

Climate Change & Sustainability Strategy

Our Place: Our Future



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MATE CHANGE & SUSTAINABILITY STRATEGY

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Content

plans and policies

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From the Mayor

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The Ashburton Domain was once renowned as an ice-skating destination but fast forward a hundred years to the present day and the idea of seeing people ice skating on the ponds is hard to imagine, as the ponds no longer freeze. And although our district has dealt with serious rainfall before, the intense heavy rain causing our rivers to flood on those grim days in May 2021, was unprecedented.



Ice skating on the Domain in 1911

While these are local events, we see across New Zealand and the globe, many more examples of a changing climate. And even though we might not all agree on the causes of climate change, Council has a responsibility to look after our district, prepare our core infrastructure for the future, help our community understand what to expect and show how we can be more sustainable.

This strategy is considered as an overarching document that considers all the existing work, ensuring we do not duplicate actions but integrate and align across the existing strategies, policies and plans. A goal of this strategy is to improve what we know about climate change, how our essential services will be affected, and how each of us can play a role in reducing negative effects.

In the document we describe how our district will be impacted by a changing climate and how we're planning for it. We're focused on strengthening our district's resilience with the strategy's six priority areas, goals and actions. These include naturebased solutions, making sure we use our water in a sustainable way and our shared effort to reduce waste.

Alongside preparing for the future, the strategy intends to reduce our input to the changing climate, including reducing greenhouse gases.

The strategy also celebrates the sustainable efforts our community are committed to and highlights the work Council is currently doing to contribute to a more sustainable future. It also acknowledges the opportunities that a changing climate might bring to the district.

As a medium-sized district on a small island in a remote corner of the world, what impact do we think we have on the changing climate of the world? We believe every small action counts, we are all in this together, and all have a part to play. We believe we have a responsibility to look after our place, to protect the prosperity of our district for future generations, providing the opportunity for them to enjoy living in our place, our district – just as we do now.



Mayor Neil Brown



What is Climate Change?

Climate change is described as a change in the average climate conditions that we experience, such as temperature and rainfall, over a long period of time.

While the earth's climate has varied naturally over millions of years, recently, the dramatic changes of the past 200-300 years can be linked to human activities, like burning fossil fuels that emit greenhouse gases into Earth's atmosphere¹. When these gases are released into our atmosphere, they create a barrier so that when the heat from the sun comes in, it gets trapped (like heat gets trapped in a greenhouse), slowly warming our planet.

In 2015, New Zealand and 195 other United Nations members signed the Paris Agreement to prevent global warming from exceeding 2 degrees Celsius (°C) above pre-industrial levels. The average global temperature at pre-industrial times was about 13.7°C which means the goal is to stay under 15.7°C on average. This agreement commits signatory countries to mitigate and adapt to the effects of climate change by reducing national greenhouse gas emissions in accordance with Nationally Determined Contributions².

There are two main approaches to addressing or minimising the impacts of climate change. These work hand-in-hand, and both are part of our draft strategy:

Mitigation: Some actions can be taken to reduce the amount of these gases (e.g. we can replace fossil fuels with clean energy sources, carbon dioxide can be absorbed/sequestered by trees etc).

Adaptation: We can take action to adjust to or minimise the impacts of climate change (e.g. we can manage our stormwater networks to prepare for increased volume and frequency of rainfall, we can build higher stop banks around rivers to minimise chances of flooding nearby properties etc).

Paris Agreement (international)

Climate Change Response Act (national)

It's Time' Canterbury (regional)

Climate Change &
Sustainability Strategy (local)

Early engagement with the community on the strategy highlighted that there are differing views on the science referencing human responsibility for the changing climate.

This strategy is based on the facts and science presented by New Zealand institutes like NIWA (National Institute of Water and Atmospheric Research), and government departments like the Ministry of the Environment and Ministry of Primary Industries. The international standard is the work produced by the Intergovernmental Panel on Climate Change (IPCC). For more details on this, please visit:

- » <u>NIWA Climate change and possible</u> impact for New Zealand
- » <u>Ministry for Primary Industries Climate</u> <u>change and primary industries</u>
- » <u>Ministry for the Environment Climate</u> <u>change</u>
- » Intergovernmental Panel on Climate Change

The impact of a changing climate on our district

"Climate change in Ashburton District may have a variety of impacts, from higher sea level to more intense rainfall, warmer temperatures and droughts. The effects may include increased frequency of flooding and coastal erosion, and changes to the sorts of crops that can be grown. Worldwide sea levels, could rise by up to 0.28 metres by 2050, affecting some coastal areas more than others. Increased coastal erosion is likely to impact rural and hut settlements near our river mouths. Water quality could be impacted by reduced access to natural water sources in drought times, and turbidity in flood times"3.

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Global warming has different impacts around the world and even within our district we are noticing a variety of impacts. For the Canterbury region, this varies from **higher temperatures** leading to an increasing likelihood of **drought** and in combination with more or **stronger winds**, a higher **wildfire risk**. It may also lead to more **severe storms**. Although the **changes of rainfall** will differ within the region, a combination of **drier summers** and **wetter winters** is expected for Canterbury.

As a district bounded by two large rivers on a flat plain, we know all too well about the risk of **flooding**, but the changes in seasons are likely to have real impacts on the region's agricultural economy. A **rising sea level** will not affect our district as much as other areas in New Zealand, but will impact our coastal communities with changes to the coastline and coastal erosion. A **warmer ocean** will impact on a rising in sea level but also make our oceans more acidic and impact aquatic life.





For a more detailed description of the impacts on the Canterbury region visit: <u>itstimecanterbury.co.nz</u>

Locally, the district features a diverse range of landscapes, including the Canterbury Plains, the Southern Alps, coastal cliffs, rivers and wetlands. Our major urban centre is Ashburton with smaller centres including Methven, Rakaia, Hinds, Mayfield and Mount Somers. Each area faces its own climate risks⁴.

¹ https://itstimecanterbury.co.nz/about

² Canterbury Climate Partnership Plan 2024-2027, p 15.

³ https://itstimecanterbury.co.nz/ashburton

⁴ Canterbury Climate Partnership Plan 2024-2027, p 17.

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Urban centres

For all communities, risks from climate hazards generally include damage to infrastructure from flooding and disruption to transport routes and supply chains. Our district experienced this firsthand when the bridge closed during the 2021 floods. Changing climate conditions also pose a risk to supporting utilities such as landfills and power supply (e.g. heavy rain fall events can cause erosion of soil in a closed landfill causing exposure of waste which can lead to environmental contamination and warmer temperatures can place extra demand on power supply).



Alpine

Higher temperatures, decreases in snow and ice, and changing rainfall will create risks to alpine activity and biodiversity. These changes are likely to impact our major tourist attraction, the Mt Hutt ski field, and other alpine tourism.



Montane/high country

Temperature increases are likely to be even greater in the mountains and high country. If, by 2090 no action is taken, average spring and summer maximum temperatures could soar as much as 6°C higher than today's average. Increased temperatures, drought, and fire weather will increase erosion, and impact forestry, tourism, and unique ecosystems, contributing to biodiversity stress. Remote communities in the district may face increased disruption and isolation if greater flooding or landslide events take out roads or bridges as we have seen in Northland and Hawkes Bay.



Plains

The fertile lowlands of the Canterbury Plains are highly important to agriculture. An increasing temperature poses risk of increased heat stress in stock, as well as increases in the occurrence of pests and invasive species. Increased drought potential may amongst others impact on water availability. Increased storms, wind, and flooding may increase erosion, and damage crops, pasture, stock, and infrastructure. In 2021, severe floods in the Ashburton District left many hectares of productive farmland under silt and river gravel.



Coastal

As a result of sea level rise, transport connections, coastal ecosystems, unique wetlands, and communities at the coastal fringe will be exposed to increasing risk of coastal flooding, salinity stress, and erosion. Changes in temperature and ocean chemistry will impact marine ecosystems.



Water resources

Increased temperatures, drought potential, and changing rainfall patterns pose risks to the reliability of water supply, with impacts on agriculture, other water users and biodiversity. Increasing flooding, sediment transport, water temperatures, and low flows pose a risk of damage to aquatic ecosystems, irrigation and hydropower systems. The unique rivers, lakes, and streams are also significant to mahika kai (food gathering) for mana whenua.



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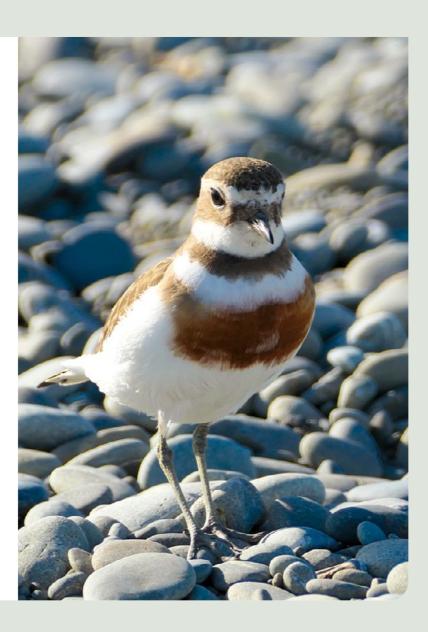
Biodiversity

Biodiversity is affected by every aspect of climate change which includes more frequent and intense droughts, storms, heatwaves, rainfall, increasing bushfires, changes in ocean currents and water temperatures, estuary and ocean acidification and sea level rise. These events can result in changes to ecosystem services and species biology.

We're noticing changes in nature both locally and worldwide, such as animals moving to different places, birds migrating at unusual times, plants blooming and leaves appearing earlier than usual, and some animals having shorter or longer pregnancies.

Climate change can also encourage changes in predator behaviour, weed proliferation⁵ and increased pest problems, including more insect infestations and the spread of existing pests.

In New Zealand, 94% of reptile species, 82% of bird species, 76% of freshwater fish species, and 46% of vascular plant species are facing extinction or are at risk of being threatened with extinction⁶.



Percentage of species unique to New Zealand









FRESHWATER FISH





REPTILE SPECIES

VASCULAR PLANT SPECIES

What is sustainability?

Sustainability revolves around the idea of balancing environmental, social, and economic needs to ensure long-term well-being for both present and future generations.

In 1987, the United Nations Brundtland Commission defined sustainability as "meeting the needs of the present without compromising the ability of future generations to meet their own needs."⁷

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A year prior to the Paris Agreement, in 2015, the United Nations adopted 17 sustainable development goals⁸. These are legally non-binding policy objectives agreed by governments, including New Zealand. Some of the goals are relevant to the work of local government including aspects of good health and wellbeing, clean water and sanitation, affordable and clean energy, decent work and economic growth, industry, innovation, technology and infrastructure, reduced inequality, responsible consumption and production, climate action, and partnerships for the goals.

How is climate change linked with sustainability?

Climate change is a major threat to achieving sustainability, impacting resources, ecosystems, and human wellbeing. While climate change is a threat to sustainability, sustainability also offers a range of solutions to combating climate change. By taking more sustainable actions, we will also reduce our emissions and better prepare us for the impacts of climate change.

Climate change as a threat to sustainability:

- » Climate change, with its effects like rising temperatures, unpredictable rainfall, and sea-level rise, directly impacts the availability and quality of essential resources like water, food, and energy, which are crucial for sustainable development.
- » Climate change causes extreme weather events, habitat loss, and shifts in ecosystems, threatening biodiversity and the services ecosystems provide, such as pollination, water purification, and carbon sequestration.
- » Climate change can lead to displacement, conflict, and economic losses, undermining social stability and economic growth, which are key pillars of sustainable development.

Sustainability as a solution to climate change:

- » Sustainable development emphasises the transition to renewable energy sources, reducing reliance on fossil fuels and mitigating greenhouse gas emissions, the primary drivers of climate change.
- » Sustainable practices promote efficient resource use, waste reduction, and the development of a circular economy, minimising environmental impacts and resource depletion, which are crucial for long-term climate stability.
- » Sustainable land management practices, such as reforestation, soil conservation, and sustainable agriculture, can help remove carbon from the atmosphere (carbon sequestration) and reduce greenhouse gas emissions from land use.
- » Sustainable development also involves adapting to the unavoidable impacts of climate change, building resilience in communities and ecosystems to withstand extreme weather events and other climate-related risks.

⁵ Ashburton District Biodiversity Strategy 2024 – Our Natural Place, p19

⁶ https://www.forestandbird.org.nz/resources/still-vanishing

⁷ United Nations Bruntland Commission 1987, Our Common Future

⁸ https://sdgs.un.org/goals

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What have we done so far?

In 2019, Council adopted its first Climate Change Policy, in response to a request from elected members. The policy outlines key goals and guiding principles for Council's climate change response.

When the policy was reviewed in 2022, it was identified there was no framework for meeting the goals it contained. In response to this, the Climate Resilience Plan was developed, which outlined several actions that Council proposed to take on climate change adaptation and mitigation. It was mainly focused on Council's internal business, as the aim was to get our own house in order before developing a community focused plan.

Through the Climate Resilience Plan, Council has reduced emissions by significantly reducing electricity use at the EA Networks Centre, supported planting through the biodiversity grants, considered the impacts of larger rainfall for new stormwater pipes and developed Community Response Plans to prepare communities for natural disasters as a result of the changing climate.

In 2024, Council also committed to being a part of the Canterbury Climate Partnership Plan. This regional plan, developed by all 11 councils in Canterbury, sets out 'how councils will work together and with others to support our transition to a thriving, climate-resilient, low-emissions region'9.

With the Climate Change Policy and Climate Resilience Plan both due for review in 2025, it was proposed to Council to consolidate this work into a Climate Change & Sustainability Strategy and in October 2024 Council adopted this recommendation.

There are many initiatives that show our community cares about sustainability and climate change. From our local farmers planting large stretches of native plants on their properties to the volunteers committing their time to 'litter free Ashburton'.

From shopping local produce at the farmers market to the parent encouraging their child to ride their bike to school rather than dropping them off in the car, these are all examples of climate change mitigation.

















- 1. Council is working towards zero-waste events through initiatives such as recycling and composting.
- 2. The Emergency Operations Centre in Ashburton is responsible for coordinating responses to large emergencies such as flooding.
- 3. Bowyers Stream bank stabilisation using native planting
- 4. Stormwater detention basin to temporarily hold water during heavy rainfall events.
- 5. Volunteers planting native kanuka at the Harris Scientific Reserve.
- $6.\ Debris\ capture\ net\ to\ collect\ litter,\ leaves\ etc\ before\ entering\ waterways.$

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Why do we need a strategy?

We value the people and places of the Ashburton District, and we know the community does too. Adopting more sustainable practices and taking appropriate, effective collective climate action within our capability and resources is a responsible path to choose.

The changes in climate are already impacting our infrastructure, communities and local ecosystems with future projections of worse storms, floods and droughts happening more often, sea levels continuing to rise, and changes in the diversity of plants and animals in our region. This means that climate change and sustainability are subjects that require a long-term vision and a long-term commitment.

Economy and the environment are interdependent

Our government, business partners and stakeholders have also encouraged us to take action and prepare our communities for the impacts of climate change. These will be physical and potentially financial. Insurance costs are rising because of climate change impacts. Our businesses, including our dairy industry, driven by international market requirements, are expecting farmers to have an emissions reduction plan and rewarding those financially who do this best. Mt Hutt, the major tourist attraction of our district whose existence depends on cold winters and sufficient snowfall, committed to be carbon neutral by 2030 and is inspiring others to make similar commitments.





Impacts on council activities

A changing climate affects many Council activities, that have strategic documents and plans, requiring a coherent approach across Council. Therefore, this strategy is considered as an overarching document that considers all the existing work, ensuring we do not duplicate actions but integrate and align across the existing strategies, policies and plans, making the most effective use of time and money. The strategy also provides the opportunity to become more energy efficient as a district.

Council also has statutory responsibilities, or a legal duty, when 'considering the effects of climate change when making decisions, including those related to natural hazards, civil defence, emergency management, and community resilience' (Ministry of the Environment)¹⁰.

Our economy and greenhouse gas emissions

In a district whose economy is reliant on agriculture, the transition to a lower carbon economy can be confronting. Council believes that the future prosperity of Ashburton District will be influenced by the ability of our business, including agriculture to reduce emissions and maintain profitability. The expectations of our international markets may mean that our long-term profitability is compromised without emissions reduction.

At the same time, the impacts of climate change in terms of increased flooding, increased drought, loss of biodiversity and so on, will all impact negatively on agriculture. We are seeing this already in terms of more intense storm events. Failure to respond

responsibly damages our reputation internationally and raises the prospects of greater trade barriers for our produce.

What is true for the economy in New Zealand is true for the economy in Canterbury and here in Ashburton. Our outcomes will be heavily influenced by decisions made elsewhere. That reality is not a reason for inaction, as we believe there is value is acting collectively to do what we can, with what we have, where we are, to ensure the best future we can for the people and the places we call home. In Canterbury, regional work is underway to help identify pathways for moving to a lower carbon economy that support the ongoing and long-term prosperity of Canterbury.

Enduring & resilient infrastructure

Although it requires serious financial commitments, as a country, we have learnt the hard way that investing in climate resilient infrastructure is cheaper in the long run than having to rebuild entire infrastructure networks following severe climate impacts - making it the responsible thing to do. With impacting events expected to increase in frequency and severity, making wise decisions now will reduce further disruption later.

The effects won't all be negative. We refer to the challenges and impacts of a changing climate on our district, but in Councils' Economic Development strategy there is also a reference that changes may bring opportunities to our district, such as opening up new agricultural or horticultural opportunities and adjusting growing seasons, allowing for a larger variety of crops to be grown over longer periods.

Our aim is a strategy that provides guidance for investment, helps to understand a complex issue, that educates and motivates. It explains what Council is doing and why. The community is already doing a lot and asking for Council to take more action. This document is to show community leadership and, as one of the largest organisations in the district, to lead by example.

Sustainability and climate change are interrelated. Sustainable actions and practices help to reduce our impact on a changing climate, enable efficient use of our resources, and help harness the power of a community.

We intend this strategy to be a living document that identifies the challenges facing our district and the opportunities to tackle these challenges. It includes stakeholder, Manawhenua and community input, and contains measurable and achievable actions that will help to prepare the district for the impacts of a changing climate and creating a sustainable future.

Funding and Costs

Action requires funding and that is why we have indicated **estimated** costs for each of the actions that are not currently included in existing budgets. You will see this in detail in the action plan in part two of the strategy. Please note that these are estimates and would be confirmed via a business case to Council when they make the decisions on Annual or Long Term Plan budgets.

The resilience of infrastructure will require some significant investment in the coming years, but experience has told us that the costs of recovering from unprepared infrastructure will be much higher. These costs are not shown in this strategy but will be part of our infrastructure budgets.

Finally, this strategy relies upon partnership with the community for its success. While we understand that we can't address everything and some efforts may seem minor, it's crucial to do what we can.

Did you know?

New Zealand's contribution to global emissions of 81 megatonnes of greenhouse gases (2023) is only 0.15% of global emissions, compared with a country like China with 14,167 megatonnes (25.68% of global emissions).

However, measured per capita, New Zealand's gross emissions of 15.5 tonnes is high in comparison with somewhere like China at 9.9 tonnes per capita (data used from climatechangetracker.org). This shows how looking at emissions per person can show that smaller, wealthier countries can still have a disproportionate impact on climate change and everyone has a part to play. China's total emissions are high because of its large population and industry, but New Zealand's high emissions per person show the difficulties developed countries face with emissions heavy sectors like agriculture.

Due to its agricultural base, the District contributes significantly to food production, much of which is exported across the world. Latest numbers show there are over 345,000¹¹ dairy cows in Ashburton District or over nine cows for every person living in the district.

Other countries, with similar population and/or in the same region and/or industries, and their per capita emissions: www.climatechangetracker.org/nations/greenhouse-gas-emissions

Country	Population (million)	Per capita emissions (tonnes)	Yearly Emissions trend (10 years trend)
Ireland	5.06	11.6 (extremely high)	-1.3%
Finland	5.55	13.5 (extremely high)	- 0.8%
Kuwait	4.31	36.3 (extremely high)	+1.3%
New Zealand	5.23	15.5 (extremely high)	0%
Australia	26.44	24 (extremely high)	-1%
United Kingdom	67.74	5.9 (high)	-3.4%
Netherlands	17.62	8.6 (very high)	-3.3%

Other major sources of emissions for New Zealand include the energy sector—particularly transport and manufacturing—industrial processes such as cement production, and waste management activities like landfilling and wastewater treatment.

The good news is, for the past year (referencing data till 2022) there has been a slight decrease in New Zealand's national emissions which according to the Ministry of the Environment was 'largely because there was more renewable electricity – mainly hydroelectricity – on the grid which meant we used less coal and gas, decreasing emissions'.

Read more here:

- » <u>www.climatechangetracker.org/nations/greenhouse-gas-emissions</u>
- » www.environment.govt.nz/news/new-zealands-annual-emissions-decreased-in-2022



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How has this strategy been prepared?

Following Councils decision to create a Climate Change & Sustainability Strategy in October 2024, early engagement with the community on the content of the strategy took place in January-February 2025. This included a public workshop with community members and a stakeholder workshop, with local businesses and organisations joining the session.

The engagement highlighted the need for:

- √ The district to be made more resilient (investment)
- ✓ Clear and transparent communication from Council
- √ Community engagement and education
- ✓ Better water management
- ✓ Nature-based solutions
- ✓ A plan to reduce greenhouse emissions
- √ Improvement of waste management

Council was presented with this feedback during the preparation of the draft, and it has been incorporated in the draft where agreed. Consultation on the draft strategy in May/June 2025 provided the opportunity for the community to provide feedback.









What does this strategy include?

The strategy contains a
20-year action plan setting
out how goals will be achieved,
who will be involved in
achieving them and how much
they are estimated to cost.

The document is divided into two sections: Part 1 provides the background information on strategy topics, the strategy development process, and the strategic framework, while Part 2 outlines the strategy vision, principles, goals, objectives and the action plan.

For a comprehensive understanding of the goals, it is recommended to read the background information on the priority areas described in the upcoming section.

The priority areas this strategy will focus on

Building on our prior climate change policy and resilience plan, our regional collaboration and the recent strategy engagement, we identified six priority areas for the strategy.

These areas touch on all the services we provide as a council. The goals, objectives and actions linked to each priority area can be found in Part 2 of this document.

- 1 Sustainable water management
- 2 Using nature-based solutions to mitigate climate change and enhance sustainability
- 3 A resilient, engaged and informed community
- 4 Waste reduction and minimisation
- 5 Resilient Infrastructure
- 6 Transition to a low carbon future



Sustainable water management*

Water is the lifeblood of Ashburton District. The district is surrounded by water on all sides, from unique braided rivers to crystal clear alpine lakes to the rolling Pacific Ocean. Water has enormous value and is critical for the district – drinking water to sustain life and health, water to support our economy and agricultural sector and water to play in – our lakes and rivers. Alongside that water is an integral part of our landscape, it sustains our biodiversity, it is strongly connected to our identity.

Climate change will impact water in multiple ways. It may lead to more intense and harsher droughts. It will mean more rainfall at greater intensity falling over shorter timeframes. While we cannot stop these climate effects, we must prepare for them.

We must value the water we have, be proactive and positive stewards and seek to sustainably manage its use, while enhancing water quality for current and future generations.



¹² Management of Water resources such as rivers, streams, natural lakes, and wetlands is regulated via the Canterbury Land and Water Regional Plan, which falls under the responsibility of Environment Canterbury. This means that any action related to these waterbodies, will have to be a collaborative effort, as you will see in the action plan

Using nature-based solutions to mitigate climate change and enhance sustainability

Nature-based solutions (NbS) are approaches that use natural processes to address societal challenges and improve biodiversity. These approaches harness the power of nature to provide benefits for both the environment and human wellbeing. For instance, nature-based solutions such as green roofs, rain gardens, or constructed wetlands can minimize damaging runoff by slowing and absorbing stormwater, reducing flood risks and preserving freshwater ecosystems.

A key aspect and reflected throughout the strategy goals for this priority area, is the nature-based solutions ability to mitigate climate change effects. For example, planting small scale native forest within 1km distance from each other (micro forestry) and restoring existing forests can absorb carbon dioxide from the atmosphere, and reducing greenhouse gas levels. Wetlands and blue-green networks act as natural buffers against storms and flooding, protecting communities along the river channels. These ecosystems also store carbon, helping to regulate the climate.

Wetlands – whether natural or constructed, can store huge amounts of greenhouse gases (GHGs).

Although they naturally release methane, healthy and undisturbed wetlands absorb more carbon than they emit, making them valuable for climate change mitigation. Research has also found that rewetting drained wetlands, as seen in Mid Canterbury, could reduce emissions by storing more GHGs. However, the overall climate benefit depends on protecting existing wetlands and restoring degraded ones so that stored GHGs will not be released to the surface.

NbS also promote sustainability by enhancing biodiversity and ecosystem services. Other aspects of NbS includes protecting and restoring natural areas to provide climate resilience to reduce floods and minimize risks from extreme weather events, creating green infrastructure such as green spaces in urban environments and urban forests, and promoting sustainable land use practices. Food forests also can mimic natural forests in removing carbon from the atmosphere while at the same time producing sustainable and organic food. These actions can improve air and water quality, reduce urban heat islands, and enhance the quality of life for communities.



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A resilient, engaged and informed community

Our community is our main partner in this strategy. A lot of the work we do to prepare the district for climate impacts affects all ratepayers and many of the proposed actions are a collaborative effort. For this strategy we consider the community to be 'everyone' in the district.

Both sustainability and climate change are complex and sometimes contentious matters. Exposure to climate-related events, either directly or through news media, has been linked to climate anxiety, especially in younger people. At a community level, Council is keen to give people access to good information and enable collective community action on things we can control. This means we will continue to help people prepare for natural events through our response plans, host educational community events and campaigns and celebrate the sustainable actions our community already undertakes.



4

Waste reduction and minimisation

Waste reduction and minimisation can improve sustainability, climate adaptation and emissions reduction outcomes. Councils have provided waste services in the district for many years and Council has a Waste Management and Minimisation Plan (WMMP) that sets out how Council plans to minimise and manage the waste in our district. Council has a key role in collecting, sorting and transferring waste and work in partnership with our community, businesses and industry to achieve our goals.

This Climate Change & Sustainability Strategy aims to highlight existing sustainability and climate change links to waste management and capture improvements that have emerged since the WMMP was last reviewed in 2022. More detail is provided in the action plan in part two of this strategy.

Reducing the amount of waste to landfill reduces the overall costs to ratepayers and extends the life of existing infrastructure. Reducing the amount of organic waste to landfill reduces the amount of methane generated in landfills. Composting of organic waste generates carbon dioxide and is generally accepted as creating less emissions than landfilling. Compost itself helps to build soil structure which enhances carbon sequestration. Council will be introducing a food garden organic collection from September 2026.

Council disposes of its residual waste to Kate Valley landfill, which is a comprehensively engineered and modern landfill facility that operates to the highest international standards. Kate Valley also generates electricity from the biogenic methane (methane produced from biological sources such as plants) created in the landfill. Today it generates enough electricity to power 2,000 homes. Kate Valley will continue to capture methane for energy generation well after the landfill is at capacity. At the time of writing, Kate Valley's owner, Transwaste Canterbury Limited, unveiled a new electric truck which is part of a trial to decarbonise the fleet with the ultimate goal to use landfill gas to charge the truck.

Closed landfills are threatened by the potential for flooding to scour landfills in the vicinity of waterways. The southwest slope of the closed Ashburton Landfill faces the Ashburton River and over time has been affected by weather and water runoff. To prevent future damage Council allocated funds (2024-29) for capping remediation and adding material to the slope to make it less steep and less prone to erosion. Council will also undertake annual monitoring and maintenance of the closed landfill in Mt Somers, which has been remediated after scouring in 2021.



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Resilient infrastructure

Climate change is making weather patterns more unpredictable and introducing new risks to areas that previously had none. As floods, extreme heat, and wildfires become more severe, we need to ensure both existing and future infrastructure will withstand future climate challenges. Climate resilient infrastructure is developed considering these climate impacts and is carefully planned, designed, built and managed to endure extreme conditions.

The effects of climate change are putting significant strain on infrastructure in various ways, such as:

Heavy precipitation and flooding:

As we experienced firsthand in 2021, flooding can cause rivers to overflow, threatening nearby communities and causing widespread damage to our roading infrastructure¹³ and productive farmland. Environment Canterbury, responsible for the riverbank repairs following the floods, stated that wherever possible, the expected effects of climate change were assessed and design solutions modified to incorporate this as part of the recovery work, rather than simply replacing the flood protection infrastructure that was in place. This included repairs and strengthening of stop banks, tree planting and installation of anchored tree protection.¹⁴

Heat:

Rising temperatures can cause roads to soften and melt, while also leading to the buckling of railroad tracks. In both the northern and southern hemispheres, thawing permafrost is contributing to infrastructure damage, including deteriorating roads and weakening building foundations.

Drought:

Decreasing precipitation and rising temperatures are increasing the risk of drought, putting strain on water supplies as increased evaporation reduces reservoir levels. Lower water levels can deplete aquifers essential for drinking water and irrigation.

Wildfires:

Rising temperatures and prolonged drought can lead to an increase in wildfires. These warmer, drier conditions are also extending wildfire seasons. Wildfires not only destroy homes, buildings, and infrastructure but also harm ecosystems and habitats.



¹³ In June 2024 flood damage repairs were completed at a total cost of \$22.6 million (funded through Environment Canterbury loans and the National Emergency Management Agency (NEMA)

Transition to a low carbon future

New Zealand's Climate Change Response (Zero Carbon) Amendment Act 2019 sets a framework for the country to develop and implement climate change policies aimed at reducing greenhouse gas emissions. The Act establishes a target to reduce net emissions of all greenhouse gases (except biogenic methane) to zero by 2050 and sets specific reduction targets for biogenic methane.

Understanding the concept of 'net zero' is key to this transition. Net zero refers to a balance between the amount of greenhouse gases emitted and the amount removed from the atmosphere. However, because of the vast accumulation of emissions over the past two centuries—primarily due to human activity—

reaching net zero requires more than just offsetting; it demands deep reductions in emissions at their source

With agriculture¹⁵ being our main industry, the per capita greenhouse gas emissions for our district (66 tonnes per capita) are significantly higher compared nationally (15 tonnes per capita¹⁶). Council has no authority and intention to intervene, however, as stated in the action plan, we aim to reduce our own emissions and see our role as to provide clear information and engage with and educate the community on greenhouse gas emissions.



¹⁵ https://tools.summaries.stats.govt.nz/places/TA/ashburton-district#business-demography

¹⁴ https://www.ecan.govt.nz/your-region/your-environment/river-and-drain-management/canterbury-flood-recovery

 $^{16 \} https://rep.infometrics.co.nz/ashburton-district/environment/greenhouse-gas-emissions/per-capita?compare=new-zealand.$

How this strategy links to other strategies, plans & policies

Council sees this Strategy as having a role in bringing together planned actions in other Council strategies, plans and policies including regional documents like the Canterbury Climate Partnership Plan.

Canterbury Climate Partnership Plan

All 11 councils in Canterbury have worked together to develop the Canterbury Climate Partnership Plan (CCPP) which sets out how we intend to work together and with others to support Canterbury's transition to a thriving, climate-resilient, low emissions region. This does not prevent individual Councils from taking extra local actions on climate change. It sets out the things we believe can best be achieved by working together.

Ashburton District Council has committed funding of \$50,000 per year for three years beginning in 2024/25, plus staff time to support regional work. Where actions in this Strategy reflect content in the CCPP, these are cross-referenced.

Council strategies and plans

Council has other strategies and plans that touch on themes related to sustainability and climate change. These include the Biodiversity Strategy 2024, the Economic Development Strategy – Rautaki Whanake Ohaoha – 2023, the Open Spaces Strategy 2016, the Surface Water Strategy 2018, the Walking and Cycling Strategy 2020, the Long Term Plan 2024-34, Infrastructure Strategy and the Waste Management and Minimisation Plan 2022. Each of these has been developed and adopted after public consultation.

Where actions in this Strategy reflect content in any of these strategies or plans, these are cross-referenced.

Relevant legislation

Council has statutory duties in relation to sustainable development and climate change under various pieces of legislation including the Climate Change Response Act 2002, the Local Government 2002, the Resource Management Act 1991, and the Waste Minimisation Act 2008. These duties are reflected in council's operating budgets and many of the strategies and plans referred to above.



 $\textit{Minister for Climate Change, Simon Watts, joined Canterbury mayors for the launch of the Canterbury Climate Partnership Plantscape (Control of the Canterbury Climate Partnership Plantsca$





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What is our strategy vision?

We want to make Ashburton District the district of choice for lifestyle and opportunity – te rohe ka whiria mō te āhua noho, me te hapori.

This Climate Change and Sustainability Strategy plays an important role in achieving this core vision for the Ashburton District.

Our district can have great spaces and places, and that means working towards a balanced and sustainable environment, and creating a prosperous economy built on innovation, opportunity and high-quality infrastructure.

Our strategy vision:

"Working together for a sustainable and resilient future for the Ashburton District: empowering our people, supporting our businesses, fortifying our infrastructure and protecting our environment"

What are the strategy principles?

In making decisions that can impact on (or are impacted by) climate change and sustainability, Council will consider the following principles, alongside other decision-making considerations:

Manaakitaka

Council shares in a collective duty of care to safeguard the natural environment and the communities it supports. Policies and decisions on climate change and sustainability need to be flexible and enabling to allow for local decisions and empower organisations and individuals to reduce emissions and improve the sustainability of community activities. Our work also needs to be focussed on pragmatic local and regional actions that will move us forward.

Anticipatory governance

Council will think and act with the long-term in mind to provide clear and consistent plans towards a sustainable, low emissions economy, environment, and society.

Equity/Inclusion/Kauawhi

Council will consider the needs and contributions of all partners and stakeholders including the most vulnerable and those without a voice – including future generations – as it responds to climate change and sustainability opportunities. This includes recognising and advocating for the needs of communities and individuals disproportionately affected by climate change and unsustainable practices.

Informed decision-making

Council will use the best available information to understand the potential impacts of climate change and sustainability issues. It will also use the best available information on options for responding to those impacts – including their costs and benefits. Council will make this information available to engage in meaningful conversations with communities and be clear with each other and communities on what we don't know and where there are limitations or uncertainties with our information.

Work as one/Mahi Tahi

Wherever practicable, Council will work cooperatively and collaboratively with partner organisations and communities, including our manawhenua in the District and the wider Canterbury region. Council will also strive to ensure greater alignment and integration of its activities relating to climate change including the maximising of co-benefits wherever practicable and affordable.

Resilience

Some impacts of the changing climate are already inevitable. Council will work with communities and businesses to improve their understanding of climate change risks and sustainable practices and what they can do to manage risks and apply practices to continue to thrive.

CLIMATE CHANGE & SUSTAINABILITY STRATEGY CLIMATE CHANGE & SUSTAINABILITY STRATEGY

What are our goals and objectives?

Priority Area 1:

Sustainable water management

GOAL 1:

Attain sustainable and resilient water management, ensuring reliable access, environmental stewardship, and improved water quality

This means to (objectives):

- ✓ Ensure a forward-thinking approach to the sustainable management of water resources in the Ashburton District.
- ✓ Promote and engage in initiatives to maintain and enhance water quality in district water bodies
- ✓ Foster a culture of water conservation and efficiency within the community.
- ✓ Track and communicate water usage and quality data to ensure transparency and informed decision-making.

Priority Area 2:

Nature-based solutions

GOAL 2:

Encourage nature-based solutions and support our communities to help understand how nature-based solutions to climate disruption will work.

This means to (objectives):

- √ Support blue-green networks development for Mid-Canterbury
- ✓ Continue biodiversity restoration and ecosystem health enhancement (Biodiversity Strategy)
- ✓ Build a climate-resilient environment in the district
- ✓ Continue to promote sustainable land use and soil conservation

Priority Area 3:

A resilient, engaged and informed community

GOAL3:

Build a community that is well-informed about the changing climate and actively engaged in sustainable practices and resilience efforts.

This means to (objectives):

- ✓ Improve Council understanding of the impacts of a changing climate and sustainable responses and advocate on behalf of the district in climate change matters
- ✓ Engage with and educate the wider community to improve understanding of climate change and sustainability practices
- ✓ Support the community to be prepared/ on resilience and adaptation to climate change impacts
- ✓ Encourage and promote sustainable good practice in Council operations and activities
- ✓ Promote and connect community and stakeholder groups working on sustainable projects and establish partnerships and initiatives to engage the community and promote collective action.

Priority Area 4:

Waste reduction and minimisation

GOAL 4:

Enable responsible waste management that reduces waste and protects community and environmental wellbeing.

This means to (objectives):

- ✓ Implement methods to reduce the amount of waste sent to landfill or other disposal
- ✓ Lower waste management costs and increase economic benefits to ensure financial sustainability
- ✓ Reduce the risk of environmental damage and protect public health through sustainable waste management
- ✓ Engage and involve our community to achieve waste management goals and objectives

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Priority Area 5:

Resilient Infrastructure

GOAL 5:

Prepare our infrastructure for the longterm impacts of climate change to ensure resilience and safety for our community.

This means to (objectives):

- ✓ Ensure all critical infrastructure within the district is assessed and upgraded for climate resilience
- ✓ Incorporate climate resilience and sustainability in new infrastructure projects and subdivisions
- ✓ Make greater use of durable, lowcarbon materials for infrastructure projects

Priority Area 6:

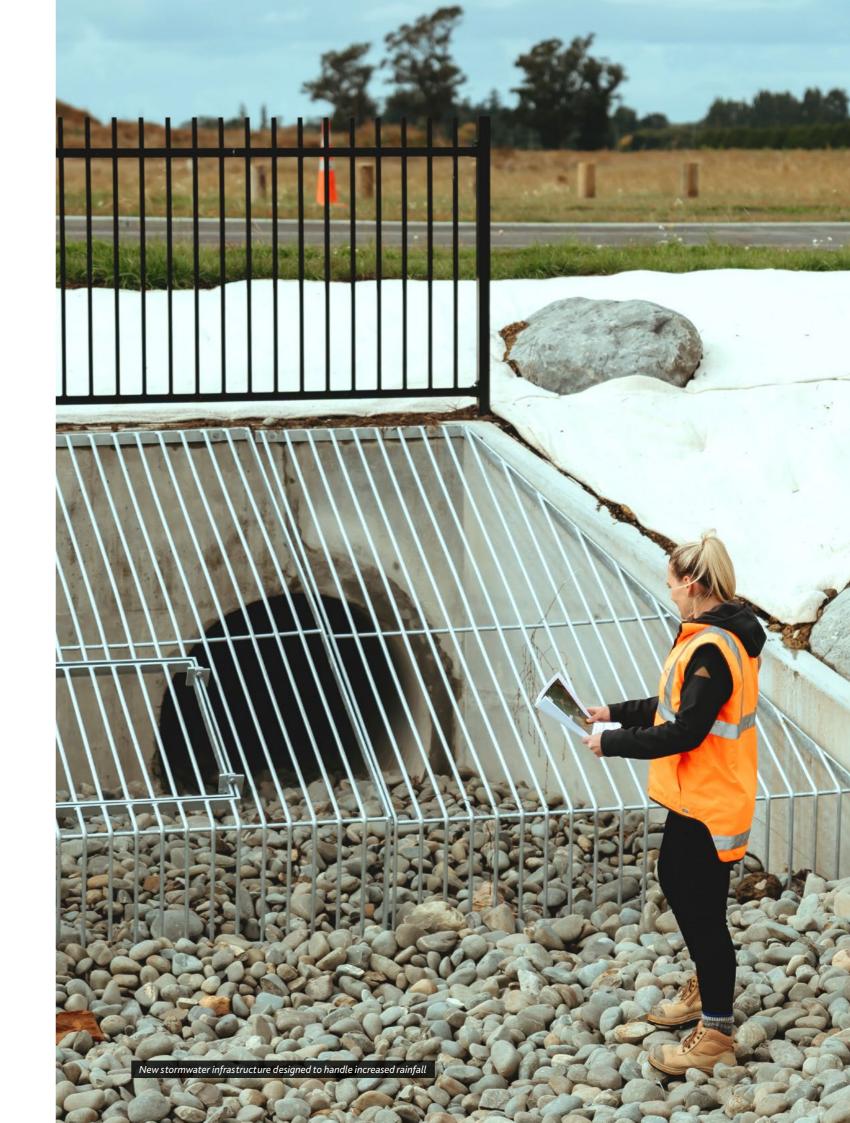
Transition to a low carbon future

GOAL 6:

Identify pathways for reducing greenhouse gas emissions while ensuring a prosperous and sustainable community.

This means to (objectives):

- ✓ Set an emissions reduction target for Council activities
- ✓ Continue to measure Council's greenhouse gas emissions, and adopt and implement emissions reduction plan
- ✓ Promote and encourage sustainable transport in the community
- ✓ Increase carbon sinks in the Ashburton District
- ✓ Engage with and educate the community on greenhouse gas emissions
- ✓ Support regional work on emissions reduction that enables the region to thrive



CLIMATE CHANGE & SUSTAINABILITY STRATEGY CLIMATE CHANGE & SUSTAINABILITY STRATEGY

How will we reach these goals?

Implementation timeframe

The lifespan for the strategy is expected to be 20 years.

However, some actions may be achieved sooner. Achievement is also dependent on financial availability, legislative changes and commitment. As a guide, we have split the timeframes into the four categories below. Actions that run for the entire life of the strategy are designated as "ongoing".

ST	Short-term	1-3 years
МТ	Medium-term	3-10 years
LT	Long-term	10+ years
0	Ongoing	Actions that run for the entire li of the strategy

Reporting and review

We will report annually on the progress of the Action Plan's implementation through the end of year strategy report to Council (note this is at the end of the financial year, which means in July).

A full review of the action plan, to ensure it remains current and meets the needs of our community is to be undertaken prior to every Long Term Plan budget cycle.

A full review of the entire Strategy will be undertaken every five years or sooner if considered necessary.

How are we going to know the strategy is working?

Reporting on the strategy will show which actions have been accomplished, if we did it on time and within the provided budget.

To know if the actions achieve the goals of each priority area, we need to monitor the results. Specific measures and data sources (for example from ADC performance reports, Infometrics, emissions data and the Annual Resident Survey) will be used in the first instance to monitor progress against the strategy. These measures and relevant sources will be identified after the strategy gets adopted and included as a separate section in the annual reporting.

Role of Ashburton District Council

The role of Council in the Strategy and Action Plan is defined in broad terms below. For some actions, Council may have more than one role.

Advocate – collecting and sharing community views with government, agencies or organisations to help improve the district. This can be locally-driven advocacy for local concerns or reactive advocacy in response to draft legislation, plans or proposals.

Influence – educate and work to change people's perceptions or behaviour to provide positive community outcomes.

Support – support agencies leading the work (e.g. research, funding or bringing stakeholders together).

Plan and Resource – take direct lead and involvement to achieve specific outcomes (e.g. developing plans, consultation, funding, resourcing, staff time). Resourcing may include funding and staff time. Funding may be full or partial.

Plan - take direct lead and involvement to achieve specific outcomes, with budget to be approved through Annual Plan or Long Term Plan processes.

Partners and organisations involved

The "Who" column in the Action plan table indicates the organisations involved in the action with the first named organisation being the lead agency.

This strategy uses teams across Council with the Strategy & Policy Team considered the driver of the strategy. When there is a specific team that will be working on the action within Council, the team will be specified.

The strategy is intended to be delivered through a community council partnership and Council will be seeking the views of, and hoping to work with other interested stakeholders.

Manawhenua were consulted in the development of the draft strategy.

Resource and Funding

Resourcing will come from a range of sources, with contributions to the success of the strategy coming from other agencies and the community.

Funding is available within the existing Council operations or budgets (staff time or operational budget) or may come from specific central government support to local councils, external contractors or other sources.

Where the Action Plan refers to new budget, these sums are preliminary estimates and are intended to highlight that some of these actions will require more resources, and the likely extent of those resources. For every 'new cost' in the budget column, it is indicated if it is a recurring annual cost 'per annum' (p.a.) or a 'one-off' investment. This funding will be required to pass normal budget scrutiny through Long Term Plan/Annual Plan budget processes, including the preparation of business cases, scrutiny by elected members, public consultation and submissions.

There will also be a potential to seek external grants/ funding from other agencies involved with climate change and sustainability. As part of the strategy, it is the intention to also inform the community of the grants/funding that are available for community projects.

CANTERBURY **Mayoral Forum**

Actions with this tag are also part of the Canterbury Mayoral Forum's Canterbury Climate Partnership Plan (CCPP)





Actions with this tag are also part of another Ashburton District Council Strategy, Plan or Policy



CLIMATE CHANGE & SUSTAINABILITY S

The Action plan

1. Sustainable Water management

GOAL 1:	Attain s	ustainable and resilient water management, e	nsuring reliable ac	cess, environmental stewards	ship, and impr	oved water quality
Objective		Action	Role of ADC	Who	When	Budget
1.1 Ensure a forwar thinking approach sustainable manag of water resources Ashburton District.	to the gement in the	A. Foster, support, advocate for or lead strategies or plans to ensure the sustainable management of water resources and storage opportunities where appropriate.	Advocate, Plan and Resource, Influence, Support	ADC, Environment Canterbury, Irrigation companies, Stakeholder groups, Community, Te Rūnanga o Arowhenua via Aoraki Environmental Consultancy Limited (AECL) ¹⁷	0	Existing budgets
		B. Involve local communities and manawhenua in water management decisions and encourage stewardship of water resources.	Advocate, Support	ADC, Environment Canterbury, AECL	0	Existing budgets
		C. Strengthen governance frameworks to support sustainable management of water resources.	Advocate, Plan and Resource, Influence, Support	ADC, Environment Canterbury, AECL	0	Existing budgets
		D. Regularly review and adapt water management strategies based on new data and changing conditions	Advocate, Plan and Resource, Influence, Support	ADC, Environment Canterbury, AECL	0	Existing budgets
1.2 Promote and en initiatives to mainta enhance water qua	tain and	A. Encourage use of nature-based solutions to improve water quality (see Goal 2)	Plan and resource	ADC	ST	See goal 2
district water bodie		B. Support community education programmes on water quality (see Goal 3.2C)	Plan	ADC (Comms, Infrastructure services), Environment Canterbury	ST MT	Funded in 3.2.C

STShort-term1-3 yearsMTMedium-term3-10 yearsLTLong-term10+ years

Ongoing Actions that run for the entire life of the strategy

E CHANGE & SUSTAINABILITY STRATEGY

Objective	Action	Role of ADC	Who	When	Budget
1.3 Foster a culture of water conservation and efficiency within the community.	A. Launch educational and public awareness campaigns to educate residents and businesses about water conservation and storage.	Plan	ADC (Comms, Infrastructure services)	ST MT	Funded in 3.2.C
	B. Implement water metering throughout the district for leak detection and water conservation	Plan	ADC	ST MT	\$5M (one off) estimated budget in Infrastructure Strategy for capital costs of installing meters i Ashburton and Rakaia– no money in LTP for this and no operating budgets (approx \$100K per annur
	C. Continue the ongoing renewal programme focused on reducing water leaks	Plan and resource	ADC (Water Services)	0	TBC
	D. Promote the adoption of water storage – both domestic and commercial – and investigate implementation of residential rainwater tanks through the District Plan.	Plan and resource	ADC (Building & Planning)	МТ	Existing budgets
	E. Ensure all new Council facilities are designed and built including water-saving technologies	Plan and resource	ADC	0	To be incorporated into future facility budgets
	F. Audit existing Council facilities for water saving capability and retrofit with water saving technologies over time	Plan and resource	ADC	0	Incorporated into future budgets
	G. Explore other opportunities for Council activities to maximise water saving in delivering their services	Plan and resource	ADC	0	Existing budgets

Plan and resource ADC

Existing budgets

added to 1.3B

Considered incl. in OPEX to be

B. Improve visibility of residential and business water Plan and resource ADC

1.4 Track and communicate A. Continue to monitor and manage water demand

water usage and quality

making.18

data to ensure transparency and informed decision-

on Council operated water supplies and make information available to community.

¹⁷ Aoraki Environmental Consultancy Limited (AECL) are mandated to represent Te Rūnanga o Arowhenua (Arowhenua).

¹⁸ Drinking water measures are part of Councils performance measures that are reported on via the mid-year and end of term performance report to Council.

CLIMATE CHANGE & SUSTA

MATE CHANGE & SUSTAINABILITY STRATEGY

2. Nature-based solutions

GOAL 2: Encourage nature-based solutions and support our communities to help understand how nature-based solutions to climate disruption will work.

Objective	Action	Role of ADC	Who	When	Budget
2.1 Support blue-green networks development for Mid-Canterbury	A. Develop a District Spatial layer to support CCPP blue-green network (BGN) and ecological connectivity model in Mid-Canterbury, including investigation of potential Council land use for ecological connectivity model.	Plan	ADC (Open Spaces, GIS & Planning), Environment Canterbury, Community, AECL	ST	NEW \$40,000 (one off)
	B. Support the blue-green network project implementation across Canterbury (Canterbury Climate Partnership Plan Action 4.2). CCPP	Plan and resource	ADC	0	LTP 24-34 – commitment of \$50,000 per year Y1-10
	C. Support climate risk assessments for the Mid-Canterbury ecosystem. (Canterbury Partnership Plan Action 4.1). CCPP	Plan and resource	ADC		LTP 24-34 – commitment of \$50,000 per year Y1-10
2.2 Continue biodiversity restoration and ecosystem health enhancement	A. Support the development of micro forestry projects	Support	Community, ADC	0	Existing budgets
neath childhearth	B. Support the development of food forests and community gardens (See Goal 3)	Support	Community, ADC	0	Existing budgets (refer community to ADC grants)
	C. Advocate for extensive native plantings to reduce runoff and hold stop banks along the major rivers and streams where native species are fit for purpose.	Advocate	ADC, Community	0	Existing budgets

S	T	Short-term	1-3 years
٨	1T	Medium-term	3-10 years
L		Long-term	10+ years
(0	Ongoing	Actions that run for the entire life of the strategy

GOAL 2	
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Encourage nature-based solutions and support our communities to help understand how nature-based solutions to climate disruption will work.

Objective	Action	Role of ADC	Who	When	Budget
2.3 Build a climate-resilient environment in the district	A. Manage external donations through an Ashburton District Natural Environmental Fund to support adaptation projects.	Plan	ADC (Open spaces)	0	NEW \$15,000 p.a. (promotion and admin of fund)
	B. Advocate for river stop banks strengthening and shingle extraction to enhance flood resilience.	Advocate	ADC	0	Existing budgets
	C. Advocate and support the development of constructed wetlands around the district.	Advocate, Support	ADC, ADBAG, Community, Environment Canterbury, AECL	MT LT	LTP
	D. Develop consistent stormwater design with nutrient filters and provide native planting opportunities.	Plan and resource, Support	ADC, AECL	0	Existing budgets
2.4 Continue to promote sustainable land use and soil conservation	A. Educate and inform the community about scientifically proven methods on sustainable land use and soil conservation (e.g. regenerative farming, sustainable burn off alternatives, the use of natural fibres for grass bales and on-farm activity, nitrate removal techniques from soil and wetlands using denitrifying bacteria etc.)	Support, Plan	ADC (Comms, Open Spaces) Community, AECL	ST	Funded in 3.2.C
	B. Continue to apply and investigate other methods for sustainable land use on council land including forestry (e.g. mulching grass clippings into land to add to soil fertility and maintaining vegetation cover in open spaces etc).	Plan and resource	ADC, Community, AECL	0	Existing budgets

Т	Short-term	1-3 yea

MT	Medium-term	3-10 ye
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Long-term 10+ yea

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CLIMATE CHANGE & SUSTAINABILITY STRATEGY

3. A resilient, engaged and informed community

OAL 3:	Build a community that is well-informed about the changing climate and actively engaged in sustainable practices and resilience efforts.
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Objective	Action	Role of ADC	Who	When	Budget
3.1 Improve Council understanding of the impacts of a changing climate and sustainable responses, and	A. Continue to support regional collaboration in response to climate change through the Canterbury Climate Partnership Plan CCPP	Plan and resource	ADC	0	LTP 24-34 – commitment of \$50,000 per year Y1-10
advocate on behalf of the district in climate change matters	B. Undertake a Local Climate Change Risk Assessment of the impacts identified as a priority by the community (e.g. flooding, fire, heavier rainfall, drought and severe storms or risk to agriculture, economic risk)	Plan	ADC / consultancy, AECL	ST MT	NEW \$50,000 every 5 years
	C. Provide information and training to staff and elected members on climate change issues. (Include in Council & staff induction)	Plan and resource	ADC (S&P)	0	Existing budgets
	D. Advocate on behalf of the district in climate change matters (e.g. by responding to Government agencies when they seek feedback on climate related proposals)	Advocate	ADC (S&P)	0	Existing budgets
3.2 Engage with and educate the wider community to improve understanding	A. Actively be part of and spread awareness of the 'It's Time Canterbury' campaign.	Plan and resource	ADC (Comms, S&P)	0	Existing budgets
of climate change and sustainability practices	B. Ensure Council's climate change webpage is kept up to date. CCPP	Plan and resource	ADC (Comms, S&P)	0	Existing budgets
	C. Establish and support community education programmes on strategy goals, focusing on different stakeholder groups (e.g. youth/schools, businesses, farming community or general public). Approx. 4 events and/or campaigns per year.	Plan	ADC (relevant topic team, Comms, S&P), Community, AECL	ST MT	NEW \$60,000 p.a. events and/or campaigns

ST	Short-term	1-3 years
МТ	Medium-term	3-10 years
LT	Long-term	10+ years
0	Ongoing	Actions that run for the entire life of the strategy
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CLIMATE CHANGE & SUSTAINABILITY STRATEGY

GOAL 3: Build a community that is well-informed about the changing climate and actively engaged in sustainable practices and resilience efforts.

Objective	Action	Role of ADC	Who	When	Budget
3.3 Support the community to be prepared on resilience and adaptation to climate change impacts	Continue the development of community response plans (response to all natural events, including climate change impacts) for all Ashburton communities and review existing plans. ADC	Plan and resource	ADC (Emergency Management), AECL	0	Existing budgets
	B. Develop adaptation plans for areas at highest risk based on the outcome of the local risk assessment described in 3.1.B.	Plan and resource	ADC, AECL	МТ	NEW \$50,000 (every 5 years) LTP 27-37
	C. Economic Development Strategy Objective 2.B 'Our businesses have access to the expertise, knowledge and skills to make informed decisions that enable them to successfully adapt to the changing business environment'. Action 3: Develop a plan for addressing risks and utilising opportunities for the objective	Support	Business Leadership Group	ST (2-4Y in 2023)	Existing budget (Economic Development strategy)
3.4 Encourage and promote sustainable good practice in Council operations and activities.	A. Council to demonstrate sustainable actions in its own operations.	Plan and resource	ADC	ST MT	Existing budgets
3.5 Promote and connect community and stakeholder groups working on	A. Council to research incentives, financial benefits or set requirements that encourage sustainable action within the community (e.g. building consents, green roof, passive housing, solar panels, water tanks etc)	Plan and resource	ADC (Building, property, roading, waste)	ST	Existing budget
sustainable projects and establish partnerships and initiatives to engage the community and promote	B. Promote sustainable projects and initiatives, such as community clean-up events, tree planting drives and sustainability fair (Council involvement)	Plan and resource	ADC (Comms, S&P, relevant ADC team), Community	0	Existing budget
collective action.	C. Establish a volunteer Community Sustainability Advisory Panel with Council support	Plan, Support	ADC	ST	NEW \$5,000 p.a
	D. Establish a sustainability grant to support community projects that address climate change and sustainability objectives and targets.	Plan	ADC	МТ	NEW \$20,000 p.a
	E. Establish an 'ADC gift a native tree' project	Plan	ADC (Open Spaces), Community	ST	Existing funding

CLIMATE CHANGE & SUSTAINABILITY STRATEGY

4. Waste reduction and minimisation

Objective	Action	Role of ADC	Who	When	Budget
1.1 Implement nethods to reduce ne amount of vaste sent to andfill or other isposal 2.2 Lower waste nanagement osts and increase conomic benefits	A. Implement the food organic/ garden organic (FOGO)kerbside collection service and extend the service to businesses on a user-pays basis (Waste Management & Minimisation Plan, p 12) ADC	Plan and resource	ADC (Projects and Operations)	(Service in place by September 2026)	Existing Budget
disposal	B. Work with Council's contractors and other providers to encourage uptake of green waste collections (WMMP, p 11) ADC	Plan and resource; Influence	ADC (Projects and operations, Communications); Contractors	0	Existing Budget
	C. Implement the Solid Waste Management and Minimisation Bylaw (WMMP, p 11)	Plan and resource	Projects and Operations; Environmental Services	0	Existing Budget
	D. Continue to work regionally and lobby central Government	Advocate	ADC	0	Existing Budget
	E. Continue to seek ongoing improvements that reduce waste to landfill across all facets of waste management.	Plan and resource, Influence, Advocate	ADC (Projects and Operations, Communications, Strategy and Policy)	0	Existing Budget
	F. Continue to reduce waste to landfill from all council activities (e.g. Office waste).	Plan and resource	ADC (all activities)	0	Existing Budget
	G. Investigate the economic feasibility of a local composting operation for food organics/garden organic and other compostable materials.	Plan	ADC	LT	NEW \$60,000 (one-off)
4.2 Lower waste management costs and increase economic benefits to ensure financial	Collect data through regular surveys and weighbridges. Continue recording and analysis to enable public reporting and performance monitoring over time. (WMMP, p12) ADC	Plan and resource	ADC (Projects and Operations)	0	Existing Budget
sustainability	B. Use data collection, analysis and research to ensure Council and the community know where District waste is going. (Based on WMMP, p. 11) ADC	Plan and resource	ADC (Project and Operations), Waste contractors	ST	Existing Budget
	C. Revise rates and charges for waste management services on an ongoing basis, having regard to user-pays principles. (based on WMMP, p12) ADC	Plan and resource	ADC (Project and operations, Finance), Waste contractors	ST	Existing Budget

CLIMATE CHANGE & SUSTAINABILITY STRATEGY

Objective	Action	Role of ADC	Who	When	Budget
4.3 Reduce the risk of environmental damage and protect public health through sustainable waste management	A. Improve processes to consider the environmental impact of all reuse, recycling and recovery options and seek to choose options with the least overall environmental impact.(Based on WMMP objective 8, p5) ADC	Plan and resource	ADC (Projects and Operations, Strategy and Policy, Executive Team, Council Elected Members), AECL	ST	Existing Budget
	B. Improve processes to consider the public health impacts of all waste management options and seek to choose those options which protect human health. (Based on WMMP objective 9, p5) ADC	Plan and resource	ADC (Projects and Operations, Strategy and Policy, Executive Team, Council Elected Members), AECL	0	Existing Budget
I.4 Engage and nvolve our community to	A. Improve existing levels of communication, and carry out one-off campaigns where necessary, such as the FOGO service or other significant service change.	Plan	ADC (Projects and Operations, Communications); Community partners	0	Existing Budget + Funded in 3.2.C
achieve waste management goals and objectives	B. Establish a working group with waste companies and building businesses to facilitate improved and targeted services for construction and demolition waste. (based on WMMP, p12) ADC	Support	ADC, Waste businesses, Building & construction businesses	(establishment of working group)	Existing Budget
	C. Support and work with local community initiatives. (Based on WMMP, p.12) ADC	Support	ADC (Projects and Operations), Community, Stakeholder groups	ST MT LT	Existing Budget
	D. Continue the promotion and requirement of sustainable waste management at Council or Council funded events	Plan and resource	ADC (Events, Waste)	0	Existing budget

ST	Short-term	1-3 years
МТ	Medium-term	3-10 years
LT	Long-term	10+ years
0	Ongoing	Actions that run for the entire life of the strate

CLIMATE CHANGE & SUSTAINABILITY STRATEGY

5. Resilient infrastructure

GOAL 5: Pro	repare o	ur infrastructure for the long-term impacts of climate cha	nge to ensure resilie	nce and safety for our co	mmunity	
Objective		Action	Role of ADC	Who	When	Budget
5.1 Ensure all critical infrastructure within t		A. Continue to assess and monitor critical infrastructure for its capacity to deal with the effects of climate disruption.	Plan and resource	ADC (Infrastructure Services, Open Spaces)	0	Existing budgets / LTP 27-37
upgraded for climate resilience		B. Continue to maintain and upgrade infrastructure to deal with the effects of severe weather events and climate disruption.	Plan and resource	ADC (Assets Team, Roading Team, Projects & Operations Team)	0	Existing budgets / LTP 27-37
		C. Manage climate change risks to existing infrastructure, particularly water supply, wastewater and key lifeline utilities (e.g. bridges, roading, electricity)	Plan and resource	ADC (Infrastructure Services, Open Spaces)	0	Existing budgets / LTP 27-37
		D. Advocate gravel extraction from rivers to manage risk of flooding to community infrastructure	Advocate	ADC, Environment Canterbury	0	Existing budgets
5.2 Incorporate climat resilience and sustain in new infrastructure and subdivisions	nability	A. Integrate climate resilience and sustainability principles into the planning phase, including consideration of options, for all new Council infrastructure projects and infrastructure to be vested in Council.	Plan and Resource, Advocate, Influence	ADC (Infrastructure Services, Open Spaces)	0	LTP infrastructure commitments (roading, stormwater, wastewater, drinking water)
		B. Integrate climate resilience and sustainability principles into the design, and construction of all new Council infrastructure projects and infrastructure to be vested in Council	Plan and Resource, Advocate, Influence	ADC (Infrastructure Services, Open Spaces), AECL	0	LTP Budgets current and futu
		C. Investigate sustainable funding and financing opportunities for Councils infrastructure investments.	Plan and resource	ADC (Finance, Assets, S&P)	0	Existing budgets
5.3 Make greater use of durable, low-carbon materials for infrastructure projects		A. Investigate different types of construction materials and prioritise the use of durable, low carbon alternatives in all new designs and builds where possible. Measure outcomes and report to Council to assess whether the investment has realised the expected benefits	Plan ADC (Infrastructure Services, Open Spaces), and AECL		NEW \$25,000 (one -off)	

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6. Transition to a low carbon future

GOAL 6: Rec	luce greenhouse gas emissions to mitigate the impacts of climate cha	nge and create o	n more sustainabl	e future.	
Objective	Action	Role of ADC	Who	When	Budget
6.1 Set an emissions reduction target for Council activities	A. Research and present emission reduction scenarios to Council.	Plan & Resource	ADC	(within 6 months)	Existing budgets
	B. Adopt an overall emissions reduction target for council greenhouse gas emissions that is achievable.	Plan & Resource	ADC	(by 30 June 2026)	Existing budgets
	C. Set interim emission reduction targets to ensure we are progressing to our overall reduction target	Plan and resource	ADC	ST O	Existing budgets
6.2 Continue to measure Council's GHG emissions, and adopt and implement emissions reduction plan	A. Continue to measure Council's GHG emissions annually and audit the inventory	Plan	ADC (Infrastructure Services)	0	NEW: \$9,000 p.a. (audit)
	B. Make use of the emissions reduction plan to reduce ADC's emissions and report progress to the community	Plan	ADC (Comms, Infrastructure Services)	0	Majority in existing budgets NEW: \$30,000 for EV chargers (one-off, spread over 2 years LTP 27-37)
	C. Publish the annual emissions report detailing Council's progress, key sources of emissions, and reduction achievements	Plan and resource	ADC (Infrastructure Services)	0	Existing budgets
	D. Develop an emissions dashboard that the public can access online that displays real-time or regular updated emissions data, trends and targets	Plan	ADC (Infrastructure Services)	ST O	NEW \$2,000 p.a.
6.3 Promote and encourage sustainable transport in the community	A. Invest in walking & cycling infrastructure to reduce emissions through the Walking & Cycling Strategy 2020 – 2030. ADC	Plan and resource	ADC (Roading)	0	Existing budgets (when funding available)
	B. Encourage community to make use of sustainable ways of transport as stated in goal 4 Walking & Cycling Strategy (Goal 4: A district committed to walking and cycling for health, well-being, safety, environmental and economic reasons) ADC	Plan and resource	ADC (Roading, Comms)	ST	Existing budget
	C. Advocate for the implementation of public transport services in Ashburton (town) and other parts of Canterbury.	Advocacy	ADC, Environment Canterbury	0	Existing budget
	D. Investigate implementation of workride benefit programme for ADC and promote to other organisations	Plan and resource, Support	ADC (Comms, P&C)	ST	Existing budget

CLIMATE CHANGE & SUSTAINABILITY STRATEGY

CLIMATE CHANGE & SUSTAINABILITY STRATEGY

GOAL 6:

Reduce greenhouse gas emissions to mitigate the impacts of climate change and create a more sustainable future.

Objective	Action	Role of ADC	Who	When	Budget
6.4 Increase carbon sinks in the Ashburton District	A. See Goal 2.3.C – 'Investigate and support the development of constructed wetlands around the district.' (This also includes planting trees) + acknowledge the existing carbon sinks in the district	Support	ADC, Community, Environment Canterbury, AECL	MT LT	See 2.3.C (LPT 27-37)
6.5 Engage with and educate the community on greenhouse gas emissions	A. Launch an education and outreach program, aimed at increasing awareness and understanding of greenhouse gas emissions among community members and local businesses, with the goal of fostering sustainable practices and reducing emissions.	Plan	ADC (Infrastructure Services, Comms)	ST	Funded in 3.2.C
6.6 Support regional work on emissions reduction that enables the region to thrive.	A. Support regional collaboration to collate data and develop models to prepare greenhouse gas emissions inventories and identify emissions reduction pathways for Canterbury to support New Zealand's national greenhouse gas commitments CCPP	Resource and support	Canterbury Mayoral Forum	ST O	Existing budget
	B. Support regional collaborative work to undertake a regional transition risk and opportunities assessment, considering social, cultural, environmental, and economic impacts, to inform an equitable and inclusive transition to a low-emissions region. CCPP	Resource and support	Canterbury Mayoral Forum	ST O	Existing budget
	C. Support regional collaborative work with partners, communities, and key stakeholders to build a regional low-emissions transition strategy that supports equitable, inclusive local pathways to a thriving, climate-resilient region meeting emissions reduction targets. CCPP	Resource and support	Canterbury Mayoral Forum	ST O	Existing budget
	D. Support the implementation of equitable, inclusive local pathways to a thriving, climate-resilient region meeting emissions reduction targets CCPP	Resource and support	Canterbury Mayoral Forum	мт О	Future budget to be considered in 2027 LTP

Action plan estimated costs (new actions)

		LTP 24-34					LTP 27-37				
Objective	Action	Year 3 (26-27)	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9
Goal 1:	1.2B	3.2C									
Goal 1:	1.3A	3.2C									
Goal 1:	1.3B		\$5M	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
Goal 2:	2.1A	\$40,000									
Goal 2:	2.3A	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000
Goal 2:	2.4A	3.2C									
Goal 3:	3.1B	\$50,000					\$50,000				
Goal 3:	3.2C	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000
Goal 3:	3.3B				\$50,000					\$50,000	
Goal 3:	3.5C	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000
Goal 3:	3.5E				\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000
Goal 4:	4.1G				\$60,000						
Goal 4:	4.4A	3.2C									
Goal 5:	5.3A				\$25,000						
Goal 6:	6.2A	\$9,000	\$9,000	\$9,000	\$9,000	\$9,000	\$9,000	\$9,000	\$9,000	\$9,000	\$9,000
Goal 6:	6.2B				\$15,000	\$15,000					
Goal 6:	6.2D	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000
Goal 6:	6.5A	3.2C									

(note: costs are to be approved through the Annual Plan or Long Term Plan budget process)

CLIMATE CHANGE & SUSTAINABILITY STRATEGY CLIMATE CHANGE & SUSTAINABILITY STRATEGY

Glossary

Below is a glossary of terms in the context of this Strategy.

Adaptation in human systems, the process of adjustment to actual or expected climate and its effects, to moderate harm or exploit beneficial opportunities in natural systems, the process of adjustment to actual climate and its effects

Biodiversity is a short term for "biological diversity". Biodiversity describes the level of diversity in natural life. This includes the variety of different species (micro-organisms and fungi, trees, plants and animals), the genes they comprise, and the ecosystems they are a part of.¹⁹

Blue Green Network (BGN) Blue-green networks are a planning approach that focuses on creating a network of interconnected waterways, wetlands, parks, greenways, and other natural areas to provide multiple benefits, including flood management, stormwater management, climate change resilience, improved water quality, protection of biodiversity, and opportunities for recreation, tourism and community engagement.

Carbon dioxide (CO₂) is a gas present in the atmosphere, required for plant growth. Plants take in carbon dioxide from the air. They keep the carbon to help them grow and let the oxygen back out into the air. It is also an important greenhouse gas, contributing to global emissions as the gas traps heat in the atmosphere for 300 to 1000 years²⁰. (see Greenhouse Gases)

Carbon sequestration is the process of capturing and storing carbon dioxide. It is one method of reducing the amount of carbon dioxide in the atmosphere with the goal of reducing global climate change.

Carbon sink a natural or artificial system that absorbs more carbon dioxide (CO₂) from the atmosphere than it releases, effectively storing it. Examples include forests, oceans, and soils. Carbon sinks play a vital role in the carbon cycle by helping to regulate the amount of CO₂ in the atmosphere.

Climate Change a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere, and which is in addition to natural climate variability observed over comparable time periods.

Denitrifying bacteria are microorganisms that convert nitrates in the soil into nitrogen gas. This is essential for preventing its accumulation in the soil and maintaining the balance of the nitrogen cycle.

Ecosystem is a community of living organisms (plants, animals and microbes) interacting with each other and their environment in a particular area.

Food forest also called a forest garden, is a garden of diverse planting of edible plants that attempts to mimic the ecosystems and patterns found in nature.

Fossil fuel a non-renewable, natural fuel such as coal or gas, formed from plants and animals that existed in the geological past (for example, millions of years ago).

Greenhouse Gases (GHG) these are also known as GHGs and are gases in the earth's atmosphere that trap heat. The main greenhouse gases are carbon dioxide (CO_2), methane (CH4), nitrous oxide (N_2O), sulphur hexafluoride (SF6), hydrofluorocarbons and perfluorocarbons.

Infrastructure is the basic structures and facilities (e.g. buildings, roads, water supplies, power supplies) needed for the operation of a community or organisation.

Manaakitaka an outward-looking behaviour, demonstrating a genuine desire to care for the wellbeing of a person, area or environment.

Methane (CH4) is a powerful but short-lived greenhouse gas. It stays in the atmosphere for about 10 years, where it traps heat more effectively than carbon dioxide²¹. (see Greenhouse Gases)

Microforestry the practice of creating small, dense, and biodiverse forests in urban and rural areas. This method involves planting a mix of native tree and shrub species very close together, which encourages rapid growth and high biodiversity values.

Mitigation a human intervention to reduce greenhouse gas emissions or enhance the sinks of greenhouse gases.

Nature-based solutions approaches that use natural processes to address societal challenges and improve biodiversity. These approaches harness the power of nature to provide benefits for both the environment and human wellbeing.

Nitrous oxide (N₂O) has a lifetime between those of CO₂ and methane. In the context of achieving the temperature goals of the Paris Agreement, it can be considered a long-lived gas²² (see Greenhouse Gases).

Nutrient filters any mechanism or process that removes or reduces the concentration of nutrients, such as nitrogen, phosphorus, or other essential elements, from water or soil. In soil, for example, riparian buffers and other vegetation can act as filters, reducing nutrient runoff into waterways.

Paris Agreement an international agreement signed by New Zealand and other United Nations members to prevent global warming from exceeding 2 degrees Celsius above pre-industrial evels.

Precipitation rain, snow, sleet, or hail that falls to or condenses on the ground.

Regenerative farming a holistic approach to agriculture that aims to rebuild and enhance soil health and biodiversity, ultimately creating more resilient and productive farms. Key aspects of regenerative farming include focus on soil health, reducing synthetic inputs, restoring biodiversity, carbon sequestration, improved water cycle and increased resilience.

Resilience the capacity of social, economic and environmental systems to cope with a hazardous event or trend or disturbance, responding or reorganising in ways that maintain their essential function, identity and structure while also maintaining the capacity for adaptation, learning, and transformation.

Salinity stress negative impacts, including impaired plant growth and development, caused by excessive salt accumulation in soil or water. This can be caused by rising sea-levels in coastal areas.

Sediment transport is the movement of solid particles (sediment), typically due to a combination of gravity acting on the sediment, and the movement of the fluid which carries the sediment. For example, the transport of sediment in river flows.

¹⁹ Ashburton District Biodiversity Strategy, p 9.

²⁰ https://environment.govt.nz/guides/methane-and-other-major-greenhouse-gases/

 $^{21 \}quad https://environment.govt.nz/guides/methane-and-other-major-greenhouse-gases/$

²² https://environment.govt.nz/guides/methane-and-other-major-greenhouse-gases/

Climate Change & Sustainability Strategy

Our Place: Our Future

