



Climate Change Action Plan: *Land use and the built environment*

Mahere Mahi Huringa Āhuarangi: *Whenua me te Taiao Waihanga*

This is one of six action plans, which support
our Climate Change Strategy 2020-23.

To view the other documents, visit whakatane.govt.nz/climate-change



Why this area is important

He aha tēnei e whakahirahira ai?

The Whakatāne District is already vulnerable to a range of natural hazards including slips, flooding, coastal erosion and inundation. Climate change is likely to exacerbate the consequences of these hazards and the impact they have on our natural and built environment. Climate change will also add to already existing pressures on the natural environment like habitat loss, pollution and intense resource use. This will impact the biodiversity and ecology, freshwater ecosystems, oceans and coasts and other ecosystem services in New Zealand¹. It is crucial that the way in which we interact with the land takes these factors into account.

The built environment provides people with the systems and infrastructure they need for living, their mobility and their well-being. This includes critical infrastructure like reliable electricity, clean drinking water, and transport networks, all of which have separate Climate Change Action Plans. Communities within Whakatāne District also rely on stormwater services, the airport and wharf assets, community buildings such as halls, public toilets, the Civic Centre, museum and library for their overall well-being. This action plan considers the impact of climate change on these types of infrastructure.

75% of New Zealanders live within 10km of the coast². Our communities, homes, workplaces, commercial, social and cultural assets are exposed to flooding, sea-level rise, storm surge and inundation from rising groundwater levels.

Climate change projections are showing a likely increase in the amount of hot days (<25°C) and extremely hot days (<30°C) across the Whakatāne District and as such, the risk of associated droughts and forest fires³. The seasonality of rainfall is expected to change with spring and summer generally becoming drier, and winter and autumn becoming wetter. Increasing temperatures are likely to result in higher biosecurity risks through pest incursions of both animal and plant pest species. Scenarios like these will have implications on pasture growth and the viability of crops. Human physical and mental health will be impacted through microbial contamination, algal blooms, disease spread and air quality.

¹ Ministry for the Environment, 2017, [Adapting to climate change in New Zealand](#)

² Statistics New Zealand, 2006, [Are New Zealanders Living closer to the coast](#)

³ Bay of Plenty Regional Council and the National Institute of Water and Atmospheric Research, 2019, [Climate change projections and impacts for the Bay of Plenty Region](#)

Where we are now

Kei hea tātou ināianeī?

The Council has developed specific actions to address some of the challenges that climate change will bring. The Whakatāne District Plan, Chapter 18: Natural Hazards states that the Council will “take into account the effects of climate change when identifying hazards and the locations where those hazards could adversely affect people and property”.

Changes from Central Government are impacting Council’s provisions regarding protection of biodiversity and the Council continues to look at how best to prepare and protect the district from the effects of a changing climate.



What we want this action plan to achieve

Ngā paetae o tēnei mahere mahi

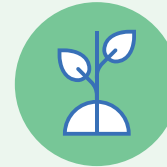
Outcomes

1. Land use activities are resilient to anticipated climate change impacts
2. Improve the resilience of community infrastructure
3. Reduce greenhouse gas emissions as a result of land use and building activities

Goals

1. Identify, understand and reduce climate change risk to existing building and infrastructure, including stormwater services, the airport and wharves, community buildings such as halls, public toilets, the Civic Centre, museum and library
2. Enhance resilience through land use decisions
3. Recognise cultural heritage and values in land use decisions
4. Promote a built environment which is resilient to climate change impacts
5. Care for biodiversity and ecosystems, and protect them from the impacts of climate change
6. Promote low emission and sustainable land use, building practises and day-to-day operations

This action plan primarily contributes to these climate change principles:



We will care for and protect the environment

Ka manaaki, ka tiaki mātou i te taiao



We will think and act long term


Ka whakaaro pae tawhiti, ka mahi pae tawhiti mātou




We will build capacity to recover from difficulties




Ka whakakaha mātou i a tātou

SHORT TERM RESOURCE REQUIREMENT

 = Additional funding requirement




 = Incorporate into business-as-usual (BAU)



 = Additional staff time requirement

Goal	Actions	Short term (2020-22)	Short term resource requirement (\$/BAU/staff time)	Medium term (2022-24)	Long term (2024-31)	Key external stakeholders and partners
1. Identify, understand and reduce climate change risk to existing building and infrastructure, including stormwater services, the airport and wharves, community buildings such as halls, public toilets, the Civic Centre, museum and library	1.1 Identify communities at risk from climate related natural hazards	Identify the likely local effects of climate change on communities within the District		Monitor ongoing risk to communities Initiate community engagement and education	Ongoing review of risk status Ongoing community engagement and education	Bay of Plenty Regional Council Iwi Community
	1.2 Develop strategy to manage associated risks to those communities	Determine Council dynamic adaptive pathways planning (DAPP)* and risk approach Community engagement on DAPP* approach		Community Action Groups established for high risk communities	Strategies for individual communities developed	Bay of Plenty Regional Council Iwi Community Central Government
	1.3 Identify and manage at risk infrastructure	Identify the likely local effects of climate change on community infrastructure within the District Identify the levels of risk to Council infrastructure arising from climate change		Stakeholder Action Groups established	Strategies for infrastructure types developed	Bay of Plenty Regional Council Iwi Community Central Government




* DAPP is a planning process recommended to local government by the Ministry for the Environment. It identifies ways forward (pathways) despite uncertainty, while remaining responsive to change should this be needed (dynamic).




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2. Enhance resilience through land use decisions	2.1 Identify how areas within the District will be affected by climate change	Identify areas most at risk from climate related natural hazards		Monitor ongoing risk from climate related natural hazards Initiate community engagement	Ongoing review of risk status Review Operative District Plan where required	Bay of Plenty Regional Council Iwi Community Central Government
	2.2 Future development avoids areas most at risk	Progress Future Development Strategy, taking into account climate-related natural hazard risks (e.g. sea-level rise) and encouraging intensification where practicable Implement Bay of Plenty Regional Policy Statement, Natural Resources Policy, New Zealand Coastal Policy and Whakatāne District Plan Give effect to other legislation i.e. Building Act, RMA		Continue to implement relevant plans and legislation	Continue to implement relevant plans and legislation	Bay of Plenty Regional Council Central Government Iwi

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3. Recognise cultural heritage and values in land use decisions	3.1. Take account of cultural values when considering the impact of climate change	Undertake targeted and wider community engagement Build internal and external knowledge of the principle of interconnectedness or “ki uta ki tai” (from the mountains to the sea)		Ongoing engagement Build internal and external knowledge of the principle of interconnectedness or “ki uta ki tai” (from the mountains to the sea).	Ongoing engagement Build internal and external knowledge of the principle of interconnectedness or “ki uta ki tai” (from the mountains to the sea).	Iwi Community Youth Bay of Plenty Regional Council
	3.2. Ensure that land use decisions create no further disconnect for local Iwi to their traditional sites and practices and consider ki uta ki tai in all land use decisions and pathways planning.	Develop a DAPP* approach that considers sites and areas of cultural and social significance and ensures that pathways give consideration to traditional sites and practices, avoiding further disconnect.		Apply culturally sensitive DAPP* approach	Apply culturally sensitive DAPP* approach	Iwi Community Bay of Plenty Regional Council
4. Promote a built environment which is resilient to climate change impacts	4.1 Comply with and promote exceedance of minimum building regulations	Develop education and communication material		Identify opportunities to require enhanced and climate resilient building specifications and design	Update education material and specification requirements in line with latest thinking	Central Government Building professionals

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5. Care for biodiversity and ecosystems, and protect them from the impacts of climate change	5.1 Promote public awareness of the District’s natural environment, and support local community groups who care for it	Media campaign		Collaborate to produce and circulate education material	TBD	Iwi Department of Conservation Bay of Plenty Regional Council Community environmental groups
	5.2. Reduce the impact of human activity on local biodiversity			Identify significant indigenous biodiversity sites (SIBS) in line with Bay of Plenty Regional Council Regional Indigenous Biodiversity Plan (RIBP) and Bay of Plenty Regional Council Regional Policy Statement	Work in partnership to protect the areas of significant indigenous biodiversity most at risk from the impact of climate change	Iwi Department of Conservation Bay of Plenty Regional Council Community environmental groups Landowners
6. Promote low emission and sustainable land use, building practises and day-to-day operations	6.1. Encourage the use of sustainable products and practises	Incorporate climate change principles into Council procurement processes Develop Council and community education and communication material		Investigate low emission and sustainable buildings practises for future development Investigate options to plant up Council land to off-set carbon emissions	Infrastructure Development Code requires the use of low emission and sustainable land use, building practises and day-to-day operations	Suppliers and contractors Building professionals
	6.2. Take travel, motor vehicle emissions and access to public transport into account when making land use decisions, working with Bay of Plenty Regional Council	Consider low emissions travel options in land use planning		Consider public transport in Future Development Strategy, working with Bay of Plenty Regional Council	Consider public transport in Future Development Strategy, working with Bay of Plenty Regional Council	Bay of Plenty Regional Council

If you want to learn more about our climate change project visit whakatane.govt.nz/climate-change

This is one of six action plans which support our climate change strategy.

The other action plans are:

- [Leadership and collaboration](#)
- [Transport](#)
- [Energy](#)
- [Waste and circular economies](#)
- [Water services](#)

