

Draft Nelson Plan – Frequently asked questions

Climate change

What is climate change?

The earth's atmosphere is made up of oxygen, a large amount of nitrogen and certain other gases, including a small percentage of greenhouse gases. Greenhouse gases act like a blanket around the earth. When the balance is right, they trap warmth from the sun and make life on earth possible. However, increasing the concentration of greenhouse gases in the atmosphere traps too much heat and causes the climate to change.

Increases in greenhouse gases are generating incremental changes in global, national and local climate at greater rates and in a consistent direction, resulting in:

- Sea level rise
- Acidification and warming of the oceans
- More heavy rainfall and flooding events
- More frequent and more severe droughts with greater fire risk
- Stronger winds
- More extreme temperatures, more often

In our daily lives, there are already lots of examples of how the results of extreme weather events (flooding, soil erosion, landslides, droughts) and changes in natural patterns can put people, properties, infrastructure and businesses, native flora and fauna and cultural sites of significance at risk. These risks are likely to increase in the future with climate change.

No one knows for sure just how much the climate will change in the future, but we know there will be change..

How can we respond to climate change? What is the difference between mitigation and adaptation?

Actions in response to climate change generally fall into two categories: mitigation and adaptation. In broad terms, climate change mitigation is about reducing greenhouse gas emissions, and climate change adaptation is about anticipating and adapting to the impacts of climate change.

Mitigation is about taking action to reduce greenhouse gas emissions so that the severity of climate change impacts will be lessened. Examples are the setting of emission reduction targets at the international level to limit average global temperature rise (e.g. Paris Agreement), national level (e.g. New Zealand's target of net-zero carbon emissions by 2050) and local and individual levels (e.g. by measuring and reducing the carbon emissions of cities, districts, organisations and individuals).

Adaptation anticipates and deals with the effects of climate change, helping to build greater resilience by harnessing innovation and responding to impacts such as rising sea levels and

coastal hazards or droughts. Most adaptation action takes place at a local and community level (e.g. through land-use planning).

Mitigation and adaptation are closely linked: the more we take action to reduce our greenhouse gas emissions, the better the chance that we will have fewer impacts to adapt to in the future. Some actions contribute to both areas, for example, planting coastal vegetation which absorbs carbon (mitigation) and at the same time protects properties by stabilising coastlines (adaptation).

Mitigation: Why does the Draft Nelson Plan not require the reduction of greenhouse gas emissions?

Until recently, Councils have had very limited ability under the Resource Management Act (RMA) 1991 to address greenhouse gas emissions. When making rules on the discharge of greenhouse gas emissions, regional councils cannot consider the effects on climate change, except:

- With regard to renewable energy (s70A); and
- Where a National Environmental Standard (NES) controls the effects of discharges into air on climate change (s70B). Such an NES does not currently exist.

However, **RMA Amendment Act 2020** allows the Council to consider Climate Change when making and amending their regional policy statements, regional plans, and district plans. The Council will ensure the Nelson Plan aligns with these amendments after they come into effect (31 December 2021). The recently released National Policy Statement on Urban Development 2020 contains Objective 8 and Policies 1 and 6 that require urban environment developments to support reductions in greenhouse gas emissions; and be resilient to the current and future effects of climate change.

In addition, the recently released National Policy Statement for Freshwater Management 2020, contains Policy 4 that requires the management of freshwater as part of the integrated response to climate change.

The Draft Nelson Plan can and does propose to encourage activities that mitigate and/or reduce greenhouse gas emissions, such as active transport and residential intensification located in association with community services (such as schools and shopping centres) and transport corridors.

The Council also has its own mitigation actions, in addition to the Draft Nelson Plan – see heading below “What else is Council doing about climate change?”

Why did Council declare a climate emergency and what does that mean?

On 16 May 2019, Council declared a State of Climate Emergency in recognition of the mounting advice from scientists and the United Nations that there is a small window for action to avoid the most damaging effects of climate change. In declaring this emergency Council demonstrated that it is taking the climate challenge seriously and intends to take urgent and meaningful action.

To find out more about the climate emergency declaration, visit:

<http://www.nelson.govt.nz/environment/climate-change/declaration-of-climate-emergency/>

How would the Draft Nelson Plan manage the potential increase in erosion and inundation from the sea?

Council commenced discussion with the community in early 2019 through a series of public drop in sessions, hui at Whakatu Marae, feedback survey, online hub and one-on-one meetings. The result of that engagement has been that Council has a significantly greater understanding of what people already know and have experienced with respect to coastal hazards, and people's general appreciation of living with coastal natural hazard risks.

Council has undertaken preliminary 'bathtub' modelling of coastal erosion and coastal inundation and the results of that modelling will be made available shortly. Council is also undertaking more detailed modelling using a 'hydrodynamic' model of future coastal flooding to capture the specific climatic and geographic situation for Nelson, new scientific and technical information as well as central government guidance with respect to the effects of climate change. These maps will allow us to have further conversations about the potential options to manage this natural hazard and will be consulted on with the community. Following that, provisions will be developed and included in a later version of the Draft Nelson Plan.

What else Council is doing about climate change?

Climate change is already factored into many of our plans, work programmes, and policies. For example, our active transport, waste minimisation, eco homes adviser service and environmental programmes contribute to climate change mitigation and adaptation through the promotion of sustainable energy use, tree planting, composting initiatives, wetland creation, waste reduction, and walking and cycling initiatives.

Impacts from sea level rise and increased flooding are already factored into subdivision and building decisions. Infrastructure design is required to anticipated increases in rainfall intensity, sea-level rise, and increasing frequency of drought conditions.

Council has undergone a Certified Emissions Management and Reduction (CEMARS – now renamed Toitū Envirocare) audit to help us understand how to reduce the organisation's greenhouse gas emissions, and various projects to achieve this are under investigation or moving into implementation.

Where can I find out more about climate change and what I can do about it?

You can find out what the Draft Nelson Plan already contains for Climate Change in the Key Information Sheets available on shape.nelson.govt.nz, and provide feedback on some of the options being considered. The Council website also contains helpful information about climate change and what we can all do about it: <http://www.nelson.govt.nz/environment/climate-change>.