resilience within our community to a changing environment. Focusing on the actions of this plan, Council will seize opportunities to reduce emissions when they arise (such as through regional partnerships, or as guided by Tangata Whenua and Mana Whenua).

Horowhenua emissions profile

What are Greenhouse Gases?

Greenhouse gases (GHG) are the gases that rise and trap heat from the sun in our planet's atmosphere keeping it warm and contributing to global warming. The Climate Change Response Act 2002² has defined six specific GHG's that require action within Aotearoa, and locally Horowhenua.

Greenhouse gas means-

- carbon dioxide (CO₂)

- methane (CH₄)
- nitrous oxide (N₂O)
- any hydrofluorocarbon
- any perfluorocarbon
- sulphur hexafluoride (SF₆)

While New Zealand only accounts for about 0.17% of global gross emissions³ we have a role to play within our local communities to reduce the effect of GHG's, which remain a cause for an increase in climate change⁴.

Horowhenua District - Greenhouse Gas Emissions

In 2021, the Manawatu-Whanganui Region was responsible for 7.4 percent of New Zealand's greenhouse gas emissions, ranking fifth out of the 16 regional councils. On a per capita basis, the region's emissions were notably higher than the national average, at 22.7 tonnes CO₂-e per person compared to 15.3 tonnes CO₂-e nationally⁵.

A significant contributor to the region's greenhouse gas emissions is the primary industries sector, which accounts for over three-quarters of the total emissions. However, forestry helps mitigate these emissions; the region's forests absorb approximately 18 percent of the greenhouse gases emitted annually. Despite this, to meet New Zealand's emissions reduction targets, it is crucial to lower both regional and local emissions promptly.

Horizons Regional Council has committed to a 43 percent reduction in gross greenhouse gas emissions by 2030 from 2019-2020 levels. This target aligns with the Intergovernmental Panel on Climate Change (IPCC) goal for 2030.

One strategy for reducing emissions involves leveraging natural ecosystems to absorb carbon. The Council has increased efforts in planting, supporting local forests, and exploring green alternatives. While trees sequester

¹ <https://environment.govt.nz/what-government-is-doing/areas-of-work/climate-change/emissions-reductions/emissions-reduction-targets/greenhouse-gas-emissions-targets-and-reporting/#target-2020>

² <https://www.legislation.govt.nz/act/public/2002/0040/latest/DLM158590.html>

³ **gross emissions** means New Zealand's total emissions from the agriculture, energy, industrial processes and product use, and waste sectors (as reported in the New Zealand Greenhouse Gas Inventory) (CCRA, 2002)

⁴ <https://www.climate.gov/news-features/understanding-climate/climate-change-atmospheric-carbon-dioxide>

⁵ <https://www.horizons.govt.nz/HRC/media/Media/Climate-JointActionPlan-English.pdf?ext=.pdf>



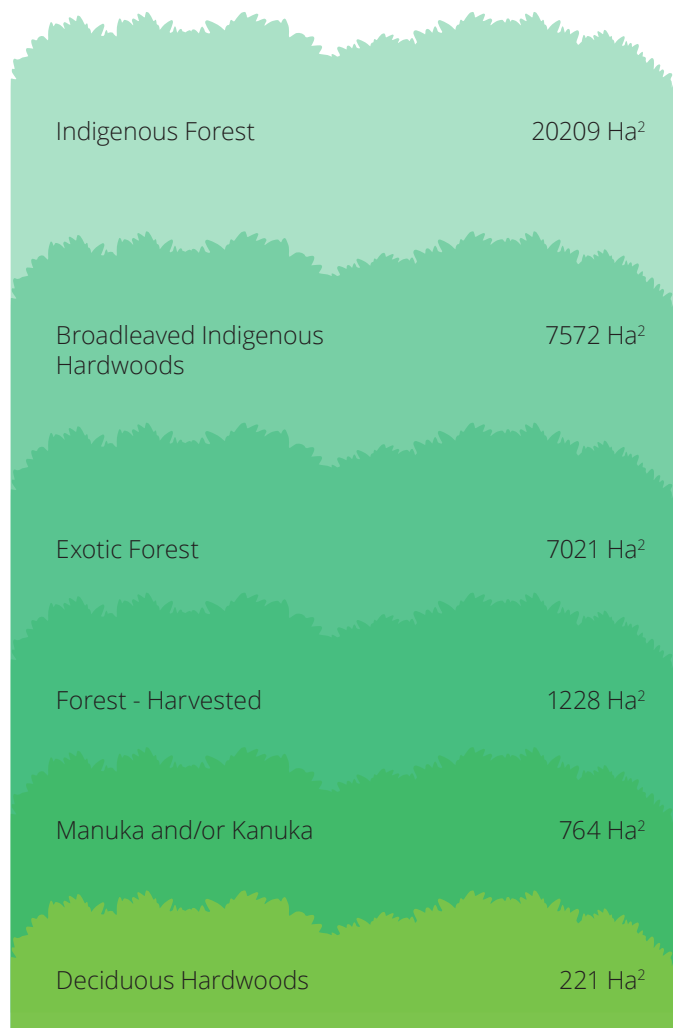
carbon as they grow, they release some of this stored carbon when they are harvested.

The IPCC emphasises that limiting global warming to 1.5°C requires immediate and significant reductions in greenhouse gas emissions across all sectors within this decade.

In the Horowhenua district, total annual emissions amount to 819,053 tonnes CO₂-e⁶. The primary sources of these emissions are:

- Primary Industries: Contributing 37% of the district's total emissions. This sector is dominated by agriculture.
- Transport: Responsible for 38.4% of emissions, primarily from petrol and diesel combustion in vehicles such as cars, utes, and trucks.
- Stationary Energy: Accounting for 9.6% of emissions, this includes electricity and natural gas used in homes, schools, and factories, as well as stationary petrol and diesel.
- Industry: Making up 12.9% of emissions.
- Waste: Contributing 2.1% of the district's emissions.

By addressing these key sources, Horowhenua can make substantial progress towards reducing its greenhouse gas emissions and achieving its climate goals.



Tree Coverage in Horowhenua: Analysis of Forest Types

Tree coverage

Tree coverage in Horowhenua is a pathway for addressing climate change challenges and enhancing the local environment. With a significant area dedicated to indigenous forests (20,209 hectares) and broadleaved indigenous hardwoods (7,572 hectares), these native trees play an essential role in carbon sequestration and supporting biodiversity. The presence of exotic forests (7,021 hectares) and harvested areas (1,228 hectares) also contributes to the district's ecological outcomes. By increasing tree canopy coverage, the district can promote urban cooling, which mitigates heat during the warmer months, and improves air quality. Overall, investing in and protecting these forest areas fosters resilience against climate impacts while enhancing the beauty and liveability of Horowhenua.

⁶ https://www.horizons.govt.nz/HRC/media/Media/Publication/SoE_2020_Horizons-Region-Community-Carbon-Footprint-2018-19.pdf?ext=.pdf

Our Partnerships

Ngā Hononga

IWI AND HAPŪ PARTNERS

Council as Te Tiriti o Waitangi/The Treaty of Waitangi partners recognises our role in upholding the principles of Te Tiriti/The Treaty, through protecting Te Taiao and Taonga, especially from the heightened impact of climate change for Māori. In developing climate action in Horowhenua, we will work in partnership with Tangata Whenua and Mana Whenua to learn and understand local impact. This understanding will be developed both within and embedded through the Climate Action Plan, and also alongside the plan as whanaungatanga (working together) occurs.

Council will build on key engagements and partnerships with iwi and hapū partners to ensure mātauranga Māori is embedded within climate action in our district. The voice of Te Taiao is woven through mātauranga Māori, storytelling across generations and local taonga. Working in partnership and with guidance from Iwi and Hapū partners Council can develop an approach to environmental change that helps achieve the objectives.

OUR IWI PARTNERS ARE:

- Muaūpoko Tribal Authority
- Ngāti Raukawa ki te Tonga
- Ngāti Tukorehe
- Rangitāne O Manawātū
- Te Kotahitanga o Te Iwi o Ngāti Wehi Wehi.
- Te Tūmatakahuki

Ko au te taiao, ko te taiao ko au.

I am nature, nature is me.



MANAWATŪ-WHANGANUI CLIMATE CHANGE ACTION PLAN / MAHERE HURIHANGA ĀHUARANGI MANAWATŪ-WHANGANUI

The Climate Action Joint Committee has developed the Manawatū-Whanganui Climate Change Action Plan / Mahere Hurihanga Āhuarangi Manawatū-Whanganui. The plan is about understanding how we best work together in response to climate change. It recommends actions councils should be taking individually, and identifies initiatives best progressed jointly.

Actions focus on four key areas:

- Empowering Communities
- Working with nature
- Addressing known issues
- Supporting Good Decisions

The strategy defines a regional approach to implementing the Manawatū-Whanganui climate change action plan.

This plan is about understanding how we will respond to climate change in the Manawatū-Whanganui region and working together to reduce potential harm.

The Manawatū-Whanganui Climate Change Action Plan builds on this work and makes recommendations to councils and communities on ways we can collaborate

on issues we can't solve on our own. A well-designed plan means our efforts are aligned – locally and nationally.

This plan looks at changes we can make that will improve our lives, strengthen our economy and help reduce adverse impacts on the environment at the same time.

The regional planning objective for climate change is set out in the Horizons Regional Council One Plan. The One Plan requires that we:

- Promote resilience land-management practices under the Sustainable Land-Use Initiative (SLUI), which will reduce the effects of climate change and provide carbon sinks.
- Manage water quality within One Plans values framework responsive to climate change.
- Manage water quantity according to minimum river flow levels as baseline and consider climate change when granting consents for water take and use.
- Plan for changes to the scale and frequency of natural hazards, especially coastal hazards, flooding and inundation, temperature rise and drought.

<https://www.horizons.govt.nz/managing-natural-resources/climate/manawatu-whanganui-climate-action-joint-committee>



WELLINGTON REGIONAL LEADERSHIP COMMITTEE - REGIONAL EMISSIONS REDUCTION PLAN, 2024

On Tuesday, 19 March 2024 the Wellington Regional Leadership Committee formally approved Te Mahere ā-Rohe Whakaheke Tukunga 2024-2030 | The Regional Emissions Reduction Plan 2024-2030, and endorsed the Plan for action.

The focus of the Regional Emissions Reduction Plan is on sectors and areas that provide significant opportunities for regional approaches. These are:

Transport and urban form

Planning for sustainable transport and urban form on a regional level.

Energy

Energy's role in decarbonising other sectors means that regional energy emissions are tipped to grow faster than other sources of regional emissions unless action is taken.

Circular economy

Circular approaches reduce GHG emissions by increasing the efficiency of resources used within the economy. Solid waste makes up a small portion of our region's emissions, but overconsumption sits at the root of our climate change and ecological crises.

Productive land use and primary industries –

Agricultural emissions make up the largest source of the region's emissions. We will work with farmers and growers to increase farming practices that help reduce emissions and increase resilience to grow food for the future that is climate-friendly, reduces emissions and is of high value.

The four focus areas have different levels of priority across the region. Reducing agricultural emissions is particularly important for Kāpiti, Horowhenua and Wairarapa. Conversely, the larger urban centres can have more of an impact by reducing transport emissions. This plan is informed by the aspirations and interests Māori have across all these focus areas.

The Horowhenua focus within this plan is the relationship of reducing emissions within agriculture and how we plan for growth through the WRLC Future Development Strategy, while continuing to support our primary land use industry. The collaborative approach of this plan brought through the varied perspectives on how and where we reduce emissions within the region. This was to enable better opportunities that reflect the region, while sustaining what we are known for.

As demonstrated by the vision, objectives and focus areas our outcomes reflect a wide array of practice, across land use, energy, transport, promoting a circular economy and primary land use. While Horowhenua is primarily classed within the primary industries and productive land use, there is an opportunity for us to enable a circular economy and promote opportunities for our community.

Lastly, the actions within the document are clearly crafted and formed to enable "Our focus for action: Making things happen together". This includes alignment to other plans and programmes, who will undertake the work, and whether new resources will be required for the work to be carried out. This plan forms the basis of implementation.

Horowhenua recognises there is a role for everyone to play in reducing emissions as we continue to work in partnership to deliver opportunities for our regions.

Read more at: <https://wrlc.org.nz/wp-content/uploads/2024/03/1497-GWRC-WLRC-Regional-Emissions-Reduction-Plan-REO-240227-ff.pdf>





Our Strategy for a Changing Environment

He Rautaki Mō te Āhuarangi Hurihuri

Horowhenua approach to climate change will be based on mitigation, adaptation, sustainability and behaviour change.

REDUCING OUR IMPACT: MITIGATION

Mitigation means reducing the amount of greenhouse gases we put into the atmosphere. We know a certain amount of change is already locked in, due to past emissions – but Horowhenua can limit future impacts of climate change by reducing future emissions. To understand and identify key shifts through mitigation it is important to understand our current emissions, as well as future emissions from proposed activities.

Mitigation means modelling current and future emissions and taking steps to reduce these to reduce future impacts. It involves understanding the risks and benefits of climate change and changing what we do to reduce the effects of climate change.

RESPONDING TO A CHANGING CLIMATE: ADAPTATION

Adaptation means modifying the way we do things to reduce the impact of environment change so we are more resilient to the impacts of climate change. Adaptation needs to occur at a range of scales, including avoiding development in hazardous areas, building to reduce hazard risk (e.g. stop banks, raising existing buildings, or building new stormwater assets), emergency management planning, and preparing for climate related weather events at the household level (e.g. having an emergency kit).

Adaptation means putting plans and measures in place to adjust to a changing climate and improve our resilience.

RESPONDING WITH A FOCUS ON OUR FUTURE: SUSTAINABILITY

Sustainability in the context of climate change focuses on balancing the needs of today, while protecting natural and physical resources to meet the reasonably foreseeable needs of future generations⁶. The environment is a core element in climate change due to the impact on natural resource and ecosystems.

Within sustainability there is a focus on the impacts of climate action (or inaction) of vulnerable communities and the need for intergenerational equity⁷.

Sustainability is about meeting the needs of the present without compromising the ability of future generations to meet their own needs.

CHANGING BEHAVIOURS TO PROTECT THE ENVIRONMENT: BEHAVIOUR CHANGE

Behaviour change involves a shift in practices that leads to better outcomes for our local environment. This approach fosters education and awareness about our collective response to climate change within the community. By taking local initiatives, we strengthen our connection to the land and enhance our educational efforts.

Behaviour change refers to creating a temporary or permanent shift in how we do things.

⁷ Resource Management Act, No. 69. (1991). <http://www.legislation.govt.nz/act/public/1991/0069/latest/whole.html>

⁸ Yohe, G., R. Lasco, Qazi K. Ahmad, N. Arnell UK, S. Cohen, T. Janetos, R. Perez et al. "Perspectives on climate change and sustainability 3." change 15, no. 39 (2006): 40.



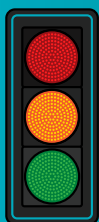
Our Climate Actions

Ngā Kawenga Mahi Mō te Āhuarangi

Horowhenua climate-based actions

Within the below table, are a set of actions for climate-based initiatives within Horowhenua – led by Horowhenua District Council. The table presents these actions by category, ranging from behaviour change to, infrastructure, biodiversity leadership, transport, and connected climate resilient communities.

The timeframe for delivery is based both on the Long Term Plan cycle and work being developed through partnership and community, with connection to Council. These are:

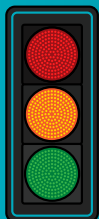


Long: 5+ years

Medium: 3-5 years

Short: 1-2 years

The impact of each action has been determined based on the number of people affected, how significantly they would be impacted, and how long they would be impacted for. These are:

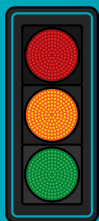


Large: Impact across generations – legacy outcomes.

Medium: Tangible outcomes, through existing work programmes and partnership.

Small: Direct impact and benefit for community of Horowhenua.

The estimated cost of an action is based both on the projects of the Long Term Plan and market research in developing the plan. These are indicative cost expectations only, and will be subject to procurement. These are:



High: \$50,001 or more

Medium: \$1,001 - \$50,000

Low: \$0 - \$1,000



| # | ACTION | HDC TEAM(S) RESPONSIBLE | PARTNERSHIP | TIME FRAME | IMPACT | ESTIMATED COST | FOCUS |
|----------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-----------------------------------------------------------|---------------|--------|--------------------|------------------------------|
| 1. Navigate behaviour change within Horowhenua | | | | | | | |
| 1.1 | Communicate with the community on climate change and the actions taken to reduce impacts and build resilience. | Consider within projects, Communications. | | SHORT | SMALL | LOW | Behaviour Change, Adaptation |
| 1.2 | Enable opportunities to learn about climate change within Horowhenua and the steps people/households can take to reduce their impact and improve their preparedness. These may include sharing resources on our website, posting informative content on our social media, hosting events and/or workshops on waste management and minimisation. Provide resources that enable korero between friends, family or colleagues, as conversations can make change happen. | Community Development, Integrated Growth and Planning, Waste Minimisation, Website | Horowhenua Company, Iwi, Hapū, Massey University. | MEDIUM | MEDIUM | LOW | Sustainability |
| 1.3 | Partner and apply for funding opportunities, such as EnviroSchools and Ministry for the Environment. There are currently fourteen EnviroSchools registered within our district, Council will work with the regional coordinator to increase this number. | Integrated Growth and Planning, Waste Minimisation, Finance | Ministry for the Environment, Manawatū-Whanganui | SHORT | MEDIUM | No additional cost | Sustainability |
| 1.4 | Work in partnership with Horizons Regional Council on the Joint Climate Action Plan to understand regional climate change vulnerability and coordinate adaptation response. Council will support this Action through updates and reports to the Joint Climate Action Committee, and partnership with the Climate Action Working Group. | Integrated Growth and Planning, Infrastructure | Horizons Regional Council, Joint Climate Action Committee | LONG | MEDIUM | No additional cost | Mitigation, Adaptation |
| 1.5 | Consider ways of reducing the organisation's emissions | Integrated Growth and Planning, Communications, Organisation Performance | | MEDIUM | LARGE | MEDIUM | Adaptation |
| 1.6 | Work in partnership with Iwi and Hapū on application of the Climate Action Plan | Executive Leadership Team | Iwi and Hapū | LONG | LARGE | MEDIUM | Behaviour Change |
| 2. Enable regenerative tourism through destination management | | | | | | | |
| 2.1 | Through strong engagement and visitor tools create approaches that support a regenerative tourism network – e.g. establish a sustainability plan alongside Major Events or markets. | Communications, Destination Management, Project Delivery. | Destination Management NZ. | LONG | SMALL | LOW | Adaptation, Sustainability |
| 2.2 | Promote values-based visitors to form connection with Horowhenua outstanding Natural Features and Landscapes. - e.g. RAMSAR site in Foxton Beach. | Destination Management, Parks and Property. | | MEDIUM | LARGE | MEDIUM | Sustainability |



| # | ACTION | HDC TEAM(S) RESPONSIBLE | PARTNERSHIP | TIME FRAME | IMPACT | ESTIMATED COST | FOCUS |
|----------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|-------------------------------------------------|---------------|--------|--------------------|------------------------------|
| 2. Enable regenerative tourism through destination management | | | | | | | |
| 2.3 | Support business and community to promote local initiatives that promote positive environmental practice. | Economic Development. | The Horowhenua Company Limited, Local business. | LONG | MEDIUM | LOW | Adaptation, Mitigation |
| 3. Monitoring and reporting | | | | | | | |
| 3.1 | Establish a Carbon Emissions Portal tool, that will monitor and measure Council controlled emissions to inform local decision-making. | Council | Provider | SHORT | LARGE | HIGH | Adaptation |
| 3.2 | Council will set emission reduction targets (e.g. reduce emissions by 25% by 2030) that guide projects and planning. Every three years Council will assess its emissions and report against its emission reduction targets. | Executive Leadership Team, Elected Members | | LONG | MEDIUM | No additional cost | Adaptation, Sustainability |
| 3.3 | Within new projects and/or site upgrades enable energy efficient design. Focus is on achieving energy reduction targets across the long term through adaptive and behaviour change practice that does not place high cost to the community but instead is invested through decision making. E.g. decision making focused on enabling the reduction of energy use across Council assets by 10%. | Executive Leadership Team, Elected Members | | LONG | MEDIUM | HIGH | Adaptation, Behaviour change |
| 3.4 | Monitor subdivision and development across Horowhenua, to determine whether District Plan provisions to manage development in potentially vulnerable areas are sufficient. | Housing & Business Development | | SHORT | MEDIUM | LOW | Mitigation |
| 3.5 | Encourage Horizons Regional Council to update flood mapping and hazards information to better understand hazard risk in Horowhenua and use this information to guide decision making about new development and growth areas – e.g. through submission to the Long Term Plan and/or Annual Plan. | Housing & Business Development, Strategic Planning | Horizons Regional Council | LONG | SMALL | MEDIUM | Mitigation, Adaptation |



| # | ACTION | HDC TEAM(S) RESPONSIBLE | PARTNERSHIP | TIME FRAME | IMPACT | ESTIMATED COST | FOCUS |
|--------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|--------------------------------|------------|--------|--------------------|------------------------------|
| 4. Business improvements that support our outstanding environment | | | | | | | |
| 4.1 | Council will demonstrate climate leadership by committing to emission reduction and sustainability through its own actions, and through procurement by considering whether others it does business with give sufficient weight to sustainability. | Council wide. | | LONG | MEDIUM | MEDIUM | Behaviour change, Mitigation |
| 4.2 | Educate Council staff about waste minimisation and food waste to reduce waste to landfill from Council facilities and assets. Reduce waste across Council facilities including by encouraging staff to reduce paper use, reduce food waste, and recycle more | Waste Minimisation Officer | | SHORT | SMALL | LOW | Adaptation |
| 4.3 | Monitor ERoad usage and kilometres travelled in Council fleet. Work with staff to reduce vehicle kilometres travelled, including by attending meetings online when appropriate and minimising short trips (by walking or cycling or instead, or by combining trips where possible). | Parks and Property; Facilities and Fleet Officer | ERoad | SHORT | SMALL | No additional cost | Behaviour change |
| 5. Promoting climate and biodiversity leadership | | | | | | | |
| 5.1 | Protect and enhance Horowhenua's natural and built environments – e.g. improved resilience and mitigation within our streetscapes through landscape planning and planting. | Integrated Growth and Planning, Infrastructure, Parks & Property | Iwi and Hapū | LONG | LARGE | HIGH | Sustainability |
| 5.2 | Keep up to date with the requirements of the National Policy Statement-Indigenous Biodiversity and look for opportunities to combine with carbon removal initiatives – e.g. prioritise plant species that have high carbon removing properties. | Cultural outcomes, Parks and Property, Integrated Growth and Planning | Iwi and Hapū, Community Groups | MEDIUM | LARGE | MEDIUM | Mitigation, Adaptation |
| 5.3 | Support local dune systems through regenerative planting, weed control and restoration. | Parks and Property | | SHORT | MEDIUM | MEDIUM | Adaptation |

| # | ACTION | HDC TEAM(S) RESPONSIBLE | PARTNERSHIP | TIME FRAME | IMPACT | ESTIMATED COST | FOCUS |
|-------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|------------|--------|----------------|----------------------------|
| 5. Promoting climate and biodiversity leadership | | | | | | | |
| 5.4 | Support Lake Punahau / Horowhenua aspirations, through Council's priorities, to restore the quality and mana. | Cultural Outcomes, Infrastructure, ELT | Iwi and Hapū, Lake Trust, Lake Domain Board. | LONG | LARGE | HIGH | Sustainability |
| 5.5 | Investigate partnering on a project to help household's lower emissions by becoming more energy-efficient, such as with Electra. | Communications, Resource Consents | Electra | SHORT | SMALL | LOW | Adaptation |
| 5.6 | Complete work with Wellington Regional Leadership Committee to understand the risk of food insecurity within Horowhenua and understand where additional demand could come from within the region. | Integrated Growth and Planning | Wellington Regional Leadership Committee | MEDIUM | MEDIUM | MEDIUM - WRLC | Adaptation, Sustainability |
| 6. Transport strategy that promotes a sustainable network | | | | | | | |
| 6.1 | Working with regional partners advocate for the establishment of public transport within urban environments and inter-regional networks. Encourage the community to use available public transport and advocate for continued investment. | Integrated Growth and Planning, Land Transport | Horizons Regional Council, Greater Wellington Regional Council, Central Government (funding). | SHORT | LARGE | MEDIUM | Adaptation, Mitigation |
| 6.2 | Continue to build shared pathways across the Horowhenua District to promote the use of non-motorised transportation. | Land Transport, Integrated Growth and Planning | | MEDIUM | SMALL | MEDIUM | Adaptation, Mitigation |
| 7. Infrastructure is built resilient to a changing climate | | | | | | | |
| 7.1 | Consider nature-based solutions – e.g. when upgrading or building infrastructure. | Infrastructure, Parks and Property, Integrated Growth and Planning | | LONG | MEDIUM | MEDIUM | Mitigation, Adaptation |
| 7.2 | Monitor and improve wastewater treatment plant emissions – e.g. through procurement of the Carbon Emissions Portal. | Infrastructure, Three Waters | | SHORT | MEDIUM | HIGH | Mitigation |
| 7.3 | Where appropriate, consider the implementation of green-building standards when building Council assets, such as through living buildings. ⁹ | Projects Delivery, Parks and Property | | LONG | MEDIUM | HIGH | Sustainability |
| 7.4 | Explore and apply for Central Government funding opportunities for Horowhenua to support mitigation initiatives within infrastructure (e.g. nature-based solutions, resilience improvements). | Integrated Growth and Planning, Infrastructure | Central Government | SHORT | SMALL | LOW | Mitigation |
| 7.5 | Working in partnership increase the protection and resilience of significant sites and taonga - e.g. through a Sites of Significance Plan Change. | Integrated Growth and Planning, Cultural Outcomes, Iwi Partners and ELT | Iwi and Hapū | SHORT | MEDIUM | HIGH | Mitigation, Adaptation |

⁹Living Buildings are:

- Regenerative buildings that connect occupants to light, air, food, nature, and community.
- Self-sufficient and remain within the resource limits of their site.
- Create a positive impact on the human and natural systems that interact with them.



| # | ACTION | HDC TEAM(S) RESPONSIBLE | PARTNERSHIP | TIME FRAME | IMPACT | ESTIMATED COST | FOCUS |
|-----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|-----------------------------------------------------------|---------------|--------|-------------------|----------------------------|
| 8. Support the development of thriving, connected, climate resilient communities | | | | | | | |
| 8.1 | Plan and provide for Integrated Growth through the Horowhenua Growth Strategy 2040 and intensification opportunities within Horowhenua. When implementing the Horowhenua Growth Strategy 2040, encourage and provide for more compact development forms, multi-modal transport, and nature-based infrastructure solutions. | Integrated Growth and Planning. | Development | LONG | LARGE | HIGH | Sustainability, Adaptation |
| 8.2 | Continue managing land use activities in coastal environments to protect dune landscapes – e.g. through controls within the Operative District Plan. | Integrated Growth and Planning, Resource Management Planner. | Green by Nature | SHORT | MEDIUM | LOW | Adaptation |
| 8.3 | Explore opportunity for innovative building and development through renewable energy and sustainable water use at site – e.g. rainwater tanks and water meters. | Housing & Business Delivery | Kainga Ora, Electra | SHORT | MEDIUM | LOW | Adaptation |
| 8.4 | Encourage innovation, best practice and sustainable design in subdivision and land use. | Integrated Growth and Planning, Infrastructure, Resource and Building Consents. | Iwi and Hapū, Kairanga Ora, Ministry for the Environment. | LONG | SMALL | LOW | Mitigation, Adaptation |

Monitoring and Review

Te Aroturuki me te Arotake

Manaaki whenua, manaaki tāngata, haere whakamua
Care for the land, care for the people, go forward

Alongside the Climate Action Plan, Council officers have been directed by Council to establish a Carbon Emissions Portal. Specifically to monitor and measure emissions as part of the focus on the reduction of Council controlled emissions.

Progress towards implementing the identified actions will be monitored, internally reviewed and reported on an annual basis through the Organisation Performance Report. A more comprehensive review of how the Plan as a whole is being implemented will be undertaken three years after it has been formally adopted by the Council and at three yearly intervals thereafter. This does not preclude a partial review earlier than three years where there is the need to update the Plan based on new information.

RESOURCE

Current Funding

This plan will be implemented through existing partnerships, Long Term Plan funding and opportunities for funding/grants.

In particular, Council approved a Climate Action Fund in the Long Term Plan 2024-2044. This provides \$150,000 in 2024/25, \$100,000 in 2025/26, and \$100,000 in 2026/27. The funding for 2024/25 will be used to implement the initial actions within the Climate Action Plan and to purchase a Climate Emissions Tool that will measure and monitor Council-controlled emissions.

Our Regional Partnerships with the Manawatū-Whanganui Climate Action Joint Committee and Wellington Regional Leadership Committee are funded separately, that do not pull from the Climate Action Fund. We will also pursue external funding opportunities where these arise.

Opportunities - Climate Action Fund (community grants) \$500-\$2,500

Council recognises that we all have a role to play in implementing climate action. While action at international, national and governmental levels is crucial, individuals can have an impact and it will take all of us to turn environmental change around.

We want to hear your stories, connection and ideas for climate action within Horowhenua.

For applications to be considered they must show connection to the eight values/initiatives of the Climate Action Plan, and benefit of implementation within Horowhenua. Applications for projects outside of the district will not be considered for this fund, neither will ideas that do not align with the eight actions of the Climate Action Plan or the approach. The grant will be to the value of \$500-\$2500, awarded from the Climate Action Fund. Applications can be made to Council via our community grants webpage.

The Climate Action Fund provides seed funding for not-for-profit climate action projects in the Horowhenua District. Our aim is to work with the community to develop projects that reduce GHG emissions or grow our community's resilience and understanding of the impacts of climate change.

Those who can apply are community organisations, Iwi or Hapū groups, schools, early childhood centres, social enterprises and not-for-profit businesses.





The Roles and Requirements of Local Government

Ngā Haepapa a te Kaunihera

NATIONAL DIRECTION

Te Tiriti o Waitangi/The Treaty of Waitangi

Through Te Tiriti o Waitangi/The Treaty of Waitangi Council recognises its responsibility to uphold the principles of partnership, active protection and participation in all Māori–Crown engagements and processes.

This is to safeguard Māori rights and interests under Te Tiriti/The Treaty and ensure an equitable transition for Māori.

Environmental interests are collective, woven with responsibility to care for resources, Tangata Whenua and Tangata Tiriti¹⁰.

Council's Role: Council will embody and uphold Te Tiriti/The Treaty through our Iwi and Hapū partnerships in implementing Climate Action. Council will honour our partnerships, and recognise Mana Whenua partners' rights to exercise rangatiratanga and kaitiakitanga in mitigation and adaptation.

Council's Role:

Council will embody and uphold Te Tiriti through our Iwi and Hapū partnerships in implementing Climate Action. Council will honour our partnerships, and recognise Mana Whenua partners' rights to exercise rangatiratanga and kaitiakitanga in mitigation and adaptation.

Resource Management Act, 1991

As stated in Section 7(i) of the RMA, in achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall have particular regard to the effects of climate change.

Within the RMA climate change means a change of climate that is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and that is in addition to natural climate variability observed over comparable time periods.

Council's Role:

We will have particular regard to the effects of climate change when exercising functions under the RMA. These include, but are not limited to, District Plan reviews, processing of resource consents, and managed of key infrastructure and assets.

Climate Change Response (Zero Carbon) Amendment Act, 2019

The purpose of this Act is to provide a framework by which New Zealand can develop and implement clear and stable climate change policies that—

- i. contribute to the global effort under the Paris Agreement to limit the global average temperature increase to 1.5° Celsius above pre-industrial levels; and
- ii. allow New Zealand to prepare for, and adapt to, the effects of climate change.

Further, the Act provides the Minister with the power to request climate change adaptation related information from Councils, who 'must comply' with the request.

Council's Role:

As a local authority, Council will work to better understand our climate risks and carbon footprint and how these interlink with the nationwide carbon targets.

National Adaptation Plan (NAP) and National Emissions Reduction Plan (ERP)

In November 2022 it became a legal requirement for local government to 'have regard to' the national adaptation plan and the emissions reduction plan when preparing or changing Resource Management Act 1991 (RMA) district plans.

This requirement is to ensure that planning nationwide is in line with New Zealand's long-term climate strategies and goals. The NAP and ERP hold the purpose of supporting all of Aotearoa to adapt and thrive in a changing environment, while reducing emissions from transport and business, to land use and energy.

Council's Role:

In developing this, and any other climate related plans, Council will have particular regard to the requirements of the NAP and ERP.

¹⁰ Hirini Moko Mead, Tikanga Māori: Living by Māori Values, New Edition (Wellington: Huia Publishers, 2016).

¹¹ Ministry for the Environment, National Policy Statement for Urban Development, December 2020, <https://environment.govt.nz/assets/publications/National-Policy-Statement-Urban-Development-2020-11May2022-v2.pdf>



Local Government Act, 2002

As stated within the purpose of the Act, the Local Government Act 2002 is directly linked to Council's ability to deliver on core services and a sustainable development approach. The Act provides for the purpose of local government to enable democratic local decision-making and action by, and on behalf, communities; and to promote the four well-beings of communities in the present and for the future.

The environmental wellbeing considers whether the natural environment can sustainably support the activities that constitute health community life, such as air quality, fresh water, uncontaminated land, and control of pollution.

Not planning for climate change has the significant potential for not providing on the purpose of the Act, and places risk to Council's ability to protect and restore infrastructure at threat or damaged by climate change impacts.

Council's Role:

In developing this Plan, Council recognises our responsibility to deliver on the Acts purpose, recognised by Council's LTP where we are delivering core service improvements to infrastructure and will incorporate risk planning where appropriate.

NATIONAL POLICY STATEMENTS

National Policy Statement - Urban Development

The Ministry for the Environment released a National Policy Statement on Urban Development (NPS-UD) which came into effect in December 2020. The objective is to have "well-functioning urban environments that enable all people and communities to provide for their social, economic, and cultural wellbeing, and for their health and safety now and into the future"¹¹. The NPS-UD seeks that planning decisions improve housing affordability by supporting competitive land and development markets, while improving resilience to the current and future effects of climate change.

The NPS-UD establishes an obligation for councils to provide sufficient development capacity to meet demand. It also requires the District Plan to allow greater intensification through heights and density in particular areas of demand.

Impact:

Horowhenua is expected to grow over the next 30 years. Focus on growth will be on enabling a well-functioning urban environment, while ensuring adequate infrastructure for current and future developments. This infrastructure needs to be provided in a way that supports environmental change, and enables thriving environments that are resilient to the effects of climate change.

National Policy Statement – Indigenous Biodiversity

The Ministry for the Environment released the National Policy Statement for Indigenous Biodiversity (NPS-IB) July 2023. The NPS-IB applies to indigenous biodiversity throughout Aotearoa New Zealand, other than in the coastal marine area and aquatic indigenous biodiversity. The NPS-IB prioritises the mauri (life force) and intrinsic value of indigenous biodiversity and recognises people's connections and relationships with indigenous biodiversity.

The NPS-IB requires councils to work with Tangata Whenua to develop a local approach to giving effect to the NPS-IB, identifying and protecting taonga species, and recognising te ao Māori in biodiversity management. Work is required to promote the restoration of degraded significant natural areas, threatened and rare ecosystems, important buffering of connectivity areas, wetlands, urban areas or other areas that align with national priorities

Impact:

This will mean a greater focus on the preservation and enhancement of indigenous biodiversity in Horowhenua at both the district plan and development stage.



COUNCIL PLANS

Long Term Plan 2024-2044

The Long Term Plan (LTP) sets Council's direction for the next 20 years: Outlining our activities and providing a long term focus for decision making. It's an important mechanism which strengthens long term planning, community consultation and participation, and accountability. In addition to LTP activity budgets, Council have approved a Climate Action Fund that will directly align and be used to implement the Climate Action Plan. This provides \$150,000 in 2024/25, \$100,000 in 2025/26, and \$100,000 in 2026/27.

Recognised across our key documents such as Infrastructure Strategy and Activity Management Plans, the risk of Council's resilience against natural hazards and climate change is evident. Particularly through our Stormwater Management, Council have signalled investment of \$76 million over 30-years to respond to resilience and effects of infill development.

Our infrastructure activities are currently experiencing challenges across our land transport network, three waters network resilience to earthquakes, and community infrastructure. In response to this, Council have set clear expectations for their response that will guide the delivery of improvements, resilience and strengthening.

Climate change mitigation and resilience is considered throughout all of Council's infrastructure and planning activities, including:

- Urban planning practices which encourage active transport friendly developments to reduce reliance of private passenger transport.
- Consideration of the location of the development of infrastructure assets to reduce risks associated with climate change and increase resilience.
- Increased investment in active transport and advocacy for improved public transport, such as rail and buses with the aim to reduce transport climate emissions.
- A programme of renewals and maintenance to reduce inflow and infiltration into the wastewater network.
- Planting of indigenous species e.g. Spinifex and Pīngao to provide resilience to Council's dune systems from storms and localised erosion.

Council is also considering established back dunes for succession planting.

- Proactive street tree management to reduce hazards such as wind-throw in storm events.
- Increase tree coverage, particularly urban coverage, through strategic and planned planting to enable environmental cooling within residential environment.
- Development of wetlands to mitigate the effect of increased overland flow and stormwater.
- Increasing understanding of risks (e.g. stormwater catchment management plans) and additional investment in stormwater and roading activities.
- Planning for future water sources and storage to future-proof the Levin water supply.

Regular assessments of local infrastructure and risk will ensure its resilience against severe weather. By partnering with local agencies and engaging schools in climate education programs, we can all be empowered to lead initiatives that promote sustainability. Collectively, these efforts will help build a climate-ready community that is well-prepared for future challenges.

The Climate Action Plan, and subsequent work programmes, will work in a collaborative manner addressing key climate data gaps, opportunities for innovation, collaboration and acceleration of ensuring resilience of Council assets. Demonstrated by the alignment of actions, the Climate Action Plan has been developed alongside the Long Term Plan 2024-2044.

Waste Management and Minimisation Plan 2024

Consideration of climate change and Council's response to it, has formed part of the Waste Management and Minimisation Plan (WMMP) 2024 discussion. Council have formally adopted the WMMP in 2024, with recognition to this Plan provided throughout the Climate Action Plan. This will mean that future reviews of the WMMP will need to align with strategic direction and support community outcomes, specifically:

- Partnership with Tangata Whenua: We will uphold Te Tiriti o Waitangi and its principles; and
- Fit for purpose infrastructure: Our community facilities and infrastructure are resilient, helping us to respond to climate change and natural hazards; and



- Outstanding environment: We protect and maintain the important natural features in our district.

Horowhenua recognises the important role we hold in implementing climate action within our region. Working in partnership with tangata whenua, mana whenua and our community enables Council to work in ways that support future sustainable waste outcomes.

Council is working regionally with councils in the Manawatu-Wanganui region through the Joint Climate Action Committee. Supported by the Emissions Reduction Plan (May 2022), the focus was to move towards a circular economy, and prevention of organic waste entering landfills. Council is also working with councils from the Greater Wellington region, through Council's involvement with the Wellington Regional Leadership Committee and Growth Framework.

OPERATIVE HOROWHENUA DISTRICT PLAN, 2015

The Horowhenua District Plan manages the environmental, social, cultural and economic effects of the use, development, and protection of land (and associated resources), including the control of the subdivision of land. To do this, the District Plan defines the various zones (Residential, Greenbelt Residential, Rural, Commercial, Industrial and Open Space) across the District and sets rules (specific to the District) for what activities are permitted to occur in each zone. Therefore, the District Plan has a very strong influence on the location and nature of activities that occur in the District. In addition to the regulatory controls (i.e. rules), the District Plan identifies where non-regulatory methods can be used to implement the policy direction such as informing people about the risks from natural hazards and being prepared for a civil defence emergency, or providing information on energy efficiency.

Coastal hazards

The Council's District Plan include provisions to protect people, property and infrastructure against erosion and avoid or minimise the destruction of sensitive foredunes and other coastal landscapes. There are rules already in place to manage structures and land subdivisions within coastal and flood hazard areas.

Coastal areas are likely to be vulnerable to the effects of climate change. To make coastal ecosystems and settlements more resilient against rising sea levels and storm surges, Council is working with Horizons Regional

Council and community interest groups to support foredune protection reserves, dune stabilisation activities and protective planting.

When assessing coastal land use and development is areas at risk of flooding, the Council consider identification of coastal hazard areas in the District Plan. Project Information Memoranda (PIM) and Land Information Memoranda (LIM) inform property purchasers about natural hazards, including the relevant risks of climate change. Section 106 of the Resource Management Act 1991 is a critical statutory requirement and directs Council to avoid subdivision and development where there is reliable evidence of a hazard or risk. Further, sections 71 and 72 of the Building Act 2004 controls buildings and the development of land subject to a natural hazard.

Flooding and inundation

Flooding is a significant and pressing issue for the Horowhenua District. Many significant rivers and streams traversing the plains rise rapidly in heavy rainfall, which can cause flooding and inundation. This issue will only become more urgent as climate change increases the number of higher intensity rainfall events.

Our Regional Flood Protection Schemes are the primary form of protection and mitigation against heavy rain and management of flood waters. This includes the stop-bank network, flood gates, flood guides and structures, which are owned and operated by the Horizons Regional Council.

Our District Plan implements the regional direction for flood hazard management in The Horizons One Plan. The rules and standards set out in the plan work to avoid, remedy and mitigate the impact of flooding and inundation on people, property and infrastructure. For example, any habitable buildings in the Flood Hazard Overlay require resource consent. Similarly, in the Moutua Floodway, structures and earthworks must generally be avoided. Overland flow paths are considered by Council's subdivision engineers when granting consents and setting consent conditions.

HOROWHENUA DISTRICT COUNCIL GROWTH STRATEGY 2040

Council produced its Growth Strategy in 2018, and later updated it in 2022 in response to faster than anticipated



population growth, changes to national direction, and more detailed information about Ōtaki to North of Levin road (Ō2NL). Many communities were identified as likely to grow, particularly those nearest to Wellington and Levin. The purpose of the Growth Strategy is to help guide decisions about where, when and how to accommodate the projected increase in population and demand for housing and business land to the year 2040.

This Growth Strategy reflects Council's desire to provide an integrated and proactive framework for managing current and future growth to ensure it is appropriately planned to manage adverse effects.

Greater consideration of the effects of climate change on sea levels and coastal areas (including estuaries and river mouths) and on roading and other infrastructure, will be required when considering further development within coastal settlements. Similarly, more intense rainfall events can be expected, which requires consideration for managing stormwater and river flood hazards. With a history of significant earthquake events in New Zealand it is also increasingly important to consider natural hazards, such as earthquakes, liquefaction and tsunami risks.

In developing the Growth Strategy, Council has tried to avoid identifying areas for potential future residential growth that are known to have significant natural hazard risks. However, only a high-level evaluation of the growth areas identified in section 10 has been undertaken to date, and further investigation will be required for some of these areas to better understand whether they are at risk of natural hazards. In some instances, special provisions may be required as part of a plan change or development process to ensure that any potential effects associated with natural hazards are appropriately avoided or mitigated.

To assist in determining the suitability of new areas for urban development, a set of assessment criteria was used. These criteria were developed and used in preparing the Development Plan 2008, and continue to be relevant assessment criteria for the local context. Location of natural hazards such as flooding, ponding, liquefaction, erosion and climate change impacts is considered to assess the growth areas identified.

HE HAPORI PAKARI, STRONG COMMUNITIES: COMMUNITY WELLBEING STRATEGY 2024-27

Community wellbeing emphasises the quality of life and satisfaction experienced by individuals within a community, as well as the collective welfare and resilience of the community itself. It involves creating supportive environments, fostering social cohesion, addressing inequities, and promoting inclusive development to enhance the overall wellbeing of all community members.

The Community Wellbeing Strategy priority areas are what our community determines to be significant and critical issues that we need to address as a community. They are the issues that if we can collaboratively tackle, head on, we can work towards enhancing overall community wellbeing. It's a team effort and with Council playing a leading role, holding the hands of the community, we can all take a step forward in fostering community pride, vibrancy, and vision.

Environment, Community Resilience and Preparedness is identified as one of seven priorities in the Strategy. Our community has experienced and continues to face the impacts of climate change through severe weather events, flooding, erosion, and drought. It is vital that both the Council and our community are prepared for any civil emergency to ensure that we remain resilient. Preparedness is key to maintaining a strong, adaptable community. To effectively navigate the challenges posed by climate change, it is important that the values of community lift and guide these discussions. Through building community connection within the development of Community Plans and implementing He Hapori Pakari (Strong Communities) Community Wellbeing Strategy, community support networks will strengthen.

Another priority is sense of place and belonging which relates to our district's abundant green spaces and facilities, contributing to fostering community connections. Council recognises the importance of green spaces as places for relaxation, reflection, recreation, and social connection with friends and whānau. To continue providing spaces for community health and wellbeing, it is imperative that we maintain these areas for the enjoyment of all.



Foxton Beach Dune Garden

Te Māra Tāhuna o Te Awa Hou

The 'dune garden' is a colloquial name for the dune system at the southern end of Foxton Beach. This includes a number of rare dune plants that are endemic to Foxton. There is a strong volunteer effort in this space, from members of local ecological groups undertaking pest plant control, including marram grass.

The Foxton Dune Gardens aims to enhance the high ecological values of the area while promoting controlled recreational activities that minimise their impact on the natural environment. The project also focuses on adapting to climate change, including addressing challenges such as sea level rise and other physical changes. To achieve these goals, a collaborative, long-term approach involving multiple agencies and the community is essential.

This space is an important focus for the Manawatu Estuary Management team (a grouping which includes the three agencies HDC, HRC and DOC, as well as Local iwi/hapu, Manawatu Estuary Trust, the Foxton Beach Progressive Association, Wildlife Foxton Trust etc) who are working collaboratively on two key strategic documents, the Manawatu Estuary Plan (for submission to retain RAMSAR accreditation), as well as the Foxton Beach Coastal Reserves Management Plan.



Rare katipo spider at the 'dune garden', South Foxton Beach

This part of Foxton Beach is a high value ecological area. Key agency and community representatives work together to enhance the space, seek to raise its profile as well as aiming that this work will contribute to the resilience of this coast to adapt to climate change impacts, including sea level rise.

The work in this space is facing a number of challenges:

- Recreational use of the beach includes a proliferation of four wheeled drive activity in recent years, as well as quad, trail and motorbikes, who race over the high dunes and use this as their motorised playground. This is having a detrimental effect on existing rare dune plants, as well as impacting negatively on the spinifex foredune work undertaken by HDC in conjunction with the community;
- There is a closed landfill at the northern end of the dune garden. The motorised activity noted above has caused erosion of dunes which is a concern in terms of the capping and containment for this landfill;
- Sea level rise is creating uncertainties as to whether this section of coast will be changed or lost. Propagation of some of these rare plant species should be considered over the medium to long term;
- Lack of funding for a comprehensive dune resilience programme (foredune, mid and rear dune plantings to effectively build resilience in a holistic way in the dune systems).

HDC has undertaken multiple planting days in recent years, which has greatly improved the foredune resilience to this section of Foxton Beach. Additionally, all of the agencies work together to maximise pest plant control, with removal of wattle, silver birch and marram a particular focus.



Glossary

He Kuputaka

Aotearoa means the country New Zealand.

Adaptation is putting plans and measures in place to adjust to a changing climate and improve our resilience.

Carbon Sequestration is the capturing, removal and permanent storage of CO₂ from the earth's atmosphere.

Climate Change refers to long-term shifts in temperatures and weather patterns.

Community Outcomes are statements which set out the outcomes that Council is working to achieve in meeting the current and future needs of the community, for good quality local infrastructure, local public services and performance of regulatory functions.

Council within this plan means Horowhenua District Council.

District Plan the plan prepared by Council under the Resource Management Act 1991 that manages potential adverse environmental effects of subdivisions and land use on the environment through objectives, policies, and rules.

Emissions means emissions of greenhouse gases.

Greenhouse Gas (GHG) means gaseous compounds released into the atmosphere associated with climate change, including:

- carbon dioxide (CO₂).
- methane (CH₄).
- nitrous oxide (N₂O).
- any hydrofluorocarbon.
- any perfluorocarbon.
- sulphur hexafluoride (SF₆).

Hazard means something that may cause, or contribute substantially to the cause of, an emergency.

Horizons Regional Council (HRC) means the Regional Council associate with the Manawatu-Whanganui Region.

Indigenous Biodiversity means the living organisms that occur naturally in New Zealand, and the ecological complexes of which they are part, including all forms of indigenous flora, fauna, and fungi, and their habitats.

Infrastructure Assets that form physical links between, or within, communities. Examples include the roading network, water supply systems, wastewater disposal systems and stormwater drainage systems.

Kaitiakitanga is the obligation to nurture and care for the mauri of a taonga, or the ethic of guardianship or protection.

Long Term Plan (LTP) Council's key strategic planning document outlining the Council's financial situation as well as the Level of Service Council is committed to for the activities it undertakes and capital work programme for at least ten years.

Mana Whenua jurisdiction over land or territory.

Matauranga Māori means Māori customary knowledge, traditional knowledge, or intergenerational knowledge and is held by tangata whenua.

Mitigation Modelling current and future emissions and taking steps to reduce these, so as to reduce future impacts involves understanding the risks and benefits of climate change and changing what we do to reduce its effects.

Nature Based Solutions are actions that work with and enhance the environment to help people adapt to climate change.

Ōtaki to North Levin (Ō2NL) Roding Infrastructure Project between Kāpiti Coast and Horowhenua, led by the New Zealand Transport Agency in partnership with Mana Whenua.

Pakeha New Zealander of European descent.

Resilience the capacity to withstand or to recover quickly from difficulties

Risk is the potential for harm, whether gradual or immediate.

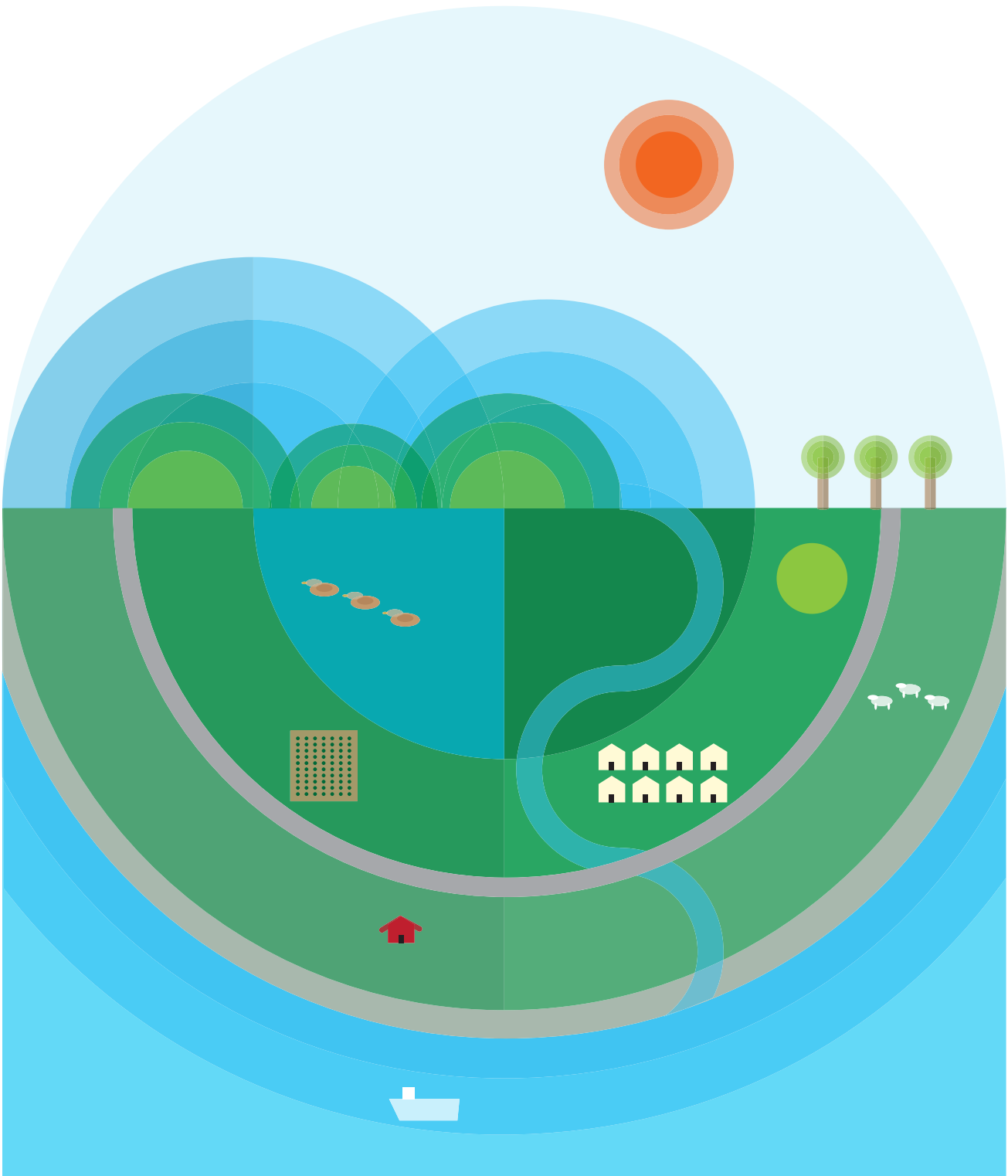
Tangata Whenua indigenous people - people born of the whenua.

Taonga treasure, anything prized - applied to anything considered to be of value including socially or culturally valuable objects, resources, phenomenon, ideas and techniques.

Sustainability The use of natural, social and physical resources in such a way that takes care of our current needs while allowing for the ongoing use of those resources by future generations.

Wellington Regional Leadership Committee (WRLC) The Wellington Regional Leadership Committee is a union of councils, iwi and central government in the Wellington-Wairarapa-Horowhenua region, formed to work together to positively shape the future of the region.







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