

### Appendix 3 Talking points on National Adaptation Plan scope and approach for Cabinet Economic Development Committee meeting on 24 March

In December, Cabinet invited this report back on the scope and approach to the National Adaptation Plan (the Plan), including lead agencies for developing and implementing action plans.

- The Plan is an all-of-government strategy and action plan for how the government will prepare New Zealand for and adjust to the risks and impacts of climate change of the next six years.
- The Plan must be developed under the Climate Change Response Act and respond to the risks identified in the National Climate Change Risk Assessment (Risk Assessment) published in August 2020.

The Government's response to the risks from climate change in this Plan needs to meet the scale and complexity of the challenge, and provide clear, coordinated and stable policies across government to achieve climate-resilience for New Zealand.

- The risks arising from climate change are broad ranging and will affect our culture, environment, and ways of living. Climate change impacts are already being felt across our economy and society, but affect different groups unequally.
- Example from Risk Assessment: Inland flooding
  - About 675,000 people currently live in areas prone to flooding and an estimated 411,500 buildings are exposed.
  - Example: In April 2017, Cyclone Debbie hit the Bay of Plenty coast bringing rainfall and flooding of the Rangitaiki River. The aging Rangitaiki stopbank was breached, causing catastrophic flooding in Edgecumbe with \$72 million in insurance claims from damaged and destroyed housing.

I propose that all 43 risks from the Risk Assessment are in scope for the development of the Plan.

- Understanding the connections between the risks will help the Plan meet the scale and complexity of this challenge. Keeping all risks in scope for now will allow us to maximise co-benefits of the actions within the Plan, and avoid maladaptation and unintended consequences.
- Keeping all risks in scope at this point will also be critical as we prioritise the actions, and consider what new actions are needed to address the risks. This includes 26 risks where more action is needed and those that should be an immediate research priority.

I propose the lead agencies with the right skills, expertise and levers co-ordinate the development of outcomes-focused action plans as outlined in Table 1 of the paper.

- Roles and responsibilities for development of the Plan must be clear. We are seeking commitment from lead Ministers now.
- Lead agencies have agreed to coordinate development these action plans, with input from relevant contributing agencies. However, some have expressed nervousness about resourcing. I am seeking commitment from Cabinet to the involvement of these agencies, and for agencies to provide input within baseline funding arrangements.

- The final Plan is likely to need to signal new areas of work. The financial implications of specific policies and proposals will be considered as these are developed, and progressed through Budget 22.

It is critical to also take action now to improve New Zealand's resilience to climate change while the Plan is developed.

- Many adaptation actions are already underway across government and will continue to be developed in parallel. Action now is essential to unlock adaptation action in other areas, particularly where these take time to develop.
- The Climate Adaptation Act and wider resource management reform directly address one of the most significant governance risks identified by the Risk Assessment - that climate change impacts across all domains will be exacerbated because current institutional arrangements are not fit for climate change adaptation.
- The Plan will bring these legislative reforms, and other projects across Government, together under a common strategic direction to ensure all adaptation action is aligned and working towards common goals.

I propose that the strategic direction of the Plan attached at Appendix 1 is agreed in-principle now to guide agencies in their action planning.

- In-principle agreement now will enable these principles to guide the action planning phase.
- However, officials are exploring with Ihirangi – the operational arm of the National Iwi Chairs Forum – how an indigenous world view could be articulated through in the Plan. I will report back to Cabinet on this work and seek your agreement to the strategic direction prior to public consultation.

I proposed to return to Cabinet in late 2021 with a draft Plan seeking agreement to publicly consult in early 2022.

- The Plan must be published by August 2022
- I intend that the Climate Ministerial Response Group provide direction and oversight between portfolios and on the Government's obligations under the Climate Change Response Act 2002, including to publish the Plan. I plan to take an item to Cabinet Environment Committee following that meeting (date to be confirmed).

## Appendix 2 – Summary of risks identified in the National Climate Change Risk Assessment

Natural	Human	Economy	Built	Governance
N1 Risks to coastal ecosystems, including the intertidal zone, estuaries, dunes, coastal lakes and wetlands, due to ongoing sea level rise and extreme weather events.	H1 Risks to social cohesion and community wellbeing from displacement of individuals, families and communities due to climate change impacts. ★	E1 Risks to governments from economic costs associated with lost productivity, disaster relief expenditure and unfunded contingent liabilities due to extreme events and ongoing, gradual changes.	B1 Risk to potable water supplies (availability and quality) due to changes in rainfall, temperature, drought, extreme weather events and ongoing sea level rise. ★	G1 Risk of maladaptation across all domains due to the application of practices, processes and tools that do not account for uncertainty and change over long timeframes.
N2 Risks to indigenous ecosystems and species from the enhanced spread, survival and establishment of invasive species due to climate change.	H2 Risks of exacerbating existing inequities and creating new and additional inequities due to differential distribution of climate change impacts. ★	E2 Risks to the financial system from instability due to extreme weather events and ongoing, gradual changes.	B2 Risks to buildings due to extreme weather events, drought, increased fire weather and ongoing sea level rise. ★	G2 Risk of exacerbating impacts across all domains because current institutions, legislation, decision-making frameworks, funding mechanisms are not fit for climate change.
N3 Risks to riverine ecosystems and species from alterations in the volume and variability of water flow, increased water temperatures, and more dynamic morphology (erosion and deposition) due to changes in rainfall and temperature.	H3 Risks to physical health from exposure to storm events, heatwaves, vector-borne and zoonotic diseases, water availability and resource quality and accessibility due to changes in temperature, rainfall and extreme weather events.	E3 Risks to land-based primary sector productivity and output due to changes in mean rainfall and temperature, seasonality, weather extremes and changes in the distribution of invasive species.	B3 Risks to landfills and contaminated sites due to extreme weather events and ongoing sea level rise.	G3 Risks to governments and businesses from climate change related litigation, due to inadequate or mistimed climate change adaptation.
N4 Risks to wetland ecosystems and species, particularly in eastern and northern parts of New Zealand, from reduced moisture status due to reduced rainfall.	H4 Risks of conflict, disruption and loss of trust in government from changing patterns in the value of assets and competition for access to scarce resources primarily due to extreme weather events and ongoing sea level rise. ★	E4 Risks to tourism from changes to landscapes and ecosystems and impacts on lifeline infrastructure, due to extreme weather events and ongoing, gradual changes.	B4 Risk to wastewater and stormwater systems (and levels of service) due to extreme weather events and ongoing sea level rise. ★	G4 Risk of a breach of Treaty obligations from a failure to engage adequately with and protect current and future generations of Māori from the impacts of climate change. ★
N5 Risks to migratory and/or coastal and river-bed nesting birds due to reduced ocean productivity, ongoing sea level rise and altered river flows.	H5 Risks to Māori social, cultural, spiritual and economic wellbeing from loss and degradation of lands and waters, as well as cultural assets such as marae, due to ongoing sea level rise, changes in rainfall and drought. ★	E5 Risks to fisheries from changes in the characteristics, productivity, and spatial distribution of fish stocks due to changes in ocean temperature and acidification.	B5 Risks to ports and associated infrastructure due to extreme weather events and ongoing sea level rise.	G5 Risks of delayed adaptation and maladaptation due to knowledge gaps resulting from under-investment in climate adaptation research and capacity building.
N6 Risks to lake ecosystems due to changes in temperature, lake water residence time, and thermal stratification and mixing.	H6 Risks to Māori social, cultural, spiritual and economic wellbeing from loss of species and biodiversity due to greater climate variability and ongoing sea level rise. ★	E6 Risks to the insurability of assets due to ongoing sea level rise and extreme weather events.	B6 Risks to linear transport networks due to changes in temperature, extreme weather events and ongoing sea level rise. ★	G6 Risks to the ability of the emergency management system to respond to an increasing frequency and scale of compounding and cascading climate change impacts in New Zealand and the Pacific region. ★
N7 Risks to terrestrial, freshwater and marine ecosystems due to increased extreme weather events, drought, and fire weather.	H7 Risks to mental health, identity, autonomy and sense of belonging and wellbeing from trauma due to ongoing sea level rise, extreme weather events and drought. ★	E7 Risks to businesses and public organisations from supply chain and distribution network disruptions due to extreme weather events and ongoing, gradual changes.	B7 Risk to airports due to changes in temperature, wind, extreme weather events and ongoing sea level rise.	G7 Risk that effective climate change adaptation policy will not be implemented and sustained due to a failure to secure sufficient parliamentary agreement.
N8 Risks to oceanic ecosystem productivity and functioning due to changes in sea surface temperature, ocean mixing, nutrient availability, chemical composition and vertical particle flux. ★	H8 Risks to Māori and European cultural heritage sites due to ongoing sea level rise, extreme weather events and increasing fire weather. ★		B8 Risks to electricity infrastructure due to changes in temperature, rainfall, snow, extreme weather events, wind and increased fire weather.	G8 Risk to the ability of democratic institutions to follow due democratic decision-making processes under pressure from an increasing frequency and scale of compounding and cascading climate change impacts. ★
N9 Risks to sub-alpine ecosystems due to changes in temperature and a reduction in snow cover.				
N10 Risks to carbonate-based, hard-shelled species from ocean acidification due to increased atmospheric concentrations of CO <sub>2</sub> .				
N11 Risks to the long-term composition and stability of indigenous forest ecosystems due to changes in temperature, rainfall, wind and drought.				
N12 Risks to the diverse range of threatened and endangered species that are dependent on New Zealand's offshore islands for their continued survival.				

### Key:

- ★ The risk has disproportionate impacts on Māori
- ◆ The risk is of particular significance to Māori

10 most significant risks

Risks that require more research

26 risks where more action is needed

## Appendix 3 – Proposed contributing agencies to each action plan<sup>1</sup>

Outcome-focused action plans	Lead agencies	Contributing agencies
1: Natural environment	<ul style="list-style-type: none"> <li>Ministry for the Environment</li> <li>Ministry for Primary Industries</li> </ul>	<ul style="list-style-type: none"> <li>Department of Conservation</li> <li>Earthquake Commission</li> <li>Heritage New Zealand Pouhere Taonga</li> <li>Ministry for Culture and Heritage</li> <li>Ministry for Pacific Peoples</li> <li>Ministry of Transport</li> <li>New Zealand Transport Agency</li> <li>Te Puni Kokiri</li> </ul>
2: Homes, buildings and places	<ul style="list-style-type: none"> <li>Ministry for Business, Innovation and Employment</li> <li>Ministry of Housing and Urban Development</li> </ul>	<ul style="list-style-type: none"> <li>Department of Conservation</li> <li>Department of Internal Affairs</li> <li>Earthquake Commission</li> <li>Heritage New Zealand Pouhere Taonga</li> <li>Kāinga Ora</li> <li>Ministry for Culture and Heritage</li> <li>Ministry for Pacific Peoples</li> <li>Ministry for Primary Industries</li> <li>Ministry for the Environment</li> <li>Ministry of Education</li> <li>Ministry of Health</li> <li>Ministry of Transport</li> <li>New Zealand Transport Agency</li> <li>Te Puni Kokiri</li> <li>Te Waihanga</li> <li>The Treasury</li> </ul>
3: Infrastructure	<ul style="list-style-type: none"> <li>Te Waihanga</li> </ul>	<ul style="list-style-type: none"> <li>Department of Conservation</li> <li>Department of Internal Affairs</li> <li>Earthquake Commission</li> <li>Kāinga Ora</li> <li>Ministry for Business, Innovation and Employment</li> <li>Ministry for Pacific Peoples</li> <li>Ministry for Primary Industries</li> <li>Ministry for the Environment</li> <li>Ministry of Education</li> <li>Ministry of Health</li> <li>Ministry of Housing and Urban Development</li> <li>Ministry of Transport</li> <li>New Zealand Defence Force</li> <li>New Zealand Transport Agency</li> <li>Te Puni Kokiri</li> <li>The Treasury</li> </ul>
4: Communities	<ul style="list-style-type: none"> <li>Department of Internal Affairs</li> <li>Te Puni Kokiri</li> </ul>	<ul style="list-style-type: none"> <li>Earthquake Commission</li> <li>Heritage New Zealand Pouhere Taonga</li> <li>Kāinga Ora</li> <li>Land Information New Zealand</li> <li>Ministry for Business, Innovation and Employment</li> <li>Ministry for Culture and Heritage</li> <li>Ministry for Pacific Peoples</li> <li>Ministry for Primary Industries</li> <li>Ministry of Health</li> <li>Ministry of Housing and Urban Development</li> <li>Ministry of Social Development</li> <li>Ministry of Transport</li> <li>National Emergency Management Agency</li> <li>New Zealand Defence Force</li> </ul>

<sup>1</sup> This list reflects agencies that that signalled their interest to be involved. Additional agencies can join the project at any time. We will invite the Ministry for Ethnic Communities to participate when it is established in July 2021.

		<ul style="list-style-type: none"><li>• NZ Climate Health Council</li><li>• The Treasury</li></ul>
5: Economy and financial system	<ul style="list-style-type: none"><li>• Ministry for Business, Innovation and Employment</li><li>• The Treasury</li></ul>	<ul style="list-style-type: none"><li>• Department of Internal Affairs</li><li>• Earthquake Commission</li><li>• Financial Markets Authority New Zealand</li><li>• Ministry for Pacific Peoples</li><li>• Ministry for Primary Industries</li><li>• Ministry for the Environment</li><li>• Ministry of Housing and Urban Development</li><li>• Reserve Bank of New Zealand</li><li>• Te Puni Kokiri</li><li>• Tourism New Zealand</li></ul>

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