

7.7 QUARTERLY CLIMATE CHANGE UPDATE

Information Only - No Decision Required

Report To:	Strategy and Policy Committee
Meeting Date:	28 May 2024
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1. Summary / Te Tuhinga Whakarāpoto

- 1.1 This report provides updates on progress with the implementation of the Tasman Climate Response Strategy and Action Plan (2024-2034). It also provides climate change updates in brief at the regional, national and international levels. Our response to an information request received from the Minister of Climate Change on adaptation preparedness is included in section 4 of this report.

2. Recommendation/s / Ngā Tūtohunga

That the Strategy and Policy Committee

- receives the Quarterly Climate Change Update report RSPC24-05-5.

3. Tasman Climate Response Strategy and Action Plan – progress update

- 3.1 An internal working group comprising 20 staff from across Council meets bi-monthly to ensure the Tasman Climate Response Strategy and Action Plan 2024-2034 progresses. Highlights from the last quarter (February to May 2024) are presented in this section.

GHG emissions inventory for 2022/23

- 3.2 The Council's greenhouse gas emissions inventory for 2022/23 was recently completed and verified by an external auditor. The report was presented to the 18 April 2024 meeting of the Strategy and Policy Committee and has now been [published on the Council's website](#).
- 3.3 Net greenhouse gas emissions from the Council's operations during the 2022/2023 financial year were 14,713 tonnes of carbon dioxide equivalents (tCO₂e). This represents a 71% reduction in emissions (i.e. 35,893 tCO₂e in total) when compared to our baseline 2020/2021 year.

Warmer Healthier Homes Initiative: Retrofit Success and Outreach

- 3.4 Council funding to Warmer Healthier Homes (WHH) contributed to approximately 40 homes being retrofitted with insulation between July 2023 and February 2024. Targeted communication to eligible households in late February led to 300 households receiving letters. The remaining funding has been used to support further retrofits.

Connecting Climate Risks and Strategic Priorities

- 3.5 Council is updating its strategic risk register to include current climate risk information. During the review, staff determines if any new risks have surfaced, if current risks have changed in likelihood or severity, and if any risks have been addressed or avoided.

Exploring Low-Emissions Refrigerant: Richmond Aquatic Centre Update

- 3.6 The investigation into switching to refrigerants with a lower emissions impact at Richmond Aquatic Centre and other Council-owned facilities has not yet started. This initiative's feasibility depends on whether "drop-in" replacements are available for existing refrigerants, which typically aligns with equipment replacement cycles.

Landfill Gas Management Update: York Valley Success, Eves Valley Delay

- 3.7 The York Valley Landfill continues to operate effectively, with gas capture and destruction levels exceeding those of the previous year. However, scoping the gas reuse system at Eves Valley Landfill has been delayed due to uncertainties in connection requirements. This work is now expected to be completed in the next financial year.

Richmond Resource Recovery Centre: Construction Waste Diversion Update

- 3.8 With our facility already in operation for over a year, the trial diversion of construction waste at the new facility at the Richmond Resource Recovery Centre is underway, with the first 3-month phase completed in November 2023. Planning for the second 3-month phase, starting in July 2024, is based on initial results from the first phase.

Mohua Golden Bay Waste Reduction Trial: Pioneering Food Waste Drop-off Service

- 3.9 To meet the goal of reducing total waste to landfill by 10% per capita by 2030, the Council is scoping a trial food waste drop-off service in Golden Bay, Mohua, as a model for centralized composting in smaller centres.

Council Staff Workshops: Eat Green for Food Waste Reduction

- 3.10 Two workshops for Council staff, centred on the "Eat Green" theme, were held in March and April. These workshops focused on preserving and fermenting as strategies to reduce food waste and maximize locally grown produce. Both were well-attended, with about 15 staff members at each session.

Advancing NTFDS: Housing Intensification and Climate Resilience

- 3.11 Implementation of the Nelson Tasman Future Development Strategy (NTFDS) continues, with a particular focus on housing intensification in locations that reduce the need for car travel and are resilient to climate risks.

Active Transport Integration in Mapua Masterplan

- 3.12 The Mapua Masterplan now includes considerations for active transport connections throughout the development. Additionally, Chesterfield Drive in the Richmond West development area has been replaced with an active transport corridor.

Streets for People projects progressing

- 3.13 The Streets for People projects in Richmond, covering Champion Road, Salisbury Road, and part of Hill Street, are in progress.

Natural Hazards Plan Change Initiative

- 3.14 Work starts to inform a future Natural Hazards plan change covering coastal hazards and sea level rise, flooding, wildfires, earthquake faults, liquefaction, and slope instability, to ensure that our communities are resilient to natural hazards and adapt to the effects of climate change. See the separate committee report for further information.

Pest Database Review and Wasp Biocontrol Engagement

- 3.15 The biodiversity and biosecurity teams are reviewing the pest database for improved usability. Additionally, they are engaging with landowners on wasp biocontrol in Wainui Bay.

Enhancing Biodiversity and Climate Resilience: Tasman Strategies Alignment

- 3.16 Integration between the Tasman Biodiversity Strategy plan and the Tasman District Council's Climate Response Strategy continues to ensure biodiversity projects are climate-resilient and provide co-benefits like carbon sequestration, nature-based solutions against climate impacts and community resilience. Collaboration fosters a diverse, cross-sector community network focused on local biodiversity protection and restoration, thus enhancing community resilience to climate change.

Climate Resilience Tasman

- 3.17 Work on the Climate Resilience Tasman Hub is progressing. This hub is meant to connect and inspire people across the organisation, to communicate our progress, insights, and action in the climate and resilience space, as well as to stimulate knowledge exchange among staff. We are developing a strategy to collect varied experiences, case studies, and information from Council staff.

Rural Resilience Expo

- 3.18 On Saturday, April 21, the first Wakefield Rural Resilience Expo started. A community gathering to better inform and educate the Wakefield and Tasman communities about natural disaster preparedness and self-sufficiency.
- 3.19 Several organisations offered information and 20-minute seminars throughout the day. Interactive displays for both adults and children marked the beginning of resilience discussions.

Climate Education Programme in Local Schools

- 3.20 Dr. Will Stovall has been engaged to deliver a climate change education program in Mahana, Lower Moutere, and Wakefield Schools during Term 2, 2024. This comprehensive program is a pilot initiative, with plans to expand to more schools from Term 3, 2024, onwards.

Take the Jump Campaign

- 3.21 The Take the Jump campaign is being rolled out internally with staff, with recent workshops focusing on low-emission opportunities. As part of this initiative, Take the Jump ambassadors were invited to participate in the Tasman Mission sustainability race for Tasman school students, where the "Dress retro" theme sparked interesting conversations about reducing environmental impact.

4. Call for data on adaptation preparedness

- 4.1 On 26 February 2024, the Minister of Climate Change requested data on adaptation preparedness from across selected organisations, including councils, under section 5ZW of the Climate Change Response Act 2002 (see letter in Attachment 1).
- 4.2 This is the second request received by council, to strengthen New Zealand's ability to adapt to the effects of climate change and to track progress in adaptation preparedness (the previous request was received in 2020).
- 4.3 The Minister of Climate Change may call for adaptation preparedness data under section 5ZW of the Climate Change Response Act 2002. This is the second request that Council has received, as a selected organisation subject to section 5ZW with critical policy and service delivery functions.
- 4.4 The survey sought information on governance processes, awareness of climate change impacts, strategies or plans in place, and any support needed.
- 4.5 The council responded to the survey, which was reviewed by the Executive Leadership Team and submitted information online on 9 April 2024. A copy of the completed survey is included in Attachment 2 to this report.

5. Regional update

Te Uru Kahika regional climate change hui

- 5.1 The Climate Change Special Interest Group of Te Uru Kahika met in Hamilton on April 29 and 30 to develop a strategy for the regional sector's role in responding to climate change, collaborate with Government, and improve the visibility of resilience-focused initiatives across the sector.
- 5.2 Te Uru Kahika, comprising New Zealand's 16 regional and unitary councils, collaborates to leverage their expertise and local insights for environmental and community welfare. Their collective responsibilities include integrated land, air, and water resource management, biodiversity, regional transport, and enhancing community resilience against climate change and natural hazards. Senior Climate Change Policy Advisor, Barbara Lewando, attended the hui.

Moananui Ocean Cluster

- 5.3 Staff is exploring partnership opportunities with Nelson-based [Moananui](#), a new technological cluster organisation that facilitates collaboration of organisations and businesses within the ocean economy sector.
- 5.4 In 2023, Moananui secured \$500,000 through the Ministry for Primary Industries' Sustainable Food and Fibre Futures fund to help the cluster get up and running. A further \$400,000 will be invested by Moananui's nine founding partners.
- 5.5 With start-up funding now secured, Moananui can actively drive innovation projects with the purpose of attracting capability, capacity, and capital to the region. With nearly 400-maritime related businesses in Tasman and Nelson, we have the largest fishing port in Australasia, and play host to a range of scientific organisations and emerging blue technology companies.

Nelson-Tasman Joint Waste Management Minimisation Working Party

- 5.6 A Joint Waste Management Minimisation Review Working Party has been formed for Nelson Tasman to review the Joint Waste Assessment Plan and make recommendations for future actions. Led by Karen Lee from NCC, the groups include representatives from both councils. The working party has started to draft the plan, while concurrently finalising the Joint Waste Assessment.

Nelson-Tasman Regional Climate Change Risk Assessment project

- 5.7 As outlined in previous 'Climate Change Update' reports, we are working together with NCC and iwi partners to undertake a [Regional Climate Change Risk Assessment](#) (RCCRA) for both the Tasman and Nelson regions.
- 5.8 This work is being led by consultant [Urban Intelligence](#). The project aims to evaluate and communicate climate change risks, as well as cascading risks and impacts¹. The outcome is a 'living' platform called the 'Risk Explorer' that can be used by councils, iwi, businesses, organisations, and communities for climate adaptation planning, asset and spatial planning, and emergency planning.
- 5.9 The initial assessment is complete, and feedback from domain and place-based workshops has been gathered, with a focus on identifying hazards and screening elements at risk for each domain. Tasman and Nelson staff provided input on datasets and methodology. The consultant is preparing the regional climate change risk report. The work has now been extended to mid-May 2024.

Nelson City Council (NCC) update

- 5.1 A Climate Advisory Group's has been appointed and is working on developing a Climate Change Strategy. The Climate Change Taskforce has been established since the Advisory Group began its work and a process is now underway to involve the Taskforce in the Strategy development.
- 5.2 The Climate Action Plan, approved in 2021, is being updated as part of the work on the Climate Change Strategy. It will aim to include projects approved under the Long Term Plan (LTP) 2024-2034.
- 5.3 The climate-resilient stormwater upgrade on St Vincent Street has been successfully completed. This upgrade aims to enhance resilience against heavy rain events and mitigate flood risks.
- 5.4 NCC have and continues to provide free monthly composting workshops to the community, run from Tim's Garden, and distributed recycling and waste minimisation information in collaboration with our Council.
- 5.5 NCC is investigating implementing Workride's [Ride-to-Work Benefit Scheme](#) for Council staff. The scheme works on a salary sacrifice model and helps staff offset up to 63% of the cost of a new commuter bicycle. The scheme intends to encourage staff to commute by bike to support the reduction of staff commuting emissions, which were added as a source of GHG emissions in our latest Council Operational Footprint. The data showed that commuter emissions represent the highest travel-related GHG emissions produced by staff, ahead of air travel, council vehicles and taxis.

¹ Cascading impacts from extreme weather/climate events occur when an extreme hazard generates a sequence of secondary events in natural and human systems that result in physical, natural, social or economic disruption, whereby the resulting impact is significantly larger than the initial impact (IPCC).

Nelson Tasman Climate Forum update

- 5.6 Staff and Councillor representatives continue to attend monthly Leadership Group hui of the [Nelson Tasman Climate Forum](#).
- 5.7 Forum members are planning for Climate Action Week 2024, which will be held from 24 May to 2 June. With twenty-plus events, the festival aims to gather climate-related initiatives happening in the Tasman-Nelson region. This year, “Grounded Community” is the theme for climate action. For an overview of the week click [here](#).
- 5.8 Work on the Motueka Repair Café continues as it proves to be a successful project attracting the community, particularly the elderly. The most recent event was held on May 18 at the Motueka Library (Te Noninga Kumu). The Café recruits volunteers at the grass-root level, supported by our Council.

6. National update

Climate Change Minister now in Cabinet after reshuffle

- 6.1 In a [statement](#) to the media, Prime Minister Christopher Luxon announced a Cabinet reshuffle where Climate Change and Revenue Minister Simon Watts moved into Cabinet.

Resource management reform update

- 6.2 Soon after taking office, the Government indicated it would take a phased approach to resource management reform. During the first phase of changes, in December 2023, it repealed the Natural and Built Environment Act (NBA) and the Spatial Planning Act. Some parts of the NBA were retained, including its fast-track consenting regime, as an interim step while new legislation was developed.
- 6.3 In the second phase the Government introduced legislation for a fast-track approvals regime (to make it easier to consent new infrastructure including renewable energy and other developments). It also intends to make amendments to the RMA and will provide national direction on the Going for Housing Growth package.
- 6.4 In the third phase of reform, the Government intends to replace the existing Resource Management Act 1991 with new legislation. During April, more details were released about two Resource Management Act Amendment Bills to be introduced this year.
- 6.5 The [first Resource Management Amendment Bill](#) is expected to be introduced to Parliament in May and passed into law later this year. The Bill will contain targeted changes while new legislation is being developed, including changes to provisions in the National Environmental Standards for Freshwater (NES-F) and the National Policy Statements for Freshwater Management (NPS-FM) and Indigenous Biodiversity (NPS-IB).
- 6.6 Port coastal permits are proposed to be extended for a further 20 years, providing port operators with certainty to continue their operations. The existing permits are set to expire in September 2026. The proposed extension is intended to be included in the [second Resource Management Act Amendment Bill](#) that Government plans to introduce later this year. The Government will be consulting with key stakeholders and iwi on the proposal in the coming months.
- 6.7 A Cabinet paper released late March provides some information about the Government’s planned three phase [Work Programme for Reforming the Resource Management System](#) including indicative timeframes over the next three years for delivery of the work programmes.

- 6.8 Last year's severe weather has focused attention on the importance of both reducing our greenhouse gas emissions and preparing for the impacts. The Ministry for the Environment's work on the proposed National Policy Statement for Natural Hazard Decision-Making continues, and work is underway to create the second Emission Reduction Plan (ERP2).

Government launches inquiry to investigate climate adaptation

- 6.1 On 10 May 2024, Parliament agreed to a [cross-party investigation](#) into needed adaptation for climate change. A notice of motion enacted in Parliament gave the Finance and Expenditure Committee the authority to conduct the enquiry, which would create objectives and principles for a national adaptation framework. An all-hazards approach is to be used. Any relevant legislation is likely to be introduced in early 2025.
- 6.2 The Committee may make recommendations on:
- Minimising the long-term costs to New Zealand of adapting to the impacts of natural events.
 - Providing certainty for property owners and ensure any support is predictable, principled, and fair. This includes clarity about the Government's response and the roles of insurers, local government and other groups.
 - Improving the sharing of information so that everyone – individuals, communities, councils and industries - can make informed decisions.
 - Contributing to maintaining efficient housing and insurance markets.
 - Ensuring people have the ability and incentive to make decisions to reduce their risk where they can.
- 6.3 The Minister has indicated local government and communities are generally best placed to understand local risks and decide whether and how to protect each of their assets see [Cabinet paper: CAB-400 Progressing an adaptation framework](#).
- 6.4 Submissions to the Environment Committee will be considered as part of the Finance and Expenditure Committee Inquiry and the MfE website notes that the "*Finance and Expenditure Committee is likely to call for new and additional public submissions. Details will be made available on Parliament's website.*"
- 6.5 Decisions have not been taken on whether new legislation is required. "*Developing guiding principles is the first priority of the adaptation framework. After this, Ministers will consider if legislation is needed.*" (MfE website). The [press release](#) noted – "*Any legislation required to support the framework is expected to be introduced in early 2025.*"
- 6.6 Council staff have anticipated the need for a national climate adaptation framework and the potential involvement of local government in its implementation. Development of a regional climate adaptation strategy and 'community adaptation plans' for local areas are key actions included within the draft Tasman Climate Response Strategy and Action Plan. This work programme will need to align with any legislative criteria established by the government's proposed adaptation framework.

Emergency Management Bill not proceeding

- 6.7 The Government has decided not to proceed with the existing Emergency Management Bill. The Minister intends to introduce a new Bill this term, alongside considering system improvements using existing mechanisms in the Civil Defence Emergency Management Act

2002 and non-legislative levers. Information relating to the Government's decision to not proceed with the Emergency Management Bill is provided in [proactively released material](#).

Government works towards modernising insurance law

- 6.8 A bill intending to modernise insurance law has passed its first reading in Parliament. The Contracts of Insurance legislation would shift the onus of disclosure duties to insurers.
- 6.9 These reforms are long overdue. New Zealand's insurance law is complicated and dated, some of which is more than 100 years old. The recent extreme weather events have highlighted the ad-hoc nature of disaster recovery funding between government and private insurance companies and the need for risk-based decisions to help prepare and adapt for climate change events.

Sustainable Finance Taxonomy for New Zealand

- 6.10 The Climate Change Minister, Hon Simon Watts, has invited recommendation non-binding advice on the design for a [green \(sustainable finance\) taxonomy](#) for Aotearoa New Zealand.
- 6.11 The Ministry for the Environment is collaborating with Toitū Tahua to develop a taxonomy for environmentally sustainable activities, aiding investors in making confident decisions to support a transition to a low emissions economy. Toitū Tahua has established an independent technical advisory group (ITAG) to provide recommendations to the Government on the taxonomy's design, expected to be finalised by mid-2024.

Independent review of biogenic methane science and targets

- 6.12 The Government is to appoint an [independent Ministerial advisory panel](#) to review New Zealand's biogenic methane science and targets. The panel will be tasked with [reviewing](#) the latest science about biogenic methane to provide an up-to-date evidence base about methane's warming impact. They will also provide advice on what a biogenic methane target consistent with the principle of no additional warming would look like for New Zealand. The Government is expected to confirm terms of reference for the review and panel members in mid-2024.

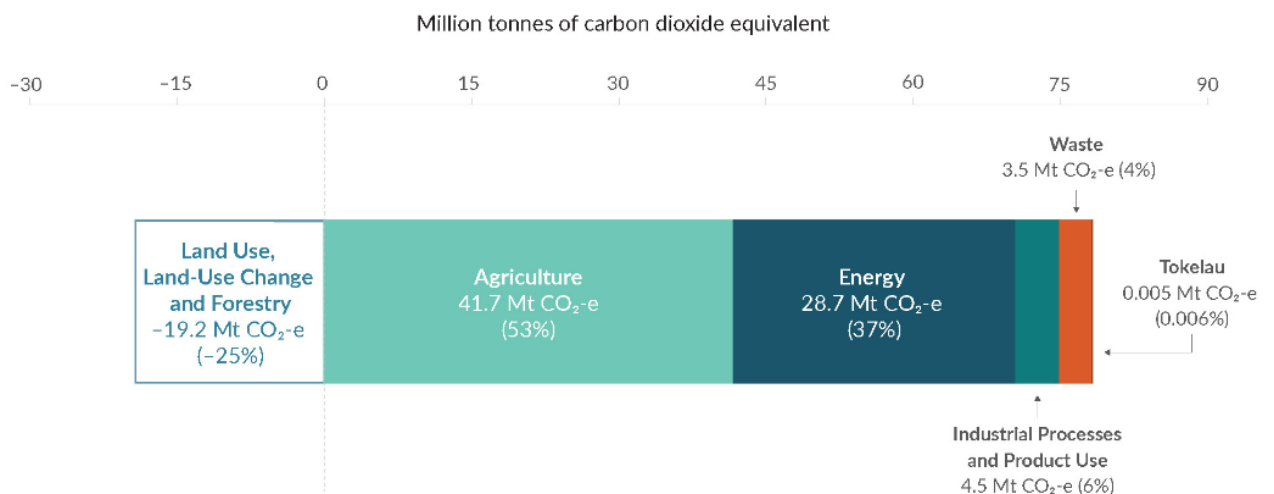
Climate Change Commission advice on the Emissions Trading Scheme

- 6.13 On 12 March 2024, the Minister of Climate Change released [He Pou a Rangi the Climate Change Commission's latest advice](#) on the New Zealand Emissions Trading Scheme (NZ ETS).
- 6.14 Under the Climate Change Response Act 2002, He Pou a Rangi Climate Change Commission provides independent evidence-based advice to the Government on the ETS unit and price control settings every year. The purpose of the advice is to help ensure the NZ ETS operates effectively and in line with Aotearoa New Zealand's emissions reduction goals.
- 6.15 This [latest report](#), covering 2025–2029, is the third time the Commission has delivered advice on NZ ETS unit limits and price control settings.
- 6.16 New evidence shows there are too many units in the NZ ETS for the Government to make best use of it to reduce emissions. This excess number of units presents a high risk that emissions budgets won't be achieved. To address this risk, the Commission advises the Government to reduce NZ ETS auction volumes as soon as possible.

- 6.17 Alongside having too many units already in the NZ ETS, the advice states that uncertainty about the Government’s priorities is affecting market and investor confidence in the scheme. This is also increasing the risk that the Government will not achieve its emissions reduction goals.
- 6.18 The Commission reiterates previous advice that the Government make clear statements about its goals for reducing greenhouse gases at their source, its goals for using forestry to absorb some emissions, and the role of the NZ ETS in achieving the emissions reductions committed to in its first Nationally Determined Contribution (NDC) under the Paris Agreement.
- 6.19 “We advise the Government to not delay action that will make the NZ ETS more capable of delivering the outcomes. The status quo will not create the stability needed by the market. Changes to the ETS now are essential to reduce uncertainty,” Dr Carr said.
- 6.20 The Government will now [consider this advice](#) and make decisions on it later this year. Following public consultation, set to occur before mid-2024, proposed changes to the ETS will be finalised by the end of September 2024.

New Zealand’s Greenhouse Gas Inventory 2022

- 6.21 New Zealand’s gross greenhouse gas emissions decreased by 3.4 million tonnes of carbon dioxide equivalent (Mt CO₂-e) in 2022, a 4% reduction compared to 2021. This amount is roughly triple the emissions produced by all domestic flights in New Zealand in 2022. This is the third successive slight decrease year-on-year.
- 6.22 New Zealand’s Greenhouse Gas Inventory (compiled by MfE) is the official annual report of all human-induced emissions and removals produced within New Zealand. [The latest inventory](#), published in April 2024, contains data from 1990 to 2022 inclusively.
- 6.23 The following graph shows New Zealand’s emissions (in Mt CO₂-e) by sector in 2022.



- 6.24 The biggest reason for the decrease in gross emissions between 2021 and 2022 was an 8% (2.5 Mt CO₂-e) decrease in emissions from energy. This was largely because there was more renewable electricity – mainly hydroelectricity – on the grid, meaning less use of coal and gas, decreasing emissions by 1.7 Mt CO₂-e.
- 6.25 Emissions from road transport decreased by 0.2 Mt CO₂-e due to decreased petrol consumption, even though the estimated kilometres travelled by petrol vehicles remained largely stable.

- 6.26 Agricultural emissions decreased by 1.4% (0.6 Mt CO₂-e) compared to 2021, because less synthetic nitrogen fertiliser was used, and the number of sheep and beef cattle fell.

Resource use and waste generation Aotearoa New Zealand

- 6.27 The Parliamentary Commissioner for the Environment has initiated an investigation into the environmental impacts of economic production and consumption in New Zealand. The investigation aims to determine the current levels of resource extraction and waste generation associated with economic activities and project future trends based on population, economic, and other factors.

- 6.28 As an initial step, a [literature review](#) has been released to assess existing research on resource use and waste generation, highlighting data gaps and proposing potential approaches to address them. The review will inform future research commissioned by the Commissioner.

Supreme Court greenlights climate case against corporate emitters

- 6.29 The Supreme Court of New Zealand has made a significant [ruling](#) in a case brought by Māori elder Mike Smith against major corporate greenhouse gas emitters. Smith's claim, seeking civil liability for these emitters' climate change contributions impacting his family's and tribe's land and cultural values, was initially dismissed by lower courts.
- 6.30 However, the Supreme Court overturned these rulings, granting Smith the opportunity to present his full case before the High Court. This decision has garnered attention locally and internationally, potentially marking a new direction in climate law. While it marks the beginning of a potentially lengthy legal process, the ruling is seen as opening a significant avenue for addressing climate-related grievances.

Report finds gas remains energy of choice for nearly half of homes

- 6.31 A new [report](#) from the Energy Efficiency Conservation Authority (EECA) has found most residential gas consumers would only replace their existing gas appliances such as water heaters, cooktops or space heaters if they break down.

\$20m flood protection plan for Westport

- 6.32 In April the government announced \$20 million in funding will be made available to Westport to fund much-needed flood protection around the town.
- 6.33 \$2 million of the allocated funding will also go towards property-level adaptation measures for those outside the stop banks. Organs Island, upstream from the town, will be transferred to West Coast Regional Council management to slow flood waters as part of the funding.
- 6.34 Construction of the stop banks is expected to begin this year and be completed by 2027. The West Coast Regional Council will also co-invest in this work with its contribution being confirmed in its draft Long Term Plan.

Submission opportunities

- 6.35 The Council lodged a submission on the draft [Government Policy Statement on Land Transport](#) prior to the submission deadline of 2 April 2024. Retrospective approval of this submission was sought at the Strategy and Policy Committee meeting held on 18 April.
- 6.36 The Council lodged a submission on the [Fast-track Approvals Bill](#) before the submission deadline of 19 April 2024. Retrospective approval of this submission was sought at the Environment and Regulatory Committee meeting held on 24 April. The Select Committee report is due on 7 September 2024.

- 6.37 An [expert advisory group](#) will provide independent recommendations to Ministers on projects to be included in the Fast Track Approvals Bill was announced on 10 April. Project applications can be made to the Ministry of Environment until 3 May. The Advisory Group will be engaged between April and July 2024, and will be supported by the Ministry for the Environment and the Ministry of Business, Innovation and Employment.
- 6.38 On 19 April, the Minister released a list of organisations that received letters about the Fast-track applications process, following several OIA requests. It should not be assumed that a stakeholder who received this letter will choose to submit projects to the Independent Advisory Group process. The list and letters are provided in this [press release](#) (Tasman District Council was not on this list).
- 6.39 He Pou a Rangī/the Climate Change Commission is consulting on how New Zealand can best tackle greenhouse gases with submissions on three aspects closing on 31 May 2024:
- 6.39.1 The first piece of work looks at [what the emissions budget should be for the period 2036–2040](#). Emissions budgets are stepping stones towards the country’s long-term emissions reduction target. They set a cap on the maximum amount of climate pollution that Aotearoa New Zealand can emit in a five-year period.
- 6.39.2 The second piece of work looks at [the country’s 2050 climate target](#). When the Commission develops advice on the next emissions budget, it also does a sense check of that long-term target.
- 6.39.3 The third piece of work also relates to the 2050 target – but is focused on [whether emissions from international shipping and aviation should also be included in it](#), like emissions from domestic shipping and aviation already are.

Due to the submission period coinciding with LTP submissions, staff have not had time to prepare submissions from the Council on any of these matters. However, we met with the Commissioner and some of her staff on 7 May to discuss the submission opportunities and provide verbal feedback.

7. International update

OECD releases economic report for New Zealand

- 7.1 The Organisation for Economic Co-operation and Development (OECD) released its [annual survey](#). The country is being told it needs to get inflation under control, balance the books, raise educational achievement, and lift productivity.
- 7.2 The OECD also said that the country needed a more systematic approach to cutting greenhouse gas emissions and coping with climate change.
- 7.1 It also said the Emissions Trading Scheme (ETS) needed to be reviewed in how forestry resources are accounted for, while the pricing of agricultural emissions needed to be settled.
- 7.2 It also stated that the recent cyclones had exposed the ad hoc nature of disaster recovery funding between the government and commercial insurance firms, as well as the necessity for risk-based decisions to help prepare for and adapt to climate change. Here's a [video](#) overview.

NZ-European Union Free Trade Agreement enters into force

- 7.3 [New Zealand's free trade agreement \(NZ-EU FTA\)](#) with the European Union, one of the world's largest trading entities, entered into force on 1 May 2024. The NZ-EU FTA is one of

the highest quality and most comprehensive free trade agreements that New Zealand has ever concluded. The agreement opens new opportunities for NZ to deepen business connections and offers significant benefits to our economy.

- 7.4 The NZ-EU FTA also establishes a sanctionable commitment for both parties to “effectively implement” their 2030 climate targets under the Paris Agreement.

UK Carbon Border Adjustment Mechanism

- 7.5 The UK Government has announced a plan to introduce its [carbon border adjustment mechanism \(CBAM\)](#) by 2027. The UK CBAM will impose a tariff on a range of high-carbon goods imported from countries with weaker emissions regulations to prevent carbon leakage and protect UK firms from being undercut by less-regulated foreign competitors.
- 7.6 The UK mechanism builds from the European Union’s carbon border adjustment mechanism started in Europe in 2023. CBAM is the first regime of its kind in any emission trading system, a WTO-compliant measure that boosts global sustainability.

European court rules climate inaction by States breaches human rights

- 7.7 The European Court of Human Rights [ruled in favour](#) of Swiss women, deeming the government’s climate efforts inadequate and a violation of human rights due to the vulnerability of older women to heatwaves.
- 7.8 This landmark decision affects 46 European countries and emphasises the legal obligations to combat climate change. It sets a precedent for future litigation on climate change’s impact on human rights and highlights the importance of national agreements like the Paris Agreement.
- 7.9 Although the Swiss case was decided under a particular legal, constitutional, and institutional setting, in many respects different to New Zealand, there is much in the decision that could inform New Zealand judicial responses to common issues which, like greenhouse emissions themselves, know no national borders.

Latest IPCC climate change report released

- 7.10 The [synthesis report](#) provides an overview of progress made in formulating and implementing national adaptation plans (NAPs).
- 7.11 It covers experiences, best practices, lessons learned, gaps, and needs in the NAP process. Additionally, it assesses the support provided and received by countries in their efforts to adapt to climate change.

Compendium of Good Practices on Quality Infrastructure 2024: Building Resilience to Natural Disasters

- 7.12 OECD has published a [compendium report](#) that outlines seven global practices for infrastructure resilience: life-cycle approach, collaboration, risk assessment, impact measurement, capacity building, preventive maintenance, and technology deployment.

AI energy use

- 7.13 A [recent article](#) notes that AI already uses as much energy as a small country, and the energy needed to support data storage is expected to double by 2026. A single ChatGPT request uses roughly 900 times more energy than a Google search.

Tackling climate change with artificial intelligence and machine learning

- 7.14 Addressing climate change involves mitigation (reducing emissions) and adaptation (preparing for unavoidable consequences). Both are multifaceted issues. Mitigation of greenhouse gas emissions requires changes to electricity systems, transportation, buildings, industry, and land use. Adaptation requires planning for resilience and disaster management, given an understanding of climate and extreme events. Such a diversity of problems can be seen as an opportunity: there are many ways to have an impact.
- 7.15 In recent years, machine learning and artificial intelligence have been recognized as a broadly powerful tool for technological progress. Despite the growth of artificial intelligence to problems of societal and global good, there remains the need for a concerted effort to identify how these tools may best be applied to tackle climate change.
- 7.16 The recent [launch](#) of the UN-led [AI Advisory Body](#) advanced a growing global trend to harness machine learning and artificial intelligence to find solutions to common challenges. AI is upping the data crunching game and a growing number of governments, businesses and civil society partners are working together to reap its many benefits.

8. Attachments / Tuhinga tāpiri
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| 2. | Council's response to the call for data on adaptation preparedness | 16 |

Hon Simon Watts

Minister of Climate Change
Minister of Revenue



26/02/2024

To: selected organisations subject to section 5ZW of the of the Climate Change Response Act 2002

I am calling for data on your adaptation preparedness

A priority for this government is to strengthen New Zealand's ability to adapt to the effects of climate change. I am now calling for adaptation preparedness data under section 5ZW of the Climate Change Response Act 2002. This request is being made to selected organisations subject to section 5ZW with critical policy and service delivery functions.

I am asking you to provide high-level information about how your organisation is preparing for the impacts of climate change. It has been over three years since the last call for data, and 18 months since our first National Adaptation Plan was published, so it is timely to track progress in adaptation preparedness.

With this call for data, I am requesting information about:

- your organisation's governance processes relating to risks of, and opportunities arising from, climate change
- your organisation's general awareness and understanding of the actual and potential effects of the risks and opportunities on the organisation's ability to carry out its functions and deliver services
- strategies or plans your organisation may have in place to address these risks, improve resilience and/or adapt to the impacts of climate change
- any support or resources your organisation might need to better prepare for the impacts of climate change.

Please provide adaptation preparedness data via online survey by 12 April 2024

Please access and respond to all questions via the online survey at this link ([Monitoring adaptation preparedness – call for data](#)) by 12 April 2024. Please use information you already have available.

Information your organisation provides will be handled securely, as laid out in the Privacy Act 2020

I am required to share the information received in response to this request with the Climate Change Commission.

I do not intend to publicly disclose organisation-specific information gathered through this survey. Neither the Climate Change Commission or I can publicly disclose any information received in response to this request unless its disclosure is necessary to perform a function or duty imposed by part 1C of the Climate Change Response Act 2002.

Information gathered through this survey may be subject to requests under the Official Information Act 1982. However, there is provision for the protection of commercial or trade sensitive information.

Providing personal information is not mandatory. Any personal information supplied will only be used in relation to information requests including section 5ZW. You have the right to request access to or correct any personal information you supply.

Thank you for your participation in this call for data. If you have any questions, please contact adaptation@mfe.govt.nz.

Yours sincerely,

A handwritten signature in blue ink that reads "Simon". The signature is stylized with a large 'S' and a cursive 'imon'.

Hon Simon Watts
Minister of Climate Change

Private Bag 18041, Parliament Buildings, Wellington 6160
s.watts@ministers.govt.nz

From: Climate Change Adaptation <adaptation@mfe.govt.nz>

Sent: Thursday, March 7, 2024 2:40 PM

To: Anna Gerraty <Anna.Gerraty@tasman.govt.nz>; Paula Dempsey <paula.dempsey@tasman.govt.nz>; Barbara Lewando <barbara.lewando@tasman.govt.nz>; Diana Worthy <Diana.Worthy@tasman.govt.nz>; Leonie Rae <leonie.rae@tasman.govt.nz>

Cc: Climate Change Adaptation <adaptation@mfe.govt.nz>

Subject: Minister of Climate Change's call for adaptation preparedness survey

Kia ora koutou

Please see the call for data request below, with the link to the survey included in the button below.

Ngā mihi

Climate Adaptation

Tēnā koe,

We are contacting you on behalf of the Minister of Climate Change to request high-level information about how your organisation is preparing for the impacts of climate change.

The information will be used to track progress on adaptation preparedness since the last call for data three years ago, and the release of the first National Adaptation Plan in 2022.

The Minister is making the call under section 5ZW of the Climate Change Response Act 2002, to selected organisations subject to section 5ZW with critical policy and service delivery functions.

Please submit your response via the online survey by Friday 12 April 2024. Only one person should fill out the survey on behalf of your organisation. The Ministry for the Environment will hold drop-in sessions in March to support with completing the survey. If you have any questions, you can contact us via adaptation@mfe.govt.nz.

Please click the button below to read the Minister's request and access the survey.

Personal Information

Providing personal information is not mandatory. Any personal information supplied will only be used in relation to information requests including section 5ZW. You have the right to request access to or to correct any personal information you supply. If you have any questions, please contact adaptation@mfe.govt.nz.

1. What is your name?

Barbara Lewando

2. What organisation do you work for?

Tasman District Council

3. What is your role?

Senior Climate Change Policy Advisor

4. Please provide contact email.

barbara.lewando@tasman.govt.nz

5. Please indicate if you are happy for the Ministry for the Environment to use the contact details provided above for broader climate change-related communications.

Yes, please also email these to anna.gerraty@tasman.govt.nz as together we co-lead TDC's climate response work programme.

6. If this response includes information related to subsidiary organisations, please name these organisations below.

Risks and Impacts

These questions are intended to test general awareness and understanding of impacts and risks from climate change.

1. Is your organisation aware of the impacts that climate change may have on its ability to carry out functions and deliver services? For example, impacts from increased flooding, sea-level rise, more heat waves, more intense storms, more droughts and wildfires.
 - a. Climate change impacts are well understood and documented
 - b. Climate change impacts are acknowledged but only partially understood or documented
 - c. Climate change impacts are poorly understood and not documented or considered
 - d. We have not considered climate change impacts to date
 - e. Unsure

2. Please provide further details on why you selected the option you did. For example, links to reports.

Weaving Council's climate response into our Long Term Plan

Work is continuing on adapting Tasman District to the impacts of climate change and growing our resilience. In particular, we are taking an adaptive planning approach, as recommended by the Ministry for the Environment. A comprehensive regional climate change risk assessment is being completed in collaboration with Nelson City Council. This will enable a better understanding of climate change risks, and the consequential impacts on people, economy, governance, and the built and natural environments. The risk assessment will inform our identification and evaluation of a range of adaptation options. Community engagement will be a critical part of the identification and assessment of options.

We also have a significant programme of work aimed at reducing our own operational emissions and supporting the Tasman community to reduce its emissions. Work on further reductions in Council and community emissions is included across the ten years of the Plan.

We have developed a comprehensive draft Tasman Climate Response Strategy and Action Plan. It provides detailed actions we plan to take across a wide range of Council's activities. Priority actions include: emission reduction measures in the transport, energy and waste sectors; empowering communities to act; initiatives to strengthen the resilience of our communities and ecosystems.

Budgets addressing climate change and resilience are embedded across many parts of what we do. Often these actions are not planned solely to address climate change and have other substantial benefits. Our Action Plan shows what we plan to spend and where we intend to spend it over the next 10 years.

For more information on our climate response see Tasman Climate Response Strategy and Action Plan | Shape Tasman.

Nelson-Tasman Risk and Resilience Explorer

Since mid-2022 we have been working together with Nelson City Council to undertake a regional climate change risk assessment for both Nelson and Tasman regions. We have engaged Urban Intelligence to undertake the assessment and develop a geospatial tool: the Nelson Tasman Resilience Explorer. These outputs are nearing completion but have not yet been finalised or released to the public. A demo of the resilience explorer tool is available on Urban Intelligence's website: <https://resilience-explorer.org/> - ours will look similar to this. This explorer tool will need to go through significant internal testing prior to any possible future public release.

NIWA reports on climate-related risks

Two NIWA reports specific to the Tasman region, available online here <https://www.tasman.govt.nz/my-region/climate-change/how-is-climate-change-affecting-tasman-district/>, cover:

- changes which may occur over the coming century in the climate of the Tasman region, and outlines some of the possible impacts of these changes (2015 report)
- climate change projections for Tasman and impacts on agricultural systems (2019 report).

Regulatory:

River flooding and stormwater modelling: key areas of the district have been modelled which include future scenarios incorporating the effects of climate change (e.g. increased rainfall, sea level rise).

Coastal storm inundation and sea level rise scenarios: [Coastal Management Project – Responding to Climate Change](#)

Wildfire risk: Staff have previously worked in partnership with Nelson City Council, Marlborough District Council and FENZ, to compile background information and increase staff knowledge to inform our resource management plan reviews. Work has been on hold the last couple of years due to staff resourcing, however both Tasman and Nelson staff have renewed interest in reestablishing this work.

In determining resource and building consent processes, natural hazards including the effects of climate change are considered. Examples include consideration of inundation (freshwater and seawater) and sea level rise. In 2019 the Council started review of our Tasman Resource Management Plan, however the review has significantly been affected by the resource management reform. More recently, a targeted work programme of plan changes has been agreed which focuses on growth, land and freshwater, and natural hazards. It is recognized that there is a need to strengthen the plan provisions to address climate change effects including sea level rise, and the increased frequency and severity of weather-related natural hazards events e.g. river flooding, coastal inundation, slope failure, drought, wildfire, and wind.

Service delivery:

Council has an ongoing programme of work in place to undertake river flooding and stormwater modelling for key areas of the district. Model runs include scenarios showing the effects of climate change (e.g. increased rainfall, sea level rise).

Natural hazards and climate change effects are also considered through our Long Term Plans (LTP) and Annual Plans (AP), Activity Management Plans (AMPs) and service delivery.

3. Does your organisation have access to data related to the impacts from climate change?
 - a. Yes – at a regional, local and asset level
 - b. Yes – at a regional and local level**
 - c. Yes – at a regional level
 - d. No
 - e. Unsure

The GIS system allows us to view climate-related risks at a regional, local and some asset levels.

4. Please provide details on any data gaps you are aware of for specific climate change impacts.
 - Climatic impacts at an asset level
 - Specific information regarding ocean acidification and saltwater intrusion
 - Understanding the impact of wildfire at a local level,
 - broader impacts such as community wellbeing and social cohesion.

Service Delivery

We have focused on mapping our three waters assets and their criticality against a range of natural hazards, many of which will be impacted by climate change. Where the nature of those changes are known the scenarios have been included in our mapping tool, but we are aware that many gaps remain.

5. Specifically, has your organisation assessed its exposure to climate change impacts, in terms of its ability to continue to carry out functions and deliver services? Note: this includes the exposure of the communities to which these services are provided.

- a. Yes, accurate (quantitative) exposure data is held for all relevant climate change impacts
- b. Accurate exposure data is held for some climate change impacts
- c. No accurate exposure data, but climate change impacts relevant to our organisation are documented
- d. Limited or no understanding and assessment of exposure to relevant climate change impacts
- e. Unsure

6. Please provide further details on why you selected the option you did. For example, links to reports.

Service Delivery

Natural hazards and climate change effects are considered through our [Long Term Plans](#) (LTP) and Annual Plans (AP), [Activity Management Plans](#) (AMPs) and service delivery.

Climate change scenarios: We have developed a resource for use in LTP and activity/infrastructure planning, called 'Impacts and Implications of Climate Change on Tasman District'. It sets out the predicted climate change scenarios for our District from the latest [NIWA reports](#) and lists the corresponding potential impacts on service delivery. Each AMP author tailors the impacts and implications of these scenarios to their specific activity.

Three Waters: A risk and resilience work programme is being undertaken to better understand the impacts of climate change on three waters infrastructure (water supply, stormwater, wastewater). A key feature of this work includes asset criticality. By including asset criticality staff can get an immediate indication of impact on communities.

Lifeline Infrastructure: Council has, in partnership with Nelson City Council, Nelson Tasman Civil Defence Emergency Management Group and other utility providers, prepared the [Nelson Tasman Lifelines Report](#). Within the report (last updated in 2018) a number of actions were identified to improve Council-owned infrastructure resilience.

Reserves and Facilities: Council has a number of coastal esplanade reserves which can be subject to erosion and accretion. In areas where we have erosion occurring, we are working with communities to re-establish coastal dunes and are undertaking coast care plantings of spinifex and pingao. In some situations residents are seeking hard structures (e.g. rock walls) on the reserves in front of their properties to help protect their properties from erosion. Council has sought extensive legal advice on the issues relating to liabilities for structures on its reserves and who is liable if these structures fail or cause end effects on neighbouring properties. In March 2024 the Council deliberated on submissions received on a draft 'Coastal Erosion Protection Structures on Council Reserve Land Policy', to deal with

landowner requests for such structures (which is separate to resource and building consent processes). We anticipate that the Council will adopt a final version of this policy within the next few months.

Regulatory

Elements at risk: Through Council's '[Coastal Management Project – Responding to Climate Change](#)', staff prepared a coastal risk assessment (2020) to understand the assets, property and facilities that are vulnerable to coastal storm inundation and up to 2m sea level rise. This includes Council infrastructure, such as parks and reserves, roads, three water infrastructure, closed landfills, etc.

This work is mentioned in the Ministry for the Environment's 2024 Coastal Hazards and Climate Change Guidance as an example of a risk assessment. The risk assessment considers the vulnerability of elements at risk at a local level, within Tasman and Golden Bays. This work will be used to inform a Natural Hazards Plan Change which is currently being scoped.

7. Specifically, has your organisation assessed its vulnerability to climate change impacts, in terms of its ability to continue to carry out functions and deliver services? Note: this includes the vulnerability of the communities to which these services are provided.
 - a. Yes, vulnerability to climate change impacts is well understood and integrated into decision making processes
 - b. **Some assessment of vulnerability to climate change impacts has been done, but this is not well embedded in organisational processes**
 - c. Limited or no assessment or understanding of vulnerability to climate change impacts
 - d. Unsure
8. Please provide further details on why you selected the option you did? For example, links to reports.

Regulatory

Community vulnerability: In 2019, as part of our Coastal Management Project – Responding to Climate Change, we sought feedback from the community on what is valued (e.g. objects, areas or experiences) that may be affected by sea level rise and coastal hazards (e.g. effects of climate change). [The community feedback report can be accessed on our website](#). This work can be used to inform Council's adaptation planning work programme.

Service Delivery

Asset vulnerability: Engineering's risk and resilience work programme is aimed at understanding asset vulnerability to natural hazards including the impacts of climate change. Through understanding this risk/vulnerability Council will be able to better plan initiatives that reduce the risk. It is likely climate change adaption will form part of that response. This work is currently on hold while staff resources are focused on development of the 2021 LTP.

National Climate Change Risk Assessment

The recently published National Climate Change Risk Assessment identified the 10 most significant risks that New Zealand faces from climate change. The risks are grouped according to five value domains: natural environment domain, human domain, economy domain, built environment domain and governance domain. For each of the risks listed below, indicate to what extent they are expected to impact the quality or consistency of services delivered by your organisation, or impact infrastructure or capital investments owned or used by your organisation. Note: this question also refers to risks affecting the communities to which these services are provided.

9. Risks to coastal ecosystems, including the intertidal zone, estuaries, dunes, coastal lakes and wetlands, due to ongoing sea-level rise and extreme weather events.
 - a. Potential for significant impacts
 - b. Potential for minor to moderate impacts
 - c. Unlikely to impact my organisation or the services it delivers
 - d. Unsure

10. Please provide further details on why you selected the option you did.

Regulatory and Service Delivery

Our experience with Cyclones Fehi and Gita in 2018 was that there was a significant impact on coastal ecology, coastal properties and coastal infrastructure. It is likely that further storms of this type will be experienced.

We are aware of the need to provide for ecosystem retreat in coastal areas, and are starting to plan for this in ecosystem restoration projects. For example, Council purchased a block of farmland near the mouth of the Waimea River (which feeds into the Waimea Inlet) and is [working to restore this area](#) by recreating a range of saltwater habitats grading into freshwater habitats further inland. The idea is that the intertidal habitats can then respond to rising sea-levels by moving inland over time.

Where Council manages coastal reserves, our current policy is to follow the guidance provided by the NZ Coastal Policy Statement. For example, where coastal erosion impacted one of the roads that ran parallel to the coastline in the recreation reserve area at Moturoa/Rabbit Island, we removed the road and do not plan to re-instate it – we are focusing on coastal dune restoration at this site instead. Also, when one of our coastal camping areas was badly damaged in during Cyclones Fehi and Gita, we upgraded the playground and water and sewerage infrastructure to cope with increased risk of inundation from the sea. In March 2024 the Council deliberated on submissions received on a draft 'Coastal Erosion Protection Structures on Council Reserve Land Policy', to deal with landowner requests for such structures. We anticipate that the Council will adopt a final version of this policy within the next few months.

11. Risks to indigenous ecosystems and species from the enhanced spread, survival and establishment of invasive species due to climate change.
 - a. Potential for significant impacts
 - b. Potential for minor to moderate impacts
 - c. Unlikely to impact my organisation or the services it delivers
 - d. Unsure

12. Please provide further details on why you selected the option you did.

Regulatory and Service Delivery

Council is aware of this risk and the potential for significant impacts. Some examples include:

- Myrtle rust has established in the top of the South and there is little that can be done to manage it on a landscape scale. How this will impact on the species diversity of indigenous ecosystems is unclear, however we are aware that in other parts of the world (Australia, Raoul Island) there has been a significant impact. There are many other strains of Myrtle rust which are more damaging and have not yet arrived in NZ and many other invasive species and pathogens which could potentially establish in this area.
- Red eared slider turtles. Females require 22–33°C for 55–80 days to hatch into live young. Only male turtles are produced below 28°C. Warmer summers will increase the potential for both males and females to be produced. The red-eared slider is included in the [list of the world's 100 most invasive species](#).
- Anecdotally, our biosecurity team has observed (over the past four years) pest plants, such as variegated thistle, germinating and producing mature plants in the middle of winter - something which we have never observed before.
- Increased temperatures will provide more opportunities for fall army worms to establish, as some of their life stages do not happen if temperatures fall below 7–10°C.
- Guava moth, a serious pest affecting feijoas in Northland and Auckland, is another potential contender for establishment in the top of the South Island, due to temperature increases.
- Severe weather events spread pests through flooding and soil movement (both caused by the flood itself and emergency works). Pests like Asiatic knotweed are being spread down the Motueka River catchment; this is going to increase as more frequent, larger flood events occur. In the August 2022 floods, the emergency works around Rocks Road in Nelson ended up spreading boneseed and white edge nightshade into Tasman District. After Cyclone Gabriele, Chilean needle grass spread out of the Esk Valley in Hawke's Bay (on the positive side, the Esk Valley rabbit population was wiped out).

Many pest species will benefit from climate change. On the upside, some of our introduced biocontrol agents may well do better in a warmer environment. For example, the three species of tropical *Tradescantia* beetles we have introduced will possibly do better, as long as they are not then predated by another organism that has also benefitted from climate change.

13. Risks to social cohesion and community wellbeing from displacement of individuals, families and communities due to climate change impacts.

- a. Potential for significant impacts
- b. Potential for minor to moderate impacts
- c. Unlikely to impact my organisation or the services it delivers
- d. Unsure

14. Please provide further details on why you selected the option you did.

Regulatory and Service delivery

Community feedback: In 2019, as part of our Coastal Management Project – Responding to Climate Change, we sought feedback from the community on what is valued (e.g. objects, areas or experiences) that may be affected by sea level rise and coastal hazards (e.g. effects of climate change). Health and wellbeing issues were commented on by participants who identified that the effects of climate change will cause stress and anxiety and a loss of sense of security. Others commented on social impacts, for example future generations not being able to enjoy the area and changes to communities as we know them today. [The community feedback report can be accessed on our website.](#)

While Council is yet to fully understand the impact of climate change on Tasman District, including implications for displacement of individuals, neighbourhoods or communities as a result of sea level rise or natural hazard events (e.g. wild fire), it is likely that there are potential for significant effects to some particular communities. Our sea level rise mapping, combined with other natural hazards information, identifies a number of coastal communities will be affected – in particular Motueka, where Council provides a number of services. A reduction in levels of service for existing assets, combined with the need for potential future managed retreat options, are likely to cause significant risks to social cohesion and community wellbeing for these communities. Additionally, short term issues will arise as hazard events unfold. For example, during the Pigeon Valley fire in 2019, a number of residents in the town of Wakefield and surrounding areas had to be temporarily evacuated. The coastal risk assessment, completed in December 2020, quantifies the number of homes and people that may be affected by up to 2m sea level rise.

15. Risks of exacerbating existing inequities and creating new and additional inequities due to differential distribution of climate change impacts.
 - a. Potential for significant impacts
 - b. Potential for minor to moderate impacts
 - c. Unlikely to impact my organisation or the services it delivers
 - d. Unsure
16. Please provide further details on why you selected the option you did.

Regulatory and Service delivery

Council is aware that the risk exists and has implemented a process to ensure that every decision report that Council considers has included an assessment of climate change considerations, however we have not yet developed tools to measure this. We can provide the report writing guidance to staff upon request.

17. Risks to governments from economic costs associated with lost productivity, disaster relief expenditure and unfunded contingent liabilities due to extreme events and ongoing, gradual changes.
 - a. Potential for significant impacts
 - b. Potential for minor to moderate impacts
 - c. Unlikely to impact my organisation or the services it delivers
 - d. Unsure
18. Please provide further details on why you selected the option you did.

Service delivery

Recent climate-related emergency events (Cyclones Fehi and Gita in 2018, the Pigeon Valley wildfire in 2019, and severe rainfall event in August 2022) have significantly impacted on the Council's ability to carry out programmed work, as many staff were diverted to the emergency response – i.e. away from business as usual. The resulting lost productivity meant delays in providing projects and services. In responding to these events, we also spent all the funding we'd set aside in our Emergency Reserves Funds for the period 2018-2028, leaving no funding available for any future events.

19. Risks to the financial system from instability due to extreme weather events and ongoing, gradual changes.

- a. Potential for significant impacts
- b. Potential for minor to moderate impacts
- c. Unlikely to impact my organisation or the services it delivers (MM)
- d. Unsure

20. Please provide further details on why you selected the option you did.

Service delivery

We are not planning to collect revenue (via rates) ahead of an emergency event taking place to create reserves to use in response and recovery. We expect a level of Government support will be available to help in recovery from a substantial emergency event based on past funding arrangements (e.g. Christchurch earthquake, Nelson Tasman August 2022 rainfall event, Auckland Anniversary event/Cyclone Gabrielle 2023), recognizing that this could change in the future. In addition, we anticipate re-prioritising our planned work and using the borrowing capacity we have above the debt cap* to fund response and recovery. In the years following an emergency event, it may be necessary to increase rates (and other forms of revenue) to service the loans used.

* The dynamic debt cap is proposed to be set at 150% of the Council's revenue. A cap that varies proportionally to our revenue has been selected because as our revenue increases, our capacity to service loans improves.

21. Risk to potable water supplies (availability and quality) due to changes in rainfall, temperature, drought, extreme weather events and ongoing sea-level rise.

- a. Potential for significant impacts
- b. Potential for minor to moderate impacts
- c. Unlikely to impact my organisation or the services it delivers
- d. Unsure

22. Please provide further details on why you selected the option you did.

Service delivery

It is not certain or clear how climate change may impact our water supplies. Impacts of climate change could change the nature of droughts potentially drying up the sources, especially if vegetation changes occur within the catchment. Droughts can lead to long periods of water restrictions, which lead to a

decrease in the volume of water sold by councils, which subsequently leads to less income for councils during the drought.

At most risk is our surface water take supplies or our groundwater takes nearer to the coast. We also have schemes which rely on a surface water taken from streams with notable low flows during summer and droughts. Motueka is the largest town in New Zealand with private bore water supplies, with individual households drawing water from the semi-unconfined aquifer, which will be vulnerable to saltwater intrusion with rising sea levels.

Council has planned in its [Infrastructure Strategy](#) to build bores further inland to avoid having to rely on coastal bores.

We are currently experiencing another drought. Many locations in Tasman District have received less than half of their average rainfall since the start of 2024. The long-awaited [Waimea Dam](#) has been constructed and started discharging water this summer, providing sustained flow to the Waimea River and reducing the need for significant water restrictions across the Waimea Plains and surrounding communities. However, many of our other rural water supplies still need to be restricted due to the ongoing dry spell.

23. Risks to buildings due to extreme weather events, drought, increased fire weather and ongoing sea-level rise.

- a. Potential for significant impacts
- b. Potential for minor to moderate impacts
- c. Unlikely to impact my organisation or the services it delivers
- d. Unsure

24. Please provide further details on why you selected the option you did.

Regulatory

In 2020, Council staff prepared a coastal risk assessment to quantify the exposure of assets, property and facilities (elements at risk) that may be vulnerable to the 1% AEP coastal storm tide and up to 2m sea level rise, [and is available on our website](#). Using the LINZ building GIS dataset, in 2020 approximately 5,500 buildings (excluding buildings <60m²) were vulnerable to a coastal storm tide and up to 2m sea level rise (15% of the district's total buildings <60m²). At that time, approximately 3,300 buildings were vulnerable and located in the Motueka and Riwaka area of the district. Buildings include homes, tourist accommodation, business premises and community facilities.

Risks to buildings from other natural hazard events and the effects of climate change have largely not been quantified. However, the development of the Nelson Tasman Resilience Explorer and supporting risk assessment will help to improve Council's knowledge once this work is completed.

Service delivery

Council's stormwater team consider the impacts of flooding on building floor levels. Staff have collected floor level survey information for buildings in areas of concern (Motueka, Richmond) so that staff can compare model predictions against those areas. Where these surveys have been completed staff can provide the numbers of buildings impacted in 10% or 1% AEP flooding scenarios.

Council considers climate change impacts when building new community infrastructure. For example, it was identified that to enable a climate-resilient new swimming pool for Motueka, Council owned land was not suitable. The Council deliberately moved away from areas in eastern Motueka that have been identified as being exposed to greater risk with sea level rise and purchased land in late 2023 on the western side of the town instead.

25. Risk of maladaptation across all domains due to practices, processes and tools that do not account for uncertainty and change over long timeframes.

- a. Potential for significant impacts
- b. Potential for minor to moderate impacts
- c. Unlikely to impact my organisation or the services it delivers
- d. **Unsure**

26. Please provide further details on why you selected the option you did.

All planning undertaken by Council relies to some degree on assumptions made about likely climate change scenarios (e.g. 1.66m SLR + vertical land movement for year 2130, as per 2024 MfE guidance). However, there is much uncertainty regarding how climate change will play out in reality and Council's ability to revise its planning in response to new sets of assumptions is limited. We revise our LTP assumptions every three years, but it is possible that climate change scenarios may play out differently even in that short time period.

27. Risk that climate change impacts across all domains will be exacerbated because current institutional arrangements are not fit for adaptation. Institutional arrangements include legislative and decision-making frameworks, coordination within and across levels of government, and funding mechanisms.

- a. **Potential for significant impacts**
- b. Potential for minor to moderate impacts
- c. Unlikely to impact my organisation or the services it delivers
- d. Unsure

28. Please provide further details on why you selected the option you did.

Regulatory

As a unitary authority, Tasman is well integrated in terms of sharing natural hazards and climate change information (where available) to inform Council's functions and decision-making processes.

The ability to update resource management plans to take into consideration new information relating to natural hazards and climate change is a slow process. Consequently, there is a risk that decisions can be made in relation to specific land use resource consent applications that do not reflect new information, where the current plan rules are either silent or not fit for purpose (e.g. for sites that are historically zoned residential and there is a presumption for development).

In relation to sea level rise, 'managed retreat' is currently not a feasible option because of fundamental issues such as who pays/landowner compensation. This is a national issue which cannot be addressed at a local level between local government and their communities. While section 20A of the Resource Management Act enables regional rules to be used to extinguish existing use rights, this has not been

tested in any meaningful way (for example, with the Matata case landowners have been offered compensation in conjunction with a plan change which implements RMA 1991 s20A).

29. What are the most immediate / urgent climate change risks to be managed from your organisations perspective?

Regulatory and Service delivery

Responding to extreme weather and natural hazard events that have been exacerbated by climate change (e.g. drought, wild fire, inundation, and erosion). Sea level rise, storms and floods are the most significant risk. Arguably there is more time to respond to sea level rise, however some coastal properties are already actively threatened (e.g. at Pakawau). Funding of emergency responses to these events is a growing risk.

The Tasman District has also suffered extensive damage from storm events, flooding and wildfire in the last ten years, including 2013 (rain events), 2018 (Cyclones Fehi and Gita), 2019 (wildfire), 2022 (rain event). The impacts have been on residential properties, businesses and farming communities.

30. Please list any other risks identified in the National Climate Change Risk Assessment that are significant for your organisation.

Regulatory and Service delivery

We agree that the 10 most significant climate change risks to New Zealand also apply to Tasman District, however the rating priorities may differ slightly.

Strategy, Governance and Metrics

These questions are designed to gather information about internal governance and decision-making processes.

31. Does your organisation have a plan or strategy to improve its resilience and/or the resilience of the community it serves to climate change impacts?
 - a. Yes, specifically for resilience to climate change impacts
 - b. Yes, but it is not focused exclusively on climate change (e.g. risk and resilience strategy)
 - c. A plan is in development
 - d. No
 - e. Unsure

32. Please provide more information and/or a link to the plan, and comment on its effectiveness.

Service Delivery

Council in partnership with Nelson City Council, Nelson Tasman Civil Defence Emergency Management Group and other utility providers, prepared the [Nelson Tasman Lifelines Report](#). This report summarises the lifeline infrastructure within Nelson and Tasman – these are the transport, energy, communications and ‘3 waters’ (water supply, stormwater, wastewater) services sectors that are fundamental to our communities and economy. Within the report there was a number of actions identified to improve Council-owned infrastructure resilience.

Council has a risk, resilience and recovery planning work programme in place which will focus on the identification, planning and management of its critical infrastructure assets and lifelines. This will ensure that Council, working in partnership with the community, can make robust decisions regarding the management of infrastructure assets over the longer term, taking into account the effects of climate change. This report provides an initial overview of Council’s infrastructure assets which are vulnerable to coastal storm inundation and sea level rise. More in-depth risk assessment work on the Council’s infrastructure assets will be completed in the future to contribute to Council’s infrastructure risk and resilience work programme. The first phase of this work was to conduct the [10 Essentials](#) review as a form of gap analysis and to identify priority areas.

Measures to improve resilience may also be non-regulatory and non-service delivery like encouraging water use efficiency, storage options and conservation.

Regulatory

Between 2019 and 2022, the Council worked on the [Coastal Management Project – Responding to Climate Change](#) which was focusing on the development of a long term adaptive strategy to respond to the effects of coastal hazards and sea level rise. This work was following best practice as set out in MfE’s 2017 Coastal Hazards and Climate Change Guidance (now 2024 Guidance). Mapping of sea level rise and coastal hazards including community engagement was completed in 2019, a coastal risk assessment was completed in 2020, and high-level options for coastal management was socialized with the community in 2021. Council staff are now recommending that this work is expanded from coastal hazards/SLR and instead is an ‘all-hazards’ adaptation approach – funding is being sought through the 2024 Long Term Plan budget for community adaptation planning. This work would leverage of the coastal hazards/SLR

work completed to date, along side updates to other natural hazards information also completed in recent years.

An issue facing all councils in New Zealand is the cost of defending policies and rules relating to climate change through challenges in the Environment Court. Although our Council uses MfE guidance in the preparation of its policies and rules, it doesn't reduce the likelihood of us being challenged in the Environment Court. The costs to councils, and therefore their communities, fighting legal challenges, are high. These costs could be reduced by central government regulating requirements for inclusion in District Plans through an national policy statement or national environmental standards. Council staff welcome development of the NPS Natural Hazards Decision-making to provide national direction.

33. What are the barriers to developing a plan?

A general barrier to undertaking this work is staff resourcing. While this work is embedded in Council processes and 'business as usual' it requires staff time in addition to other Council work which may take more immediate priority, as well as a need to have staff with suitable skill sets.

While internationally climate change science is agreed and understood, there remains a level of skepticism within the community and criticism of Council staff undertaking work in this space. Alternatively, there are some in the community who feel that Council are not doing enough in relation to climate change mitigation and adaptation. Providing education to elected members and the community regarding climate change and its effects is a key part of developing any climate change response.

As noted above, central government regulation in this space could also assist.

34. Does your organisation have any indicators, or measures to help it monitor and manage its risks from climate change impacts? For example, from increased flooding, sea-level rise, more heat waves, more intense storms, more droughts and wildfires. Note: this question includes risks affecting the communities to which these services are provided.

- a. Yes
- b. **These are in development**
- c. No
- d. Unsure

35. Please list the indicators or measures.

Service delivery

Our LTP 2024-2034 includes levels of service (LoS) and performance measures/targets relating to flooding, however other climate change impacts are not specifically included as measures yet.

LoS for stormwater flooding: We have measures in place to respond to and reduce flood damage from stormwater to property and risk to the community.

Performance measures: (a) The number of flooding events that occur in the District and (b) For each flooding event, the number of habitable floors affected. Target: <1 habitable floor flooded per event (expressed per 1,000 properties connected to Council's stormwater system).

Performance measure: The median response time to attend a flooding event, measured from the time that Council receives notification to the time that service personnel reach the site. Target: <2 hours.

Performance measure: The number of complaints received by Council about the performance of its stormwater system, expressed per 1,000 properties connected to the stormwater system. Target: <20.

LoS: Our stormwater activities are managed at a level which satisfies the community. Performance measure: Percentage of customers satisfied with the stormwater service, as measured through the annual resident's survey. Target: 80%.

LoS for flood protection: Our structures are managed to reduce the impact of flooding now and in the future.

Performance measure: The major flood protection and control works are maintained and renewed to the standards described below. No failure of flood protection in the existing stopbank system maintained by Council when river flows remain below the specified design levels:

- Riuwaka River = approximately 145 m³/s @ Hickmotts flow gauge, which corresponds approximately to a 20% AEP* to 10% AEP event in 2020 for the area downstream of the SH60 bridge. This is considered a LOW level of protection.
- Lower Motueka River = 1,854 m³/s @ Woodstock flow gauge, which corresponds approximately to a 2% AEP event in 2020. This is considered a MODERATE level of protection.
- Waimea River = 1,346 m³/s @ Irvine Bridge flow gauge, which corresponds approximately to a 2% AEP event in 2020. This is considered a MODERATE level of protection.

*AEP = Annual Exceedance Probability, the probability that a flow event of a certain size will occur in any given year. The lower the percentage, the larger the flow event, and the less frequently it is expected to occur.

Target: 100%

(Mandatory measure one).

36. Are risks to your organisations ability to carry out functions and deliver services from the impacts of climate change reported to your organisations governance board?

- a. Yes, more often than annually
- b. Yes, annually
- c. Yes, less often than annually
- d. Not at all
- e. Unsure

37. Any comments?

The following risk is included in the Council's Strategic Risk Register, which is reported on a quarterly basis to the Audit and Risk Committee:

"Risk title: Climate change and natural hazards

Risk description: Inadequate consideration of climate change and natural hazards

Causes or sources of risk: Lack of data and strategy

Consequences of risk: Loss of life and property, Legal challenge, Existing legislation creates poor framework, Relationship breakdown with community, Treaty issues.

Actions required and treatment plans: Implementation of Tasman Climate Response Strategy and Action Plan, completion of Nelson-Tasman Regional Climate Change Risk Assessment project; maintain and update Nelson-Tasman Resilience Explorer, Review of Hazard Data, Review of District Plan, Understanding and keeping up with legislative change, Right district plan / planning framework, Ensure right communication and consultation.”

38. In the box below, please briefly describe the role that management plays within your organisation in responding to risks from climate change.

Management (Executive Leadership Team) has oversight of the responses to climate change and prioritises activities and resources to support those responses.

39. Does your organisation require the impacts of climate change, and adaptation options to address these impacts, to be assessed and considered in decision-making? For example, will climate change be considered before making a decision to invest in a physical asset. Note: this does not refer to requirements for mitigation/carbon emissions reduction.

- a. Yes
- b. For some projects
- c. Not yet, but this is in development
- d. No
- e. Unsure

40. If applicable, please provide details about the requirements and their effectiveness.

A process was implemented four years ago with requires every decision report that Council considers to include an assessment of climate change considerations. Report authors are tasked with providing the following information:

- The <proposal/matter requiring a decision> in this report was considered by staff in accordance with the process set out in the Council’s ‘Climate Change Consideration Guide 2024’. *Explain how the proposal will impact greenhouse gas (GHG) emissions. State whether GHG emissions will reduce/increase/stay the same and describe the likely impact on Council’s and/or Tasman District’s carbon footprint. If emissions are likely to increase, also describe steps that could be taken to avoid or reduce the impact of any increase in GHG emissions.*
- *Explain whether the proposal will be impacted by a changing climate and, if so, how these impacts will be addressed. List steps that could be taken to build/increase resilience.*
- *Briefly explain how this proposal aligns with, or detracts from, the Council’s and Government’s plans, policies and legal obligations relating to climate change (e.g. Tasman Climate Response Strategy and Action Plan, Emissions Reduction Plan, National Adaptation Plan etc).*

A reporting guide has been developed for staff, to assist authors to complete the climate change impact assessment section of their report. This reporting guide is not publicly available, but we are happy to send you a copy upon request.

In terms of effectiveness, staff feel that this new reporting requirement has only a minor influence on decision-making. Most of the written assessments are very brief and do not appear to incorporate all the relevant considerations included within the guidance document.

Support and Resources

41. Which actions or resources would help your organisation to better prepare for the impacts of climate change? Tick as many as apply:
- More information about how climate change is projected to impact a region or a district
 - Guidance on how to assess and consider the impacts of climate change on your organisation
 - Tools to help quantify impacts from climate change on your organisation
 - Methodology for assessing and quantifying climate change risks
 - Legislative requirements to consider/plan for the effects of climate change
 - Legislative requirements to publicly report on your organisations climate risks and adaptation plans
 - Opportunities to engage and learn from others
 - Training to develop skills/capabilities
 - Improved and centralised data repository e.g. flooding
 - Good practice guides, bench-marking and assessment tools
 - Funding to implement a strategy and deliver on-the-ground adaptation actions

All of the above.

42. Any other actions or resources?

More support and guidelines in relation to coastal erosion issues and how we should be responding (legal, liability, regulatory, service delivery).

Addressing climate change impacts requires coordinated efforts at both local and national levels. While local government plays a crucial role, national leadership is essential to support local decisions effectively. The priority policy needs of councils are for legal, technical, financial, and governance frameworks to deliver adaptation measures efficiently across their broad range of responsibilities. Clear responsibilities, consistent evaluation frameworks, and data-driven decision-making are vital.

Examples of where councils across NZ could benefit from support and resourcing from central government include:

- Frameworks for assessing both physical and social vulnerabilities to prioritise adaptation actions and ensure equity.
- Empowering communities to build resilience, particularly during extreme events.
- Provision of a series of unified and cost-efficient suite of methods and tools to evaluate impacts of, vulnerability and adaptation to, climate change. Some tools in vulnerability and assessment offer specific information tailored to certain aspects, like M-CACES for estimating adaptation costs and CCAV for understanding climate variability impacts. There are broader approaches, such as DAM for dimension of adaptation modelling, uncertainty, and risk analysis, forecasting by analogy, and expert judgment, which can be applied across multiple stages of assessment.
- Provision of toolboxes from NIWA and other agencies that provide precise climate change projections for regions and sectors like agriculture, horticulture, tourism, or infrastructure.

- Provision of standardised tools for understanding and responding to climate-related risks, such as the [resilience explorer tool](#) under development by Urban Intelligence, across all councils and co-funding of their ongoing maintenance costs to keep these updated and relevant over time.
- Methodologies for helping Councils understand the potential impacts and risks of our activities, and foster coherent approaches for effective adaptation planning, while translating and communicating climate and hazard data to facilitate informed decision-making processes, enhancing resilience strategies. Tools to help quantify impacts from climate change in the organization and the wider community.
- Central government/NEMA should roll out the D4H platform to all Emergency Operation Centers across NZ, to enable CDEM-trained staff across the country to assist in any future emergency response. Many South Island councils already use this platform, including Nelson and Tasman. Having one consistent platform would enable better collaboration and improve capacity, as it would enable staff to log in and assist remotely from anywhere in the country.

Council strongly advocates that central government allocates resources in its upcoming budget towards the creation of standardised, open-source or low-cost climate change tools, that will ensure continuity and consistency in estimating, modelling and communication across local and central government.

43. As the adaptation landscape evolves, there is an opportunity for improvement through policy integration and convergence, especially by integrating climate adaptation into the strategies of councils and council-controlled organizations. What are the barriers to an effective adaptation response that are faced by your organisation? Tick as many as apply:
- a. Lack of awareness/education regarding the impacts of climate change by decision makers/the wider community
 - b. Lack of political will or desire from the community for change
 - c. Lack of tools/methods by which to engage decision-makers/the community
 - d. Inflexibility of current legislation

All of the above.

44. Any other barriers?

Funding adaptation actions is a significant barrier (e.g. who pays/gets compensation for adaptation responses). There is not enough resourcing (staff and budget) to do what needs to be done.

Other barriers to effective adaptation action include a lack of action and personal responsibility amongst the wider community regarding the risks of climate change, as well as a lack in tools and methods to engage decision-makers and the community.

45. Is there any further information you would like to provide about your organisations response to the risks and impacts of climate change? Please let us know in the box below.

In September 2019, Council adopted the first Tasman Climate Action Plan. The original Action Plan was internally-focused, living document, used to guide actions on four focus areas: mitigation, adaptation, leadership and information provision. Each goal had targets and short, medium and long-term actions. Since its adoption, staff have provided brief quarterly updates and detailed annual reports on progress to Council's Strategy and Policy Committee. These reports and the 2019 plan are available online at: <https://www.tasman.govt.nz/my-region/climate-change/tasman-climate-action-plan/>

Over the past year we have reviewed the plan and added a strategic section. The draft document has been renamed 'Tasman Climate Response Strategy and Action Plan'. As part of the LTP 2024-2034 development, a 10-year draft budget has been allocated alongside relevant actions. We are publicly consulting on this document as part of our LTP consultation (see <https://shape.tasman.govt.nz/tasman-climate-response-strategy-and-action-plan>) and expect Council to adopt the finalised Strategy and Action Plan by 30 June 2024.

Sensitive Information

Is there any further information you would like to provide about your organisations response to the risks and impacts of climate change? Please let us know in the box below.

Where our service delivery is provided by a joint council controlled organisation, our response has been submitted by the other Council.