



Climate change

What do we know?

Climate change describes the effect on our planet of typically leads local community initiatives to reduce and offset emissions, ie. tree planting and urban human-induced atmospheric changes. These are wide variations in temperature resulting in more intense and passenger transport services, as well as adaptation frequent rainfall, droughts, storms, fires and floods. initiatives to promote community resilience as the Scientists have observed that the Earth's surface is climate changes. warming. Many of the warmest years on record have The Resource Management Act currently constrains happened in the past 20 years. what councils can do to consider the effects on

Hawke's Bay Regional Council declared a climate enables councils to play an active role to adapt to the emergency for the region on 26 June 2019. The effects of climate change, such as the planning and declaration recognised the climate crisis as an activities impacted by natural hazards rule-based and urgent and pervasive threat to human and ecological exacerbated by climate change. wellbeing. A small window of time remains to act to The council set a goal for HBRC to be carbon neutral avoid the most damaging effects of a rapidly changing by 2025 and will play a leadership role in the region's climate for the longer term. Hawke's Bay's climate goal of net zero greenhouse gases by 2050. The council crisis declaration was one of many declarations from also supported creating a Climate Action Ambassador councils across the country, and the Government role to coordinate HBRC work and create collective declared a climate emergency on 2 December 2020. momentum for regional carbon neutrality by 2050. Central Government typically leads national policy and Climate change is therefore a focus in all HBRC planning legal tools to reduce and offset (mitigate) greenhouse and decisions. gases, ie. the emissions trading scheme, emissions reduction plan, fuel quality regulations and electric vehicle subsidies. Meanwhile, local government



KOTAHI TŌ TĀTAU PAPA. TŌ TĀTAU ANAMATA OUR PEOPLE, OUR FUTURE

activities, such as carbon emissions. The RMA



Known issues

The range of likely climate change impacts for Hawke's Bay includes:

- Annual average temperatures projected to rise between 0.5°C and 1°C by 2040, and between 1.5°C and 3°C by 2090; on top of the 1°C increase over the last century
- Coastal areas may have five fewer frosty days by 2040 This could • increase to 50 fewer frosty days for inland areas by 2090
- Heat waves, defined as three or more days above 25°C, will become • increasingly common, increasing to 10-20 days by 2040, and 20-60 days by 2090
- Annual rainfall is forecast to drop up to 5% by 2040, and up to 15% in • parts of Hawke's Bay by 2090
- Storms are likely to become more intense
- Expected sea level rise of up to 40 centimetres in 40 years, worsening coastal • erosion and inundation (under the extreme worst-case scenario).

Source NIWA, November 2020, Climate Change projections and impacts for Tairawhiti and Hawke's Bay

The Regional Council gathered input from 836 people in 2020 to find out Hawke's Bay residents' attitudes and perceptions of climate change, and barriers to taking action. This research found:

- 62% of respondents were worried about climate change •
- 69% wanted to reduce carbon and erosion through tree planting
- 55% were willing to pay more in rates to fight climate change •
- Drought was seen as the main negative outcome of a changing climate •
- Water storage and use was the main suggested improvement for the • Regional Council to investigate.

How we are doing?

Over the last five to seven years, HBRC has built up an enhanced network of climate monitoring stations and now has 18 stations around the region. The Regional Council is better placed to capture localised climate data recorded to changes in Hawke's Bay. The community also has access to these comprehensive readings and findings to assist land use decisions related to climate change.

As well as greater monitoring, both the Tukituki Plan (operative) and the proposed TANK Plan include policies and objectives referring to climate change (POL TT13 and OBJ TANK 3). Both relate primarily to water quality and quantity management and are limited in scope.

Where to from here?

As HBRC develops the new Kotahi Plan, there is an opportunity to strengthen commitment to managing the effects of climate change, by reducing emissions and adaptation. The Kotahi Plan might for example promote clean renewable energy, infrastructure to support active transport, protect vulnerable communities, encourage appropriate land-use management, and environmental enhancement and restoration.

Consideration through the Kotahi process will need to be given to how to support a place for renewable energy production, and a whether a move away from traditional forestry to carbon farming is appropriate and how this would be managed. Consideration should also be given

to how HBRC's Regional Policy Statement can instruct local councils in their own plans. A number of issues raised locally will be common across the region. To make the best use of everyone's time, HBRC will set up region-wide working groups to tackle region-wide issues. Local catchment-based groups will work to develop practical action plans to meet local needs. This should enable regional consistency in the Kotahi Plan.

The Clifton to Tangoio Coastal Hazards Strategy 2120 also plays a role in addressing the influence of climate change. The implementation of the strategy will manage coastal erosion and coastal inundation, both known effects of climate change and associated sea level rise.

Kotahi will address a broad range of climate change issues over time, not limited to coastal hazards, sea level rise, flood protection, water allocation, power generation, environmental resilience, invasive pests and diseases, increased fire hazards and related air quality problems.

The Regional Council is commissioning a greenhouse gas inventory for the region which will help to direct the focus of any mitigation and offsetting efforts.

