

3 June 2022

Ministry for the Environment  
[Adaptation@mfe.govt.nz](mailto:Adaptation@mfe.govt.nz)

Dear Ministry for the Environment,

### **Submission on draft National Adaptation Plan and managed retreat proposals**

Thank you for the opportunity to submit on *Adapt and thrive: Building a climate-resilient Aotearoa New Zealand: Consultation document* and the draft National Adaptation Plan (NAP).

In Nelson, we are already seeing the effects of climate change. Nelson has experienced increased natural hazards in the past decade, such as fires, droughts, storms and floods.

Nelson City Council (Council) is committed to action on climate change. This was demonstrated by Council's Declaration of a Climate Emergency in 2019, a commitment in the Long-Term Plan to consider climate change as "a lens through which all work programmes are considered" and the release of *Te Mahere Mahi a te Āhuarangi Climate Action Plan* in 2021.

This letter summarises Council's most significant comments on the draft NAP and managed retreat proposals. **Appendix A** contains a list of Council's specific responses to questions in the consultation document.

The Council's contact for this submission is: Rachel Pemberton, Climate Change Manager ([Rachel.pemberton@ncc.govt.nz](mailto:Rachel.pemberton@ncc.govt.nz)).

Please note that the submission is subject to approval by the Environment and Climate Committee of the Council.

### ***Draft National Adaptation Plan***

Council welcomes the release of the draft NAP. The draft NAP is a comprehensive document which brings together a significant number of adaptation policies from across many government agencies. Council thanks the staff involved in developing the NAP for the enormous amount of work that has gone into collating these proposals.

Council is encouraged by the references in the draft NAP to the responsibility for climate change adaptation being shared between central government, local government, property owners, insurance companies and banks. Historically, local government has received little direction and support on climate change adaptation. It is great to see a shift towards stronger central government leadership and direction. However, there are many references in the documents to central government not bearing all the responsibility (and risks). Council acknowledges this, but this should not mean that the risks are then disproportionately borne by local government.

More detail is needed in the NAP on how policies will be implemented and funded. Many of the proposed policies will require local government to implement them. This will significantly increase local government workloads and will require considerable additional funding that

will put strain on local communities unless central government assists in funding and resources. Council would expect to see more discussion in the draft NAP on funding support for local government and opportunities for co-investment of initiatives between local and central government.

Currently there is variable capability and capacity in councils around the country to implement central government policies. Without significant support from central government there is likely to be highly variable implementation.

While the National Climate Change Risk Assessment provided a clear picture of national climate change risks, information on regional/local risks is still highly variable throughout Aotearoa New Zealand. The guidance released by Ministry for the Environment on local climate change risk assessments this year may help with this, but some councils aren't resourced to carry out the work and may not prioritise it. Consideration should be given to supporting local government with funding and expertise to develop regional risk assessments.

The NAP needs to more clearly explain how the Future of Local Government review fits in with other policies, such as resource management and Three Waters reform. This should be identified as a critical system-wide action.

There is a need for more integration of policies within the NAP, but also between the Emissions Reduction Plan and the NAP. The policies in the NAP should maximise opportunities for achieving co-benefits for both mitigation, adaptation and other issues (for example, regenerative agriculture has multiple climate change and environmental benefits). Supporting leadership by Māori and applying a te ao Māori lens is critical in developing both adaptation and mitigation solutions. Further, there is also a need for better integration between the Waka Kotahi Climate Adaptation Action Plan and local government planning on local roads.

Council is encouraged by the focus on the natural environment. There are many adaptation solutions that could improve resilience to climate impacts and also improve environmental outcomes (e.g. biodiversity and water quality), such as by restoring coastal habitats. However, Council would welcome and expect to see more discussion on coastal ecosystems and supporting adaptation of estuaries and coastal margins and coastal ecosystem retreat – this seems to be missing from the natural environment chapter.

Council would expect to see greater emphasis on the role of the Building Act 2004 and Building Code in the chapter on homes, buildings and places. The Building Act is critical to ensuring homes and buildings are climate resilient. The Act could implement relatively straightforward changes to ensure greater consideration of elevated water levels arising from climate change. Also, many of the proposals in this chapter will take years to develop. There is a significant risk of maladaptation in the meantime. Government should consider providing interim direction or guidance, for example by: setting a national methodology for setting ground or floor levels for subdivision and buildings; increasing the minimum requirements for floor levels above surface water; and updating the Coastal Hazards and Climate Change Guidance from Ministry for the Environment.

The chapter on communities should place greater emphasis on preventative or preparatory measures to strengthen communities, rather than supporting communities after an event. The objectives in this chapter should emphasise the need for communities to support each other, so that they are less reliant on assistance from central or local government or another organisation. Enabling iwi and hapū leadership to strengthen communities is important, but iwi and hapū need to be empowered with the right tools and resources to be able to play this role.

It is also critical that engagement on the NAP is tailored for diverse communities, so that all people have access to clear information about risks and adaptation opportunities, This will be important in order to build a social license for change.

In the infrastructure chapter, the outcomes and objectives do not adequately reflect the limits to service levels that will be able to be achieved in the context of climate change impacts. In particular, investment in infrastructure in low lying coastal areas will need to be assessed through a cost/benefit lens, not only for the infrastructure itself, but for the community it services.

In the section on economy and financial system, Council would expect to see content on opportunities to access climate finance, such as green bonds.

To ensure policies can be effectively implemented, local government needs to play a stronger role in informing the development of policies. Local government should also play a stronger role in determining research priorities.

Finally, Council is already working with communities to make adaptation decisions and is concerned that the pace of policy development by central government signalled in the NAP is too slow. Clear direction, in particular on roles and responsibilities and cost apportionment for adaptation work, is needed now to reduce the risk of alignment issues down the track.

### ***Managed retreat proposals***

Council thanks the Ministry for the Environment and other agencies for their work on developing the managed retreat proposals. It is encouraging to see a draft framework for managed retreat prepared.

Greater clarity is needed on the balance of financial responsibility between central and local government (and other players) for managed retreat. More information is needed on how costs will be apportioned and opportunities for co-investment between central and local government (and other organisations). The proposals are currently light on central and local government roles and responsibilities. Intergenerational equity and the principles for a just transition need to be considered when determining how costs will be shared among affected parties.

It is good to see some case studies included in the managed retreat proposals (and in the draft NAP), but the consultation document could draw upon learnings from local government to date better, such as the approach to managed retreat in Matatā and red-zoning in Canterbury.

A definition of intolerable risk and a coastal hazard risk assessment methodology is needed and these should apply nationally to ensure a consistent approach is adopted across the country. Risk management methodologies need to be robust and understandable by those affected. Complex risk assessments can be difficult to communicate to communities and subject of legal challenge once the risks are translated into Resource Management planning documents.

One key aspect of risk assessment that needs development is clear direction about 'trigger points' for initiating retreat, or other mitigation actions. A national framework which includes trigger points would create greater certainty, reduce litigation risk and be more efficient.

We would welcome another opportunity for local government to submit on the managed retreat proposals once these proposals are further developed (ahead of the Select Committee process).

***Concluding words***

Council thanks government for the opportunity to submit on this important consultation. We strongly encourage the Ministry to continue to engage with local government to ensure the inclusion of a local government voice in the development of the policies included in the NAP and on managed retreat.

Ngā mihi,

Cr Kate Fulton  
Chair, Environment and Climate Committee  
Nelson City Council

## Appendix A: responses to questions in *Adapt and thrive: Building a climate-resilient Aotearoa New Zealand: Consultation document*

Question	Response
<b>General questions</b>	
<p>1. Climate change is already impacting New Zealanders. Some examples include extreme weather events such as storms, heatwaves and heavy rainfall which affects lives, livelihoods, health and wellbeing, ecosystems and species, economic, social and cultural assets, services (including ecosystem services) and infrastructure. How is climate change impacting you? This could be within your community and/or hapū and iwi, and/or your business/organisation, and/or your region.</p>	<p>Council is already seeing the effects of climate change in Nelson - Nelson has experienced increased fires, droughts, storms and flooding in the past decade.</p>
<p>2. The national adaptation plan focuses on three key areas. Please indicate which area is most important for you (tick box).</p> <ul style="list-style-type: none"> <li>• Focus area one: reform institutions to be fit for a changing climate. This means updating the legislative settings so that those who are responsible for preparing for and reducing exposure to changing climate risk will be better equipped.</li> <li>• Focus area two: provide data, information and guidance to enable everyone to assess and reduce their own climate risks. This means that all New Zealanders will have access to information about the climate risks that are relevant to them</li> <li>• Focus area three: embed climate resilience across government strategies and policies. This means that Government agencies will be considering climate risks in their strategies and proposals.</li> <li>• Other – please explain.</li> </ul>	<p>All are critical. Another key area of importance is cost allocation and cost sharing, particularly around managed retreat and other adaptation actions.</p>
<p>3. We all have a role to play in building resilience to climate change, but some New Zealanders may be more affected and less able to respond. There is a risk that climate change could exacerbate existing inequities for different groups in society. <a href="#">Appendix 3</a> sets out the full list of actions in this national adaptation plan.</p> <p>a) What are the key actions that are essential to help you adapt? Please list them.</p> <p>b) Which actions do you consider to be most urgent? Please list them.</p> <p>c) Are there any actions that would help ensure that existing inequities are not exacerbated? Please list them.</p> <p>d) Are there any actions not included in this draft national adaptation plan that would enable you to assess your risk and help you adapt?</p>	<p>On a) - There are too many to list. Most of the actions outlined in the draft National Adaptation Plan (NAP) are essential. The <i>most</i> critical action, in our view, is: resource management reform, including passing legislation to support managed retreat. It is essential the reforms connect strongly to LGA reform on funding. Communities will need to be able to rely on long-term funding decisions for managed retreat. The future for Local Government review is also critical and will impact local government's ability to implement many of the actions outlined in the draft NAP.</p> <p>Also, amend the Building Act to provide for building design that can adapt to climate change.</p> <p>On b) - Robust co-investment by central and local government to reduce the risks for local government</p> <p>On c) - Building community resilience through social cohesion is important. However, building community resilience won't be enough - financial support is needed too. There is very little content in the draft NAP which would result in reducing financial risk to vulnerable communities.</p> <p>On d) - Yes, opportunities for accessing climate finance, how local government will work with central government on the design and implementation of policies, opportunities for co-investment between central and local government</p>

Question	Response
<p>4. Central government cannot bear all the risks and costs of adaptation. What role do you think asset owners, banks and insurers, the private sector, local government and central government should play in:</p> <p>a) improving resilience to the future impacts of climate change?</p> <p>b) sharing the costs of adaptation?</p>	<p>Council agrees that the costs should not fall just on central government. However, Council does not support the language in the document that tries to shift the responsibility (and risk) from central government. To date local government has borne most of the risks of action (or inaction) on climate change adaptation.</p> <p>On b), Council agrees that the costs should be shared between the players listed above.</p>
<p>5. The National Climate Change Risk Assessment recognised that there may be economic opportunities in adapting to a changing climate. a) What opportunities do you think could exist for your community or sector? b) What role could central government play in harnessing those opportunities?</p>	<p>On a):</p> <ul style="list-style-type: none"> <li>• There is potential for the tourism sector to expand with a warmer climate attracting visitors to the region's many outdoor activities</li> <li>• There is potential to strengthen iwi partnerships by working together on climate solutions</li> <li>• A warmer climate may offer opportunities to grow different crops</li> <li>• Nelson could position itself as a climate knowledge hub - e.g. Council is already providing leadership on blue carbon</li> </ul> <p>On b) - Research into new crop opportunities across NZ as the climate changes; and resourcing and support for iwi and Māori to work with central and local government on climate solutions</p>
<p><b>System-wide actions</b></p>	
<p>6. Do you agree with the objectives in this chapter?</p>	<p>Broadly yes, but information was missing on reforming how the costs and liability for action (or inaction) on climate change adaptation will fall.</p>
<p>7. What else should guide the whole-of-government approach to help New Zealand adapt and build resilience to a changing climate?</p>	<ul style="list-style-type: none"> <li>• Innovation and local solutions enabled and supported.</li> <li>• An 'environment-first' approach similar to Te Mana o te Wai, as the health of the natural environment is intrinsically linked to human survival and well-being. There is however a balance that needs to be achieved when developing adaptation solutions to ensure public safety.</li> <li>• Local government sufficiently funded to deliver adaptation responses Central government investment in preventative/preparatory measures (rather than cleaning up after an event)</li> <li>• The principles of a just transition.</li> </ul>
<p>8. Do you agree that the new tools, guidance and methodologies set out in this chapter will be useful for you, your community and/or iwi and hapū, business or organisation to assess climate risks and plan for adaptation?</p>	<p>Tools are more useful than guidance. Guidance sets out central government expectations, often without the legislative teeth and supporting tools/resources to implement it. There is lots of proposed guidance and far less supporting resource/tools.</p> <p>The proposals for legislative change include quite optimistic timeframes and the critical actions and supporting actions appear to be quite high level and largely strategic programmes. It would be helpful to also include a suite of straightforward suggestions for short to medium term construction works that can include at least some future proofing in the design and construction. See response to Q9 below also.</p>

Question	Response
<p>9. Are there other actions central government should consider to:</p> <p>a) enable you to access and understand the information you need to adapt to climate change?</p> <p>b) provide further tools, guidance and methodologies to assist you to adapt to climate change?</p> <p>c) remove barriers to greater investment in climate resilience?</p> <p>d) support local planning and risk reduction measures while the resource management and emergency management system reforms progress?</p>	<p>Climate resilient solutions often require OPEX funding, because based on living systems, people or behaviours change. Funding models may need to be changed to reduce dependency on CAPEX-funded fixed infrastructure and remove barriers to investment in flexible, adaptable solutions.</p> <p>It is likely that many councils currently have a limited appreciation of the increased operational costs associated with maintaining such things as transport networks, recreational facilities, or drainage systems in low lying coastal areas where siltation rates will likely increase due to sea level rise and higher intensity storms generating additional sediment load that will compromise drainage capacity. Further research on these impacts is needed to ensure that these 'hidden' future costs are factored into consideration of adaptation options. Guidance on standardised financial assumptions for asset planning would be a useful output from the research.</p> <p>On 9b) - Require each council to prepare interactive website tools that quickly allow property owners to see flood levels and sea levels at different time intervals (Nelson City Council has done this already).</p> <p>On 9d) - as it will take a few years for the national legislative and policy settings to be finalised, interim direction and guidance is needed to guide local government decisions. There is a lot of development underway (driven by population growth, the NPS Urban Development and RMA Amendment Act 2021) so there is a significant risk of maladaptation while there are insufficient national policies in place</p>
<p>10. What actions do you think will have the most widespread and long-term benefit for New Zealand?</p>	<ul style="list-style-type: none"> <li>• Focus area 2 - providing data and tools</li> <li>• Resource management reform, which requires new developments to be developed in locations that will not be impacted by sea level rise (at least in the next 150 years)</li> <li>• Raising ground levels for subdivision and raising floor levels of new construction in lower lying areas (through changes to the Building Act and new resource management system)</li> <li>• Requiring new construction in low lying areas subject to sea level rise to be designed for future relocation; and 'closing off' of services or removal of onsite wastewater systems associated with relocated buildings</li> </ul>
<p>11. Are there additional actions that would strengthen climate resilience?</p>	<ul style="list-style-type: none"> <li>• Include review/reform of the Building Act 2004 and Biosecurity Act in the critical actions</li> <li>• Make links between adaptation and review of Environmental Reporting Act and Essential Freshwater policies and regulations more overt.</li> <li>• Ensure that housing capacity policy does not promote rapid building of poor-quality housing that will not perform well under climate change. This should be managed via changes to the Building Act to ensure consistency across NZ</li> <li>• Recognise the potential tensions between the hierarchy of obligations under the NPS Freshwater Management, providing for growth under the NPS Urban Development, and promoting resilience to climate impacts in urban areas subject to increasing climate impacts.</li> <li>• Provide guidance on how councils should reconcile public safety risks and socioeconomic loss in these areas with the need to promote the health and wellbeing of water bodies and freshwater ecosystems.</li> <li>• Ensure that the new Three Waters entities are resourced and enabled to provide climate resilient infrastructure (working with nature as per IPCC report) - not just business as usual.</li> </ul>
<p>12. There are several Government reform programmes underway that can address some barriers to adaptation, including the Resource Management (RM) reform. Are there any additional actions that we could include in the national adaptation plan that would help to address barriers in the short-term before we transition to a new resource management system?</p>	<p>Ensure the Building Act and Building Code supports adaptive resilience - both retrofitting and new housing, for example by allowing houses to be easily modified or lifted as an interim measure before managed retreat, and providing incentives for low carbon/sustainable building.</p> <p>It is a noteworthy omission that reform of the Building Act/ Building Code is excluded from the legislative reform actions, given that there is no specific requirement under that legislation (and the Building Code), to take into consideration climate change impacts in the design of new buildings or major alterations to existing buildings.</p> <p>Continue to implement the recommendations from the Report 'Adapting to Climate Change in New Zealand – recommendations from the Climate Change Adaptation Technical Working Group'.</p> <p>Build capacity within Local Government and local communities to provide climate leadership; and capacity to implement changes.</p>

Question	Response
<p>13 In addition to clarifying roles and providing data, information, tools and guidance, how can central government unlock greater investment in resilience? Would a taxonomy of 'green activities' for New Zealand help to unlock investment for climate resilience?</p>	<p>That would be a good start - any information about activities that support mitigation and adaptation will be useful.</p>
<p><b>Natural environment</b></p>	
<p>14 Do you agree with the actions set out in this chapter?</p>	<ul style="list-style-type: none"> <li>• Note that climate change impacts are not confined to coastal ecosystems, but across all ecosystems, particularly those that are confined by natural environmental limits (e.g. alpine ecosystems) or greatly reduced and squeezed by human development (e.g. lowland ecosystems, wetlands).</li> <li>• Support the implementation of the NPS - Indigenous Biodiversity. Include review of Biosecurity Act as a critical action.</li> <li>• Consider how all biodiversity can be protected, not just biodiversity on conservation land. The current plan is focused only on threatened species and DOC managed land, but this includes only part of NZ's biodiversity. This document needs to be updated with input from regional councils who are working across land tenures.</li> <li>• Include implementation of NPS-FM 2020 as a critical action. Te Mana o te Wai will be essential for supporting resilience of our freshwater bodies, and the environmental flows workstream needs to include climate change impacts (droughts, severe weather events, changes in rainfall patterns) modelled for how they will affect freshwater ecosystem health. Freshwater ecosystem health is not just all about farmers and land use. Objective NE1 needs to include freshwater - not just land and sea.</li> </ul>
<p>15 What else should guide central government's actions to address risks to the natural environment from a changing climate?</p>	<p>There is no specific action about coastal ecosystems and supporting adaptation of estuaries and coastal margins, and coastal ecosystem retreat, despite it being highlighted as a particular risk.</p> <p>Note that IPCC 6th Assessment report summary for policymakers says: "Safeguarding biodiversity and ecosystems is fundamental to climate resilient development, in light of the threats climate change poses to them and their roles in adaptation and mitigation (very high confidence). Recent analyses, drawing on a range of lines of evidence, suggest that maintaining the resilience of biodiversity and ecosystem services at a global scale depends on effective and equitable conservation of approximately 30% to 50% of Earth's land, freshwater and ocean areas, including currently near-natural ecosystems (high confidence)". The provisions in this plan don't fully reflect that advice, and it is recommended that the criticality of supporting adaptation of the natural environment to support adaptation of communities is reviewed.</p> <p>Government's actions should be supported by good data. This means support for research to understand better impact of climate change on a range of ecosystems and species, not just obvious coastal environments.</p>
<p>16. Are there other actions central government should consider to: a) support you, your community, iwi and hapū, business and/or organisation to build the natural environment's climate resilience? b) strengthen biosecurity in the face of climate change? c) identify and support New Zealand's most vulnerable ecosystems and species in a changing climate?</p>	<ul style="list-style-type: none"> <li>• Support for research at a local/regional scale to identify vulnerable species and ecosystems and model the effects of climate change so that interventions can be developed.</li> <li>• Support for closer relationships with Waka Kotahi to plan for coastal margin retreat, where the retreat barrier is a State Highway, would also be welcomed.</li> </ul>
<p>17. What do you identify as the most important actions that will come from outside of central government (eg., local government, the private sector or other asset owners, iwi, hapū and/or other Māori groupings such as: business, forestry, fisheries, tourism, urban Māori, the private sector) to build the natural environment's resilience to the impacts of climate change?</p>	<p>All industries undertaking modelling to understand how climate change impacts may affect the natural systems they interact with, for example aquaculture and sea temperature, or land development and changes to rainfall intensities; and then forward planning to ensure actions support environmental resilience in the future, and that future business models are based on likely climate impacts.</p>

Question	Response
18. Are there additional actions that would advance the role of Māori as kaitiaki in a changing climate?	Council can't answer this question on behalf of Māori
<b>Homes, buildings and places</b>	
19. Do you agree with the outcome and objectives in this chapter?	<p>Broadly yes, but Council would suggest the following changes:</p> <ul style="list-style-type: none"> <li>On objective HBP2 - this should be amended to include the word 'avoid' - i.e. 'minimise <i>or avoid</i> risks to communities from climate change'.</li> <li>Council also suggests splitting objective HBP1 so they are two separate objectives: 1) homes and buildings are climate resilient, and 2) homes and buildings meet social and cultural needs.</li> </ul>
20. What else should guide central government's actions to increase the resilience of our homes, buildings and places?	<p>There is very little mention of the role of the Building Act 2004 and Building Code in this section. The Building Act is critical to ensuring homes and buildings are climate resilient. Also, many of the proposals will take years to develop, and there is a significant risk of maladaptation in the meantime. Government should consider providing interim direction or guidance, for example on building climate-resilient buildings (e.g. by setting minimum floor levels that specifically account for sea level rise or increased rainfall events).</p> <p>The Building Code should be amended to require the following:</p> <ul style="list-style-type: none"> <li>All buildings to be constructed with floor levels above the level of 1% AEP flood events for 2075 climate with 2075 sea levels (at a minimum)– habitable floor levels for residential buildings and working floor levels for other buildings. Allow option of building to these new levels or if construction technique allows design to the 1%AEP now and allow floor levels to be lifted in the future at appropriate times as sea level develops.</li> <li>Timber framed buildings to be designed in a manner that allows reasonably easy relocation in the future.</li> </ul> <p>It is a lot easier to change the Building Code than change every resource management plan. The regulatory work proposed will take time to deliver positive results and this would begin some positive change in the meantime.</p> <p>Increasing resilience of 'places' needs greater attention. There needs to be more consideration of how communities evolve to accommodate SLR or adapt to it, while still retaining community 'places' that enable cohesion and the social support networks - especially in an equitable way.</p> <p>There could be greater support for urban greening and management of urban heat through alignment of national and regional transport plans with climate change adaptation objectives; similarly, align NPS UD urban design guidance with objectives for CC adaptation objectives.</p>
21. Do you agree with the actions set out in this chapter?	As above, there are gaps relating to the Building Act and place-making. Capacity building and funding for local government implementation of the policies also needs further consideration.
22. Are there other actions central government should consider to: a) better promote the use of mātauranga Māori and Māori urban design principles to support adaptation of homes, buildings and places? b) ensure these actions support adaptation measures targeted to different places and respond to local social, cultural, economic and environmental characteristics? c) understand and minimise the impacts to cultural heritage arising from climate change?	This question is more appropriately answered by Māori

Question	Response
23. Do you think that there is a role for government in supporting actions to make existing homes and/or buildings more resilient to future climate hazards? If yes, what type of support would be effective?	<p>Yes, raising existing homes may be a viable medium-term option to keep risk at a tolerable level whilst longer term adaptation strategies are developed. This is an area where central government can provide support.</p> <p>Also consider funding for:</p> <ul style="list-style-type: none"> <li>• Double glazing and retrofitting insulation to maximise heat efficiency.</li> <li>• Rainwater tanks to assist with drought resilience (for garden water; and water take reductions)</li> <li>• Solar panels to minimise demands on energy networks</li> <li>• Education on passive heating design standards</li> </ul>
24. From the proposed actions for buildings, what groups are likely to be most impacted and what actions or policies could help reduce these impacts?	<ul style="list-style-type: none"> <li>• Māori - A number of marae are located in low lying coastal areas. Central government funding may be needed to support iwi and Māori to determine and implement adaption options.</li> <li>• Lower socioeconomic communities - Who cannot afford to pay for property upgrades.</li> <li>• Renters - The costs of upgrading buildings may be transferred from the landlord through increased rent.</li> </ul>
25. What are some of the current barriers you have observed or experienced to increasing buildings' resilience to climate change impacts?	<p>The cost of raising buildings is considerable, but economies of scale may be achievable if many buildings are raised as part of a coordinated response.</p>
<b>Infrastructure</b>	
26. Do you agree with the outcome and objectives in this chapter?	<p>Partially, the outcome and objectives for infrastructure are aspirational, but they do not adequately reflect the limits to service levels that will be able to be achieved in the context of climate change impacts. In particular, investment in infrastructure in low lying coastal areas will need to be assessed through a cost / risk / benefit lens, not only for the infrastructure itself, but for the community it services.</p> <p>The outcome and objectives give the impression that infrastructure provision will not be time limited in these areas. Further clarification is needed on what is intended by the reference to 'long term climate impacts' within the objectives. There is need for more emphasis on how triggers and thresholds for service provision in these areas should be identified, with these limits reflected in strategic and land use planning.</p> <p>Council suggests that wastewater should feature with potable water as a priority since many treatment plants and pump stations are close to coastal margins or rivers. Council suggests making a minor addition to the last bullet point on p64: 'the risk to potable water supplies (availability and quality) <i>and wastewater collection and treatment</i> due to changes in rainfall, temperature, drought, extreme weather events and ongoing sea-level rise.'</p> <p>Further, there is little discussion in this chapter on the impacts of climate change on ports and the future of ports in New Zealand. Climate change is increasingly affecting port operations around New Zealand and the world. As a result, ports must consider their near-term and long-term climate change vulnerabilities when planning for the future. Integrated planning between ports, local government and Waka Kotahi is critical to determining the future viability of port operations.</p> <p>Council notes it will be critical to consider how emissions from transport can be reduced when planning for transport infrastructure to be more resilient to climate change impacts.</p>

Question	Response
<p>27. What else should guide central government’s actions to prepare infrastructure for a changing climate?</p>	<p>Local Government would benefit from central government initiatives, such as the resilience standard / code for infrastructure, and guidance such as that issued by The Treasury to guide investment management and service performance in the context of climate change impacts, but these initiatives should be brought forward. There is potential for Central Government to collaborate with Ko Tātou LGNZ to develop suitable guidance and standards for Local Government and other infrastructure providers, in particular, for vulnerable coastal infrastructure.</p> <p>Financial assistance from central government for Councils to undertake the necessary strategies for responding to climate change may also be needed. These strategies are operational costs (OPEX), which has greater impact on Council rates. For some councils, this financial constraint will limit their ability to develop the necessary robust and detailed strategies.</p> <p>There is a need for greater certainty, as soon as possible, related to whether society is retreating from certain parts of the urban coastline. This influences renewal and Level of Service decisions as well providing clear direction on whether or not areas are to be considered for growth. This is identified in the system wide objectives and it needs to be strongly linked to infrastructure and infrastructure providers.</p> <p>It is recommended that the National Transition Unit for Three Waters Reform be given an opportunity to comment on this National Adaptation Plan. Council suggests more recognition be given to existing developments and infrastructure in climate at-risk areas as well as the work on future new infrastructure. A substantial amount of infrastructure is in place across the country in at-risk areas and will need to function as long as people occupy these areas.</p> <p>See also comments on question 26.</p>
<p>28. Do you agree with the actions set out in this chapter?</p>	<p>Partially. It is noted that the resource management reform will include climate action measures in relevant parts of the National Planning Framework. This will be valuable to guide investment decisions on infrastructure.</p> <p>The modernisation of the emergency management system is needed to give greater consideration of future emergency management arrangements in light of climate change impacts, and whether such arrangements would be practical.</p> <p>There is scope for greater involvement by emergency management staff in strategic and land use planning processes in areas exposed to future climate impacts.</p> <p>P69 ‘Support the integration of climate adaptation and mitigation in new and revised standards’: Suggest bringing forward a revision of NZS 4404:2010 Land development and subdivision infrastructure to include climate action measures in new developments.</p> <p>Suggest a concurrent strand of work be considered looking at more specific operational solutions for adaptation strategies for existing infrastructure in climate at-risk areas. A tool box of generic options would be useful.</p>
<p>29. The national adaptation plan has identified several actions to support adaptation in all infrastructure types and all regions of Aotearoa.</p> <p>a) Do you see potential for further aligning actions across local government, central government and private sector asset owners?</p> <p>b) Do you see any further opportunities to include local mana whenua perspectives and mātauranga Māori in infrastructure adaptation decision-making?</p>	<p>Yes, Council agrees that Waka Kotahi should be the lead agency (or work with Te Waihanga) for setting the assessment framework for transport assets, including funding framework changes to include adaptive measures into programmes. However, this statement p67: “Waka Kotahi will lead, collaborate on and support land transport system adaptation, enabling climate-resilient transport networks and journeys, where people live, work and play”: should be expanded to include alignment if communities decide to relocate their area. For example, if the Nelson airport shifted, new transport connections would need to be built to the right scale for the traffic.</p> <p>Road corridors often contain a number of services so decisions related to roads impact other services – any decisions made in relation to renewing, relocating, retiring roads should be integrated and involve other lifeline asset owners using that corridor.</p>

Question	Response
<p>c) Do you see any further opportunities to include local community perspectives in infrastructure adaptation decision-making?</p> <p>d) Do you see any further opportunities to ensure that groups who may be disproportionately impacted by climate change, or who are less able to adapt (such as those on low incomes, beneficiaries, disabled people, women, older people, youth, migrant communities) have continued and improved access to infrastructure services as we adapt?</p> <p>e) Do you think we have prioritized the right tools and guidance to help infrastructure asset owners understand and manage climate risk?</p>	<p>There is limited information on sea and air travel in these documents. Nelson Airport and Port Nelson are both located in future coastal inundation areas and will be exposed at and beyond 0.5m of sea level rise. These are key community and industry hubs and provide essential support to the local economy. They require a lot of land space and have wide reaching networks. They are currently lumped in with transport, page 63, but have different governance models to transport - table 4 p65.</p> <p>The National Policy Statements for Freshwater Management and Urban Development and the New Zealand Coastal Policy Statement will in some scenarios be in direct conflict with each other and potential climate change adaptation solutions. Improved alignment is needed so that a pragmatic balance can met when developing adaptation solutions.</p> <p>A lot of infrastructure follows residential and industrial development. Councils and central government typically have much longer-term involvement with infrastructure and the best solution can often be in conflict with a developer’s shorter-term goals. Better direction on infrastructure design and construction across all sectors would be beneficial.</p> <p>On 29 b) - Yes, there are opportunities for better integration of mana whenua perspectives and mātauranga Māori in infrastructure planning generally, and in relation to Local Government, the key processes include the Infrastructure Strategy and the Long-Term Plan. There is a need for the form that this takes to be effective and expedient. The focus should remain clearly on the Infrastructure Objectives. Council is also consulting directly with Iwi on coastal adaptation planning in June / July this year.</p> <p>On 29 c) Yes, Council will soon be initiating consultation with coastal communities on adaptation planning. Discussion on infrastructure adaptation needs to be part of a broader conversation about the vulnerabilities and climate risks for these areas as well as land use planning approaches. There is a need for the form that this takes to be effective and expedient.</p> <p>However, the long timeframes, large costs and competing interests create significant challenges for making decisions – particularly decisions that compel future councils or governments to investment. How can community participation now be relied upon on in future decision-making?</p> <p>On 29 d) Yes, but these groups could also be prioritised for relocation from at risk areas. People who own property (assets) in affected areas who will see asset value decline/become unsalable, due to uncontrolled impacts, if adaptive measures are not placed for their benefit. These people could end up with no value assets (in fact could end up with liabilities). There is a need for early communications and whole of life discussions. There is a need for the form that this takes to be effective and expedient.</p> <p>On 29 e) Yes, but there would need to be some training with people who will be tasked with implementing the new tools. If the tools are not going to be available before 2024, then there will be a further period during which they need to be adopted and worked through, and so changes are not likely to be implemented before 2027. Communication with communities and community leaders (e.g. elected member of Councils) will need to clearly set expectations and avoid promising solutions before this can be worked through, to avoid misaligned community expectations.</p> <p>An item that is missing from the Infrastructure chapter is the need for a clear decision making process related to retreat or defend (system wide objective) – once these decisions are made, infrastructure service providers will largely organically adapt.</p> <p>Most large infrastructure is managed by professional staff who probably are already well versed in risk management concepts and can advise owners reasonably well. The proposed work programme is pretty high level and lacks options for existing infrastructure.</p>
<p>30. Are there additional infrastructure actions that would help to strengthen Māori climate resilience?</p>	<p>We are unable to answer this question on behalf of Māori.</p>
<p>31. Are there any other tools or data that would help infrastructure asset owners make better decisions?</p>	<p>Please refer also to response to Q27. High quality, nationally consistent data sets and forecasting tools need to be continually invested in. Clear overarching regulatory direction is needed – either from central or regional government.</p>

Question	Response
<b>Communities</b>	
32. Do you agree with the outcome and objectives in this chapter?	Partially. We support the overarching objectives but recommend that objective C3 include 'strengthen communities' as well as supporting communities when they are displaced or disrupted. The emphasis should be on preventative or preparatory measures so that communities are not displaced and disruption is minimised, rather than supporting communities after an event. This objective should also emphasise the need for communities to support each other, so that they are less reliant on assistance from central or local government or another organisation.
33. Do you agree with the actions set out in this chapter?	Yes, though we suggest that some of the actions marked as 'supporting' are critical, such as 'building community resilience through social cohesion'. We also question whether central government is best placed to deliver these actions - in many cases local government, iwi or community organisations may be better to determine communities' needs.
34. What actions will provide the greatest opportunities for you and your community to build climate resilience?	As above, building community resilience through social cohesion is critical. Reforming the health and disability system is also important to ensuring the rights and interests of disabled people are considered in designing adaptation solutions and that better support is provided to disabled people.
35. Are there additional actions central government should consider to: a) support your health and wellbeing in the face of climate change? b) promote an inclusive response to climate change? c) target support to the most vulnerable and those disproportionately impacted?	a) Provide sufficient funding to local government to deliver the actions set out in this plan b) It is important that different communication and engagement tools are used to connect with groups who do not traditionally engage in government processes, such as young people, Māori, Pasifika, immigrant communities and disabled people. These groups are likely to be the most impacted by climate change, so it is important their voices are heard. c) As above in b).
36. What do you think are the most important actions that will come from outside of central government (eg, local government, the private sector or other asset owners, iwi, hapū, non-government organisations, community groups) to strengthen community resilience in the face of climate change?	Iwi and hapū leadership on addressing climate risks is important, but they need to be empowered with the right tools and resources to be able to play this role. Community groups could also play a strong role in building community resilience to climate impacts, but again, they need to be empowered and supported to do so. A focus on education would empower local communities; and setting up programmes to develop climate leaders within communities.
37. Are there additional actions could be included in the national adaptation plan to help strengthen climate resilience for iwi, hapū and whānau?	As above, iwi, hapū and whanau need to be provided with the right tools (e.g. guidance that is tailored to Māori and incorporates te ao Māori) and supported by resourcing.
<b>The economy and financial system</b>	
38. Do you agree with the outcome and objectives in this chapter?	Partially, there is no reference to enabling access to climate finance/alternative funding mechanisms - this should be included. Providing opportunities for central government and local government to co-fund investments should also be considered as an objective.
39. What else should central government do to realise a productive, sustainable and inclusive economy that adapts and builds resilience to a changing climate?	As above - provide access to climate finance/alternative funding mechanisms.
40. Do you agree with the actions set out in this chapter?	No, the critical actions mostly focus on specific sectors and do little to provide alternative funding mechanisms to finance climate adaptation. We would expect to see more discussion in this section on how funding for climate action is to be split between central, local government, insurance providers and other players, and alternative funding mechanisms such as the freehold to leasehold scheme discussed in question 42.

Question	Response
<p>41. Are there other actions central government should consider to: a) support sectors, businesses and regional economies to identify climate risks and adapt? b) promote a resilient financial system in the face of climate change?</p>	<p>The State-owned enterprise QV (Quotable Value) valuations of coastal property will influence how Central Government, Local Government, and the private sector manage risk within coastal areas vulnerable to sea level rise. Higher property valuations may deter insurance companies and increase the case for protection measures, whilst lower valuations may make it more affordable to compensate property owners as part of a relocation, or conversion of ownership from freehold to leasehold package, as proposed by Belinda Storey (<a href="https://www.rnz.co.nz/national/programmes/ninetonoon/audio/2018781916/climate-hazard-property-from-freehold-to-leasehold">https://www.rnz.co.nz/national/programmes/ninetonoon/audio/2018781916/climate-hazard-property-from-freehold-to-leasehold</a>).</p> <p>Nelson City Council released coastal inundation mapping in November 2020 showing areas potentially exposed to 1% AEP storm surge events with up to 2m of sea level rise. Preliminary analysis of property values by NCC in areas exposed to 1.5m of sea level rise has shown a 33% increase in property values, using 2021 QV date, relative to 2018 QV data. This raises a question over whether the risks of future climate impacts are reflected in valuations of coastal property. The apparent lack of a 'value signal' in relation to these risks potentially contributes to continued high demand for properties in these areas, and the resulting over-valuation by the market.</p> <p>Further consideration also needs to be given to how climate leases could be applied for existing development, as well as time limited consents for new development in areas predicted to be at risk of sea level rise within the next 100 years.</p>
<p>42. What do you think are the most important actions that will come from outside of central government (eg, local government, the private sector or other asset owners, iwi, hāpu and/or other Māori groupings such as: business, forestry, fisheries, tourism, urban Māori, the private sector) to reduce the economic and financial risk they face from climate change?</p>	<p>Improving consumer understanding of property insurance pricing and risks.</p>
<p>43. Are there additional actions within the financial system that would help strengthen Māori climate resilience?</p>	<p>Additional thought is needed on how climate change is likely to reflect the Māori economy, and opportunities for working with Māori to strengthen economic resilience to climate impacts.</p>
<p>44. In the context of other risk management options (eg, flood barriers, retreat from high-risk areas), what role should insurance have as a response to flood risk? Please explain your answer.</p>	<p>Insurance provides cover for events that exceed the level of protection provided by existing defences. When this residual risk becomes excessive, insurance retreat signals that further action (such as additional risk mitigation or retreat) is overdue. There needs to be improved communication between the insurance sector and other actors responsible for risk management. Increasingly, the role of insurance should be to enable greater resilience rather than to reinstate the insured assets that existed previously.</p>
<p>45. Should the Government have a role in supporting flood insurance as climate change risks cause private insurance retreat? a) Does your answer to the above question depend on the circumstances? (For example, who the owner is (eg, low income), the nature and characteristics of the asset (eg, residential or commercial property, contents and vehicles), what other risk management options are available and their cost/benefit, and where the asset is located?) Please explain your answer.</p>	<p>Central government does have a role in ensuring that an effective framework is in place to facilitate the implementation of adaptation plans in areas exposed to climate impacts. Supporting flood insurance is just a part of this role and this should only be seen as a stop gap measure, as insurance retreat implies that continued occupation of these areas is no longer sustainable.</p>
<p>46. If you think the Government should have a role in supporting flood insurance as climate change risks cause private insurance retreat, how do you envision the Government's role, and how is this best achieved (eg, direct support and/or indirect support such as reducing underlying flood risk)?</p>	<p>Both direct and indirect support should be considered by Central Government. In relation to flood insurance, risk sharing with landowners could be reflected in higher rates for excess. Insurance arrangements should incentivise appropriate response actions by landowners and other parties to reduce risk. Ultimately, indirect support to implement measures that seek to reduce the underlying flood risk will only provide finite protection. Therefore, government support needs to be directed towards the implementation of adaptation plans, which will include transitional measures to mitigate intolerable risks, as well as longer term responses that are more sustainable.</p>

Question	Response
47. If the Government were to directly support flood insurance: a) what is the best way to provide this direct support? b) should the Government's focus be to support availability or affordability of insurance, or both? c) how should the costs of that support be funded, and by whom? d) what are the benefits and downsides of this approach? e) should this support be temporary or permanent? f) if temporary, what additional measures, if any, do you think would be needed to eventually withdraw this support (eg, undertaking wider flood protection work)? g) what would the risks or benefits be of also including non-residential property, such as commercial property? h) what design features or complementary policies are needed so any flood insurance intervention retains incentives for sound flood-risk management (eg, discouraging development in high-risk locations)?	No comment – these comments are very specific
48. How effective do you think the insurance “price signal” (eg, higher premiums or loss of insurance) is for providing incentives to reduce flood risk?	It is effective, as insurability is generally a prerequisite for accessing finance. Inability to insure a property is likely to significantly impact on property value. Higher premiums and excess on insurance policies signal a transition towards insurance retreat that may give a property owner time to respond to the increasing risk.
49. In your view, should a scheme similar to Flood Re in New Zealand be used to address current and future access and affordability issues for flood insurance? Why or why not?	Yes. Flood Re is a good example - a model like this should be considered in NZ.
50. How do you think a scheme similar to Flood Re in New Zealand could support or hinder climate change adaptation initiatives in New Zealand?	No comment (don't have sufficient detail on Flood Re to be able to comment).

### Closing question

51. Do you have any other thoughts about the draft national adaptation plan that you would like to share?	<p>In relation to research priorities, Council supports the proposed transition to open access data, and transforming this into knowledge about vulnerability. The recent (May 2022) release of sea rise projections that take account of vertical land movement demonstrates the impact of factors that may not have previously been given sufficient consideration. Nelson, and the Tasman Bay coastline comprises areas like the Delaware Bay, Wakapuaka Flats (Horoirangi), Nelson Haven and the Waimea estuary that may be subject to silt accumulation as sea level rises. This will have a knock-on effect on low lying drainage channels and culverts, as well as causing accretion in the lower reaches of watercourses, that may reduce flood conveyance capacity. The situation could potentially be exacerbated by land subsidence shown in the Sea Rise projections. Research on this topic would be useful to expose the long-term risks.</p> <p>Council strongly encourages the on-going implementation of the recommendations from the report: <i>Adapting to Climate Change in New Zealand Recommendations from the Climate Change Adaptation Technical Working Group</i>.</p> <p>Council is already working with communities to make adaptation decisions and is concerned that the pace of activity signalled in the NAP is too slow. Clear direction is needed now to reduce the risk of alignment issues down the track.</p>
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### Managed retreat

Question	Response
<p>52. Do you agree with the proposed principles and objectives for managed retreat? Please explain why or why not.</p>	<p>A definition of intolerable risk is needed, and this should apply nationally to ensure a consistent approach is adopted across the country. As above, a consistent methodology for SLR risk assessment, management, and planning is needed. The methodology would include clear guidance about the 'trigger points' for initiating retreat (i.e. under what conditions should retreat be initiated, or other mitigations). Trigger points that are nationally consistent will reduce uncertainty; reduce litigation risk; and reduce the amount of process churn that will occur as communities change over time; and or decision-making priorities change over time.</p> <p>On Table 1 (page 11) - Objectives:</p> <ul style="list-style-type: none"> <li>• Suggest clarity is provided on when land uses can be changed to ensure consistent approach. 'To provide stronger tools for councils to modify or extinguish existing uses of land and when they should be used '</li> <li>• Include 'legal mechanisms' in 'to provide strong tools and legal mechanisms to modify or extinguish existing uses of land'</li> </ul> <p>On Principles - Suggest clarity is provided that managed retreat processes must follow a nationally consistent framework.</p> <p>Managed retreat needs to be applied consistently across the country. Local authorities continue to maintain services while people and activities exist in-situ and the cost of maintaining an asset is paid for by the wider community. National guidelines are required to ensure that managed retreat options are applied without fear or favour.</p>
<p>53. Are there other principles and objectives you think would be useful? Please explain why.</p>	<p>As above. Also, remediation of retreat areas. These cannot be just abandoned but are an opportunity for environmental and ecological or other benefits. There needs to be a mechanism for connecting infrastructure (especially for managed retreat) to the soft outcomes and who pays for this work. The assessment and funding mechanisms for managed retreat may need to include remediation opportunities and costs.</p> <p>Suggest adding in additional objective. 'To clarify when local authorities or service providers may cease to provide services to properties subject to intolerable risk.' A substantial amount of local authority infrastructure is in place to service existing developments. While those developments remain in place, local authorities must maintain and renew those assets to meet levels of service. When areas are subject to intolerable risk, local authorities should be able to reduce the level of service provided and stop the asset renewal cycle.</p> <p>Equity needs to be a key consideration, as: a) future generations are not responsible for the projected impacts of climate change but will be burdened with paying for adaptation and b) greenhouse gases have been emitted across the country yet the costs will mostly fall on coastal communities and their councils.</p>
<p>54. Do you agree with the process outlined and what would be required to make it most effective?</p>	<p>It is not clear when a decision to retreat be made, what the trigger or threshold should be - e.g. When there is intolerable risk? Are there any circumstances in which a decision to retreat be forced, even if the community at-risk doesn't want to retreat?</p>
<p>55. What do you think could trigger the process? What data and information would be needed?</p>	<p>It is anticipated that a trigger could be informed by a cost risk benefit analysis, demonstrating that continued occupation of a coastal area at a threshold where future sea level was no longer viable, and that the alternative risk mitigation options represented a poor investment. This would need to include consideration of opportunity cost aspects associated with retreat, as well as the economic, social and cultural costs of relocation and resettlement. This should ideally be established, and an adaptation plan completed, before investment is made in mitigation options.</p>
<p>56. What other processes do you think might be needed, and in what circumstances?</p>	<p>There is a need to think through the implications for renewals, upgrades, and level of service for lifelines infrastructure in areas identified as being at high risk from flooding and where adaptation options such as managed retreat are likely to be needed in the future.</p>
<p>57. What roles and responsibilities do you think central government, local government, iwi/Māori, affected communities, individuals, businesses and the wider public should have: a) in a managed retreat process? b) sharing the costs of managed retreat?</p>	<p>Agree that the costs of managed retreat should be shared with the groups listed.</p>

Question	Response
58. What support may be needed to help iwi/Māori, affected communities, individuals, businesses and the wider public participate in a managed retreat process?	Community engagement to inform the decision to retreat is critical. The groups directly affected will need understand and get support to explore alternative options (and associated costs) for relocating their homes, businesses . Particular attention needs to be paid to vulnerable groups.
59. A typical managed retreat will have many costs, including those arising from preparation (including gathering data and information), the need to participate in the process, relocating costs and the costs of looking after the land post-retreat. In light of your feedback on roles and responsibilities (question 57), who do you think should be responsible for or contribute to these costs?	Central government and local government should contribute the same share of costs, but they should not bear all the costs. The private sector (and individual homeowners) should also be required to contribute.
60. What do you consider the key criteria for central government involvement in managed retreat?	Key criteria include: Whether coastal area is currently subject to significant disruption due to climate change impacts, % of property buildings (habitable floors) exposed to risk e.g. 5% AEP event, degree of insurance retreat, low security of access, population socio-economic vulnerability metrics.
61. There may be fewer options for homes and community buildings (eg, schools, churches, community halls) to move than businesses (eg, retail and office buildings, factories, utilities) for financial, social, emotional and cultural reasons. That may suggest a different process for retreat, and different roles and responsibilities for these actors. Should commercial properties/areas and residential properties/areas be treated differently in the managed retreat process? Please explain why or why not.	Yes, as there is likely to have been a greater degree of risk acceptance by businesses located in vulnerable areas. The Building Code recognises this in excluding Commercial and Industrial properties from floor level controls. For instance, E1.3.2 only applies to Housing, Communal Residential and Communal Non-residential buildings.
62. Even in areas where communities are safe, local services and infrastructure such as roads, power lines and pipes may become damaged more frequently and be more expensive to maintain because of erosion or increases in storms and rainfall. Local councils may decide to stop maintaining these services. Are there circumstances in which people shouldn't be able to stay in an area after community services are withdrawn?	Yes, as there is a cost to the wider community in servicing these areas. Lessons must be drawn from the red zoning of areas following the Christchurch earthquakes. It is not just Local Councils providing these services, but also the private sector, Central Government Departments, and soon, the Three Water Entities.
63. In what situations do you think it would be fair for you to be required to move from where you live?	Each area should be assessed, based on a standardised set of criteria, that reflect various aspects of benefit, cost and risk relating to continued occupation of exposed coastal areas, as well as the relocation and re settlement process. Many of these criteria are standard risk assessment metrics.
64. Many residential communities are made up of a combination of renters, owner-occupiers and people who own a property and use it as a second/holiday house. Do you think there are reasons for these groups to have different levels of involvement in a managed retreat process?	Potentially, but the status of these properties may change over time.

Question	Response
65. It is not always obvious that an area is at high risk from natural hazards or the impacts of climate change. However, council risk assessments and increased data and information should make these risks clearer. Do you think different approaches should be taken for those who purchased properties before a risk was identified (or the extent or severity of the risk was known) and those who bought after the risk became clear?	Individuals purchase property with varying levels of understanding of the risks. In addition, Council hazard maps and risk assessments may evolve over time, particularly as new data emerges, such as the latest IPCC report. This initiative would therefore be complex to implement in practice.
66. Under what circumstances do you think it would be fair or necessary for government to take approaches with a greater or lesser degree of intervention or support?	It will be challenging to reconcile a lesser or greater degree of support for communities or subgroups, with the funding and financing adaptation principles in Table 2 of the consultation document, in particular, 'Ensure fairness and equity for and between communities, including across generations.'
67. How do you think land with historical, cultural, social or religious significance (eg, cemeteries or churches) should be treated?	Specific considerations are needed for these sites.
68. Some Māori communities have needed to relocate as a result of events (including natural disasters) that have impacted their marae and wāhi tapu. These examples show that Māori communities are aware of the ways that climate change is affecting their marae, papa kāinga and wāhi tapu, and how relocation can be approached as a community, with engagement from iwi, hapū and whānau. The examples also demonstrate that climate change and natural hazard events are impacting coastal communities as well as inland communities located closer to rivers and lakes. How do you think managed retreat would affect Māori?	Managed retreat would have a significant impact on Māori. Bespoke processes should be co-developed with Māori for retreat of Māori land and sites of significance to Māori (such as marae and urupa).
69. Managed retreat has rarely occurred in Aotearoa, especially within Māori communities. However, there are examples of Māori proactively working to protect their marae, papa kāinga and wāhi tapu by either relocating or protecting and developing their current sites. In these instances, the focus was on protecting and preserving their taonga for future generations. What do you see as being most important in developing a managed retreat system for Māori?	No comment. This question needs to be answered by Māori.
70. Māori land and Treaty settlement land have unique legislative arrangements. Restrictions and protections are placed on Māori land to meet a clear set of principles and objectives that recognise the cultural connection Māori have with the land and focus on land retention and use. Land that has been acquired through Treaty settlement processes is most likely to have cultural significance to a particular iwi or hapū and used to support the aspirations of their people. How do you think Māori land (including Treaty settlement land) should be treated?	See response above.
71. How do you think post-event insurance payments could support managed retreat?	Post-event insurance payments do and can assist in building back better, raising and /or relocating structures to higher ground. Insurance companies may be prepared to proactively invest in measures that reduce their risk exposure.

Question	Response
72. Should insurability be a factor in considering the option of managed retreat from an area?	Yes, insurability / insurance retreat should be one of the criteria in prioritising areas for intervention, not just managed retreat. There may be alternative responses in the short to medium term that enable insurance cover to be reinstated.