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Enquiries to: Alejandro Cifuentes



Private Bag 3038
Waikato Mail Centre
Hamilton 3240, NZ

waikatoregion.govt.nz
0800 800 401

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New Zealand Parliament
Komiti Whiriwhiri Take Taiao (Environment Committee)
Parliament Buildings
Wellington

Email: en@parliament.govt.nz

Tēnā koutou katoa,

Waikato Regional Council Submission 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 (the council's) submission, formally endorsed by the council's Strategy and Policy Committee on **1 November 2023**.

Should you have any queries regarding the content of this document please contact Alejandro Cifuentes, Team Leader, Policy Implementation directly on (07) 859 2786 or by email Alejandro.Cifuentes@waikatoregion.govt.nz.

Nāku iti noa, nā,

Tracey May
Director Science, Policy and Information

Submission from Waikato Regional Council on the Select Committee Inquiry into Climate Adaptation

Introduction

1. We appreciate the opportunity to make a submission on the Select Committee Inquiry into Climate Adaptation (the inquiry).
2. Communities, iwi and local government are already working with local residents and homeowners to plan for their long-term resilience. 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 to determine when adaptation planning should start.
3. It is acknowledged that the main driver for adaptation is the need to respond to the risks linked to natural hazards that are exacerbated by climate change. However, the inquiry is narrowly focused and tied to a reactive concept of accommodating human activity to natural hazards. We submit that adaptation planning must enable strategic decisions around the economic, social, cultural and natural components of communities, resulting in more resilient land uses and economic activities.
4. The council's submission makes general comments on topics where we have a high level of interest and answers the questions in the issues and options paper. In summary:
 - a. We advocate for a system that enables complementarity of funding sources, leads to equitable opportunity of access and recognises the limitations of specific communities to pay for plan formulation and implementation.
 - b. The system needs a suitable tool to assess the risks from natural hazards and climate change, as well as a nationally consistent methodology to identify risk thresholds. Decisions about the timing of options and access to funding need to be based on robust risk assessments that can help a community confidently define their risk appetite.
 - c. Our experience in working with territorial authorities and iwi partners has highlighted capacity limitations from some local government authorities to respond to increased demand for assistance with adaptation planning.
 - d. Adaptation planning needs to recognise that the impacts from natural hazards and climate change disproportionately affect Māori communities. Barriers to Māori participation 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.
5. We look forward to future developments from this consultation process 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) 859 2786

Adaptation challenges

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.

We suggest the Select Committee recommends that the incoming government prioritises action in developing a fit-for-purpose adaptation planning system that enhances community resilience and adaptive capacity.

6. The council invites the Select Committee to issue a recommendation for the incoming government to prioritise actions to develop a fit-for-purpose adaptation planning system with a strong focus on community resilience and adaptive capacity. We highlight the absence of this work programme in the National Party 100-Day Action Plan,¹ and encourage recommendations to make it a priority.
7. The council also requests that this inquiry considers the different scenarios of how a community responds to uncertainty and the impacts of natural hazards and climate change risks.
8. For some communities, managed retreat is the only option. We suggest considering the following as part of the inquiry's analysis:
 - a. How to create frameworks and tools based on fairness, particularly with a market dominated system.
 - b. How to address challenges in assisting those in need and sharing the burden and responsibility.
 - c. How to provide a system that guarantees similar outcomes for lower-income communities to those that have more means. Our current beneficiary-pays arrangement has been unable to deliver this.
 - d. How to balance voluntary retreat with mandated retreat in a fair manner in this context.
9. Good data, information and tools are key to underpinning risk assessments and adaptation planning. 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.
10. We observe that asset owners are often unable to meet the costs of adaptation and retreat for the asset. Communities then find it harder to retreat. Communities might also be pressed to move after a disaster, and this might increase the risk of investing in the wrong things and places.
11. We note that actions around mitigation and adaptation need to be complementary and facilitated by the right framework. Local government is already carrying out work in emissions mitigation that can lead to identifying options for adaptation. For example, in 2002, the council published a review of potential management interventions to reduce peat subsidence and CO₂ emissions in the Waikato.² For each management practice identified (e.g. cultivation, sub-surface drainage) the review provided an overview of current research and summarised the effect on subsidence and CO₂ emissions. The report recommended the following steps to reduce peat subsidence and CO₂ emissions in the Waikato region:
 - a. Develop a spatial vulnerability index to identify locations where the most severe consequences are likely to occur.

¹ [100 Day Action Plan.pdf \(nationbuilder.com\)](https://www.nationbuilder.com)

² <https://www.waikatoregion.govt.nz/services/publications/tr202110/>

- b. Test a range of potential mitigation strategies including priority water management, land management, and land use strategies as identified in the review.
- c. Combine knowledge gained from experimental testing of mitigation strategies with modelling of catchment hydrology to develop a spatially appropriate management decision support tool to provide guidance for drainage and land managers to select the most appropriate mix of mitigation approaches.
- d. Update good practice guidelines and, if necessary, develop policy incentives or interventions to encourage adoption of management strategies and decision support tools.

Funding mechanisms

Investigating funding options must include a comprehensive analysis of the funding mechanisms for unitary authorities, district and regional councils under the Local Government Act 2002 and the Local Government (Rating) Act 2002. The mandate for local government authorities to fund adaptation planning and implementation of options needs to be clear.

The consultation document does not provide any concrete solutions to questions on the level of government that should meet the costs for different actions.

- 12. The council submits that identifying *who* pays is only part of the equation; there needs to be an assessment of *how*, *what* and *when*. Funding decisions have the potential to commit future generations to meeting the costs of adapting now. A key question to answer is how local authorities (those leading the majority of adaptation plans across New Zealand) fund the options identified through a community plan. Funding mechanisms need to account for the opportunities and limitations of meeting the costs of options through rates and provide reliable access to central government funding.
- 13. National Land Transport Fund bids through the Regional Land Transport Plan are an example of central government funding mechanisms that complement local government funding. Funding will require a focus on resilience and will have to come (for adaptation and retreat) from different sources. This also requires a regulatory and policy framework that enables and facilitates coordination between funding sources and decision-making organisations. A higher degree of coordination and complementarity will help overcome some of the limitations of the traditional beneficiary-pays approach.
- 14. Funding will have to recognise the rating base from different communities, based on their ability to pay and relative level of deprivation. 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. The mandate for local government authorities needs to include funding adaptation planning and implementation. As the consultation document mentions, the current settings are based on natural hazards risk mitigation and recovery.
- 15. A successful funding model for adaptation should also be able to leverage private capital that has social orientation. Alternatives include community banking models that provide a suitable degree of flexibility and scalability, which can deploy capital in response to localised climate adaptation needs. Other examples include current lending lines for homeowners looking to make their homes more energy efficient.³ Ultimately, the regulatory framework should allow communities to easily identify and access sources of funding, such as lottery grants, credit lines, etc.

³ <https://www.beehive.govt.nz/release/government-supports-more-energy-saving-projects-help-more-kiwis-save-money>

16. Another challenge is determining how funding is allocated and the options it will pay for. We suggest a participatory budgeting process: starting with the budget and then determining the options within that envelope. This has the advantage of moving the process from a range of options that are not achievable, to focusing on what can be done.
17. 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.
18. Another aspect unaddressed under the beneficiary-pays framework is determining who pays for actions aimed at allowing the natural environment to adapt. Local government authorities may end up being responsible due to catchment management functions. It is hard to quantify benefit in this instance.

Tools needed now

Local government authorities, iwi and community groups are currently working to meet the challenges of adapting to natural hazards risk in a changing climate.

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

The Aotearoa Climate Adaptation Network (ACAN) - a network of local government adaptation practitioners - can share learnings to identify challenges and opportunities for future adaptation planning.

19. Central government direction is needed on how to make 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.
20. The council's experience in adaptation processes in the region has revealed a need for institutions to become enablers for communities to decide on how to increase long-term resilience, rather than these institutions imposing solutions. This should have a strong focus on meeting the four wellbeings in a more holistic way, while acknowledging that the challenges posed by climate change bring changes to the communities' way of life.
21. 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. 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.

Impact on capacity and existing arrangements

Local government authorities need a clearer mandate to undertake long-term adaptation planning with communities. This will drive decisions to allocate capacity and funding to investigate adaptation options.

Local government needs sufficient capacity to respond to adaptation needs.

The systems should be principles-based and enhance capacity to meet obligations under Te Tiriti o Waitangi.

22. Local government is experiencing capacity constraints when responding to communities' adaptation needs. This is a rapidly evolving field and is challenging to properly resource, particularly when staff who work in adaptation are also charged with response and recovery for severe weather events. This impacts staff wellbeing and capacity to deliver both business-as-usual activities and projects. We highlight that this challenge is additional to issues around financial capability to carry out options resulting from adaptation plans; there are costs embedded in the process to facilitate the development of adaptation plans – this includes councillor participation, technical staff input and production of relevant technical reports to support decision-making.
23. Community adaptation planning is an increasing need and takes a lot of resource, but there are funding constraints on local government, particularly in the current economic climate. This is compounded by a lack of clarity around roles between regional and territorial authorities. Clear division in legislation needed.
24. 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.
25. In addition to the principles outlined above, 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.
26. We submit that the national system should have the benefit of a principles-based approach that acknowledges the differences between communities, need for action based on risk and the ability of partner organisations and the community to meet the cost for different actions.

Te Tiriti-based adaptation

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.

27. 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. Disproportionate Climate Change Impact
 - 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. Transparency and Equal Value of Knowledge Systems
 - i. 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.

Table 1: Questionnaire responses - Community-led retreat and adaptation funding: Issues and options

Question	Feedback/Answer
<p>1. Do you think we should use the term 'community-led retreat'? If not, what do you think we should use and why?</p>	<p>We suggest using the term <i>community-focused adaptation</i></p> <p>The community is at the centre of the process and in many instances co-designs and leads some of the work, however, the majority of current adaptation planning is undertaken by local government authorities.</p> <p>Also, we suggest focusing on adaptation, rather than just retreat, as the latter is only one of the many outcomes of adaptive planning. Retreat can have negative connotations, and communities may prefer terms such as planned relocation and/or resettlement.</p> <p>We acknowledge that regardless of the terminology, the topic is contentious and will not be easy to find a term that everyone agrees with. However, to many communities the word retreat makes it sound very final. Over time land will be reclaimed by nature, which may result in retreat for humans but not for the natural environment. This might represent a retreat for certain human activities which can create opportunities for alternative uses for the land, thus leading to adaptation. Failure to understand the impact of using the wrong terminology will make it difficult to effectively engage with communities affected by natural hazards and climate change risk. Further, it is preferable to shift the focus from "moving away" to generate excitement of moving towards something that increases community resilience.</p>
<p>2. Are there other barriers to Māori participation in adaptation and upholding Māori rights and interests? How can we better support Māori?</p>	<p>In our comments on Te Tiriti-based adaptation we have provided a list of challenges and suggested solutions.</p> <p>We advocate for central government funding and resourcing to enable iwi Māori to work with local government in local adaptation planning.</p>
<p>3. Are there other issues that affect the quality of risk assessments and local adaptation planning? How can we strengthen our approach?</p>	<p>We consider the main issues are:</p> <ol style="list-style-type: none"> 1. Capacity and a common understanding in the context of risk management: A professional workforce is required that can undertake risk assessment in the context of adaptation in a consistent manner. Communities also require understanding of what risk is, how risk assessment is undertaken, and its related assumptions. 2. Scalability of risk assessment frameworks and methodologies: Generating an approach that is scalable and remains consistent is also required. There are different levels of risk assessment which are more appropriate for different scales.

Question	Feedback/Answer
	<p>3. Communicating risks and understanding how these change over time: Displaying risk and how it changes over time can be difficult, especially when talking about the environment. This is compounded by how perceptions of risk vary. Personal risk varies between people, stakeholders, and organisations, etc. Addressing this issue is key for coming to a common understanding to define thresholds for tolerable, intolerable and acceptable risks.</p> <p>4. Access to funding as a limit to proactive community action: access to funding will also affect the quality of a risk assessment. Wealthier communities can afford access to technical expertise, whereas poorer communities will largely depend on local and/central government funding.</p> <p>5. Limitations to prioritising long-term adaptation under current regulatory frameworks: there is a lack of a national/regional view of priorities for adaptation planning. At present, regional council involvement 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 is constrained by a district council's ability to commence adaptation planning. Or, if all councils in a region decide to commence adaptation planning, regional resources become stretched.</p> <p>6. 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.</p> <p>7. 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.</p> <p>8. Another challenge for the prevalent adaptation approach (dynamic Adaptive Policy Pathways – DAPP) is that it can lead to believing that there is more time and more options than are actually reasonable/feasible in many cases. The context of adaptation planning has shifted considerably as insurance companies are now exiting and we are no longer anticipating severe weather events but responding to them.</p>

Question	Feedback/Answer
	<p>9. Lastly, we consider the process of community adaptation planning needs to be improved; to enhance community representativeness, to lower the cost for councils and the burden on communities.</p>
<p>4. Are there other issues that limit our ability to retreat in advance of a disaster? How can we improve our approach?</p>	<p>Maladaptation can limit our ability to retreat, in implementing defence options which provide a false sense of safety.</p> <p>The time between disasters also allows risks to be forgotten, which can lead to legislation changes. Policy and statutory frameworks need to be put in place to prevent the return of certain human activities to a location where retreat occurred due to natural hazards.</p> <p>Another issue is the willingness of the community or individuals to leave. This occurs even in communities that have already been affected by a natural disaster. In these communities, the issue can be further complicated by assigned perceived fault – central and local government are highly scrutinised following an event on the decisions they have made, and landowners may not take responsibility for decisions they have made.</p> <p>The funding and resource/capacity to commence a retreat process is severely limited within local government. The administrative, project management, communication and engagement burden of adaptation planning is significant, and local government needs additional resourcing in all of these areas to deliver adaptation planning. Local government is also constrained by the timing of annual plan and long term plan processes to provide sufficient funding.</p>
<p>5. Are there other issues with the way we fund adaptation? How can we improve our approach?</p>	<p>We consider there are four main issues with the way we currently fund adaptation:</p> <ol style="list-style-type: none"> 1. Sources of funding are not clear. The system lacks an express statutory mandate for different levels of government to fund adaptation planning and implementation. 2. Not all communities have the same opportunities financially to adapt. Funding tools need to be designed to ensure fair and equitable outcomes. 3. There are existing gaps in funding, as assets owners are often unable to afford cost of adaptation, including retreat. 4. Current decision-making frameworks and funding arrangements prioritise as-hoc decision making after disasters.

Question	Feedback/Answer
	<p>Current lack of clarity and funding constrains means communities find it difficult to plan with uncertainty around shared costs. This can lead to a short-term focus which does not incentivise long-term solutions.</p> <p>Further, communities need to understand that when local and central government funds are used, it means the community is paying for it in practical terms. While the more vulnerable communities may not be able to afford adaptation, a balance is required between vulnerable and more affluent communities being able to fund adaptation. If wealthier communities pay more in rates/taxes to generally cover adaptation in the more vulnerable ones, the system needs to ensure that, in the long run, the more affluent communities can still effectively fund their own adaptation. The share of funds needs to be strategically distributed as a function of risk, vulnerability, risk appetite and adaptive capacity.</p> <p>Current funding models can lead to reactive and ad hoc decision-making after disasters. This increases the risk of investing in the wrong things/places. Our current system benefits those paying for adaptation measures, but those benefits are often narrow. There needs to be shared responsibility for central and local government in a strategic and fit-for-purpose manner.</p>
6. What do you think the costs are of a failure to adapt or failure to adapt well?	Failing to collectively coordinate an adaptation process that is fair will increase inequality and social division. Adaptation options should be long term to avoid investment in maladaptation such as expensive short-term fixes that buy time.
7. What does a te Tiriti-based approach to adaptation mean to you?	Te Tiriti-based adaptation is tied to the system's ability to properly integrate tikanga, te ao and mātauranga Māori. In some instances the mainstream way of framing adaptation is not aligned with te ao Māori, environmental factors (or hazards) are seen as ngā atua, and not necessarily thought of as weather events and/or risks to some Māori. We also need to recognise that land that may need to be retreated from can be part of Māori identity. We have provided more comments about challenges and potential solutions for a Tiriti-based approach at the beginning of our submission.
8. What does a local mātauranga-based framework for risk assessment look like to you?	Such a framework should use mātauranga Māori notions of kaitiakitanga. Respecting kaitiakitanga means respecting the relationship of land and Māori and connection to whakapapa – for Māori it may not be so easy to retreat from a land which holds hapu/iwi/whanau/ individual significance and mauri.
9. What innovative approaches to adaptation planning do you have with your own hapori?	Please refer to the comments related to Te Tiriti-based adaptation at the beginning of this submission.

Question	Feedback/Answer
10. How can we manage overlapping interests during adaptation planning, including where there is a conflict?	There is a need for skilled adaptation planning facilitators. The quality of the process is important. Processes that include the community as a whole are needed to avoid capture by particular community interests. Managed retreat is a social process that should offer members of the community an opportunity to understand the range of perspectives and interests represented by the community as a whole. Social conflict over adaptation should not be avoided but needs to be managed within the context of a fair and agreed process for funding adaptation options.
11. What is your perspective on the Crown's te Tiriti obligations to support community-led retreat? Are there existing examples of what that should or should not look like?	No further comment.
12. What funding approaches have worked for your own iwi, hapū and hapori?	No further comment.
13. How many stages do you think are needed for risk assessment and what scale is appropriate for each of those stages?	<p>The stages should vary depending on the scale of the risk assessment. We recommend three scales for risk assessments: regional, district and local. Within each scale would then be high level and detailed assessments, and the process for the detail would be slightly different for each scale. Risk classifications will vary depending on the scale. However, risk assessments must complement each other and be based on a methodology that avoids duplication. We suggest the following approach:</p> <ol style="list-style-type: none"> 1. Regional risk assessment <ol style="list-style-type: none"> a. High level identification b. High level assessment (perhaps by element group or location) of the general risk 2. District risk assessment <ol style="list-style-type: none"> a. High level identification using regional 1b results. b. Detailed risk assessment – bringing in the district information, e.g. the risks for a whole town. 3. local risk assessment <ol style="list-style-type: none"> a. Using the 2b risk information to identify risks to a community, suburb, street, etc. b. Detailed risk assessment – how many homes are flooded above their floor level, how many people are out of their homes, the communities adaptative capacity, is the risk intolerable or acceptable. <p>Further steps should be aligned with the use of the ISO31000:2018. Establishing levels of tolerance is key for decision making at the local level. While regional and district risk assessments can be used to understand generally what is acceptable, tolerable or intolerable, this should be decided once risks are understood at the local level.</p>

Question	Feedback/Answer
	<p>The current MfE guidance does not provide clear direction on the different approaches possible or appropriate for different scales of assessment. The absence of guidance results in inconsistency in local government approaches, and a lack of drivers for proactive action. Currently, local government authorities carry out risk assessments to meet planning statutory requirements. However due to lack of national direction, the findings may not be suitable to develop adaptation options because of cost and capacity limitation. National direction and statutory provisions should be designed to address this shortcoming.</p>
<p>14. How frequently should a risk assessment be reviewed?</p>	<p>Risk assessment should be reviewed on a case-by-case basis. Triggers could include:</p> <ol style="list-style-type: none"> 1. After an event 2. Once a natural hazard risk mitigation action has been implemented 3. Following the turnover of a large proportion of community 4. When the community feels it is needed 5. When new information about natural hazards and their related risks comes to light. <p>Risk assessment can take some time. By the time the risk assessment analysis is finished, some of the information is already outdated so it may also be worth developing a living model approach to risk assessments. Any assessment of frequency and triggers is significantly dependent on the scale and purpose of the assessment.</p>
<p>15. What do you think makes a risk tolerable or intolerable (ie, acceptable or unacceptable)?</p>	<p>Tolerable and intolerable risk thresholds are subjective. Some examples may be: personal experience, repair time, cost, social impact, etc. The level of risk for each situation also varies, e.g. any risk to life is intolerable, but risk to property may be more acceptable. It is difficult to classify intolerable or tolerable generally and perhaps different triggers are needed across the different environments.</p> <p>For the purpose of resource management decisions, the Waikato Regional Policy Statement defines tolerance in the context of natural hazards risk as follows:</p> <p>Natural hazard risk – the probability or likelihood of specified negative consequence to life, wellbeing, property, economic activity, environmental or other specified values, due to a particular hazard or group of hazards.</p> <p>Three levels of risk are identified in the Regional Policy Statement:</p> <ol style="list-style-type: none"> a) intolerable: risk which cannot be justified and risk reduction is essential e.g. residential housing being developed in a primary hazard zone; b) tolerable: risk within a range that a community can live with so as to secure certain net benefits. It is a range of risk that is not regarded as negligible or as something to ignore, but rather as something to be kept under review and reduced if possible; and

Question	Feedback/Answer
	<p>c) acceptable: risk which is minor, and the cost of further reducing risk is largely to the benefits gained e.g. residential housing being developed beyond coastal setbacks.</p>
<p>16. Do you think local risk assessments should be carried out or reviewed by a centralised agency or a local organisation? Why?</p>	<p>We suggest a tiered level for review, e.g. local (community) risk assessments may be reviewed by expert local councils, and district and regional risk assessments could be reviewed by a centralised agency. The key part of this process is that any agency reviewing a risk assessment needs to be involved from the beginning of the process and providing advice throughout it as a technical adviser.</p> <p>Any reviewer requires a deep understanding of the process, with input from local/regional subject matter experts. This would help inform a consistent national and regional review of the risks. At present, a range of approaches have been undertaken by councils, and consultants have become a key part of the risk assessment process for different councils. Risk assessment process knowledge is then primarily sitting with consultants, rather than with staff or a centralised body.</p> <p>A further consideration in terms of who should carry out risk assessments is how risk assessment information is reported/shared. This would lead to cost saving as each council would not have to scope and develop the assessment separately.</p>
<p>17. Should risk assessments be carried out only by technical experts or should other people also have a role? What role should other people and organisations have?</p>	<p>We suggest it is important to have both technical experts for and experts associated with risk. Having a risk expert providing guidance throughout the process is essential to ensure the risk assessment is being conducted appropriately, but the technical experts or the community who know the assets (such as road, schools, health facilities, etc) or the impact category need to be deciding on the level of risk the asset is exposed to.</p> <p>The level and timing of involvement of other organisations, technical experts and/or the community will depend on the scale of the assessment. When engaging the community (via a survey, for example) some people may provide very specific localised risk information, which can be too detailed for a regional risk assessment. Another challenge is people's understanding of "risk," which can vary from the technical notion. A solution to these challenges is using technical/subject matter experts to inform regional assessment and create a common understating of risk, and then share it more widely for feedback; checking if the assessment is correct with the community or if there is anything else to add.</p>

Question	Feedback/Answer
<p>18. Do you think there should be a requirement to undertake local adaptation planning? If so, should the trigger be based on the level of risk or something else?</p>	<p>Yes, there should be a requirement for this planning, triggered by risk priorities, looking at short, medium and long-term – noting that a trigger-based mechanism would be different depending on the risks and characteristics of each community. This will also depend on the quality of the risk assessments available for the area.</p> <p>It is also important to understand the level at which adaptation planning should take place and the risk assessment it is based on. We would like to see the inquiry answer the following questions:</p> <ol style="list-style-type: none"> 1. What level will risk is being assessed? 2. What does “local” mean? Regional or district level? This also varies for unitary authorities. 3. Should we use risk tolerance levels as a trigger? If so, whose tolerance? <p>We note that although districts will have a more granular understanding of risk than regions, even more understanding and better risk assessment will come from the communities themselves.</p> <p>We also note that while this inquiry is taking place, parliament is assessing changes to the emergency management legislation. For the Civil Defence and Emergency Management function, we understand that there will be a statutory trigger, based on changes to the Emergency Management Bill, with a requirement to create an emergency management plan, that will be captured in the framework of the Group Management Plan (s37).</p>
<p>19. What direction should central government provide on the local adaptation planning process?</p>	<p>We suggest central government should provide direction on how to work through the technical processes of adaptation planning, e.g. engagement frameworks, prioritisation frameworks, implementation frameworks, costing, etc. All of these need to be adaptable to fit the community (at the appropriate scale) and interlinked with each other. We highlight that:</p> <ul style="list-style-type: none"> • A signals and triggers framework is needed. • A space is needed to share information on how adaptation projects are undertaken so everyone can access it – an open-source document sharing system. • Consistent approaches are needed for modelling climate change at the regional and local level to inform risk assessments. • A central repository for asset and impact categories is needed. This information should be open source, easily accessible and continually updated to ensure the most up to date information is available.
<p>20. Do you think there should be a requirement to plan for different scenarios, such as</p>	<p>Planning for a disaster to occur while the adaptation pathways are being implemented is crucial. Emergency Management should be at the technical advisory and community level from the beginning of the process. The adaptation pathways should be adaptable in themselves. This way, the adaptation options determined to be</p>

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<p>changes in the level of risk or what happens if there is a disaster? Why or why not?</p>	<p>implemented at the short, medium or long term should help reduce the risk to the community and generally would all be triggered by some sort of event – whether large or small.</p> <p>Planning should also be required for the smaller, more frequent events and how the community can overcome those rather than focusing on the big, less frequent, more impactful events.</p> <p>Planning should also include contingencies for the changing level of risk acting as a trigger. This should be part of the assessment and review cycle, to understand how the level of risk changes. This means the plan needs to be adaptable and the level of risk should be reviewed following an adaptation action being implemented.</p>
<p>21. How can we make sure that local adaptation planning is inclusive and draws on community views?</p>	<p>Risk identification is part of local authorities’ duties; however, adaptation planning and retreat discussions must be community-led.</p> <p>Projects such as Wharekawa Coast 2120 and the Shoreline Management Pathways can provide useful insights into the challenges of inclusiveness of community views. These projects have shown that inclusive engagement requires work and needs a departure from traditional understandings of engagement with local government, usually driven by statutory requirements. Communication is very important as is providing spaces for communities to access the technical information, understand it and provide their views. This includes consideration of how different demographics access and relay information.</p> <p>We also note the Climate Change Commission has provided advice to government of the suitability of citizen assemblies. The council supports the citizens’ assembly approach and sees it as a good way of countering some of the shortcomings of the traditional stakeholder engagement approach. We believe these assemblies give people the opportunity to engage experts, the citizens do not only vote on the issues but have to give account as to why they decide in a particular way.</p>
<p>22. Who do you think should make decisions about the adaptation pathway we choose and why? How should others be involved in the process?</p>	<p>Communities need to be empowered to make the decisions on where they live and why. Local and central government need to support communities with information to make those decisions. This should be in addition to supporting the communities’ decision-making process through different democratic and statutory processes (elections and long-term plan funding discussions).</p> <p>Central and local government should help the community in assessing the viability of available adaptation options, using technical information and providing guidance on the process to understand why one option is better than</p>

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	<p>another (using multi-criteria analysis or prioritisation criteria). It should be the role of government agencies (central and local) to help communities understand the implications and technically appropriate limits of the options explored while developing an adaptation plan. Technical experts, technical information, technical design and engagement specialists are needed to advise the community.</p> <p>Guidance and advice must focus on long-term resilience. One of the risks for decision-making in the adaptation context is that these might not align with longer term objectives, thus leading to maladaptation. Adaptation decisions need to be cognisant of the risk and implicit external costs they create, such as the implications of the risk to lives of emergency services workers for communities who refuse to retreat, as well as response and recovery costs.</p>
<p>23. What do you think are the most important outcomes and principles for community-led retreat?</p>	<p>We suggest the most important outcomes and principles are:</p> <ol style="list-style-type: none"> 1. Clarifying roles and responsibilities between different stakeholders, government and community. 2. Ensuring the community's expectations remain realistic in the context of climate change. Community wishes will need to be tempered by environmental aspects. In the Waikato context, for example, the Hauraki Plains flood and drainage schemes have major implications on peat emissions and water quality. The community needs to be empowered to understand how this can be avoided as part of any options assessment. 3. Aligning with existing powers and statutory responsibilities: in some cases, compulsory acquisition of land may be required to manage risk or provide region-wide benefit (e.g. flood plain management from a system-wide perspective). 4. Ensuring options provide for adaptive capacity of the natural environment: we need to ensure the "natural world" is considered - habitats and migration pathways will also need to be subject to "planned relocation" which may not align with what a community wants at a community or property scale.
<p>24. Do you prefer option 1 (voluntary) or option 2 (a mix of voluntary and mandatory parts)? Are there any other options?</p>	<p>We prefer Option 2. It is effective in managing the risk, but it meets a key element of bringing the community along and then understanding that when it is decided to retreat, that means everyone retreats and no council services will be provided. This is connected to our previous points about empowering communities while being honest about the implications for some adaptation options.</p>
<p>25. Do you agree that affected land should no longer be used at the end of a retreat process (with limited exceptions for things like ceremonial events, recreation, some</p>	<p>To the largest extent possible, the land should be left to restore back to its natural state. The key will be how to restore the land acquired by managed retreat. It is possible that over time the land use will change slightly as the land reverts to its natural state. The process of retreat may not be to immediately stop all homes and activities in</p>

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agricultural or horticultural uses and mahinga kai gathering)? Why or why not?	<p>an area, a community may decide to remove residential living but agriculture or other industries like solar power is acceptable until a certain trigger is reached.</p> <p>This means the land remains available for other uses at the end of a retreat process, with a priority given to certain land use types (e.g., habitat restoration, improving water quality, reducing emissions). This could be used to prioritise land uses that bring region-wide benefits.</p>
26. Do you think there should be any other exceptions? If so, what, and why?	Exceptions should be assessed in a case-by-case basis.
27. Do you agree that these powers are needed to ensure land is no longer used once a decision has been made to retreat? What powers do you consider are needed?	Local government already has powers to control land use and avoid certain activities to occur in an area. What is needed is a framework to use these consistently and in a way that decreases the likelihood of lengthy litigation processes.
28. What do you think the threshold or trigger should be for withdrawing services once a decision has been made to retreat?	The trigger should be the point at which services and infrastructure need to be retreated. This needs to be built into the adaptation pathway. We also need to understand the thresholds of those service providers to figure out when retreat is likely and develop signals and triggers for them also.
29. In what circumstances, if any, do you think decision-makers should be protected from liability? What are your views on option A, option B or any other possible option?	We note issues around liability in areas where a regional council has opposed a decision by a district council to allow development in a certain area that is now subject to managed retreat.
30. Which parts of the current system work well and which do not? Are there any other issues with our current approach to adaptation funding?	<p>There are several issues with the current approach to adaptation funding:</p> <ol style="list-style-type: none"> 1. Decisions made in the past (and now) make communities more or less adaptive to the future. One of the current issues with the system is “pathway dependency”: <ol style="list-style-type: none"> a. It is harder to retract infrastructure decisions because of investments required (sunken costs) and commitments around the level of service to be provided. b. Maintaining levels of service in some cases will be either that others subsidise areas at risk; or people are forced to fund infrastructure that is not affordable. 2. Funding uncertainty: it is unknown where funding will come from. Local government is doing significant work, but on a case-by-case basis. 3. In some areas that may require adaptation funding are infrastructure schemes that were originally established by central government to enable economic development, such as parts of the Waikato. There is now a challenge of reducing or removing some of these legacy schemes which have key climate change and environmental challenges, while local government still has a responsibility for economic wellbeing under the

Question	Feedback/Answer
	<p>Local Government Act. Given that the original decisions were around the existence of the asset and the benefit, we submit that a different mechanism is needed to make decisions about when to retract an asset and how to fund the relevant investigations and decisions.</p>
<p>31. What do you think are the most important outcomes and principles for funding adaptation?</p>	<p>We suggest that equity and avoiding moral hazard (as an outcome of maladaptation) are important principles. This should include an honest assessment of the equity implications of funding adaptation options when the affected persons made conscious decisions to build in areas at risk.</p> <p>A key outcome is environmental resilience. One of the learnings from the Wharekawa Coast 2120 project was that when humans adapt/retreat, they need to make space for the ecosystem to respond or adapt, i.e. by moving community owned/private assets we need to ensure we do not create additional pressures on ecosystems. Enhancing the ability of natural ecosystems to adapt was left out of the issues and options document.</p>
<p>32. In what circumstances (if any) do you think ratepayers and taxpayers should help people pay for the costs of adaptation?</p>	<p>We suggest that ratepayers and taxpayers could contribute to the costs where communities would choose to adapt, but doing so would cause financial hardship. It seems more reasonable to contribute where people have held a property for a long time; less so for those who have purchased inflated coastal property prices without having done due-diligence.</p> <p>We note that any contribution to adaptation planning will increase the current rates burden for our local communities, and suggest that the government needs to enable funding streams accessible to local government to meet the costs of developing and implementing adaptation actions.</p>
<p>33. In what circumstances should central government help councils to meet adaptation costs?</p>	<p>See answer to question 32 above.</p>
<p>34. What are the benefits and challenges of providing financial support to people needing to retreat?</p>	<p>We note the following challenges:</p> <ol style="list-style-type: none"> 1. Different levels of adaptive capacity for communities based on income. 2. The overall scale of this problem is vast – far beyond the resources of local government. 3. Determining how much to support which could create issues of fairness/equity or affect market price-setting mechanisms (supply/demand dynamics). However, we should also analyse where markets have been distorted by failure to take account of future risks (capital losses). These existing market failures could justify public policy intervention.

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	<ul style="list-style-type: none"> ○ Public policy for adaptation needs to properly consider the effect of government action on markets and price setting mechanisms (supply/demand). We need to ensure that policy interventions do not widen existing wealth gaps and distribution, thus exacerbating current inequalities. ○ Funding of communities is also uncertain. This may lead to communities funding action themselves, which may exacerbate existing wealth gap/distribution. <ol style="list-style-type: none"> 4. Determining when mitigation or retreat are appropriate. 5. Some communities have the ability to choose: Some can postpone moving because they have money for insurance (or similar risk transfer mechanisms) or can afford to move. There is challenge in creating a publicly funded system that includes these communities and distributes funding with fairness, particularly with market-led decisions. 6. Identifying how to work out the mechanisms to implement voluntary and/or compulsory managed retreat. 7. Whether to allow people to remain in areas that should be retreated from, but they bear the risks; how to clarify that services will not be provided in those places.
35. Are there any other approaches for providing support to people needing to retreat that we should consider?	Please see the options highlighted throughout this submission.
36. What are the benefits and challenges of providing financial support to businesses needing to retreat?	<p>The local, regional and national economic benefit a business provides needs to be a consideration.</p> <p>Given the costs related to the process of moving a population, we need to consider the impact on the system's ability to assist businesses too. A careful assessment will need to consider issues of equity and fairness. Due to budget constraints, the government may only be able to provide financial support to people either as residents or business owners, but not both.</p>
37. What should central government's initial funding priorities be and why? Which priorities are the most important and why?	The initial funding priority should be having consistent nationwide data and information to support decision-making.
38. How could central government communicate its investment priorities? Please indicate which option you think would be most effective and explain why.	We suggest Option 3 would be most effective: a statement that is part of central government's annual Budget, which would provide flexibility to update priorities every year, taking account of recent weather events and other natural hazards, as well as new information. However, this should make reference to each of the actions identified in the National Adaptation Plan.

Question	Feedback/Answer
39. Should funding priorities cover councils as well as central government?	Yes, this approach would assist consistency.
40. How can the banking and insurance sectors help to drive good adaptation outcomes?	<p>These sectors can help to drive good adaptation outcomes through:</p> <ol style="list-style-type: none"> 1. Data sharing. 2. Having consistent/agreed approach/principles across the nation between insurers, local and central government. 3. Sending clear signals about retreat via price and then via supply of services.
41. What solutions should be explored for funding and financing adaptation?	<p>Resilience bonds are a tool that could be explored. This tool helps frame adaptation as a positive investment, and it allows communities to access funds that are linked to the avoidance on natural hazards risk.</p> <p>We suggest further exploring the United Kingdom’s grants model for flooding risk management. This should include direction on the definition of scope, identification of risks and assessment of viable adaptation options. However, the system needs to be adapted to the New Zealand context and set up properly to mitigate the risk of ‘planning blight’ when an area is identified as being at risk or where managed retreat is the most viable option. It is imperative to avoid or minimise negative impacts from identifying areas as being at risk – community-owned and privately owned assets should be looked at differently and the sources of funding for adaptation should be separate.</p>
42. Are there any other issues that make it difficult to adapt during a recovery?	No further comment.
43. Do you think our approach to community-led retreat and adaptation funding should be the same before and after a disaster? Why or why not?	No further comment.