File No: 25 12 05 Document No: **29410865**

Enquiries to: Alejandro Cifuentes

10 June 2024

Hamilton 3240, NZ waikatoregion.govt.nz

Waikato

REGIONAL COUNCIL

Private Bag 3038

0800 800 401

Waikato Mail Centre

Pāremata Aotearoa New Zealand Parliament Finance and Expenditure Committee

Email: fe@parliament.govt.nz

Tēnā koutou,

Waikato Regional Council comments on the Select Committee inquiry into climate adaptation

Thank you for the opportunity to submit on the Select Committee inquiry into climate adaptation. Please find attached the Waikato Regional Council's staff comments, endorsed under delegated authority.

Should you have any queries regarding the content of this document please contact Alejandro Cifuentes, Team Leader, Policy Implementation directly on (07) 8592786 or by email Alejandro.Cifuentes@waikatoregion.govt.nz.

Ngā mihi nui,

Tracey May

Director Science, Policy and Information

Comments from Waikato Regional Council on the Select Committee inquiry into climate adaptation

Introduction

- 1. We appreciate the opportunity to provide feedback on the Select Committee inquiry into climate adaptation.
- 2. Waikato Regional Council (the council) notes that communities, iwi and local government are already working with local residents and property owners to plan for their long-term resilience. In the case of the Waikato region, territorial authorities are leading the development of adaptation plans. These plans have significant costs and capacity requirements associated with engagement, producing technical reports to support decision-making, project management and communications, among other things.
- 3. We recommend that as part of its inquiry, the select committee carries out direct engagement with councils and communities currently developing or implementing adaptation plans. It is important to examine the current approach to adapt to natural hazards and climate change risk and analyse the effectiveness of the existing mechanisms to determine the roles and responsibilities of central and local government, communities and the private sector. Similarly, it is critical to investigate suitable funding mechanisms, adaptation metrics and national direction on risk thresholds to determine when and where adaptation planning should start.
- 4. Current adaptation planning is largely undertaken by initiative of communities and led by district councils. Work is continuing despite absence of clear national direction of how to engage all the relevant levels of government. To bridge this gap, the council has agreed to use principles to guide its ongoing participation in community adaptation planning and respond to district council-initiated community adaptation planning. These principles include:
 - a. Participating in community adaptation processes as invited by territorial authorities and where the council's participation will provide value to the wider region and the regional resilience programme.
 - b. Providing technical and governance support to community adaptation planning.
 - c. Agreeing input into adaptation planning processes at the outset of projects.
 - d. That the resource committed to any community adaptation process is commensurate with the scale of risk posed to the community.
 - e. Acknowledgement that preferred community options will have associated costs and that council participation in the adaptation planning process does not indicate an agreement to fund interventions.
 - f. Advocating that the community adaptation plan processes prioritises options for intervention, and where possible, includes indicative costs to guide conversations.
 - g. Acknowledging that funding of options and interventions will need to travel through additional funding processes, and include consideration of whether targeted and/or general rates will apply, where a discussion on option beneficiaries will be well canvassed.
- 5. Despite the importance of community adaptation planning, the main factor that determines the impact of natural hazard events is decisions around resource use and land use patterns. If infrastructure, use and development are allowed to happen without proper consideration of natural hazards and risk, this will result in less resilient communities. These challenges can be addressed by a long-lived, fit-for-purpose framework that carefully guides local and central government decisions around infrastructure and the places where we work and play.
- 6. Our feedback builds on comments provided to the Environment Committee inquiry, guided by the questions posed by the Finance and Expenditure committee.

7. We look forward to future consultation processes on policy and regulatory changes that arise from this inquiry and would welcome the opportunity to comment on any issues explored during their development.

Submitter details

Waikato Regional Council Private Bag 3038 Waikato Mail Centre Hamilton 3240

Contact person:

Alejandro Cifuentes Team Leader, Policy Implementation Email: Alejandro.Cifuentes @waikatoregion.govt.nz

Phone: (07) 8592786

What would be a durable, affordable, and fair approach to adaptation for the existing built environment (i.e., where people live and work) in the future? How could that approach be phased in over time?

We recommend factoring in affordability in the general assessment of costs and benefits, rather than making it a main focus. Decisions around the built environment should centre on sustainability and equitable outcomes.

The framework should be clear about what to prioritise when dealing with existing development.

- 8. The bulk of adaptation planning in Aotearoa New Zealand is done for areas where people currently live and work, focusing on formulating pathways for communities to adapt land uses and existing assets within a 100-year timeframe. This is done under uncertainty about the future frequency and severity of natural hazard events, and regulation. To address the uncertainty about the hazards and risks, adaptation plans identify appropriate triggers and signals that can be reviewed periodically and are flexible enough to be amended if and when required. To reduce the regulatory uncertainty, we recommend introducing an enduring approach that commits successive governments to its implementation much like the Climate Chage Response (Zero Carbon) Amendment Act 2019 did to transition to a low emissions and climate resilient economy.
- 9. Funding arrangements will have to recognise when a beneficiary-pays approach is appropriate. Currently, preparing adaptation plans has looked wider than through beneficiary-pays, which has led to a more equitable access to council funding and technical knowledge. However, the main challenges will come from funding options of existing projects and providing the same level of assistance to an increasing number of communities wanting to start planning for their long-term resilience. At the implementation stage, most of the materialisation of actions will still depend on the ability of a community to meet the costs. However, the rating base from different communities, their ability to pay and the relative level of deprivation will result in unequal adaptation outcomes. The mandate for local government authorities needs to include funding adaptation planning and implementation and be accompanied by access to national resources and funding to assist in the preparation of adaptation plans and their implementation.
- 10. Further, the framework should include clear thresholds to distinguish the appropriate time, location and scale for different actions, i.e. structural defences, accommodating hazards, retreat, relocation, etc. The scale of financial help people will need to relocate, or retreat will be diverse and differ between owned and rented property. Feasibility will be very different dependent on personal situations, and reconciling this within communities will be challenging.
- 11. A fit-for-purpose adaptation framework should help in determining how funding is allocated and the options it will pay for. We suggest including a participatory budgeting process: this starts with an overall adaptation budget, and then determining the options within that envelope. This has the advantage of focusing the process on what can be done, while moving away from options that are not achievable.

What outcomes should such an approach to adaptation lead to? What are the highest priorities to achieve?

Long-term adaptation planning needs the right tools and frameworks to encourage proactive action and ensure fair and equitable outcomes.

Adaptation cannot be separated from mitigation options. We recommend developing a system that allows organisations to leverage work in both areas of the climate response.

A successful adaptation framework should foster a fit-for-purpose adaptation planning system that enhances community resilience and long-term adaptive capacity.

- 12. Priorities for adaptation planning also need to be informed by a system-wide view i.e. being aware of how catchments affect each other and how this flows on to local adaptation processes. An example in the Waikato region is decisions about Lake Taupo management, as it has the capacity to affect all parts of the Waikato river which crosses multiple district councils. We acknowledge it is difficult to coordinate and collaborate adaptation planning across all entities.
- 13. Consistent and updated approaches are required nationally for undertaking risk assessments for different hazards throughout the country. It will be useful to use international risk assessments methodologies that are tested and proven to be accurate, but ensure these are properly adapted to the New Zealand context.

What do you think the costs will be? How should these various costs be distributed (e.g. amongst property owners, widely across New Zealanders, ratepayers, now and in future)? Should this distribution change over time?

- 14. It is difficult to estimate the costs with the current levels of information. The costs of adaptation will include funding the development of tools and frameworks to do the work, as well as building and maintaining sufficient capacity in the system to respond effectively.
- 15. Estimation of costs is technical in nature, but the decisions around distribution and changes to funding over time are a political question.

What do you think is the critical information that will inform people and help them understand future risks, costs, and impacts?

Consistent technical information that is easy to understand and communicated clearly and in a timely manner.

Good data, information and tools are key to underpinning risk assessments and adaptation planning.

Communities and practitioners need tools to guide risk assessment and evaluation of risk thresholds.

- 16. It would be useful to have a clear roadmap of the data, information and tools that central government, and various research projects, will deliver for local government to use. Local government needs to clearly understand this roadmap so we can focus our efforts and avoid duplication with central government work.
- 17. Central government direction is needed on how to make hazard and risk assessments, to then generate nationally consistent decisions on what is tolerable or intolerable. Some organisations define the risk by using high/medium/low levels, however, this does not equate to a community level of tolerance.

- 18. A system needs to ensure consistency to evaluate all effects of actions and options on a community's capacity to adapt. Consistent central government guidance would assist to more effectively deliver multi-criteria decision-making frameworks to consider the significant infrastructure decision-making that is required, rather than multiple councils developing bespoke work to address the same issues.
- 19. People will benefit from clear accessible information, that plainly defines risk levels and relative tolerance threshold for different communities. New Zealanders need to understand the natural hazards surrounding their communities, the level of exposure and vulnerability that these are subject to over time to then make informed decision around land use and infrastructure spending. The Local Government Act 2002 and the Resource Management Act 1991 already provide the necessary avenues for the public to use this information in their decision-making.

What are the particular issues facing Māori, especially sites, assets, and land vulnerable to climatedriven natural hazards?

Adaptation planning needs to recognise that the impacts from natural hazards and climate change disproportionately affect Māori communities and whenua Māori.

Barriers to the participation of Māori need to be removed and there needs to be proper consideration of tikanga, Te Ao and mātauranga Māori in technical assessments and decision-making processes.

- 20. We submit that the following issues should be addressed by an effective, fair and equitable adaptation system, and propose solutions to meet these challenges:
 - a. <u>Disproportionate Climate Change Impact</u>
 - i. Māori communities and their whenua, despite their proactive efforts, are facing exacerbated impacts from climate change.
 - ii. **Solution**: Collaboration needs to be bolstered with Māori. It is essential to embed Māori traditional knowledge (mātauranga) in risk assessment and adaptation plans, ensuring solutions that are rooted in local understanding and context.
 - b. <u>Transparency and Equal Value of Knowledge Systems</u>
 - It is critical to inform Māori communities about potential risks to their land and ensure that their unique knowledge system is considered equally with scientific knowledge.
 - ii. **Solution**: An information dissemination system needs to be put in place, emphasising transparency and inclusivity. Mātauranga Māori should be integrated and valued adequately in all processes.
 - c. Recognising and Respecting Māori Culture and Identity
 - i. The distinct cultural values, practices, and identity of tangata whenua deserve recognition and respect at all levels of decision-making.
 - ii. **Solution**: Policies need a deep-rooted understanding of Māori cultural diversity. Continuous dialogue and consultation with Māori communities are essential.
- 21. Limited capacity from iwi Māori to effectively engage with local government authorities undertaking adaptation planning is at the heart of these challenges. In some cases settlement status mean that different iwi and hapū have different levels of capacity to engage and provide knowledge and advice necessary to develop culturally appropriate community adaptation plans. We strongly advocate to have an approach that is built around effective partnerships with iwi Māori and recognition of obligations under Te Tiriti o Waitangi.

What are the problems with New Zealand's approach to managing climate-related natural hazards? What are the underlying drivers of these problems?

Inconsistency in approaches to collect and analyse flood data.

Decision-making incentives and frameworks under different statutes are misaligned in providing for more resilient communities.

Plan making processes under the RMA are not flexible enough to respond to changes in natural hazard data, fluctuating risk levels and thresholds.

- 22. With respect to flood risk, there are a number of systemic challenges to flood risk reduction and flood risk governance. A 2023 paper, published in the Journal of the Royal Society of New Zealand,¹ notes that achieving flood resilience in New Zealand requires reconfiguring flood governance to attain national consistency while allowing targeted variability at the local scale, and highlights the following as the main challenges for managing changing flood risks:
 - a. Lack of Consistent Approach: Currently, there is no publicly available consistent approach to accurately determine flood risk on a national scale in New Zealand. Achieving national consistency in flood risk management is crucial.
 - b. Climate Change Impact: High confidence exists that climate change is making extreme rainfall events more frequent and intense. This exacerbates flood risks and requires proactive strategies.
 - c. Development Pressures: Significant development pressures could increase the number of people and assets at risk from flooding. Balancing development with flood hazard management is essential.
 - d. Quality Information: There's a growing legislative requirement to provide quality flood risk information over multiple spatial scales. Access to accurate data and decision-support tools is crucial.
 - e. Understanding Vulnerability: Better understanding of New Zealand communities and their vulnerability to floods is necessary for effective risk management.
 - f. Economic Impacts: Understanding the economic impacts of floods on different communities, regions, and places is essential for informed decision-making.
- 23. In terms of preventing future development in unsuitable locations (that is, preventing the need for future adaptation), the distribution of regulatory responsibilities between regional councils and local councils does not promote effective and efficient management of climate-related natural hazards. Local councils have development/growth-driven objectives that are not always consistent with regional council positions on managing natural hazard risk. This leads to resource (both time and money) being used to challenge development decisions. In a similar vein, our regional council is responsible for the provision of flood infrastructure (which in a number of cases will not meet the needs of a future climate), yet local councils determine land zoning.
- 24. There are no nationally available and consistent climate hazard datasets that are suitable for local-scale decision-making. This means that only those local councils with available funds or who are prioritising investment in these datasets are making decisions using best-practice data. As a regional council, we have recently carried out an inventory of climate related-natural hazard data held by districts across our region and have found gaps and wide-ranging quality in these datasets. Some data is old and not consistent with current standards/guidelines. Some does not include climate projections. In other cases, the best available data is not reflected in district plans. There are also some instances where district data refers to using regional datasets as a source, but we

Doc # 29410865 Page 7

_

¹ Serrao-Neumann, S., White, I., Dean, S. M., Paulik, R., Sleight, B., Stori, F. T., ... Lane, E. M. (2023). The need to reconfigure consistency and variability to best manage changing flood risks in Aotearoa-New Zealand. *Journal of the Royal Society of New Zealand*, *54*(4), 473–490. https://doi.org/10.1080/03036758.2023.2211777

cannot see any resemblance to our datasets. Although we have a regional programme of investment to improve these datasets, this is limited to the funds approved in our Long-Term Plan and will take time.

- 25. Linked to the above point is the fact that NIWA holds significant climate and modelling data, but only makes a component of this data available at no cost. For example, 1% AEP flood data is available from NIWA at no cost but we were recently asked to pay \$75,000 for any further AEP datasets. This is a significant issue to be addressed, as NIWA is commercialising data that, in our view, they have already been paid to develop for the public good.
- 26. Another one of the limitations to prioritising long-term adaptation under current regulatory frameworks is the lack of a national/regional view of priorities for adaptation planning. At present, regional council involvement in the Waikato is driven by those district councils which have decided to start adaptation planning projects. A detailed regional climate change risk assessment for the Waikato is being created, which will help identify strategic priorities for adaptation planning. However, progress can be constrained by a district council's ability to commence adaptation planning, or by region's ability to effectively resource the growing demand.

What adaptation-related costs are you facing now? How are you planning on addressing these costs?

Local government authorities are doing the bulk of the work for community adaptation planning and unless there is a significant increase in funding and capacity from central government, we will continue to fund this work through the collection of rates.

- 27. Under the Waikato Regional Policy Statement, we are directed to collaborate with territorial authorities, tāngata whenua and other agencies to undertake assessments of coastal and other communities at risk or potentially at risk from natural hazards, and develop long-term strategies for these communities. This has ensured a consistent regional approach to community adaptation projects across our region.
- 28. As more territorial authorities embark on community adaptation projects, our ability to support these is limited by the staff resources we have available. We are faced with either providing less support (resulting in potentially inconsistent outcomes across the region) or seeking further funding from our regional rating base. Dedicated funding mechanisms at the national level are needed to bridge this gap.
- 29. A significant adaptation cost we are facing is decision-making and investment in our flood and drainage infrastructure. Our historic approach of replacing "like with like" will not always be appropriate in a future climate for a range of reasons (such as environmental and long-term affordability), and we need to work through substantial engagement processes with communities and landowners to identify long-term options. In addition, flood infrastructure capital planning is not currently aligned to community adaptation planning, despite being inherently linked.
- 30. At present in the Waikato, the costs of flood infrastructure are split in varying proportions between the general rating base and targeted ratepayers. A fit-for-purpose adaptation framework must assist local government authorities in making decision to determine whether the benefits which that infrastructure delivers are fairly split.
- 31. The focus of adaptation processes has been on meeting the costs of reactive actions to mitigate natural hazards risks. However, costs also need to be taken into account regarding decisions made around flood defences and drainage infrastructure which will have environmental, social and economic impacts. The system needs to ensure consistency to evaluate all effects of actions and options on a community's capacity to adapt. Consistent central government guidance would assist

to more effectively deliver multi-criteria decision-making frameworks to consider the significant infrastructure decision-making that is required, rather than multiple councils developing bespoke work to address the same issues.

What adaptation related risks are you facing now and how are you planning to address these risks?

Increased climate extremes that exacerbate coastal inundation and river flooding and drought -

We are proactively working to address these risks through strategic land use and resource planning, by collecting hazard information and working collaboratively with district and iwi partners.

- 32. Although much focus is placed on adaptation as a result of "too much water", water quality and availability is a key adaptation risk for the Waikato region. Regional councils play a key role in this space as a result of their water allocation functions. Our regional economy and the wellbeing of our people are dependent on the availability of water. There is increasing concern among Waikato communities over climate-related reductions in water availability and the implications for freshwater ecosystems, urban and industrial water supply/demand dynamics, ongoing delivery of electricity generation, primary sector productivity and constraints on future growth.
- 33. We are seeing impacts of a prolonged period of reduced rainfall on water resource supply and an increase in demand in parts of our region. Water available for allocation is approaching, or exceeding, limits in several major catchments. Projected effects of climate change are likely to exacerbate constraints on water availability and/or increase demand. Analysis of regional water resource state and trends confirms the concerns raised by the Waikato Mayoral Forum and Waikato Regional Council about the scale, severity and impact of water security issues for the Waikato region.
- 34. Waikato Regional Council has developed a draft water security strategy² to support conversations on regional and local water security issues and to identify potential solutions this includes the provision of \$388k for the Water Security Implementation Plan under our latest LTP. A collaborative, multi-stakeholder and regional-scale water security management plan is planned to identify roles and responsibilities in addressing the significant water security challenges facing the region, and to establish partnerships to implement appropriate solutions. Some potential solutions are identified, including managing demand, enhancing supply and increasing ecosystem resilience to periods of water deficit, but it is recognised that all options need to be 'on the table' and assessment of options should follow a robust process. The draft strategy also recommends development of a more detailed water accounting system for the Waikato that can provide timely and robust information on water availability and demand (including better information on actual use) to our communities.
- 35. The systemic challenges to flood risk reduction and flood risk governance are further adaptation related risks for our region. Our latest Infrastructure Strategy which was included in the 2024-2034 Long Term Plan sets out planned long term pathways to address flood risk from an infrastructure perspective, however, we note that it does not address the systemic issues.
- 36. As mentioned previously in this feedback, despite the lack of a consistent national framework and clear direction, we continue to work to increase our communities' future resilience.. Attachment 1 (current system diagram for natural hazards and adaptation planning) provides an overview of the input from different actors and identifies some of the gaps in the system in relation to capacity and funding.

https://www.waikatoregion.govt.nz/council/policy-and-plans/waikato-regional-freshwater-strategy/water-security-strategy/

- 37. The council is also working to align its climate mitigation actions with our work on adaptation. We have recently created a pathway to carbon neutrality through Te Āki Tūroa | Nature + Framework, using nature-based solutions, this was endorsed by our Council on 30 May 2024. As a result, we recognise that when regeneration through nature-based solutions (NBS) are considered a priority alongside all other land use changes it creates the following:
 - a. Closer connection to nature for the community which increases the understanding of the benefits nature solutions have on the land.
 - b. Potential different income streams that have not been considered before, that are easily scalable and if scaled at the local and business level will accelerate the % of land that can be transformed, which will ensure more land is more resilient to weather events at a very local level.
 - c. Incentives and funding streams for nature-based solutions that will be a faster way to share the responsibility load and enable the public sector to be an enabler rather than just a solution provider, helping to create more self-reliant, resilient communities.
 - d. Where NBS are introduced, this will allow for potential part or full self sufficiency of projects when they are eligible for schemes such as the ETS and voluntary carbon market and in time for the biodiversity credit market when it comes into play, encouraging more to see this type of action as income generating as well as good for the environment, which in turn should create a positive feedback loop.

Attachment 1 - current system diagram for natural hazards and adaptation planning

