



Manawatū-Whanganui Climate Change Action Plan Towards a Climate-Resilient Region

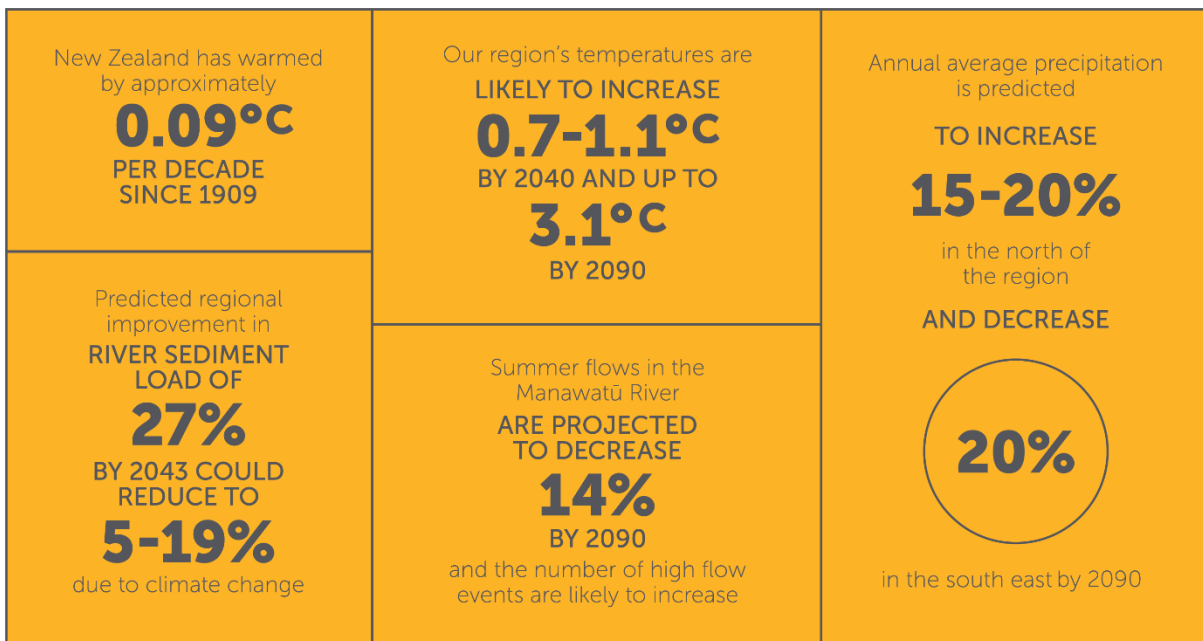
Ruapehu District Council | Whanganui District Council | Rangitikei District Council |
Manawatū District Council | Palmerston North City Council | Tararua District Council
| Horowhenua District Council | Horizons Regional Council

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OUR CHANGING CLIMATE

Climate change may be the biggest environmental challenges we face. Our region is likely to see both longer dry spells and more intense rainfall events. Stormier weather will exacerbate erosion in the hill country and on the coast. Rivers will flood more often. In a warmer climate, threatened species may struggle to survive while pest species thrive. Some of those impacts are already being felt.

Over the coming decades, a changing climate will affect our economy, environment, and way of life. Submissions on council plans, protest movements, and discussions with iwi and community groups all show us that people want to see action. We need to prepare for a future that is different from today.



OUR REGION'S EMISSIONS

On a per capita basis, our region's emissions are slightly above the national average (about 24t CO₂e, compared to about 17t CO₂e). The region's emissions fell by 2 percent over the 2007-18 period – slightly faster than the national average.

Most emissions in our region (around two-thirds) are from livestock agriculture – however, these emissions fell by about 7 percent over the decade 2007-18.

Emissions from other sources have been increasing, reflecting a growing population. Energy use is the region's second biggest source of emissions, with the main component being transportation.

As a region, a relatively small proportion of our emissions are offset by forestry (about 18 percent, compared to a national average of 30 percent). The exception to this pattern is Ruapehu District, where most emissions are offset by 'removals' through forestry.

While local government has no direct responsibility for setting or achieving emissions reduction targets in its area, we do have a role in supporting the transition communities will need to make to a low-emissions economy.

RESPONDING TO CLIMATE CHANGE

The pace, scale, and impact of climate change will be influenced by many factors – future greenhouse gas emissions, global environmental processes, development of new technologies, investment decisions, and the community’s response. Much remains uncertain and there are competing ideas about what should be done.

Decisions must nonetheless be made to manage the transition to a low-emissions economy and to ensure our communities thrive in a changing climate. These decisions will need to be adaptable, enabling us to make adjustments as new information emerges.

We will need to consider both ‘mitigation’ and ‘adaptation’ in our response.

Mitigation means reducing our impact on the climate. A certain amount of change is ‘locked in’ due to greenhouse gases that have already been emitted – but we can limit future impacts by reducing emissions from now. The Paris Agreement seeks to limit temperature increase to 1.5-2.0°C above pre-industrial levels. Scientists believe that increases greater than this will see many natural systems cross dangerous points of no return. The frequency of extreme weather events (e.g. storms, droughts, flooding) increases more rapidly the more temperatures rise. Average global temperatures have already risen by about 1.0°C, so the window to achieve that target is closing quickly.

New Zealand’s national targets align with the Paris Agreement goals. They require us to:

- reduce net emissions of all greenhouse gases except biogenic methane (from waste and agriculture) to zero by 2050; and
- reduce emissions of biogenic methane to 24–47 per cent below 2017 levels by 2050, including to 10 per cent below 2017 levels by 2030.

Adaptation means modifying the way we do things to reduce the impact of climate change on us. The climate affects where it’s safe to live, our jobs, food supply, health, cultural practices and recreational activities, and infrastructure like roads and water pipes. Some impacts will be relatively easy to deal with; others will present significant challenges – but there will also be opportunities if we are able to respond proactively and creatively.

We all have a role to play in responding to climate change – central and local government, iwi and hapū, farming and urban communities, companies and individuals. A transition needs to occur if our children and grandchildren are to enjoy the same quality of life as previous generations.

LOCAL GOVERNMENT'S ROLE

Local government exists to enable local decision making for communities and to promote their social, economic, environmental, and cultural wellbeing – now and for the future.

The eight councils in the Horizons Region recognise the urgency of addressing climate change, and are committed to playing our part. We have agreed to work together at a regional and local level. A Memorandum of Understanding, signed in September 2019, commits us to:

- Collaborate across our organisations to build organisational, community and regional resilience in the face of a changing climate
- Collaborate across our organisations to mitigate the effects of climate change
- Collaborate and communicate within our organisations and our communities, openly sharing how our community can transition to a sustainable future and significantly lower contribution to the causes of climate change
- Place priority on developing strategies to address climate change
- Communicate openly, sharing what we know about likely effects and response options
- Engage and involve our communities in decisions that affect them
- Give effect to our engagement responsibilities with iwi and hapū in our areas of responsibility and arrangements detailed in Treaty of Waitangi Settlements
- Report regularly on work going on to address climate change adaptation and mitigation across the region
- Support each other with skills and knowledge from our respective organisations
- Work collectively as a region to engage with central government

ACTION IN OUR REGION

This document provides an overview of work being undertaken by councils to tackle climate change, in accordance with our joint commitment. It is organised into four themes:

- Natural environment
- Built environment and infrastructure
- Social and cultural wellbeing
- Local governance

Each of these themes is described, with examples of activities that local councils are undertaking or have committed to undertake. The list is not exhaustive, nor is it final. Rather, it provides a starting point upon which we will build as our work programmes develop.

NATURAL ENVIRONMENT

Our region is home to a wide range of species and habitats, including iconic places like the Tongariro World Heritage Area, the Whanganui River, Te Āpiti, and the Manawatū Estuary.

Ecosystems and the services they provide are essential to us. We rely on the environment for clean water and food. Forests and wetlands absorb floodwaters and reduce erosion. The natural environment also provides less tangible benefits such as spiritual wellbeing and places for recreation.

Many of the environmental challenges we already face will be exacerbated by climate change. The impacts of land use, invasive species, sea-level rise, and changing climatic conditions can constrain the natural resilience of our ecosystems, and their ability to adjust and adapt. Conversely, restoring natural environments can do much to improve the resilience of both ecosystems and local communities.

Erosion control

Horizons Regional Council has a long-running programme to reduce hill-country erosion through the Sustainable Land-Use Initiative (SLUI). The focus is on supporting landowners to build resilience to storms, improve water quality, and reduce sedimentation. SLUI has significant benefits in reducing the impact of climate change on erosion-prone hill country (adaptation) and sequestering carbon in trees (mitigation).

Green corridors

Several councils are working to re-establish green corridors to enhance native biodiversity and ecosystem services. These projects, usually involving both planting and pest control, are underway across the region including in Tararua, Palmerston North, Whanganui, and Rangitikei.

Wetland restoration

Wetlands are important for native biodiversity, and can provide a range of benefits such as buffering floodwaters and acting as carbon sinks. In the Manawatū district, work is underway to restore wetlands at Kitchener Park and along the Ōroua River.

Coastal management

Horowhenua and Manawatū District Councils are undertaking dune restoration and protective planting to improve stability and prevent degradation of the dunes during severe weather events. This should enhance the resilience of coastal ecosystems and coastal settlements to impacts such as sea level rise and storm surges.

BUILT ENVIRONMENT AND INFRASTRUCTURE

Critical infrastructure like water and energy supply, roads, and bridges sustain and connect our communities. They may be susceptible to damage from slips and storms, or exposed to sea-level rise and flooding. Maintaining these services is important to the functioning of our society and economy, and particularly vital to supporting our rural communities.

Urban design and transport services are key elements in making it easier for people to reduce their carbon footprints. Alternative energy sources can be integrated into the urban landscape, like Palmerston North City's 100kW solar array, and use of gas captured at the old Awapuni landfill to power the adjacent wastewater treatment plant. Local councils are investing in the transition towards low-carbon, adapting and improving the resilience of our infrastructure and the wider built environment.

Water supply

Tararua District Council has recently improved water storage systems for Woodville and Dannevirke in preparation for future drought scenarios. Horowhenua District Council is working to improve the efficiency of its water supply network and investigate future water storage options to cope with the anticipated effects of climate change.

Storm water

Ruapehu and Rangitīkei District Councils are both working to improve the resilience of infrastructure (including culverts and roads) to cope with larger, and more frequent and intense rainfall events – and bigger peaks in storm water.

Transport

The Regional Public Transport Plan and Regional Land Transport Plan aim to support the transition to a low-carbon economy by increasing use of alternative transport options such as buses, walking or cycling, and by improving the emissions efficiency of the public transport fleet. Councils are advocating for improved rail infrastructure. Road upgrades will improve network efficiency and resilience to the impacts of climate change such as slips and flooding. Tararua and Horowhenua District Councils are installing more EV charging facilities (there are already facilities in many of the region's towns).

Urban design

In Palmerston North, urban design improvements are focused on encouraging more active use of public spaces and active transport. Whanganui District Council is improving pathways for active and low-carbon travel around the city. In Horowhenua, work is underway to green urban spaces to enhance resilience.

SOCIAL AND CULTURAL WELLBEING

Resilient communities are communities that are connected, informed, and empowered to look after the things they care about. Climate change impacts on all of our communities; each will be affected in different ways. As well as direct, physical impacts, climate change may affect our sense of place, cultural identity, or social cohesion. These things are important. Local people are best placed to make decisions about what matters at a local level.

Community plans

Manawatū District Council is working with communities to develop response and recovery plans to reduce the disruption caused by disaster events, including the sorts of extreme weather events that will become more frequent with climate change.

Resilient homes

Palmerston North City Council provides free advice on sustainable design and affordable energy options for people to implement in their homes. Ruapehu District Council is developing information for the public on stormwater management and rainwater harvesting on their property. Both initiatives aim to improve resilience at a local and community level.

Local Governance

Governance encompasses the way we make decisions, processes for community involvement, and the information upon which strategic decisions are based.

Much of our immediate focus is on making sure we have processes and information to support the significant decisions we will have to make, in consultation with communities, over the next few years. We are also making changes to reduce the carbon footprint of councils' own activities.

Climate Action Committee

Local government leaders have agreed to establish a joint Climate Action Committee, across the eight councils, to oversee our climate change response. The Committee's first meeting is planned for December 2020.

Council strategies

Several councils are in the process of developing strategies to ensure our respective approaches are well directed and clearly communicated. Manawatū District Council is developing an environmental **sustainability strategy** and commissioning research to better understand localised impacts of climate change. Horizons Regional Council and

Whanganui District Council are both preparing climate change strategies, while Palmerston North City Council is developing a **low-carbon roadmap**.

Regional Climate Change Risk Assessment

Councils are jointly conducting a high-level **risk assessment** in the 2020/21 financial year. This will provide an assessment of issues across the region that need attention, helping to inform decisions about relative priorities and what resourcing should be made available. Future action plans will be informed by the risk assessment's findings.

Corporate footprints

Like any organisation, councils are responsible for the impact of our own operational activities. Ruapehu District Council has an organisational commitment to zero waste, and has undertaken to purchase carbon credits to offset emissions from landfill. Palmerston North City Council tracks its corporate emissions and is working to reduce emissions from council services. Manawatū and Rangitīkei District Councils also have active programmes to improve the efficiency and reduce the footprint of their operations.

WHAT'S NEXT

This document provides an introduction to the range of actions councils in our region are pursuing in response to climate change.

Over the next twelve months, we will establish joint governance arrangement across councils and complete a regional risk assessment. Each council will consider priorities and resourcing through its long-term planning process. These will be reflected in the next iteration of our regional action plan.



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