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Tēnā koe

Response to the draft National Adaptation Plan and Managed Retreat consultation

- Greater Wellington Regional Council (Greater Wellington) wishes to respond to the draft National Adaptation Plan (the Plan) and Managed Retreat policy as it will have a fundamental effect on Greater Wellington's activities.
- 2. A report commissioned from the National Institute of Water and Atmospheric Research (NIWA) in 2017 projects significant impacts to the Wellington Region by 2090 if global emissions are not significantly reduced.¹ Greater Wellington needs to consider a range of risks, including to freshwater and water supply, biodiversity and low-lying coastal assets, as well as effects to the environment from engineered protection structures, and our organisational response to adaptation requirements.
- 3. Greater Wellington wishes to highlight some key issues. The Plan:
 - a. Identifies local government as a primary actor in adaptation planning, but without the range of funding or policy levers required to deliver on expanding responsibilities
 - b. Needs to strengthen its approach to working in partnership with iwi/Māori and recognising mātauranga Māori
 - c. Does not sufficiently recognise the importance of indigenous biodiversity and healthy ecosystems for climate change adaptation
 - d. Would benefit from a focus on approaches to adaptation that involve nature-based solutions and natural infrastructure, with co-benefits for biodiversity, carbon sequestration and opportunities for kaupapa Māori adaptation underpinned by mātauranga
 - Must prioritise public transport resilience and funding, particularly in rail services, given the scale of the task and the importance of this infrastructure to community and economic wellbeing.

 $^{^{1}\,\}text{NIWA}, \textit{Climate change and variability} - \textit{Wellington Region}, \text{June 2017}, \text{www.gw.govt.nz/environment/climate-change/impacts-on-our-region}$



- 4. This submission makes a set of recommendations, including that:
 - a. Central government engages with local government and iwi to collaboratively develop climate policy, moving beyond the standard submissions processes
 - b. Government prioritises the National Policy Statement on Indigenous Biodiversity for immediate action
 - c. The Plan includes protection and restoration of blue carbon areas, ocean and coastal ecosystems that offer natural protection from erosion, storm surge and sea level rise
 - d. Central government provides an enduring mechanism for funding to support the role of local and regional councils in providing flood defences that proactively protect communities and central government assets, like road and rail
 - e. Government considers developing a major fund, which could be of the scale of the National Superannuation Fund, which would provide enduring inter-generational funding for climate change adaptation measures such as managed retreat²
 - f. Managed retreat legislation, standards and guidance should define clear roles for local, regional and central government, and designate a clear lead agency for community-scale management plans
 - g. Government should ensure that new investment in infrastructure or buildings are resilient and located in a place that does not require them to be protected or relocated later.
- 5. Greater Wellington upholds the principle that risks, responsibilities and costs of managed retreat should be shared proportionately and equitably, and makes recommendations in support of this approach.
- 6. Greater Wellington's submission is structured as follows:
 - a. System-wide actions recommendations
 - b. Natural environment recommendations
 - c. Homes, buildings and places recommendations
 - d. Infrastructure recommendations
 - e. Managed retreat recommendations
 - f. Partnership with Māori

² J Boston and J Lawrence, Funding climate change adaptation: The case for a new policy, *Policy Quarterly*, 14, 2, May 2018, pp.41-49.



System-wide actions recommendations

Focus area one: Reform institutions to be fit for a changing climate, and Focus area three: Embed climate resilience across government strategies and policies

- 7. A key action is integrated planning to clarify roles and responsibilities, where funding and expertise lies, and who is responsible for implementation and monitoring. We look forward to partnering with mana whenua, central government and territorial authorities to achieve cohesive and coordinated responses.
- 8. Further, there needs to be a clear agency with overall responsibility for ensuring that each link in the chain is appropriately planned, supported and delivered. Greater Wellington recommends consistency is brought to this practice across all legislation, funding and policy direction.
- 9. Local government is identified as a primary actor in adaptation planning, but without the range of funding or policy levers required to deliver on expanding responsibilities. Greater Wellington recommends that central government engages with local government and iwi to collaboratively develop climate policy, moving beyond the standard submissions processes.
- 10. Where critical actions consist of multiple interrelated projects and programmes from different agencies, a coordinated governance arrangement should be considered to realise opportunities for alignment, sharing of resources and preventing duplicated effort. Links and knowledge-sharing between iwi, local and central government should be encouraged. For example, climate impact assessments are being carried out at regional level, and this work may be utilised in central government initiatives.
- 11. The Wellington Regional Leadership Committee, involving mana whenua, local government and central government, is overseeing a programme of work for a regional spatial plan. It has an active programme of work for adaptation planning underway, providing government with the opportunity to learn about the challenges and barriers to undertaking this work at a regional and territorial scale. Stage one, a Wellington Regional Climate Change Impacts Assessment, implements Ministry for the Environment guidance for local climate change risk assessments. Greater Wellington has invited the Ministry to partner with this regional project to review the effectiveness of the guidance and to update the guidance as proposed.
- 12. The complex interactions between reforms in resource management, three waters, the future of local government and emergency management should be recognised. These reforms place a considerable workload on local and regional council resources. In particular, three waters entities have a key role as technical experts and water authorities must be resourced to support adaptation work as expertise



from local government will be transferred to the new entities. Clear lead organisations for community scale adaptation plans must be set and actions should be led by authorities closest to the citizen.

Focus area two: Provide data, information and guidance

- 13. Greater Wellington supports the provision of clear, accessible and timely central government technical advice. Bringing consistency to how climate risk information is generated will be valuable to build trust among communities and across local authority boundaries. For example, progress on the legislation to include hazard information (such as risk from sea level rise and flooding) on Land Information Memoranda is important.
- 14. There is a need to build a social licence to bring about change, requiring surety of policy settings and transparent communication with the public. Greater Wellington recommends that central government runs a public awareness raising campaign to promote clearly how Aotearoa New Zealand will adapt, and that central government also supports the long-term engagement required for adaptation to occur successfully.
- 15. Greater Wellington recommends that central government surveys local authorities regarding regional data gaps and assists with increasing the efficiency and consistency of data collection. Examples are landslip hazard mapping, climate change impacts on wildfire risk, sea level rise interaction with groundwater potentially exacerbating flooding, and the fragility of coastal infrastructure under increased climatic impacts.
- 16. Central government funding and support should include data gathering and information sharing at a local and regional level, as well as national level. This would enable regional expertise and community links to be better utilised in national lead projects. It would also address issues where national scale modelling does not produce output adequate for local scale adaptation.
- 17. Greater Wellington recommends national standards rather than voluntary guidelines for implementing climate impact and hazard assessments (governance, data inputs, modelling and business cases). This would address issues of duplication of effort, drive consistency of implementation across local authority boundaries and free up resources to focus on community engagement on adaptation options. Natural hazard impact assessments may be simplified if implemented against robust national standards rather than guidelines. That will ensure evidence-based, defendable decision-making can take place. Currently, flood and coastal hazard assessments follow no consistent methodologies, and the public has multiple opportunities to challenge this process, meaning time and expense spent disputing hazard assessments rather than focusing together on finding solutions.



18. Greater Wellington recommends that central government identifies adequate resourcing systems for mana whenua to develop their own solutions on how mātauranga Māori will inform whānau, hapū and iwi responses to climate change. This would enable working with iwi/Māori to ensure that mātauranga Māori can inform modelling and quantitative assessments, with Māori determining and having ownership of appropriate use of the knowledge. A programme of research led by Māori to address adaptation areas of interest to Māori is needed to inform and upskill central and local government policy and practice.

Natural environment recommendations

- 19. The National Policy Statement on Indigenous Biodiversity should be a priority. Local authorities working to protect natural biodiversity and ecosystems need this statutory support now. This is where real change for biodiversity conservation, including climate change adaptation and mitigation, can be made. Greater Wellington strongly recommends that government prioritises the National Policy Statement on Indigenous Biodiversity for immediate action. Further delay by setting ratification for August 2024 does not reflect the urgency and importance of this work for climate change adaptation and biodiversity.
- 20. The National Climate Change Risk Assessment identifies risk to potable water supplies as an extreme risk in the built environment. Currently, the benefits of the Water Availability and Security programme accrue to the primary sector and rural communities. This programme should extend to all communities urban and rural.
- 21. Central government should consider an overhaul of biosecurity-related legislation to ensure that all actors in the system are appropriately empowered to plan and implement biosecurity measures.

 Relevant legislation includes the Wildlife Act 1953, but also the Wild Animal Control Act 1977 and the Biosecurity Act 1993.
- 22. The National Adaptation Plan needs an increased focus on the impact of pest animals in weakening the resilience of ecosystems to climate-induced pressure. For example, more frequent and intense weather events will have a more significant impact on a damaged forest ecosystem than one that is relatively healthy and intact. Also, for example, warmer temperatures allowing disease-carrying pest animals to flourish will impact human health.
- 23. As well as providing a forestry planning advisory service, government should ensure that barriers to achieving adaptation benefits from indigenous forests are minimised. Conversion of plantation forestry to indigenous forest can create substantial benefits for biodiversity, flood control, water quality and mahinga kai, while removing dis-benefits of permanent exotic forestry such as pests, fire risk, windfall and erosion. However, under current New Zealand Emissions Trading Scheme (ETS) settings, forestry



owners may incur financial penalties through the slower sequestration rates of indigenous compared to exotic forests, with no ability to monetise the benefits of indigenous forests. Greater Wellington recommends that the government considers an amendment to the ETS that monetises the benefits of indigenous forests compared to exotic forests, including biodiversity, flood control, water quality and mahinga kai, while removing the disbenefits of permanent exotic forestry such as pests, fire risk, windfall and erosion.

- 24. Greater Wellington recommends the Plan include approaches to adaptation that involve nature-based solutions and natural infrastructure, with their co-benefits for biodiversity, carbon sequestration and opportunities for kaupapa Māori adaptation underpinned by mātauranga. This would include restoring areas and, crucially, preventing development from occurring that is damaging to nature-based solutions.
- 25. Greater Wellington recommends the Plan include protection and restoration of blue carbon areas, ocean and coastal ecosystems such as seagrass meadows, estuaries and wetlands. As well as storing carbon and benefitting biodiversity, they offer natural protection to shorelines from coastal erosion, storm surge and sea level rise. This can be a cost-effective alternative to building protective structures and without the environmental impacts that can be associated with built structures. Protection should include the prevention of development on or next to valuable saltmarsh and wetlands.

Homes, buildings and places recommendations

- 26. Nature-based solutions can be integrated into the urban environment and Greater Wellington supports the Plan including consideration of nature-based approaches such as water sensitive design. Greater Wellington recommends that provision be made to require water sensitive design within the National Planning Framework and within Regional Natural and Built Environment Plans that will be required under the Natural and Built Environment Act.
- 27. A shift from a reactive to an anticipatory approach to climate impacts is required, given the uncertainty and irreversibility involved.³ Greater Wellington recommends that urban growth strategies are reconsidered as resilient growth strategies.
- 28. By collaborating through the Wellington Regional Leadership Committee, the partners are seeking to integrate land use and infrastructure planning to build a climate resilient region. In the early stages of this spatial planning process, areas of Wāhi Toitū are identified to be protected from new urban development and areas of Wāhi Toiora identifies values which can significantly constrain urban development. This seeks to avoid introducing new risks or further exacerbating existing risks. Greater

³ New Zealand Climate Change Research Institute, NIWA, Manaaki Whenua Landcare Research, *Climate change: The cascade effect: Cascading impacts and implications for Aotearoa New Zealand,* p.5.



Wellington recommends government supports integrated approaches to spatial planning, bridging across levels of government and across areas such as three waters, flood risk management, utilities, asset planning and land-use planning. This coordination must be effectively delivered through the resource management system reforms.

29. Spatial planning must focus on the ability of whanau and hapū to retain a strong presence on their whenua. Building intergenerational living in all areas of planning (not just papakāinga) would allow iwi to reside across the district for which they are ahi kaa (home fires burning). This would contribute to creating resilient communities in urban spaces, now and into the future.

Infrastructure recommendations

- 30. Central government should ensure that new investment in infrastructure is resilient and located in a place that does not require it to be protected or relocated later.
- 31. Greater Wellington recommends that a fourth objective be added to the "what we want to achieve" section (p.64). This would be to ensure that all infrastructure is contributing to emissions reduction targets by considering both the embodied and operational carbon costs of options, including those associated with renewals over the lifecycle of the development. This is an area where creating synergies between adaptation and mitigation objectives will be beneficial. Likewise, integrating adaptation into Treasury decisions on infrastructure should simultaneously consider emissions reduction.
- 32. Te Waihanga will develop a methodology for assessing impacts on physical assets and the services they provide. The Ministry for the Environment has just developed a methodology for local government. Built infrastructure will be a focus of local government's climate change risk assessments. By 2023 the Wellington Region will have completed its regional climate change impacts assessment and will be developing a regional adaptation plan. If Te Waihanga then develops a new methodology specifically for infrastructure, there is a risk that different and separate practices will evolve, with wasted or duplicated effort. This requires coordination and clarity on any suite of approaches, including kaupapa Māori methodologies.
- 33. The resilience standard or code for infrastructure is noted as voluntary. Voluntary codes are unlikely to be followed where they have a higher cost or difficulty in implementation. For critical infrastructure, Greater Wellington recommends that there needs to be a mandatory standard to follow. We encourage Te Waihanga to work closely with iwi/Māori, local government and the three waters sector in its development.



- 34. Increased funding should be available for resilience projects in the Government Policy Statement (GPS) activity classes. Developing and implementing the Waka Kotahi Climate Change Adaptation Action Plan and investing in the rail network, public transport and active transport are key activities, with multiple co-benefits that will need appropriate signalling through the GPS. The integration of adaptation into both Treasury and Waka Kotahi's decision-making processes will help to cement the need to mitigate the effects of a rapidly changing environment, and should expedite approval processes, enabling quick on-the-ground response. Integration of transport infrastructure planning with community and district planning is also critical.
- 35. Central government should provide an enduring mechanism for funding to support the role of local and regional councils in providing flood defences that proactively protect communities and central government assets, like road and rail, from flooding. Current central government funding is retroactive (only after natural hazard events occur). Investment in flood protection reduces exposure to climate change impacts, protects valuable assets, avoids clean-up costs, and has the potential to reduce the cost of maintaining and insuring public assets. Local Government New Zealand has reported that the Wellington Region has \$320 million worth of publicly owned infrastructure exposed at a 1 metre increment of sea level rise.⁴
- 36. Flood defences should be recognised as critical lifeline infrastructure, a status it currently does not have.
- 37. Greater Wellington is committed to working with mana whenua to incorporate managed retreat, kaupapa Māori and land-based solutions and positive engineering options into the flood plain management plans for rivers of the region, and for resourcing managed retreat expertise in each level of decision-making.⁵

Managed retreat recommendations

Principles

- 38. Greater Wellington recommends that the principle to limit the Crown's fiscal exposure is extended to include local government, in line with the principle to share risks and responsibilities equitably.
- 39. While the Plan refers to managed retreat as "high-cost interventions" (p.31), in some scenarios it may be the most affordable solution, depending on the planning horizon, community and nature of the hazard.

⁴ Local Government New Zealand, Vulnerable: The quantum of local government infrastructure exposed to sea level rise, 2019, p.29.

⁵ Greater Wellington Regional Council, *Te Mahere Wai o Te Kahui Taiao*, p.54.



40. Greater Wellington recommends that government encourage a 'build back better' approach. This may involve supporting building in low hazard prone areas and not supporting rebuilding in a high risk (and perhaps increasingly uninsurable) location after a disaster. This would also involve a review of existing building legislation and codes.

Processes

- 41. Greater Wellington recommends that the government consider whether one approach will fit both fast and slower events (for example, a sudden slip versus gradual sea level rise), or whether more than one approach is required. Any decision to begin a managed retreat process should be based on robust science relevant to the local area. Planning would be agreed in advance with the community using an adaptative planning approach. However, there also needs to be a process to address significant sudden natural hazard events (disasters) so that these do not have to be developed on an ad hoc basis. Red zoning is traumatic for a community, and this will need particularly good processes built around it.
- 42. Greater Wellington recommends that managed retreat schemes for flood and coastal hazard are aligned, where possible, with existing processes and led at a local level supported by central government, for example, including the community-driven Floodplain Management Plan process used by Greater Wellington.
- 43. The National Policy Statement for Freshwater Management hierarchy of objectives Te Mana o te Wai may require that implementation of managed retreat type solutions in river, wetland and lake environments is prioritised rather than investment in hard flood defences. Managed retreat legislation should also address the tensions between individual property rights, retreating communities and defences and application of tools such as the Public Works Act.
- 44. Outline business cases for options assessment should be developed early in processes and updated as more information and certainty of options is created (following a standard process like *Better Business Cases*). A weakness of some existing managed retreat schemes is that costing of options was only done late in the process.

Roles and responsibilities

45. Managed retreat legislation, standards and guidance should define clear roles for local, regional and central government, and designate a clear lead agency for community-scale management plans.



- 46. The costs of managed retreat should be shared proportionately and equitably across all sectors from central government to individuals, aiming for cost efficiency and a solution that is not financially crippling to communities, businesses or individuals. Greater Wellington recommends that the government consider developing a major fund, which could be of the scale of the National Superannuation Fund, which would provide enduring inter-generational funding for climate change adaptation measures such as managed retreat, as proposed by Prof Jonathan Boston and Dr Judy Lawrence.⁶
- 47. Central government will need to provide legislative support and contribute to the costs of land acquisition and post-retreat rehabilitation. The capacity of regional government in managing such land needs to be considered realistically. Key criteria for central government involvement in managed retreat (question 60) will include the financial capability of the local authority to undertake the process.
- 48. The loss of land will have a significant intergenerational impact for mana whenua. The costs of this need to be understood, and what this means for our mokopuna who are our rangatira mo āpōpō (leaders of the future). Central government must consider how to ensure that decisions are made with mana whenua, with recognition of their mana motuhake, tino rangatiratanga and ahi kaa.
- 49. Communities will need financial, legal and wellbeing support. It is possible that those most affected will be people with fewer options and resources and less ability to participate effectively in consultation. Greater Wellington recommends that communities at higher risk receive a greater degree of support, while areas that are identified as prone to risk, and becoming more at risk over time, go through a longer-term process.

Property transfer

- 50. There are circumstances where managed retreat will be required: when the risks from natural hazards are severe, the consequences from repeated natural hazard events are intolerable, the costs of remaining outweigh the benefits, and the impact of mitigation works on the natural environment cause irreparable long-term harm to Te Mana o te Wai or Te Mana o te Taiao.
- 51. This would be a process that involves the whole community, without distinction based on property ownership status (question 64) or prior knowledge of risk (question 65).
- 52. Any approach to managed retreat that affects Māori must be developed by Māori for Māori within a te ao Māori perspective and with Crown support. Where Māori settlements are on hazard prone land and

⁶ J Boston and J Lawrence, Funding climate change adaptation: The case for a new policy, *Policy Quarterly*, 14, 2, May 2018, pp.41-49.



the people may have nowhere within their own land to relocate, special assistance will be required. Māori whakapapa to a whole place and space. They have lost land to processes that were not of their desire. They may not be the landowner in western terms but may consider themselves to be the landowner in customary areas of whakapapa.

Partnership with Māori

Working in partnership and recognising the indigenous worldview

- 53. Enhanced democratic decision-making is essential to a just transition, as is upholding the principles of Te Tiriti o Waitangi. Greater Wellington is concerned about the very short timeframes provided to develop submissions. This has compromised our ability to have discussions with our mana whenua partners on the opportunities and challenges of the proposals from their perspective and to identify any shared regional views.
- 54. Greater Wellington shares the view that Māori have whakapapa connections to the landscape as demonstrated through waiata (songs), pūrākau (narratives), whakataukī (parables) and karakia (prayers) that contain intergenerational knowledge relating to place and space. Climate change related damage, modification or permanent loss of cultural locations and features, especially sites of historic and contemporary significance, are likely to be considerable, alongside potential loss of cultural practice and mahinga kai. Damage to cultural sites, through processes such as sea level rise, coastal erosion, storm surge and flooding, are likely to force some whānau, hapū and iwi in at-risk areas to seek alternative locations, or even lose the opportunity to pass on knowledge, intermittently or permanently severing the link between their historical associations with whenua and taonga.⁸ Further, the Māori economy is more reliant on natural resources than some other parts of the economy, making it more sensitive to climate change impacts and policies.
- 55. Manaaki Whenua has identified risk ratings that reflect the degree to which Māori investments, livelihoods, health, culture and the environment are vulnerable to climate hazards. Changing climatic conditions are expected to pose minor to moderate risks for whānau, hapū, iwi and Māori businesses by 2050, and moderate to major risks by 2100, across four domains: He kura taiao (living treasures), Whakatipu rawa (Māori enterprise), He oranga tāngata (healthy people) and Tikanga Māori (Māori culture, values, principles).⁹

⁷ Policy Quarterly, 17, August 2021.

⁸ Manaaki Whenua Landcare Research, *He huringa ahuarangi, he huringa ao: A changing climate, a changing world*, 2021, p.37.

⁹ Manaaki Whenua, p.2, p.45.



- 56. Greater Wellington supports the Ministry for the Environment's position that the obligations under Te Tiriti o Waitangi involve recognising the special kaitiaki role Māori have for natural capital and ecosystems, and the inherited responsibility to care for and protect resources and taonga. Active partnership and resourcing of Māori, iwi and hapū need to be strongly supported, so increased understanding of the future climate change impacts on taonga Māori, communities and values can be achieved.¹⁰
- 57. Greater Wellington supports the position of Te Puni Kōkiri that Māori and iwi have a partnership role in the governance and management of natural resources and the response to climate change to strengthen Māori economic and community resilience.¹¹

Thank you for your consideration. If you have any queries regarding the matters raised in this submission, please contact Suze Keith, Strategic Advisor Climate Change, 021 281 3116, Suze.Keith@gw.govt.nz.

Nāku iti nei, nā

Daran Ponter

Chair, Greater Wellington Regional Council

Ham Fools

¹⁰ Ministry for the Environment, *Arotakenga Huringa Ahuarangi, A framework for the National Climate Change Risk Assessment for Aotearoa New Zealand*, 2019, p.17.

¹¹ Te Puni Kōkiri, *He Takunetanga Rautaki Strategic Intentions 2020-2024*, p.24.