

Climate Action Strategy

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Author: Tom Bowen and Andrew Watt Front Cover Photo: Horizons Regional Council

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Contact

24 hour freephone 0508 800 800 fax 06 952 2929 | email help@horizons.govt.nz www.horizons.govt.nz

Centre Services

Kairanga Service Centre Cnr Rongotea and Kairanga-Bunnythorpe Roads Palmerston North

Marton Service Centre 19 Hammond Street

Taumarunui Service Centre 34 Maata Street

Regional Houses

Palmerston North Regional House 11-15 Victoria Avenue

Whanganui Regional House 181 Guyton Street

Depots

Taihape Depot Torere Road Ohotu

Woodville Depot 116 Vogel Street

Postal Address

Horizons Regional Council Private Bag 11025, Manawatu Mail Centre, Palmerston North 4442

We share a vision for a healthy environment and thriving, resilient communities. Realising that vision demands that we take action on climate change.

Climate change may be the biggest environmental challenge we face. It will affect ecosystems, the economy, our way of life and wellbeing. Tangata whenua and others are already noticing the subtle changes in seasonal rainfall, species migrations and bloom times. Tangata whenua feel the impacts of climate change deeply because of their enduring connection to land and water.

Over the coming decades, our region will see both longer dry spells and more intense rainfall. Stormier weather will exacerbate erosion in hill country and on the coast. Rivers will flood more often threatening communities. In a warming climate, threatened species may struggle to survive while some pest species thrive. These changes are happening now and are expected to worsen as this century progresses.

How we act now and through the next decades is critical if we are to limit the severity of climate change.

Our engagement with communities tells us that local people want to see action. We need to prepare for a future that is different from today – and we must do so with urgency.

New Zealand has warmed by approximately

0.09°C

SINCE 1909

Predicted regional improvement in RIVER SEDIMENT LOAD OF

27%

BY 2043 COULD REDUCE TO

5-19%

due to climate change

Our region's temperatures are LIKELY TO INCREASE

0.7-1.1°C

BY 2040 AND UP TO

3.1°C

BY 2090

Summer flows in the Manawatū River

ARE PROJECTED TO DECREASE

14%

RY 209

and the number of high flow events are likely to increase

Annual average precipitation is predicted

TO INCREASE

15-20%

in the north of the region

AND DECREASE



in the south east by 2090

MAN MAN



CLIMATE CHANGE THROUGH THE EYES OF A TUNA

As the climate changes, so will the lives of taonga species. Tuna (eel) are iconic species in Aotearoa. They can live as long as a human, can travel across land, and make two long ocean migrations during their life cycle. They are connected to tangata whenua through whakapapa, they are mentioned in stories and some have been regarded as kaitiaki. They are important to local people, not only as a food source, but also as an expression of manaakitanga (hospitality) offered to guests. Kirirua tuna (longfin), only found in Aotearoa, are already in decline and are very vulnerable to the effects of climate change.

Most people encounter tuna in creeks and lakes, where they spend most of their lives, These freshwater bodies are likely to be affected by both heavier rain and longer dry periods as the climate changes. Heavier rain washes more sediment into rivers: the water can become murkier and the bottom muddier, making it easier to hide but harder to find food. If there's enough sediment in the water, it can damage sensitive gills. Rain also carries nutrients into the water. This encourages the growth of aquatic plants – especially if the rain is followed by warm, settled periods of weather, as we expect with climate change. Some plants are good, but too much algae can smother the streambed and affect the abundance of the bugs and small fish that tuna eat. The longer and warmer those summer dry periods, the less water in the river and the less habitat will be available. There's another problem, too – fish need oxygen just as we do, and there's much less of it in warm, stagnant water. This means that, in a drought, fish may actually suffocate.

After many years in our rivers and lakes, tuna travel thousands of kilometres into the Pacific Ocean to spawn. Nobody knows exactly where they go or how they find their way there — but it's fair to assume that ocean currents and temperatures will be important for their breeding cycle, and for the successful return of juveniles to Aotearoa.

Tuna gender may be influenced by temperature. Climate change could upset the balance of males and females threatening their survival.

Tuna, like people, are a resilient species. Nonetheless, a changing climate will present them with challenges that may impact on their future wellbeing. Taking a look at the world through the eyes of a tuna challenges us to consider environmental issues differently, taking a little time to reflect on what climate change may mean for them and other species. Generally speaking what is good for the tuna, is good for the people.



OUR OBJECTIVES

Everybody has a role to play in responding to climate change – central government, local councils, tangata whenua, community groups, businesses and individuals. At Horizons, we see our role as facilitating and directly contributing to an effective, constructive response to climate change in our region. In line with the Government's commitments to address climate change, we aim to:

- Build the resilience of communities and our environment to the effects of a changing climate.
- Support the transition to a sustainable, carbon-neutral regional economy by 2050.
- Ensure central and local government's efforts are aligned to the needs of our region.

OUR APPROACH

To achieve our objectives, we need to achieve a just transition to a carbon neutral, sustainable regional economy that addresses rather than exacerbates inequities. That will not be easy. A challenge for local government will be how we work together to use our resources to affect a fair transition. We acknowledge the challenge that communities, lwi/Māori and business will face as they transition.

Government provide the framework to adapt to climate change and reduce greenhouse gas emissions. Transition will require Government resourcing and alignment with local government efforts. It will require regulatory clarity and direction from Government. Resources aren't endless and difficult choices will need to be made.

Horizons recognise we cannot achieve our objectives alone. We recognise that we must cooperate and support the work of others to ensure our environment and communities continue to thrive. We will do this by:

- Working together toward shared outcomes.
- Involving local communities in decisions that affect them.
- Sharing what we know, being open about what we don't.
- Supporting people to make a difference.
- Considering the climate in everything we do.
- Prioritising the most vulnerable.
- Remaining open to new information and ways of doing things.
- Prioritising nature based solutions in our response.
- · Acting now, with future generations in mind.
- Where we can, influencing climate action beyond our operations.

OUR REGION'S GREENHOUSE GAS EMISSIONS

In 2021, the Manawatū-Whanganui Region emitted 7.4 percent of Aotearoa/ New Zealand's greenhouse gas emissions, the fifth highest emitting region nationally. On a per capita basis, our region's emissions are above the national average, 22.7 tonnes CO_2 -e per person compared to 15.3 tonnes CO_2 -e nationally.

Over three quarters of the region's greenhouse gas emissions are from primary industries. Some of these emissions are offset by forestry, as growing trees removes around 18 percent of the region's greenhouse gas emissions annually.

While the region's emissions have not increased over the past fifteen years, they will need to decrease significantly over the coming years in line with New Zealand's emissions reduction targets.

Source, Greenhouse gas emissions by the region.

REDUCING OUR IMPACT: MITIGATION

Mitigation means reducing the amount of greenhouse gases we put into the atmosphere. A certain amount of change is already locked in, due to past emissions – but we can limit future impacts of climate change by reducing future emissions. The Paris Agreement seeks to limit temperature increase to 1.5°C above pre-industrial levels. Global temperatures have already risen by 0.8-1.0°C from pre-industrial levels. The window to respond and limit the more severe impacts that higher levels of warming would bring is closing quickly.

In 2022, the Intergovernmental Panel on Climate Change (IPCC) released a 2030 target to limit warming to close to 1.5°C. That requires global greenhouse gas emissions to peak by 2025 and reduce by 43 percent by 2030. This is the most scientifically robust global short-term target designed to meet the Paris Agreement goal.

To meet that target will require a step change transition to a low carbon economy. Globally, if achieved, it will set the path for a low emission future without the extreme impacts of unmitigated climate change. That will require businesses, communities, lwi/Māori, local and central government to all play our part to reduce emissions.

HORIZONS' EMISSION REDUCTION TARGET

In line with our shared responsibility, Horizons intends to reduce its gross greenhouse gas emissions by 43 percent by 2030 from 2019-20 levels. This target aligns Horizons with the IPCC 2030 target. The 2019-20 financial year was the first year our greenhouse gas emissions were measured, providing a baseline against which we can track changes.

We are focused on reducing our gross greenhouse gas emissions rather than net emissions. Carbon sequestration plays an important part in our climate-change response, both locally and globally. Indeed, Horizons already contributes significantly to plantings through its erosion-control and riparian management programmes. But there are issues, too, with an overreliance on forestry – and, as a local authority, it is appropriate for us to show leadership. Our target is ambitious; it reflects the urgent global need to reduce emissions.

To support this strategy, we have developed an Operational Emission Reduction Plan. That plan will need regular review so that new technology and innovation is considered and opportunities to reduce emissions seized as they arise.

One of the challenges in reaching our target is that the nature of our work means we need a range of vehicles – and fit-for-purpose low-emission options for some are not yet available. While this is a constraint, we will be ready to adopt solutions like electric four-wheel drives when suitable options become available. Like many organisations, the fact that we have been growing to meet community and government expectations will also make it more challenging to achieve emission reduction targets. This is a challenge that we are up for.

RESPONDING TO A CHANGING CLIMATE: ADAPTATION

Adaptation means modifying the way we do things to reduce the impact of a changing climate on us and on the environment. Although it is not entirely clear how climate change will affect our communities, we can be sure that things will change. We also have a good idea of the sorts of impacts to expect.

The climate affects where it's safe to live, infrastructure (like roads and water pipes), jobs, food supply, health, cultural practices, recreational activities, and our environment. Some of these impacts will be minor; others will be challenging for us to manage – but they will also present opportunities if we are able to respond proactively and collaboratively.

WHAT HORIZONS ALREADY DOES

Many of Horizons' existing activities take climate change into account. Climate change is addressed in our current Long-Term Plan, Infrastructure Strategy and the One Plan. Core functions like flood protection and land management provide a starting point for an action plan that will evolve as we better understand risks and opportunities, and reach agreement on what needs to be done.

Resource management: managing the use of natural resources and effects of development on freshwater, land, air and the coast; avoiding further risks from natural hazards, and supporting renewable energy generation.

Sustainable land and riparian management: supporting the fencing and planting of riparian margins and sustainable land use in erosion-prone hill country.

Biosecurity: regional pest management to minimise the adverse effects of plant and animal pests on indigenous biodiversity and habitat and on the regional economy.

Biodiversity: protecting and enhancing the region's indigenous biodiversity through active management of priority sites, monitoring, and support for community and landowner action.

Transport: regional land transport planning and public transport services across the region, including low-emissions and active transport options.

Hazard and emergency management: working with territorial authorities and other agencies to reduce the risk of hazards, raise awareness, maintain readiness and provide response and recovery capabilities.

Flood protection and river control: managing risk to people, property and infrastructure from flooding by containing floods, building and maintaining drainage infrastructure, and reducing the effects of river erosion.

Information, research and monitoring: collecting reliable environmental data and carrying out research, and ensuring its availability within and outside Horizons, as a basis for the development of sound policies and actions.

Strategic management: providing proactive, coherent policy responses across the organisation on emerging and ongoing issues; engaging with central government and other regional councils to ensure national policy reflects local realities, and that the right tools are available to achieve change.

Council operations: incremental changes to improve energy efficiency and reduce GHG emissions from our offices and vehicle fleet. We implemented an Operational Emission Reduction Plan in 2022 and are measuring our emissions to track reductions.

Decision making: from September 2020, decisions across all Council activities consider climate impacts.

We've increased resource for our climate change response in the 2021-31 Long-Term Plan. We appointed a Climate Action Coordinator.

Horizons acknowledges Te Tiriti o Waitangi and the place of tangata whenua in local decision making. We are committed to upholding the Treaty principles as we respond to climate change. We are working through what this looks like in practice together with iwi and hapū.

CLIMATE ACTION WITH AN UNCERTAIN FUTURE

We cannot know exactly what the future will bring – it depends on future emissions, new technologies, community responses, and complex global environmental processes. There is uncertainty in the science and in estimates of the risks. There are competing ideas about what should be done.

Nor can we afford to wait. Decisions must be made now to manage the transition to a low-emissions economy and ensure our communities thrive in a changing climate. These decisions will need to be 'adaptive', enabling us to progress towards agreed long-term objectives and make adjustments as we learn more or circumstances change.

REGIONAL ACTION

Horizons is a signatory to the Local Government Leaders' Climate Change Declaration, as well as a Memorandum of Understanding with other councils in our region. These documents commit us to working together to reduce greenhouse gas emissions and improve resilience to the effects of a changing climate

The first Regional Climate Change Risk Assessment was released in 2021. That identified risks to the environment, people and communities across the region. This assessment has provided understanding of the sorts of impacts to expect and how those impacts may worsen over time. Horizons and the region's other councils are using that risk assessment to inform climate action.

Climate change calls for leadership at a local and regional level. We established the Climate Action Joint Committee two years ago, with representation from each of the region's councils as well as tangata whenua. The purpose of the Climate Action Joint Committee is to support a coordinated response to climate change across the councils and communities of the Manawatū-Whanganui Region.

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

Horizons Climate Action Strategy considers and aligns with the key points of the Manawatū-Whanganui Climate Change Action Plan/ Mahere Hurihanga Āhuarangi Manawatū Whanganui. Our strategy defines our approach to implementing the regional action plan.

HORIZONS' CLIMATE ACTION PLAN

Horizons Climate Action Plan outlines work already underway and new projects that we intend to commission. The actions we will take are influenced by statutory responsibilities, the Manawatū-Whanganui Climate Change Action Plan / Mahere Hurihanga Āhuarangi Manawatū-Whanganui, and the approach and objectives defined in this strategy.

Some actions are joint initiatives that rely on the region's councils working together and pooling resources to be successful.



WHAT'S NEXT

We've set aside resource that will increase our capacity and capability to respond to climate change. We will be considering the future resource requirements for our climate change response through the 2024-34 Long-term Plan. That process will provide an opportunity for communities to comment on any significant proposals.

We will continue to work with other councils to implement the Manawatū-Whanganui Climate Change Action Plan. To successfully implement joint initiatives from that plan, all the region's councils will need to play their part, resourcing and prioritising climate action in their Long-term Plans.

We also need to ensure that climate change is adequately considered in future spatial planning. Modelling that accounts for the future impacts of climate change will be vital to allow for spatial planning that is fit for purpose to enable climate resilient regional urban and rural development and land use.

We will continue to work with and support our Te Tiriti o Waitangi partners as they respond to climate change. We are on a journey as an organisation to consider and include mātauranga Māori into our work including our climate change response. We can only achieve that in partnership with Iwi / Māori.

Government's response to climate change continues to develop, including proposed legislation. We will respond to new information as it emerges, to ensure that we continue to meet regulatory requirements, align with new guidance, and act proactively on opportunities to better support communities and build the resilience of the environment as we confront the challenges ahead.









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