



Report of the Expert Working Group on Managed Retreat: A Proposed System for Te Hekenga Rauora/ Planned Relocation

Te Rīpoata o Kāhui Mātanga mō te Kimi
Kāinga Rua: He Pūnaha Marohi mō Te
Hekenga Rauora/Kimi Kāinga Rua

Report of the Expert Working Group on Managed Retreat:

A Proposed System for Te Hekenga Rauora/Planned Relocation

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Executive summary

Executive summary

Purpose of this report

- E1. Climate change presents a significant – and unprecedented – challenge for Aotearoa New Zealand. Rising temperatures are causing sea levels to rise and increasing the incidence and severity of extreme weather events, such as flooding, landslips and wildfire. These changes pose threats to the safety and well-being of communities around the country, as well as to infrastructure and sites of cultural significance. Aotearoa New Zealand must begin adapting to these risks.
- E2. Adaptation covers a spectrum of activities aimed at preventing or limiting the expected adverse consequences of climate change. Examples are raising the floor levels of houses and extending sea walls and stopbanks. In many cases, however, policies to accommodate or protect at-risk communities will not be cost effective or technically viable. In such cases, planned relocation, or ‘managed retreat’ – the strategic withdrawal of human activities and associated assets – may become necessary.¹ Such action is the focus of this report.
- E3. The Government is currently reforming Aotearoa New Zealand’s resource management system and, as part of these reforms, it is considering options to enable communities to relocate from places of risk to places of greater safety where necessary. The Managed Retreat Expert Working Group (the Group) was convened to support the Government in this work. Our objective was to develop detailed design options for an equitable and enduring managed retreat system as one part of the development of the Climate Change Adaptation Bill (CCAB).
- E4. Although our objective looks to a medium- to longer-term time horizon, the Government’s current recovery efforts are relevant to its work. The Government announced a National Resilience Plan in response to the North Island weather events of early 2023, including voluntary buy-outs for the most severely affected properties. Although we refer to this scheme in our report, the primary objective of the report is to provide a blueprint for a medium- to long-term approach to planned relocation, with an emphasis on enabling and incentivising pre-event retreat and relocation.

The policy problem

- E5. There is a lack of national direction on how to plan for relocation. National guidance recommends how to approach adaptation planning in a coastal context, but councils are not required to undertake adaptation planning. Nor is there a framework that promotes consistent and efficient planning for planned relocation. Roles and responsibilities for facilitating relocation are not clearly articulated – either from a planning perspective or from a funding perspective.

¹ We use the term ‘planned relocation’ rather than ‘managed retreat’. We also suggest the possibility of the use of a te reo Māori expression – ‘te hekenga rauora’ – for consideration: see below at paragraph E21.

- E6. There are insufficient legal powers to enable a coordinated and planned approach to relocation. Although a patchwork of relevant powers and mechanisms exists (eg, relating to land use and powers to condemn buildings and land), these do not meet the requirement for a coherent and fit-for-purpose planned relocation system. Moreover, the land-use planning legislation that will replace the Resource Management Act 1991 (RMA) – that is, the Spatial Planning Bill (SP Bill) and the Natural and Built Environments Bill (NBE Bill) – will not be sufficient either.
- E7. Issues with using the land-use planning system for planned relocation include the lack of legislated mandate, processes, powers, institutional arrangements and funding to support planned relocation. In particular, gaps arise from:
- the protection of existing uses by the planning system – this makes it very difficult to change existing uses to reduce risk, particularly in anticipation of risk, or before risk becomes intolerable
 - the lack of a clear, specific, mandated requirement to reduce risk through planning for, and implementation of, adaptation (including relocation)
 - the inability of the system to plan in the face of significant uncertainty
 - the lack of national direction on when and how to plan for relocation (although there is national guidance on how to approach adaptation planning in a coastal context, there is no national consistency on when and how planned relocation becomes a valid response to risk, or on the role of risk tolerance)
 - insufficient powers, tools and mechanisms to carry out a planned relocation (see chapter 4) – in particular, to require action to be undertaken and to change ownership of land, resulting in adaptation plans that struggle to get implemented
 - the lack of clearly articulated roles and responsibilities for enabling planned relocation, both from a planning perspective and from a funding perspective (see chapter 5).
- E8. Although most instances of community relocation to date have occurred after a natural disaster, in the future, pre-emptive or anticipatory relocation will become increasingly necessary. Such action can permanently mitigate the risk faced by threatened communities and allow local and central government to exit an increasingly expensive cycle of responding to, and recovering from, destructive storms and similar harmful events.
- E9. But pre-emptive relocation can be complex and challenging for local government to coordinate. Understandably, people feel attachment to their place of residence, where they have built social networks and settled their families – sometimes over generations. These connections are central to people’s sense of identity and well-being, and people may discount future risks in the face of such immediate concerns. Anxieties can be further exacerbated if people face the prospect of significant financial loss through relocation.
- E10. Further complexities arise in relation to Māori land. Many marae and other sites culturally important to Māori are located on the coast or near rivers or lakes, and so are vulnerable to the effects of climate change. Colonisation, dispossession and regulation of Māori land has severely impacted present-day Māori communities – including their location in high-risk areas and lower socio-economic status. This heightens the Crown’s obligations to them when developing a relocation policy. The special status of Māori land recognises the deep cultural relationship of Māori with their whenua, which gives rise to customary rights and interests

beyond those generally ascribed to land ownership and may result in reluctance to leave 'at-risk' whenua.

- E11. Moreover, relocation is generally expensive, particularly when it takes place prior to a disaster. In post-event situations such as after the Canterbury earthquakes, most affected homeowners had property insurance and so had access to insurance pay-outs. Because of their significant and visible impacts, such disasters also engender a high level of social licence for government intervention to assist people. But in situations of pre-event planned relocation – where people withdraw from an area because staying will inevitably involve risks to well-being at some future point – insurance pay-outs will not be available and there may be less social licence for government intervention and assistance.
- E12. Given attachments to place, cost, and other complexities associated with retreat and relocation, communities at risk may support responses to climate change effects that, although helping to mitigate risk in the short term, will not provide long-term solutions. For example, communities may favour protective measures such as sea walls, even where they cannot offer long-term protection against rising seas and escalating risks. A comprehensive planned relocation system will need to help communities to adopt the best long-term solution for their situation, which will, in many cases, require relocation.
- E13. Without a principled and enduring framework, government may likewise fail to invest in the best long-term interests of New Zealanders. For example, the government may invest primarily in locations where disasters have been most visible and recent and invest less in other places with equal or greater need, but where disasters have not yet materialised. The resulting ad hoc and potentially inconsistent governmental responses could strain perceptions of fairness and responsibility in use of public resources. It could also exacerbate existing inequalities if some communities in need do not receive adequate support.
- E14. Finally, constraints in the government's current institutions limit its ability to support communities to relocate. In coming years and decades, policy-makers will increasingly need to deal with a range of significant, interconnected and multi-dimensional problems. If community relocation is to be conducted effectively, efficiently and equitably, it will require extensive coordination within and across each tier of government, and across the public, private and voluntary sectors. Equally, enduring partnership with Māori, iwi and hapū will be vital.

Outcomes and principles

- E15. We consider that community relocation should contribute to eight essential outcomes.
- People must be kept physically and psychologically safe.
 - People must have access to adequate and affordable places to live.
 - People must have the opportunity to build more secure and resilient futures and to maintain or enhance their well-being.
 - Socio-economic inequalities must not be exacerbated and need not be preserved.
 - Risks from climate-related and other natural hazards should be reduced.
 - The rights and interests of Māori must be respected and given effect.

- Environmental standards must be met, and ecological values must be protected.
 - Opportunities for improvement should be realised (eg, in relation to housing, infrastructure, transport, and urban form).
- E16. There are ten principles to guide how community relocation should be undertaken to achieve the desired outcomes.
- Be informed by the best available evidence and expert advice.
 - Reflect important community values and aspirations.
 - Take a proactive and precautionary (ie, cautious and risk-averse) approach to the timing and pace of relocation, despite the absence of perfect information.
 - Provide certain, timely and predictable outcomes.
 - Be adaptable to meet the pace, scale, and variable circumstances of relocation.
 - Be simple to operate and minimise compliance costs.
 - Minimise moral hazard and other perverse incentives.
 - Give effect to te Tiriti o Waitangi (te Tiriti) and honour the intent of settlements.
 - Comply with the New Zealand Bill of Rights Act 1990 where applicable.
 - Maintain the sound functioning of markets (eg, in relation to property, construction, insurance and banking).

What we recommend

- E17. Our recommendations are listed below the conclusion to this executive summary. What follows is a brief overview of what we propose.

Recognition of Māori rights and interests

- E18. As noted, iwi, hapū and Māori communities are significantly at risk from the effects of climate change, in terms of both sea-level rise and the after-effects of severe weather events. They also have deep cultural connections with the land, which means that climate adaptation – and planned relocation in particular – raises complex and difficult issues.
- E19. The general system for addressing climate change and adaptation issues must be consistent with te Tiriti. It should be based on the following principles.
- **A partnership approach** grounded in the principles of te Tiriti – the Crown and Māori must work together to develop a framework for relocation, with Māori involved in the full variety of capacities, including iwi, hapū, whānau, mātauranga Māori and kaupapa Māori expertise, and as decision-makers.
 - **Recognition of context** – the development of an adaptation policy (including planned relocation) must proceed with an understanding and recognition of the historical context of the Crown–Māori relationship; the unique rules that apply to Māori land under Te Ture Whenua Māori Act; the challenges that arise from those rules; and the current challenges that arise because of historical displacement.

- **Preservation of mana and rangatiratanga** – the principle that iwi, hapū and Māori communities make decisions for themselves needs to be embedded within the framework.
 - **System flexibility** – the diversity of the rights, needs and vulnerabilities of Māori means that the framework must be flexible enough to enable those rights to be upheld and those needs met within the particular context of each Māori community, supporting equitable outcomes.
 - **Holistic** – the framework needs to facilitate a holistic approach, that supports all community members (not just landowners), from leaving one area to re-establishing in a new area (communities and community infrastructure) – both financially and socially.
 - **Equitable funding** – iwi, hapu and Māori communities will require financial support to participate in adaptation and planned relocation. Public funding options ought to be considered.
- E20. The term most used in Aotearoa New Zealand for relocating communities away from risk is ‘managed retreat’. There is some concern that the term can imply that decisions about relocation are imposed upon communities – that is, that they are being forced to relocate. Although it may be necessary for communities to avoid risk to life and well-being by retreating, forcing communities to relocate takes away their right to make decisions for themselves – their rangatiratanga.
- E21. We propose reframing the concept of ‘managed retreat’ so that it is more inclusive of risks that accompany relocation and reflects that communities make decisions about their futures together. An alternative term could be ‘te hekenga rauora’. This is a draft term (and not a literal translation) for community-led relocation. We suggest it here as a starting point for discussion, but we recognise it will need to be supported by, and adopted in partnership with, Māori.
- E22. The chapters on processes (chapter 3), powers (chapter 4), funding (chapter 5) and institutions (chapter 6) set out our recommendations in relation to relocation by iwi, hapū and Māori communities.

Processes

- E23. Planning for relocation should be part of the normal planning process for adaptation generally. As noted above, current and proposed land-use planning is not sufficient for adaptation generally, or planned relocation in particular. A process for planning for adaptation, including planned relocation, should build on the strengths of the existing and proposed planning systems where possible, and provide new processes and mechanisms where needed.
- E24. The planning process should be community centred and nationally enabled. It should generally have three stages, although the Crown should be empowered to ‘short cut’ and direct the process to start at Steps 2 or 3 without completing the previous step – for example, if a significant damaging event occurs.

Step 1: Understanding the need for adaptation

- E25. Step 1 involves identifying areas at risk within a region and prioritising adaptation planning for those areas, to reduce existing and expected future risk. Initially, we consider that regional councils, in partnership with Māori and territorial authorities, should be the decision-makers for regional-level risk assessment, including the identification and prioritisation of areas for adaptation, with the Crown having an option to appoint a member to this group. In the longer term, if regional planning committees are established as envisaged in the proposed legislation, they could undertake this role. We anticipate areas for adaptation planning being identified within regional spatial strategies (RSSs), should these be part of the new planning system.
- E26. This identification and prioritisation of areas for adaptation planning should be based on a regional-level risk assessment, using existing information where appropriate, and undertaken in accordance with national direction. The level of detail only needs to be the minimum necessary to identify areas for adaptation planning, as a more thorough assessment will follow in Step 2. This assessment should be undertaken by a panel of experts, including in mātauranga Māori and tikanga, and should be audited by an independent national-level body.
- E27. National direction should guide the process of identification and prioritisation of areas for adaptation planning by setting out the risk circumstances in which adaptation planning is required, and principles and criteria for prioritisation. As well as ongoing community engagement throughout the whole process, there should be a formal community feedback process for the identification and prioritisation of areas for adaptation planning (but not for the risk assessment itself), similar to a Local Government Act 2002 process, or under the process requirements for the proposed RSSs. We do not recommend appeals to the courts on decisions made in Step 1.
- E28. Once areas have been identified and prioritised for adaptation planning, the risk assessment that informed the decision-making should be given 'particular regard' in resource consent decision-making under the RMA (or NBE Act, if relevant). A national policy statement should be used to provide direction on this. This is a temporary measure, to be in place while the process of local adaptation planning is undertaken.

Step 2: Planning to adapt

- E29. This step involves assessing risk in priority areas at a local scale, identifying adaptation options and determining adaptation actions and future pathways (including giving consideration to where people move to if relocation is an option) and recording all decisions in a local adaptation plan (LAP).
- E30. Local adaptation planning should be undertaken by a new, fit-for-purpose decision-making body – an adaptation committee – which should be provided for in the new climate adaptation legislation. Membership of adaptation committees should be flexible, in order to reflect the scale and spatial extent of the adaptation issues to be addressed, but will likely include representation from relevant regional councils, territorial authorities, and iwi, hapū and Māori communities, together with an optional Crown representative. Some adaptation situations are likely to be of a scale that exceeds the capacity and capability of an adaptation committee and, in those situations, there should be a call-in power for the responsible Minister.

- E31. A Māori decision-making body will be required for Māori-led adaptation planning, which we recommend when Māori communities decide to plan for relocation.
- E32. A LAP should include, among other things, an area-specific all-hazards or hazard neutral risk assessment, identification and assessment of options for adaptation (including planned relocation), a list of actions required for implementation and responsibilities, and provisions for monitoring and review.
- E33. An area-specific risk assessment is a crucial first step in local adaptation planning. It needs to be expert led and evidence based, and not subject to challenge through the courts. Rather, as for the regional-level assessment, the area-specific risk assessment should be undertaken by an expert panel and be audited by an independent national-level body. The expert panel should have expertise in hazard and vulnerability assessments; engineering risk assessments; mātauranga Māori; tikanga; and environmental, financial and social risks from natural hazard and climate change impacts. National direction needs to standardise requirements for risk assessments, for both adaptation planning and standard land-use planning, including requirements for:
- hazard assessments – for example, quality assurance requirements
 - a holistic assessment of risk, based on well-being
 - consideration of risk from a te ao Māori perspective
 - specific methodologies and metrics for risk assessment.
- E34. National direction is also needed to support other aspects of local adaptation planning, particularly:
- the principles, criteria and methodologies for the assessment of adaptation options, including the incorporation of mātauranga Māori, tikanga and kaupapa Māori methodologies
 - the risk circumstances in which consideration of planned relocation as an option is mandatory, to provide a mandate for adaptation committees to consider relocation
 - the minimum requirements for who should be engaged with and at what point, and guidance on how to engage with Māori, stakeholders and the community
 - the matters to be addressed in a pre-event recovery plan, to ensure post-event decision-making does not foreclose adaptation options being applied in the future.
- E35. There should be at least three types of community engagement in the process of developing a LAP:
- ongoing community engagement throughout the process
 - use of community panels to advise the decision-maker (adaptation committee) of the views of the various aspects of the community
 - a formal feedback process similar to that under the RMA or proposed NBE Act – an independent hearing panel hears submissions on the draft local adaptation plan and makes recommendations to the adaptation committee.
- E36. Appeals to the courts should be provided in a similar way to the proposed NBE Act – merit appeals in situations where the adaptation committee does not accept a recommendation

from the hearings panel and appeals on points of law to the High Court. An additional check should be provided by the Crown, for planned relocation aspects of the LAP.

Step 3: Undertaking adaptation

- E37. This step involves implementing the package of adaptation actions through existing and new mechanisms. We propose two new mechanisms: an adaptation designation for the planning system, and a relocation programme where relocation is part of the LAP.
- E38. An adaptation designation is a modification of existing designations under the RMA and NBE Bill. It would be included directly in district and/or NBE plans when the local adaptation plan is finalised, without a further public consultation process, and cover the area subject to adaptation actions. The designation would be held by the Crown, or a Māori decision-making body in the case of Māori-led adaptation planning. It would authorise activities requiring district resource consents, but unlike normal designations, it would also authorise plan changes and other matters. An adaptation designation would be a 'one-stop shop' that provides a responsive process for all planning changes and approvals required for all adaptation actions, excluding actual relocation. Relocation would be implemented outside of the planning system, through a relocation programme and associated powers.
- E39. A relocation programme would cover a range of matters about the upcoming relocation and identify who is responsible for carrying them out. The programme should be developed through close engagement with the affected community and the other stakeholders involved, such as infrastructure providers. There should be a formal feedback process on a draft relocation programme, similar to a Local Government Act 2002 process, but with no ability to relitigate the decision to relocate made in the LAP. The relocation programme will require Crown approval. There should be no appeals to the courts on relocation programmes, but there should be a dispute resolution service for disputes relating to the logistics of implementing relocation.

Powers

- E40. The existing land-use planning regime, and its proposed replacement under the NBE Bill, do not provide adequate tools for planned relocation. Land-use planning tools, on their own, are not an appropriate way to implement relocation. We recommend that overarching legislation, containing all necessary powers, should govern the adaptation system, including planned relocation. It will be important that this legislation specifies the circumstances in which its terms take priority over other legislative provisions.
- E41. A large range of powers will be necessary. These will include general powers as well as those relating to process, emergencies and the ability to intervene on other systems. For relocation, an important suite of powers will be necessary in relation to the control of use, acquisition and retirement of land.
- E42. Relocation must address the ongoing ownership of the at-risk land. It must also address the extent to which a relocation is voluntary or mandatory. This engages presumptions about the role of the state in reducing risk, where the costs usually fall and what powers can be exercised in what circumstances. On one hand, individuals are often responsible for the

condition of, and the risks posed to, what they own (eg, in relation to dangerous or earthquake prone buildings). On the other, where the state wants to acquire private property, there are constitutional protections and a presumption of compensation.

- E43. Clarity on the answers to these issues is critical. The types of interventions that are common in post-event situations should inform the powers needed in an anticipatory risk reduction system. They should exhibit similar characteristics, albeit tailored to take advantage of the circumstances that accompany pre-emptive action.
- E44. At the end of a relocation programme, land in the at-risk area should no longer be in use (with some very limited exceptions). Allowing individuals to remain in any capacity would not adequately achieve the overall objective of risk reduction and would raise further difficult questions about the safety of those who remain, those they invite onto their properties, and responsibilities when a natural disaster occurs. To achieve this, the system should contain a mix of voluntary and mandatory elements and aim to provide those affected with as much choice as possible over the timeframe of the relocation programme, consistent with the efficient and effective implementation of that programme.
- E45. In almost all cases (except in relation to Māori land), planned relocation should involve a change of land ownership. Legislation should empower decision-makers to acquire land by agreement, compulsorily acquire land, and exercise a new power to retire land from use. We recommend that overarching legislation contain all these powers. We do not consider the Public Works Act 1981 should be used in this context. Māori should retain ownership of Māori land (excluding general land, with some exceptions), and tools should be developed to prohibit use with limited exceptions.
- E46. There will also need to be powers to make payments of compensation for land acquisition or retirement, and powers to provide financial assistance more generally.
- E47. The system should contain a right of appeal; mechanisms for dispute resolution; multiple general powers, such as ministerial call-in powers; powers to enable ongoing management of land relocated from; limited protection of liability for decision-makers, powers to withdraw services; and emergency powers. The legislation should be clear about who can exercise powers and in what circumstances they can be exercised.

Funding and financing

- E48. In 2021, the Cabinet approved the following objectives and principles for funding planned relocation.

Objectives

- Reduce hardship due to the impacts of climate change.
- Incentivise better long-term investment decisions concerning climate change risk.
- Reduce liabilities, including contingent liabilities to the Crown.
- Support the role of banking and insurance in facilitating risk management.

Principles

- Limit the Crown's fiscal exposure.
- Minimise moral hazard.
- Design solutions to be as simple as possible.
- Ensure fairness and equity for and between communities, including across generations.
- Beneficiaries of risk mitigation should contribute to costs.
- Minimise costs over time by providing as much advance notice as possible.
- Solutions support system coherence and the overall adaptation system response.
- Risks and responsibilities should be appropriately shared across parties, including property owners, local government, central government and banking and insurance industries.

E49. Three features of these are particularly relevant: first, the objective of reducing hardship due to the impacts of climate change; second, the need to ensure fairness and equity among communities and generations; and third, the appropriate sharing of risks and responsibilities.

E50. We developed our own set of funding principles, as follows:

- What is collected and distributed should be sufficient to achieve the outcomes of planned relocation.
- The requirements of fiscal prudence and responsibility should be met.
- The scheme should be adaptable to meet the pace and scale of relocation, and should be sustainable over the period in which planned relocation is required.
- The scheme should be certain and predictable.
- The scheme should be fair and should contribute to compensatory, restorative and distributive justice.
- The scheme should take proper account of the rights and interests of Māori.
- In terms of administration, the scheme should be efficient and low cost.
- The scheme should not create perverse incentives.

E51. Although our statement does not refer explicitly to avoiding hardship, when read in conjunction with the statement of outcomes and principles for planned relocation (paragraphs E15 and E16 above), it shares the concern to prevent undue hardship.

Who pays the costs of planned relocation?

E52. When determining who should pay particular costs relating to managed relocation as between central, regional and territorial government, account should be taken of the following.

- In principle, the funding source should match the level at which decisions are made or responsibility and accountability are located.
- A specific mix of funding sources may be necessary to create the right incentives for all decision-making entities.

- The mix of funding sources will also have equity and fairness implications that should be considered.
- Different sources of funding have different levels of administrative complexity and collection costs associated with them.
- The need to reduce hardship is relevant to cost allocation, given the different resources available to possible funding sources.

E53. In the report, we identify a range of relevant costs and indicate how they should be met.

Compensatory payments for building owners who must relocate

E54. From our perspective, avoiding hardship by structuring funding so as to provide adequate housing to those who must relocate was a key consideration. Based on the outcomes and principles for planned relocation and funding, we did not consider that preserving people's wealth or protecting property owners from the risks of property ownership were legitimate objectives of the funding system.

E55. Government assistance for property owners participating in a planned relocation should distinguish between:

- natural hazard damage for which insurance pay-outs are available and natural hazard damage for which no insurance pay-outs are available
- natural hazard damage to land and natural hazard damage to buildings
- natural hazard damage to different classes of buildings.

E56. In terms of compensatory payments for buildings (assuming no insurance payouts are available), distinctions should be made between:

- owner-occupied homes that are the principal places of residence for their owners
- rental properties that are the principal places of residence for their tenants (residential rental properties)
- commercial buildings
- second homes (including baches and holiday homes which are not principal places of residence)
- buildings owned by not-for-profit organisations
- buildings of iwi, hapū and Māori communities.

E57. We recommend that compensatory payments be calculated as set out below.

Owner-occupied homes

E58. For buildings, owners of principal places of residence would receive compensatory payments based on the basis of either:

- the rateable value (RV) of their houses, with a cap fixed in a way that would mean that 80 per cent to 90 per cent of homeowners would receive the full RV for their homes

- a sum calculated on the basis of the 'per square metre' cost of building a standard new home of the same size as that being left, subject to a maximum size cap (for example, 180 square metres).

The choice between these two options lies with government.

- E59. For land, owners would receive compensatory payments for the same land as is covered under current public natural hazard insurance – namely, for the land under the house and any outbuildings, and for eight metres round the perimeter of the house and any outbuildings. The amount of the payment would be fixed as a proportion of the RV for that land or by reference to the minimum lot size for a residence under local planning requirements, whichever is the greater.

Residential rental properties

- E60. Owners of rental properties which provide permanent places of residence for their tenants would receive compensatory payments similar to, but less generous than, those applicable to owner-occupied homes. But owners would receive the payments only on condition that they use the funds to establish long-term rental facilities in the new location, either themselves or by investing in an approved investment vehicle for long-term rental accommodation.

Commercial buildings

- E61. Owners of commercial buildings could be eligible for compensatory payments on the following bases:
- Eligibility would be based on hardship, which would be assessed by means testing.
 - Any payment would be subject to a condition that it must be used to re-establish new commercial premises in the new location if there was a community-wide planned relocation, or elsewhere if there was not.
 - The amount of the compensatory payment would be less than that provided to homeowners (eg, it could be 50 per cent of the RV of the building). There would also be some compensatory payment in relation to land.

Second homes

- E62. Second homes such as baches and other holiday homes that are not principal places of residence would receive no compensatory payments, but could receive assistance for removal, demolition and clean-up costs.

Not-for-profit organisations

- E63. As was the case after the Canterbury earthquakes, buildings owned by not-for-profit organisations and used for the purposes of their not-for-profit activities should receive compensatory payments equal to the full RV of their buildings. In relation to land, they should also receive the full RV, although land swaps should also be an option.

Buildings of iwi, hapū and Māori communities

- E64. In relation to iwi, hapū and Māori communities, a ‘full compensation’ approach should be adopted, as applies to not-for-profit organisations. There should, however, be greater emphasis on the Crown making safer land available, providing assistance to move buildings and structures of cultural significance to safer locations, and ensuring that cultural connections to the land being moved from can be retained.

Paying for planned relocation

- E65. There is an issue as to how planned relocation should be paid for – through a special levy? Through a dedicated fund built up by a special levy and/or periodic contributions from general tax revenue? Or just through general tax revenue (supported by any necessary borrowing) whenever required?
- E66. We do not make a firm recommendation on this issue, but rather set out relevant arguments. It is important, though, that whatever mechanism is chosen, funding for planned relocation should not be subject to the usual vicissitudes of the annual budget round. That will too easily result in deferment and to dangerous delay.

Institutions

- E67. There should be a staged, evolutionary approach to institutional reform. In the near term (three to five years), institutional changes should be limited primarily to those that are likely to be desirable regardless of the medium- to long-term policy framework for planned relocation. In the medium-to-long term, there should be further institutional changes to give effect to the new policy framework for planned relocation, including funding arrangements, recognising that institutions will evolve over time to meet changing conditions.
- E68. Important design principles for institutions include that form should follow function, the responsibilities of each organisation should be clear and transparent, organisations should be structured so as to avoid issues of ‘capture’, they should have robust accountability mechanisms, they should be adaptable so they can meet changing circumstances, and they should have the capacity for reflective learning as their knowledge and experience grows.
- E69. In addition, design issues must be considered. Some of these include the degree of centralisation or decentralisation of decision-making that is desired; whether the necessary decision-making is technical in nature, democratic, or a combination; the extent to which policy advice and delivery/operational functions are dealt with in separate organisations or within a single larger organisation; and whether particular organisations should be independent or politically accountable.
- E70. Although we make a number of recommendations in relation to institutions, there are four that we emphasise in particular.
- Given the need for long-term planning and anticipatory governance, the public sector’s foresight capacity in relation to natural hazards needs to be improved.
 - An existing ministry should lead in providing policy advice for all matters relating to climate change adaptation and natural hazard management, including planned

relocation. The Ministry for the Environment is probably best placed to do so. The lead ministry should work closely with local authorities, and with iwi, hapū and Māori communities.

- There needs to be an independent audit and review function of all regional and other risk assessments.
- In relation to Māori, the institutional structures must be consistent with the requirements of te Tiriti, so that Māori have an effective voice in relevant institutional structures as partners. In addition, there may be a role for ‘navigators’ to assist iwi, hapū and Māori communities to perform their partnership role, and also to assist communities facing the possibility of relocation with developing their own plans and strategies for planned relocation.

E71. In the near term (ie, the next three to five years), operational responsibilities for planned relocation should be mainstreamed across existing departments and Crown entities to the extent possible. For the longer-term, the government should explore establishing a departmental agency (or possibly a Crown entity) to focus on proactive and post-event planned relocation, along with post-disaster recovery and reconstruction and enhancing the nation’s long-term resilience. In particular, any separate fund that is established to provide compensation for property losses will need to be managed by a suitable central governmental entity – whether existing (such as Toka Tū Ake EQC) or new.

E72. In addition, the government should:

- consider creating a special purpose coordinating body to bring together central and local government and iwi/hapū to address issues relating to planned relocation and a ‘one-stop shop’ advisory service for affected communities
- investigate expanding the New Zealand Claims Resolution Service to include non-insurance-related issues that are likely to arise through the implementation of planned relocation.

E73. Finally, the proposed legislation should require an independent review of the performance of institutional arrangements for climate change adaptation every 10 years.

Conclusion

E74. Our report does not address all the issues raised by planned relocation, or by adaptation more generally. Rather, it focuses on significant matters that are essential to decisions to leave at-risk locations – what processes are needed? What powers should there be? What funding is appropriate? What institutions are necessary? How are Māori rights and interests to be addressed?

E75. To succeed in meeting the challenges that climate change presents, it will be vital that the public accept the need for planned relocation as a means of adaptation to climate change effects, and that they have confidence in the way planned relocation decisions are made and implemented. Accordingly, community education and engagement will be critical, both generally and in the context of specific relocations.

E76. The substantive decisions made on the issues discussed in this report will obviously be important to achieving the necessary public confidence. Equally important, however, are matters such as clarity, certainty and policy stability. Decision-makers need to adopt a perspective that is not simply a short- to medium-term one, but a long-term one. Only if this is done will there be the opportunity to achieve the best outcomes. As a result, there will have to be a broad consensus – a multi-party approach – to addressing climate change issues. They cannot be dealt with on the basis of the usual electoral cycles.

List of recommendations

#	Recommendation
1	<p>We recommend that the Government considers adopting the following statement of outcomes and principles for planned relocation, or something similar.</p> <ul style="list-style-type: none"> • Outcomes <ul style="list-style-type: none"> – People must be kept physically and psychologically safe. – People must have access to adequate and affordable places to live. – People must have the opportunity to build more secure and resilient futures, and maintain or enhance their well-being. – Socio-economic inequalities must not be exacerbated and need not be preserved. – Risks from climate-related and other natural hazards should be reduced. – The rights and interests of Māori must be respected and given effect. – Environmental standards must be met, and ecological values protected. – Opportunities for improvement should be realised (eg, in relation to housing, infrastructure, transport and urban form). • Principles <ul style="list-style-type: none"> – Be informed by the best available evidence and expert advice. – Reflect important community values and aspirations. – Take a proactive and precautionary (ie, cautious and risk-averse) approach to the timing and pace of relocation, despite the absence of perfect information. – Provide certain, timely and predictable outcomes. – Be adaptable to meet the pace, scale and variable circumstances of relocation. – Be simple to operate and minimise compliance costs. – Minimise moral hazard and other perverse incentives. – Give effect to te Tiriti o Waitangi and honour the intent of settlements. – Comply with the New Zealand Bill of Rights Act 1990 where applicable. – Maintain the sound functioning of markets (eg, in relation to property, construction, insurance and banking).
2	<p>We recommend a reframing of the concept of 'managed retreat' to one that:</p> <ul style="list-style-type: none"> • is more inclusive of the social, cultural and psychological risks that accompany relocation of communities • reflects that communities should make decisions about their futures together • supports rangatiratanga. <p>We suggest that an appropriate framing that reflects the Aotearoa New Zealand context could be 'te hekenga rauora', which loosely expresses the concept of community-led, planned relocation.</p>

<p>3</p>	<p>We recommend that the Government considers adopting the following principles as the basis for a system of adaptation and planned relocation, or te hekenga rauora, for iwi, hapu and Māori communities.</p> <ul style="list-style-type: none"> • A partnership approach grounded in the principles of te Tiriti: The Crown and Māori must work together to develop a framework for relocation, with Māori involved in all capacities, including iwi, hapū, whānau, mātauranga Māori and kaupapa Māori expertise, and as decision-makers. <ul style="list-style-type: none"> – This principle builds on the chapter 1 principles that planned relocation should be informed by the best available evidence and expert advice, reflect important community values and aspirations, and give effect to te Tiriti and honour the intent of settlements. • Recognition of context: The development of an adaptation policy (including planned relocation) must proceed with an understanding and recognition of the historical context of the Crown–Māori relationship, the unique rules that apply to Māori land under Te Ture Whenua Māori Act 1993, the challenges that arise from those rules, and the current challenges that arise because of historical displacement. <ul style="list-style-type: none"> – This principle builds on the chapter 1 principles that a planned relocation policy should reflect important community values and aspirations, and should give effect to te Tiriti and honour the intent of settlements. • Preservation of mana and rangatiratanga: The principle that iwi, hapū and Māori communities make decisions for themselves needs to be embedded into the framework. <ul style="list-style-type: none"> – This principle builds on the chapter 1 principles that the process for planned relocation should reflect important community values and aspirations, and should give effect to te Tiriti and honour the intent of settlements. • System flexibility: The diversity of the rights, needs, and vulnerabilities of Māori means that the framework must be flexible enough to enable those rights to be upheld and those needs met within the context of each Māori community, supporting equitable outcomes. <ul style="list-style-type: none"> – This principle builds on the chapter 1 principles that the planned relocation process should reflect important community values and aspirations. It should be adaptable to meet the pace, scale and variable circumstances of relocation. • Holistic: The framework needs to facilitate a holistic approach, that supports all community members (not just landowners), from leaving one area to re-establishing in a new area (communities and community infrastructure) <ul style="list-style-type: none"> – both financially and socially. • Equitable funding: Iwi, hapū and Māori communities will require financial support to participate in adaptation and planned relocation. Public funding options should be considered.
<p>4</p>	<p>We recommend a process for planning for adaptation and planned relocation that is community centred and nationally enabled. It will build on the strengths of the existing and proposed planning systems where possible and include new processes and mechanisms where needed. The process should include three key steps.</p> <ul style="list-style-type: none"> • Step 1 – Understanding the need for adaptation at national and regional scales: This step involves identifying areas at risk and prioritises planning for those areas to reduce existing and increasing risk. • Step 2 – Planning to adapt: This step involves assessing risk in priority areas at a local scale, identifying adaptation options, and determining adaptation actions and future pathways (including considering where people relocate to, where relocation is an option) and recording all decisions in a local adaptation plan (LAP) that will include: <ul style="list-style-type: none"> – an area-specific, all-hazard or hazard-neutral risk assessment – identification and assessment of options for adaptation, including planned relocation, using a dynamic adaptive framework – a confirmed ‘package’ or ‘pathway’ of adaptation measures (relocation and/or other measures), including (where appropriate) protection mechanisms, planning controls to reduce risks, and measures required to support the relocation of people and property to new land – an assessment and identification of options for the relocation of people or communities (ie, where they will go), if relocation is considered necessary either in the short or long term, and plans for land retreated/relocated from

	<ul style="list-style-type: none"> – a list of actions required for implementation, including who is responsible for each – provisions for monitoring and review – a pre-event recovery plan to address recovery if an event occurs before adaptation is implemented. <ul style="list-style-type: none"> • Step 3 – Undertaking adaptation: This step involves implementing the package of adaptation actions, including the development of a detailed relocation programme when relocation is part of the LAP. When a relocation programme is developed, it will address the three stages of relocation: enablement, active relocation and post-relocation. It will: <ul style="list-style-type: none"> – specify properties and assets that will be subject to relocation and details of use and ownership changes – provide details of the relocation process, including: <ul style="list-style-type: none"> – what financial assistance will be provided and how – timing of relocation – where residents will or could move to (if applicable) – specify requirements for the relocation of infrastructure – identify roles and responsibilities for land post-relocation, including land-use management and details of memorials and values to be protected. <p>We recommend that Steps 2 and 3 can occur on their own, without the preceding step(s), should circumstances change (such as a significant event), on the direction of the Crown.</p>
5	<p>We recommend that:</p> <ul style="list-style-type: none"> • directly impacted communities are at the centre of all planning and implementation actions of adaptation and planned relocation • expert panels are used to identify risks and are informed by te ao Māori • infrastructure providers (councils, Crown agencies and the private sector) are involved as stakeholders in adaptation planning processes, both in areas directly impacted by climate change and in areas where future relocation is being considered.
6	<p>We recommend the establishment of adaptation committees – consisting of relevant territorial authorities; iwi, hapū and Māori representatives; and the regional council – to lead local adaptation planning and decision-making, supported by central government as required.</p>
7	<p>We recommend that Māori decision-makers are appointed to lead the preparation of local adaptation plans for Māori communities.</p>
8	<p>We recommend that provision is made for a ‘call-in’ by the responsible Minister, if adaptation planning or relocation is large scale or in a location where local government is not able to carry out this work. Criteria for when call-in powers apply should be developed.</p>
9	<p>We recommend that risk assessments follow the methodologies set by national direction and are subject to an independent peer-review process undertaken by an independent national body. Risk assessments do not involve public consultation or challenge.</p>
10	<p>We recommend that the local adaptation plan goes through a robust preparation process, including public consultation, and that it is subject to a hearing by an independent hearings panel. Appeals rights will be parallel to those proposed for natural and built environment plans under the new planning system (ie, merits appeals when an adaptation committee does not accept a recommendation of an independent hearing panel, and appeals on points of law to the High Court).</p>
11	<p>We recommend that regional planning committees (RPCs) (or, before RPCs are established, a committee of the regional council; territorial authorities; and iwi, hapū and Māori representatives) undertake regional risk assessments and identify areas at risk and areas subject to adaptation planning.</p>
12	<p>We recommend that before adaptation actions are included in a local adaptation plan, an assessment is undertaken that includes consideration of the most appropriate option, given the risk level and the social, cultural, environmental</p>

	and economic costs, including accounting for intergenerational equity. The impacted community should be involved with this assessment.
13	We recommend that the new planning legislation provides for a new 'adaptation designation' to be included in regulatory plans, following the approval of a local adaptation plan (LAP). This designation would be a modification of existing designations under the Resource Management Act 1991 and proposed Natural and Built Environments Act, and it would allow for a responsive process to authorise physical works, plan changes and other planning tools agreed to in a LAP.
14	We recommend that regional spatial strategies provide for land that will be needed for the relocation of people and property relocated from at-risk land.
15	We recommend that the adaptation committee develops a relocation programme and authorises the powers and processes to achieve relocation – notably, the ability to change land ownership through the acquisition of land to be relocated from and cancelling of titles to land, the ability to change uses of relocated land, and the payment of compensation and support to affected people. We recommend that a new Crown entity oversees the implementation of the relocation programme and holds the new adaptation designation.
16	We recommend that the focus for identifying areas for adaptation planning should be on areas where risk needs to be reduced to protect well-being, in accordance with the Treasury's Living Standards Framework.
17	We recommend that national direction (through either regulation or the National Planning Framework) is provided to guide adaptation planning, including setting out principles and criteria for identifying areas at risk; methods and standards for risk assessments, including risks to well-being; and methodologies for assessing adaptation options and when planned relocation will be required. This will ensure national consistency and manage political risk for local decision-makers. The risk assessment methodology must include te ao Māori considerations.
18	We recommend that: <ul style="list-style-type: none"> regional spatial strategies (RSSs) include areas at risk from natural hazards, areas that will be subject to a local adaptation plan (LAP), and priority areas for that planning. To enable this, parts of clause 17 of the Spatial Planning Bill will need to be amended. following the inclusion of areas for adaptation planning in an RSS, that the new legislation requires all resource consent applications within the areas (whether under the Resource Management Act 1991 (RMA) or the proposed Natural and Built Environment Act) to have 'particular regard' to the risk assessment that informed the RSS. a national policy statement is used to direct consent decision-making under the RMA in the period between an area being identified for adaptation planning in an RSS and the LAP being completed.
19	We recommend that planning provisions are not used as the sole, or primary, mechanism to implement planned relocation.
20	We recommend that the adaptation system, including planned relocation, be governed by overarching legislation containing all necessary powers. To avoid conflicts, the legislation must also specify the circumstances in which its terms take priority over other legislative provisions.
21	We recommend that, at the end of a relocation programme, land in the at-risk area should no longer be used, although there may be some very limited exceptions such as for ceremonial events, transitory recreational activities, some agricultural or horticultural activities or mahinga kai gathering. To achieve this, the system will need to contain a mix of voluntary and mandatory elements. Setting the right mix should be guided by a principle that the system should aim to provide those affected with as much choice as possible over the timeframe of the relocation programme, consistent with the efficient and effective implementation of that programme.

22	<p>We recommend that:</p> <ul style="list-style-type: none"> • in almost all cases (except in relation to Māori land), planned relocation should be accompanied by a change of land ownership to either the Crown or local government • overarching legislation empowers decision-makers to acquire land by agreement, to compulsorily acquire land and to retire land from use by cancellation of the Land Transfer Act 2017 title. <p>We recommend that Māori retain ownership of their land (excluding general land, with some exceptions), particularly where the land is held in trust or in the names of multiple owners. Tools should be developed to prohibit use with limited exceptions, such as for ceremonial gatherings or mahinga kai gathering.</p>
23	<p>We recommend against using the Public Works Act 1981 to implement planned relocation (unless required for and carried out in conjunction with a public work).</p>
24	<p>We recommend that the powers of acquisition by agreement and compulsory acquisition be coupled with powers to make payments of compensation. These payments should be referred to as 'compensation', because this term is well understood in this context. There should also be powers for authorities to provide financial assistance generally, even if the precise policies are left to different, potentially non-statutory, instruments.</p>
25	<p>We recommend that at the point a decision to relocate is made (ie, at the local adaptation plan stage), there should be a right to a merits appeal to the Environment Court where the adaptation committee does not accept a recommendation from the independent hearings panel. Where a recommendation of the hearings panel is accepted, there should only be an appeal on points of law to the High Court, or to the Māori Land Court for Māori land. There should be no further rights of appeal during the relocation programme stage of the process. Judicial review should remain available throughout the process.</p>
26	<p>We recommend that the system contain a number of general powers (noted in Table 5) and that the legislation is clear about who can exercise powers and when. These powers should include:</p> <ul style="list-style-type: none"> • ministerial call-in powers • an administrative catch-all power indicating actors in the system can do all acts necessary and which are incidental to the specific powers granted • the powers necessary to enable the ongoing management of land relocated from and transferred to whomever assumes guardianship of post-relocation land.
27	<p>We recommend that actors in the system be given some protection from liability for making decisions and acting in good faith to reduce risk. However, decision-makers should not be excluded from liability in circumstances of misfeasance, if they fail to act at all, or if they fail to implement designations or directions from the Crown.</p>
28	<p>We recommend that there be a process where authorities (including central and local government and private providers) can apply to withdraw services (including roads and bridges) from a property before or during a planned relocation process.</p>
29	<p>We recommend that the planned relocation system consider the effect of other systems and contain powers to intervene in them where necessary.</p>
30	<p>We recommend that the Government considers adopting emergency powers in overarching legislation for adaptation and planned relocation.</p>
31	<p>We recommend that:</p> <ul style="list-style-type: none"> • the funding source should match the level at which decisions are made or at which responsibility and accountability are located • there should be a supporting mechanism from central government that will provide grant funding to local government to pay for specific planned relocation projects and/or specified costs, on an 'ability of local government to pay' basis.
32	<p>We recommend that a central government entity should manage initial data gathering.</p>

33	<p>We recommend that:</p> <ul style="list-style-type: none"> • a mix of local and central government funding be used for risk assessments, relocation decisions and planning processes • central government pay for independent advisory services and legal advice for those affected.
34	<p>We recommend that:</p> <ul style="list-style-type: none"> • a mix of funding sources for implementing the planned relocation process, the provision of social support (including ad hoc hardship grants and loans, relocation allowances, and any business-interruption payments), and any legal costs arising, with a bigger role for central government than it currently has • central government mainly pays for property payments, but exceptions may occur in the case of relatively small, planned relocations, particularly in the context of larger projects • support to property owners is given on a specified basis, up to a cap (per property), and any costs above the cap would be borne by the individual property owners.
35	<p>We recommend that central or local government pay for post-implementation costs (demolition and clean-up costs, post-relocation land rehabilitation and management, development of new sites for communities that have decided to move through land swaps, and the provision of new public facilities serving affected communities), depending on the details and relevant needs of each planned relocation implementation.</p>
36	<p>We recommend that the Government considers:</p> <ul style="list-style-type: none"> • introducing amendments to the Credit Contracts and Consumer Finance Act 2003 and/or the Responsible Lending Code, to support a more consistent and certain framework for mortgagors with consumer credit contracts in a planned relocation situation • entering a memorandum of understanding with lenders (potentially via industry bodies such as the New Zealand Banking Association and the Financial Services Federation) that outlines a consistent approach across all lenders for loans secured against properties subject to planned relocation • introducing a formal mediation process within the planned relocation compensatory payment process in circumstances where a mortgagee is involved.
37	<p>We recommend all homeowners of properties that have been explicitly designated for planned relocation be required to maintain a stated minimum amount of natural hazard insurance (from private insurers, Toka Tū Ake EQC, or some other mechanism) until their relocation occurs.</p> <p>We also recommend that this compulsory natural hazard insurance includes a clause providing that, once a property experiences a damage event above a certain threshold (say, damage worth at least 30 per cent of the property's value), this will automatically trigger the planned relocation, even if it was originally planned to happen at some future date.</p>
38	<p>We recommend that principal places of residence (ie, owner-occupied homes) should be treated differently from second homes (eg, baches and holiday homes), commercial buildings and short-term rental properties.</p> <p>We recommend that, whether the value of the principal places of residence is assessed using market values (ie, rateable values) or 'per square metre' costs, a cap is applied.</p>
39	<p>We recommend limited support payments for commercial properties at levels that are significantly lower than for principal places of residence.</p> <ul style="list-style-type: none"> • Any payment would be based on need, which would be assessed by some form of means testing. • The payment would be some proportion of the rateable value of the building. • The payment would be conditional on the commercial premises being re-established, either in the new location if there was a community-wide planned relocation, or elsewhere if there was not.

40	<p>We recommend that payments for residential rental properties should be more generous than for commercial properties, though they could be less generous than for owner-occupied principal places of residence.</p> <ul style="list-style-type: none"> • Any payment should not be means tested, but rather be available to all property owners who provide this type of long-term rental accommodation. • The payment would be subject to a similar reinvestment obligation as applies to commercial building owners who receive compensatory payments.
41	<p>We recommend that second home (eg, bach and holiday home) owners should not receive compensatory payments, although they might receive some modest assistance with removal, demolition or clean-up costs.</p>
42	<p>We recommend that where not-for-profit organisations own buildings that they use to provide their services to the public, they should be compensated to the full rateable value of the building.</p>
43	<p>We recommend a case-by-case negotiated approach for iwi-, hapū- and Māori-owned property, with a starting point of full compensation for lost value (as with not-for-profit organisations). The approach should take account of the historical practices of dispossession that have led to current ownership patterns and canvass different ways of enabling communities to maintain connections with culturally significant buildings and structures.</p>
44	<p>We recommend that:</p> <ul style="list-style-type: none"> • owner-occupied homes should be compensated for loss of land on the same basis as they would be under the natural hazard legislation, or based on the minimum lot size in the relevant territorial authority, whichever is greater • residential rental properties should receive compensation for land, but not on a more generous basis than applies to owner-occupied homes, and probably on a less generous basis • commercial properties should receive some compensation for land, but not on a more generous basis than applies to the first two categories • not-for-profit organisations should be compensated for the value of the land associated with their building or offered a land swap • iwi, hapū and Māori communities should be offered alternative land or funded to procure new land. <p>We recommend that the Government undertakes an investigation of the likely implications of the different valuation methods for land to determine which approach will lead to better outcomes.</p>
45	<p>We recommend that the funding set-up includes a mechanism to decide who is eligible for additional support; what they are eligible for; and how this additional support interacts with (or contradicts) other social assistance available to them, or to other people more generally. This assistance should be needs-based and cost-based (based on costs actually incurred).</p>
46	<p>We recommend that some notional amount should be offered to all businesses that require relocation, and larger amounts of support can be made on an ad hoc basis and based on applications to receive such funding.</p>
47	<p>We recommend that the Government adopts a staged, evolutionary approach to institutional reform for planned relocation. The first step should be to implement modest institutional changes in the near term (ie, one to three years) that will likely be desirable, irrespective of the future policy framework for planned relocation. The second step will be to implement a further set of institutional changes in the medium term, to give effect to the new policy framework, recognising that the institutions must evolve over time to meet changing conditions.</p>
48	<p>We recommend that the Government enhances the foresight capacity of the public sector, particularly with respect to the management of natural hazards.</p>

<p>49</p>	<p>We recommend that there should be a lead ministry for planned relocation policy that should undertake the functions of:</p> <ul style="list-style-type: none"> • advising the Minister with responsibilities for planned relocation on all relevant policy issues, including flood risk • preparing National Adaptation Plans under s 5ZS of the Climate Change Response Act 2002 and other long-term strategies to mitigate the risks of climate change • coordinating the activities and responses of the public sector in relation to planned relocation and overseeing the responses across the different tiers of government • providing advice on the methods and standards for risk assessments (eg, via the National Planning Framework) and overseeing the risk assessment processes • coordinating government input and, where relevant, submissions on natural hazards management (including risk assessments) to regional planning committees as they prepare their regional spatial strategies and natural and built environment plans • providing advice and support, as needed, to local government on the preparation of local adaptation plans (LAPs) and reviewing draft plans, including, for example, associated designations and zoning • providing advice to the responsible Minister on whether any relocation proposals in LAPs should be approved, and whether relocation programmes should be approved • ensuring all relevant information relating to natural hazards, including planned relocation, is properly gathered, assessed and disseminated • investing in research related to natural hazards management • investing in developing the expertise and skills required across the system to undertake the full range of tasks that planned relocation will entail • exercising a range of stewardship responsibilities • long-term administrative, planning, risk assessment, foresight and advisory capabilities and capacities • inter-governmental and intra-governmental coordination • institutional knowledge, information, evidence, research and evaluation • governmental systems and processes, including support for bespoke arrangements for iwi, hapū and Māori communities • funding and financing arrangements • all legislation and regulations relating to climate change adaptation and natural hazard mitigation. <p>We recommend that in the near term, the Ministry for the Environment should be the lead policy ministry.</p>
<p>50</p>	<p>We recommend that the lead ministry for planned relocation should focus primarily on policy matters and should not have extensive operational responsibilities.</p> <p>In formulating its policy framework for planned relocation, the Government should evaluate the relative merits of:</p> <ul style="list-style-type: none"> • mainstreaming the new and additional operational responsibilities within existing government departments and Crown entities; or • creating a new government agency, whether in the form of a departmental agency or a Crown entity, to undertake some the operational responsibilities.
<p>51</p>	<p>We recommend that the Government considers creating a special purpose consultative body to address important issues relating to planned relocation. Members should include elected representatives of all three levels of government; iwi, hapū and Māori representatives; and business and community groups.</p>
<p>52</p>	<p>We recommend that the primary responsibility for policy advice on the regulatory framework for risk management should reside with the lead ministry for planned relocation. The Climate Change Commission should be mandated under the Climate Change Response Act 2002, with responsibility for independently auditing the quality of risk assessment processes relating to climate change adaptation, including planned relocation.</p>

53	We recommend that the Government ensures the principle of partnership under te Tiriti o Waitangi is applied consistently in all planning and decision-making processes with respect to planned relocation. The Government should also provide appropriate funding to help iwi, hapū and Māori communities develop the necessary expertise and capability to participate effectively in such processes.
54	We recommend that there should be an integrated online information portal for climate change and natural hazards and this should cover all aspects of planned relocation.
55	We recommend that the Government establishes a 'one-stop' advisory service for communities affected by planned relocation.
56	We recommend that the Government investigates expanding the responsibilities of the New Zealand Claims Resolution Service to include various non-insurance related issues that may arise in the process of implementing planned relocation.
57	We recommend that the Government be required by statute to commission an independent review of the performance of the institutional arrangements for climate change adaptation, including planned relocation, every ten years.



Chapter 1

Setting the context

1. Setting the context

Introduction

- 1.1. Climate change is one of the most important challenges facing Aotearoa New Zealand today. Its effects are already apparent, especially more extreme weather events, as have occurred recently in parts of Aotearoa, and rising sea levels. The scientific consensus is that human activities, especially the burning of fossil fuels, are driving climate change. The impacts are now being felt in every region of the world.
- 1.2. Extreme weather events – combined with human modification of the environment by activities such as deforestation, draining and developing wetlands and flood-prone areas, and the general intensification of land uses – are resulting in increasingly severe inland and coastal flooding and land movements (significant landslips and coastal erosion, in particular). Such events put people, structures, and activities at risk of serious harm, undermining the well-being and viability of communities, disrupting commercial activities, and undermining the health and resilience of ecosystems.² They are also costly. The Treasury estimates the overall costs of physical damage caused by the late January and February 2023 weather events in the North Island at somewhere between \$9.0 billion and \$14.5 billion.³
- 1.3. Sea-level rise results from warmer temperatures, which cause water to expand and glaciers and ice sheets to melt. Although it has a time lag and will likely continue for centuries, sea-level rise is accelerating and having near-term impacts. In Aotearoa New Zealand, sea-level rise is being exacerbated by land subsidence (downward land movement) resulting from tectonic plate movements.⁴ Regardless of why it occurs, sea-level rise will increase the impact of storm surges. When combined with heavier rainfall, higher groundwater levels, and increased river flows, it will also threaten the continued viability of communities along the coast and in low-lying or flood-prone areas, especially near rivers.
- 1.4. These adverse effects of climate change are increasing and speeding up. Both the weather-related effects of climate change and the accelerating impact of sea-level rise are major challenges for Aotearoa New Zealand over the next several decades and beyond. This means

² See Lawrence J, Mackey B, Chiew F, Costello M, Hennessy K, Lansbury N, Nidumolu U B, Pecl G, Rickards L, Tapper N, Woodward A, Wreford A. 2022. *Australasia*. In *Climate Change 2022: Impacts, Adaptation and Vulnerability*. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [H.O. Pörtner, D.C. Roberts, M. Tignor, E.S. Poloczanska, K. Mintenbeck, A. Alegría, M. Craig, S. Langsdorf, S. Löschke, V. Möller, A. Okem, B. Rama (eds.)]. Cambridge, UK and New York, NY, USA: Cambridge University Press

³ The Treasury. 2023. *Impacts from North Island weather events – information release*. Wellington: The Treasury; Ministry of Foreign Affairs and Trade. 2023. *Cyclone Gabrielle's impact on the New Zealand economy and exports – A market intelligence report*. Wellington: Ministry of Foreign Affairs and Trade.

⁴ Naish T, Levy RH, Hamling IJ, Garner G, Hreinsdottir S, Kopp R, Golledge N, Bell R, Paulik R, Lawrence J, Denys P, Gillies T, Bengston S, Clark K, King D, Litchfield N, Newnham R, Wallace L. 2022. *The significance of vertical land movements at convergent plate boundaries in probabilistic sea-level projections for AR6 scenarios: The New Zealand case*. Manuscript submitted for publication.

that Aotearoa New Zealand must prepare now for these challenges. Well-designed measures, taken early, will reduce future costs.

- 1.5. We cannot safely ignore or minimise the effects of climate change. Some responses involve mitigation strategies, such as reducing greenhouse gas emissions, which are designed to address the human behaviours that contribute to global warming and consequent climate change. But as some of the effects of climate change are already 'locked in', and global emissions have yet to fall significantly, mitigation alone is not sufficient. People must find ways of adapting or adjusting to the changing climate and its consequences, in a context where adaptation will increasingly have limits.
- 1.6. Adaptation strategies include a spectrum of activities.⁵ They are aimed at preventing or limiting the impact of the expected adverse consequences of climate change (although climate change may also present opportunities). Although adaptation strategies must be location-specific, the strategies achievable in particular localities will be shaped by a variety of considerations, including financial, technical, environmental, social and cultural factors.
- 1.7. This report focuses on one adaptation response that will be necessary in many locations over the coming century and beyond: managed retreat. We emphasise that public education about climate change and its effects is critical to the success of all adaptation strategies, including managed retreat. Public understanding of the issues and acceptance of the need to take decisive action to address the threats posed by climate change, and to take advantage of any opportunities it presents, will be key to successful adaptation.
- 1.8. In this chapter, we set the context by:
 - summarising the nature of the problem and its implications for Aotearoa New Zealand
 - giving a brief overview of managed retreat as an adaptation strategy
 - describing our role as the Expert Working Group (the Group)
 - noting the impact of complexity and uncertainty on our work
 - identifying key features of a system for managed retreat
 - recommending that the Government considers adopting a statement of outcomes and principles that we have developed, or something similar.

⁵ Begum R A, Lempert R J, Ali E, Benjaminsen T A, Bernauer T, Cramer W, Cui X, Mach K, Nagy G, Stenseth N C, Sukumar R, Wester P. 2022. *Point of Departure and Key Concepts*. In *Climate Change 2022: Impacts, Adaptation and Vulnerability*. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [H.-O. Pörtner, D.C. Roberts, M. Tignor, E.S. Poloczanska, K. Mintenbeck, A. Alegría, M. Craig, S. Langsdorf, S. Löschke, V. Möller, A. Okem, B. Rama (eds.)]. Cambridge, UK and New York, NY, USA: Cambridge University Press.

The impact of climate change: the nature of the problem

- 1.9. On 20 March 2023, the United Nations body for assessing the science relating to climate change, the Intergovernmental Panel on Climate Change (IPCC), released its Sixth Assessment (AR6) Synthesis Report.⁶ That report reflects widespread scientific agreement on issues relating to climate change. In this section, we summarise briefly some relevant points that emerge from the IPCC's report.⁷
- 1.10. The global mean surface temperature is increasing and is now at least 1.1 degrees Celsius above pre-industrial levels. Human activities, in particular greenhouse gas emissions, are the major cause. Despite efforts since the 1990s to curb global emissions, these have continued to increase over recent decades because of factors such as unsustainable energy use, population growth, modern lifestyles, and patterns of consumption and production.⁸
- 1.11. Human-caused climate change is having widespread effects, including causing extreme weather events and rising seas. As the IPCC says:⁹
- Widespread and rapid changes in the atmosphere, ocean, cryosphere¹⁰ and biosphere have occurred. Human-caused climate change is already affecting many weather and climate extremes in every region across the globe. This has led to widespread adverse impacts and related losses and damages to nature and people (high confidence). Vulnerable communities who have historically contributed the least to current climate change are disproportionately affected (high confidence).
- 1.12. We emphasise that, in addition to its effects on people, climate change is having profound effects on ecosystems, some likely irreversible.¹¹ Examples are the impacts of hydrological changes resulting from glacier retreat, changes in ecosystems resulting from permafrost thaw, and the impact of ocean warming on kelp forests and the aquatic life they support.¹² Climate change can also affect important sectors of economic activity such as horticulture, fisheries, agriculture, forestry and tourism,¹³ all of which are significant for Aotearoa.

⁶ Intergovernmental Panel on Climate Change (IPCC). 2023. *Climate Change 2023: Synthesis Report*. Contribution of Working Groups I, II and III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change. [Core Writing Team, H Lee H, J Romero (eds)]. IPCC: Geneva, Switzerland.

⁷ The paragraph references in the extracts and footnotes are to: IPCC. 2023. Summary for Policymakers. In: 2023. *Climate Change 2023: Synthesis Report*. Contribution of Working Groups I, II and III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change. [Core Writing Team, H Lee, J Romero (eds)] IPCC: Geneva, Switzerland. pp 1–34.

⁸ IPCC. 2023. *Summary for Policymakers* at A.1.

⁹ IPCC. 2023. *Summary for Policymakers* at A.2.

¹⁰ The cryosphere refers to frozen water, such as the sea ice found in the Arctic and Antarctic.

¹¹ IPCC. 2023. *Summary for Policymakers* at A.2.3.

¹² See, for example, Law CS, Bell JJ, Bostock HC, Cornwall CE, Cummings VJ, Currie K, Davy SK, Gammon M, Hepburn CD, Hurd CL, Lamare M, Mikaloff-Fletcher SE, Nelson WA, Parsons DM, Ragg NLC, Sewell MA, Smith AM, Tracey DM. 2018. *Ocean acidification in New Zealand waters: Trends and impacts*. *New Zealand Journal of Marine and Freshwater Research*, 52(2), 155–195 and Forest & Bird. 2019. *Ocean Acidification: Implications for New Zealand*. Forest & Bird.

¹³ IPCC. 2023. *Summary for Policymakers* at A.2.6.

- 1.13. Modelling indicates that global warming beyond 1.5 degrees Celsius above pre-industrial temperatures will significantly increase the risk of (among other things) more extreme weather events and increased sea-level rise.¹⁴ The IPCC gives a “best estimate” that the 1.5 degree figure will be reached “in the near term”.¹⁵ It then identifies a range of possible increases by the end of the century, depending on different levels of greenhouse gas emissions.¹⁶
- 1.14. The IPCC scenarios highlight that the precise impact of climate change over time will depend on how quickly and effectively countries reduce the behaviours that result in global warming (or at least substantially mitigate their effects). The IPCC notes that, although adaptation planning and implementation is being undertaken in many countries and may slow the pace of global warming, it can only do so with “deep, rapid and sustained reductions” in greenhouse gas emissions. Even then, however, the slowdown will not be discernible for about two decades.¹⁷ Importantly, the IPCC notes that some future changes are now unavoidable or irreversible.¹⁸
- 1.15. The IPCC report also highlights the dramatic impact of continued failure to curb greenhouse gas emissions:¹⁹

For any given future warming level, many climate-related risks are higher than assessed in [the Fifth Assessment Report], and projected long-term impacts are up to multiple times higher than currently observed (*high confidence*). Risks and projected adverse impacts and related losses and damages from climate change escalate with every increment of global warming (*very high confidence*). Climatic and non-climatic risks will increasingly interact, creating compound and cascading risks that are more complex and difficult to manage (*high confidence*).

As this statement indicates, climate change is likely to result in numerous risks occurring at the same time and triggering additional risks. This process will both multiply and amplify the effects of climate change.²⁰

¹⁴ Hoegh-Guldberg O, Jacob D, Taylor M, et al. 2018. Impacts of 1.5°C Global Warming on Natural and Human Systems. In V Masson-Delmotte, P Zhai, H-O Pörtner, D Roberts, J Skea, PR Shukla, A Pirani, W Moufouma-Okia, C Péan, R Pidcock, S Connors, JBR Matthews, Y Chen, X Zhou, MI Gomis, E Lonnoy, T Maycock, M Tignor, and T Waterfield (eds). 2022. *Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty*. In press.

¹⁵ IPCC. 2023. *Summary for Policymakers* at B.1. The best estimate of the “near term” is at some time in the decade beginning 2030: see B.1.1 at fn 29. It is possible that it may be sooner, however.

¹⁶ IPCC. 2023. *Summary for Policymakers* at B.1.1.

¹⁷ IPCC. 2023. *Summary for Policymakers* at B.1.

¹⁸ IPCC. 2023. *Summary for Policymakers* at B.3

¹⁹ IPCC. 2023. *Summary for Policymakers* at B.2.

²⁰ See Lawrence J, Blackett P, Cradock-Henry N, Nistor BJ. 2018. *Climate Change: The Cascade Effect. Cascading impacts and implications for Aotearoa New Zealand*. Wellington: Deep South Challenge.

- 1.16. Finally, in relation to sea-level rise, the IPCC reiterates that “[i]t is unequivocal that human influence has warmed the atmosphere, ocean and land.”²¹ It emphasises that the rate of sea-level rise is increasing and that, at least from 1971, human influence has probably been the main driver.²²
- 1.17. The IPCC highlights the long-term effects of global warming, observing that “limiting global surface temperature does not prevent continued changes in climate system components that have multi-decadal or longer timescales of response (high confidence), and as a consequence, some sea-level rise is:²³

...unavoidable for centuries to millennia due to continuing deep ocean warming and ice sheet melt and sea levels will remain elevated for thousands of years (*high confidence*). However, deep, rapid and sustained [greenhouse gas] emissions reductions would limit further sea-level rise acceleration and projected long-term sea-level rise commitment.

In summary, even with emissions reductions, some amount of sea-level rise is already ‘locked in’ for the future.

- 1.18. The accelerating trends and known sea levels to 2040 mean that sea-level rise will have significant impacts in the current and future decades. Those impacts will be worse if higher levels of global warming result in higher sea-level rise. This means that a precautionary (cautious and risk-averse) approach must be taken, despite the lack of perfect information. Governments will need long lead times to prepare to meet effects that are already ‘built in’, quite apart from the effects of ‘worst-case’ climate change scenarios.

Implications for Aotearoa New Zealand

- 1.19. Aotearoa New Zealand has long coastlines (around 15,000 kilometres), mountainous terrain, large rivers that move water from mountains to sea and many coastal and riverine communities. It is also geologically active, so its coastline is subject to vertical land movement, both up and down. Aotearoa New Zealand must expect that it will continue to suffer destructive weather events and rising seas and that global warming will enhance their severity. The unknown factors are how extreme and frequent the storms will become, what the pace of sea-level rise will be, and whether the country will adapt quickly enough to reduce the level of damage.²⁴

²¹ IPCC. 2023. *Climate Change 2023: Synthesis Report* at A.2.1.

²² For a general discussion, see Parliamentary Commissioner for the Environment. 2014. *Changing climate and rising seas: Understanding the Science*. Wellington: Parliamentary Commissioner for the Environment.

²³ IPCC. 2023. *Summary for Policymakers* at B.3.1.

²⁴ The implications of continued sea-level rise for Aotearoa New Zealand have been assessed by the *NZ SeaRise | Te Tai Pari o Aotearoa programme* (retrieved 3 August 2023), which has released location specific sea-level rise projections for every 2 km of the coast up until 2300. See also the Parliamentary Commissioner for the Environment. 2015. *Preparing New Zealand for rising seas: Certainty and Uncertainty*. Wellington: Parliamentary Commissioner for the Environment.

- 1.20. A 2019 report by the National Institute of Water and Atmospheric Research (NIWA) on sea-level rise in Aotearoa New Zealand concluded:²⁵

There is near certainty that the sea will rise 20-30 cm by 2040. By the end of the century, depending on whether global greenhouse gas emissions are reduced, it could rise by between 0.5 to 1.1 m, which could add an additional 116,000 people exposed to extreme coastal storm flooding.

To illustrate the effect of this, we note that a 30 centimetre rise in sea level at the coast will cause some of New Zealand's stormwater systems to become ineffective.²⁶ Sea-level rise of a metre would put Petone and Seaview in the Hutt Valley at risk, especially in significant storm events.²⁷

- 1.21. Research indicates that the exposure of the built environment to flooding from 100-year extreme sea-level flood events doubles with sea-level rise of less than one metre. Buildings and other physical assets in low-lying coastal areas are likely to experience rapid increases in exposure to flooding at the relatively low levels of sea-level rise that are expected within the next few decades.²⁸ Researchers have also estimated that over 282,000 houses, having an estimated replacement value of over \$213 billion, are in flood hazard areas across Aotearoa New Zealand.²⁹
- 1.22. The Ministry for the Environment's interim guidance on the use of new sea-level rise projections noted the possible range in 2100 is 0.4–1.1 metres, and in 2150 the range is 0.7–2.0 metres, depending on global carbon dioxide emissions and polar ice-sheet instability. The guidance emphasises that it is necessary to consider “short- to medium-term impacts on existing coastal developments and environmental systems, as well as the long-term risk for new long-lived developments and assets that will last beyond 100 years”.³⁰
- 1.23. Although reductions in global greenhouse gas emissions might slow the rate of sea-level rise, it would require the countries that produce the bulk of greenhouse gas emissions to act quickly and decisively to make dramatic and sustained reductions in emissions. Currently, it seems doubtful that they will do so. But even if that did occur, sea-level rise will be a major threat to Aotearoa New Zealand communities along coasts and rivers for generations to come.
- 1.24. In summary, it is now inevitable that some low-lying coastal areas and other flood-prone areas in Aotearoa New Zealand will become unsuitable for continued human habitation because of climate change. This might be because of risks to physical or psychological safety (for example, the effect of constant disruptive weather events and ongoing sea-level rise impacts

²⁵ National Institute of Water and Atmospheric Research (NIWA). 2019. [News report highlight flood risk under climate change](#). NIWA 21 August. Retrieved 7 August, 'Over 70,000 New Zealanders currently at risk' section.

²⁶ Kool R, Lawrence J, Drews M, Bell R. 2020. Preparing for Sea-Level Rise through Adaptive Managed Retreat of a New Zealand Stormwater and Wastewater Network. *Infrastructures* 5(11): 92.

²⁷ See, for example, Steele C, Williams N, Dawe I. 2019. Preparing Coastal Communities for Climate Change – Assessing coastal vulnerability to climate change, sea level rise and natural hazards. Mitchell Daysh Ltd.

²⁸ Paulik R, Stephens SA, Bell RG, Wadhwa S, Popovich B. 2020. National-Scale Built-Environment Exposure to 100-Year Extreme Seal Levels and Sea-Level Rise. *Sustainability* 12(4): 1513.

²⁹ Paulik R, Zorn C, Wotherspoon L, Sturman J. 2023. Modelling national residential building exposure to flooding hazards. *International Journal of Disaster Risk Reduction* 94(103826).

³⁰ Ministry for the Environment. 2022. [Interim guidance on the use of new sea-level rise projections](#). Wellington: Ministry for the Environment. p. 13.

on well-being), or because the costs of repeatedly repairing and maintaining compromised infrastructure, buildings, and other assets have become unsustainable. It is impossible to calculate precisely how many people and buildings, and how much infrastructure, will be affected over any set timeframe. It is probable, however, that the scope and scale of impacts will increase over time, and that those who must relocate to safer locations will number in the tens of thousands.

Managed retreat

What is managed retreat?

- 1.25. As the name suggests, managed retreat (or, as we will call it, planned relocation or *te hekenga rauora*)³¹ is a process involving the planned, strategic withdrawal of existing human activities and their associated assets (such as houses, commercial premises, public buildings and infrastructure) from certain localities as a result of actual or predicted natural disasters — “the purposeful, coordinated movement of people and assets out of harm’s way”.³² For example, where the evidence indicates that a community is likely to be inundated by water because of sea-level rise within, say, a decade or so, this may pose an intolerable level of risk to the community’s safety or its continued viability. The only rational response, in the absence of a feasible, cost-effective alternative, will be to relocate the community to a safer place.
- 1.26. Where possible, such relocations should be proactive and occur before the threat materialises (in other words, when it becomes clear that the risks associated with not relocating are becoming, or are likely to become, unacceptably high). Relocations should enable those affected to re-establish themselves by accessing suitable housing, the infrastructure necessary for *whānau* and community life, employment opportunities, educational and other facilities, and mechanisms to rebuild cultural and social networks and enjoy leisure activities. Obviously, the larger the community needing relocation, the more complex and time consuming the process will be. The area relocated from may simply be left to nature, or it may be put to alternative uses (such as environmental or recreational uses).³³
- 1.27. Planned relocation is sometimes described as a ‘last resort’. This is not the right way to characterise it. ‘Planned relocation’ is one of several adaptation strategies. In some circumstances, it will be the only viable strategy. This may be because other adaptation strategies are not suited to the particular hazard that is creating the risk, or because other strategies, although available, are short-term ‘fixes’ that will not be effective in the longer term. Planned relocation is an adaptation strategy that should be used in some circumstances because it offers the best long-term solution to addressing the relevant risk. In that context, it is not a last resort. Moreover, planned relocation may do more than simply remove people,

³¹ Managed retreat is also referred to as strategic, adaptive, or planned relocation or resettlement. We use the term ‘planned relocation’ because ‘relocation’ involves both leaving and arriving, whereas ‘retreat’ focuses on leaving. We suggest a *te reo* Māori term – ‘*te hekenga rauora*’ – for consideration. The background to this suggestion is explained in chapter 2.

³² Siders AR. 2019. Managed retreat in the United States. *One Earth* 1(2): 216–225.

³³ See, for example, Allan S, Bell R, Forkink A. 2023. Coastal Realignment another coastal challenge. *Policy Quarterly* 19(1): 50.

buildings and other assets from areas of risk. It may also bring other benefits, such as improving ecological outcomes.

- 1.28. A relocation that is planned is to be contrasted with an unmanaged relocation. Whereas a planned relocation is a strategic response to a known risk, unmanaged relocation is a spontaneous, uncontrolled process initiated by people in an 'at-risk' area who decide that the time has come to move out of harm's way. The risk tolerance of whānau and individuals may, of course, vary markedly, so in an unmanaged relocation, some may choose not to move. Others may be unable to move, even if they want to, because of insufficient resources. Whatever the reason, for those who are left, an unhappy spiral is likely to result. As risks increase over time, insurers begin to charge higher premiums or to withdraw from insuring in the locality altogether; property values fall; businesses close; good quality rental accommodation becomes unavailable; remaining homeowners find themselves with mortgage or other debt they cannot meet; services decline, either because of ongoing maintenance problems or because their providers withdraw them; and overall, those remaining become highly vulnerable – in a state of 'property purgatory'.³⁴

Pre-event and post-event planned relocations

- 1.29. Most recent instances of planned relocations in Aotearoa New Zealand have been reactive, in the sense that they have occurred after some form of natural disaster (most notably, from the Residential Red Zones in Christchurch following the 2010/2011 earthquakes) or to avoid the effects of repeated weather-related events (such as destructive debris flows following heavy rain – as occurred, for example, at Matatā in the Bay of Plenty in 2005). Proactive relocation is likely to become more common as communities are encouraged (and assisted financially) to avoid significant harm by moving (for example, where they are exposed to coastal or riverine flooding). Planned relocation will become necessary both before and after harmful events occur.
- 1.30. Although pre-event planned relocation³⁵ and post-event planned relocation have similarities, they differ in important respects.
- 1.30.1. In post-event situations such as the Canterbury earthquakes, most affected homeowners had property insurance and so had access to insurance payouts.³⁶ Presumably, most homeowners affected by Cyclone Gabrielle will be in a similar position (although in some poorer communities, there will likely be high levels of uninsurance and underinsurance). For pre-event planned relocation, insurance

³⁴ Tombs BD, Stephenson J, France-Hudson B, Ellis E. 2021. 'Property Purgatory'. *Policy Quarterly* 17(1): 50.

³⁵ Other expressions used to describe pre-event planned relocation are pre-emptive, anticipatory and proactive relocation.

³⁶ Department of Prime Minister and Cabinet. 2017. *Whole of Government Report: Lessons from the Canterbury earthquake sequence*. Greater Christchurch Group; Department of Prime Minister and Cabinet. As we discuss later in this report, the availability of insurance payouts in post-event relocations may reduce or disappear as a result of insurance retreat.

payouts will not be available, if only because no event triggering an insured loss will have occurred.³⁷

1.30.2. In post-event situations, there is likely to be a high level of social licence for the government to intervene to assist people, both to meet their immediate needs and to relocate them if necessary. Both those affected and the general public are likely to be supportive of government intervention. In pre-event situations – where the risk is known but has not yet materialised – there may well be less social licence for, and more public controversy about, the extent and level of government intervention and assistance. Even those who are affected may be reluctant to relocate, as we discuss below.

1.30.3. For pre-event planned relocations, a thorough process must first be undertaken to identify areas where the risks of harm from sea-level rise or other potential natural disasters are sufficiently serious to require a planned relocation programme (as discussed in detail in chapter 3). For post-event planned relocations, the natural disaster will have identified the locality of concern, although an assessment may still be needed to determine whether planned relocation is the appropriate adaptation strategy.

1.30.4. Pre-event planned relocations may, for example, be chosen to avoid:

- a specific harmful event that will occur if the right trigger is present (such as rockfalls caused by an earthquake; or major landslips, debris dumps or flooding caused by extreme storm events)
- the effects of a process that will, over time, affect a community's viability (such as a gradual rise in sea level that initially amplifies the effect of storm surges and later has more permanent and widespread impacts).

Since they are not subject to the immediate pressures of post-disaster situations, such pre-event relocations allow time for careful and thorough preparation (for example, by allowing greater opportunities for community engagement). Moreover, they can accommodate remedial steps that would not be available in post-event situations. For example, in a pre-event planned relocation, it may be possible to move homes and other buildings from their existing locations to safer locations, rather than simply abandoning them and rebuilding elsewhere. The extent and nature of the damage in a post-event relocation may mean that the relocation of buildings is not feasible.

1.31. Over the course of this century, it is likely that pre- or post-event planned relocations will affect tens of thousands of New Zealanders directly or indirectly.³⁸ Māori will be particularly affected, because many marae, papakāinga, urupā and other taonga are located close to the

³⁷ It is, of course, possible that between a decision to undertake a planned relocation from a particular area and its implementation, a natural disaster will occur there, so what was intended as a pre-event planned relocation becomes a post-event planned relocation.

³⁸ Indirect effects include, for example, the effects on communities into which those subject to planned relocation move.

coast or rivers, and because of the nature of the relationship of Māori to whenua and awa.³⁹ In addition, the nature of Māori land ownership raises particular complications.

Variability of planned relocations

- 1.32. Planned relocations will vary in size and complexity. For example, following the 2010/2011 Canterbury earthquakes, over 8,000 houses were located in Residential Red Zones, which covered approximately 600 acres of flat land in and around Christchurch and 197 acres in the Port Hills. The owners of most of these homes (7,720) accepted the Crown's offer to buy their properties at their 2008/2007 quotable value (QV), with the Crown taking over any claims they had against their insurers and becoming responsible for demolition and similar costs.⁴⁰ The Crown spent approximately \$1.7 billion on this offer,⁴¹ although it recovered some funds from private insurers and from the Earthquake Commission (EQC). By contrast, the relocation at the Awatarariki fanhead in Matatā involved 16 houses and 18 sections.⁴² They were purchased by the Whakatāne District Council at current market valuations (with no discount for the known risk). Central government, the Bay of Plenty Regional Council, and the Whakatāne District Council equally contributed to the necessary funds (around \$15 million in total).
- 1.33. As these two examples illustrate, the size and complexity of a planned relocation affects how the proposals are developed, funded and implemented. In Christchurch, the extent and scale of the damage and the complexity of the issues meant that central government had to take responsibility for the process. Special legislation was enacted,⁴³ establishing a new entity, the Canterbury Earthquake Recovery Authority (CERA), to manage the response. In Matatā, the process was locally driven, although it took many years (the damaging debris flows occurred in 2005, and the affected properties were purchased in 2019).
- 1.34. Importantly, planned relocations may occur as one element of a larger project. There are two recent examples. The Twin Streams project in Waitākere, Auckland was a 10-year project that began in 2002⁴⁴ to address escalating flooding and stormwater issues. Among other things,

³⁹ There are 191 marae within 1 km of the coastline: Bailey-Winiata A, Gallop SL, Hikuroa DCH, White I. 2022. The role of coastal marae in natural hazard response and climate change adaptation. In *Coastal Adaptation: Adapting to coastal change and hazard risk in Aotearoa New Zealand. Special publication 5*. Wellington: New Zealand Coastal Society. pp 41–44.

⁴⁰ See Canterbury Earthquake Recovery Authority. 2016. Residential Red Zone Survey (of those who accepted the Crown offer). Prepared for the Canterbury Earthquake Recovery Authority by Nielsen. The remaining homeowners accepted the Crown's offer for their land but sought to recover from their insurers for the loss of their houses.

⁴¹ Controller and Auditor-General. 2017. *Canterbury Earthquake Recovery Authority: Assessing its effectiveness and efficiency*. Wellington: Controller and Auditor-General. p 48 at 4.22.

⁴² Other buildings were affected as well. The Matatā experience is discussed in Hanna C, White I, Glavovic B. 2018. *Managed retreat governance: Insights from Matatā, New Zealand*. Report for the National Science Challenge: Resilience to Nature's Challenges. New Zealand: University of Waikato.

⁴³ The Christchurch Earthquake Recovery Act 2011 (which was repealed and replaced by the Greater Christchurch Regeneration Act 2016).

⁴⁴ See Vandenberg A, MacDonald J. 2013. Fostering community acceptance of managed retreat in New Zealand. In J Palutikof, SL Boulter, AJ Ash, MS Smith, M Parry, M Waschka, D Guitart (eds). *Climate Adaptation Futures*. Wiley-Blackwell. ch 15; and Atlas Communications and Media Ltd. 2011. *Project Twin Streams case study: Large-scale property purchase without recourse to compulsory purchase*. Prepared for the Ministry for the Environment by Atlas Communications & Media Ltd on behalf of Waitākere City Council.

the project involved purchasing and removing houses from a floodplain to create stormwater reserves and management areas, and to improve the ecological functioning of local waterways. In addition, amenities such as parks, cycleways and walkways were developed. In total, 78 houses and an additional 78 blocks of land were purchased.

- 1.35. The relevant territorial authority (the former Waitākere City Council) could have used the Public Works Act 1981 (PWA) to acquire the properties, but chose not to, deciding that all property purchases would be voluntary and at market prices (assessed before the decision to relocate was made). Most property owners sold, even though many had not experienced a flood while owning their properties. Those who refused to sell remained in place, and their properties continued to be at risk of flooding, which was noted on their Land Information Memoranda (LIM). The former Infrastructure Auckland provided the funding for the property purchases. A feature of the project was the adoption of a highly effective community-centred approach.
- 1.36. The second example is the Riverlink project in the Hutt Valley along te Awa Kairangi | the Hutt River. This joint project, funded by Hutt City Council, Greater Wellington Regional Council and Waka Kotahi NZ Transport Agency involves major roading improvements and the development of other amenities. But it also has the important purpose of enhancing flood-protection measures by widening the riverbed, increasing the height of stopbanks, and creating ecological buffer zones such as wetlands. As part of the project, the Greater Wellington Regional Council purchased around 140 riverside properties. Although the compulsory acquisition powers in the PWA were available to compel sales, most (but not all) sales were voluntary (in the sense that the 'acquisition by agreement' processes in the PWA were used). The property purchases were necessary for the work proposed, and they also served to remove some homes and their occupants from a hazardous area. The project included the development of options using a dynamic adaptive pathways planning (DAPP) framework and extensive public engagement to socialise the Council's preferred options. This enabled a smooth decision-making process, which included planned relocation.⁴⁵
- 1.37. These two examples show that, where a planned relocation is one element of a larger project, PWA processes may be available to enable the acquisition of properties, through the Act's voluntary or compulsory acquisition processes (even though they may not actually be used). Where a planned relocation is not part of a larger project, however, and is undertaken simply to protect those who live in a particular locality from an unacceptably high level of natural-hazard risk, PWA processes will not be available.⁴⁶ We discuss what the appropriate processes and funding arrangements should be in those circumstances, drawing on insights from projects such as the two mentioned. For example, both the Waitākere and Hutt Valley projects demonstrate the benefits of close community engagement in processes involving planned relocations.
- 1.38. Finally, planned relocations occur in response to, or in anticipation of, different natural hazards. For example, the Christchurch relocations were a response to earthquake damage, the Matatā relocations were a response to the threat of damaging debris flows following storms, and the Waitākere relocations were a response to frequent flooding. Other

⁴⁵ See Lawrence J, Boston J, Bell R, Olufson S, Kool R, Hardcastle M, Stroombergen A. 2020. Implementing pre-emptive managed retreat: constraints and novel insights. *Current Climate Change Reports* 6: 66–80.

⁴⁶ See chapter 4 at paragraphs 4.60–4.66.

possibilities include coastal erosion, landslips, rock falls and the effects of sea-level rise. Obviously, the nature of the natural hazard is likely to affect the nature and timing of the response.

Attitude to planned relocation

- 1.39. At least in theory, planned relocation offers significant benefits, both to affected individuals and to central, regional and territorial governments. It protects the inhabitants of threatened communities by removing them and their personal property from places of serious risk. It means that central, regional and territorial governments may no longer need to spend their limited resources to mitigate risks or to respond to destructive storms and similar harmful events in the area relocated from.⁴⁷ It also may allow nature to take its course, either by returning the area to something like its original state (eg, as a wetland) or by establishing new ecosystems or community activities suitable to the new environment.
- 1.40. However, especially in situations of pre-event planned relocation, the inhabitants of threatened communities may view relocation negatively,⁴⁸ although this is not inevitable. People feel an attachment to place, especially if they have jobs; cultural, intergenerational, or social networks; or other connections that contribute to their sense of identity and well-being. Some people may have an understandable fear that these attachments and connections will be lost in a relocation. These anxieties can be exacerbated when people are concerned about how planned relocation will affect them financially.
- 1.41. Given that the natural hazard risk is predicted to materialise in the future, people may tend to dismiss it.⁴⁹ They may promote other protective measures instead of relocation, even though they may be only short-term solutions. An example is sea walls, which are often not long-term solutions. Sea walls may give landowners a false sense of security and have harmful effects on the environment (eg, on an adjacent beach) and on neighbouring properties or communities (by transferring or exacerbating flooding for them).
- 1.42. For many Māori, planned relocation will be even more difficult, because most marae are located near the coast or alongside rivers and lakes. Moreover, Māori have deep historical, cultural and spiritual connections to both whenua and awa. In addition, land is recognised in law as taonga tuku iho (an heirloom) to Māori,⁵⁰ which creates complexities both for owners and for government.
- 1.43. The consequence is that risk reduction and the transition to safety through relocation is likely to be hard on everyone. If it is not done well and is disorderly or incomplete, people and communities are likely to suffer – physically, psychologically and financially. It is essential that

⁴⁷ In some instances, the process of relocation will be lengthy, and challenging weather and other events may occur during the process. Also, in some instances, relocations will be incremental, in the sense that a number of relocations will occur over time as conditions worsen in the locality.

⁴⁸ See, for example, Hino M, Field CB, Mach KJ. 2017. Managed retreat as a response to natural hazard risk. *Nature Climate Change* 7: 364–370.

⁴⁹ There are several biases that may operate here – optimism bias, status quo bias and neglect of probability. Optimism bias, for example, is a tendency to overestimate the likelihood of positive events and underestimate the likelihood of negative events.

⁵⁰ Te Ture Whenua Māori Act 1993, s 2(2).

Aotearoa New Zealand develops a system for orderly transition where planned relocation is necessary. The system must be agreed (so it is as durable as possible); it must be seen to be fair, as straightforward as possible, affordable; and it must involve high-quality community engagement. Further, the system must enable planned relocation to be used for good – to restore or improve people’s well-being, the economy and the environment so that they are healthier, more resilient and ecologically sound.

The role of the Expert Working Group

- 1.44. The Expert Working Group (the Group) was asked to “assist officials to develop detailed design options for a robust, equitable and enduring managed retreat system, and funding and financing adaptation as one part of the development of detailed policy design for the Climate Adaptation Act”. Several months after we had commenced our work, the extreme weather events of January/February 2023 occurred in the North Island and became an important part of the context for our considerations.

What this report addresses

- 1.45. We have concluded that current and proposed legislative settings in relation to planning⁵¹ and associated matters are not sufficient to address the full range of issues raised by climate change adaptation, including planned relocation. The Government wishes to introduce a Climate Change Adaptation Act to address the issues specifically. That is the context for this report.

- 1.46. Against this background, our report addresses the following.

1.46.1. **How the Crown’s obligations to Māori under te Tiriti o Waitangi can be given effect**

Te Tiriti o Waitangi (te Tiriti) is relevant to the issues addressed in the report in two ways. First, the overall process that ultimately leads to adaptation decisions such as planned relocation must be consistent with the Crown’s obligations to Māori under te Tiriti. Second, Māori must be supported in their consideration and decision-making about planned relocation within their rohe, including about the ways they will maintain their connections with their urupā, taonga and other places of deep cultural significance.

1.46.2. **How land subject to relocation is identified**

This involves processes for identifying areas with existing or potential natural hazards (ie, ‘at-risk’ areas), assessing the extent of any risks, determining priorities among areas of risk, considering the range of adaptation strategies, and deciding whether planned relocation is the right adaptation strategy for particular areas.

1.46.3. **The processes and institutions required to implement planned relocation**

Implementing the planned relocation of communities from areas of risk will be a complex and challenging process. It will require commitment, coordination (both

⁵¹ Respectively, the Resource Management Act 1991 and the Spatial Planning Bill and the Natural and Built Environment Bill.

across central government and among central, regional and territorial governments), resources and expertise. We must support and provide opportunities for meaningful participation by local communities in decision-making.

1.46.4. **The powers necessary to implement planned relocation**

As noted, current and proposed legislative settings related to land-use planning will not be sufficient for planned relocation, or adaptation more generally. The report considers what additional powers will be necessary and who should have them.

1.46.5. **The responsibility for caring for land relocated from**

An important issue is what happens to land that has been relocated from. Two dimensions of this are important:

- What, if any, interest do landowners have in the area relocated from after the relocation has occurred?
- Who should be responsible for the ongoing management of the land after the relocation is complete?

1.46.6. **How the costs of planned relocation can be addressed**

This report is principally concerned with two funding issues. The first is to identify when planned relocation involves costs, who currently bears them, and who should bear them in the future. The report makes no attempt at quantification of these costs. The second issue is to set out principles and considerations for payments to those who must leave a place and relocate elsewhere, with a particular focus on the position of homeowners.

- 1.47. As this description indicates, we have not attempted to address all issues relating to planned relocation. For example, of the three basic processes – leave, restore and rebuild – we have focused on the first and said little about restoration and rebuilding. In addition, we have not discussed matters such as ecological considerations and coastal realignment.

How we have undertaken this work

- 1.48. We have undertaken much of our work through subgroups, each of which has addressed a different topic or set of topics. Although the work of those subgroups has been wide ranging and has covered a wide variety of issues and options in the context of these topics, this report does not identify and discuss all possible options related to the topics addressed. It is more focused in its approach.
- 1.49. For example, the report does not address matters such as the funding of adaptation measures other than planned relocation (such as raising buildings with stilts or enhancing flood protection). Nor does it address in detail the funding of necessary infrastructure in areas of new settlement (and that topic is instead dealt with at the level of principle). We do discuss in detail what, if any, financial provision should be made for building owners (particularly homeowners) who are part of a planned relocation programme. This is because assistance for owners of homes and other buildings in areas that will be subject to planned relocation is difficult and likely to be controversial unless carefully managed.

- 1.50. In addition, members of the Group have engaged with experts both within and outside Aotearoa New Zealand, and with officials from a range of agencies. We have considered how other countries have dealt with similar issues to those faced in Aotearoa New Zealand.

Facing complexity and uncertainty

- 1.51. Planned relocation raises complex and difficult issues, some of which must be addressed against a background of significant uncertainty. For example, there are uncertainties about timing. Although it is certain that climate change is presently affecting the lives of New Zealanders, and that those effects will increase over time, there are different and variable uncertainties over how, when and where some of those effects will emerge. In addition, other non-climate uncertainties are important to our work – an example is the legislative environment, which is presently in a state of transition. The Future of Local Government Review will also be relevant.
- 1.52. In addition, the Government has taken various steps in response to the North Island weather events of January/February 2023 during the period we have been undertaking our work. The Government established the Cyclone Gabrielle Recovery Taskforce under Sir Brian Roche and, on 1 June 2023, announced support for affected communities and infrastructure.⁵² Obviously, we are aware of these steps, but they are not part of our work. They may, however, affect the likelihood of at least some of our recommendations being implemented.
- 1.53. In this section, we identify some important uncertainties, and the assumptions we have made about them. We begin with the legislative framework.

Legislative framework

- 1.54. The Government plans to replace the Resource Management Act 1991 (RMA). Two Bills have been introduced in the House: the Spatial Planning Bill (SP Bill) and the Natural and Built Environment Bill (NBE Bill). The SP Bill is intended to provide for the development and implementation of long-term regional spatial strategies across Aotearoa. The NBE Bill is intended to complement it by providing “an integrated framework for regulating both environmental management and land use planning”.⁵³ The Government plans to introduce a third Bill, the Climate Change Adaptation Bill, which is intended to address issues related to planned relocation. Our work is relevant to this third Bill.⁵⁴
- 1.55. From our perspective, the fact that legislative processes are underway to repeal and replace the RMA creates difficulty. Legislation about matters such as long-term regional spatial strategies (RSSs) and planning must interact with legislation about planned relocation to ensure complementarity, coherence and consistency. For example, planning processes should prevent housing development on floodplains and other places of significant risk, at least in the absence of effective mitigation strategies and contingency plans for relocation (which might include, for example, building relocatable houses and other buildings). Given the

⁵² See: Hon Grant Robertson and Hon Michael Wood. 2023. [Govt to support councils with buyout and better protection of cyclone and flood affected properties](#) (release). *Beehive.govt.nz* 1 June. Retrieved 3 August 2023.

⁵³ Natural and Built Environment Bill 2022, explanatory note.

⁵⁴ If the General Election in October 2023 results in a change of government, legislative priorities may change.

lack of certainty on the final form of the legislation when this report was prepared, we have assumed that the legislation will largely reflect the Bills as introduced.⁵⁵

- 1.56. Other relevant legislation that has recently been enacted or is currently under consideration in Parliament includes the following.
 - 1.56.1. **Natural Hazards Insurance Act 2023:** Taking effect from 1 July 2024, it repeals and replaces the Earthquake Commission Act 1993. The Act renames the Earthquake Commission (Toka Tū Ake | Natural Hazards Commission) to reflect the range of natural disasters with which the Commission deals. It also makes various improvements to the previous legislative scheme.
 - 1.56.2. **Severe Weather Emergency Legislation Act 2023 and the Severe Weather Emergency Recovery Legislation Act 2023:** These Acts are intended “to ensure that government agencies and Crown entities and affected local authorities and communities, can appropriately respond to or recover from the recent severe weather events, or both, including by providing the Government with flexibility to facilitate, enable and expedite the recovery”.⁵⁶
 - 1.56.3. **Water Services Legislation Bill and Water Services Economic Efficiency and Consumer Protection Bill:** These are intended to implement the Government’s Three Waters policy.
 - 1.56.4. **Local Government Official Information and Meetings Amendment Act 2023:** This Act strengthens the principal Act’s provisions concerning natural hazard information in LIMs so that the memoranda convey essential information about the natural hazard risks in a particular area to help property buyers make more informed decisions.
- 1.57. In addition, the Review into the Future of Local Government has recently delivered its final report.⁵⁷ If accepted, its recommendations may have some impact on the issues discussed in our report.

⁵⁵ The Select Committee reported back on the SP Bill and the NBE Bill on 27 June 2023, just as our report was being finalised. Given the extent of the changes recommended by the Select Committee, we have had to maintain our assumption that the legislation will largely reflect the Bills as introduced. This report should be read with that caveat in mind.

⁵⁶ Severe Weather Emergency Recovery Legislation Bill 2023, explanatory note.

⁵⁷ Future for Local Government Review Panel. 2023. *He piki tūranga, he piki kōtuku: The future for local government*. Wellington: Future for Local Government Review Panel.

Timing and uncertainty

- 1.58. Timing issues have a significant influence on planned relocation as a response to threatened harm. For example, although it is predictable that there will be extreme weather events to which climate change has contributed – and that their severity is likely to increase – when and where they will occur is unpredictable until shortly before the event.⁵⁸ This means that institutions, personnel and processes must be identified and be given (or have access to) the capacity to respond effectively to the results of these extreme weather events when they occur. This type of emergency preparedness is beyond the scope of our work.
- 1.59. Issues of timing and uncertainty are relevant in other contexts, however. Pre-event or anticipatory relocations will take place where there are known threats to people's safety, such as flooding of coastal communities. In some instances, scientific analysis may provide some certainty about location and timing. In other instances, however, there may be substantial agreement as to the ultimate outcome (for example, that the community will be flooded), but there may be less agreement over the precise timeframe (next year, in this decade, or by 2040). Moreover, an unexpected natural disaster (such as an earthquake or severe weather event) may add to a locality's vulnerability and hasten the predicted outcome.
- 1.60. This means that a precautionary approach must be adopted in the context of decision-making about planned relocation. Because the risk of harm must be assessed before harm occurs, a precautionary approach should consider the worst-case scenario. Waiting for certainty around the timing of harm may mean that planned relocation cannot be carried out in an orderly, organised and sequenced way. For prioritisation purposes, however, the potential risk of harm, the consequences of delaying planned relocation and the cost of avoiding it will all have to be considered.
- 1.61. Timing is relevant in another way. A relatively small, planned relocation (for example, consistent localised flooding affecting 20 or so residential properties) might be resolved over a few years. On the other hand, the planned relocation of a larger community (such as a town or suburb) may take a decade or more, given the greater complexity of the process. Further, as we noted above, planned relocation may simply be one component of a larger adaptation project, which will have its own timetable and special requirements. Consequently, the context for the planned relocation will affect how and when it is carried out.
- 1.62. How these varied timeframes are best accommodated within the framework for planned relocation is difficult. For example, if a decision to relocate a town is made 10 years before the relocation will be completed, we must decide what approach should be taken in the interim to:
- maintain basic infrastructure and services
 - assist homeowners to move early if they are ready
 - keep schools operating
 - manage those who do not wish to move.

⁵⁸ Of course, other effects of climate change will be more predictable. For example, areas vulnerable to sea-level rise (such as Westport) can be identified now, and some robust timing predications can be made based on known trends.

If central and/or regional and territorial governments will compensate affected homeowners, is this assessed before or after the decision to relocate is made? And what about homeowners who buy into a locality, knowing that a decision to implement planned relocation there has been made? Should subsequent buy-ins even be permitted?

- 1.63. The planning cycle is 10 years for district plans under the RMA.⁵⁹ The Bills before Parliament require a longer-term view. For example, as presently drafted, the SP Bill would require the regional planning committee for each region to prepare an RSS, which must “set the strategic direction for the use, development, protection, restoration and enhancement of the environment of the region for a time-span of not less than 30 years”.⁶⁰ It must be consistent with the National Planning Framework developed under its companion, the NBE Bill.
- 1.64. Among other things, RSSs must identify “areas that are vulnerable to significant risks arising from natural hazards and measures for reducing those risks and increasing resilience” and “areas that are vulnerable to the effects of climate change both now and in the future and measures for addressing those effects and increasing resilience in the region”.⁶¹ These RSSs must be reviewed and renewed approximately every 10 years.⁶² The strategies will be accompanied by implementation plans. These are intended to set out “the key actions that delivery partners will take to implement the [strategy], along with an approach to monitor and report on delivery of these actions”.⁶³ These plans, however, are not intended to be directly enforceable.
- 1.65. Thus, although RSSs must look at least 30 years into the future, they must be reviewed and renewed more regularly. This means that two, potentially competing, issues must be considered.
- 1.65.1. Given that the effects of climate change, particularly from sea-level rise, will increase and persist over long timeframes – centuries rather than decades – it will be necessary for the system of adaptation to accommodate planning well beyond 30 years. The New Zealand Coastal Policy Statement’s planning horizon of at least 100 years, along with its precautionary basis, should be used for the new adaptation regime.
- 1.65.2. Given the range of matters that may be relevant to planned relocation from particular localities, it is unlikely to be practical to plan for pre-event relocations with enough detail more than a decade or two in advance. If longer-term planning is

⁵⁹ Obviously, substantial continuity will be needed in plans from one planning period to another. Also, significant infrastructure investments are likely to involve longer timeframes.

⁶⁰ Spatial Planning Bill 2022, explanatory note.

⁶¹ Spatial Planning Bill, cl 17(i) and (j).

⁶² A regional planning committee must start the process to renew its strategy nine years after the strategy was adopted and must review the strategy before renewing it: Spatial Planning Bill, cls 46(1) and (2). Reviews can be conducted earlier if there are “significant changes”.

⁶³ Spatial Planning Bill, explanatory note.

undertaken, it will have to be regularly reviewed. DAPP provides a mechanism for this type of planning.⁶⁴

The availability of insurance

- 1.66. One of the most difficult decisions in connection with planned relocation is the issue of funding — in particular, the extent to which the government will be prepared to support homeowners⁶⁵ in moving from areas of serious risk to areas of greater safety. From a governmental perspective, the presence or absence of insurance cover will be relevant to the question of how much government support is needed, given that, if available, insurance pay-outs provide a co-funding stream.
- 1.67. In situations of *pre-event* planned relocation, insured homeowners will not be entitled to any insurance pay-out, given that no insurable loss will have occurred,⁶⁶ but the position in relation to *post-event* planned relocation situations in the future is unclear. Although insurance remains generally available at present, at some future point in time, insurance companies may well react to increased risks in localities likely to suffer substantial damage as a result of extreme weather events or seawater inundation. The insurers' reaction could be to increase homeowners' insurance premiums,⁶⁷ to refuse to provide cover against certain risks, or to withdraw from providing any insurance cover in the relevant localities. In this context, the reaction of reinsurers to increased risk will be important to the insurers' assessments.
- 1.68. Given the importance of insurance and the uncertainties about exactly when and where insurers will, for example, withdraw all or some cover, we have had to consider funding scenarios with and without the presence of insurance.
- 1.69. The availability or unavailability of insurance is relevant in another way. Banks (and other lenders) generally require insurance as security for mortgage lending. Being uninsured is an act of default. The withdrawal of insurers from residential property in particular localities, either completely or for natural disaster risks, will therefore affect banks' ability to continue to lend on the security of houses in those areas.
- 1.70. This points to a larger problem. One of the difficulties in attempting to devise a system for planned relocation is that it involves a complex web of interconnected relationships, where a change in one element will produce changes elsewhere. For example, many homeowners have mortgages, which are not only linked to insurance as mentioned, but are also highly

⁶⁴ See Lawrence J, Allan S, Clarke L. 2021. Enabling Coastal Adaptation: Using current legislative settings for managing the transition to a dynamic adaptive planning regime in New Zealand. Wellington: Resilience to Nature's Challenges National Science Challenge – Enabling Coastal Adaptation Programme.

⁶⁵ Although others (eg, businesses) will be affected by planned relocation, we have focused on homeowners, given that it is a fundamental responsibility of the government to do what it can to preserve the safety and security of its people, although we do mention other groups as well. Further, the statutory scheme for natural hazard insurance applies only to residential properties.

⁶⁶ This assumes that they are insured, which may not be the case given the possibility of insurance retreat. It also assumes that there has been no supervening event between the decision to implement planned relocation and its actual implementation, which might give rise to an insurance payout.

⁶⁷ Insurance companies are moving to risk-based pricing based on sophisticated data and modelling. Premiums are likely to become more expensive for people facing higher risk, and they are the same people potentially facing relocation at some time in the future.

relevant to compensatory payments to homeowners. The purpose of such compensatory payments is to enable people to obtain replacement housing. But, as we discuss in chapter 5, a lender is entitled to require compensatory payments to be used to meet the outstanding mortgage debt. Depending on how generous the compensatory payment is and the size of the debt, an affected homeowner could lose equity in their home and be left with residual debt to the lender (if the compensatory payment does not meet the indebtedness). Complex interrelationships of this type among a variety of elements mean that a holistic view must be taken when thinking about planned relocation.

The role of state coercion

- 1.71. In general, the experiences of other countries indicate that planned relocation is most effective where the local community is closely engaged in the decision-making and accepts that relocation is necessary.⁶⁸ Where that occurs, people are likely to relocate voluntarily. This suggests that Aotearoa New Zealand should focus on educating people about risks and options for addressing those risks; providing timely, accurate and comprehensive information; and supporting people to engage in the local decision-making process in an informed and meaningful way. Because a voluntary process is likely to be the most effective, state coercion should, in principle, play a limited role. Consequently, our starting position is that the system should operate to encourage voluntary participation in planned relocations, including by creating appropriate incentives.
- 1.72. At the same time, some coercive powers will be necessary. The Christchurch, Matatā and Waitākere examples show that some people are unwilling to move, despite having received generous offers for their properties. The Crown therefore may need the power to require people to move from areas of risk for their own safety or the safety of others (such as first responders), as well as for a range of other reasons.⁶⁹ A power to compel may also prevent people attempting to game the system by holding out for higher offers. In addition, a power to extinguish existing uses will be needed to control land use in the lead-up to, and during, the implementation of planned relocation. The possibility of the use of coercive powers is likely to be part of the background against which planned relocation occurs.
- 1.73. The implementation of planned relocation will also result in the withdrawal of services such as electricity, gas and sewerage. The threat of the use of coercive powers, in conjunction with the withdrawal of services, will likely force those who are reluctant to leave to participate in the relocation. Because there is no viable alternative to leaving, homeowners will face a 'Hobson's choice', as the Supreme Court acknowledged in the *Quake Outcasts* case.⁷⁰
- 1.74. If there is some form of compulsory power, an obvious issue is whether it would apply to whenua Māori, given the Crown's history of forcibly relocating Māori, and the impact of those unlawful actions. We recommend that the ownership of whenua Māori should not change

⁶⁸ See, for example, Wiseman J, Williamson L, Fritze J. 2009. Community engagement and climate change: learning from recent Australian experience. *International Journal of Climate Change Strategies and Management* 2(2): 134–147.

⁶⁹ These are discussed in chapter 4 at paragraphs 4.41–4.46 and 4.50–4.59.

⁷⁰ *Quake Outcasts v Minister for Earthquake Recovery* [2015] NZSC 27, [2016] 1 NZLR 1, at [140] and [176] per Glazebrook J, delivering the judgment of McGrath J, herself, and Arnold J.

following a planned relocation, even if occupation of that land is prohibited. This is addressed in more detail in subsequent chapters.

Outcomes and principles for planned relocation

1.75. In a 2022 consultation about managed retreat, the Ministry for the Environment outlined a “high level framework for managed retreat”.⁷¹ As part of that framework, the Ministry identified five key objectives and six principles to guide the development of legislation.⁷² These have been approved by Cabinet.

1.76. The five objectives are:

- to set clear roles, responsibilities and processes for managed retreat from areas of intolerable risk
- to provide stronger tools for councils to modify or extinguish existing uses of land
- to provide clarity on tools and processes for acquiring land and related compensation
- to clarify local government liability for decision-making on managed retreat and the role of the courts
- to provide clear criteria for when central government will intervene (or not) in a managed retreat process.

1.77. The six principles are as follows.

- Managed retreat processes are efficient, fair, open and transparent.
- Communities are actively engaged in conversations about risk and in determining and implementing options for risk management.
- Social and cultural connections to community and place are maintained as much as possible.
- There is flexibility as to how managed retreat processes play out in different contexts.
- Iwi/Māori are represented in governance and management and have direct input and influence in managed retreat processes, and outcomes for iwi/Māori are supported.
- Protection of the natural environment and the use of nature-based solutions are prioritised.

1.78. The Ministry for the Environment’s paper went on to identify objectives and principles relevant to funding for managed retreat. We address these in chapter 5.

⁷¹ Ministry for the Environment. 2022. *Kia urutau, kia ora: Kia āhuarangi rite a Aotearoa, Adapt and thrive: Building a climate-resilient New Zealand*. Wellington: Ministry for the Environment.

⁷² Ministry for the Environment. 2022. *Kia urutau, kia ora: Kia āhuarangi rite a Aotearoa, Adapt and thrive: Building a climate-resilient New Zealand*. Wellington: Ministry for the Environment. p 11.

- 1.79. Although this statement of objectives and principles has some attractive features, it is also problematic.
- 1.79.1. The objectives and principles do not appear to be clearly distinguished. Some objectives could be principles (perhaps with slight wording changes) and vice versa. For example, “flexibility” could be an objective or a principle. The real point is that the processes for planned relocation must be fit for purpose, which means (among other things) that they will need to provide flexibility.
 - 1.79.2. The list of objectives has important omissions. For example, the most important objective of planned relocation is to preserve people’s physical (and psychological) safety, yet that is not mentioned.
 - 1.79.3. The objectives are stated in a way that gives little guidance to policy-makers. For example, four of the objectives are about providing greater clarity in particular contexts. Clarity is, of course, important, but more important is the substance – what is the substantive objective? Ideally, the principles would provide guidance on this, but the guidance given is slight.
 - 1.79.4. The test for planned relocation in the first objective – from areas of “intolerable risk” – is set too high. Some localities have natural hazards that do not create an intolerable risk to people’s physical safety but do affect their quality of life so significantly that they need to be relocated. For example, constant flooding may not involve a risk to physical safety but may well make settled life in a particular community impossible. Even if inhabitants’ safety is not threatened, experience shows that people cannot be expected to live with constant disruptive flooding events.
 - 1.79.5. Similarly, the statement of principles is incomplete, and some principles suffer the same deficiencies as the objectives.
- 1.80. Because of these concerns, we have made our own attempt to identify outcomes (rather than objectives) and principles for planned relocation. What should planned relocation seek to achieve? How should it seek to achieve the identified outcomes?
- 1.81. We consider that planned relocation should contribute to eight essential outcomes.
- People must be kept physically and psychologically safe.
 - People must have access to adequate and affordable places to live.
 - People must have the opportunity to build more secure and resilient futures, and to maintain or enhance their well-being.
 - Socio-economic inequalities must not be exacerbated and need not be preserved.
 - Risks from climate-related and other natural hazards should be reduced.
 - The rights and interests of Māori must be respected and given effect.
 - Environmental standards must be met, and ecological values protected.
 - Opportunities for improvement should be realised (eg, in relation to housing, infrastructure, transport and urban form).

- 1.82. We consider that there are nine principles to guide how planned relocation should be undertaken to achieve the desired outcomes.
- Be informed by the best available evidence and expert advice.
 - Reflect important community values and aspirations.
 - Take a proactive and precautionary (ie, cautious and risk-averse) approach to the timing and pace of relocation, despite the absence of perfect information.
 - Provide certain, timely and predictable outcomes.
 - Be adaptable to meet the pace, scale and variable circumstances of relocation.
 - Be simple to operate and minimise compliance costs.
 - Minimise moral hazard and other perverse incentives.
 - Give effect to te Tiriti o Waitangi and honour the intent of settlements.
 - Comply with the New Zealand Bill of Rights Act 1990 where applicable.
 - Maintain the sound functioning of markets (eg, in relation to property, construction, insurance and banking).
- 1.83. Although we do not discuss these objectives and principles in detail at this stage, we should highlight features of the third and fourth outcomes.
- 1.84. The third outcome refers to people having the opportunity to maintain or enhance their “well-being”. We have included this reference for three reasons.
- 1.84.1. Under s 10(1)(b) of the Local Government Act 2002, it is a purpose of local government “to promote the social, economic, environmental and cultural well-being of communities in the present and for the future”. This is particularly significant in the context of activities such as planned relocation.
- 1.84.2. The Treasury has established a well-being framework, which is “a flexible framework that prompts [Treasury’s] thinking about policy impacts across the different dimensions of wellbeing, as well as the long-term and distributional issues and implications of policy”.⁷³ That framework is relevant in the present context.
- 1.84.3. Relocations can be carried out in a way that either undermines or enhances the opportunities for people to maintain or increase their well-being. Because well-being is important for functioning communities, we think the statement of outcomes should reflect this.
- 1.85. The fourth outcome is that existing socio-economic inequalities “must not be exacerbated and need not be preserved”. Although this outcome is relevant to several aspects of planned relocation, it is particularly relevant in the context of funding. The approach to funding that we recommend is *not* directed at the preservation of wealth or other inequalities. We do not, for example, recommend full compensation for all affected homeowners. Instead, the focus is on assisting people to rehouse themselves so that they can get on with their lives. We discuss this in detail in chapter 5.

⁷³ Te Tai Ōhanga | The Treasury 2021. *Our Living Standards Framework*. Retrieved 25 July 2023.

- 1.86. The outcomes and principles identified in paragraphs 1.81 and 1.82 above have guided our approach. We will return to them later in this chapter when we discuss the characteristics of a system for planned relocation, and in subsequent chapters where they are relevant. For the moment, we simply record our recommendation that the Government consider adopting our statement of outcomes and principles for planned relocation, or something similar.

Recommendation 1

We recommend the Government considers adopting the Group's statement of outcomes and principles for planned relocation, or something similar.

Features of a system for planned relocation

- 1.87. Before we set out the essential features of a system for planned relocation, we should note four significant points:
- 1.87.1. Planned relocation is simply one component of a much larger 'system'. If hazard identification, risk assessment and planning processes are working properly, the need for planned relocation away from areas of potential threat and to areas of greater safety should be less than it otherwise would have been (although it will remain a necessary adaptation measure for the long term). If, for example, planning processes operate in the future to prevent the building of houses and communities on floodplains, low-lying coastal areas and wetlands, that will reduce the need for planned relocation overall, because human habitation in those areas of potential risk will have been prevented.
 - 1.87.2. Mitigation (if on a global scale) and adaptation measures will also work to reduce the need for planned relocation, although they will not provide permanent solutions. For example, improvements in stormwater management in new subdivisions (for example, using permeable piping, swales and strategically placed wetlands) should reduce the incidence of damaging flooding. Likewise, improved stopbanks will help to control and direct water flows. Changes in building technology, materials and practices will both mitigate the causes of climate change (eg, through the use of more environmentally friendly materials) and facilitate adaptation to climate change. Architects, engineers and designers will also increasingly look to ecological solutions to counter the effects of climate change. Obviously, however, such measures will have limited capacity to withstand frequent extreme weather events and sustained sea-level rise.
 - 1.87.3. Planned relocation will provide opportunities to improve ecological outcomes. For example, it may allow wetlands that have been drained and developed to return to something close to their original natural state. If such areas do rejuvenate and become wetlands again, that will allow new ecosystems to emerge, and the rejuvenated areas may act as climate change buffers. Again, however, the capacity of such measures will be limited.⁷⁴

⁷⁴ Lawrence J, Allan S, Clarke L. 2021. *Enabling Coastal Adaptation: Using current legislative settings for managing the transition to a dynamic adaptive planning regime in New Zealand*. Wellington: Resilience to Nature's Challenges National Science Challenge – Enabling Coastal Adaptation Programme.

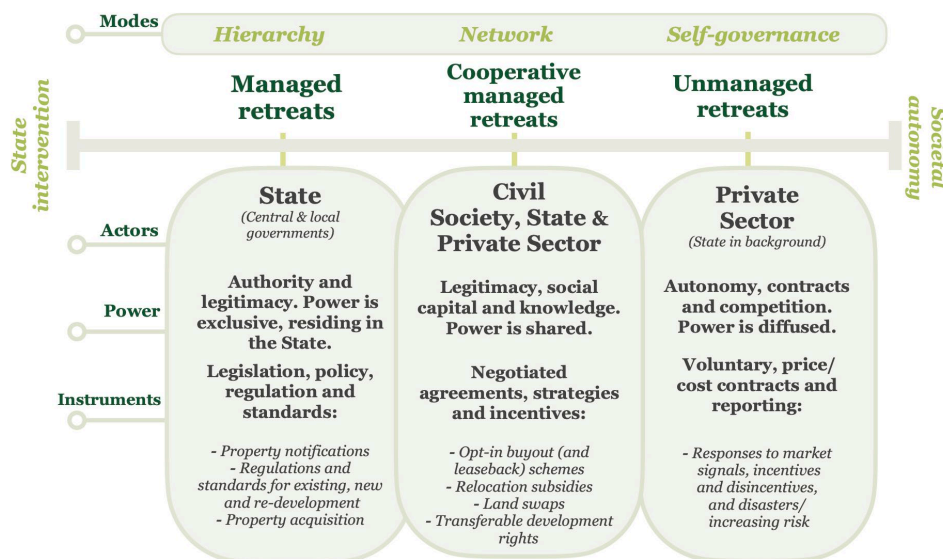
1.87.4. For those who are forced to relocate because of catastrophic weather events, any system for post-event funding and finance will operate against the background of the various social support mechanisms that already provide support to those in need. An example is Civil Defence Payments, which are administered by the Ministry for Social Development through its Work and Income division. They provide support for emergency food, clothing and bedding where needed after catastrophic events, as well as accommodation costs for those who have been evacuated and need temporary accommodation.

Models for planned relocation

1.88. Planned relocations take a variety of forms. Researchers have examined a range of international examples to classify or categorise them.⁷⁵ Recent research in Aotearoa New Zealand sought to develop a governance framework that could inform both national and local strategies.

1.89. In their article, Hanna, White and Glavovic present a helpful diagram that maps three forms of retreat on the governance continuum.⁷⁶

Figure 1: Models of managed retreat (planned relocation)



1.90. For our purposes, two of the forms of managed retreat – Hierarchy and Network — are relevant. They reflect a difference between a ‘top-down’ approach and an approach that, although not ‘bottom-up’, is more collaborative and inclusive – a form of co-governance involving state, private sector and civil society.

⁷⁵ See, for example, Hino M, Field CB, Mach KJ. 2017. *Managed retreat as a response to natural hazard risk*. *Nature Climate Change* 7(27 March 2017): 364–370; and Ajibade I, Sullivan M, Lower C, Yarina L, Reilly A. 2022. Are managed retreat programs successful and just? A global mapping of success typologies, justice dimensions and trade-offs. *Global Environmental Change* 76(September 2022): 102576.

⁷⁶ Hanna C, White I, Glavovic B. 2021. *Managed retreats by whom and how? Identifying and delineating governance modalities*. *Climate Risk Management* 31: 100278 at Fig 1.

- 1.91. The article's authors acknowledge that the models are theoretical, in the sense that approaches to managed retreat, in reality, typically combine elements from both models.⁷⁷ We recommend a hybrid model, drawing features from both the Hierarchy and Network models.
- 1.92. To briefly explain our model, we consider that strong central government support for planned relocation and other adaptation strategies must be shown through strong ministerial leadership. A national agency must have certain fundamental responsibilities related to adaptation, and national standards should be established for risk identification and assessment. Planning processes must recognise the existence of uncertainties and the evolving nature of some climate change risks, through mechanisms such as DAPP that can interface effectively with community participatory processes.
- 1.93. Any national agency must work closely with regional and territorial governments on matters such as identifying areas of risk; assessing the scale, timing and characteristics of the risk; and prioritising among 'at-risk' areas. All concerned parties must share knowledge and expertise and work together to enhance the overall expertise and knowledge base. The process will inevitably involve some 'learning by doing', so a process of continuous improvement will be needed as practical experience is gained and assimilated.
- 1.94. The development of local adaptation plans (LAPs) will be fundamental. Again, a collaborative process will be needed among the various levels of government. Critically, affected communities must be fully engaged in decision-making about which adaptation strategies are appropriate for their communities. This means that they must be given the information, support and opportunities necessary for them to be meaningfully involved and empowered.
- 1.95. All this needs a suitable legislative framework that is clear, facilitates good decision-making, confers any necessary additional powers and limits the opportunities for prolonged litigation.

General characteristics of a system for planned relocation

- 1.96. To give proper effect to the objectives and principles set out earlier, any system for planned relocation must have a number of general characteristics.⁷⁸ We address each in turn.

The Crown's obligations under te Tiriti must be met

- 1.97. One of our outcomes for planned relocation is that the rights and interests of Māori must be respected and given effect. An important principle to achieve this outcome is that te Tiriti must be applied. We consider that the Crown has at least two broad obligations to Māori under te Tiriti in relation to climate change adaptation, including planned relocation. The first is that the general system for addressing climate change and adaptation issues must be consistent with te Tiriti. That means that Māori must have meaningful involvement as partners throughout the process.

⁷⁷ Hanna C, White I, Glavovic B. 2021. Managed retreats by whom and how? Identifying and delineating governance modalities. *Climate Risk Management* 31: 100278.

⁷⁸ For a helpful overview, see Hanna C, White I, Glavovic B. 2019. Managed Retreat in Practice: Mechanisms and Challenges for Implementation. In BJ Gerber (ed). 2020. *The Oxford Encyclopedia of Natural Hazards Governance*. Oxford University Press.

- 1.98. The second obligation is that, where planned relocation affects whenua Māori and taonga (including marae, wāhi tapu, mahinga kai and urupā), or where planned relocation affects the relationship of Māori with the well-being of whenua and awa within their rohe, it must be consistent with te Tiriti. This means the process must be community centred and respect the rangatiratanga of iwi, hapū and whanau.
- 1.99. One other relevant imperative is that planned relocation must operate in a way that honours the intent of any Tiriti claim settlements that are affected by the relocation.

The system must be effective, efficient and humane

- 1.100. Obviously, any system for planned relocation (and other adaptation measures) must be capable of operating effectively and efficiently. Equally, it must be humane, in the sense that it must be certain and predictable, so that people are not left in limbo for long periods, unable to get on with their lives.
- 1.101. Consistently with our principles, the approach to hazard identification must be evidence based, and risk assessments must be informed by expert opinion combined with other inputs. The approach to planned relocation should be proactive and precautionary (ie, risk averse). At an institutional level, a mix of national, regional and territorial bodies will need to be involved, with clear identification of functions, duties and lines of accountability at each level. The institutional framework must be capable of adapting and evolving, to reflect increasing knowledge and greater experience of the impacts of, and responses to, climate change. A staged approach to institutional development is also desirable. Some steps in developing institutional structures should be taken in the next several years, whereas other steps will require a longer timeframe. This is addressed in chapter 6.
- 1.102. The legislative framework must be comprehensive, clear, coherent and consistent in its approach. Currently, a patchwork of powers and mechanisms are scattered across a number of statutes relating to land use, public utility obligations, powers of condemnation of buildings and land, powers of public acquisition, powers to respond to natural disasters and instruments relating to property. They provide a useful starting checklist for designing a new planned relocation framework. They also provide a context against which new proposals can be tested for justification and legitimacy (because they have been used in comparable circumstances in the past).
- 1.103. At the same time, the existing patchwork does not meet the needs of an effective, efficient system of planned relocation.⁷⁹ Moreover, the land-use planning legislation that will replace the RMA (ie, the SP Bill and the NBE Bill) will not be sufficient either. New powers will be needed, as we discuss in chapter 4, and some relevant legislation will need alignment.

The system must be fair and must be perceived to be fair

- 1.104. One of our outcomes is that planned relocation should not exacerbate socio-economic inequalities and need not preserve them. A relevant principle is that the system of relocation

⁷⁹ See Peart R, Tombs BD. 2023. *Aotearoa New Zealand's Climate Change Adaptation Act: Building a Durable Future – Current Legislative and Policy Framework for Managed Relocation: Working Paper 2*. Auckland: Environmental Defence Society.

and transition to safety must reflect important community values. Considered together, these mean that the system for planned relocation must be fair and must be perceived to be fair.

- 1.105. Two considerations are fundamental to the concept of 'fairness' in this context.
 - 1.105.1. Intergenerational fairness means that present generations cannot minimise the likely impact of climate change and avoid taking action, or simply leave the problems it will cause to be dealt with by future generations. In other words, we cannot act in a way that transfers the costs of climate change to future generations. Rather, fairness requires that we attempt to mitigate the rate and impact of climate change now, by reducing or eliminating its human-related causes and that we put in place measures to address its ongoing and long-term impacts, including through planned relocation.
 - 1.105.2. When we deal with the impact of climate change (eg, by responding to extreme weather events or sea-level rise), we should do so in a way that avoids perpetuating existing social and economic inequalities and prevents avoidable escalation of such inequalities, including across different regions and generations. Wealth preservation should not be an objective of the system.
- 1.106. Without an agreed framework, ad hoc and potentially inconsistent governmental responses to chronic climate change impacts and adverse natural events are likely to strain perceptions of fairness and responsible use of public resources. They will erode the confidence of property owners, financial institutions and the wider public, and will undermine trust in public institutions.
- 1.107. Risks to consistency may arise through natural and other disasters that are not the result of climate change (such as earthquakes, volcanic eruptions and industrial contamination), but which raise comparable concerns about relocation from danger and community response. As a result, these should fit within the design of any framework for relocation.

Public education, communication and involvement are critical

- 1.108. For planned relocation to be successful as an adaptation strategy, the public must support it. Climate change adaptation should ideally be accepted as a collective responsibility. To achieve this, the public must understand the strategy and the reasons that planned relocation will sometimes be necessary. All levels of government must take responsibility for educating the public on these issues, although non-governmental organisations and other elements of civil society will also play a part.
- 1.109. Experience to date indicates that proposals for pre-event planned relocation are likely to be contested, although some have been completed successfully. Public opposition may reflect doubts about the underlying science, the validity of risk assessments, the need for planned relocation (rather than other adaptation measures such as sea walls and stopbanks) and financial effects. People will also have a commitment to place, as mentioned earlier. All of this creates political risks, which politicians will have to manage in a way that reflects Aotearoa New Zealand's long-term interests.
- 1.110. For the public to accept the need for planned relocation, they must have confidence in the credibility and integrity of the relevant processes for policy making, hazard and risk identification, risk assessment and prioritisation, and adaptation decision-making. To generate

that confidence, the relevant processes will have to be based on robust evidence and rigorous analysis of options. They must also reflect democratic values, such as transparency and appropriate protection of fundamental rights and freedoms.

- 1.111. Accordingly, there must be meaningful public engagement. Affected communities must be closely involved in the processes that lead to decisions to relocate. They must be given relevant and timely information, and they must be supported to contribute substantively during the decision-making process. In short, their voices must be heard – and this means all voices. Care should be taken to ensure that community engagement embraces the whole community and is not dominated by privileged or powerful voices. Affected communities should have a sense of ownership about any decision to relocate.

The system must be durable and reflect a long-term perspective, yet retain flexibility

- 1.112. One significant defect of current administrative and governance processes is that they tend to focus on immediate problems at the expense of a long-term perspective. Although it is perhaps understandable that political actors should focus on the pressing problems of the day, climate change adaptation policy can only be effective if it reflects a long-term perspective. The issues are complex and multi-faceted, there is considerable uncertainty, and hard choices must be made in the public interest. There is also the prospect of considerable public and political controversy, especially in the absence of adequate planning and careful management.
- 1.113. Because climate change effects such as sea-level rise are playing out now and will continue to do so over long timeframes, a framework for planned relocation must be durable and broadly consistent over time, to retain a public perception of fairness and public support. A system for planned relocation should also be predictable, to give all those who will rely on it some certainty for their own planning and decisions.
- 1.114. At the same time, any system for planned relocation must also retain sufficient flexibility to allow adaptation to certain circumstances. It should also allow for adjustment for developing scientific and engineering knowledge and capacity, as well as changes in social and economic conditions in Aotearoa New Zealand and globally.
- 1.115. Both public and multi-party consensus for the general framework for planned relocation out of harm's way is therefore essential. Clear and stable policies are needed, and the system must also have the capacity to meet changing circumstances, including climate surprises. Managing the impacts of climate change effectively through planned relocation and other adaptation strategies does not lend itself to the politics of three-year election cycles. Decision-making is needed that, in addition to dealing with immediate concerns, addresses the long-term challenges facing Aotearoa New Zealand and protects our country's long-term interests.

Opportunities for beneficial change should be taken

- 1.116. As the statement of outcomes recognises, planned relocation will often provide opportunities to improve the lives of those who must move, along with the well-being of the broader community. For example, those who must leave their homes and relocate should have the

opportunity for a better, more secure future. There will be the opportunity to 'build back better', by building new homes that are healthier, more energy efficient and more environmentally friendly than those abandoned.

- 1.117. The land relocated from might be able to be converted to more environmentally suitable uses, including for recreational activities. The Twin Streams and Riverlink projects described above show that planned relocation does not need to be negative. Instead, we should see what opportunities it offers and undertake those that offer real and lasting benefits.



Chapter 2

Recognising Māori rights
and interests in a system for
te hekenga rauora

2. Recognising Māori rights and interests in a system for te hekenga rauora

- 2.1. Climate change will have a disproportionate impact on Māori. The United Nations Permanent Forum on Indigenous Issues notes that indigenous peoples are among the first to experience the direct consequences of climate change due to their dependence on, and close relationship with, the environment.⁸⁰
- 2.2. A significant number of iwi, hapū and Māori communities are located in low-lying areas highly vulnerable to sea-level rise and climatic events such as flooding, storms and high tides.⁸¹ For example, around 80 per cent of the 800 marae in Aotearoa New Zealand are located on or near the coast or near flood-prone rivers.⁸² A glimpse at Māori Maps⁸³ illustrates the heavy distribution of marae along Aotearoa New Zealand's coastline. Many urupā, other places of significance to Māori and cultural practices are also particularly susceptible to the risks of climate change.⁸⁴

⁸⁰ United Nations Permanent Forum on Indigenous Issues. *Climate change and indigenous peoples*. Retrieved 20 July 2023. See also Ministry for the Environment. 2022. *Te hau mārohi ki anamata: Towards a productive, sustainable and inclusive economy: Aotearoa New Zealand's first emissions reduction plan*. Wellington: Ministry for the Environment. p 50. This addresses the climate change impacts on Māori and notes that some of those impacts could compound existing inequalities in wealth and well-being.

⁸¹ Ministry for the Environment. 2022. *Managed Retreat from a Māori perspective*. Prepared for the Ministry for the Environment by Te Amokura Consultants (unpublished). p 4; Iorns CJ. 2019. *Treaty of Waitangi Duties Relevant to Adaptation to Coastal Hazards from Sea-Level Rise*. Victoria University of Wellington Legal Research Paper No. 63/2020. Wellington: Victoria University of Wellington Faculty of Law, p 37.

⁸² Ministry for the Environment. 2022. *Managed Retreat from a Māori perspective*. Prepared for the Ministry for the Environment by Te Amokura Consultants (unpublished). p 11; Iorns CJ. 2019. *Treaty of Waitangi Duties Relevant to Adaptation to Coastal Hazards from Sea-Level Rise*. Victoria University of Wellington Legal Research Paper No. 63/2020. p 39; and Peart R, Tombs BD. 2023. *Aotearoa New Zealand's Climate Change Adaptation Act: Building a Durable Future – Current Legislative and Policy Framework for Managed Relocation: Working Paper 2*. Auckland: Environmental Defence Society. pp 11–12. See also Kowhai TR. 2022. *Māori cultural sites among most vulnerable to climate change, rising sea levels*. *Newshub* 8 May; and Ministry for the Environment. 2022. *Adapt and thrive: Building a climate-resilient New Zealand – New Zealand's first national adaptation plan*. Wellington: Ministry for the Environment. pp 115–116.

⁸³ See Māori maps. *Welcome to Māori Maps*. Retrieved 3 August 2023.

⁸⁴ For example, kōiwi at the Ngāti Kahungunu urupā at Omaha were unearthed by Cyclone Gabrielle in early 2023: RNZ. 2023. *Cyclone Gabrielle: Flooded Hawkes Bay cemetery exposes graves, bones in Omaha*. *NZ Herald* 18 February. Retrieved 3 August 2023. See also Peart R, Tombs BD. 2023. *Aotearoa New Zealand's Climate Change Adaptation Act: Building a Durable Future – Current Legislative and Policy Framework for Managed Relocation: Working Paper 2*. Auckland: Environmental Defence Society. pp 11–12; Te Puni Kōkiri | Ministry of Māori Development. 2023. *Te Puni Kōkiri | Ministry of Māori Development. 2023. Māori Climate Adaptation: Briefing to Māori Affairs Select Committee- 8 March 2023*. slide 4; and Te Kāwanatanga o Aotearoa. 2023. *Māori climate adaptation – Brief to the Māori Affairs Select Committee 8 March 2023*. slide 3.

- 2.3. The socio-economic status of Māori also contributes to climate change impacts falling disproportionately upon Māori. Iwi, hapū and Māori communities are more likely than Pākehā to live in rural and remote locations, and in areas with high socio-economic deprivation.⁸⁵ These types of communities are more vulnerable to climate hazards such as flooding and landslides, and are less able to respond to climate change.⁸⁶
- 2.4. The recent working paper on managed retreat released by the Environmental Defence Society (EDS report) articulates the impacts of climate change on iwi, hapū, and Māori communities.⁸⁷

Māori are particularly susceptible to a climate changing world which threatens their connections to land and ecosystems. Through whakapapa, as well as language, stories, and traditions (such as karakia, whakatauki, pūrākau, waiata and mātauranga), Māori strongly identify with landmarks such as maunga/mountains and awa/rivers. They maintain their connection with place through activities such as visiting their marae or swimming in their awa. The loss of such places can undermine a sense of identity as well as threaten the health and well-being of Māori communities.

- 2.5. Our response to climate change – the way we adapt – also has the potential to disproportionately affect Māori, unless the unique and complex nature of Māori rights and interests is carefully considered in developing adaptation responses, especially planned relocation. The relationship between Māori and land, and the historical dispossession of whenua Māori, mean that the impacts of climate change on whenua Māori and decisions affecting its ownership, use and occupation are extremely significant.
- 2.6. Whenua, and the connection to whenua, is a central principle of Māori individual and collective identity. Sir Hirini Moko Mead observes:⁸⁸

The land and environment in which people live became the foundation of their view of the world, the centre of their universe and the basis of their identity as citizens or as members of a social unit.

⁸⁵ See Cochrane W, Stubbs T, Rua M, Hodgetts D. 2017. *A statistical portrait of the New Zealand precariat*. In S Groot, C Van Ommen, B Masters-Awatere, N Tassell-Matamua (eds), *Precarity: Uncertain, Insecure and Unequal lives in Aotearoa New Zealand*. Auckland: Massey University Press. pp 25–34.

⁸⁶ See Awatere S, Ngaru King D, Reid J, Williams L, Masters-Awatere B, Harris P, Tassell-Matamua N, Jones R, Eastwood K, Pirker J, Jackson A-M. 2021. *He huringa āhuarangi, he huringa ao: A changing climate, a changing world*. Prepared for Ngā Pae o te Māramatanga by Manaaki Whenua — Landcare Research; Ministry for the Environment. 2022. *Adapt and thrive: Building a climate-resilient New Zealand – New Zealand's first national adaptation plan*. Wellington: Ministry for the Environment. p 13. This sets out the vulnerability of Māori in rural and remote locations to the impacts of climate change (p. 29); see also pp.191–193, setting out the risks identified in Ministry for the Environment. 2020. *National Climate Change Risk Assessment for New Zealand: Arotakenga Tūraru mō te Huringa Āhuarangi o Āotearoa. Main report: Pūrongo Whakatōpū*. Wellington: Ministry for the Environment, and identifying those risks that are particularly significant to, or will disproportionately affect, Māori.

⁸⁷ Peart R, Boston J, Maher S, Konlechner T. 2023. *Aotearoa New Zealand's Climate Change Adaptation Act: Building a Durable Future, Principles and Funding for Managed Retreat, Working Paper 1*. Auckland: Environmental Defence Society. p 2.

⁸⁸ Mead HM. 2003. *Tikanga Māori: Living by Māori Values*. Wellington: Huia. p 271.

- 2.7. Mead notes that the Māori word for land, 'whenua', means more than land. It also means 'placenta', 'ground', 'country' and 'state':⁸⁹

Whenua, as placenta, sustains life and the connection between the foetus and the placenta is through the umbilical cord. This fact of life is a metaphor for whenua, as land, and is the basis for the high value placed on land.

- 2.8. The history of land alienation in the post-1840 period (including Crown and private purchases, confiscation, and takings for public works) must be viewed with this cultural perspective.⁹⁰ Over the last few decades, through the settlement of historic te Tiriti o Waitangi (te Tiriti) claims, the Crown has apologised to iwi for the breaches of te Tiriti associated with land alienation and resulting landlessness. These settlements have included an apology, Crown acknowledgements of its breaches of te Tiriti, and the return of some land.⁹¹
- 2.9. Te Ture Whenua Māori Act 1993 provides modern statutory recognition of land as a treasure inherited from earlier generations [**emphasis added**]:⁹²

Whereas the Treaty of Waitangi established the special relationship between the Māori people and the Crown: And whereas it is desirable that the spirit of the exchange of kawanatanga for the protection of rangatiratanga embodied in the Treaty of Waitangi be reaffirmed: And whereas it is desirable to recognise that **land is a taonga tuku iho of special significance to Māori people and, for that reason, to promote the retention of that land in the hands of its owners, their whanau, and their hapu, and to protect wāhi tapu: and to facilitate the occupation, development, and utilisation of that land for the benefit of its owners, their whānau, and their hapū**: And whereas it is desirable to maintain a court and to establish mechanisms to assist the Māori people to achieve the implementation of these principles.

- 2.10. This passage also reflects that Māori rights and interests in land are not limited to the type of property rights that exist in Western culture, such as ownership. They include the exercise of rangatiratanga, the relationship with ancestral whenua, wāhi tapu, cultural infrastructure such as marae and significant historical sites, and access to mahinga kai.

⁸⁹ Mead HM. 2003. *Tikanga Māori: Living by Māori Values*. Wellington: Huia. p 269.

⁹⁰ For a graphic representation of the progress of land Māori land loss, see Waitangi Tribunal. 2016. *He Kura Whenua ka Rokohanga Report on Claims about the Reform of Te Ture Whenua Māori Act 1993: Wai 2478*. Wellington: Waitangi Tribunal. pp 18–21 and 24.

⁹¹ In evidence to the Waitangi Tribunal, the late Moana Jackson stressed the fundamental importance of whenua to the identity and the cultural, social, and economic well-being of tangata whenua. See Waitangi Tribunal. 2015. *Undated brief of evidence of Moana Jackson: Wai 2478*. Document A11 at paragraphs 17–18; and Waitangi Tribunal. 2016. *He Kura Whenua ka Rokohanga Report on Claims about the Reform of Te Ture Whenua Māori Act 1993: Wai 2478*. Wellington: Waitangi Tribunal. p. 17.

⁹² Te Ture Whenua Māori Act 1993, Preamble; see also s 2.

- 2.11. Recent comments made in the report by the Ministerial Inquiry into Land Uses in Tairāwhiti and Wairoa provide this context for the relationship of Māori with the whenua, and the impacts of the effects of climate change and adaptation on them:⁹³

The Panel found that Maori landowners had a longer-term view and a more sustainable relationship with the environment, despite many obstacles. Maori own less than a fifth of their ancestral land across Wairoa and Tairāwhiti. What land remains is not individually owned and often lacks legal governance entities. This land is generally located on the most marginal land zones, with poor or no accessibility; it cannot be sold and is constantly predated upon in the public interest – such as through persistent compulsory acquisition of whenua Maori for regional infrastructure... The position of whenua Maori today is the direct result of generations of successive government decisions.

- 2.12. This chapter cannot address comprehensively the relationship of Māori with whenua and the rights and interests that stem from that relationship. However, for the purposes of this report, this summary illustrates that a framework for the adaptation and planned relocation of iwi, hapū and Māori communities requires a tailored approach that recognises both the historical context of the Māori-Crown relationship and the complex landscape of Māori rights and interests.
- 2.13. This chapter considers the broad range of matters relevant to adaptation and planned relocation of iwi, hapū and Māori communities. We use the term 'iwi, hapū and Māori communities' as an inclusive term that captures the range of interests that Māori hold, in the broad context of adaptation and planned relocation. The term does not reflect the breadth of issues that arise in specific contexts.
- 2.14. The issues and solutions will depend on whether the policy affects Māori freehold land, Māori owners of general land, cultural infrastructure such as marae and wāhi tapu, or Māori generally. The issues range from economic impacts (such as the affordability of relocation or restrictions on land use) to cultural impact (eg, impacts on the relationship of Māori with taonga, their ability to access kaimoana, and their ability to exercise kaitiakitanga and tino rangatiratanga over the whenua). Māori freehold land, Māori reservation land, settlement land, and takutai moana rights have specific issues that require close consideration.
- 2.15. We begin by setting out contextual matters that need to be factored into developing a system that enables iwi, hapū and Māori communities to safely relocate from high-risk areas, while maintaining their significant connections to place and relationship with whenua. We then address specific issues that need to be considered in the context of an adaptation planning framework, as well as the powers, institutions, and funding required to support community adaptation and planned relocation.
- 2.16. This chapter has not been developed in conjunction with Māori. Any system for adaptation and planned relocation must be based on Tiriti partnership. It must provide for the Crown and Māori to work together to develop a framework for adaptation and planned relocation, recognising the right of Māori to make decisions for Māori (rangatiratanga) and the importance of applying mātauranga Māori. The whakaaro in this chapter are offered to help

⁹³ Ministerial Inquiry into Land Uses in Tairāwhiti and Wairoa. 2023. *Outrage to Optimism - Report of the Ministerial Inquiry into land uses associated with the mobilisation of woody debris (including forestry slash) and sediment in Tairāwhiti/Gisborne District and Wairoa District*. New Zealand: Ministerial Inquiry into Land Uses in Tairāwhiti and Wairoa. p 26.

inform the Crown of key issues in developing a system of adaptation and planned relocation for Māori, in partnership with Māori.⁹⁴

Context

- 2.17. Any conversation about a system of adaptation and planned relocation for iwi, hapū and Māori communities must acknowledge both current and historical context. That context needs to inform the development of policy, and it will impact how Māori feel about the policy and the process of its development.

Colonisation – dispossession of whenua Māori

- 2.18. In pre-European times, all land in Aotearoa New Zealand was Māori land and was communally owned, based on traditional Māori custom. After the signing of te Tiriti in 1840, the Crown used two methods to obtain land from Māori: Crown acquisition and, after the passage of the New Zealand Settlements Act 1863, raupatu or confiscation.⁹⁵
- 2.19. The colonisation of Aotearoa New Zealand was characterised by the aggressive and rapid acquisition of land from Māori. An element of this process included the conversion of customary title into general title that could be more easily sold and traded. Armed conflict, confiscation, Crown (and private) purchasing, and takings for public works – including without compensation – were all common.⁹⁶ The use of public works legislation to dispossess Māori of their land continues today.⁹⁷ ‘Scorched earth’ policies were adopted in some places, destroying Māori communities and undermining the Māori economy.⁹⁸
- 2.20. Through such policies, Māori were dispossessed of their land and hindered from using their remaining whenua – whether for habitation or cultural and economic practices. Some had their access to the coast or rivers cut off, affecting their ability to access kaimoana. Displacement from the whenua limited the ability of iwi and hapū to exercise rangatiratanga, kawa, tikanga and mātauranga in relation to their whenua, awa, moana, wāhi tapu, wāhi tupuna, and other taonga such as marae and urupā.

⁹⁴ The Government has endorsed this approach by establishing the platform for Māori climate action. See Ministry for the Environment. 2022. *Adapt and thrive: Building a climate-resilient New Zealand – New Zealand's first national adaptation plan*. Wellington: Ministry for the Environment. p 29.

⁹⁵ Office of the Auditor-General New Zealand. 2004. *Māori Land Administration: Client Service Performance of the Māori Land Court Unit and the Māori Trustee: Report of the Controller and Auditor-General*. Wellington: Office of the Auditor-General of New Zealand.

⁹⁶ See, generally, Marr C. 1997. *Public Works Takings of Māori Land, 1840–1981, Rangahaua Whanui National Theme G*. Wellington: Waitangi Tribunal. Specific Waitangi Tribunal reports, by district, discuss public works takings on a district or regional basis, as well as particular takings of significance. See, for example, Waitangi Tribunal. 2010. *Wairarapa ki Tararua Report*. Wellington: Waitangi Tribunal, which discusses the taking of land at Pouakani, in the South Waikato, for the purposes of hydropower generation.

⁹⁷ See, for example, *Grace – Ngarara West A25B2A* (2014) 317 Aotea MB 268 and *Grace v Minister of Land Information* [2014] NZEnvC 82 which relates, in summary, to a failed attempt by Waka Kotahi | New Zealand Transport Agency to utilise the Public Works Act 1981 to acquire 983 square metres of Mrs Grace's land, Ngarara West A25B2A, as part of improvements to State Highway 1.

⁹⁸ See Ministry for Culture and Heritage. 2021. *The year of the lamb*. Retrieved 3 August 2023; and Fairfax Media. 2012. *Tuhoe struggle timeline*. Retrieved 3 August 2023.

- 2.21. Historical accounts and the deeds of settlement of historic Tiriti claims signed by the Crown and iwi recognise these grievances. The settlement of historic claims is yet to be completed. Some iwi are still working through the Tiriti settlement process to have those grievances recognised.
- 2.22. A system for adaptation and planned relocation must recognise the historical trauma that exists for many iwi, hapū and Māori communities. That requires an approach that mitigates the exacerbation of that trauma and prevents further trauma related to the displacement of Māori from their whenua. For example, the use of the Public Works Act 1981 (PWA) for planned relocation purposes may concern iwi, hapū and Māori communities and needs to be carefully considered.⁹⁹ Similarly, powers relating to the withdrawal of infrastructure must be considered in this context.

Māori customary and freehold land and Tiriti settlement land

- 2.23. During the late twentieth century, the Crown began to recognise the unlawful confiscation and alienation of Māori land. This led to the establishment of the Waitangi Tribunal, the first Treaty settlements, and Te Ture Whenua Māori Act 1993.
- 2.24. Te Ture Whenua Māori Act 1993 governs Māori land, which is defined as Māori customary land and Māori freehold land.¹⁰⁰ At the Third Reading for the Bill that became Te Ture Whenua Māori Act, the responsible Minister, the Hon Doug Kidd, summarised its significance:¹⁰¹

Retention of Māori land in Māori ownership is at the heart of this Bill. Retention has, however, been reconciled where necessary with the need to operate in a modern context. The Bill empowers Māori landowners with the means to decide upon and facilitate the retention, development, use, and occupation of their lands. Te Ture Whenua Māori is the first major legislation framed according to what Māori have said they need. It has as its foundation the Treaty of Waitangi and reflects the Māori philosophy that land is a treasure, a taonga tuku iho, to be preserved and passed on to future generations and that it should remain within whānau, hapū, and iwi structures.

- 2.25. The recognition of Māori land itself as a taonga tuku iho is carried through Te Ture Whenua Māori Act 1993.¹⁰² For example, section 2 requires that the Act be interpreted in a manner that best furthers the principles set out in the Preamble. It also requires that the powers, duties and functions be exercised in a way that “facilitates and promotes the retention, use, development, and control of Māori land as taonga tuku iho by Māori owners, their whanau, their hapu, and their descendants, and that protects wāhi tapu”.

⁹⁹ There are many examples of takings or acquisitions of Māori land for public good, including environmental protection, that have resulted in private good or benefits for some (excluding the former owners). See for example, the acquisition of land for the Mangatu State Forest.

¹⁰⁰ Te Ture Whenua Māori Act 1993, s 4.

¹⁰¹ Waitangi Tribunal. 2016. *Wai 2478*. Wellington: Waitangi Tribunal. p 53.

¹⁰² Te Ture Whenua Māori Act 1993, Preamble and s 2(2).

- 2.26. The Act's primary objectives are to promote the retention of both Māori land and general land owned by Māori and to promote the effective use, management and development of that land by its owners.¹⁰³ To that end, it establishes a system of rules for different types of Māori-owned land. Those rules will affect how a policy for relocating iwi, hapū, and Māori communities is developed and implemented.
- 2.27. 'Māori customary land' is land that is held by Māori in accordance with tikanga Māori (or Māori customary values and practices).¹⁰⁴ Māori customary land has not had its ownership investigated and determined by the Māori Land Court (or the Native Land Court). The Māori Land Court estimates that there are only 1,204.30 hectares (held in 39 titles or blocks) of Māori customary land remaining.¹⁰⁵ The distribution of Māori customary land is also uneven across the seven Māori Land Court districts. For example, in Te Wai Pounamu (consisting of the entire South Island) there is no Māori customary land (as defined), whereas the Aotea District with 659.12 hectares (held in 15 titles) and the Waiariki District with 453.25 hectares (held in two titles) contain the majority of remaining Māori customary land (at least by area).
- 2.28. In addition to its taonga status, a relevant feature or characteristic of Māori customary land is that it cannot be alienated, including by sale, by taking under the PWA, or for recovery of debt, while it retains the status of Māori customary land.¹⁰⁶
- 2.29. 'Māori freehold land' is land that has had its beneficial ownership determined by the Māori Land Court by freehold order.¹⁰⁷ Māori freehold land is held by individuals, trusts, and others who have shares together as tenants in common. There are approximately 1,403,693.41 hectares of Māori freehold land, in 27,608 titles.¹⁰⁸ The Māori Land Court recently published the following data, which provides a snapshot of the present situation.¹⁰⁹
- Blocks with a management structure (such as a trust, incorporation, or reservation to manage land) have an average size of 107.17 hectares and average 203 beneficial owners.
 - Blocks without a management structure have an average size of 14.78 hectares and average 45 owners.
 - Overall, an average Māori land block is 53.07 hectares and has 111 owners.
 - The total number of ownership records for all blocks is 3,919,068.

¹⁰³ Te Ture Whenua Māori Act 1993, s 17.

¹⁰⁴ Te Ture Whenua Māori Act 1993, ss 4 and 129(2).

¹⁰⁵ See Office of the Chief Registrar, Māori Land Court. 2022. [Māori Land Update | Ngā Āhukatanga o te whenua. June 2022 | Pipiri 2022](#). Wellington: Ministry of Justice | Te Kooti Whenua Māori.

¹⁰⁶ Te Ture Whenua Māori Act 1993, ss 145 and 342.

¹⁰⁷ Te Ture Whenua Māori Act 1993, ss 4 and 129(2).

¹⁰⁸ See Office of the Chief Registrar, Māori Land Court. 2022. [Māori Land Update | Ngā Āhukatanga o te whenua. June 2022 | Pipiri 2022](#). Wellington: Ministry of Justice | Te Kooti Whenua Māori.

¹⁰⁹ See Office of the Chief Registrar, Māori Land Court. 2022. [Māori Land Update | Ngā Āhukatanga o te whenua. June 2022 | Pipiri 2022](#). Wellington: Ministry of Justice | Te Kooti Whenua Māori.

- 2.30. Māori land is typically characterised by multiple ownership, fragmentation of interests and in some cases, a lack of management structures. There are:
- 11,942 blocks of Māori land with a management structure (1,264,570.14 hectares or 83 per cent of total Māori land)
 - 16,876 blocks of Māori land without a management structure (264,735.18 hectares or 17 per cent of total Māori land).
- 2.31. The absence of a management structure may present challenges to decision-making about adaptation and planned relocation, including for the timing of decision-making.
- 2.32. To retain Māori land, Te Ture Whenua Māori Act 1993 contains limitations and protections on the use, administration and alienation of land. This includes the requirement for Māori Land Court approval for certain decisions and transactions, such as alienation (including sale and leases of certain duration), appointment of trustees to administer land, and changing the status of Māori land. The role of the Māori Land Court under the Act, and in particular, the scope of the Court's power, is contentious.¹¹⁰
- 2.33. The status of Māori customary land can be changed to Māori freehold land, and similarly Māori freehold land can be changed to 'general' land (the latter not having the same protections from alienation).¹¹¹ A status change, however, is difficult to achieve, since it can remove statutory protections and jeopardise the retention of the land, which is one of the primary objectives of Te Ture Whenua Māori Act 1993.
- 2.34. Māori customary land, Māori freehold land, and general land may be set aside as a 'Māori Reservation' under Te Ture Whenua Māori Act 1993 and the Māori Reservation Regulations 1994 for purposes including marae, urupā, a wāhi tapu, or a place of special significance according to tikanga Māori.¹¹²
- 2.35. Māori reservations are often home to cultural infrastructure such as marae and urupā. Urupā are similarly central to Māori identity and reflect connections to both the land and ancestors, elders, and generations that have passed.¹¹³ Marae are fundamental to the identity of Māori, and they form a vital part of Māori culture. They usually contain a whare tipuna or an ancestral house which, in many cases, carries the name of a significant ancestor.¹¹⁴ They are culturally significant places where communities hold hui (meetings), āhuareka (celebrations), tangi

¹¹⁰ This issue featured most prominently in recent years during the review of Te Ture Whenua Māori Act 1993 under the fifth National Government, which included a report by a panel of independent experts. See Te Puni Kōkiri | Ministry of Māori Development. 2013. *Discussion Paper*. Wellington: Te Puni Kōkiri; and Te Puni Kōkiri | Ministry of Māori Development. 2014. *Report: Te Ture Whenua Māori Act 1993 Review Panel*. Wellington: Te Puni Kōkiri. This review led to a Bill being introduced to Parliament to repeal and replace the Act. Dissatisfaction with the review led to an urgent claim to the Waitangi Tribunal, resulting in an inquiry and report: Waitangi Tribunal. 2016. *He Kura Whenua ka Rokohanga Report on Claims about the Reform of Te Ture Whenua Māori Act 1993 Wai 2478*. Wellington: Waitangi Tribunal. In addition to summarising the history of Māori land legislation, the Tribunal's report summarised the views of both supporters and opponents of the review and proposed replacement for Te Ture Whenua Māori Act 1993.

¹¹¹ Te Ture Whenua Māori Act 1993, ss 130–137.

¹¹² Te Ture Whenua Māori Act 1993, ss 145(2) and 338(1).

¹¹³ Mead HM. 2003. *Tikanga Māori: Living By Māori Values*. Wellington: Huia. p 270.

¹¹⁴ Mead HM. 2003. *Tikanga Māori: Living By Māori Values*. Wellington: Huia. p 96.

(funerals), and other important tribal events. Marae are important to both Māori and the wider community by providing support during emergencies, such as earthquakes and floods.¹¹⁵ This was demonstrated during Cyclone Gabrielle, when marae were used to house and feed people, and as welfare centres during the state of emergency.¹¹⁶

- 2.36. Land set aside as a Māori reservation is also inalienable, including under the PWA.¹¹⁷ The limitations on alienability of sites of cultural infrastructure signifies their importance to iwi, hapū and Māori communities.
- 2.37. Decisions regarding adaptation and planned relocation that affect Māori land may become contentious and require dispute resolution. This is especially so where the land in question may represent only limited remnants of former landholdings, or where the land in question holds special significance as a marae. For example, if a decision is made to move a marae currently on a Māori reservation to a new location, the Māori Land Court might be called upon to address matters such as:
- cancelling the Māori reservation status of the land on which the marae was originally located, or redefining the purpose of the Māori reservation¹¹⁸
 - appointing new trustees (or not) and setting the terms of trust for that land, if the original location is to remain a Māori reservation¹¹⁹
 - partitioning an area of land in the new location from an existing title (if it is Māori freehold land), and setting that land aside as a new Māori reservation for the purpose of the marae and appointing trustees for that land.
- 2.38. The Māori Land Court has formal dispute resolution or mediation powers for any matters within the Court's jurisdiction.¹²⁰ The purpose of these dispute resolution powers is to "quickly and effectively resolve any disputed issues ... as far as possible in accordance with the relevant tikanga of the whānau or hapū with whom they are affiliated."¹²¹ Tikanga Māori is accepted as part of law in Aotearoa New Zealand,¹²² including when incorporated into statutes and regulations,¹²³ as it is in the case of Te Ture Whenua Māori Act 1993 – both

¹¹⁵ Te Te Puni Kōkiri | Ministry of Māori Development. 2023. *Briefing to Māori Affairs Select Committee – 8 March 2023*. slide 10, citing Davies C, Timu-Parata C, Stairmand J, Robson B, Kvalsvig A, Lum D, Signal V. 2022. *A kia ora, a wave and a smile: an urban marae-led response to COVID-19, a case study in manaakitanga* *International Journal for Equity in Health* 21, 70.

¹¹⁶ See, for example, Smale A. 2023. *The long tail of Cyclone Gabrielle: Between the rivers*. *Newsroom* 13 June. Retrieved 3 August 2023; and Wara I. 2023. *How a marae supported its community during Cyclone Gabrielle: Marae as a centre for community resilience*. *Consumer* 4 May. Retrieved 3 August 2023.

¹¹⁷ See, generally, Te Ture Whenua Māori Act, s 338(11); and *Grace – Ngarara West* A25B2A (2014) 317 Aotea MB 268 (317 AOT 268) [2014] NZMLC 25 (27 March 2014) and *Grace v Minister for Land Information* [2014] NZEnvC 82 (8 April 2014).

¹¹⁸ Te Ture Whenua Māori Act 1993, subss 338(5)(b)–(c).

¹¹⁹ Te Ture Whenua Māori Act 1993, subss 338(7)–(8).

¹²⁰ Te Ture Whenua Māori Act 1993, s 98L. Note that s 98H sets out a number of matters that the Māori Land Court has jurisdiction for, but for which dispute resolution or mediation under s 98L is not available. See also Warren A. 2022. *Dispute Resolution*. Māori Land Court | Judge's Corner.

¹²¹ Te Ture Whenua Māori Act 1993, s 98I.

¹²² *Ellis v R* [2022] NZSC 114 (7 October 2022) at [108]–[110], [171]–[174], [257]–[259] and [279].

¹²³ *Ellis v R* [2022] NZSC 114 (7 October 2022) at [98]–[102], [175]–[176], [257] and [280].

generally and in these specific provisions. The reference to “relevant tikanga of the whānau or hapū with whom they are affiliated” reflects that tikanga is not a singular set of values or customs and will be specific to the context.¹²⁴

- 2.39. In relation to general land owned by Māori, it is tempting to suggest that the land be treated the same as any other land owned by members of the public. However, a careful approach should be taken to that land for the purpose of planned relocation. Parliament recently recognised that some of this land lost the status of Māori freehold land and the associated protections, becoming general land due to the Māori Affairs Amendment Act 1967 – without notice to the owners. Parliament therefore recommended that general land categorised as such by that legislation and owned by Māori should be provided the same protection as Māori freehold land.¹²⁵ We support this approach.
- 2.40. We also need to address land returned to iwi through post-settlement governance entities (PSGEs) from settling a Tiriti claim (or land subsequently acquired by a PSGE). The return of land – either as cultural redress or commercial redress – is a common component of Tiriti settlements. Returning land as cultural redress recognises the traditional, historical and spiritual associations of iwi with that place or site. Land returned as commercial redress forms part of the financial settlement with iwi. Both the Crown and iwi acknowledge that full compensation for grievances is not possible. Instead, financial redress focuses on providing an economic base for iwi for future development.¹²⁶ As noted above, land returned under Tiriti settlements is often marginal land, which is more vulnerable to the impacts of climate change.
- 2.41. A final category of relevant rights and interests relates to the marine and coastal area. Māori rights and interests in this environment are recognised via the Marine and Coastal Area (Takutai Moana) Act 2011 (Takutai Moana Act). This Act enables iwi, hapū and whānau to apply for customary marine title, or the recognition of customary rights. Customary marine title recognises customary interests that iwi, hapū, and whānau have had in the common marine and coastal area since 1840.¹²⁷ If customary marine title is recognised, the iwi, hapū or whānau group may exercise specified rights in relation to the customary marine title area, including the right to approve or prevent certain activities, to restrict access to wāhi tapu, to own certain minerals, and to create planning instruments relating to the management of the area.¹²⁸

¹²⁴ *Ellis v R* [2022] NZSC 114 (7 October 2022) at [121], [125], [127], [181], [261]–[267] and [273].

¹²⁵ See Local Government (Rating) Act 2002, s 62A(1)(a), as amended by the Local Government (Rating of Whenua Māori) Amendment Act 2021 s 33; Infrastructure Funding and Financing Act 2020, s 11(1)(h)(ii); and Urban Development Act 2020, s 17(4)(b)(ii). For discussion of the Māori Affairs Amendment Act 1967, see, for example, Waitangi Tribunal. 2016. *He Kura Whenua ka Rokohanga Report on Claims about the Reform of Te Ture Whenua Māori Act 1993: Wai 2478*. Wellington: Waitangi Tribunal. pp 36. See also Controller and Auditor-General. 2011. *Government planning and support for housing on Māori land*. Wellington: Controller and Auditor-General. pp 24 and 104.

¹²⁶ See, for example, Te Arawhiti | Office for Māori-Crown Relations. 2018. *Ka tika ā muri, ka tika ā mua — Healing the past, building a future' – A Guide to Treaty of Waitangi Claims and Negotiations with the Crown*. Wellington: Te Arawhiti | Office for Māori-Crown Relations. p 77.

¹²⁷ Marine and Coastal Area (Takutai Moana) Act 2011, s 58.

¹²⁸ Marine and Coastal Area (Takutai Moana) Act 2011, subpt 3 of Pt 3.

- 2.42. To have customary marine title recognised under the Takutai Moana Act, the applicant group must be able to show that they hold the area in accordance with tikanga and have exclusively occupied and used the area without substantial interruption.¹²⁹ The use and occupation of the (dry) land abutting, or contiguous with, the coastal marine area is a relevant consideration in determining whether the test for customary marine title is satisfied. If adaptation and/or relocation affect use of the abutting or contiguous land, this may have an impact on the recognition of customary marine title, which is an ongoing process. Applications for customary marine title cover the whole of the Aotearoa coastline and will take a significant time to resolve.¹³⁰ Relocation from land adjacent to marine and coastal areas may pose challenges to the success of those applications, particularly in being able to show continuous occupation and use.
- 2.43. This discussion shows that the presence or emergence of risk of harm – no matter how high or ‘intolerable’ – does not displace or diminish the relationship between Māori and whenua. Planned relocation threatens to impact these interests, in turn affecting the traditional mātauranga and kōrero of Māori.¹³¹ This may result in some hesitancy to leave the whenua. Relocation from whenua Māori must therefore be considered through a different lens. It may be important to retain ownership of Māori land, including sites of cultural significance, notwithstanding the risk posed by the impacts of climate change – even where certain activities (such as residential activity) are relocated.
- 2.44. In summary, a policy for adaptation and planned relocation will need to recognise:
- the special status of Māori land as taonga tuku iho
 - the unique rules that apply to Māori land under Te Ture Whenua Māori Act 1993 for the purposes of its retention and productive use
 - the challenges associated with making decisions about Māori land due to those rules and the ownership and management structures of Māori land
 - the relationship of Māori with the whenua and the customary rights and interests that arise (for example, the role of mana whenua as kaitiaki, exclusive and undisturbed access to traditional sites of mahinga kai, and the maintenance of ahi kā (burning fires))
 - the importance of cultural infrastructure and taonga such as marae and urupā to iwi, hapū and Māori communities
 - the broader set of Māori-owned land to which some of these considerations also apply (ie, general land owned by Māori, and land returned to PSGEs as redress under historic Tiriti settlements)
 - the challenges that planned relocation poses to the recognition of customary marine title under the Takutai Moana Act.

¹²⁹ Marine and Coastal Area (Takutai Moana) Act 2011, s 58.

¹³⁰ Te Arawhiti | Office for Māori-Crown Relations. 2021. *Takutai Moana Crown Engagement Strategy*. Cabinet Paper. Paragraphs 5, 20–21 and 44 suggest the estimate timeframe was 95 years, but is now between 10 and 20 years.

¹³¹ Ministry for the Environment. 2022. *Managed Retreat from a Māori perspective*. Prepared for the Ministry for the Environment by Te Amokura Consultants (unpublished). pp 11–12.

Iwi, hapū and Māori communities today

- 2.45. As stated, since the early 1990s, the Crown and Māori have negotiated the settlement of grievances related to breaches of te Tiriti, resulting in acknowledgements of the relationship with whenua and a small percentage of land being returned to Māori.
- 2.46. The land returned is usually land that is not sufficiently productive to have already been taken into private ownership. It is often in rural and isolated areas, and on the coast or alongside rivers. Many iwi, hapū and Māori communities have resettled on or use that land or have developed it for commercial purposes to build an economic base, as envisaged by the Tiriti settlement process.
- 2.47. These communities tend to experience already compromised infrastructure – such as roading, power, and water supply – due to their isolation.¹³² Land erosion from deforestation near the coasts and adjacent to waterways has exacerbated the effects on communities. The location of some marae is the result of historical forced relocations. Although uncommon, some iwi, hapū, and Māori communities now own land that was transferred to them by the Crown, but which was not in their traditional or customary rohe. Those owners may, or may not, assert a relationship with the land they own.¹³³
- 2.48. Substantially driven by colonisation, the socio-economic characteristics of many Māori mean that members of these communities are less likely to own their own homes, or are more likely to own lower-value homes. It is likely to be more difficult for Māori to afford new homes when relocation is necessary. The expenses and resources required for relocation present barriers for Māori.¹³⁴ In addition, targeted support may be required for non-homeowners, to find suitable alternative and affordable accommodation.
- 2.49. Although Māori remain overly represented in negative economic, educational, health, and social statistics, Māori mana – across the legal, political and economic spheres – has grown substantially since the late twentieth century. This growth has been driven in part by the momentum of the Māori renaissance, as well as by the Waitangi Tribunal findings and Tiriti settlements. Many iwi are focusing on social investments, providing a range of services usually associated with the government, such as housing, finance, and health. The ‘Māori economy’ – the assets and income of collective and individually owned Māori businesses in the wider Aotearoa New Zealand economy – has grown. Translating this restoration of mana

¹³² Ministry for the Environment. 2022. *Adapt and thrive: Building a climate-resilient New Zealand – New Zealand's first national adaptation plan*. Wellington: Ministry for the Environment. p 13.

¹³³ *Farquhar – Palmerston North Māori Reserve Trust* [2016] NZMLC 79; (2016) 358 Aotea MB 19 (358 AOT 19) (31 August 2016):

[4] *The first unusual matter is that the beneficial owners of this trust have no historical relationship in terms of tikanga Māori with the land.*

[5] *The land was vested in what were called the people of Waiwhetu by a series of transactions prior to the commencement of the Native Land Courts in the mid nineteenth century. They received these lands in consideration of lands taken in the Lower Hutt and Wainuiōmata and have held them in one form or another ever since.*

¹³⁴ Ministry for the Environment. 2022. *Managed Retreat from a Māori perspective*. Prepared for the Ministry for the Environment by Te Amokura Consultants (unpublished). p 13.

into meaningful actions to address systemic disadvantage remains a key challenge for planned relocation.¹³⁵

- 2.50. Iwi, hapū and Māori communities are increasingly building capacity for, and increasing their role in, planning in their rohe and takiwā. Many have iwi management plans that set out their aspirations and expectations for natural resource management. They may also have close relationships with local authorities through mechanisms such as Mana Whakahono ā Rohe or joint management agreements, or through groups with planning roles established by Tiriti settlements.
- 2.51. Many iwi, hapū and Māori communities are already planning for climate change and are undertaking adaptation planning for their communities and marae. In December 2021, South Taranaki iwi Ngaa Rauru Kiitahi published *Ka Mate Kaainga Tahī, Ka Ora Kaainga Rua – The Ngaa Rauru Kiitahi Climate Change Strategy*. The strategy outlines how the iwi will work with others in the community to better adapt to the impacts of climate change and reduce emissions. Similarly, the Te Arawa Climate Change Working Group is protecting cultural infrastructure and communities through the *Te Ara ki Kōpū: Te Arawa Climate Change Strategy*.¹³⁶
- 2.52. In some cases, iwi, hapū and Māori communities have already had to work their way through adaptation and planned relocation decision-making processes. For example, in 2018, the hapū of Tangoio Marae in the northern Hawke’s Bay adopted a participatory decision-making model to work through the potential impacts of climate change on the marae.¹³⁷ Tangoio Marae has experienced numerous floods over many years and was severely impacted by Cyclone Gabrielle. The hapū established a marae options committee to consider expert information and help the hapū determine options for the marae, including staying at the existing site or finding a new location.¹³⁸
- 2.53. Common ethics reflected in iwi and hapū climate change plans include the following.¹³⁹
- 2.53.1. **Whanaungatanga:** Māori are a communal people and value collective participation and membership. These are often founded on genealogy, lineage and descent, which recognise common interests to encourage and build community pride, identification and ownership. Relationships and connections reflect the importance of the social interactions among people, and between people and the environment. Relocation should help the community make social and environmental connections.

¹³⁵ Rout M, Awatere S, Mika JP, Reid J, Roskrige M. 2021. A Māori approach to environmental economics: Te ao tūroa, te ao hurihuri, te ao mārama—The old world, a changing world, a world of light. In JR Kahn (ed). *Oxford Encyclopedia of Environmental Economics*. Oxford University Press.

¹³⁶ Ministry for the Environment. 2022. *Adapt and thrive: Building a climate-resilient New Zealand – New Zealand's first national adaptation plan*. Wellington: Ministry for the Environment. p 26.

¹³⁷ This was undertaken as part of a Deep South Challenge project – see Deep South Challenge. *Tangoio Marae adaptation pathways*. Retrieved 3 August 2023.

¹³⁸ Maungaharuru-Tangitū Trust. *Marae Options*. Retrieved 3 August 2023.

¹³⁹ See Tapsell P. 2002. *Marae and tribal identity in urban Aotearoa/New Zealand*. *Pacific Studies* 25(1): 31; and Rolleston S, Awatere S. 2009. *Ngā hua papakāinga: Habitation design principles*. *MAI Review* 2(2): 1–13.

- 2.53.2. **Manaakitanga:** The ability to nurture and protect inhabitants is an important element of the ethic of manaakitanga (reciprocity). The adaptation and planned relocation process should incorporate aspects of manaakitanga, by encouraging community participation and membership and building new settlements where people feel accepted and are safe.
- 2.53.3. **Kotahitanga:** This means creating spaces and environments that are in unison and harmony with their surroundings. The adaptation and planned relocation process should connect people and connect environments. Spaces should be inclusive of people. Cross-cultural and multi-disciplinary collaboration of knowledge and understanding Māori values and perspectives are required.
- 2.54. The development of a policy for adaptation and planned relocation will need to recognise the present challenges for Māori created by historical displacement, while respecting the mana of iwi, hapū and Māori communities who are exercising their rangatiratanga within their rohe or takiwā. It will also need to accommodate the fact that tribal rohe and takiwā boundaries are not the same as district or regional planning boundaries. This means adaptation planning may need to occur across traditional planning boundaries. Flexibility in a system for adaptation and planned relocation will be important and necessary to enable iwi, hapū and Māori communities to coalesce and make decisions at different levels, and perhaps by specific location.

Tiriti-based approach to adaptation and planned relocation

- 2.55. We considered that the current and historical context of colonisation and dispossession and regulation of Māori land, and the present-day impacts of colonisation on iwi, hapū and Māori communities (especially their tendency to be located in high-risk areas and have a lower socio-economic status) heighten the Crown's obligations to them in developing a policy for adaptation and planned relocation.
- 2.56. An approach to adaptation and planned relocation based on te Tiriti is required. This has a few implications for policy development. We think it begins with how a policy or programme of planned relocation is framed, and extends throughout the process from inception to implementation. This includes how risk is assessed and who assesses it, how communities are involved in identifying and assessing options, how decisions are made and implemented, how solutions are developed that recognise the cultural impacts of relocating marae or Māori from their home or whenua, and what support is provided to the diverse Māori communities who are affected.
- 2.57. Rangatiratanga – the right of Māori to make decisions that affect their lives – must form the core of such an approach. We are, after all, talking about moving people from their homes and whenua – places to which they are deeply connected, which hold their history and form part of their identity.

- 2.58. Supporting rangatiratanga requires the integration of whakaaro Māori across a system of adaptation and planned relocation. The report of the Ministerial Inquiry into Land Uses in Tairāwhiti and Wairoa recognises the importance of the role of Māori in decision-making:¹⁴⁰

The [Gisborne District Council] has also unilaterally determined not to collaborate with mana whenua – deciding instead to establish separate networks and conduct its communication through local media. This is neither Treaty-based partnership, nor recognition that over half the district’s population is Maori, most of whom are tangata whenua to one or more of the local iwi. This gratuitous use of its power as a territorial local authority flies in the face of its responsibility to “enable democratic local decision-making and action by, and on behalf of, communities...”. People are especially concerned about the future that will be created for their children and mokopuna without more effective and future leadership and planning. This appears to be an issue at both the iwi authority and community level, with both iwi and Maori communities calling attention to the lack of engagement and partnership when decisions are made that affect them.

- 2.59. A Tiriti-based approach¹⁴¹ that supports rangatiratanga involves more than simply consultation with iwi, hapū and Māori communities. It includes:

- adopting te ao Māori approaches to policy development, including risk assessments informed by kaupapa Māori
- engagement with Māori from an early stage in policy development and throughout the process (such as the process outlined in the Framework for National Climate Change Risk Assessment for Aotearoa)¹⁴²
- Māori community involvement in decision-making about relocating communities – from the decision to relocate, to the identification of new sites, and the implementation of a planned relocation policy
- consideration of the appropriate use of powers in the Māori context
- a role for Māori in any institutions involved in a system for adaptation and planned relocation
- sufficient and appropriate support for Māori to participate in the development and implementation of an adaptation and planned relocation, as well as for the actual relocation of hapū, whānau and cultural assets (such as financial and social support).

¹⁴⁰ Ministerial Inquiry into Land Uses in Tairāwhiti and Wairoa. 2023. *Outrage to Optimism - Report of the Ministerial Inquiry into land uses associated with the mobilisation of woody debris (including forestry slash) and sediment in Tairāwhiti/Gisborne District and Wairoa District*. New Zealand: Ministerial Inquiry into Land Uses in Tairāwhiti and Wairoa. p 36.

¹⁴¹ We do not propose here to discuss the principles of te Tiriti in detail, nor to isolate any individual principles at the expense of the whole. For a discussion of the principles of te Tiriti acknowledged by the courts and emerging in jurisprudence, see Peart R, Boston J, Maher S, Konlechner T. 2023. *Aotearoa New Zealand’s Climate Change Adaptation Act: Building a Durable Future, Principles and Funding for Managed Retreat, Working Paper 1*. Auckland: Environmental Defence Society. pp 25–27.

¹⁴² Ministry for the Environment. 2019. *Arotakenga Huringa Āhuarangi: A Framework for the National Climate Change Risk Assessment for Aotearoa New Zealand*. Wellington: Ministry for the Environment.

2.60. This view is echoed in the EDS report:¹⁴³

The current approach to managed retreat is not informed by a te ao Māori worldview, which would see its objectives and principles redrafted from a place of rangatiratanga, with tikanga as the guide. Adopting a te ao Māori worldview would mean moving from an approach where Māori interests are narrowly confined to ‘cultural’ concerns, to a situation where collaborative governance occurs on an equal footing with the Crown from the outset... A prerequisite to such a ‘tika’ approach is the availability of funding to build capacity in the rangatiratanga ‘sphere’, so it becomes of equal strength to kawanatanga in decision-making, and so that Māori have adequate resources to fulfil their kaitiaki obligations.

2.61. It is also reflected in the Government’s national adaptation plan:¹⁴⁴

Upholding the principles of te Tiriti o Waitangi is a central aspect of the Government’s long-term adaptation strategy. This means developing adaptation responses in partnership with Māori, elevating te ao Māori and mātauranga Māori in the adaptation process and empowering Māori in adaptation planning for Māori, by Māori.

2.62. These matters are addressed more fully in the sections that follow, but now, we turn to an issue that is closely related to rangatiratanga: how we frame a policy of planned relocation.

Framing a policy of ‘managed retreat’

2.63. ‘Managed retreat’ is the term most used in Aotearoa New Zealand for relocating communities away from risk. There is some concern that this term can imply that decisions are imposed upon communities – in other words, that they are being forced to retreat.¹⁴⁵ Although it may be necessary for communities to avoid risk to life by retreating, forcing communities to relocate takes away their right to make decisions for themselves.

2.64. Particularly considering the historical context referred to above, we think it is important to frame the issue in a way that is empowering, rather than in a way that diminishes the ability of iwi, hapū and Māori communities to make decisions about their own futures.

2.65. ‘Te hekenga’ is a phrase used to describe the migration of people to Aotearoa New Zealand, along with the many movements of iwi, hapū and Māori communities within the country, including in response to both seasonal changes and natural hazards. ‘Rauora’ (abundance)¹⁴⁶ is a notion that implies positive outcomes and the opportunity to improve. For example, planned relocation could provide the opportunity to reduce inequity, improve housing stock, restore ecosystems and create resilient communities. This framing supports the narrative that communities will work together to determine their own move, or migration, away from areas at

¹⁴³ Peart R, Boston J, Maher S, Konlechner T. 2023. *Aotearoa New Zealand’s Climate Change Adaptation Act: Building a Durable Future, Principles and Funding for Managed Retreat, Working Paper 1*. Auckland: Environmental Defence Society. p 18.

¹⁴⁴ Ministry for the Environment. 2022. *Adapt and thrive: Building a climate-resilient New Zealand – New Zealand’s first national adaptation plan*. Wellington: Ministry for the Environment. p 13.

¹⁴⁵ Maldonado J, Marino E, Iaukea L. 2020. *Reframing the language of retreat*. *Eos* 101.

¹⁴⁶ See also the Rauora Framework, which is an indigenous worldview framework developed for the first national adaptation plan: Irihangi. 2021. *Exploring an indigenous worldview framework for the national climate change adaptation plan – Summary document*. Prepared for the Ministry for the Environment by Irihangi.

risk to new areas where they can build a safe future for their hapū and whānau. It also draws on the historical narrative of Māori migration to and within Aotearoa New Zealand, and the strength exhibited by Māori during that migration.

- 2.66. Te hekenga rauora is a draft term (and not a literal translation) for community-led planned relocation, with an emphasis on ensuring that the needs and aspirations of iwi, hapū and Māori communities are prioritised in the process of relocation. We suggest it as a starting point for discussion, but we recognise it will need to be supported by, and adopted in partnership with, Māori.

Recommendation 2

We recommend a reframing of the concept of 'managed retreat' to one that:

- is more inclusive of the social, cultural and psychological risks that accompany relocation of communities
- reflects that communities should make decisions about their futures together
- supports rangatiratanga.

We suggest that an appropriate framing that reflects the Aotearoa New Zealand context could be 'te hekenga rauora', which loosely expresses the concept of community-led, planned relocation.

- 2.67. We suggest that the following key principles underpin planned relocation, to ensure that community-led adaptation addresses the unique needs of iwi, hapū and Māori communities, and that it avoids exacerbating existing inequities. They build on the principles in chapter 1 to guide how planned relocation should be undertaken.¹⁴⁷

2.67.1. **A partnership approach grounded in the principles of te Tiriti:** The Crown and Māori must work together to develop a framework for relocation, with Māori involved in all capacities, including iwi, hapū, whānau, mātauranga Māori and kaupapa Māori expertise, and as decision-makers.

- This principle builds on the chapter 1 principles that planned relocation should be informed by the best available evidence and expert advice, reflect important community values and aspirations, and give effect to te Tiriti and honour the intent of settlements.

¹⁴⁷ We note that Ministry for the Environment. 2022. *Adapt and thrive: Building a climate-resilient New Zealand – New Zealand's first national adaptation plan*. Wellington: Ministry for the Environment identifies principles for adaptation (at p. 33), many of which broadly align with these principles, including to:

- uphold te Tiriti o Waitangi, and work in partnership with Māori to address climate risk
- maximise opportunities, and avoid disproportionately affecting Māori or locking in existing inequities
- work inclusively with affected groups to understand their needs
- take opportunities to reduce inequalities and support communities and regions to promote resilience in line with local objectives
- prioritise support to those most affected and least able to adapt, particularly lower-income households.

- 2.67.2. **Recognition of context:** The development of an adaptation policy (including planned relocation) must proceed with an understanding and recognition of the historical context of the Crown–Māori relationship, the unique rules that apply to Māori land under Te Ture Whenua Māori Act 1993, the challenges that arise from those rules, and the current challenges that arise because of historical displacement.
- This principle builds on the chapter 1 principles that a planned relocation policy should reflect important community values and aspirations, and give effect to te Tiriti and honour the intent of settlements.
- 2.67.3. **Preservation of mana and rangatiratanga:** The principle that iwi, hapū and Māori communities make decisions for themselves needs to be embedded into the framework.
- This principle builds on the chapter 1 principles that the process for planned relocation should reflect important community values and aspirations, and give effect to te Tiriti and honour the intent of settlements.
- 2.67.4. **System flexibility:** The diversity of rights, needs, and vulnerabilities of Māori means that the framework must be flexible enough to enable those rights to be upheld, and those needs met, within the context of each Māori community, supporting equitable outcomes.
- This principle builds on the chapter 1 principles that the planned relocation process should reflect important community values and aspirations. It should be adaptable to meet the pace, scale, and variable circumstances of relocation.
- 2.68. Two further principles will also contribute to the outcomes identified in chapter 1 and address the unique needs of iwi, hapū and Māori communities.
- 2.68.1. **Holistic:** The framework needs to facilitate a holistic approach, that supports all community members (not just landowners), from leaving one area to re-establishing in a new area (communities and community infrastructure) – both financially and socially.
- 2.68.2. **Equitable funding:** Iwi, hapū and Māori communities will require financial support to participate in adaptation and planned relocation. Public funding options should be considered.

Recommendation 3

We recommend that the Government consider adopting the principles above as the basis for a system of adaptation and planned relocation, or te hekenga rauora for iwi, hapū and Māori communities.

The issues

2.69. This report discusses how a central government policy for adaptation and planned relocation could be framed. We address how the need for relocation should be identified through an adaptation planning process, what additional powers are required to support planned relocation, what specific institutional arrangements need to be in place, and how the relocation of communities should be funded. The remainder of this chapter addresses how a Tiriti-based approach to community-led planned relocation could be properly reflected in the consideration of each of those issues, considering the context above.

Framework for adaptation planning

2.70. Planned relocation is one of a range of possible responses, or adaptations, to the risks of climate change. Chapter 3 of this report suggests that, to determine whether planned relocation is appropriate, communities should engage in an adaptation planning process. In summary, that process involves:

- undertaking a risk assessment
- identifying and assessing options for adaptation
- creating an adaptation plan that sets out adaptation measures to be taken
- creating a relocation plan for implementing the process of relocation if it is required.

2.71. A Tiriti-based approach requires that each of these steps involve Māori in various capacities – for example, as mana whenua, PSGEs, Māori landowners, business owners, homeowners, renters, iwi, hapū and whānau.

Risk assessment

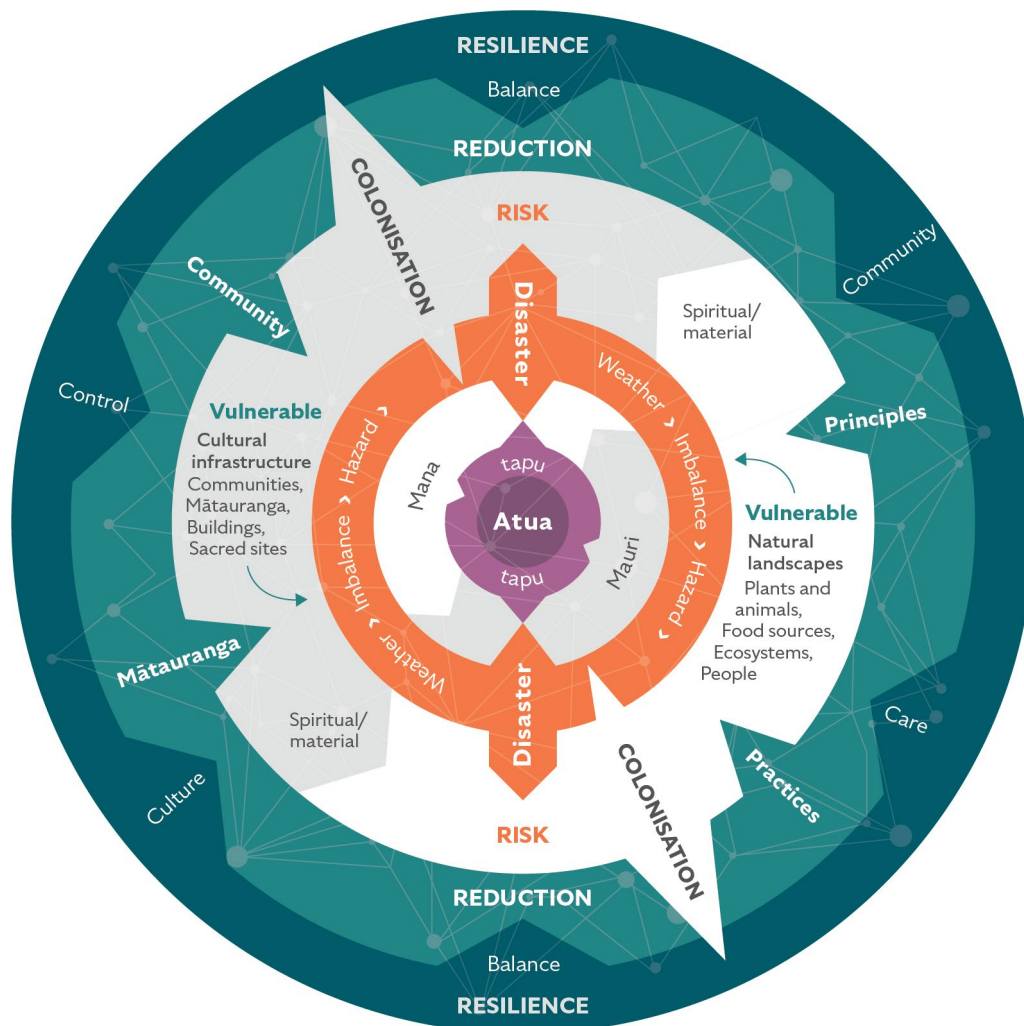
2.72. Assessing risk and identifying options for adaptation responses will require input from a range of perspectives. Financial and/or engineering expertise will be necessary, but those types of assessments should be applied within the context of a kaupapa Māori perspective.

2.73. A kaupapa Māori framework for considering risk affirms the importance of Māori self-definitions and self-evaluations. It enables a holistic assessment that considers the impacts on people's health, livelihoods, and taonga, including (but not limited to) wāhi tapu, cultural infrastructure such as marae, significant historical sites, and mahinga kai.¹⁴⁸

2.74. Figure 2 shows an example of a kaupapa Māori framework for considering risk.

¹⁴⁸ See, for example, Rout 2023; and Awatere S, Ngaru King D, Reid J, Williams L, Masters-Awatere B, Harris P, Tassell-Matamua N, Jones R, Eastwood K, Pirker J, Jackson A-M. 2021. *He huringa āhuarangi, he huringa ao: A changing climate, a changing world*. Prepared for Ngā Pae o te Māramatanga by Manaaki Whenua — Landcare Research.

Figure 2: Kaupapa Māori framework for risk assessment



- 2.75. The kaupapa Māori framework for risk assessment reflects the holistic, relational and cyclical nature of hazards, disasters, risk and vulnerability, reduction and resilience.
- 2.76. 'Atua' can be observed as a representation of te taiao where:
- mana is the recognition of intrinsic value, irrespective of human value
 - mauri is the signifier of the life force of natural assets.
- 2.77. Climate change is causing imbalance, resulting in climate impacts that increase hazards. This process leads to cumulative effects on natural assets that have been degraded and creates disasters affecting iwi, hapū and Māori communities.
- 2.78. Iwi, hapū and Māori communities should develop an assessment of risk, alongside a panel of experts. Only iwi, hapū and Māori communities should decide on the processes for determining the vulnerability of whenua Māori and taonga. Māori need to be supported by local and central governments to define, measure and implement risk assessments from their perspectives.

Adaptation planning

- 2.79. Following a risk assessment, communities will need to identify options and create an adaptation plan, which will set out what adaptation measures will be taken to reduce risk to the community. One option – at the most extreme end of the scale – is a relocation from certain land uses. For example, land may be identified as inappropriate for permanent housing, accommodation, or infrastructure (although communities may decide that other, less permanent or risk-prone activities may still be appropriate).
- 2.80. Māori must be empowered to participate throughout the adaptation planning process. A robust approach to engagement with Māori is essential to produce better quality outcomes and realise Māori-Crown partnerships. Processes for engagement with Māori outlined in the Framework for National Climate Change Risk Assessment for Aotearoa¹⁴⁹ should be followed in the development of community-led adaptation and planned relocation plans. The following aspects are particularly relevant:
- acknowledgement of their rangatiratanga and status as Tiriti partners
 - acknowledgement that mātauranga Māori makes an important contribution to solving policy and practical problems
 - acknowledgement that some issues affect Māori disproportionately, and Māori are therefore better placed to develop solutions.
- 2.81. Putting these principles into practice, a framework for adaptation planning should include the following features.
- Processes for deciding if a community-led adaptation and planned relocation plan relating to iwi, hapū, and Māori communities is necessary will need to be determined by those communities.
 - Access to good quality information is important, to enable iwi, hapū and Māori communities to exercise rangatiratanga. This information should be shared with iwi, hapū and Māori communities, including landowners and governors (such as trustees, committees of management and PSGEs).
 - Space will need to be provided for wānanga/workshops for iwi, hapū and Māori communities to draw upon mātauranga Māori, including the opportunity to rediscover historical narratives around relocation,¹⁵⁰ to inform the relocation process.
 - Mātauranga Māori should be considered and applied alongside Western knowledge, worldviews and values in any decision-making process.
 - Iwi, hapū and Māori communities should make decisions on planned relocation as an adaptation option – particularly where that will affect taonga and Māori relationships with

¹⁴⁹ See Ministry for the Environment. 2019. *Arotakenga Huringa Āhuarangi: A Framework for the National Climate Change Risk Assessment for Aotearoa New Zealand*. Wellington: Ministry for the Environment.

¹⁵⁰ Peart R, Boston J, Maher S, Konlechner T. 2023. *Aotearoa New Zealand's Climate Change Adaptation Act: Building a Durable Future, Principles and Funding for Managed Retreat, Working Paper 1*. Auckland: Environmental Defence Society notes (at p 25) that “[m]any traditional narratives hold mātauranga about risk and customary or historical practices including informing ideas around adaptation. For example, the whakatauki ‘Ka mate kāinga tahi, ka ora kāinga rua’ refers to resilience, perseverance and preparedness and suggests that when one’s home is no longer habitable, another can be found.”

those taonga, including (but not limited to) whenua Māori (either Māori freehold or customary land), wāhi tapu, mahinga kai, and urupā.¹⁵¹

- The framework should be sufficiently flexible to recognise that takiwā and rohe boundaries do not always align with district and regional council boundaries. Iwi, hapū and whānau may wish to organise themselves and interact with the process at different levels or by specific location.
- The Crown should fund partnership processes with iwi, hapū, and Māori communities, and the development of adaptation plans by those communities.

2.82. Many of these features are reflected in the following passage from the EDS report:¹⁵²

It will be important to ask iwi and hapū how they wish to proceed with long term adaptive planning and for funding to be well targeted to their activities. Funding will need to be more accessible to communities who need it. For example, access to Māori researchers is often needed to complete research application proposals (eg Deep South Challenge Te Taura Fund) but there is a very limited number of Māori researchers in Aotearoa New Zealand and many of them are too busy to assist.

2.83. Where planned relocation of communities and sites of cultural infrastructure is being considered, it will be important to discuss:

- how to identify and acquire sites for relocation within the rohe or customary area of the group or landowners being relocated¹⁵³
- how to fast-track or streamline the provision of any consents required to facilitate relocation
- how to fast-track and fund infrastructure required (eg, waters, roads, power) for the new site
- opportunities to rectify other socio-economic disparities, such as housing, roading, and water supply¹⁵⁴
- opportunities for Māori to exercise a kaitiaki role in rehabilitating and re-purposing the area relocated from, particularly to build resilience to climate change (eg, using nature-based adaptation solutions) and to restore the mauri of ecosystems.

¹⁵¹ Bargh M, Tapsell E. 2021. *For a Tika Transition: strengthen rangatiratanga. Policy Quarterly* 17(3): 13–22.

¹⁵² Peart R, Boston J, Maher S, Konlechner T. 2023. *Aotearoa New Zealand's Climate Change Adaptation Act: Building a Durable Future, Principles and Funding for Managed Retreat, Working Paper 1*. Auckland: Environmental Defence Society. p 45.

¹⁵³ For discussion of the importance of physical presence in rohe generally, see Ministry for the Environment. 2022. *Managed Retreat from a Māori perspective*. Prepared for the Ministry for the Environment by Te Amokura Consultants (unpublished). p 12.

¹⁵⁴ See Ministry for the Environment. 2022. *Managed Retreat from a Māori perspective*. Prepared for the Ministry for the Environment by Te Amokura Consultants (unpublished). p 14. This includes discussion of whether managed retreat provides opportunity to rectify or address other socio-economic issues such as housing, roading, water supply. See also Peart R, Boston J, Maher S, Konlechner T. 2023. *Aotearoa New Zealand's Climate Change Adaptation Act: Building a Durable Future, Principles and Funding for Managed Retreat, Working Paper 1*. Auckland: Environmental Defence Society (at p 61) for discussion about the opportunity to 'build back better', while recognising the need to avoid the mistakes of the past – including the use of public works legislation to confiscate land from Māori in the name of infrastructure.

- 2.84. The Tangoio Marae project, referred to above, is a good example of community-led adaptation planning. In that case, a flood adaptation game was developed called Marae-opoly. The game helped the hapū assess how sea-level rise and extreme floods might impact marae assets. To support the hapū decision-making processes, hydrological and hydrodynamic modelling was undertaken to identify how the marae might mitigate flood impacts in the future. Using Marae-opoly, the hapū worked through the uncertain and complex climate change impacts by examining trade-offs, developing strategies for the future, and assessing how well these strategies would serve them.
- 2.85. That project identified that deeper engagement and interdisciplinary approaches are needed to support iwi, hapū and Māori communities with climate adaptation. It illustrated that knowledge held by scientists, environmental managers, and Māori needs to be shared, so that they can co-develop plans that respond to climate change and also meet community aspirations. This type of approach should be considered in developing plans for community-led adaptation and planned relocation.

Powers

- 2.86. Chapter 4 addresses the range of new powers that will be required to support the relocation of communities away from risk. Comprehensive powers will be required to enable or (where appropriate) to compel changes in land use (ie, to restrict land being used for activities vulnerable to risk). Powers will also be needed to enable the Crown or local governments to acquire that land. Amendments to existing obligations, such as to continue to provide infrastructure, may also be required.
- 2.87. In some situations, the acquisition of land for new communities may be needed, and the development of those new communities will need to be fast-tracked. Although the latter is beyond the scope of this report, we note that planning for 'where to go' is a fundamental aspect of community-led planned relocation from a te ao Māori perspective and should be considered further.
- 2.88. The application of a planned relocation policy to Māori-owned land needs to take account of the complexities addressed earlier in this chapter, namely:
- the historical dispossession of land – both via policies which have been subsequently recognised as breaches of te Tiriti by the Crown and via the application of public works legislation
 - the special significance of land to Māori as a taonga tuku iho and their relationship with that land, including the importance of the principle of ahi kā
 - the special rules set out in Te Ture Whenua Māori Act 1993 that apply to the alienation and changes in land use for Māori land
 - the circumstances in and purposes for which land has been returned to Māori via Tiriti settlements
 - the impact of land ownership and occupation on customary marine title rights over the marine and coastal area.
- 2.89. In relation to point 5, continuous occupation and ownership (from 1840 to the present) of the land contiguous to or abutting the marine and coastal area claimed is a relevant consideration

for determining or recognising customary marine title under the Takutai Moana Act.¹⁵⁵ In the event that iwi, hapū and whānau do relocate away from coastal areas, or those areas are subject to land-use changes that may affect a claim under the Takutai Moana Act, amendments to that Act may be required to preserve such claims.

- 2.90. These factors contribute to our view that Māori-owned land, including land returned via Tiriti settlements, should not be acquired by others as part of a programme of relocation – unless that is desired by the Māori landowners. A planned relocation policy therefore needs to consider how Māori can retain ownership of land relocated from, and continue to exercise their rights on that land as mana whenua. This includes maintaining relationships with cultural sites and exercising kaitiakitanga and other customary rights.
- 2.91. However, a planned relocation policy also needs to ensure that the needs of iwi, hapū and Māori communities are met, while ownership and certain uses of land are retained. These needs include the need to be rehoused in a safe location, and the ongoing need for infrastructure. This will require close collaboration with iwi, hapū and Māori communities to identify their needs and desires associated with relocation. The opportunity to achieve more positive outcomes for Māori should be a focus of this collaboration.
- 2.92. There may be opportunities to implement a planned relocation policy using existing powers of the Māori Land Court. For example, one option for controlling the use of Māori land vested in trustees (including, but not limited to, Māori reservations) is a trust order issued by the Māori Land Court. Trust orders limit what trustees can do with the land. A trust order could restrict or prohibit certain activities that would create an intolerable risk to health and life (such as continued housing or papakāinga), while not restricting activities that do not involve such risk. For example, agricultural and pastoral activities might be able to continue under some circumstances, at least for a period.

Impact on Tiriti settlements

- 2.93. The potential impact of a planned relocation policy on Tiriti settlements is particularly important. A policy decision that changes or limits land use (such as limiting or preventing the use of such land for certain commercial or other purposes) could undermine the integrity of Tiriti settlements. This is particularly relevant given one of the stated aims of Tiriti settlements, generally, is to build an economic base for the settling group.
- 2.94. The Crown will also hold land subject to Tiriti settlements that the iwi has not yet had the chance to acquire (ie, under a right of first refusal or deferred selection process). If this land is affected by an adaptation and planned relocation policy to the point that the Crown could not transfer it to iwi, this may affect the value of the settlement reached.
- 2.95. The proposed Natural and Built Environment Bill (NBE Bill) and Spatial Planning Bill (SP Bill)¹⁵⁶ provide for the intent, integrity and effect of Tiriti settlements to be upheld in the new resource management system. The same should apply here.

¹⁵⁵ Marine and Coastal Area (Takutai Moana) Act, s 59(1)(a)(i).

¹⁵⁶ See Schedule 2 of both the Spatial Planning Bill and the Natural and Built Environment Bill.

- 2.96. We consider that PSGEs and the Crown will need to identify and work through the potential impacts on Tiriti settlement land – and the solutions – on a case-by-case basis. PSGEs affected by proposals for planned relocation and the Crown will need to reach an agreement on what the impact on settlement land is likely to be, and how the intent of the settlement can be upheld. This will depend on a range of factors, including the land affected, whether it includes cultural or commercial redress, and the aspirations of iwi. It will be necessary to consider whether the adaptation and planned relocation policy affects the ability of a settling iwi to build an economic base. If so, the Crown will need to consider making alternative land available to provide the economic base.
- 2.97. A report commissioned by the Ministry for the Environment suggested the Crown should consider amending Tiriti settlements to refer explicitly to planned relocation, particularly to ensure that iwi have a role in exploring the adaptation options (including planned relocation) and responses to risks that impact their communities.¹⁵⁷ Many Tiriti settlements contain relationship instruments or protocols with government agencies that have climate change and planned relocation responsibilities, such as the Ministry for the Environment. These arrangements often include regular meetings, engagement on policy development and information sharing. We do not know to what degree these existing commitments are observed, or whether these existing mechanisms could provide a role for iwi.

Institutions

- 2.98. Chapter 6 addresses the institutional arrangements required to support a system that enables the planned relocation of communities and infrastructure. Various institutional arrangements will be needed to support risk identification, community-centred planning, and funding – over generations of change and across multiple government agencies and political terms.
- 2.99. Government institutions can be difficult for Māori to navigate. They often operate in silos and seek to engage with Māori in ad hoc ways, sometimes unaware of each other's interactions with iwi, hapū and Māori communities. Consideration should be given to this issue when developing new, or amending existing, institutional arrangements. Each chapter in the national adaptation plan records the government agencies with actions or responsibilities.¹⁵⁸ It is important that these roles are coordinated within and among agencies. Clear communication with Māori communities is also essential to avoid or limit inefficiencies and overburdening under-resourced communities.
- 2.100. Tiriti-based institutional arrangements to support adaptation and planned relocation of iwi, hapū and Māori communities should incorporate the following considerations.
- They should be designed alongside Māori, so that they are responsive to the needs of those communities.
 - They need to reflect a partnership approach to adaptation and planned relocation and ensure appropriate participation in the system for Māori, including in leadership and decision-making roles that affect Māori.

¹⁵⁷ Ministry for the Environment. 2022. *Managed Retreat from a Māori perspective*. Prepared for the Ministry for the Environment by Te Amokura Consultants (unpublished). p 10.

¹⁵⁸ Ministry for the Environment. 2022. *Adapt and thrive: Building a climate-resilient New Zealand – New Zealand's first national adaptation plan*. Wellington: Ministry for the Environment.

- They should consider te ao Māori perspectives and incorporate mātauranga Māori.
 - They should be sufficiently flexible and adaptable to take the local and historical context of each community into account, and to protect the diverse range of Māori rights and interests.
 - They should ensure equity for, and equal treatment of, Māori – including the possibility of specific or tailored institutional arrangements to ensure that Māori rights and interests are protected. Te ao Māori perspectives should be integrated into decision-making processes.
- 2.101. We also suggest that ‘navigators’ are established to help Māori landowners, leaders and communities work through the relocation process, including engagement with government agencies, where roles or functions may be divided across multiple agencies.
- 2.102. The Māori Climate Action Platform will perform an important role in supporting Māori to build climate change capacity and capability. This includes the ability to understand climate change impacts on their communities and to identify kaupapa Māori adaptation solutions. Any new, or altered, institutional arrangements should take this into account once properly established.

Funding and support for planned relocation of iwi, hapū and Māori communities

- 2.103. Chapter 5 addresses funding for planned relocation. It focuses on how homeowners, businesses and others affected by a planned relocation policy can be financially supported to move their homes or places of business away from areas of high risk. It does not address funding for building new communities and associated infrastructure, for social support, or to take advantage of potential opportunities arising from planned relocation.
- 2.104. Iwi, hapū and Māori communities are more likely to require support from central and local government agencies to relocate. Without adequate government support, most of the costs of relocation will fall on these communities and households, and will present a significant barrier to successful relocation.¹⁵⁹ Broad consideration of the funding and support that is required for relocating iwi, hapū and Māori communities is beyond the scope of this report, but we nevertheless address these issues, to contribute to ongoing discussions on the topic.
- 2.105. We start with the funding and support required for relocating iwi, hapū, Māori communities, and cultural infrastructure from Māori or Tiriti settlement land. We have already noted the need for iwi, hapū and Māori communities to retain ownership of that land. Funding will be required to assist with:
- providing alternative locations for housing/papakāinga and marae
 - moving or rebuilding physical structures
 - preservation of taonga, such as wāhi tapu, cultural infrastructure, significant historical sites, mahinga kai, and other cultural sites.

¹⁵⁹ Ministry for the Environment. 2022. *Managed Retreat from a Māori perspective*. Prepared for the Ministry for the Environment by Te Amokura Consultants (unpublished). p 13.

2.106. Funding approaches will need to be flexible, so that the individual circumstances of each Māori community can be addressed in a way that supports rangatiratanga. Iwi, hapū and Māori communities will require financial support to participate in adaptation and planned relocation planning processes, to identify options and decide on an appropriate approach for their community.

2.107. The relocation from land at risk from climate change also gives rise to opportunities to rehabilitate that land, restore and enhance ecosystems, and exercise kaitiakitanga. We think consideration should be given to funding these processes. Bargh and Tapsell note that:¹⁶⁰

A tika transition will involve funding Māori to build capacity for kaitiaki operations and to fulfil their rangatiratanga role alongside the Crown's kawanatanga. This was reiterated in the Randerson report, which recommended that funding be provided to Māori who are undertaking resource management duties in the public interest.

2.108. We have also noted the specific issues that arise in the context of Tiriti settlement land – especially because of the potential economic impacts of restricting land use on land returned as commercial redress. The Crown will need to address this issue with each PSGE on a case-by-case basis.

2.109. The higher levels of socio-economic deprivation among Māori mean that many will own lower-value homes in vulnerable areas or will be renting. Both groups require support to relocate – but the type of support required for each will be different. Renters face the possibility of decreased rental housing availability, which is likely to result in higher rents, overcrowding, and substandard living conditions. In addition, an increased housing shortage may result, which is likely to drive house prices up and may result in the same unacceptable conditions that renters face. The dynamics of iwi, hapū and whānau relationships may mean that Māori will want to relocate to new areas as a community, rather than moving individually to new cities or suburbs. As noted above, the historical context may exacerbate the trauma of planned relocation.

2.110. We think a coordinated approach is required, involving agencies tasked with social outcomes (such as Te Puni Kōkiri, Ministry of Social Development, Ministry of Housing and Urban Development and Kainga Ora), to ensure that appropriate support services for planned relocation are provided to iwi, hapū and Māori communities, including those in urban areas.

2.111. Development, and Kainga Ora), to ensure that appropriate support services for planned relocation are provided to iwi, hapū and Māori communities, including those in urban areas.

¹⁶⁰ Bargh M, Tapsell E. 2021. *For a Tika Transition: strengthen rangatiratanga. Policy Quarterly* 17(3): 13–22 at p 19, citing Resource Management Review Panel. 2020. *New Directions for Resource Management in New Zealand*. Wellington: Ministry for the Environment. p. 116.



Chapter 3

Framework for adaptation
planning and planned relocation

3. Framework for adaptation planning and planned relocation

Introduction

- 3.1. This chapter discusses our recommendations for planning and undertaking planned relocation/te hekenga rauora. Because planned relocation is one of a spectrum of options available to communities to adapt to and reduce risks from climate change and other natural hazards, planning for relocation cannot be separated from adaptation planning more generally.¹⁶¹ This chapter therefore proposes a framework for planned relocation as part of a framework for adaptation planning. Our expectation is that the new legislation (the proposed Climate Change Adaptation Act) will legislate for planned relocation as part of legislating for adaptation planning.
- 3.2. Adaptation planning, and to a much lesser extent relocation planning, is already occurring in Aotearoa New Zealand. Both local government and Māori communities have started planning.¹⁶² However, this work is being undertaken primarily in non-regulatory settings. The current legislative framework is not designed for adaptation planning or planned relocation that seeks to reduce risk for existing communities. The key piece of planning and environmental management legislation in Aotearoa, the Resource Management Act 1991 (RMA), does not provide a clear mandate or 'fit-for-purpose' tools and mechanisms to plan and implement a relocation. On its own, the RMA is not sufficient to enable a relocation (see chapter 4). The issues with the current system for adaptation planning and planned relocation are comprehensively set out in two publications from the Resilience to Nature's Challenges National Science Challenge,¹⁶³ and in a recent report by the Environmental Defence Society.¹⁶⁴
- 3.3. The legal environment for planning for adaptation and planned relocation for existing communities can be contrasted with the legal environment for planning for new communities. The planning system is better equipped to manage the creation of risk from new development than to address risk that is a legacy of already established development.

¹⁶¹ Adaptation considers the full range of options for areas already subject to high or increasing risk. Those options include avoiding uses of land that would create risk, protecting assets and people from risk, accommodating risk by making adjustments so risk can be lived with, and retreating from risk (planned relocation).

¹⁶² See, for example, Maketu Iwi Collective. 2022. *He Toka Tū Moana Mō Maketu – Maketu Climate Change Adaptation Plan*. Retrieved 3 August 2023.

¹⁶³ Lawrence J, Allan S, Clarke L. 2021. *Enabling Coastal Adaptation: Using current legislative settings for managing the transition to a dynamic adaptive planning regime in New Zealand*. Wellington: Resilience to Nature's Challenges National Science Challenge – Enabling Coastal Adaptation Programme; and Grace ES, France-Hudson BT, Kilvington MJ. 2019. *Reducing risk through the management of existing uses: tensions under the RMA*. GNS Science Report 2019/55. Lower Hutt: GNS Science.

¹⁶⁴ Peart R, Tombs BD. 2023. *Aotearoa New Zealand's Climate Change Adaptation Act: Building a Durable Future – Current Legislative and Policy Framework for Managed Relocation: Working Paper 2*. Auckland: Environmental Defence Society.

- 3.4. Our focus is on the lack of legislated mandate, processes, powers, institutional arrangements, and funding to support planned relocation, in a context of adaptation planning. Gaps arise from:
- no clear, specific, mandated requirement to reduce risk through planning and implementation of adaptation and relocation
 - a lack of national direction on when and how to plan for relocation (national guidance suggests how to approach adaptation planning in a coastal context, but no nationally consistent direction recommends when and how planned relocation becomes a valid response to risk, or on the role of risk tolerance)
 - insufficient powers, tools, and mechanisms to carry out a planned relocation (see chapter 4), resulting in adaptation plans that are difficult to implement
 - no clearly articulated roles and responsibilities for enabling planned relocation, both from a planning perspective and from a funding perspective (see chapter 5).
- 3.5. We have concluded that a bespoke system, integrated with relevant existing systems and processes, is required to bring together and (where necessary) create the agencies, powers, and processes necessary to enable a coordinated and nationally consistent approach to adaptation planning and planned relocation. A complete system is needed, from risk assessment and planning to implementation, review and monitoring.
- 3.6. A system that enables planned relocation must address – in a way that meets te Tiriti o Waitangi (te Tiriti) obligations – the needs for:
- the process to be community-centred and consider the well-being of present and future generations
 - adaptation and risk reduction to override other drivers in the land-use planning system
 - a forward-looking approach to increasing climate risk as impacts worsen
 - discrete powers and financial mechanisms required to change existing and established land uses and ownership in a coordinated, timely, and equitable way to implement planned relocation.
- 3.7. In this chapter, we discuss:
- the context for planning for relocation (or managed retreat)
 - an overview of our proposed process for planning and implementing adaptation and relocation, including the key steps, te Tiriti considerations, community and stakeholder involvement, decision-making, and checks and balances
 - the three steps of the planned relation process: understanding the need to adapt, planning to adapt, and undertaking adaptation
 - our recommendations for national direction
 - an integration of our process with the current and proposed planning systems.

Context

- 3.8. This section provides a basic explanation of natural hazard and climate change risk and planned relocation. We introduce adaptation planning, explain the role of managing land use in reducing risk, and discuss the challenges with using the existing and proposed land-use planning systems for adaptation planning and planned relocation.

Risk and planned relocation basics

- 3.9. The notion of risk is forward looking and is ‘the effect of uncertainty’ on our objectives.¹⁶⁵ It has traditionally been considered as the combination of the likelihood (probability) of an event of any magnitude occurring and the consequences (impact) of that event. But risk defined in terms of likelihood is unhelpful when risk is changing over time, and past low probability extremes become more common and therefore more certain. Climate change risk considerations include both climate events and progressive changes that compound uncertainties. These uncertainties, however, do not mean that we should not plan for future climate change risks – rather, the risks need assessment and planning.
- 3.10. Assessment of risk from natural hazards that are not affected by climate change, such as seismic hazards, is also important. For seismic hazards, considering the consequences of a natural hazard event against the probability of occurrence can still be helpful. A large rockfall during an earthquake or a tsunami can present risks to life that are high enough for planned relocation to be considered to reduce the risk.
- 3.11. The Intergovernmental Panel on Climate Change (IPCC)¹⁶⁶ has defined risk from climate change as the potential for adverse consequences for human and ecological systems,¹⁶⁷ recognising the diversity of values and objectives associated with such systems. This applies to geological and seismic risks, as well as to climate change risks. Risk is therefore not just a technical concept. It encompasses competing values and objectives that involve value judgments and precaution. The consequences embrace well-being (social, cultural, economic and environmental) and the agility of governance and financial arrangements.
- 3.12. The actions required to address high levels of risk depend on the regulator’s tolerance for risk (or risk appetite), which should be informed by the community’s tolerance for risk. In other words, what level and frequency of disruption and potential harm are the regulator and community prepared to accept and respond to, compared with the costs (not just financial) of implementing an intervention to reduce the disruption and potential harm? The costs include opportunity costs – for example, the cost of forgoing development and its associated benefits.

¹⁶⁵ Standards New Zealand. 2021. *ISO 14091:2021*. Retrieved 8 August 2023.

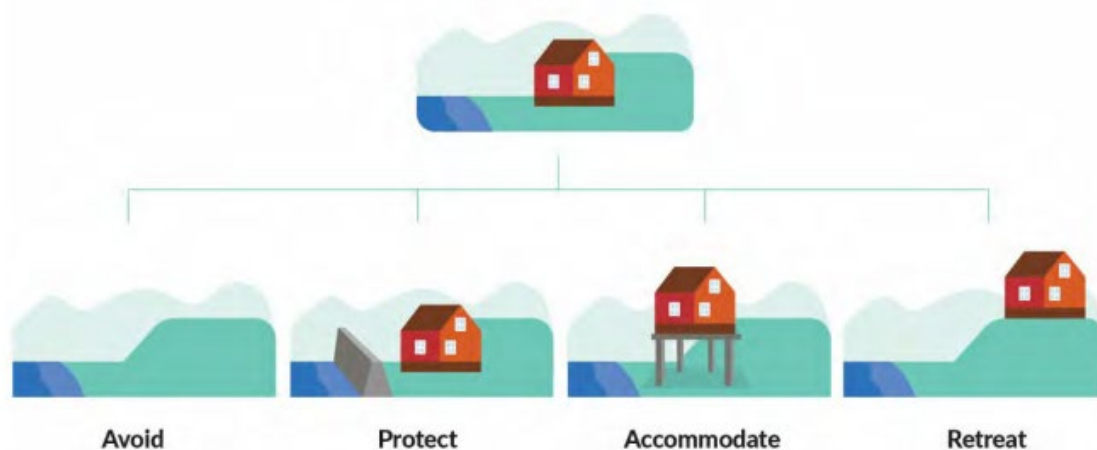
¹⁶⁶ Reisinger A, Howden M, Vera C, Garschagen M, Hurlbert M, Kreibiehl S, Mach KJ, Mintenbeck K, O’Neill B, Pathak M, Pedace R, Pörtner H-O, Poloczanska E, Rojas Corradi M, Sillman J, van Aalst M, Viner D, Jones R, Ruane AC, Ranasinghe R. 2020. *The concept of risk in the IPCC Sixth Assessment Report: a summary of cross-Working Group discussions. Guidance for IPCC Authors*. Geneva, Switzerland: Intergovernmental Panel on Climate Change.

¹⁶⁷ ‘System’ is a set of interrelated or interacting elements (Standards New Zealand. 2021. *ISO 14091:2021*. Retrieved 8 August 2023.) or through a te ao Māori lens, the implicit connectedness between taiao (environment) and tangata (people) and related mātaḡono or guiding principles. See Ministry for the Environment. 2019. *Arotakenga Huringa Āhuarangi: A Framework for the National Climate Change Risk Assessment for Aotearoa New Zealand*. Wellington: Ministry for the Environment. Box 1.

There are currently no national standards or thresholds for natural hazard and climate change risk tolerance in Aotearoa New Zealand. This means case-by-case consideration of risk tolerance is undertaken when planning for adaptation and relocation, including in post-event situations.

- 3.13. Natural hazard and climate change risk is generally not static. The reality of climate change means that the frequency and intensity of storm events are increasing and the impacts are compounding and cascading. Sea-level rise is accelerating and will continue to do so for centuries. In some places in Aotearoa New Zealand, the impacts will reach tolerance thresholds this decade and will continue to increase. Planning to reduce risk needs to account for the increase in risk over time and ideally include action before tolerance thresholds are reached.
- 3.14. Planned relocation removes risk by moving people and property (eg, buildings and structures) out of harm's way. It sits at one end of the adaptation action spectrum (see figure 3), which includes avoiding risk in the first place, protecting assets and people from risk through physical works (eg, stopbanks), accommodating risk by adopting land use activity standards and restrictions (eg, minimum floor heights or limited uses), and relocating away from the risk.

Figure 3: Adaptation options: avoid, protect, accommodate, retreat¹⁶⁸



- 3.15. Planned relocation will rarely be considered on its own. Instead, it is considered as an adaptation option when planning to reduce risk, including in a post-event situation. For a system for planned relocation to be practical and workable, it therefore needs to be considered in the broader context of adaptation planning to reduce risk.
- 3.16. Because the financial and social costs of implementing planned relocation are significant, it is generally thought of as a last resort, after protection and accommodation options have been exhausted. The 'last resort' approach deserves critical scrutiny, for three reasons.
- The inevitable effects of climate change mean that in many cases, protection and accommodation approaches will not be effective in the longer term.

¹⁶⁸ Ministry for the Environment. 2022. *Adapt and thrive: Building a climate-resilient New Zealand – New Zealand's first national adaptation plan*. Wellington: Ministry for the Environment.

- Early investment in temporary measures will be an expensive option over the life of the ongoing adaptation plan.
- Geological hazards (for example, fault rupture) may not have protection or accommodation options.

Adaptation planning

- 3.17. Adaptation planning is a process for understanding risk, considering options, and making decisions to achieve objectives for risk reduction, including climate change risks. Planned relocation is one option to reduce high and increasing levels of risk, ideally before they become intolerable. Adaptation planning is anticipatory – it anticipates and plans for changes in risk and the eventuation of different types of futures. In the context of climate change, adaptation planning addresses the certainty of impacts, along with the *uncertainty* in the exact timing of impacts, lead time to adjust, and speed of change.
- 3.18. Dynamic adaptive pathways planning (DAPP) is an adaptation planning approach that is familiar in Aotearoa New Zealand. It has been described as follows:¹⁶⁹
- Spatial and temporal uncertainty can be addressed over time through adjustments to the chosen options and pathways using signals to warn and triggers to decide, ahead of the impacts and with lead-time to implement, thus avoiding lock-in of unsustainable development pathways and inevitably, expensive reactive decisions in the near future.
- 3.19. Key elements of adaptation planning and planned relocation include the ability to:
- plan in circumstances of deep uncertainty
 - use scenarios to consider multiple futures
 - consider long planning horizons (at least 100 years)
 - assess multiple adaptation measures in a long-term context
 - decide on the triggers for future actions before they are needed and regularly review these
 - change adaptation actions or alter adaptation pathways, depending on when a pre-determined trigger is signalled.
- 3.20. Importantly, adaptation planning and planned relocation have an active component. They take proactive action or intervention. Action is needed to reduce risk, and in the case of planned relocation, the actions (moving people and assets) are significant.

¹⁶⁹ Lawrence J, Allan S, Clarke L. 2021. *Enabling Coastal Adaptation: Using current legislative settings for managing the transition to a dynamic adaptive planning regime in New Zealand*. Wellington: Resilience to Nature's Challenges National Science Challenge – Enabling Coastal Adaptation Programme. p 13.

Control of land use as an adaptation measure to reduce risk

- 3.21. Land-use planning and regulating land use can address high levels of risk by controlling the location, nature and scale of land uses, and by regulating physical protection works.
 - 3.21.1. The use of land in hazard areas has a direct impact on the level of risk, because the land-use type determines the extent of the consequences from a hazard event. Vulnerability and exposure of people and assets are key determinants of the severity of an
 - 3.21.2. event. Different types of land use will have different vulnerabilities (eg, a rest home will be more vulnerable than a storage facility). The intensity of the land use will also affect the exposure (eg, an apartment block results in higher exposure than a single dwelling). By controlling the use of land, we can manage vulnerability and exposure to hazards, control the extent of consequences and therefore manage the level of risk.
 - 3.21.3. Physical protection works can be used to control a hazard directly and therefore reduce risk. These works often require resource consents under the RMA. Planning policies and rules can be used to control these protection activities, by either enabling or discouraging them.
- 3.22. Land-use planning can offer tools for adaptation and relocation planning. Significantly, it can consider current risk levels and what types of land uses are most appropriate, given those risk levels. However, where existing land uses are not appropriate for the current level of risk, or when there is a need to consider future impacts of increasing risk, the current planning system is inadequate. The next section summarises the reasons for this (and see chapter 4 for more information).

Problems with using the current planning system for adaptation planning and planned relocation

- 3.23. The planning system under the RMA¹⁷⁰ provides for the development of objectives to promote the sustainable management of natural and physical resources, as well as policies, rules, and other methods to achieve those objectives. To summarise, plans are developed that set out the types of development that can occur in various locations (often based on the use of zones and overlays on maps), provisions for the protection of significant values, and regimes to allocate natural resources. Any rules and policies controlling activities must be based on an assessment of the *effects* of those activities and their appropriateness, given the purpose of the RMA, supported by robust evidence.
- 3.24. These plans are prepared based on static maps and the information available when the plan is prepared. They have a 10-year review cycle. This planning takes place on a district or regional basis (by territorial and regional authorities, respectively) and the process is guided

¹⁷⁰ The resource management planning system is currently undergoing reform. The implications of this reform are discussed later in this chapter.

by national policy prepared by the Minister for the Environment (jointly with the Minister of Conservation, for the New Zealand Coastal Policy Statement (NZCPS)).¹⁷¹

- 3.25. Plans prepared under the RMA are enabling or facilitating, rather than directive. That is, they set the parameters for the use of land and resources (noting that these should have been informed by input from the community), but they do not cause those land uses and resources to occur. The plans do not include actions; they simply control the effects of activities others may choose to undertake. District and regional plans are not able to assign responsibility or compel anyone to take actions, except for the local authorities that are responsible for them. The system is based on users and developers of land and resources making their own decisions to take actions to create land uses, within the parameters set by the plan. This system immediately raises an issue for planned relocation. Planned relocation is a purposeful process, from planning through to action, that requires multiple parties to have responsibilities and take action to achieve a reduction in risk through the physical removal of people and property. This process is fundamentally at odds with an enabling, facilitative (rather than directive) planning system. Planned relocation will not occur by just setting the parameters for planned relocation.
- 3.26. The planning system's underlying principle is that the use and development of land is a right, subject to constraints related to effects. It is centred on rights and permissions to use land, and, once created, it is challenging to change these rights and permissions. In addition, the RMA provides specific protection for existing uses¹⁷² (see chapter 4 for more detail). In this context, stopping new use and development requires very strong evidence of adverse effects, and removing or extinguishing existing uses is even more challenging. The relative lack of rules in plans to manage existing uses in hazard situations, despite the regional councils' ability to use such rules, illustrates this conundrum.¹⁷³
- 3.27. The planning system does not specifically enable adaptation or risk reduction (neither is mentioned in the RMA), although it is not ruled out. Adaptation and risk reduction under the RMA need to fit into concepts of 'adverse effects'; 'avoiding, remedying, and mitigating'; and 'natural hazards'. This awkward situation demonstrates that adaptation planning and planned relocation have not been specifically considered under the RMA.
- 3.28. The current planning system performs best with certainty and struggles to deal with uncertain situations. It is challenging to adopt restrictive provisions with incomplete or uncertain information. Land-use planning tools, such as maps and rules, are spatially and temporally static measures that rely on the best information available at the time of decision-making. Planning provisions are fixed for the 10-year life of the plan, or until a review begins. It does not appear to provide the ability to adapt and change approaches using pre-determined signals and triggers within a district or regional plan, without a separate plan change process

¹⁷¹ The New Zealand Coastal Policy Statement 2010 provides national policy for managing the coast. It includes a requirement to identify coastal hazards and direction to encourage the change of use to reduce risk, as well as other national hazard policies. Department of Conservation. 2010. *New Zealand Coastal Policy Statement 2010*. Wellington: Department of Conservation.

¹⁷² Through the Resource Management Act, ss 10 and 85.

¹⁷³ A handful of these rules can be found in regional plans. For example, the prohibition of residential activity on the Awatarariki fanhead (rules AREA2-R1 and AREA2-R2, Proposed Bay of Plenty Regional Natural Resources Plan), and restrictions on rebuilding following coastal erosion events (rule 9.1(b) of the Canterbury Regional Coastal Environment Plan, and rule C.8.6.1 of the Proposed Regional Plan for Northland).

each time (with the associated costs and delays). This is a significant hurdle to using the planning system for adaptation planning and planned relocation.

- 3.29. Land-use controls that are anticipatory are also challenging to include in plans under the current system, due to ‘the timing conundrum’.¹⁷⁴ This is based on an underlying assumption in the RMA that restrictions on private property rights need to pass a high threshold to be included in plans. In the case of risk reduction, this threshold is likely to be substantial existential risk. This means restricting existing uses and withdrawing from an area before the risk is intolerable may not be possible under the RMA (see chapter 4 for more detail).
- 3.30. A necessary aspect of most planned relocations is a change in the ownership of land (generally to the Crown or local authority). This ensures people are permanently removed from the risk. The planning system has no ability to change ownership of land, except in the specific case of designations.¹⁷⁵ Under the current system, processes and powers outside of the planning system are needed to change ownership and implement planned relocation. Moreover, these processes and powers do not specifically exist for planned relocation (see chapter 4).
- 3.31. The planning system also has no associated funding mechanisms. This is not surprising for a system that regulates land use. Funding to change ownership or carry out any other actions for adaptation planning or planned relocation needs to be sourced from different systems – systems not controlled by the current planning system.
- 3.32. All these factors mean that planning for adaptation and relocation under the RMA is significantly difficult. It is a very challenging process for a regional council or territorial authority to undertake, and it comes with high litigation risk. The process is also challenging because of a lack of strong national policy direction – and therefore national consistency – in when or how to consider planned relocation.
- 3.33. Table 1 summarises these points by showing whether the key elements in adaptation and relocation planning (set out in paragraph 3.19 above) are possible under the RMA.

Table 1: Planning for adaptation and relocation under the RMA

Key elements in planning for adaptation and relocation	Options under the RMA
Plan in circumstances of deep uncertainty	Very challenging to make decisions under the RMA in the context of uncertainty. Controlling land use through rules and policies in plans and resource consent application processes relies on robust evidence about adverse effects from activities, which cannot be speculative based on possible future effects.
Use scenarios to consider multiple futures	Possible, since there is no barrier to using scenarios when developing plans under the RMA. However, the provisions in plans must be based on evidence that is not purely speculative.

¹⁷⁴ Grace ES, France-Hudson BT, Kilvington MJ. 2019. *Reducing risk through the management of existing uses: tensions under the RMA*. GNS Science Report 2019/55. Lower Hutt: GNS Science.

¹⁷⁵ Designations are a specific case involving public works and are not currently available for situations of planned relocation. This is discussed in more detail later in chapter 3 and in chapter 4.

Key elements in planning for adaptation and relocation	Options under the RMA
Consider long planning horizons (at least 100 years)	Possible, especially given the direction in the NZCPS. However, the evidence required to control or limit activities makes it almost impossible for plans to prohibit or restrict activities based on long-term climate and other changes.
Assess multiple adaptation measures in a long-term context	This assessment could occur through a consent application process, but the RMA does not direct that such an analysis is required. Rules in plans address effects of activities, rather than strategic, long-term costs and benefits.
Decide on the triggers for future actions before they are needed, and regularly review them	Highly improbable, because plans do not direct future actions or activities; rather, they are a regulatory regime that manages the effects of activities. Reviews are required every 10 years, but a review could occur earlier.
Change adaptation actions or alter adaptation pathways, depending on when a pre-determined trigger is signalled	Highly improbable, because plan provisions apply throughout the life of the plan. Plans do not contain 'inactive' provisions in anticipation of a trigger activating them at a future, unspecified date within the life of the plan.
Planning to act	Not possible, as regional and district plans do not plan for activities to occur, and they do not assign responsibilities to other parties to take specific actions. They are enabling or facilitating, and they control the effects of activities that others may choose to undertake. In addition, there are no funding or change of ownership powers under the RMA.

Planning reform

3.34. The planning system under the RMA is currently under review. Two new Bills to replace the RMA have been introduced to Parliament and are being considered by the Environment Select Committee at the time of writing. These bills are the Natural and Built Environment Bill (NBE Bill) and the Spatial Planning Bill (SP Bill). The final form of these bills is unknown, but we do know a significant amount about the general shape of the new legislation, which will result in some relevant differences.

- The reduction of risk is expected to become a focus for planning, which would support adaptation planning and planned relocation.
- It is expected that objectives will be replaced with outcomes, and that this will result in more purposeful planning. However, plans under the new legislation will still be enabling and facilitating, rather than directive.
- Protection of existing uses is expected to be retained, albeit with a clearer ability to extinguish them for reasons of natural hazard risk. This power will extend to district plan rules as well as regional rules. We discuss this further in chapter 4.
- The plan review cycle is expected to change from 10 years to 9 years, with more agile plan-change processes.
- National direction on natural hazards planning is expected to be compulsory under the new legislation, which will fill a current void.
- Spatial planning will be compulsory at a regional level. One requirement of such planning is expected to be the identification of areas vulnerable to the effects of climate change and measures to address this vulnerability.

- Regional spatial strategies (RSSs) are expected to include actions and be supported by implementation plans that record responsibilities for actions. This appears to be a more directive element of the system, although it seems to relate to the recording of agreements reached, rather than the directive assigning of responsibilities, and RSSs are anticipated to have no regulatory effect.
- 3.35. Overall, we think that adaptation planning and planned relocation under the NBE Bill and SP Bill will face similar hurdles to those processes under the RMA. This is not surprising, given the Government's stated intention that a third piece of legislation, the proposed Climate Change Adaptation Act, will specifically address planned relocation.

Benefits of the planning system

- 3.36. Despite these challenges, the land-use planning system (under the RMA and the reformed system) provides processes, institutions and powers that complement those needed for adaptation planning and planned relocation. In designing an adaptation planning framework, we have focused on integrating it with the planning system. Both the existing and reformed planning systems have three key strengths that we have incorporated within our proposed framework for adaptation planning and planned relocation.
- Planning processes have strong foundations in community engagement, which is essential for a community-centred adaptation and planned relocation process.
 - Planning is evidence based. Risk assessments form the basis of planning for adaptation and relocation, and a strong evidence base is critical, even if assessing future changes will rely on futures modelling and assumptions that will need constant review.
 - The system provides for national direction that can be used to provide a mandate and ensure consistency and certainty of process.
- 3.37. The role for Māori in the planning system under the proposed NBE Bill and SP Bill is greater than under the RMA. This is a strength to be built on in the context of adaptation planning and planned relocation.

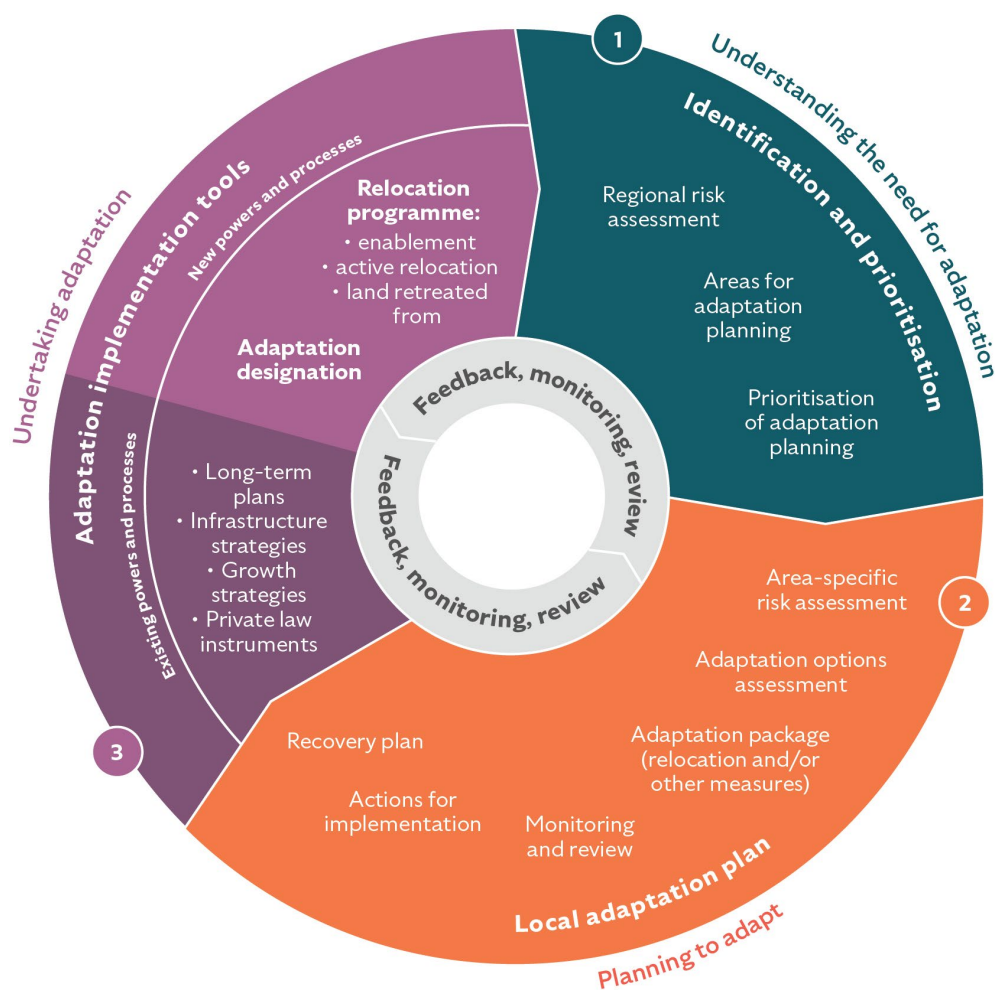
Overview of proposed adaptation and planned relocation process

- 3.38. The process to plan and implement adaptation and relocation should be community centred and nationally enabled. Decision-making needs to focus on the impacted community. National support, however, and the application of national powers in some situations (including compulsion) will be necessary to overcome the hurdles identified earlier in this chapter.

- 3.39. We recommend a process involving three key steps.¹⁷⁶
- **Step 1 – understanding the need for adaptation:** This step involves assessing risk at a sufficiently high level to focus efforts on ‘at-risk’ areas and prioritise planning for those areas.
 - **Step 2 – planning to adapt:** This step involves assessing risk in the priority areas at a more granular level, identifying adaptation options, and determining adaptation actions and future pathways (including considering where people relocate to, when relocation is an option).
 - **Step 3 – undertaking adaptation:** This step involves implementing the package of adaptation actions, monitoring change, and reviewing actions against the changed conditions over time.
- 3.40. These three steps are a convenient way to consider the legislative requirements for planned relocation within an adaptation planning framework. We are not offering a new way to do adaptation planning. Rather, we are recommending a formal, legislated system to ensure planned relocation is part of an adaptation planning process that has the necessary statutory mechanisms and powers to achieve its purpose effectively and equitably.
- 3.41. Figure 4 below provides an overview of our proposed framework, and the following tables summarise the key aspects of each step. The rest of this chapter elaborates on the information in the tables.
- 3.42. We have designed a process for proactive relocation before risk becomes intolerable. We are cognisant, however, of the increasing likelihood that an event may occur during the proactive planning process for relocation, which would change the proactive process to a post-event process. We have included that ability to ‘short cut’ the process if an event occurs, so that Steps 2 and 3 can occur by direction of the Crown, without needing to have completed the preceding step.

¹⁷⁶ For the purposes of considering the legislative requirements of adaptation planning, these three steps are a simplification of the 10-step adaptation planning process described in Ministry for the Environment. 2017. *Coastal Hazards and Climate Change: Guidance for Local Government*. Wellington: Ministry for the Environment.

Figure 4: Overview of the proposed process for adaptation and planned relocation



Step 1: Understanding the need for adaptation

3.43. Table 2 summarises the key aspects of Step 1.

Table 2: Key aspects of Step 1 – understanding the need for adaptation

Aspect	Description
What	Regional identification and prioritisation of areas for adaptation planning, based on a high-level risk assessment that uses existing risk information where possible.
Trigger	Legislative requirement.
Decision-maker	Committee of regional council; territorial authorities; and iwi, hapū and Māori representatives in the region, with optional Crown representative (or regional planning committee if one exists).
Risk assessment	Undertaken by an expert panel whose expertise reflects a wide range of matters relevant to understanding risk, including mātauranga Māori and tikanga.
Community engagement	No public input to the risk assessment. Public engagement process on identification of adaptation areas and prioritisation.
National support	National direction on the methods and metrics for the risk assessment, including assessing relevance of existing assessments.

Aspect	Description
	National mandate and methodology to identify areas where adaptation planning is required, as well as principles and criteria for prioritising areas.
Output	Incorporated within RSS, or within a regional policy statement if no RSS.
Checks and balances	Independent peer review of the risk assessment.
	Judicial review of output.
	Possible public hearing by regional planning committee if part of the RSS.
Monitoring and review	Reviewed every nine years in accordance with RSS review, or following a significant event in the region.

Step 2: Planning to adapt

3.44. Table 3 summarises the key aspects of Step 2.

Table 3: Key aspects of Step 2 – planning to adapt

Aspect	Description
What	Preparation of a local adaptation plan (LAP), based on an area-specific all-hazard or hazard-neutral risk assessment, which assesses adaptation options and decides on an adaptation package or pathway. This may include planned relocation, which will set out where people move to and what happens to the land relocated from. Actions for implementing the LAP, and who is responsible, are identified, as well as monitoring and review requirements. A recovery plan outlines intentions should an event occur before the LAP is implemented.
Trigger	Identification in a regional risk assessment or RSS.
	Direction by the Crown following an event or local request.
Decision-maker	Māori decision-maker for Māori-led planning for adaptation and planned relocation.
	Adaptation committee, made up of appropriate members for the situation including regional council; applicable territorial authority or authorities; appropriate iwi, hapū and Māori representation; and an option for a Crown representative.
Risk assessment	Undertaken by an expert panel whose expertise reflects a wide range of matters relevant to understanding risk, including mātauranga Māori and tikanga.
Community engagement	No public input to the risk assessment.
	Community panel consisting of people representative of the local community, to advise the adaptation committee.
	Public engagement process to run throughout the LAP process.
National support	National direction on the methods and metrics for the risk assessment.
	National direction on all aspects of the LAP process, including community engagement, options assessment methodologies, and setting signals and triggers for adaptation measures (including planned relocation).
	National risk thresholds for consideration of planned relocation as an option.
Output	LAP.
	Adaptation designation in district plans or natural and built environment plans (NBE plans) (a new mechanism to provide link to the planning system, over the area identified in the LAP).

Aspect	Description
Checks and balances	Independent peer review of the risk assessment.
	Public hearing, following formal submission process on a draft LAP, run by an independent hearings panel that makes recommendations to the adaptation committee.
	Limited merit appeals of LAPs, appeals on points of law to High Court (to reflect NBE plan appeal rights)
	Judicial review of LAPs.
	Crown approval of planned relocation aspects of LAPs.
Monitoring and review	LAPs reviewed as signals and triggers are achieved in accordance with monitoring and review requirements in LAP.
	Review following an event.

Step 3: Undertaking adaptation

3.45. Table 4 summarises the key aspects of Step 3.

Table 4: Key aspects of Step 3 – undertaking adaptation

Aspect	Description
What	The implementation of the actions identified in the LAP, using various existing and new adaptation implementation tools. A new adaptation designation provides the mechanism to implement actions using the planning system. A relocation programme directs preparation for relocation (enabling actions), active relocation, and the steps to be applied to the land relocated from.
Trigger	As directed by the actions in a LAP.
	A relocation programme can be prepared without a LAP, if directed by the Crown following an event or local request.
Decision-maker	LAP to assign responsibility for adaptation actions to appropriate entity.
	Adaptation designation held by new Crown entity.
	Adaptation committee to prepare relocation programme, which will assign responsibilities to appropriate entity. Crown will approve relocation programme.
	Ability for specific Crown–Māori responsibilities to be agreed for Māori-led planned relocation.
	New Crown entity to oversee implementation of relocation programme.
Community engagement	Public engagement process to run throughout the relocation programme, but no ability to relitigate the decision to relocate.
	Formal process for submissions to be made on a draft relocation programme and a hearing held before the programme is finalised.
	No public notification of planning changes made under the adaptation designation.
National support	Crown oversight of relocation programme.

Aspect	Description
Output	Relocation programme.
	Specific planning controls via the adaptation designation.
	Provision for implementation measures via existing mechanisms (eg, long-term plans, growth strategies, private law mechanisms).
Checks and balances	Judicial review of relocation programme.
	Dispute resolution services for disputes relating to the logistics of relocation implementation.
	No merits appeals or appeals on points of law.
Monitoring and review	Relocation programme to be reviewed and progress reported on annually.
	Review of implementation of the LAP to be part of review of the LAP.

Recommendation 4

We recommend the process outlined above for planning for adaptation and planned relocation that is community-centred and nationally enabled. It will build on the strengths of the existing and proposed planning systems where possible and include new processes and mechanisms where needed. The process should include three key steps:

- **Step 1** – Understanding the need for adaptation at national and regional scales
- **Step 2** – Planning to adapt
- **Step 3** – Undertaking adaptation

We recommend that Steps 2 and 3 can occur on their own, without the preceding step(s), should circumstances change (such as a significant event), on the direction of the Crown.

Considerations for a planning framework for adaptation and relocation

3.46. Several system-wide, overarching considerations have informed our proposed framework. These include te Tiriti and te ao Māori considerations, community and stakeholder involvement, who should be responsible for decision-making, and the checks and balances needed in the system. We discuss these considerations below. The need for national direction is also an overarching consideration and this is discussed in more detail later in this chapter.

Te Tiriti and te ao Māori

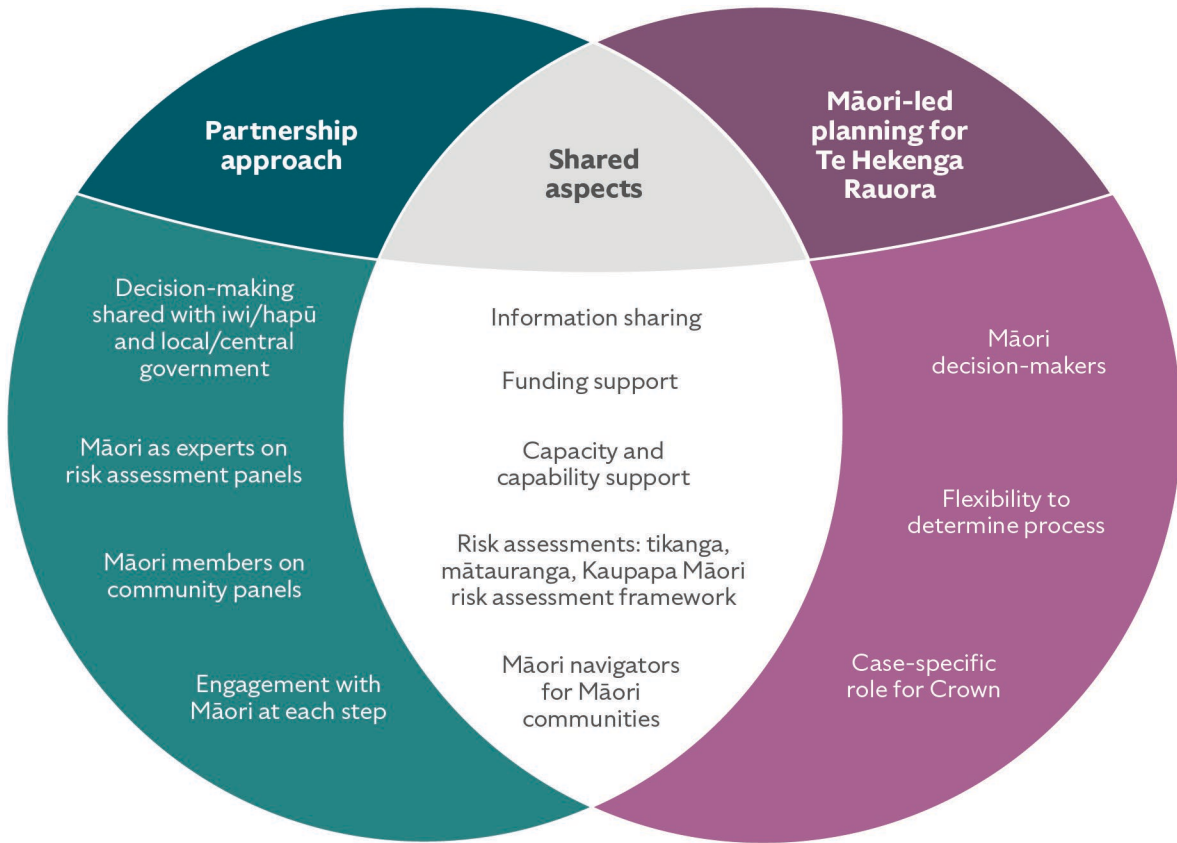
3.47. As outlined in chapter 2, six key principles underpin a system for planned relocation.

- Te Tiriti partnership
- Recognition of historical context
- Preservation of mana and rangatiratanga
- System flexibility
- Holistic approach
- Equitable funding

- 3.48. We have also noted that Māori are already planning for climate change. A framework for planned relocation must enable this work to continue, rather than interrupting or changing it.
- 3.49. We also noted that adaptation planning may impact Tiriti settlements (see chapter 2).
- 3.50. In recognition of these principles, particularly preserving mana and rangatiratanga, our proposed system includes a specific process for Māori to plan for relocation of their communities (referred to as Māori-led planning for relocation). We envisage this taking place in situations where the community considering adaptation is largely Māori or the land being considered is predominately Māori land. This specific system would provide the ability for iwi, hapū and Māori communities to decide when adaptation planning was required, and for iwi, hapū and Māori decision-makers to be responsible for preparing LAPs.
- 3.51. Sharing of risk information and early adaptation planning will be essential, so that iwi, hapū and Māori communities have the knowledge needed to make decisions. Iwi, hapū and Māori communities would have flexibility to set the process for the preparation of the plan, including options-assessment methodologies. They would also have the power to decide on the adaptation measures implemented, to plan where their community moves to and to determine how land relocated from is managed. The system needs to provide the financial and other support needed, and the powers necessary, to allow Māori to fulfil this role. Notably, Māori do not have access to the same sources of funding as local and central government decision-makers. Thus, funds will need to be transferred from local and central governments to Māori decision-makers for planned relocation.
- 3.52. For planned relocations and other adaptation measures that are not Māori led, the system we propose includes several aspects to provide for the principles outlined above and in chapter 2.
- 3.53. In the context of adaptation planning, a partnership approach will provide a role for iwi, hapū and Māori as collaborators, decision-makers and technical advisors. Adopting a collaborative, partnership-based approach to adaptation planning may help to overcome the mistrust that will exist for some iwi, hapū and Māori communities because of historical land alienation. To provide for a partnership approach, the decision-making bodies we propose within the system include iwi, hapū and Māori members alongside local and central government members.
- 3.54. Risk assessment is an essential part of planning for adaptation and relocation. As discussed in chapter 2, a kaupapa Māori framework for considering risk affirms the importance of Māori definitions and self-evaluations and enables a holistic assessment of risk. In Step 1 and Step 2 of our proposed process, both the regional and area-specific risk assessments should be informed by tikanga and mātauranga and include kaupapa Māori methodologies. In this way, risk assessments will account for risks to cultural infrastructure and assets (such as marae, urupā and wāhi tapu) and for risks affecting Māori priorities for their communities and whenua. Our recommendations include the use of expert panels to undertake the risk assessments, and these panels should have experts in tikanga and mātauranga for the risk assessment.
- 3.55. Each step of the process needs strong Māori participation. As discussed in chapter 2, the processes for Māori engagement outlined in the Framework for National Climate Change Risk Assessment for Aotearoa should be followed. Iwi, hapū and Māori communities must have opportunities for input into the assessment of adaptation options and into the setting of thresholds and triggers for planned relocation. Our recommendations include the use of community panels to advise the decision-maker on community perspectives during the

process. These panels should include leading figures from the Māori community, to provide a formal representative voice. In addition, 'navigators' should be used to help Māori participants understand the system and work through the process.

Figure 5: A partnership approach for Te Hekenga Rauora/planned relocation



Community and stakeholder involvement

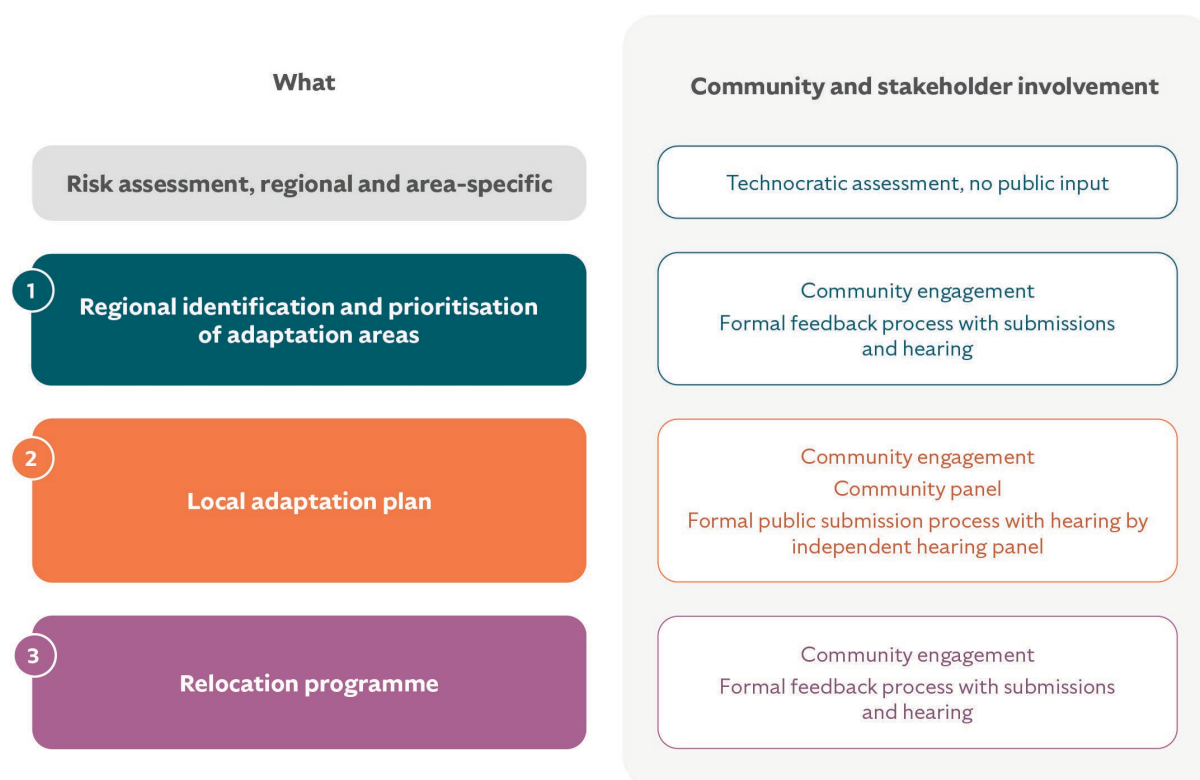
- 3.56. As noted, our view is that planning for adaptation and relocation should be community centred and nationally enabled. This means that, although the framework we propose has top-down direction and central government involvement, the affected community has a significant role in determining its future.
- 3.57. Academic studies and best practice guidance from the Ministry for the Environment emphasise the many benefits for both councils and communities of community engagement in adaptation planning. Outcomes are improved when councils and communities work together closely to understand the implications, co-develop plans, and undertake agreed actions for adaptation.¹⁷⁷

¹⁷⁷ Barth J, Bond S, Stephenson J. 2023. *Community engagement for climate change adaptation*. Research Summary for the South Dunedin Future Programme. Otago: Centre for Sustainability, University of Otago.

- 3.58. Social licence and community buy-in for planned relocation depend on early and meaningful engagement by stakeholders and the community in the overall process. This means stakeholders and the community should be involved throughout each step of the adaptation planning process.
- 3.59. We have attempted to balance the tension between top-down and bottom-up approaches in the following ways.
- 3.59.1. Stakeholder and community engagement should be focused where value judgements are required in the system. Our recommendation is that risk assessments are expert led and evidence based, without community input, and that deciding how to respond to the risk assessment, through adaptation planning, has a strong stakeholder and community focus. When to relocate is a significant value judgement in the system. We recommend that national direction set the circumstances for when relocation is a mandatory consideration, but that the actual threshold for relocation in any case (and associated signals and triggers) is based on the tolerance of the community concerned.
- 3.59.2. Those affected by decisions should have a say in those decisions. As well as stakeholder and community engagement, we recommend formal feedback processes for each of the three steps. This feedback will need to capture ideas from key stakeholders such as infrastructure providers, as well as the local community. For Step 1 (identification and prioritisation of areas for adaptation) and Step 3 (relocation programme), these processes would resemble Local Government Act 2002 consultation processes, where submissions are requested and there is an opportunity to be heard by the decision-maker before plans are finalised. For Step 2 (LAP), we propose a more robust submission and hearing process, run by an independent hearing panel that provides advice to the decision-maker. This reflects the fact that the LAP is where the significant value judgements are made.
- 3.59.3. We see significant benefit in the use of community panels as advisors to decision-makers on LAPs. Panels of this kind have been used with some success in adaptation planning processes in Aotearoa New Zealand in the past.¹⁷⁸ A community panel does not remove the need for other forms of community engagement, but it does provide a representative group for locally specific advice, helping to maintain a strong local voice in the process.
- 3.59.4. We rely on local government and iwi, hapū and Māori as decision-makers who are representative of local communities.

¹⁷⁸ For example, for adaptation planning in Hawke's Bay, Wharekawa, and Coromandel Peninsula. For further information, see New Zealand Coastal Society. 2022. In *Coastal Adaptation: Adapting to coastal change and hazard risk in Aotearoa New Zealand. Special publication 5*. Wellington: New Zealand Coastal Society.

Figure 6: Community and stakeholder involvement during the adaptation planning process



3.60. We have considered the impact of the compensation proposal for property relocated from (described in chapter 5) on our recommendations for community engagement. In summary, our proposal involves different entitlements for different types of affected property. For example, principal places of residence would receive generous compensation, whereas holiday and second homes would receive no compensation. Commercial properties could, in some circumstances, receive limited compensation. This differential compensation scheme attempts to give effect to a range of relevant principles, some of which pull in different directions. Importantly, a fundamental principle is that undue hardship should be avoided; thus, the scheme does not seek to preserve existing wealth or asset values. The scheme is discussed in detail in chapter 5.

3.61. The different levels of compensatory payment may cause tension within a community. This tension may result in more diverse views about the best adaptation option for any particular situation. This will make engagement with the community, and understanding community tolerance for risk, more challenging. The financial implications of managed relocation are likely to mean that those who own principal places of residence will be more open to planned relocation than owners of second homes. The latter group may promote other adaptation measures, such as sea walls, because these will preserve some of their property value, at least for a time. But such measures may simply delay the inevitable, and increase costs in doing so.

3.62. To help address the disincentives that result from not compensating some properties, the proposal does include assistance for relocation, demolition or similar costs. It also includes guaranteed insurance cover for natural hazard risks until relocation occurs if private insurers have withdrawn from providing cover in the locality. Overall, however, we acknowledge that the compensation proposal will make engagement with some communities challenging.

- 3.63. Another problem that has arisen in overseas planned relocations is that community engagement can be ‘captured’ by privileged or powerful voices within the community (for example, well-resourced property owners).¹⁷⁹ Authorities can mitigate this by carefully planning community engagement, and national support is needed on methods and processes for meaningful and genuine engagement with communities.
- 3.64. Several mechanisms in our proposed process mean conflicted communities are not a barrier for deciding on and implementing planned relocation.
- The community is not the ultimate decision-maker; rather, decisions will be made on behalf of the community.
 - Community panels will help provide rounded feedback, rather than individually focused feedback.
 - National direction will guide the methodologies for assessing adaptation options, to ensure the full range of criteria are considered and biases can be addressed.
 - Only very limited rights to appeal to the Courts are allowed (to avoid lengthy delays).

Recommendation 5

We recommend that:

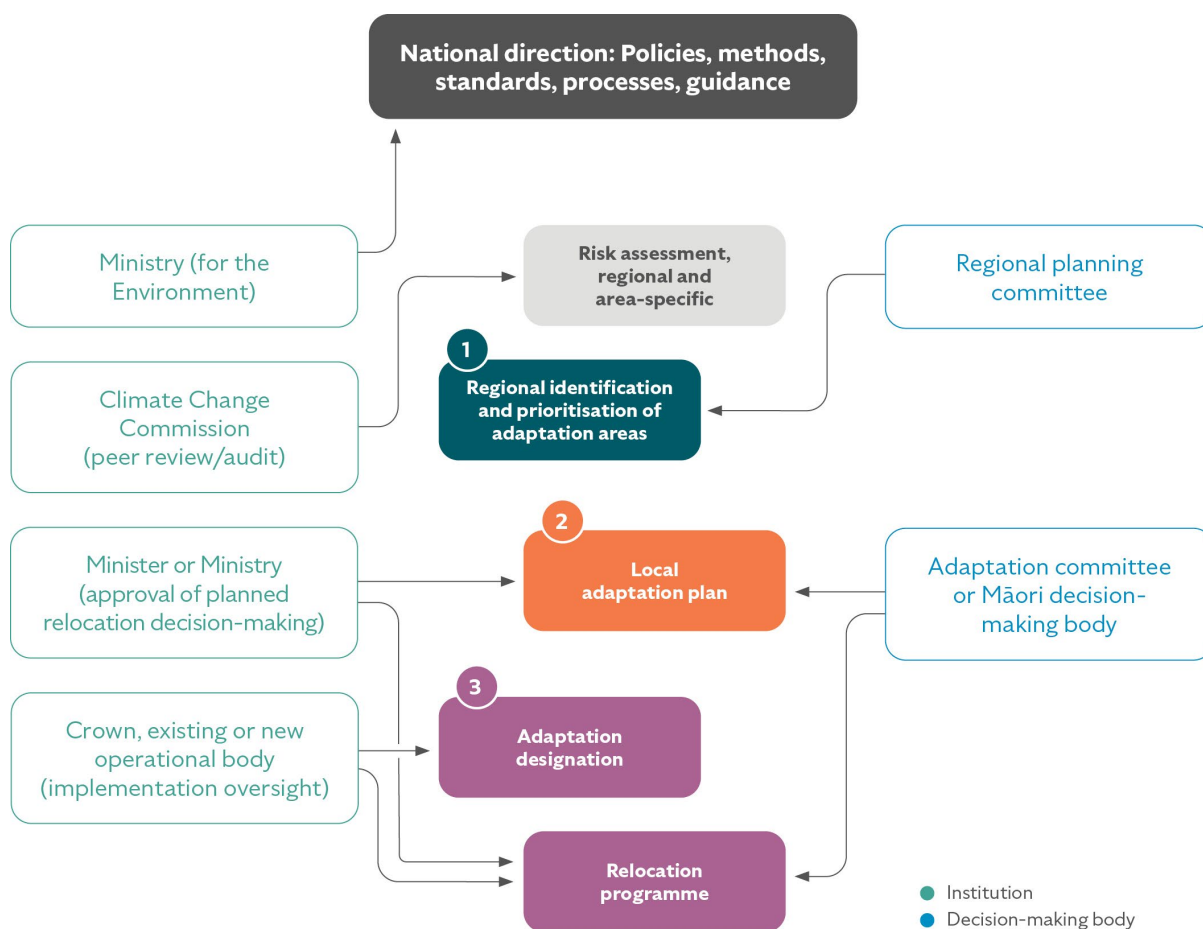
- directly impacted communities are at the centre of all planning and implementation actions of adaptation and planned relocation
- expert panels are utilised to identify risks and are informed by te ao Māori
- infrastructure providers (Councils, Crown agencies and the private sector) are involved as stakeholders in adaptation planning processes, both in areas directly impacted by climate change as well as areas where future relocation is being considered.

Decision-making

- 3.65. Our view is that community-centred and nationally enabled planning for adaptation and relocation requires local decision-making (with specific exceptions for Crown decision-making).

¹⁷⁹ See discussion in Tubridy F, Lennon M, Scott M. 2022. *Managed retreat and coastal climate change adaptation: The environmental justice implications and value of a coproduction approach*. *Land Use Policy* 114(3): 105960.

Figure 7: Roles for different entities within the adaptation planning process



Potential issues with local decision-making

- 3.66. We are mindful of the potential problems of local decision-making for adaptation planning and planned relocation. In particular, if we assume that the decision-maker is also the funder of the decisions, then an immediate problem arises, because local government in Aotearoa New Zealand does not have the financial means to pay for planned relocation. It also makes planned relocation decisions highly political because of the large cost and the three-year election cycle means the political nature of the issues are kept front of mind.
- 3.67. We have designed a system for planned relocation that provides certainty of funding responsibilities. It recommends that the Crown bears a significant proportion of the cost of planned relocation, with some contribution from regional councils and territorial authorities (see chapter 5).
- 3.68. A local decision-maker who does not need to bear the full cost of implementing planned relocation is more likely to make a decision that is effective at reducing risk for the local community. However, some Crown oversight is needed to ensure Crown funds are spent wisely. For this reason, we recommend Crown approval of planned relocation decision-making (see chapter 6) and strong national direction that guides all steps of the planning process.

- 3.69. Another potential issue with local decision-making is a tendency to consider risk reduction from a biased perspective, without an open mind. This might occur due to the history of past decisions, or when community sentiment about the best solution has become entrenched. This is a particular danger when risk reduction – and planned relocation, in particular – become political issues.
- 3.70. Our view is that this issue can be managed by strong national direction, particularly related to a trigger for mandatory consideration of planned relocation and to the assessment methodologies that should be applied to the consideration of adaptation options (including ways to overcome biases). Crown oversight through approval of planned relocation decisions is another way to ensure local decision-making follows due process, considers relevant matters, and adheres to community engagement requirements.
- 3.71. Lack of mandate has been another barrier to effective local decision-making on adaptation and planned relocation. As discussed elsewhere in this report, clear legislative responsibility to undertake the planning and implementation of planned relocation is essential for the system to work efficiently and effectively.

Which local decision-maker?

- 3.72. There is no obvious entity for decision-making on community-centred adaptation planning in Aotearoa New Zealand. Territorial authorities and regional councils have overlapping functions under the RMA relating to natural hazards, which results in a range of governance issues. Regional councils are responsible for riverine flood protection,¹⁸⁰ and they generally have good natural hazard and science capability. However, they do not usually undertake land-use planning, and they do not interact with their communities to the same extent as territorial authorities. Territorial authorities, on the other hand, are strong in both aspects.
- 3.73. There is also some level of mistrust between territorial authorities and regional councils,¹⁸¹ and between Māori and local and central government (as described in chapter 2). The design of the decision-maker for adaptation planning and planned relocation needs to take account of this.
- 3.74. Provision needs to be made for decision-making in partnership with Māori. There are different types of Māori decision-making bodies. Flexibility will be key, to ensure the right membership for Māori on each specific decision-making body.
- 3.75. Under the new resource management system, regional planning committees (RPCs) will be responsible for all resource management decision-making, including natural hazards planning at the spatial planning and land-use planning levels. These committees will be made up of members from the regional council and territorial authorities within the region, as well as members appointed by a Māori appointing body (or bodies). For spatial planning, a Crown representative will also be on the committee. The RPCs will be supported by a secretariat, but the exact make-up of these secretariats is yet to be confirmed.

¹⁸⁰ Under the Soil Conservation and Rivers Control Act 1941.

¹⁸¹ Grace ES, France-Hudson BT, Kilvington MJ. 2019. *Reducing risk through the management of existing uses: tensions under the RMA*. GNS Science Report 2019/55. Lower Hutt: GNS Science.

Decision-maker for Step 1: Understanding the need to adapt

- 3.76. For regional decision-making on adaptation planning and planned relocation, the strong overlap with spatial planning and land-use planning suggests RPCs could potentially be good decision-makers. However, RPCs have no direct political accountability, and their connection to the community is likely to be tenuous, particularly initially. It is also unclear how the iwi, hapū and Māori representation will be resolved to the satisfaction of Māori. RPCs have not been established yet, and the enabling legislation is not yet enacted, so RPCs remain an unknown entity. However, we are reluctant to recommend a new regional decision-maker when both regional councils and RPCs have the potential to do the job.
- 3.77. We recommend that regional councils, in partnership with Māori and territorial authorities, are the decision-makers for the Step 1 regional risk assessment and identification and prioritisation of areas for adaptation. We consider that the Crown should have the option to appoint a representative to be part of this decision-making body. We envisage a formal committee as the decision-maker and recommend the appropriate powers are assigned to this committee. Once an RPC is established, it should take over the work for Step 1, but should have the ability to appoint additional members to the RPC temporarily, for the purpose of Step 1, if necessary, to ensure appropriate representation is carried through the process. The NBE Bill may need to be amended to provide for this.

Decision-maker for Step 2: Planning to adapt

- 3.78. For the LAP in Step 2, our view is that local decision-making is required, which suggests territorial authorities, alongside iwi, hapū and Māori, may be most appropriate. We also suggest, however, that decision-making should draw on the strengths of regional councils. In addition, the Crown should be given the option to be part of the decision-making, given the need for Crown approval of the planned relocation aspects of the LAP and the implications of LAP decision-making for Crown funding.
- 3.79. Our view is that the decision-maker for LAPs should be a new body, with membership appropriate for the location. We recommend that legislation provides for the power to create a new body with flexible membership. We refer to this body as the ‘adaptation committee’. These committees would likely include the regional council; the relevant territorial authorities; appropriate iwi, hapū and Māori representation; and an optional Crown representative. Flexibility needs to be retained in determining appropriate local Māori membership, to account for the specific circumstances of the adaptation planning area.

Decision-maker for Step 3: Undertaking adaptation

- 3.80. We consider that the adaptation committee should also be the decision-maker on the relocation programme. However, the adaptation committee will not be the appropriate body to carry out all the planned relocation implementation functions. The relocation programme will need to clearly assign roles and responsibilities for all actions in the programme.

Recommendation 6

We recommend the establishment of adaptation committees – consisting of relevant territorial authorities; iwi, hapū and Māori representatives; and the regional council – to lead local adaptation planning and decision-making, supported by central government as required.

Māori decision-making

- 3.81. As discussed above, the system should provide for Māori-led planning for adaptation and relocation, which will require a Māori decision-making body for preparing a LAP and relocation programme. The system needs to provide flexibility in the make-up of these decision-making bodies to reflect local circumstances. There should be agreement with the Crown each time such a body is established, to determine what the Crown–Māori relationship will be for decision-making on that adaptation planning process.

Recommendation 7

We recommend that Māori decision-makers are appointed to lead the preparation of local adaptation plans for Māori communities.

Role of the Crown in decision-making

- 3.82. The Crown will have a role in decision-making on planned relocation, particularly given that the Crown will provide some funding. There is tension between providing a role for the Crown in decision-making and ensuring a community-centred approach to planning for adaptation and relocation.
- 3.83. We take the view that the conflict can be resolved in part by the Crown:
- focusing its efforts on setting clear criteria for the assessment of risk, thresholds for planned relocation, and criteria for funding contributions
 - having the option to be a member of the local decision-making bodies for adaptation planning and planned relocation (in a partnership capacity with iwi, hapū, Māori and local government)
 - taking an approval role in planned relocation decision-making, including the way central funds are allocated to the implementation of specific relocation situations.
- 3.84. To explain point 1 further, as discussed below under ‘National Direction’, a critical aspect of our proposed framework for adaptation planning and planned relocation is strong national direction. We consider it vital that the Crown supports local decision-making by providing clear direction on mandate, process requirements, and criteria and triggers for planned relocation. The substantive decisions remain with the local decision-makers, but the national direction and legislative requirements clarify who has authority to make those decisions, and the framework within which they are made. As discussed in chapter 6, this is a critical way our proposed framework reduces the political risk associated with local decision-making on planned relocation. Without strong national direction and legislative requirements, no change to the status quo will be made in this regard.
- 3.85. As identified in chapter 6, the Crown needs a ministry to develop national direction and oversee the administration of the legislation in the name of the responsible Minister.
- 3.86. To explain point 3 further, we recommend Crown approval of planned relocation decisions in LAPs and relocation programmes, for three key reasons – namely:
- to ensure Crown funds are spent wisely and to manage the risks associated with a decision-maker that is not wholly financially responsible for the decisions made

- to help reduce the political risk associated with local decision-making (if approval from the Crown is required, local decision-making is likely to be more considered and may have less political influence)
 - to ensure due process is followed in the decision-making, and the national direction is applied reasonably.
- 3.87. We do not recommend a Crown veto right in this approval process, unless the review by the Crown finds that due process has not been followed. Our intention is not for the Crown to undertake its own decision-making in this review, but rather to ensure local decision-making has been undertaken appropriately.
- 3.88. As we identify in chapter 6, the ‘Crown’ in this approval role means a ministry or the responsible Minister directly. It will not always be necessary to involve the Minister in approval of relocation decision-making. We envisage a scale trigger that requires large-scale decisions to be approved by the Minister, with small- and medium-scale decisions being approved by senior officials in the relevant ministry. That scale should be set in regulations, along with a set of criteria to guide ministry and ministerial approval.
- 3.89. We recommend that the Crown takes a decision-making role (rather than an approval role) on planned relocation in limited situations, where either scale or resourcing warrants that approach. This would be a call-in process, where Crown decision-making means the adaptation planning process is run by the relevant ministry, and the responsible Minister makes the decisions. It may be that a large-scale relocation scenario justifies Crown leadership and decision-making to ensure an efficient and effective process, particularly where the cost to the Crown will be significant and/or the political risks are too great for local decision-making. There may also be situations where smaller territorial authorities are not able to resource the adaptation planning process and require Crown support, even for small-scale relocations. We therefore recommend that provision is made for a call-in by the responsible Minister in these scenarios. Criteria for when call-in powers apply should be developed.
- 3.90. We note that the regional council; territorial authority; and iwi, hapū and Māori communities should still have a role in providing local input to call-in processes. It will be essential that local voices are heard, even when the Crown is the decision-maker.
- 3.91. The Crown is also an owner of infrastructure assets, such as state highways and education facilities, that will be subject to planned relocation. The Crown may also be an owner of land that will accommodate a relocated community, and it may take over ownership of relocated land. Our view is that this does not warrant a decision-making role, but that the Crown should be treated as a stakeholder in the planning process, like other infrastructure providers and landowners.

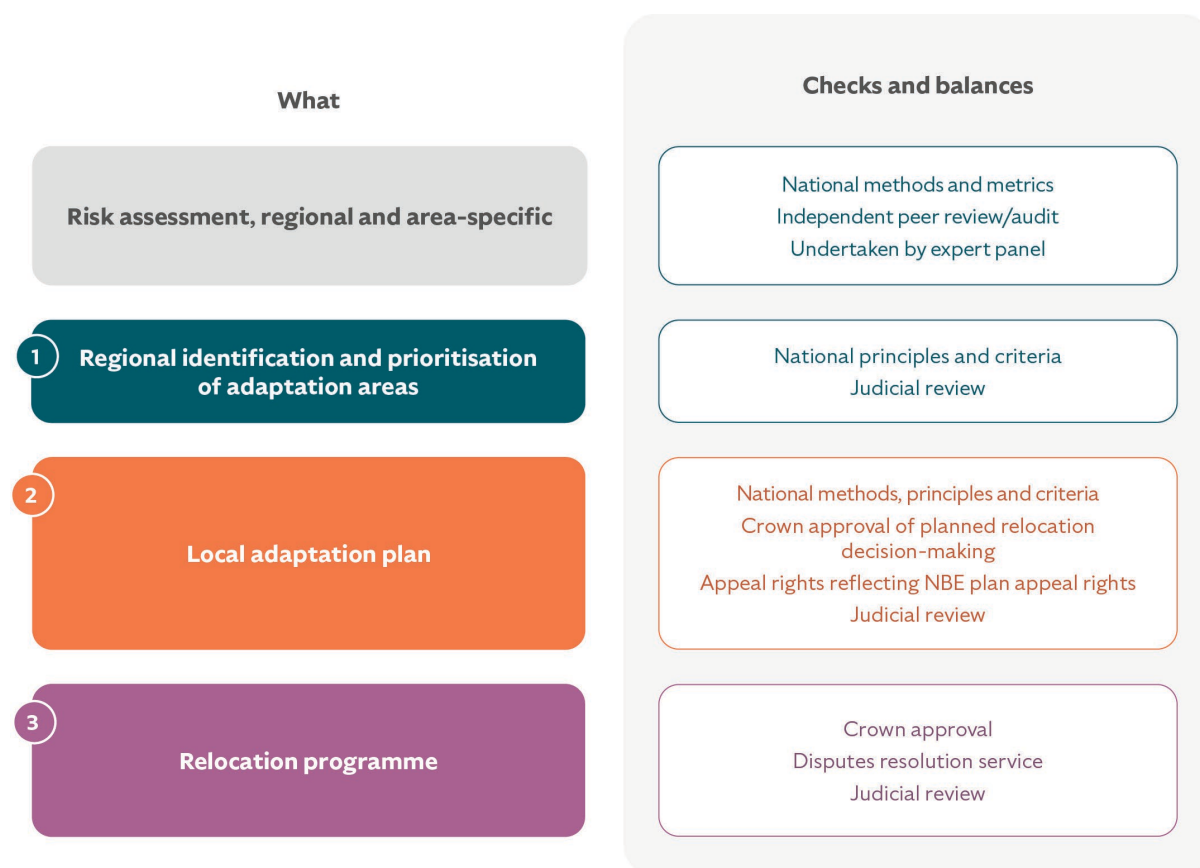
Recommendation 8

We recommend that provision is made for a ‘call-in’ by the responsible Minister, if adaptation planning or relocation is large scale or in a location where local government is not able to carry out this work. Criteria for when call-in powers apply should be developed.

Checks and balances

- 3.92. We acknowledge that a system for planned relocation – which has the potential to impact private property rights, Māori rights and interests in whenua Māori, and land that is legally recognised as a taonga tuku iho – needs strong checks and balances.
- 3.93. As noted in chapter 4, the Māori Land Court is likely to play an important role in any change of use or ownership arrangements that result from the planned relocation process.
- 3.94. We have considered three aspects of the proposed system for adaptation planning and planned relocation that require different types of checks and balances.
- Technical risk assessments
 - Value judgement decision-making (LAPs)
 - Logistical decisions on relocation implementation

Figure 8: Available checks and balances during the adaptation planning process



Technical risk assessments

- 3.95. We propose a two-part check and balance approach to risk assessments (for both region-wide and area-specific risk assessments). The first part is strong national direction on methods and metrics for undertaking risk assessments, to ensure risk assessments are nationally consistent and robust. We discuss national direction later in this chapter. The second part is independent peer review or audit of risk assessments to ensure the robustness

of the assessments. These reviews would be undertaken by an independent national agency, as discussed in more detail in chapter 6.

Recommendation 9

We recommend that risk assessments follow the methodologies set by national direction and are subject to an independent peer-review process undertaken by an independent national body. Risk assessments do not involve public consultation or challenge.

Value-judgement decision-making

- 3.96. Significant value judgements will be made on adaptation and planned relocation options in LAPs. This step is when options will be assessed, risk tolerance will be determined for the community, and signals and triggers for relocation will be set. We recommend a decision-making process for a LAP that is like the decision-making process under the RMA or in an NBE plan, with similar checks and balances. In other words, an independent hearing panel should hear submissions on the LAP and make recommendations to the decision-maker (the adaptation committee). Like the NBE plan process, merits appeals should be limited to cases when the adaptation committee does not accept a recommendation from the hearings panel. A provision is needed for appeals on points of law to the High Court.
- 3.97. A balance needs to be reached between progressing adaptation planning and acting expediently and making sure the right level of review is applied to the decision-making. Given the need for adaption action, we recommend a robust first-instance hearing process, with limited merits appeals (as described above). However, we consider an additional check is warranted, given the severity of the potential impacts of planned relocation and the need for Crown funding. We recommend that the Crown (either the Minister for large-scale cases or senior ministry officials for small- and medium-scale cases) approve the planned relocation aspects of a Step 2 LAP, including the identification of planned relocation signals and triggers. The role of the Crown will be to check that national direction has been correctly applied, the appropriate process has been followed to arrive at relocation thresholds and decisions, and that the community, iwi, hapū and Māori were engaged correctly in the process. We note that in the case of Māori-led planning for adaptation and relocation, the role of the Crown should be discussed and agreed at the start of the process, so flexibility can be set up in the appropriate arrangements.

Recommendation 10

We recommend that the local adaptation plan goes through a robust preparation process, including public consultation, and is subject to a hearing by an independent hearings panel. Appeals rights will be parallel to those proposed for natural and built environment plans under the new planning system (ie, merits appeals when an adaptation committee does not accept a recommendation of an independent hearing panel, and appeals on points of law to the High Court).

Logistical decisions on implementation

- 3.98. The way relocation is carried out will have a significant impact on those involved. This detail will be considered in the relocation programme. We recommend two checks and balances for this part of the process (Step 3).
- 3.99. As discussed above, the relocation programme should be approved by the Crown, in much the same way as the planned relocation aspects of a LAP. This will provide a check that the programme has been developed in accordance with due process, and that the decision-

making is robust. This is an important check, as, once approved, additional powers such as those that enable compulsory acquisition will be available (see chapter 4).

- 3.100. We do not propose that any further appeals to the courts can be made against a Step 3 relocation programme once it has been approved by the Crown. That is because the relocation programme implements the decisions made in a LAP, which gives rise to appeals on points of law and will already have been approved by the Crown. It may be that there should be a right of objection to some aspects of implementing relocations (such as timing issues) through a Disputes Tribunal process (see the discussion in chapter 6 on a dispute resolution service). However, care should be taken in designing any such process to ensure that it does not enable people who are reluctant to move to impede the orderly progression of planned relocations.

Step 1: Understanding the need for adaptation

- 3.101. This section details Step 1 of our framework for adaptation and relocation planning.
- 3.102. The first step in planning for adaptation is to understand how risks related to natural hazards, including risks from climate change and sea-level rise, change across a geographical area (spatial context) and over time (temporal context).
- 3.103. Understanding both the spatial and the temporal contexts of that risk will enable communities to identify where the level of risk warrants adaptive action and where risk is sufficiently high to warrant a planned relocation response.
- 3.104. We propose that this step be undertaken in two parts:
- a risk assessment on a region-wide basis ('region-wide risk assessment')
 - the identification and prioritisation of areas requiring adaptation planning.
- 3.105. Both sub-steps must be statutorily mandated, with timeframes for completion. Responsibility for undertaking these tasks needs to be clearly assigned, to avoid the current situation – where functions relating to natural hazards fall within the jurisdiction of both regional councils and territorial authorities. Legislation should also provide for regular reviews, as well as extraordinary reviews, such as following a natural hazard event or other triggers like frequent smaller events.
- 3.106. The two sub-steps are discussed in the following sections.

Region-wide risk assessment

- 3.107. The purpose of the region-wide risk assessment is to enable the identification and prioritisation of areas that require adaptation planning. This assessment will therefore only be undertaken in enough detail to enable those areas to be identified and prioritised. It will be high level and use existing information where appropriate. Our intention is not to 'reinvent the wheel' for this regional assessment. Rather, it is a preliminary step that will be followed by a more detailed, area-specific risk assessment during the adaptation planning phase.

- 3.108. A regional scale is appropriate for this ‘first pass’ risk assessment, because it enables a strategic approach to adaptation planning, particularly by enabling:
- prioritisation of resources across a wide area to enable adaptation to be undertaken in the highest areas of risk first
 - flexibility in scale of adaptation planning (eg, along a stretch of coastline that crosses district council and iwi boundaries).
- 3.109. A regional approach also acknowledges the typical scale at which such exercises are currently undertaken in Aotearoa New Zealand. It aligns with the approach of the new resource management system, which also provides for planning to be undertaken for a region with local representation (ie, territorial authority and Māori representation).
- 3.110. The region-wide risk assessment should identify:
- areas of risk across all hazard types
 - both existing and increasing risk, with increasing risk taking into account the likely impacts of climate change on sea-level rise and existing natural hazard risk.
- 3.111. An expert panel, appointed on behalf of the decision-maker, should undertake the region-wide risk assessment in accordance with national direction (addressed below). The regional council (or the RPC, once the new planning system comes into effect) will be responsible for the region-wide assessment and therefore appoint the expert panel. The expert panel should include specialists in hazard and vulnerability assessments; engineering risk assessments; mātauranga Māori; tikanga; and environmental, financial and social risks from natural hazard and climate change impacts. This reflects the approach that was taken for the National Climate Change Risk Assessment¹⁸² and is consistent with the Treasury Living Standards Framework (which requires consideration of risk to physical and financial capital, human capability, natural environment, and social cohesion).
- 3.112. A considerable amount of information on natural hazard risk and climate change impacts is already available in Aotearoa New Zealand, and the expert panel should be able to draw on that, provided the information meets the standards outlined in the national direction.

Recommendation 11

We recommend that regional planning committees (RPCs) (or, before RPCs are established, a committee of the regional council; territorial authorities; and iwi, hapū and Māori representatives) undertake regional risk assessments and identify areas at risk and areas subject to adaptation planning.

Identification and prioritisation of areas for adaptation planning

- 3.113. Adaptation planning is unlikely to be required across an entire region. Communities will need to identify areas for adaptation planning, based on the region-wide risk assessment. However, the system needs to provide the ability for Māori communities to determine a need to undertake adaptation planning themselves. Adaptation planning should be undertaken where measures are needed to either:

¹⁸² Although this excludes governance risks, which we do not consider to be a type of risk that warrants a planned relocation response.

- reduce risk that already exceeds tolerance levels
 - avoid increases in risk that will exceed tolerance levels.
- 3.114. We recommend that national direction provides a mandate on the risk circumstances that require adaptation planning. This is necessary so that after a regional risk assessment is completed, clear criteria are available to decide if adaptation planning is required. This is discussed in more detail below, in the 'National direction' section. This approach allows consideration of local circumstances and community tolerance when identifying areas for adaptation planning.
- 3.115. There are likely to be limited people and financial resources available for adaptation planning. This is because of the limited capability and capacity in Aotearoa New Zealand in risk assessment and natural hazards/adaptation planning, as well as the reforms underway of various policies such as the resource management system. We therefore propose that the Government prioritises adaptation planning within a region. National direction will need to set the principles and criteria to consider for the prioritisation exercise (see discussion below).
- 3.116. We consider that a public engagement process should help identify and prioritise areas for adaptation planning. This should not include development of the region-wide risk assessment itself. Instead, we propose technical checks and balances for the risk assessment. A formal public engagement process will allow the public to provide written feedback on the areas identified and the priority for undertaking adaptation planning. The public will have an opportunity to be heard by the decision-maker.
- 3.117. We propose that the outcomes of the region-wide risk assessment be included in the RSSs required by the new planning system (or regional policy statement until an RSS is prepared). This will require amendments to the proposed Spatial Planning Act (SP Act) (discussed in more detail below, in the 'Links to the planning system' section). A change to the RMA, or the use of a national policy statement, is likely to be required to achieve this for regional policy statements under the RMA.

Step 2: Planning to adapt

- 3.118. This section details Step 2 of our framework for adaptation and relocation planning.
- 3.119. Once an area has been identified as requiring adaptation planning and is prioritised, the relevant community will need to prepare a LAP. The LAP's purpose will be to enable the community to consider the risks it faces and identify actions that must be taken to reduce risk that exceeds tolerance levels (or will exceed tolerance levels in the future due to increasing risk). As stated above, Māori communities need to have the ability to prepare LAPs on their own behalf.

Trigger to prepare local adaptation plan

- 3.120. The need for a LAP would be triggered if the region-wide risk assessment and prioritisation exercise identifies that an area requires adaptation planning. However, there may be circumstances in which the need for a LAP is already apparent without undertaking a region-wide risk assessment. For example, the occurrence of a natural hazard event or a progressive

climate change risk might pass a tolerance threshold, or successive low-to-moderate risks might trigger a tolerance threshold. The latter two types of risk could occur at 30 centimetres of sea-level rise, which stops stormwater systems functioning at the coast, for example.

- 3.121. We propose that the Crown be given powers to direct the preparation of a LAP – for example, by means of an Order in Council, either at the direction of the responsible Minister or in response to a request from the local decision-maker or iwi, hapū and Māori community (see chapter 4).

Community engagement

- 3.122. Because the LAP is where the significant value judgements are made in the adaptation planning process, this is the step focused on community engagement. We recommend that community engagement takes the following forms.

- Intensive community engagement with those directly impacted by adaptation planning should occur throughout the development of the LAP.
- A community panel should be established to be representative of the community (members not directly affected by relocation) to advise the decision-maker on the development of a LAP.
- A formal community consultation process will include notification of a draft plan, written submissions, hearing by an independent panel that makes recommendations to the decision-maker, and a final decision by the decision-maker. This process will be like a district plan or NBE plan process, but the subject matter will be wider.

- 3.123. National direction should provide guidance on community engagement in the development of LAPs, including setting thresholds for the timely start of a planned relocation process and other adaptation measures.

Content of local adaptation plans

- 3.124. We propose that LAPs (including for Māori-led processes) comprise seven key parts:

- an area-specific all-hazard or hazard-neutral risk assessment
- identification and assessment of options for adaptation, including planned relocation, using a dynamic adaptive pathways planning (DAPP) framework
- a confirmed 'package' or 'pathways' of adaptation measures (relocation and/or other measures)
- an assessment and identification of options for the relocation of people and/or communities (ie, where they will go), where relocation is considered necessary either in the short or long term, and plans for land relocated from
- a list of actions required for implementation, including who is responsible for each, and associated timing
- review and monitoring requirements
- a pre-event recovery plan, to address recovery if an event or tolerance trigger occurs before adaptation is implemented.

- 3.125. We acknowledge that LAPs will be significant documents. Our intention is that these plans will have statutory weight in the adaptation system and other related systems (particularly the planning system), and that they will have the ability to require actions to be taken to achieve adaptation outcomes, including planned relocation.
- 3.126. Each of the key parts of a LAP is addressed below.

Area-specific risk assessment

- 3.127. The first stage of local adaptation planning would be a more detailed, area-specific risk assessment. This risk assessment would refine the extent of the area where risk needs to be addressed and identify how risk changes across the area and over time. This risk assessment needs to be detailed enough to identify the individual properties and infrastructure to which adaptation measures will be applied, with alternative pathways depending on how the changing risk evolves. This assessment should also cover all hazards or a hazard-neutral approach.
- 3.128. Because LAPs will provide a signal for changes to existing uses and private property rights, as well as the allocation of Crown (and other) funding, the area-specific risk assessment needs to be robust. We recommend that:
- national direction sets the methods and standards for this risk assessment and the triggers for a timely start to the planned relocation process
 - an expert panel is appointed to undertake the area-specific risk assessment
 - an independent body undertakes a peer review and audit of the risk assessment.
- 3.129. We do not envisage community feedback on the area-specific risk assessment. The checks and balances we recommend for that assessment (ie, national direction on methodologies and standards, preparation by an expert panel, and review and audit by an independent body) are sufficient to provide the robustness required. Making provision for challenge to the risk assessment from the community may result in delays to adaptation planning, which we do not consider justified, given the checks and balances proposed.

Adaptation options assessment

- 3.130. Once existing and future risks are understood through an area-specific risk assessment, options for adaptation can be identified and assessed. A wide range of options should be considered, including planned relocation, even if it does not seem a likely option at the time. The planning timeframe should be at least 100 years. It is important to consider the full breadth of options to ensure an open process and identification of the most appropriate options for the type of hazard and for that community. Alternative pathways need to be considered, to enable agility as the changing risk evolves. These pathways need to be tested for their sensitivity to different scenarios.
- 3.131. The methodology for assessing options will be important. The assessment methods should be able to accommodate the dynamic nature of the changing risks (eg, using a DAPP framework). For economic assessments, traditional cost/benefit assessments are not a good fit for climate adaptation – particularly because present costs and benefits are typically

emphasised over longer-term costs and benefits. This means that options that give an immediate protective benefit will be favoured, because they are cheaper and more palatable to existing landowners in the short term than planned relocation. However, they may be temporary, give a false sense of security, encourage further development, and increase exposure over time. This approach may also simply transfer the costs of planned relocation to future generations.

- 3.132. Rather than assuming planned relocation is a 'last resort', the options assessment methodology needs to provide a framework for considering the most appropriate option in terms of risk and the social, cultural, environmental and economic costs (including accounting for intergenerational equity over the lifetime of the options). The methodology should also discourage the locking in of high levels of risk that can leave stranded assets. Kaupapa Māori methodologies are likely to be very helpful in assessing options for intergenerational equity.
- 3.133. The options assessment also needs to consider the financial costs of implementing each potential adaptation measure or suite of measures, who would pay, and whether funding is likely to be available at the time the option is required. We anticipate high-level costs will be required for the options assessment, as detailed costing takes time and requires detailed plans, which are not normally undertaken for options assessments. For planned relocation, our proposals in chapter 5 are intended to provide certainty on what Crown funding and support is available for people required to relocate. This would provide some certainty on what funding would be required from other sources. Decisions on funding availability would be required.
- 3.134. We recommend that the methodology or methodologies for assessing adaptation options be set out in national direction. National direction will help to ensure:
- application of key principles for assessment of adaptation options
 - consistency across the country
 - robustness of the options assessment.

It will also avoid delays from debate over methodology. We note that kaupapa Māori methodologies will need to be developed by local mana whenua. National direction would not set out kaupapa Māori methodologies, but simply require them to be applied.

Recommendation 12

We recommend that before adaptation actions are included in a local adaptation plan, an assessment is undertaken that includes consideration of the most appropriate option, given the risk level and the social, cultural, environmental and economic costs, including accounting for intergenerational equity. The impacted community should be involved with this assessment.

Package or pathways of adaptation measures

- 3.135. The options assessment process will identify a 'package' or 'pathways' of adaptation measures to be applied to reduce risk that exceeds tolerance levels, or to do so in the future when risk increases. These should be included in the LAP.
- 3.136. The package ultimately adopted will depend on the nature and level of risk. For example, reducing risk from a seismic hazard that is reasonably well understood might involve a simple package of measures to address the known risk. However, climate change presents a greater

level of uncertainty – in terms of both the magnitude and the timing of impacts and consequences. This is likely to be a driver for the type of package adopted.

3.137. A package may include:

- just one adaptation measure (for example, if planned relocation is selected as the only option)
- a selection of adaptation measures to be applied concurrently, such as rockfall fences and restrictions on future development in the area
- A 'pathway' for adaptation, where the most robust pathway of action to start is identified by developing several pathways and stress-testing them for sensitivity to different scenarios, to find which one gives the flexibility to shift to other pathways before the damaging thresholds are reached. This system is based on testing for potential lock-in of the actions and pathways to enable a flexible decision path that can respond to changing risk over time. Where planned relocation is inevitable, the value of investment in temporary measures requires careful consideration, as it may be more cost effective to start on the planned relocation preparation in a staged manner.

3.138. The DAPP process has been applied in several places throughout the country, and Ministry for the Environment guidance is available in the Coastal Hazards and Climate Change Guidance for Local Government (currently being updated).¹⁸³ Specific DAPP guidance is also being prepared.

3.139. The DAPP process involves identifying different options to reduce risk; assessing their sensitivity to a range of different scenarios; and identifying signals (warnings), trigger points (decision points), and adaptation thresholds that must be avoided by taking actions at the trigger point. The triggers and the thresholds can be physical, social, economic, cultural or environmental conditions or tolerance levels – for example:

- a specified amount of sea-level rise
- a number of times floodwaters affect an area during a specified period
- a number of times in a year that people cannot get to work because of flooding
- a number of times communications networks are disrupted
- an increase in house sales due to the impact of hazards on livelihoods.

3.140. The LAP would need to determine the signals and the trigger points for moving from one course of action to another. This would be influenced by agreed threshold levels that are developed in accordance with national direction and informed by local engagement.

3.141. Because communities need to be heavily involved in making adaptation decisions, signals (warnings) and trigger points – particularly for planned relocation – need to be established, with meaningful community input. This is the best way to determine community tolerance for risk. A community needs to consider what impacts and harm from natural hazards or sea-level rise they can tolerate before they are prepared to bear the cost of the next adaptation measure.

¹⁸³ Ministry for the Environment. 2017. *Coastal Hazards and Climate Change: Guidance for Local Government*. Wellington: Ministry for the Environment.

- 3.142. Where planned relocation is an option identified in a LAP, the LAP should make clear which properties are intended for relocation within the next 10 years. This will provide certainty to landowners and provide a date for valuation and use status (ie, principal place of residence, rental, or second home) to be set (see chapter 5). If rateable value (RV) is used as the basis for calculating compensation, the RV applicable at the time a property is identified in the LAP could be used. Note that we recommend the properties *intended* for relocation are identified. The signals and triggers still need to be reached before a relocation would occur. A signal or a trigger may be used to identify properties for relocation during later reviews of the LAP.

Where people go and land relocated from

- 3.143. Where relocation is identified as an option, even in the long term, the LAP will need to consider what is required to make land available for people and/or communities who need to relocate. In some circumstances, this may simply mean ensuring that regional spatial strategies and district plans/NBE plans ensure sufficient land is available to accommodate relocated properties. Where communities decide to move together, or a large amount of new developed land is needed to facilitate relocation, the LAP will need to consider what is required to ensure this land is developed in time for the relocation.
- 3.144. In addition, the LAP will need to clarify the status, future use, and ownership details for land relocated from, and outline the relevant parties involved with the detailed planning.
- 3.145. In the case of Māori-led planned relocation, there will be considerations for how and where Māori communities move to, and for how the land relocated from is managed (see chapter 2).

Monitoring and review

- 3.146. Monitoring is an essential part of adaptive planning. Adaptive planning is a continuous, ongoing process that is responding to changing risk, and risk that is changing in uncertain ways. As such, that risk, especially the indications of approaching changes (signals) and decision points (triggers), needs to be monitored on an ongoing basis.
- 3.147. Signals will be conditions that are expected to occur sufficiently in advance of the tolerance threshold to allow for adaptation actions to be taken. Triggers also occur before the tolerance threshold is reached (it is too late to adapt if the tolerance threshold is reached). If people are not aware that a signal or trigger has been reached, they will not have sufficient time to adapt. Conditions therefore need to be monitored so people understand when it is time to act, and which action is required. A LAP must include a monitoring plan for the signals and triggers it identifies.
- 3.148. In addition, it is important that the monitoring is linked to the ability to review and change the LAP and any implementation instruments (such as the relocation programme discussed in the section on Step 3 below), as necessary. When a signal is reached, a review of the trigger point and associated adaptation option can be undertaken. In this way, the system will be responsive and adaptive. There is no need to specify periodic reviews of LAPs when this 'adaptive review' approach is applied.
- 3.149. Our intention is that review of the LAP to check signals, triggers and actions should not repeat the process used to prepare the original LAP. The adaptation committee should lead the

review. The expert risk panel should review the risk assessment and check new information. We recommend a public consultation process for the review, like the one recommended for the prioritisation exercise in Step 1 and the development of the relocation programme in Step 3 (a Local Government Act 2002 type of process), rather than the independent hearings panel process we recommend for the preparation of the LAP.

Actions for implementation

- 3.150. The LAP should set out the actions required to implement the package of adaptation measures identified in the plan, with who is responsible for each action. This should include the sequencing and timing of actions. This step will provide the basis for undertaking the adaptation measures (ie, Step 3).
- 3.151. Our intention is that the actions and responsibilities identified in the LAP will be binding obligations. This is essential to ensure the coordinated achievement of adaptation outcomes. Funding agreements may be required to support LAPs. We have not considered the exact mechanisms required to achieve this in the new legislation, but we anticipate arrangements like those for implementation plans and agreements in the SP Bill (but possibly with more statutory weight). Alternatively, or in addition, the relocation programme may be the appropriate vehicle for binding obligations relating to the implementation of planned relocation.

Pre-event recovery plan

- 3.152. All natural hazard events are unpredictable in their precise timing (although some climate change hazards like sea-level rise are predictable in the near term). This means that a natural hazard event could occur during the planning or implementation phase of the adaptation process. Alternatively, a tolerance threshold could be exceeded because of incremental change, such as regular coastal flooding at high tide. The adaptation planning process needs to be able to adjust if either of these situations occurs before the process is complete.
- 3.153. To make the system responsive to events, we recommend that, as a precautionary measure, LAPs require pre-event recovery planning. This type of planning has overlaps with civil defence and emergency management planning and land-use planning. By considering recovery issues before an event occurs, recovery can be better targeted, more efficient, and more effective in the long term. If an event occurs during adaptation planning or implementation, the recovery plan will provide direction on how planning or implementation of adaptation measures might change. Decision-making in response to critical situations must not lock in maladaptive measures or result in adaptation planning being stymied.

Step 3: Undertaking adaptation

- 3.154. This section details Step 3 of our framework for adaptation and relocation planning.
- 3.155. Step 3 involves using existing and new tools to implement adaptation measures, including planned relocation, if it is part of the package. This step has strong overlaps with the land-use planning system. Further detail on links to the planning system are provided below.

Adaptation designation

- 3.156. LAPs will identify land-use planning mechanisms such as rules to reduce risk within an adaptation area. That adaptation area would be based on the area-specific risk assessment that refined the region-wide risk assessment. These rules need to be incorporated into district plans or NBE plans to have legal effect. Under the planning system, this would occur through a plan-change process. In addition, physical works, which are likely to require resource consent approvals, may also be identified as adaptation measures. Both plan change and resource consent processes can be time consuming and costly. They could also result in relitigation of the decisions made in the LAP and result in a 'no', which would frustrate the implementation of the LAP. This situation should be avoided.
- 3.157. We recommend a new tool called 'adaptation designation' to overcome these issues. This designation would be included in a district plan or NBE plan once the LAP has been approved. In other words, the LAP would direct a change to the district plan or NBE plan so that the designation is included without any further process. In this way, the LAP has the power to directly influence the planning system. This designation would be a modification of existing designations under the RMA and proposed Natural and Built Environment Act (NBE Act). We have designed it to provide a responsive process to authorise both physical works and the incorporation of land-use planning tools into a district plan or NBE plan when these have been agreed to in the LAP.
- 3.158. Adaptation designations are discussed in greater detail below.

Recommendation 13

We recommend that the new planning legislation provides for a new 'adaptation designation' to be included in regulatory plans, following the approval of a local adaptation plan (LAP). This designation would be a modification of existing designations under the Resource Management Act 1991 and proposed Natural and Built Environment Act, and would allow for a responsive process to authorise physical works, plan changes and other planning tools agreed to in a LAP.

Relocation programme

- 3.159. The adaptation designation is an appropriate mechanism for land-use planning adaptation measures other than planned relocation. Planned relocation is a process that involves more than just the planning system. We propose that, when the trigger for planned relocation is approaching (indicated by a signal specified in the LAP), a separate relocation programme should be required.

3.160. A relocation programme would set out the details of how the relocation will be implemented. As well as being triggered by a signal specified in the LAP, a relocation programme may also be triggered by a significant event that makes it obvious that relocation is needed, in the same way that a LAP can be triggered by an event.

3.161. A relocation programme would need to identify:

- specific properties and assets that will be subject to relocation and details of use and ownership changes
- the details of the relocation process to be followed, including:
 - what financial assistance will be provided and how
 - timing of relocation, including the final date for vacating properties
- where residents will or could move to (if applicable)
- specific requirements relating to the relocation of infrastructure
- roles and responsibilities for land post-relocation, including land-use management, details of memorials and values to be protected, and kaitiakitanga opportunities for mana whenua.

3.162. In terms of where people will relocate to, the programme will need to include actions related to the preparation and review of RSSs, to ensure sufficient land is available to accommodate those who will be relocated. This may include a dispersed relocation or whole communities relocated together. NBE plans may then need to rezone land to accommodate additional residential or other uses, or to amend land-use rules to enable relocation.

Recommendation 14

We recommend that regional spatial strategies provide for land that will be needed for the relocation of people and property relocated from at-risk land.

3.163. Where new or upgraded infrastructure will be required to enable relocation, the programme should identify how and by whom this infrastructure will be provided, and how that infrastructure will be funded. That information would then be captured in the appropriate asset-management plans. The relocation programme should be binding on those who have these responsibilities, so that asset management plans do get changed.

3.164. In addition, it will be necessary to consider whether existing planned development needs to be accelerated, or if new land needs to be developed expediently, to accommodate relocated people. If this is the case, the relocation programme will need to record agreements on which planned development, and how this can occur in time for the planned relocation to occur. Those agreements should be binding.

- 3.165. We recommend that the relocation programme is divided into three stages: enablement, active relocation, and post-relocation.¹⁸⁴
- 3.165.1. Preparation for relocation requires enablement actions, such as putting land-use rules in place, reducing infrastructure levels of service, negotiating property acquisitions, and making land ready for relocation.
- 3.165.2. Active relocation involves physically moving people and assets, including the relocation of buildings, legal actions, and the payment of compensation and assistance allowances.
- 3.165.3. Post-relocation actions are required, to restore and/or repurpose the land relocated from – these include demolition of buildings, removal of infrastructure, ecological restoration, installation of memorials, and arrangements for kaitiaki opportunities for mana whenua, as well as entering legal agreements related to ongoing maintenance and use of the land.
- 3.166. Development of the relocation programme will involve significant community and stakeholder engagement. During this process, the decision to relocate will not be relitigated, but how the relocation will occur will be consulted on. As well as this engagement, there should be an opportunity for formal submissions on a draft relocation programme and a hearing before the programme is finalised.
- 3.167. Our intention is that those who will relocate should have some flexibility over the timing of their relocation. For example, if a property has been identified for relocation in the next 10 years, some people in that area may wish to leave as soon as possible, whereas others may wish to stay as long as possible. Arrangements could be made that allow a person to receive compensation for leaving their property but continue to live in it under a lease arrangement until the final date to leave.¹⁸⁵ These details of timing and arrangements in the lead-up to relocation will be worked through as part of the development of the relocation programme.
- 3.168. As identified above in the ‘Decision-making’ section, we propose that the decision-maker on the relocation programme should be the same as the decision-maker for the LAP – that is, the adaptation committee or Māori decision-making body. However, the adaptation committee will not be the appropriate body to carry out all the planned relocation implementation functions. These functions will need to be carried out by a range of different entities (eg, infrastructure providers, Land Information New Zealand (LINZ), territorial authorities, and regional councils). The relocation programme will need to clearly assign roles and responsibilities for all actions. This assigning of responsibilities should be based on agreement with the relevant parties. It should be binding and have enforceable statutory weight.

¹⁸⁴ Olufson SE. 2019. *Managed Retreat Components and Costing in a Coastal Setting*. Master's Thesis. Wellington: VUW.

¹⁸⁵ Storey B. 2017. *Conversion to Leasehold as a Methodology to Price Sea Level Rise Risk*. Master's Dissertation. Christchurch: Canterbury University.

- 3.169. The relocation programme will authorise the powers and processes to achieve relocation. Notably, these will include the ability to change land ownership through the acquisition of land relocated from and the cancelling of titles to land, the ability to control and change uses of land (both in the lead-up to relocation and once relocation has occurred), and the payment of compensation and support to affected people. For these reasons, the Crown (ie, the responsible Minister or senior ministry officials) will need to approve the relocation programme. The relocation programme can then begin, and the necessary powers will flow from the Crown to the relevant agencies implementing relocation.
- 3.170. We recommend that, once a relocation programme is prepared, the implementation of the programme is overseen by a Crown entity that can coordinate the different central government, local government, and private sector providers with responsibilities.
- 3.171. Implementing the relocation programme will be a significant responsibility that lends itself to a centralised agency. As well as coordinating the full range of actors within the system, there will be a requirement to oversee the full range of activities required to implement relocation, such as paying Crown and other funds to individuals involved, acquiring properties, undertaking building relocation and demolition, disconnecting and creating new connections to services, among a long list of other actions.
- 3.172. Our view is that a local decision-making committee, such as the adaptation committee, is not the right type of body to be responsible for coordinating and overseeing all these actors and actions. An operationally focused body, rather than a collaborative decision-making body, is needed to oversee implementation (see chapter 6 for more detail).
- 3.173. We recommend that the Crown entity responsible for implementing the relocation programme be required to report on progress of a relocation programme annually. Annual review and reporting will ensure that progress is closely monitored and any issues can be addressed promptly. It will also help create transparency for those involved in relocation. The relevant ministry should receive the reports, provide support, and intervene if the relocation programme gets off track.

Recommendation 15

We recommend that the adaptation committee develops a relocation programme and authorises the powers and processes to achieve relocation – notably, the ability to change land ownership through the acquisition of land to be relocated from and cancelling of titles to land, the ability to change uses of relocated land and the payment of compensation and support to affected people.

We recommend that a new Crown Entity oversees the implementation of the relocation programme and holds the new adaptation designation.

Other adaptation measures

- 3.174. Our view is that adaptation measures that are not planned relocation, and that are not implemented through the land-use planning system (plan changes and resource consents, which we proposed are achieved via the adaptation designation), can be achieved using existing powers and processes. We do not propose any changes in this regard.

National direction: risk assessment and adaptation planning

- 3.175. We have described our proposed framework as community centred and nationally enabled. This section of the report discusses the 'nationally enabled' aspect of the system. We have attempted to strike a balance between the top-down and bottom-up approaches by focusing national direction on process and methodology, with local decision-makers able to apply those processes and methodologies to decide on adaptation and relocation planning.
- 3.176. National direction will be required to ensure good outcomes, equity, and consistency of approach across the country. This is particularly important, considering the extraordinary nature of the powers required to achieve relocation, as well as the Crown funding that a decision to relocate will unlock. National direction will need to:
- provide specific mandates for taking actions within the system
 - standardise the assessment of risk
 - direct the methodologies to be followed in assessing options and making decisions on adaptation
 - provide guidance for engagement with Māori and the community.
- 3.177. Our framework for adaptation planning is based on risk assessments. This is because planned relocation and other adaptation measures are a means of reducing risk, so we need to be clear about where risk is, or will be, high enough that it needs to be reduced.
- 3.178. Our framework proposes two key steps in the risk assessment process:
- a regional assessment that identifies land where adaptation planning is needed to reduce risk
 - an area-specific risk assessment that is more detailed than the regional assessment and forms the basis for decisions on what adaptation measures are needed, including planned relocation.
- 3.179. Currently, there are no mandated national standards or national directions on how to undertake a risk assessment. A variety of Ministry for the Environment guidance exists, but, because this is not mandated, practice differs across the country. This has created considerable inefficiencies and inconsistencies, with different agencies around the country using different methods. It also means risk assessments can be contested by challenging the methodologies used.
- 3.180. As a result, best practice is not necessarily being applied in risk assessments (eg, for how climate change effects are considered or how mātauranga Māori is incorporated). Standardisation of the process, methods and metrics for risk assessment at the national level will provide national consistency, robustness and certainty to the risk assessment process.
- 3.181. Given the importance of the risk assessment to decision-making on adaptation and planned relocation, national direction on risk assessment is essential. We have given some thought to what this direction needs to cover, to provide useful and effective support to the adaptation and relocation planning process.

- 3.182. We discuss this below, but first, it is important to point out that national direction on assessing risk needs to be directive to both adaptation planning processes and 'standard' land-use planning processes. Adaptation planning is primarily focused on reducing risk, or avoiding future increases in risk, to existing and future communities. It goes alongside land-use planning for new development and redevelopment, so that we do not create new or increased risk that needs to be later reduced or relocated from. Both these situations require risk assessments, and both should use the same risk assessment processes, methods and standards. Strong national direction that applies to the effects of both past decisions and decisions going forward is critical.
- 3.183. This raises a structural issue related to the governance of adaptation planning and natural hazards planning. Our understanding is that adaptation planning, and planned relocation in particular, will be governed by a specific piece of legislation (the Climate Change Adaptation Act). However, planning for natural hazards and the effects of climate change as part of 'standard' land-use planning is governed by the RMA and the proposed NBE Act.
- 3.184. If national direction on assessing risk sits within the resource management system, such as in a national policy statement (under the RMA) or the National Planning Framework (under the proposed NBE Act), this direction will need to have force for adaptation planning as well. Conversely, it would be a perverse outcome if national direction is developed for adaptation planning, but not for avoiding the creation of greater need for adaptation.
- 3.185. The authority responsible for adaptation planning, if it is different from the authority responsible for resource management planning, will need joint responsibilities for the preparation of national direction on assessing risk (in a similar way to the Minister for Conservation and the Minister for the Environment for coastal issues under the RMA). We recommend that the new legislation addresses this issue.

Hazard assessment

- 3.186. The starting point of a risk assessment is an assessment of the hazard, including the spatial extent of impact and the frequency, probability or likelihood of the hazard. National direction should specify:
- that assessment is required for all applicable hazards, including compounding and cascading hazards
 - quality assurance requirements for hazard assessments
 - standard methodologies for the different types of hazards, for both regional assessments and area-specific assessments
 - how to account for climate change exacerbating the frequency and magnitude of hazards
 - the types of professionals that can carry out the assessments, and what qualifications and expertise are required.

Risk to what?

- 3.187. Current practice in land-use planning is to assess risk to life and risk to property when planning for natural hazards. This provides for a narrow consideration of risk. We note that risk to life is not a helpful measure for risks associated with climate change, which will often cause repeated damage but not threaten life in a significant way. Additionally, climate change risks may not cause significant damage to property/buildings, but if that damage is recurring, it will still significantly threaten livelihoods, and physical and psychological health.
- 3.188. We need to look more broadly than risks to life and property to effectively address risks associated with climate change. Other aspects of risk include risk to ecological systems, risk to cultural values, financial risks, risks to health, and risk to social values – all of which will be overlooked if the focus is only on risk to life and property. In other words, the consequences of climate change and natural hazards cross many domains.
- 3.189. A holistic assessment of risk is required, and to achieve that, we recommend that the basis of risk assessments should be risk to *well-being*. Guidance on assessing risk to well-being can be found in the Treasury’s Living Standards Framework. The National Climate Change Risk Assessment sets an example of how to use this framework to assess risk. We see benefits in consistency between the basis for the national risk assessment and the basis for regional and area-specific risk assessments.
- 3.190. A well-being focus for risk assessment would align with the purpose of local governments under the Local Government Act 2002 and the purpose of resource management planning under the RMA (and reformed planning system). It would also closely align with the IPCC’s definition of risk.
- 3.191. The Living Standards Framework breaks down an assessment of risk into four key areas: risk to physical and financial capital, human capability, natural environment, and social cohesion. National direction on risk assessment should set methods for assessing risk to well-being based on these four key areas.

Recommendation 16

We recommend the focus for identifying areas for adaptation planning should be on areas where risk needs to be reduced to protect well-being, in accordance with the Treasury’s Living Standards Framework.

Risk from a te ao Māori perspective

- 3.192. Te ao Māori needs to be an essential part of a risk assessment. This perspective brings a well-being focus, which aligns with our recommendation that well-being is the focus of the risk assessment.
- 3.193. Risk assessments from a te ao Māori perspective need to be undertaken alongside other assessments of risk, which is not currently done well.
- 3.194. The National Climate Change Risk Assessment established a process by which mātauranga Māori could be incorporated into risk assessments. We recommend that national direction uses that methodology as the basis for incorporating te ao Māori into risk assessments.

Methodologies and metrics

- 3.195. National direction needs to specify the methodologies and metrics to be used for risk assessment. This should include:
- the circumstances in which a qualitative, semi-quantitative, or quantitative assessment is required
 - direction to apply kaupapa Māori methodologies for risk assessment
 - methodologies for assessing risk and making decisions under deep uncertainty where risk is increasing (such as DAPP)
 - a clear mandate to make decisions using these processes despite uncertainty (this will be essential to overcome the bias in the planning system towards certainty for decision-making)
 - metrics for assessing risk, and when to use them
 - The types of professionals that can carry out risk assessments, and the required qualifications and expertise.

Identification and prioritisation of areas for adaptation

- 3.196. National direction must set out principles and criteria for prioritising areas for adaptation as part of Step 1. Urgency is not the only consideration. In situations where communities are using land that is subject to risk that is increasing over time, decisions made now on those uses will influence the ability of the community to adapt later.
- 3.197. Prioritisation of areas for adaptation planning needs to avoid locking in maladaptive decisions now, even though the impacts of increasing risk will be felt later. For example, national direction should give priority to areas subject to growth pressures and increasing risk over time.
- 3.198. National direction will also need to set out principles and other criteria for prioritisation, such as:
- the relative rates at which risk is changing
 - how to address urban and rural situations
 - the influence of infrastructure considerations on prioritisation
 - the influence of the scale or extent of impacts.

When is adaptation and planned relocation required?

- 3.199. Our framework for adaptation planning requires a national mandate on the risk circumstances that require adaptation planning. In some cases, this may be numeric values for risk, but more likely this will be specific descriptors linked to an assessment methodology, so that after a regional risk assessment is done under Step 1, it is clear what the next step should be – adaptation planning or not.

- 3.200. Significant time and resources can be spent working out whether risk is high enough for adaptation planning, and the system will be much more efficient if there is a national mandate and strong national direction on how to decide this threshold. Because it is a trigger to plan, rather than a trigger to act in any particular way, we do not think this is politically risky for central government. It will allow local decision-makers to get on with working with their communities on the process for planning to adapt.
- 3.201. Our framework also requires a mandate in national direction on the risk circumstances that require compulsory assessment of planned relocation as a possible option. This would be a narrower set of circumstances than described above for adaptation planning. We have not recommended setting a level of risk that mandates that planned relocation is compulsory, as communities need to be involved in the decision-making on when planned relocation is required. Local circumstances will also have an influence on this decision. However, clarification in national direction on when planned relocation needs to be included as an option will ensure that this consideration is not deferred.
- 3.202. If relocation is considered and adopted, local decision-makers, with their communities, will need to develop signals and triggers for planned relocation in LAPs. The coastal adaptation planning guidance provides suggestions for how to develop these signals and triggers. We recommend considering including this guidance within national direction on adaptation planning.

Adaptation options assessment methodologies

- 3.203. Step 2 of our framework requires options for adaptation to be assessed and either one or a combination of options selected for action. The principles, criteria and methodologies for this assessment process need to be set in national direction, including the incorporation of mātauranga Māori, tikanga and kaupapa Māori methodologies. This will ensure national consistency in how this assessment is undertaken, remove the need for debate over how the assessment is done, and ensure that appropriate matters are considered in the assessment.
- 3.204. Where this information already exists in national *guidance*, the key directive elements need to be incorporated into national *direction*, to create a mandate to apply them.

Pre-event recovery planning

- 3.205. National direction should set out the purpose of pre-event recovery planning and the matters that need to be addressed in a pre-event recovery plan as part of a LAP. This needs to include criteria for considering response measures post-event, to ensure those measures do not lock in maladaptive approaches and preclude the application of adaptation measures in the future.

Engagement

- 3.206. The new legislation should identify who should be engaged with in the adaptation planning process and at what point in the system, as is identified in the NBE Bill. These legislative requirements need to be supported by national guidance (rather than direction) on how to engage with Māori, stakeholders and the community on adaptation planning, including issues

that need to be addressed for relocation, information to provide to individuals, staff capability for designing and running engagement exercises, and resources to support community understanding. Following the release of the new legislation, the existing guidance on this topic should be reviewed and updated, if necessary, to reflect the new legislative requirements.

Recommendation 17

We recommend that national direction (through either regulation or the National Planning Framework) is provided to guide adaptation planning, including setting out principles and criteria for identifying areas at risk; methods and standards for risk assessments, including risks to well-being; and methodologies for assessing adaptation options and when planned relocation will be required. This will ensure national consistency and manage political risk for local decision-makers. The risk assessment methodology must include te ao Māori considerations.

Links to the planning system

- 3.207. Our proposed framework for adaptation and relocation planning has strong overlaps with the resource management planning system. This is partly due to our underlying principle that the system for relocation should build on existing systems and that new measures should only be introduced if the current system or process does not sufficiently enable relocation.
- 3.208. We are also cognisant of the current reform of the planning system. Two of the three Acts intended to replace the RMA are a significant way through the parliamentary process, meaning we know a lot about them. Our work will help inform the third piece of legislation, the Climate Change Adaptation Act. We have endeavoured to integrate our recommendations with the SP Bill and NBE Bill.

Relationship between the three Acts

- 3.209. Our view is that relocation provisions in the Climate Adaptation Act should take precedence over the SP Act and all but Part 1 of the NBE Act.
- 3.210. The whole system must prevent planning decisions that create natural hazard risks in the future, as climate changes, and therefore remove the need to reverse planning decisions rules made now, in the future. That is, we need to stop making decisions that create the need for adaptation planning and planned relocation in the first place. To achieve this, natural hazard risk, including climate change, must take primacy over all other considerations in the system.
- 3.211. This priority needs to be driven by the Climate Change Adaptation Act and its relationship with the other two Acts.

Step 1: Understanding the need to adapt

- 3.212. We recommend that Step 1 of the adaptation planning process is undertaken as part of the preparation of an RSS under the SP Act. A regional risk assessment, identification of areas for adaptation planning, and prioritisation of areas that require detailed plans for adaptation will merely extend the existing provisions in the SP Bill relating to climate change and natural hazards.

3.213. We believe using the RSS as the vehicle for this part of the adaptation planning process will allow this planning to be undertaken in an effective and efficient manner and ensure integration with the other spatial planning decisions.

Spatial Planning Bill clauses

3.214. Relevant clauses of the SP Bill, as introduced to Parliament, are paraphrased below.

- The content of an RSS must include strategic direction on key matters, including (clause 17):
 - areas that are vulnerable to significant risks arising from natural hazards, and measures for reducing those risks and increasing resilience
 - areas that are vulnerable to the effects of climate change, both now and in the future, and measures for addressing those effects and increasing resilience in the region, including indicative locations for:
 - major new infrastructure that would help to address the effects of climate change in the region
 - areas that are suitable for land-use changes that would promote climate change mitigation and adaptation.
- An RSS must give effect to the National Planning Framework (clause 15).
- An RSS must set out the priority actions to achieve the vision and objectives of the RSS (clause 16). An implementation plan must be prepared that sets out the key steps for delivering the priority actions and who is responsible for delivery (clause 54). Implementation agreements can be entered into that set out the programme of activities for delivering priority actions, including the funding sources for those activities (clause 57).
- There is an ability for regulations to specify methodology, data and other information that must be used in the preparation of RSS (clause 28).
- There are review and reporting requirements for RSS and implementation plans, requirements for the process of preparing an RSS, and requirements for engagement with Māori, stakeholders and the public.

How Step 1 fits with the Spatial Planning Bill

3.215. For the regional risk assessment, we anticipate that the clauses relating to regulations and the National Planning Framework can be used to require the risk assessment, to prescribe the methodology for undertaking the assessment, to require independent review of the risk assessment, and to set nationally consistent risk thresholds. We recommend that the key matters in clause 17 of the SP Bill are amended to include a specific requirement to identify areas where an adaptation plan must be prepared and to prioritise those areas. We anticipate that the requirement to prepare a LAP can be identified as a priority action in an RSS under the drafting of the SP Bill clauses, as introduced to Parliament.

3.216. Identifying in the RSS which areas will be subject to a LAP will ensure integration with related provisions for infrastructure, future development needs and other strategic growth matters. It also means that NBE plans, when developed, must 'have regard to' these areas. This gives areas for adaptation planning special status and focus under the reformed planning system.

However, an RSS has no regulatory effect, so identification of areas subject to adaptation plans in an RSS will have no direct or immediate impact on rules controlling the use of land within those areas.

- 3.217. We have considered whether any immediate limitations should be placed on land use within areas identified in an RSS for adaptation planning. On balance, we consider that there should not be any limitations. A restriction on private property rights needs robust and specific information on risk, and the region-wide risk assessment that the RSS will be based on will not be this specific (although it will be robust). There also needs to be a genuine opportunity for affected property owners to participate in the decision-making, and to have appeal rights against that decision. The process for an RSS does not provide these mechanisms, and we do not think it would be appropriate to recommend changing this for one specific aspect of an RSS. Giving legal effect to areas identified for adaptation planning in an RSS may also have the unintended outcome of making RSS decision-makers very conservative when they identify areas for adaptation planning, which could result in fewer areas being identified.
- 3.218. Rather than legal effect for an RSS, we recommend that the new legislation requires that all resource consent applications within adaptation areas, whether under the RMA or proposed NBE Act, be required to have 'particular regard' to the risk assessment that informed the RSS. We recommend that a national policy statement is used to direct consent decision-making under the RMA in the period between an area being identified for adaptation planning in an RSS and the LAP being completed. This will help councils respond appropriately to the information during this transition period. This national direction could, for example, include standard objectives, policies and rules that are inserted into district plans and have immediate legal effect when adaptation areas are identified in an RSS, to ensure appropriate consideration of activities within the areas.
- 3.219. We considered a requirement for councils to undertake plan changes to manage development within the adaptation area while the LAP is developed, but we have not recommended this. Given the effort involved in promulgating a plan change, the short-term need for a plan change when the LAP is under development, and the fact that NBE plans are likely to be under development during this time, we think a requirement to prepare a plan change will be too onerous for councils. A directive national policy statement will be much more effective. We note that a plan change will remain an option for councils under the 'normal' system.
- 3.220. We are cognisant that development within areas identified for adaptation planning is likely to result in an increase in risk, making adaptation and planned relocation more difficult and expensive. The measures outlined above reflect an appropriate balance between managing any increase in risk and ensuring the right checks and balances are in place for individuals affected. Our understanding of the changes occurring to the legislation governing LIMs is that the risk assessment informing the RSS will be part of the information included in LIMs for properties within the adaptation planning areas. Identification of these areas in the RSS will put the public and the banking and insurance sectors on notice that there is an issue to be addressed. Both these implications are likely to trigger some individual responses to the issue. We recommend review of the LIM requirements, to ensure that the regional risk assessment would be included on LIMs within the adaptation areas.

Recommendation 18

We recommend that:

- regional spatial strategies (RSS) include areas at risk from natural hazards, areas that will be subject to a local adaptation plan (LAP) and priority areas for that planning. To enable this, parts of clause 17 of the Spatial Planning Bill will need to be amended.
- following the inclusion of areas for adaptation planning in a RSS, that the new legislation requires all resource consent applications within the areas (whether under the Resource Management Act 1991 (RMA) or the proposed Natural and Built Environment Act) to have 'particular regard' to the risk assessment that informed the RSS.
- a national policy statement is used to direct consent decision-making under the RMA in the period between an area being identified for adaptation planning in an RSS and the LAP being completed.

Step 2: Planning to adapt

- 3.221. There is no direct link to the planning system required for Step 2 of the adaptation planning system. Step 2 is a planning process, and the process itself does not need to influence the planning system. A plan change may be promulgated before or at the same time as the process for adaptation planning, to manage land use in the interim.
- 3.222. The output of the adaptation planning process is a LAP. The LAP does need to influence the planning system. This is tied to how the LAP gets implemented, and we discuss this in the next section.

Step 3: Undertaking adaptation

Need for a link to the planning system

- 3.223. LAPs have a different purpose to district plans and NBE plans. They will set out the path and actions for reducing risk and adapting to the effects of climate change, but they will not authorise physical works that might require resource consents, and they will not change district plans or NBE plans to regulate land-use activities directly.
- 3.224. LAPs will include the use of land-use tools as methods for adaptation and will specify what the tools should achieve, but they will not craft the exact wording of the rules. A link to the planning system is required, so that planning-based adaptation measures can be applied through district and NBE plans without additional processes, and to address the need for resource consents for adaptation works. As identified earlier in this report, the link we propose is an adaptation designation.
- 3.225. This section of the report discusses our proposed adaptation designation in more detail, as well as the links to the planning system required for the relocation programme.

Considerations for a mechanism to implement a LAP in the planning system

- 3.226. If a land-use instrument such as the one described above is specified in a LAP, it will still need to be included in the district plan or NBE plan for it to have legal effect. However, because the type of instrument and its intent have been agreed through the LAP process, which is an intensive engagement process, only the details of how to include the instrument

within the regulatory plan needs to be considered, and not the merits of the instrument itself. There should be no relitigating of the decision made in the LAP, as this would be extremely inefficient.¹⁸⁶

- 3.227. A mechanism is needed that allows district and NBE plans to be changed in accordance with a LAP but without the usual public consultation and hearing process. This type of mechanism exists in the RMA and NBE Bill in the case of national direction. Under the RMA, a national policy statement or national environmental standard can insert provisions into a district plan without the need to follow the process for plan development set out in Schedule 1 of the RMA. The same applies under the NBE Bill for the National Planning Framework. However, a LAP is not a national direction document. A new mechanism would be required to allow a district plan or NBE plan to be altered in accordance with a LAP. We propose the adaptation designation is this mechanism.
- 3.228. It is also important to consider the implications of relying on resource consent processes for the approval of physical works that might be part of a LAP, such as a sea wall or stopbank. Unless a permitted or controlled activity, the resource consent can be declined, which would jeopardise implementation of the LAP.
- 3.229. Another consideration relevant to the mechanism used to implement a LAP in the planning system is that the timing of the change needed may not be clear when the LAP is decided. If a LAP is effectively a DAPP plan that includes different adaptation measures that will apply if different trigger conditions occur, then, although the mechanism is certain, the time at which it is needed may not be. This means the ability to change a district plan or NBE plan needs to be flexible and responsive, and not tied to the regular review cycles of these plans.

Adaptation designation

- 3.230. Our recommendation is that the new legislation provides for an 'adaptation designation' to be included in regulatory plans once the LAP has been approved. The standard objectives, policies and rules inserted into district and NBE plans under Step 1 would be replaced by the adaptation designation. This designation would be a modification of existing designations under the RMA and NBE Bill, and would allow for a responsive process to authorise physical works and incorporate land-use planning tools agreed in the LAP.
- 3.231. A designation is a planning tool that provides a specific authorisation for a public work that has public benefit. For example, a designation is available for infrastructure that manages risks from natural hazards, such as stopbanks. It operates by setting aside the rules in a district plan or NBE plan for works associated with the purpose of the designation. In place of the rules, the designation imposes a set of conditions the public work must comply with. There are two stages to a designation: the identification of the land and the construction of the work.

¹⁸⁶ This proposition is supported by Lawrence J, Allan S, Clarke L. 2021. *Enabling Coastal Adaptation: Using current legislative settings for managing the transition to a dynamic adaptive planning regime in New Zealand*. Wellington: Resilience to Nature's Challenges National Science Challenge – Enabling Coastal Adaptation Programme.

- 3.232. Once a designation is in place, any activities that are not in accordance with the purpose of the designation require the approval of the designation-holder (either a minister, local authority, or requiring authority). If the designation-holder does not own the land subject to the designation, powers under the Public Works Act 1981 (PWA) are available.
- 3.233. The power to include a designation in a planning document lies with the requiring authority. The council will review the details of the designation, but it only has the power to make recommendations to the requiring authority on the details of the designation. It is the requiring authority that has the decision-making power. Approval to be a requiring authority, and the types of works for which designations can be used, are therefore strictly controlled by the legislation.
- 3.234. An adaptation designation would not be used for a public work, but it could be used for a public good (reducing risk). As well as authorising the construction of infrastructure or other physical works for risk reduction, it would authorise changes to land-use activities and the application of specific rules to manage land use. The control of land use in this way by means of a designation would be a new mechanism, as currently designations control land use for the purpose of physical works only. It would give the requiring authority control within the designation area to manage activities for the purpose of reducing risk, and to ensure the implementation of the LAP.
- 3.235. Under the two-stage approach, the first stage of identifying the land would confirm the specific area within which adaptation measures apply, either immediately or in the future. This would be based on the area-specific risk assessment undertaken in Step 2, which would be at a 'property' level of detail, so that the adaptation area can be accurately identified on a map. The LAP, which sets out all the agreed adaptation measures, would be the equivalent of a notice of requirement for a designation under the RMA or NBE Bill.
- 3.236. The second stage would involve confirmation of the detail of the measure that is needed at the time (for example, the design and construction methodology for a stopbank or the drafting of a suite of rules to control land use in the way required). This second stage would occur as often as needed, or before the trigger for each adaptation measure occurred. This second stage would be the equivalent of an outline plan of works under the RMA or a construction and implementation plan under the NBE Bill.
- 3.237. An adaptation designation has the advantage of being able to manage all land-use planning authorisations for adaptation measures through one mechanism. Physical adaptation works would otherwise require a resource consent from either or both the regional council and territorial authority, which would follow the standard resource consent process, with the consent authority being the ultimate decision-maker. Currently, designations do not replace the need for regional council resource consents or resource consents under the National Environmental Standards for Assessing and Managing Contaminants in Soil to Protect Human Health (NES-Soil).
- 3.238. We recommend that this is changed for adaptation designations, so that they provide a complete authorisation, including for regional consents and NES-Soil consents. Changes to a district plan or NBE plan would follow a plan-change process, again with the council as decision-maker, and would require different considerations to the assessment of resource consents. Authorising both physical works and changes to plans via an adaptation

designation allows for an integrated and holistic approach to implementing adaptation measures via the planning system.

Ownership change and compensation

- 3.239. We stated earlier in this chapter that the planning system, specifically land-use rules, are not appropriate for implementing planned relocation. A key reason is that land use rules have no direct ability to change ownership or provide compensation for this change in ownership. However, a designation under the RMA and NBE Bill does have this ability, including acquisition.
- 3.240. In the case of a designation under the RMA and the NBE Bill, an owner of an estate or interest in land, including leasehold, can apply to the Environment Court for an order obliging the holder of the designation to acquire or lease the estate or interest under the PWA.¹⁸⁷ In addition, the holder of a designation can apply to the Minister of Lands to have the land acquired under the PWA.¹⁸⁸ Chapter 4 of this report discusses why the PWA is not considered suitable for planned relocation purposes. However, it may still be appropriate for acquiring land and paying compensation for adaptation measures that are not relocation, such as sea walls or stopbanks.
- 3.241. We do not propose any changes to the way the PWA is incorporated into designations, for the adaptation designation.
- 3.242. As discussed above, acquiring land and compensating people for relocating will be governed by the relocation programme, and not the adaptation designation. We acknowledge that this will result in two land acquisition and compensation systems – the PWA for adaptation measures that require land that is not planned for relocation (for example, realigning a stopbank), and the specific planned relocation mechanism implemented through the relocation programme.
- 3.243. We consider this distinction appropriate, as it represents a continuation of the status quo for physical construction works and proposes a new, fit-for-purpose mechanism for the new planned relocation aspect.

Who is responsible for an adaptation designation?

- 3.244. We have carefully considered who the holder of an adaptation designation should be. That entity has considerable power in the planning system. Under the current system, the designation-holder does not exercise designation powers unchecked. For example, Crown oversight is provided through ministerial approval to become a requiring authority and for approval for land to be acquired on behalf of the requiring authority. Additionally, the Environment Court makes decisions to acquire land at the request of the landowner. In comparison, the process we recommend for preparing LAPs includes Crown approval for the planned relocation aspects of the plan, which we consider to be a comparable level of oversight.

¹⁸⁷ Natural and Built Environment Bill, cl 524.

¹⁸⁸ Natural and Built Environment Bill, cl 535.

- 3.245. Currently, holders of designations are ministers, local authorities, or specified network utility operators. For an adaptation designation, the requiring authority needs to be an entity that can administer the designation over the long term. We recommend that the proposed new Crown entity is the holder of the adaptation designation, with the ability to delegate this responsibility to an alternative body. This will allow case-by-case consideration of which body is best placed to administer the designation.
- 3.246. In the case of Māori-led planning for adaptation and relocation, we recommend that the Māori decision-making body that was responsible for the LAP is also the holder of the adaptation designation. We expect these bodies to have greater longevity than adaptation committees.

Adaptation designation process

- 3.247. As mentioned above, the first stage of an adaptation designation would effectively be the preparation of the LAP. There are strong parallels between the information and assessment requirements for a Notice of Requirement for a designation and a LAP.
- 3.248. Once the LAP is approved by the decision-making body, the legislation should require that the district plan or the NBE plan is amended to incorporate an adaptation designation that covers the land area identified in the LAP, and that sets out the adaptation measures and the triggers for their application. Because the LAP will have been through an extensive engagement process and hearing, no additional process associated with the adaptation designation is needed.
- 3.249. The second-stage authorisation process would occur for each adaptation measure that is required. It would involve providing the details of that measure to the RPC for review and comment, like an outline plan of works under the RMA and a construction and implementation plan under the NBE Bill. For an adaptation designation, this process could be referred to just as an implementation plan, as an adaptation measure will not always involve construction.
- 3.250. As stated above, there is no need for this stage to involve extensive public engagement, as this will have occurred during the development of the LAP. There should be no ability to relitigate the need for the measure. However, we do see benefit in limited public engagement on the specific nature of the measure. For example, there would be public interest in the visual amenity and public access aspects of a sea-wall design, and changes to these aspects of the design may be possible.
- 3.251. Similarly, the exact nature of how land-use planning rules work, and what this means for people living and working in an area, may be able to be refined through public consultation.
- 3.252. For these reasons, the RPC should have the ability to seek feedback from either the public generally or from specific individuals on the way the measure is implemented, but not on the need for the measure in the first place. We also recommend that this is a feedback process and not an affected-party-approval process that would result in appeal rights. No further rights should be created for people who provide feedback. The RPC should have the discretion on whether to give people the right to be heard through a hearing. If a hearing is offered, it should just be hearings by the RPC, rather than an independent hearing panel process.

3.253. Once the requiring authority has decided on the recommendations from the RPC on the implementation plan for the adaptation measure, the measure could proceed. For a physical work such as a sea wall, this would mean that construction work could commence. For a land-use planning provision, such as a particular rule, the provision would take immediate legal effect within the area of the designation.

Relocation programme

3.254. We consider that the designation implementation plan process described above is appropriate for linking adaptation measures to the planning system, other than planned relocation. When the trigger for planned relocation is approaching (indicated by a signal specified in the LAP), a more thorough programme for relocation should be required. This programme should be authorised by the Crown (ie, a minister or senior ministry officials), rather than the requiring authority. The logistics of carrying out a planned relocation have implications beyond the planning system, so a separate process is appropriate, as discussed above.

3.255. In terms of the planning system, the adaptation designation would stay in place while the relocation programme is developed. When preparation of the relocation programme begins (indicated by a signal in the LAP), the area to be relocated from should be specifically identified within the adaptation designation, to provide certainty. The monitoring and review of the LAP (described above) should mean that the mapping of the area for relocation has been kept relevant since the preparation of the LAP.

3.256. The relocation programme will also govern actions related to the land relocated from. Several options will be available for the ongoing ownership, use and management of land post relocation. We expect these to be identified and assessed, and agreement reached, through the LAP process. The options will then be included in the relocation programme.

3.257. Reserve status options will be available, which are likely to be applied in most cases. Land relocated from must be permanently protected from future land uses that re-create risks. The types of uses that might be appropriate for Relocated land will need to be assessed on a site-by-site basis, following a robust risk assessment. In some circumstances, limited agriculture and horticulture may be allowed. In other cases, the land may be managed as a recreation area. There may be circumstances where no human activity will be allowed.

3.258. Ownership options are likely to include the Crown (eg, the Department of Conservation or LINZ), local authorities and Māori Trusts.

3.259. Once relocation has been implemented in accordance with the relocation programme, the adaptation designation will be uplifted from the district plan or NBE plan. In its place, new zoning and rules to reflect the new land use will need to be included in the plan (in situations other than loss of land to the sea). These plan provisions are likely to reflect new reserve or other statuses of the land. This matter would have been considered as part of the relocation programme, which we recommend goes through a public engagement and hearing process. In this situation, we consider that a further public process is not needed to include the new zoning and rules within the district plan or NBE plan. The legislation should enable this to occur as part of the uplifting of the designation.

Where people move to

- 3.260. The planning system has a key role in ensuring people have a place to move to. Through provisions such as zones and rules, the district plan or NBE plan needs to provide the capacity to accommodate people within areas of the district not being relocated from.
- 3.261. The extent of this need will become apparent during the development of the LAP, and we expect actions will be recorded in a LAP, confirming where people will move to and changing planning provisions such as zones and rules to provide for this.
- 3.262. Changes to land-use provisions to accommodate relocated people need to be included in plans before a relocation programme is implemented. Where provision of new land requires rezoning or a change in land-use rules, we believe a standard plan change could be used. However, in circumstances where relocation is imminent (eg, within the following five to ten years), and where a significant parcel of land is required,¹⁸⁹ a truncated process is likely to be needed.
- 3.263. The NBE Bill includes an urgent plan-change process, which does not require as many process steps as a standard plan-change process. We consider this urgent process would be appropriate for a plan change required to accommodate relocated people if relocation is imminent. We recommend that the provisions of the NBE Bill are amended to provide for this, and that this process also be available to change a district plan (if the change is required before an NBE plan is in place).

¹⁸⁹ We envisage this will only be required where all or some members of affected communities opt to stay together, which will likely be the case for hapū- and whānau-based communities.



Chapter 4

Powers

4. Powers

- 4.1. In this chapter, we discuss why the existing land-use planning regime and the proposed new regime do not provide adequate tools to implement planned relocations from places of high natural hazard risk. We emphasise the need for overarching legislation that contains all necessary powers and discuss the additional powers needed, particularly related to managing land that must be relocated from. We discuss discrete issues, including appeals and dispute resolution procedures, protection from liability for those involved in decision-making, withdrawal of services, such as electricity and other infrastructure, and the power to intervene in other processes when necessary. The chapter concludes with a table that identifies the additional powers that will be necessary.

Implementation of planned relocation using land-use planning tools

- 4.2. We agree with the recent report by the Environmental Defence Society that no existing tools allow for the effective implementation of planned relocation.¹⁹⁰ Although the report's analysis is comprehensive, we offer further reflections on one element of the discussion that is repeatedly raised: the implementation of planned relocation using only land-use planning tools.
- 4.3. Our view is that land-use planning tools are not appropriate, or sufficient, on their own to enable the implementation of planned relocation. It is uncertain whether a relocation could be implemented using the RMA, especially one that is not an element of a larger public works project. It is unlikely that the proposed NBE Act will change the status quo.
- 4.4. It is unclear whether it is possible to implement planned relocation using the provisions of the RMA. To significantly reduce the risk posed to a property from a natural hazard, some or all activities on that land would need to be prohibited. For example, to reduce the risk to residential occupants, it would be necessary to prohibit residential activity.¹⁹¹ Where residential activity is currently occurring, this would involve extinguishing that existing use. It might also be necessary to nullify existing resource consents to use that property in a particular way.
- 4.5. It is currently possible to modify or extinguish existing uses using rules in a regional plan (although not using rules in a district plan).¹⁹² If a planned relocation were implemented only by extinguishing an existing use (eg, prohibiting existing and future residential activity) the land could no longer be used for that purpose. Under s 85 of the RMA, no compensation is

¹⁹⁰ Peart R, Tombs BD. 2023. *Aotearoa New Zealand's Climate Change Adaptation Act: Building a Durable Future – Current Legislative and Policy Framework for Managed Relocation: Working Paper 2*. Auckland: Environmental Defence Society.

¹⁹¹ Of course, there may be other activities that need to be prohibited to enable planned relocation. Indeed, all use of the land may have to be stopped. Residential use serves as a useful illustration.

¹⁹² Resource Management Act 1991, s 20A. We note that, under the reformed resource management system, territorial rules would also be able to have this effect, see Natural and Built Environment Bill 2022, cl 26.

payable for the effect of planning provisions on interests in land, and so no compensation would be paid because of the change.¹⁹³

- 4.6. Telling a land owner they can no longer use their land for residential purposes using only the mechanism of planning provisions would be an extraordinary use of land-use planning powers, particularly given the lack of compensation. It is likely any decision to implement a relocation in this way would result in legal challenge and it would raise the question of what (if any) limits on planning powers exist.
- 4.7. One of the limits on planning powers is contained in s85, which also allows for an exception to the 'no compensation' rule. Land owners¹⁹⁴ affected by a planning provision (for example, prohibiting residential use of land) can apply to the Environment Court for relief.¹⁹⁵ If the Environment Court is satisfied the provision would render the land "incapable of reasonable use" and place "an unfair and unreasonable burden" on the land owner, the Environment Court can, at the election of the local authority, order the provision modified, deleted or replaced. Alternatively, the Court can order the acquisition of the land under the PWA, provided the land owner consents. If the land owner does not consent to an acquisition, the only option is for the local authority to choose to modify, delete or replace the provision. It follows that, where a planned relocation uses a plan provision to prohibit residential activity, the land owner may, if the statutory tests are satisfied, frustrate that policy of relocation.
- 4.8. Where a land owner accepts a PWA offer in such circumstances, it would be tantamount to planned relocation. Ownership of the land would change; the former occupier would no longer live on that land (nor would anyone else) and the risk would be reduced.

Reservations about the exception to section 85

- 4.9. The exception in s 85 of the RMA gives land owners a veto power that would be inappropriate in the context of planned relocation. It is also an open question as to when land owners would accept offers and what happens if some, but not all, land owners in an affected area accept.
- 4.10. Getting to the point of an offer in this context requires litigation in the Environment Court. It also raises the question of whether PWA processes are appropriate in the context of planned relocation. For example, it is not clear that the valuation methodology required by the PWA is appropriate in the context of planned relocation.¹⁹⁶
- 4.11. The circumstances in which the Environment Court would find that the exception was not satisfied may only arise when a significant risk is already posed to the property.

¹⁹³ See Resource Management Act 1991, s 85(1); Natural and Built Environment Bill 2022, cls 139–141.

¹⁹⁴ Or the holders of any interest in the land.

¹⁹⁵ This description is simplified. For example, the holder of any interest in the land (including, for example, a mortgagee or lessee) can apply under these provisions; it is not limited to land owners.

¹⁹⁶ Peart R, Tombs BD. 2023. *Aotearoa New Zealand's Climate Change Adaptation Act: Building a Durable Future – Current Legislative and Policy Framework for Managed Relocation: Working Paper 2*. Auckland: Environmental Defence Society.at 9.

- 4.12. It would be much more difficult to apply s 85 if the risk being managed is not yet ‘significant’ (ie, where the risk is certain to occur, but the timing and magnitude is uncertain).¹⁹⁷ It follows that, in the context of planned relocation from hazards such as sea-level rise or predicted future increases in flooding risk, the operation of s 85 is likely to be particularly difficult, because the magnitude and timing of such risk may be uncertain, even if the eventual outcome is inevitable.
- 4.13. This leads to a ‘timing conundrum’ in the context of planned relocation and land-use planning.¹⁹⁸ An argument exists that where a provision in a plan attempts to prohibit residential activity on land, the only way to avoid triggering the exception to no compensation outlined in s 85 is where the risk is considered ‘significant’.¹⁹⁹ This would mean that taking steps to reduce risk may only be possible once it is too late because, in an ideal system, people would no longer be using land in at-risk places by the time the risk becomes ‘high’.

Changes under the Natural and Built Environment Bill 2022

- 4.14. Like the RMA, the NBE Bill does not require compensation for the effects of planning provisions on interests in land.²⁰⁰ However, it makes changes to the exception outlined in s 85. It states that risk (including future risk) can be considered in deciding whether the tests of “incapable of reasonable use” and unfairness are met.²⁰¹ It also removes the ability of a land owner to veto the policy underpinning the relevant provision. If the land owner declines the offer, the provision comes into force with no changes.²⁰²
- 4.15. The ability to consider the risks posed to the land in assessing whether the tests have been met will make the process of applying s 85 more straightforward. This will ensure plans can achieve their policy aims through planning provisions, rather than allowing an individual to frustrate those aims, which will also ensure the reformed system has an outcomes-based focus.
- 4.16. In the context of planned relocation, however, the proposed changes will not greatly alter the status quo. The ability to consider ‘future risk’ may not necessarily be sufficient to solve the timing conundrum. Without some degree of immediate risk, decision-makers may not be able to persuade the Environment Court that it would be fair and not unduly burdensome for a land owner to be prohibited from using their land for residential purposes with no compensation. Ultimately, it will depend on how the courts interpret the provisions.

¹⁹⁷ Some instances of sea-level rise may fall into this category, although there is reasonable certainty of where and how much seas will rise to about 2040–2050 and the hotspots can be identified. See NZ SeaRise. *Predicting sea-level rise for Aotearoa New Zealand*. Retrieved 3 August 2023.

¹⁹⁸ Grace ES, France-Hudson BT, Kilvington MJ. 2019. *Reducing risk through the management of existing uses: tensions under the RMA*. GNS Science Report 2019/55. Lower Hutt: GNS Science.55 at 6.2.1.

¹⁹⁹ However, it is that ‘significance’ is measured.

²⁰⁰ Natural and Built Environment Bill, cl 139(1).

²⁰¹ Natural and Built Environment Bill, cl 140(3).

²⁰² Natural and Built Environment Bill, cl 141(4).

- 4.17. If a provision prohibits the residential use of land, and the tests are met, two potential outcomes could occur under the NBE Bill's provisions:
- the local authority makes an offer to acquire the land under the PWA, which the land owner accepts
 - the land owner rejects the offer, in which case the policy could still be implemented, but there would be no change of ownership. The land owner would continue to have all the obligations of ownership with few of the rights that normally accompany ownership. There would be no compensation for any loss suffered by the land owner.
- 4.18. The provisions also pose practical difficulties.
- They require application to the Environment Court if a land owner wishes to seek relief.
 - Extinguishing residential use of land (for example) does not clarify whether land can be put to other uses, who will own the land and be responsible for cleaning it up and making it safe or who will be responsible for it in the future.
- 4.19. This suggests the NBE Bill's proposed provisions will not, on their own or without further refinement, address planned relocation by providing a principled, transparent and integrated way to implement planned relocation policies. We therefore recommend against planning provisions being the sole, or primary, mechanism to implement planned relocation. We acknowledge, however, that land-use planning provisions will have an important part in adaptation planning and before a relocation programme is implemented. They may signal the likelihood of a relocation and help in controlling the use of land while a relocation is implemented.

Recommendation 19

We recommend that planning provisions are not used as the sole, or primary, mechanism to implement planned relocation.

An argument about unconstitutional 'takings' of land

- 4.20. An alternative argument that a land owner may make is that such a provision to prohibit residential use of their land amounts to an unconstitutional 'regulatory taking' of their land. This is an argument that could be run under either the RMA or NBE Bill (if enacted). This raises constitutional questions about how private property can be 'taken' (see paragraph 4.67).
- 4.21. A tenable argument is that if Parliament intends interests in land to be 'taken' in this manner, it would, and should, have been much clearer in the statutory language used. It might follow that the use of planning provisions on their own and without other empowering statutory provisions is an illegitimate use of those planning powers.
- 4.22. It is likely the courts would strive to interpret the provisions in a way that invokes the importance of private property rights and in a way that would ensure some level of compensation for the exercise of state power. This may mean that the courts simply say Parliament has not conferred such powers on local government in this context and such planning provisions are 'ultra vires' of the legislation. This further reinforces the need for considered and comprehensive legislation to provide for planned relocation.

Overarching legislation containing all necessary powers is needed

- 4.23. Specific powers are needed not only to enable the implementation of planned relocation but also the effective operation of a comprehensive system for adaptation and risk reduction from all natural hazards. As described in chapter 3, the system should be as clear as possible but will nevertheless have several elements, all of which need to be clearly enabled and work in concert.
- 4.24. Given the complexity of what is being proposed, we do not favour simply amending existing, or proposed, legislation to make the existing system provide for planned relocation. Those amendments would be significant. There is a strong likelihood that reliance on powers across different pieces of legislation would cause confusion and uncertainty, especially as those laws have different purposes and objectives and they have not been designed with planned relocation in mind.
- 4.25. Overarching legislation would bring all the necessary powers and processes into one place, provide clarity and certainty, and help those involved in relocation understand their responsibilities, rights and obligations. It would provide for the necessary leadership and the flexibility to take the right action where intolerable risk is present.
- 4.26. The legislation will, however, need to clearly state its connection with the other relevant laws. This will include but is not limited to the resource management system, the broad emergency management system, the Building Act 2004, the Health Act 1956, the Local Government Official Information and Meetings Act 1987, Te Ture Whenua Māori Act 1993, the Marine and Coastal Area (Takutai Moana) Act 2011 and the Reserves Act 1977.
- 4.27. The legislation will also need to consider technical matters, such as the decision-making of co-owners of property (eg, between cross-lease owners, body corporates and ownership structures, particularly trusts, and multiple ownership structures like corporations under Te Ture Whenua Māori Act 1993) and the occupation leases, licences and rights of first refusal under the Māori Reserved Land Amendment Act 1997. Some of the difficulties in decision-making experienced by owners of these types of properties following the Canterbury earthquakes are instructive and may provide a starting point for policy development.²⁰³ We do not make any recommendations in this regard but, as discussed in chapter 6, some disputes in these contexts may require a dedicated independent forum for resolution. Indeed, the planned relocation process itself should require a dedicated forum for resolving disputes given the emphasis on enabling individuals to choose to relocate at a time that suits them during a relocation programme.
- 4.28. As discussed in chapter 2, the legislation will need to be in accordance with te Tiriti o Waitangi. It must ensure that the Crown is required to meet its obligations in relation to the principles of te Tiriti. It will have to preserve Treaty settlements and be in accordance with Treaty claim settlement statutes. It must protect relationships with Māori freehold and customary land, even when there is a need to relocate and be in accordance with Te Ture Whenua Māori Act 1993. The legislation should ensure Māori can retain ownership of land,

²⁰³ Toomey E, Finn J, France-Hudson B and Ruru J. 2017. *Report ER23: Revised Legal Frameworks for Ownership and Use of Multi-dwelling Units*. Porirua, Wellington: BRANZ.

while ensuring risks are reduced. Specific powers and provisions will be needed to guide decision-making related to Māori land.

- 4.29. Chapter 6 makes the case for establishing an overarching government body with the powers to ensure all actors are doing what they should and powers to step in when they do not. The Crown should also provide a central information portal for those considering, or engaged in, adaptation generally (including planned relocation). Expert panels with broad representation and including iwi, hapū and Māori communities should support decision-making, both for the preparation of significant documents and their subsequent review.

Recommendation 20

We recommend that the adaptation system, including planned relocation, be governed by overarching legislation containing all necessary powers. To avoid conflicts, the legislation must also specify the circumstances in which its terms take priority over other legislative provisions.

The long list of powers

- 4.30. Table 5 lists the main powers we think are necessary to include in a system designed to deliver planned relocation. The powers fall into six broad categories:
- process
 - control of use, acquisition, and retirement of land
 - appeals
 - general powers
 - intervention powers in other systems
 - emergency powers.
- 4.31. The precise mix of powers and who exercises them will, in large part, flow from the policy choices made in relation to process, documents, actors and institutions. However, some choices about the available powers in turn affect the policy choices for the whole system. As a result, there is an element of causality dilemma²⁰⁴ in discussing the powers necessary for a system of planned relocation. Our recommendations are based on what we consider will work best for the process we are suggesting, and we make broad comments on each of the categories we have identified.

Process

- 4.32. The process described in chapter 3 will require a range of powers, to operate effectively. Importantly, the entities necessary to put the process into effect will need to be established. Each step of the system will need statutory direction setting out what needs to happen and who is responsible (eg, for the new adaptation designation tool, requirements for relocation programmes and who should prepare and approve them). Legislation will also need to provide special powers, such as those identified below, to change land ownership and enable actors to undertake their roles. Legislative provisions should address all natural hazard risks (not just

²⁰⁴ That is, a 'chicken and egg' problem.

those exacerbated by climate change) and will need to be supported by national direction to guide how different parts of the process should be undertaken.

Control of use, acquisition and retirement of land

- 4.33. Various options could be used to practically implement relocation, and each option raises questions about the control of use or a change of ownership of the land. In turn, there are related questions about the degree to which individuals have freedom of choice in the process, if not its end point.
- 4.34. Relocation directly engages questions of land ownership and the ways and extent to which the state can control or acquire private property (acknowledging that te ao Māori may take a very different view). From a Western worldview, private property is protected to some degree from interference by the state or others by long-standing constitutional traditions, except where authorised by law and where fair compensation for any taking or injury is available.
- 4.35. Conversely, this is not absolute and many instances exist where the use of property is curtailed in the public interest with no compensation (eg, in relation to land-use planning). Moreover, the general approach (illustrated by schemes like the Building Act 2004) is that any risk to private property is borne by the owner. This 'owner responsibility' model incentivises owners to adopt risk management measures, such as installing fire extinguishers or sprinkler systems, and to take out appropriate insurance cover.
- 4.36. Planned relocation directly engages the boundaries between these conflicting presumptions and raises moral and social arguments about the responsibility of government generally. Our view is that the context in which planned relocation arises is distinct from the issues that arise in relation to buildings that are unsafe or unsanitary. The starting point for assessing the governmental response should not be what happens when a building becomes unsound but what governments do when disasters strike. The political reality is governments intervene heavily after disasters and what might be considered the 'normal' rules are often suspended.
- 4.37. It is important to acknowledge the tensions and options. For example, the provisions of the Building Act 2004 and related legislation suggest that owners of property at risk from natural hazards may already have potential liabilities that are consequential on harm to the property. Under the Building Act 2004, owners are liable for property that is dangerous or a public nuisance or to which regulatory standards are set in the public interest under any law. The liability is not only related to harm caused to another person or property but also to regulatory duties to reinstate, demolish or remove defects that make a building dangerous or insanitary.²⁰⁵ Likewise, the scheme created under Subpart 6A of the Building Act 2004 in relation to the obligations of owners of earthquake-prone buildings takes a similar approach and may be comparable to what will be necessary for planned relocation. The scheme is a

²⁰⁵ See the Building Act 2004, s 121 and following sections. See also the Health Act 1956, s 42 and s 44. If it is necessary for a territorial authority to demolish a dangerous building the territorial authority may carry out the work and recover the costs from the owner (and this can be secured against the property) (s 126). This approach was also taken in the Canterbury Earthquake Recovery Act 2011 (repealed), which also included responsibility for owners to bear the costs of demolition of dangerous buildings (s 40). Moreover, the Crown was not liable to compensate the owner of a demolished dangerous building and had the ability to recover the costs of demolition from the owner.

precautionary (pre-event) compulsory system for avoiding or minimising harm driven by standards that measure risk according to location and through resilience assessments of buildings. Owners, not government, are responsible for remediation or demolition, although limited central government support is available for those in need.²⁰⁶

- 4.38. These schemes indicate that in the context of dangerous or insanitary buildings, the responsibility, and cost, to render them safe (even if demolished) fall to the owner. It is possible these liabilities may already serve as impetus for those owners to relocate before the harm is suffered, and after the harm is suffered if they are in a position, or are helped, to do so.
- 4.39. A planned relocation scheme could adopt a similar approach. However, planned relocation, which requires both land and buildings to be vacated, is substantively different and the analogy should be treated with caution. Planned relocation is not about vacating dangerous buildings; it requires vacating land that will be unsafe for continued use, now or in the future. In contrast, once a building deemed dangerous under the Building Act 2004 is made safe or demolished, the owner (subject to any other regulations) is free to rebuild, to continue using the repaired building, or to use the land for some other purpose.
- 4.40. As illustrated by the Crown response to the Canterbury earthquakes, even when schemes suggest many costs should fall on owners that is often not the reality. The Government's approach in making offers to Red Zone residents was extremely generous. Another example is the Government's recently announced intention to support councils in regions affected by Cyclone Gabrielle and the recent floods and to offer a voluntary buyout for owners of Category 3 designated residential properties.²⁰⁷ Designing a policy framework for anticipatory planned relocation must be undertaken in this context. The types of interventions that are common in post-event situations should inform the powers needed in an anticipatory risk reduction system. They should exhibit similar characteristics, albeit tailored to take advantage of the circumstances that accompany pre-emptive action.
- 4.41. The tensions between the responsibility for mitigating risks and other community values flow into some of the fundamental questions that must be addressed in creating a planned relocation system. Because of the presumptions noted above (that 'takings' of private property by the state are relatively rare, and that risks are normally borne by the owner), the temptation can be to frame the issues by asking under what circumstances relocation might be mandatory and, conversely, when it would be voluntary and what would happen if it was. However, we do not consider this is an appropriate way to frame the issues. The nature of relocation, and the risks it is aimed at reducing, indicate that at the end of a relocation programme the 'at-risk' area should no longer be used.
- 4.42. Limited exceptions may exist for things such as ceremonial events, transitory recreational activities, some agricultural or horticultural uses (where identified as appropriate through the LAP process) or mahinga kai gathering. This should be a 'hard-and-fast rule' or outcome. It should not be possible for individuals to be able to elect not to participate in the relocation programme or to choose to stay in the at-risk area once the relocation programme has ended.

²⁰⁶ Such as the Heritage EQUIP grants and Kainga Ora – Homes and Communities advances.

²⁰⁷ See New Zealand Government. *Govt to support councils with buyout and better protection of cyclone and flood affected properties*. Retrieved 20 July 2023.

If the system allows for exceptions, it will be weakened by providing less certainty and diminishing the status of planned relocation. It would also undermine the risk reduction outcome for planned relocation. If people stay, the risk will not be reduced and may be increased, in the sense that, in the event of a natural disaster, others such as first responders are likely to be put at risk.

- 4.43. As a result, the planned relocation system will need to contain elements that are both voluntary and mandatory. The question is not whether either of those things is desirable or appropriate but rather what mix of the two is necessary. The balance should provide the individuals affected with a reasonable degree of freedom of choice to make decisions that suit them at the time that suits them, while ensuring that the risks to the community can be reduced. For this reason, setting the right mix should be guided by a principle that the system should aim to provide those affected with as much choice as possible over the timeframe of the relocation programme, consistent with the efficient and effective implementation of that programme.
- 4.44. If individuals could remain in any capacity, the overall objective of risk reduction would not be adequately met. In addition, allowing individuals to remain would require an individualised consideration of counter-factual scenarios and various issues, including:
- whether individuals ought to be able to remain in their properties without access to services (eg, electricity, water and sanitation) and roads, subject to the power of withdrawal of services (see paragraph 4.88)
 - the risks associated with allowing people to remain in an area and the impact of those risks, if realised, on others (eg, on emergency services, tenants, visitors and children)
 - the risk that no insurance cover would be available
 - the risk that the Crown or local government will have to bear the financial and physical risks of saving people who refuse to leave
 - the risk that the Crown or local government will bear the residual financial and political burdens of being ultimately responsible for closing off the ability to use and occupy an area
 - the risk that lowered property values and rents will make those houses attractive to lower socioeconomic groups, leading to increased vulnerability and inequality
 - the extent to which people wishing to stay can pay to provide their own risk mitigation or protection.
- 4.45. This last point raises questions about coordination between individuals who wish to stay and the ability for people to decline to pay for mitigation and/or protection and stay anyway. For example, if a sea wall is an option, it will not work if it has breaks outside two properties, and it is potentially unfair if some get a benefit paid for by others. Related issues that would also have to be considered include: that sea walls will be temporary protections at best; raising houses and filling land to enable new development in risky places is also temporary; and in many cases access to the use of this land will be impeded by unprotected adjacent land.
- 4.46. Overall, a hybrid range of powers will be necessary in the overarching legislation to provide the necessary tools to implement a relocation programme, both during the process and at its conclusion.

Recommendation 21

We recommend that at the end of a relocation programme, land in the at-risk area should no longer be used, although there may be some very limited exceptions such as for ceremonial events, transitory recreational activities, some agricultural or horticultural activities or mahinga kai gathering.

To achieve this, the system will need to contain a mix of voluntary and mandatory elements. Setting the right mix should be guided by a principle that the system should aim to provide those affected with as much choice as possible over the timeframe of the relocation programme, consistent with the efficient and effective implementation of that programme.

Control of use

- 4.47. As outlined in chapter 3, a relocation programme may be undertaken over multiple years. During this period, it will be important for the system to contain powers to control the use of the land (although these powers may be of less use once the relocation is completed).
- 4.48. Land-use planning tools will be used during this time to control the use of land in the lead-up to relocation (eg, by preventing further intensification). The adaptation designation discussed in chapter 3 is a new mechanism proposed to facilitate this.
- 4.49. Private law tools may also be used during this period. Options to consider include the following.
- 4.49.1. The land could be acquired by agreement and then leased back to the former owner or another tenant. Alternatively, an occupation licence could be granted instead of a lease. However, any option in this context would need to consider the effect of the Residential Tenancies Act 1986 and the Property Law Act 2007. This may not be a straightforward option.
- 4.49.2. Covenants could be used to restrict the activities that can be undertaken on land. However, the current land owner would have to agree to them, limiting their application.²⁰⁸ Because covenants can be modified using court processes,²⁰⁹ it may be necessary to consider if a specific scheme is needed and whether amendments to the Property Law Act 2007 are required.²¹⁰

Acquisition and retirement of land

- 4.50. As discussed in paragraphs 4.2 to 4.19, we recommend against using land-use controls to implement the final stage of a planned relocation (eg, to prohibit residential activity). In line with our recommendation that the at-risk area should no longer be used once a relocation programme has finished, this means ownership of the land must change as part of the relocation programme. To enable this, the law will need to set out specific and clear tools.

²⁰⁸ We cannot imagine a circumstance in which land was acquired for the purposes of planned relocation by central or local government, a covenant placed on the land restricting use, and the land then sold again to a third party.

²⁰⁹ See Property Law Act 2007, s 316 and s 317.

²¹⁰ For example, see the Queen Elizabeth the Second National Trust Act 1977, s 22A, which provides constrained powers to vary covenants created under that legislation by consent.

- 4.51. Our recommendation is based on both principle and the practical difficulties posed by the alternative. Allowing the land to continue in private ownership would require rules regarding the permissible uses on individual pieces of land, a means to record those rules, and an enforcement mechanism to ensure that only those uses are undertaken. It would also require legislative provisions regarding the clean-up and restoration of land that has been relocated from, including identification of who bears the costs and a mechanism to ensure it happens. Further provisions would be necessary regarding the ongoing maintenance of the land and what a non-using land owner would have to continue to pay in rates, if anything.
- 4.52. To provide clarity and avoid disputes, the legislation will need to clearly identify the rights that a land owner, who can otherwise not use their land, may still have in relation to it. For example, will the land owner be able to sell or gift their land to others? It may be difficult to see why a land owner would want to sell land that cannot effectively be used, but we do not rule out the possibility that there could be, for example, speculation in land in the hope that in future the rules might be relaxed. Indeed, consolidation of land in private hands might lead to greater pressure to reverse earlier decisions. A land owner may also be able to get some return for granting non-possessory interests in the land to others. For example, a prohibition on residential use might not prevent the granting of an easement of right-of-way, or an easement allowing for a recreational activity other than residential use. This may or may not be desirable, and if a relocation is not coupled with a transfer of ownership, these questions would need to be considered.²¹¹
- 4.53. Eventually the land would be inherited by the heirs of the current land owner. Ultimately, there may be many absentee owners and corresponding difficulties of administration if formal steps need to be taken (such as cancelling the title if the land is lost to the sea or health and safety processes if someone is injured on the land in a way that should have been prevented by the land owner). It is likely that, if not acquired at the time of relocation, land will ultimately be abandoned completely. Abandoned assets, including bare land, can be difficult for local government to manage, particularly if those assets pose a hazard to others.²¹² Scale would be an important issue, as would the question of bona vacantia (ie, where property has no owner) and the difficulties of management and process if large amounts of abandoned land will eventually return to the Crown in an ad hoc way.

²¹¹ See also the discussion of the effect of inundation from the sea of title to land, at footnote 217.

²¹² Note that the Building Act 2004 contains provisions allowing councils to demolish dangerous buildings and recover the costs from the property owner, or from the property (usually at the time of sale) (see s 121 and following sections). In this context, a risk is that any similar steps would be taken in relation to a property that has no value and so no ability to recover.

- 4.54. Several local authorities have undertaken relocation processes in recent years, including through purchasing properties. It seems to have been assumed that general powers and competencies under the Local Government Act 2002 have been sufficient to empower these purchases. It is likely that at some point this assumption will be tested and may prove to be incorrect.²¹³ To provide clarity of process and to avoid arguments about whether such agreements are within the capacity of local government, or the Crown, the legislation should contain all necessary powers to provide for acquisition by agreement.²¹⁴
- 4.55. A power of compulsory acquisition will also need to be part of the system, in line with our recommendation that, at the end of a relocation programme, the at-risk area should no longer have people living in it. This power may only be exercised rarely, but strong powers are necessary to ensure a relocation programme can be implemented and to incentivise people to leave an area at a time that suits them before the relocation programme ends. In addition to the difficulties of allowing people to stay in at-risk areas (noted at paragraph 4.44), if the legislation does not empower decision-makers to compulsorily acquire properties, they would need to continually manage risks, often at much greater cost. Authorities would find it hard to discontinue services to those properties, even where service provision becomes extremely expensive. Even if they were given the power to withdraw services (see paragraphs 4.89 to 4.91), authorities would face increasing demands for expensive protective infrastructure.
- 4.56. Instead of acquisition by agreement or compulsory acquisition, it is also possible to craft a power that allows for retirement of at-risk land by way of cancellation of the Land Transfer Act 2017 title. Current laws do not provide such a power.²¹⁵ Creation of this power would be another mechanism to ensure a prohibition on almost all existing and future use. This may be a conceptually more robust way to remove at-risk land from circulation, and it could be crafted to technically avoid a transfer of the land. This could be a useful tool in circumstances where the land has been lost, for example, through sea-level rise²¹⁶ or the land has become unsuitable

²¹³ We note that s 86 of the Resource Management Act 1991 empowers local authorities to acquire land by agreement in order to terminate or prevent any non-complying or prohibited activities in relation to that land. Compensation is to be determined in accordance with the Public Works Act 1981 (PWA). There may be an argument that, considering this power, in circumstances where residential activity will be prohibited to implement a planned relocation, this power (and the required calculation of compensation) ought to be used, and that it overrides any other powers to contract held by local authorities. This argument might apply in circumstances where a voluntary process is undertaken, and the offers made are less than what owners would be entitled to under the PWA.

²¹⁴ For example, s 17 of the PWA empowers acquisition by agreement and this helps in determining how such agreements are to be given effect in the context of the Act's other provisions. Similar clarity is necessary in relation to planned relocation.

²¹⁵ A power of cancellation does not currently exist in this context, although the Commissioner of Crown Lands does have this power in other contexts. See the Land Act 1948, s 42.

²¹⁶ See the existing powers in the Marine and Coastal Area (Takutai Moana) Act 2011, s 22 and s 23 (noting that these powers do not apply to 'specified freehold land'). These suggest that Records of Title might not need to be immediately cancelled. Nonetheless a cancellation power for freehold land below the high-water mark may be useful. Another policy option could be for legislation to state that as the sea encroaches, 'private' land becomes part of the marine and coastal area without the need for the Crown or a local authority to acquire it.

for private ownership and where the title might properly be cancelled.²¹⁷ Cancellation would have to provide for compensation in the same way as acquisition.

- 4.57. Cancellation of title would typically mean the land reverts to Crown ownership,²¹⁸ but in some circumstances a change of status of the land may be appropriate, perhaps to reserve status and the responsibility of local government. An existing power to cancel Land Transfer Act 2017 title exists where the Crown acquires land in various circumstances.²¹⁹ This involves a two-step process of acquisition and then cancellation. However, we do not see any impediment to legislation creating a one-step process (perhaps using an Order in Council mechanism) if this was seen as politically and administratively desirable.
- 4.58. As noted in chapter 2, the nature of Māori land and its importance to Māori mean there are unlikely to be any circumstances in which it would be appropriate to acquire Māori land in the context of a relocation. Māori should retain the ownership of their land, particularly in the case where the land is held in trust or in the names of multiple owners. The rationale is to give credence to mana whenua, respecting the history and cultural significance that Māori attach to the land and the environment, apart from understanding the hurt caused by many historical confiscations and PWA takings. However, it will be necessary to develop tools that can ensure use is prohibited with limited exceptions.
- 4.59. Options include placing a memorial on the title to the land, the use of land-use zoning tools, conferring the land with reserve status under the Māori Reserved Land Act 1955, or creating wāhi tapu or urupā easements registered on a title. These powers will need to align with the decision-making process for Māori land and be subject to appropriate engagement procedures. The Māori Land Court could play an important role in this process. A definition of Māori land would need to be developed as part of the legislative process. We suggest that general land owned by Māori be excluded from this definition, perhaps with some exceptions.²²⁰ Deciding what types of general land owned by Māori should be subject to an exception should consider the context in which that land exists. For example, an exception might apply to a piece of general land near an area of Māori freehold land, but an exception might not apply to a piece of general land owned in a suburb of a large metropolitan area.

²¹⁷ We note there is an open question about the effect of the Marine and Coastal Area (Takutai Moana) Act 2011 in this regard. The 'common marine and coastal area' excludes 'specified freehold land', which includes land that, immediately before commencement of the Act, is registered under the Land Transfer Act 2017 in which a person other than the Crown or a local authority has an estate in fee simple that is registered under that Act. Although land can be lost through the doctrine of erosion (and the title changed accordingly), this only applies where the erosion is gradual or imperceptible. If land on the coast was lost because of a sudden event (eg, storm surge), which is technically known as an avulsion, and, as a result, became part of the coastal and marine area, an argument exists that it would still belong to the land owner, who would retain all of the rights associated with their fee simple. Owners may wish to continue to exercise rights over this land. Conversely, resolving who owns it may have to be left to the situation that arises once that land achieves bona vacantia status. We note the common law position has changed under the Marine and Coastal Area (Takutai Moana) Act 2011 in relation to land owned by the Crown or a local authority. Section 13 introduces a concept of 'natural occurrence or process' in relation to this land, and as a result appears to include avulsion.

²¹⁸ It is possible to register instruments such as easements without titles existing, as it is possible to lodge such an instrument in the Interest Register at Land Information New Zealand.

²¹⁹ See the Land Act 1948, s 42.

²²⁰ See, for example, the Infrastructure Funding and Financing Act 2020, s 11, the Urban Development Act 2020, s 9 and ss 16–21, and the Local Government (Rating) Act 2002, s 62A(1)(a), as amended by the Local Government (Rating of Whenua Māori) Amendment Act 2021.

Recommendation 22

We recommend that:

- in almost all cases (except in relation to Māori land), planned relocation be accompanied by a change of land ownership to either the Crown or local government
- overarching legislation empowers decision-makers to acquire land by agreement, to compulsorily acquire land and to retire land from use by cancellation of the Land Transfer Act 2017 title.

We recommend Māori retain ownership of their land (excluding general land, with some exceptions), particularly where the land is held in trust or in the names of multiple owners. Tools should be developed to prohibit use with limited exceptions, such as for ceremonial gatherings or mahinga kai gathering.

Use of the Public Works Act 1981

- 4.60. Overarching legislation should contain all the powers necessary to implement planned relocation, including those relating to the acquisition of land. As noted in chapter 3, the planning system does not have the ability to change the ownership of land. To the extent that system speaks to changes of ownership, for example, in the context of designations, it relies on links to the PWA. An alternative could be to modify the PWA to provide for planned relocation, but specific property acquisition tools in overarching legislation would be clearer and more comprehensive.²²¹
- 4.61. As noted by the Environmental Defence Society, planned relocation itself does not appear to meet the definition of a ‘public work’,²²² because it appears to contemplate building or operating a public work on land as opposed to relocating from it.²²³ Additionally, the rationale for allowing acquisition of land for public works is significantly weaker in relation to acquisition for planned relocation. Acquisitions under the PWA are authorised on the basis that it is appropriate for the Crown to exercise its powers of eminent domain in circumstances where a public work will contribute significantly to the common good. An airport runway, a highway, or a bridge may provide large returns to scale, and the PWA provides the tools to overcome holdouts and allow for an efficient process of coordination. The coercive use of state power is balanced by requirements that the state compensate the owner and that it offers that land back to the original owners (or their heirs) if the land is no longer needed for a public work.²²⁴

²²¹ That said, the PWA has a few powers that should be considered for inclusion in the planned relocation legislation. These include: ‘disturbance payments’ (moving costs, including reasonable valuation and legal fees) under s 66; compensation for loss through repayment of mortgage (on the basis of the difference in interest payable for substituted land if it accords with interest rates prevailing in the locality) under s 67; compensation for business loss resulting from relocation, under s 68; additional compensation (for up to \$50,000) for land that contains a dwelling used as the land owner’s principle place of residence, under s 72; discretionary assistance to purchase an equivalent residence if given vacant possession, under s 73. For further examples, see s 74, s 75 and s 99.

²²² We understand it is unlikely a process of planned relocation would meet the definition of a ‘public work’ under the existing definition in the PWA. This definition could be changed, but we consider it would be better for a specific compulsory acquisition power to be included in dedicated planned relocation legislation (as it was in the Canterbury Earthquake Recovery Act 2011).

²²³ Peart R, Tombs BD. 2023. *Aotearoa New Zealand's Climate Change Adaptation Act: Building a Durable Future – Current Legislative and Policy Framework for Managed Relocation: Working Paper 2*. Auckland: Environmental Defence Society. pp 47–48.

²²⁴ Public Works Act 1981, s 40.

- 4.62. Planned relocation, in many respects, attempts to do the inverse of this. It aims to largely retire land from use. While planned relocation may also serve the public good and save long-term costs, these are often substantively different from the returns one would expect from a public work. It would be better for the powers of acquisition necessary for planned relocation to be framed by the purpose of planned relocation legislation.
- 4.63. PWA processes are not a good fit with planned relocation. For example, the starting point in calculating compensation is that the land owner is entitled to ‘full compensation’.²²⁵ As discussed in chapter 5, compensation for planned relocation might look quite different. Problems may also occur given that, if the valuation is undertaken once the risk is high, the value of the land may be quite low.²²⁶ Moreover, valuations under the PWA ignore the status of land as designated for the public work and are valued as though there is no designation. How this would play out in the context of a relocation is unclear. Presumably, it would be necessary to ignore the fact the land was being acquired due to a high level of risk. This may unjustifiably inflate the land’s value. We consider that acquisition powers and processes should be closely linked to the framework described in chapter 3, including in relation to decision-making, implementation and disputes.
- 4.64. We have recommended against powers to acquire Māori land, and we note the deep concerns Māori hold about the PWA generally. This further supports our view that overarching legislation should contain all necessary powers.
- 4.65. While we do not think the PWA is fit for purpose to implement planned relocation, it will still be relevant in the context of risk reduction. For example, where acquisition of land is necessary to build flood defences (a public work), then the PWA process should be used. The PWA may also be needed to acquire land or interests in land outside an area identified for planned relocation to replace infrastructure that is ‘lost’ through the adaptation planning and/or relocation process, such as rerouting roads or pipelines where necessary.
- 4.66. The risk of inequity exists if there is a large difference between what an individual might be entitled to under planned relocation acquisition in contrast to a public works acquisition in the same location. However, at this stage, it is not clear this would occur or which approach would be less generous. For example, if a public works acquisition is based on the value of the land at the time of acquisition, the amount may be lower than some of the figures proposed in chapter 5. It may be difficult to differentiate in particular cases, but if the purpose of the acquisition is to acquire land for a public work (as opposed to a relocation), the starting point should be that the PWA is the appropriate regime.

Recommendation 23

We recommend against using the Public Works Act 1981 to implement planned relocation (unless required for and carried out in conjunction with a public work).

²²⁵ Public Works Act 1981, s 60(1).

²²⁶ Peart R, Tombs BD. 2023. *Aotearoa New Zealand's Climate Change Adaptation Act: Building a Durable Future – Current Legislative and Policy Framework for Managed Relocation: Working Paper 2*. Auckland: Environmental Defence Society. pp 47–48.

Financial assistance and compensation

- 4.67. Long-standing constitutional traditions control Crown action regarding the compulsory acquisition of property (governed by Magna Carta 1297 and constitutional convention).²²⁷ These presumptions indicate that compulsory acquisition by the Crown must be authorised by Parliament using clear statutory language and be accompanied by fair compensation.²²⁸ This suggests that specific reference to compensation will be an important aspect of the legislation. For clarity and function, we also suggest that the legislation is specific about the level of compensation appropriate in circumstances of acquisition by agreement.
- 4.68. As discussed in chapter 5, compensation may not necessarily be given at the same rate for all land that must be transferred because of planned relocation. Of course, Parliament could, if it wished, clearly state that the compensation is \$0. This would be in accordance with constitutional presumptions, even though unusual. It would inevitably lead to litigation, but providing the statutory language is clear, any challenge is unlikely to be successful. Various alternatives to no compensation could also be developed and chapter 5 considers these possibilities in more detail. However, the legislation will have to make it clear what level of compensation is payable under different circumstances. For example, if distinctions are made between different types of property (eg, primary residential and second homes), the different compensation that is payable would need to be specified in the primary legislation itself. These matters cannot be left to the development of secondary legislation or governmental policies.
- 4.69. The legislation will also have to consider other possible variables, each with benefits and disbenefits. For example, should compensation be fixed or based on market value and should it be calculated around the equivalence principle with or without a discount? The level of compensation provided for compulsory acquisition would need to be specified in the legislation and set with reference to the balance of the system discussed in chapter 5 and the need to avoid perverse outcomes. For example, people might wait until risks are high enough to force compulsory acquisition in the hope of receiving more than if they opted to relocate earlier by entering into an acquisition by agreement. Ultimately, clarity and consistency over time may be the most important factors.
- 4.70. A power to retire land from use by cancelling the Land Transfer Act 2017 title might more easily justify an approach of no compensation; what the Crown has given, the Crown can take away. However, to avoid disputes and litigation, the legislation would still need to be clear on this point.

²²⁷ Palmer G. 2001. *Westco Lagan v Attorney-General*. *New Zealand Law Journal*. 163.

²²⁸ *Waitakere City Council v Estate Homes Limited* [2006] NZSC 112; [2007] 2 NZLR 149 at [45].

- 4.71. Whatever mix of options is agreed, they will need to be supported in the legislation through property valuation powers and a process for objecting, although these will be dependent on how payments are assessed. Consideration should also be given to providing for accelerated compensation²²⁹ provisions in appropriate cases, or as an incentive.²³⁰
- 4.72. The legislation also must have mechanisms to ensure no abuses of power. For example, the PWA adopts an objection process in relation to acquisitions, where objections are made to the Environment Court.²³¹ Disputes about valuation are taken to the Land Valuation Tribunal.²³² Of course, these issues are not limited to land acquisition, and, as noted in chapters 3 and 6, appeal and dispute resolution processes will be an integral part of the overall system.
- 4.73. Some prefer to refer to compensation as ‘financial assistance’ or other synonyms on the basis that compensation implies that the payer carries responsibility for a loss suffered by another or is providing redress for wrongdoing. Reasonable people will differ on this point; however, our view is that compensation does not necessarily import notions of wrong-doing or illegitimacy. For example, the PWA uses the word compensation in the context of both acquisition by agreement and compulsory acquisition, neither of which involve any wrongdoing because public works are not illegitimate exercises of state power.²³³ People can be well compensated for their work, and, in this sense, recompense is an alternative synonym.
- 4.74. As noted in chapter 5, payments to help people suffering hardship (ie, social assistance beyond the payments tied to property) will also be a critical part of the system (eg, to support renters). The legislation should enable authorities to provide financial assistance generally, even if the precise policies are left to different, potentially non-statutory, instruments.

Recommendation 24

We recommend that the powers of acquisition by agreement and compulsory acquisition be coupled with powers to make payments of compensation. These payments should be referred to as ‘compensation’, because this term is well understood in this context. There should also be powers for authorities to provide financial assistance generally, even if the precise policies are left to different, potentially non-statutory, instruments.

Appeals and dispute resolution

- 4.75. As discussed in chapter 3, given the issues at stake and the impact decisions in the system will have on individuals and their property, the ability to challenge decision-making will be an important part of the system. It should be tailored to the planned relocation system, rather than relying on the resource management system (or other) processes. It should be designed (where possible) to minimise risks of delay, gridlock, and frequent relitigation of decisions.

²²⁹ That is, a payment that occurs prior to the actual acquisition being undertaken (which in the context of public works can be some years away and in some cases prior to any formal designation).

²³⁰ Under the PWA regime, accelerated compensation is typically available in hardship cases.

²³¹ Public Works Act 1981, s 24.

²³² Public Works Act 1981, s 59 and following.

²³³ See, for example, Public Works Act 1981, ss 17–21.

- 4.76. We must attempt to strike the right balance between the importance of the issues at stake and the need for checks and balances with the need for efficiency. This can be achieved by adopting a similar appeal structure to that proposed for the reformed resource management system. This would provide a right to appeal against the merits of the local adaptation plan decision to the Environment Court in circumstances where the adaptation committee does not accept a recommendation from the independent hearings panel. Where a recommendation is accepted, there should be a right of appeal on points of law to the High Court, or the Māori Land Court for Māori land. Although the Crown's approval for a relocation programme must be obtained, there should be no ability to appeal against the programme itself.
- 4.77. This approach is supported by the number of other steps that must be taken, including the need to obtain Crown approval of the local adaptation plan and relocation programme and the level of community engagement required to make a final decision on relocation.
- 4.78. The availability of judicial review throughout the process will also ensure that the robustness of the decision-making process can be tested at any point.
- 4.79. The role of appeals in circumstances where the responsible Minister exercises a call-in²³⁴ power to prepare a local adaptation plan or relocation programme might be different. It may be that, in these circumstances, judicial review is the appropriate mechanism for challenge. We do not make any recommendation in this respect.
- 4.80. Specific elements of the system (eg, the relocation programme) will need to contain a right to object, but this will not amount to a full appeal on the merits of a decision to relocate. As discussed in chapters 3 and 6, an independent body may be needed to resolve disputes about the logistics of implementing a relocation. We note the proposals in chapter 5 that recommend compensation be based on either the rateable valuation of land or the cost per square metre to construct a similar house are both driven by a desire to find a relatively objective and well-understood value of the property at a point in time before a decision to relocate is made. We do not consider there should be an ability to object to that sum (or at least not once the decision to relocate has been made and that valuation 'fixed' in time).²³⁵

Recommendation 25

We recommend that at the point a decision to relocate is made (ie, at the local adaptation plan stage), there should be a right to a merits appeal to the Environment Court where the adaptation committee does not accept a recommendation from the independent hearings panel. Where a recommendation of the hearings panel is accepted, there should only be an appeal on points of law to the High Court, or to the Māori Land Court for Māori land. There should be no further rights of appeal during the relocation programme stage of the process. Judicial review should remain available throughout the process.

²³⁴ This means allowing the responsible minister to 'call-in' the process and make the necessary decisions and take the necessary action themselves.

²³⁵ If the rateable value option is adopted, it may be necessary to make changes to the process of objection to rating valuations under the Rating Valuations Act 1998.

General powers

- 4.81. To operate effectively, the system will need to contain a range of general powers. For example, the legislation will need to provide the powers for land to be designated differently (eg, as reserve land) post-relocation.
- 4.82. It is also critical, given the number of different actors involved, the legislation clearly indicate who can exercise powers and when they can be exercised. Flexibility will be needed, and different actors may have to be enabled to use the same sorts of powers at different times or in different circumstances.
- 4.83. The responsible Minister will need to have a call-in power in circumstances where the relevant decision-maker is unable or unwilling to discharge their functions, or where the scope of the relocation is beyond the capacity of local government. The Minister may also need powers in circumstances where people refuse to move, although this may depend on what general enforcement provisions are provided. The Minister may need further powers to order the preparation of a local adaptation plan outside the usual risk assessment process (eg, following a natural hazard event). In this context, Orders in Council or Gazette Notices are tools that should be considered to deal with implementation questions, especially in the acquisition or retirement of the land.
- 4.84. An administrative ‘catch-all’ power should state that the Minister, or other actor charged with making decisions and implementing relocation, can do all acts and other things necessary that are incidental to the specific powers granted.
- 4.85. The legislation must also establish powers necessary to facilitate the ongoing management of land relocated from and transferred to the Crown or local government.²³⁶ Regimes are already in place that could be used for this purpose.²³⁷ However, further limits on how this land can be dealt with may be necessary (eg, to remove any ability for the Crown or local government to subsequently sell the land).
- 4.86. For simplicity and efficiency, consistency will be needed within a geographical area on the actor responsible for ongoing maintenance. For example, if people voluntarily surrender their land over time in an area, the surrender should be to the same actor, to enable land to be consolidated easily.²³⁸

²³⁶ Consideration could also be given to whether iwi, hapū and Māori communities could be appropriate actors to manage land that has been relocated from (even if that land was not previously Māori land).

²³⁷ For example, the Reserves Act 1997, Conservation Act 1987, Land Act 1948, Māori Reserved Land Act 1955, and Queen Elizabeth the Second National Trust Act 1977.

²³⁸ The consolidation of land may be an issue (or step in the process) that central government agencies (eg, Land Information New Zealand and Te Puni Kōkiri) are involved in or provide guidance on.

Recommendation 26

We recommend that the system contain a number of general powers (noted in table 5) and that the legislation is clear about who can exercise powers and when. These powers should include:

- ministerial call-in powers
- an administrative catch-all power indicating actors in the system can do all acts necessary and which are incidental to the specific powers granted
- the powers necessary to enable the ongoing management of land relocated from and transferred to whomever assumes guardianship of post-relocation land.

Protection from liability

4.87. Protection from liability for those involved in decision-making about planned relocation could be modelled on the protections for local government recently provided by the Local Government Official Information and Meetings Amendment Act 2023. That Act amends the Local Government Official Information and Meetings 1987 to provide that local authorities will not be liable in civil or criminal proceedings for making information available in good faith on hazard risk relevant to the Land Information Memoranda (LIM) system. In circumstances where decision-makers are unwilling or unable to exercise their powers, ministerial call-in powers may be justified.

Recommendation 27

We recommend that actors in the system be given some protection from liability for making decisions and acting in good faith to reduce risk. However, decision-makers should not be excluded from liability in circumstances of misfeasance, if they fail to act at all, or if they fail to implement designations or directions from the Crown.

Withdrawal of services

4.88. Currently, a latticework of provisions creates various obligations on authorities to continue to supply services and the circumstances where those obligations can be curtailed are unclear. We do not attempt a comprehensive review of the many relevant pieces of legislation and regulation here. However, two brief examples illustrate the problem.

- 4.88.1. Section 105 of the Electricity Industry Act 2010 prohibits electricity distributors from ceasing to supply line function services to consumers. Cessation is allowed in limited circumstances (s 106), including after a fire or earthquake, but cessation may only continue so long as the reason for cessation continues.
- 4.88.2. Section 130 of the Local Government Act 2002 obliges local government to provide water services. A local government organisation must provide water services and maintain its capacity to meet its obligations under the Act. There is a limited power to close 'small water services' but only following a referendum that receives the support of 75 per cent of those eligible to vote. The continuing obligation to supply water was an issue following the Canterbury earthquakes, because the 'Red Zone' residents who chose not to accept the Crown's offer of purchase and who therefore

remained in the Red Zone were entitled to the benefit of the council's continuing obligation to supply them with water, at considerable expense to the council.²³⁹

- 4.89. The power to withdraw services is necessary because costs can quickly become prohibitive. For example, after repeated storm events, supplying a home with electricity or water can become very expensive. If a planned relocation process is unfolding and services are washed out in a storm or become ineffective because of rising seas, replacing them may not be efficient. Furthermore, staged withdrawal of services can incentivise residents to leave an area before risks become acute.
- 4.90. Legislation will need to establish the process and powers to reduce or stop the supply of services (including roads and bridges)²⁴⁰ and provide clear justification by explaining their purpose. The process would need to involve a request by the authority to an independent decision-maker, or the process could be embedded into the relocation programme so it is clear when services will be withdrawn. In either scenario, there should be transparency regarding the triggers or thresholds at which withdrawal is justified. This will also be important to ensure that local adaptation plans factor in the likelihood and timing of a service withdrawal.
- 4.91. Given the likelihood that areas subject to pre-event relocation will suffer from an event at some point during the relocation, the legislation should allow for both the planned and unplanned withdrawal of services.

Recommendation 28

We recommend that there be a process where authorities (including central and local government and private providers) can apply to withdraw services (including roads and bridges) from a property before or during a planned relocation process.

Intervention powers in other systems

- 4.92. It may be necessary to control whether, and to whom, land is sold or gifted and who can inherit it (as discussed at paragraphs 4.52 and 4.53). This may be important during implementation of a relocation programme, or if a decision is made that transfer of the land is not an integral aspect of relocation. For example, legislation could require land to be offered to the Crown at the point of succession, or if the land owner chooses to gift or sell the land (ie, a power of Crown pre-emption). These powers would involve interfering in other systems and could, for example, require changes to the Wills Act 2007 or Administration Act 1969. The process of private sale is primarily contractual and not heavily regulated in Aotearoa New Zealand, beyond the requirements of the Fair Trading Act 1986 and various pieces of tax legislation. Any restrictions on the normal rules of freedom of contract in this context would need to be included in the legislation governing relocation. Powers to intervene and override the provisions of private trusts, or other contractual agreements, may also be necessary (eg, an option to purchase or right of first refusal given by a land owner to a third party).

²³⁹ For illustrations of the general challenges, see Hayward M. 2019. *Christchurch council spends \$74k connecting water, sewerage to lone red zone house*. *Stuff* 22 February; and Truebridge N, Law T. 2018. *City council considering buying several red-zoned Christchurch properties*. *Stuff* 6 March. Retrieved 1 August 2023.

²⁴⁰ A large amount of road stopping may be necessary to remove roads from the acquired land so that parcels can be amalgamated (which will make it easier to manage long-term). An expedited process in this respect (coupled to the relocation programme) may be very useful.

- 4.93. Tools are also needed to deal with other interests, beyond the freehold interest held by the 'land owner', registered or noted against the title to land acquired for relocation. This may also be true for some unregistered interests. For example, existing easements, leases, mortgages, or other encumbrances (including licences) may need to be acquired or extinguished. Covenants may also need to be extinguished. These may include, for example, those noted on the title because of s 221 of the RMA²⁴¹ or because of the Queen Elizabeth the Second National Trust Act 1977.
- 4.94. Transfer of ownership to the Crown or local government would not, on its own, be sufficient to remove these interests in land, and the obligations they create would continue to bind the new land owner (ie, the Crown or local government). Retirement of the land through cancellation of the Land Transfer Act 2017 title would solve these problems.
- 4.95. Powers for post-event relocation will need careful consideration, particularly given many ostensibly anticipatory relocations will become post-event relocations at some point during the process. Rapid decision-making will sometimes be necessary but will need to provide for due process. Achieving this will need to account for other parts of the system (eg, mortgages and insurance) and government will need to work with mortgage lenders and the insurance industry to address these issues. Other aspects of the system may also need consideration (eg, processes may be needed like the Christchurch 'yellow sticker' process). Different types of hazards may need different treatment. Implementation, protection, emergency and enforcement powers will need to be considered in this context.
- 4.96. As noted in chapter 5, changes to the scheme of the Credit Contracts and Consumer Finance Act 2003 and the Responsible Lending Code are other examples of where the planned relocation system may require powers to change other systems. This is particularly true if ongoing oversight is needed on how those systems operate, as more about the planned relocation process is learned.

Recommendation 29

We recommend that the planned relocation system consider the effect of other systems and contain powers to intervene in them where necessary.

Emergency powers

- 4.97. A variety of tools may be necessary in a planned relocation system. Given few planned relocation processes play out smoothly over time and that events will occur during the process, emergency tools may be critical.

Recommendation 30

We recommend the Government consider adopting emergency powers in overarching legislation for adaptation and planned relocation.

²⁴¹ Which allows for the notification of a consent notice by way of a covenant recording the conditions attached to a grant of subdivision consent.

Table 5: List of additional powers necessary for a planned relocation system

Description of powers	
Planned relocation powers	
1	Overarching legislation containing all necessary powers and that specifies its connection with other relevant laws and the circumstances in which its terms take priority over other legislative provisions.
2	<p>Legislation that:</p> <ul style="list-style-type: none"> a. is te Tiriti of Waitangi compliant b. ensures the Crown is required to meet its te Tiriti obligations c. preserves Treaty settlements and is in accordance with te Tiriti of Waitangi claim settlement statutes d. protects relationships of Māori with Māori freehold and customary land, even where there is a need to relocate and be in accordance with Te Ture Whenua Māori Act 1993 e. equally, enables Māori to respect the overriding powers needed because of the absolute need to reduce risk, including risk to life (subject to protections, such as retaining ownership).
Process	
3	Establishment of the entities necessary to put the process into effect.
4	<p>It will be necessary to have robust powers to make the system work, including to provide for all the components of:</p> <ul style="list-style-type: none"> a. regional risk assessments b. adaptation plans c. adaptation designations d. adaptation implementation tools e. relocation programmes f. national direction to guide all of the above.
5	Powers for engagement and consultation processes, with a focus on collaboration and community engagement. This should not ignore the need to provide support personnel and social support particularly to poorer communities. Exercise of these powers will need to be clearly funded.
6	<p>Powers to exclude Māori freehold and customary land from the standard process (including reservation; wāhi tapu; urupā or significant cultural sites; as well as sites within the capture of Marine and Coastal Area (Takutai Moana) Act 2011 and potentially Treaty settlement land).</p> <ul style="list-style-type: none"> a. If excluded, an alternative process will need to be identified, to ensure the reduction of risk to this land. b. Consideration may need to be given to whether ownership of Māori land remains in existing names and/or trusts or passes to another body to hold on behalf of beneficial Māori owners in perpetuity. For example, a reserved site could be designated as such through a Gazette notice or memorial on any relevant title where titles exist.
7	<p>Corresponding powers to ensure risks can be reduced in relation to Māori freehold and customary land and that the necessary processes and support are provided for the decision-making identified as appropriate in this context.</p> <ul style="list-style-type: none"> a. Powers to make sure iwi, hapū and Māori communities are supported to identify in advance (or are advised in advance) of any threat to sites (eg, wāhi tapu) if any activity undertaken risks and/or threatens such sites.
8	Different powers may be needed for a pre-emptive (pre-event) relocation and a post-event relocation. Ideally, these systems would be similar.

Description of powers

9	Regulation-making power on points of detail may be best dealt with in secondary legislation. Need to avoid seeking statutory amendment each time a new power is needed, as has been necessary historically for both the Resource Management Act 1991 and Building Act 2004 regimes.
10	Power to request information and commission expert reports.
11	A 'red sticker' regime for land, to indicate and respond to various stages of intolerable risk.
12	Powers to deal with non-compliance and/or enabling action to be taken (eg, failure to provide information, provision of incorrect information, and failing to relocate).
13	There may also need to be robust powers to implement relocation outside the proposed system (ie, where clearly necessary and without having to wait on risk assessments and adaptation plans to evolve). This may be a transitional matter. Some communities may wish to be able to 'opt-in' to a relocation programme.

Control of use, acquisition and retirement of land

14	Powers (including a mix of voluntary and mandatory elements) to ensure that, at the end of a relocation programme, land in the at-risk area is no longer used (subject to limited exceptions). This should be guided by a principle that the system should aim to provide those affected with as much choice as possible over the timeframe of the relocation programme, consistent with the efficient and effective implementation of that programme.
15	Powers to allow for adaptation designations and other land-use controls in the lead-up to relocation.
16	Powers to provide for the use of private law tools in the lead-up to relocation, including: <ul style="list-style-type: none"> a. the grants of leases or licences following an acquisition by agreement (subject to a specific scheme in the relocation legislation or modifications to the Residential Tenancies Act 1986 and the Property Law Act 2007) b. land-use covenants (although these tools may need amendments to prevent changes through the Court process).
17	Powers for acquisition by agreement and compulsory acquisition. <ul style="list-style-type: none"> a. This should usually exclude offer backs (ie, the requirement to offer the land back to the original owner (or their heirs) as required under the Public Works Act 1981 (PWA), s 40). Allowing offer backs will defeat the relocation process but arguably may be permissible in extreme cases, such as significant uplift in shorelines through earthquakes.
18	Powers to retire land from use by cancellation of the Land Transfer Act 2017 title. <ul style="list-style-type: none"> a. As an alternative to acquisition, a new power could be created to retire land. b. This would not involve an 'acquisition' of the property but would result in the land no longer being owned. c. It would have to be accompanied by payment of compensation.
19	Controls on the circumstances (if any) where Māori land can be acquired by agreement and a prohibition on compulsory acquisition of Māori land.
20	Corresponding powers to ensure that use of Māori land relocated from is prohibited (with limited exceptions). Options include: <ul style="list-style-type: none"> a. a memorial on the title to the land b. the use of land-use zoning tools c. the ability to confer on the land reserve status under the Māori Reserved Land Act 1955 d. the ability to create wāhi tapu or urupā easements registered on a title. <p>The Māori Land Court could play an important role in governing or exercising these powers.</p>

Description of powers

21	<p>Powers to pay compensation will be a critical part of any acquisition or retirement of land process.</p> <ol style="list-style-type: none"> a. Compensation will need to be supported (ie, in line with the options in chapter 5 by reference to an objective figure, such as rateable value or by cost per square metre). b. There should be provision for the payment of accelerated compensation provisions in appropriate cases. c. Compensation should cast a wide net and include, for example, social and/or legal support, solatium payments and relocation costs. As noted in chapter 5, there may be a need to deal differently with compensation and other funding needs for private homes, holiday homes, baches, businesses, rentals, landlords and tenants and council-owned land. d. There must be clarity about circumstances where no compensation is payable, to ensure the constitutional presumption of compensation for takings of land has been clearly dismissed by Parliament.
22	<p>Powers to provide financial assistance generally (ie, social assistance beyond the payments tied to property, as discussed in chapter 5). For example, to help tenants to move or in relation to coping with the impacts of stress and legal representation. The PWA provides examples under s 72 and s 76, including the grant of solatium payments.</p>
23	<p>Specific powers in relation to the decision-making of co-owners of property in the context of relocation (eg, between cross-lease owners, body corporates under the Unit Titles Act 2010, and ownership structures, particularly trusts under Te Ture Whenua Māori Act 1993). For example, see Property Law Act, s 339 (Court may order division of property), which allows for an order of sale.</p>
24	<p>Powers to allow for land swaps as part of acquisition process.</p>
25	<p>Powers to allow for the cancellation or nullification of resource consents.</p>

Appeals and dispute resolution

26	<p>As noted in chapter 3, independent hearing panels (in addition to the overarching government agency and independent body to resolve disputes mentioned in chapter 6).</p>
27	<p>Rights of appeal.</p> <ol style="list-style-type: none"> a. Recommend that, for local adaptation plans, there is a merits appeal to the Environment Court where the adaptation committee does not accept a recommendation from the independent hearings panel, and a right of appeal on points of law to the High Court (or Māori Land Court in relation to Māori Land) where a recommendation of the hearings panel is accepted. b. The ability to apply for judicial review should not be restricted at any stage of the process. c. There should be an ability to object to a ministerial decision made under the exercise of a call-in right. This could be by way of appeal or judicial review (or both providing they occur at the same time). d. There should be no ability to appeal against a relocation programme. e. There should be ability to challenge decisions regarding the logistics of implementing a relocation programme through an independent body to resolve disputes or institutions, as discussed in chapter 6.
28	<p>Powers for or a dedicated forum for independent dispute resolution (or alternative dispute resolution), as discussed in chapter 6. Fast-track resolution; mediation; a role for the Ombudsman or separate tribunal.</p>

General powers

29	<p>There must be clarity on who can exercise powers and when. There is a need for flexibility.</p> <ol style="list-style-type: none"> a. The legislation must specify who can exercise powers and executive decision-making; identify any rights of delegation; identify the ministerial overlord; and the right to obtain independent expert reports.
30	<p>Designation and/or proclamation powers deeming land to be a certain category, such as reserve land or Crown land (or to be held by an agency on behalf of a community), post-relocation. Relevant to both Māori land and general land.</p>

Description of powers

31	The responsible Minister must have a call-in power in circumstances where the relevant decision-maker is unable or unwilling to discharge their functions (or where the scope of the relocation is beyond the capacity of local government).
32	Ministerial powers in circumstances where people hold-out and refuse to move.
33	Ministerial powers to order the preparation of a local adaptation plan outside the usual risk assessment process (eg, following a natural hazard event).
34	Enforcement powers.
35	Powers to facilitate ongoing management of land relocated from and transferred to the Crown or local government.
36	Decision-makers should be excluded from liability where they make decisions or act in good faith. a. Decision-makers should not be excluded from liability in circumstances of misfeasance, if they fail to act at all, or if they fail action or to implement designations or directions. If they fail to act or implement decisions, call-in rights should be triggered.
37	Powers (and a process) to withdraw services and utilities (and roads, bridges and use of drains and culverts) in appropriate circumstances (and on who has power to make decisions to stop services).
38	Order in Council decisions and/or Gazette Notices may be useful tools to help in the acquisition and transfer process.
39	An administrative 'catch-all' power that states that the Minister, or other actor charged with making decisions and implementing relocation, can do all acts and other things necessary that are incidental to the specific powers granted.

Intervention powers in other systems

40	Powers to deal with interests in land not acquired or extinguished through the acquisition process (eg, mortgages, leases, easements, covenants and encumbrances).
41	Powers to control succession.
42	Powers to control present and future gift or sale.
43	Powers to limit the granting of non-possessory interests in land.
44	Powers to make orders in the context of relationship property disputes (and potentially other types of disputes, such as trust disputes between family members).
45	Powers to impose obligations on non-resident owners regarding care and maintenance.
46	Powers to constrain the granting of further interests in land (proprietary and contractual).
47	Powers for the recovery of costs.
48	Powers regarding mortgages and interest rates (including that consideration is given to a moratorium on mortgage and interest payments in circumstances where no occupation is allowed).
49	Powers to change the use of land.
50	A streamlined and efficient consent process, where needed.

Emergency powers

51	Evacuation from premises or places to preserve life.
52	Entry whether by force or otherwise.
53	Closing roads and public places.
54	Removing vehicles and vessels.

Description of powers

55	Requisitioning powers.
56	Demolition and removal of buildings and structures like powers under the Building Act 2004 for dangerous or unsanitary buildings but much broader because buildings may still be habitable in a relocation zone.



Chapter 5

Funding and financing for planned relocation

5. Funding and financing for planned relocation

Introduction

5.1. Funding and financing for planned relocation is a large and complex topic, involving numerous issues. Given the scope and complexity, we did not consider all of the issues,²⁴² but this chapter addresses four of them.

- We identify various activities in respect of which costs will be incurred in a planned relocation scheme, identify principles relevant to determining who should meet those costs and indicate where we consider responsibility for those costs should rest.
- We set out our recommendations in relation to government support for property owners who must relocate because of planned relocation, with particular focus on the owners of residential buildings.
- We briefly discuss social assistance other than payments tied to properties.
- We discuss revenue sources for planned relocation, in particular the use of general tax revenue versus targeted fiscal instruments.

5.2. Of these, our principal concern is with the second issue: support for property owners, especially homeowners, who must undertake planned relocation. We have focused on this because:

- it is likely to be controversial, largely because of the distributional implications and potential for significant hardship
- adequate housing is a core well-being value and human right
- government will face pressure to support people who must relocate
- it is the part of the programme with the most significant fiscal implications
- the extent of government support may determine whether homeowners are willing to participate voluntarily in planned relocation.

5.3. Before we discuss these topics, however, we address the issue of funding objectives and principles.

²⁴² For a comprehensive analysis of the issues, see, for example, Boston J. 2023. *Funding Managed Retreat: Designing a Public Compensation Scheme for Private Property Losses: Policy Issues and Options*. Auckland: Environmental Defence Society.

Funding objectives and principles for planned relocation

5.4. In its April 2022 consultation document on planned relocation,²⁴³ the Ministry for the Environment set out four main objectives and eight principles to guide its approach to funding issues in relation to planned relocation, which Cabinet has approved. They are as follows.

Objectives:

- to reduce hardship due to the impacts of climate change
- to incentivise better long-term investment decisions concerning climate change risk
- to reduce liabilities, including contingent liabilities to the Crown
- to support the role of banking and insurance in facilitating risk management.

Principles:

- limit the Crown's fiscal exposure
- minimise moral hazard
- solutions are designed to be as simple as possible
- ensure fairness and equity for and between communities, including across generations
- beneficiaries of risk mitigation should contribute to costs
- minimise costs over time by providing as much advance notice as possible
- solutions support system coherence and the overall adaptation system response
- risks and responsibilities are appropriately shared across parties including property owners, local government, central government, and banking and insurance industries.

5.5. Four features of these objectives and principles are particularly relevant to the funding issues we discuss in this chapter.

5.6. First, as discussed in chapter 1,²⁴⁴ the Ministry's consultation document also identifies objectives and principles for the development of a legislative framework for planned relocation. One principle is that Māori will be represented in governance and management and have direct input and influence in planned relocation processes, and that outcomes for Māori will be supported. However, the funding objectives and principles do not address the position of Māori explicitly. Obviously, this is an important issue that must be addressed.

5.7. Second, the objective of reducing hardship due to the impacts of climate change is an important aim, one that has guided our approach. However, it is important to be clear about what is meant by 'hardship'. We consider this when we discuss government support for homeowners and others who must relocate, but it is also relevant to the question of allocation of the costs of planned relocation schemes between central and local (ie, regional and territorial) government. For the moment, we interpret hardship to refer to a more general

²⁴³ Ministry for the Environment. 2022. *Kia urutau, kia ora: Kia āhuarangi rite a Aotearoa, Adapt and thrive: Building a climate-resilient New Zealand*. Wellington: Ministry for the Environment. p 12.

²⁴⁴ Chapter 1 at paragraphs 1.76–1.77.

conception of distributive justice. One consequence is that we do not view preserving people's existing wealth as equivalent to preventing hardship, and we do not view the preservation of accumulated wealth as an objective of this programme of support.

- 5.8. Third, one of the principles expresses a desire for simplicity. We would add certainty, at least to the extent possible while preserving flexibility. We believe it will be important for those directly affected by the need to relocate to be able to move on and re-establish their lives elsewhere, and not be trapped for lengthy periods in at-risk locations because of unwarranted process delays and continuing uncertainty. The need for simplicity and certainty where possible has guided our approach.
- 5.9. Fourth, the principles suggest that the risks and responsibilities associated with funding should be shared 'appropriately' across various agencies and people, including central and local government and affected homeowners. This is relevant both to the allocation of costs between central and local government and to government support for building owners who must relocate. A range of factors will determine what is 'appropriate' in each setting.
- 5.10. As with the general outcomes and principles for managed relocation discussed in chapter 1, we developed a set of principles to guide funding in this context, both in terms of the collection and the distribution of funds. Our view is that:
- what is collected and distributed should be sufficient to achieve the outcomes of planned relocation
 - the requirements of fiscal prudence and responsibility should be met
 - the scheme should be adaptable to meet the pace and scale of relocation and be sustainable over the period in which planned relocation is required
 - the scheme should be certain and predictable
 - the scheme should be fair and contribute to compensatory, restorative and distributive justice
 - the scheme should take proper account of the rights and interests of Māori
 - the scheme should be efficient and low-cost to administer
 - the scheme should not create perverse incentives.
- 5.11. These principles do not refer explicitly to reducing hardship due to the impacts of climate change. However, they refer to our outcomes for planned relocation. These include outcomes that, taken together, would reduce hardship due to the impacts of climate change (eg, keeping people safe and giving them access to adequate and affordable housing, but within a context that does not exacerbate or preserve socioeconomic inequalities). We agree that reducing hardship from the impacts of climate change is an essential objective.

- 5.12. We return to these matters later in the chapter, but they indicate there is no ideal way to fund planned relocation. There are numerous relevant considerations, some of which pull in different directions. In addition, political considerations will play a significant role.²⁴⁵

What are the costs of a planned relocation scheme?

- 5.13. It is difficult to estimate the likely overall costs of a planned relocation scheme, or even its payment programme for private properties only. This is true whether the distribution of costs is described dynamically over time or just accumulated over an extended period (eg, by the year 2070). Treasury has provided preliminary estimates of the physical damage caused by the severe weather events of late January and February 2023 in the North Island. The estimated damage is \$2.0 billion to \$3.5 billion for housing, \$2.0 billion to \$3.0 billion for businesses, and \$5.0 billion to \$7.5 billion for infrastructure, totalling \$9.0 billion to \$14.5 billion overall.²⁴⁶ Although the \$2 billion to \$3.5 billion estimate for housing is a significant amount, it is less than a quarter of the estimate of the overall cost. It is also relevant that around half of the estimated cost relates to infrastructure, which is the responsibility of central and local government.
- 5.14. Any precise costing of planned relocation schemes in the future is nearly impossible given our limited knowledge of the existing risks, and because the cost will depend on various global and local policy decisions and events that have not yet happened.²⁴⁷ The cost of rebuilding infrastructure is particularly uncertain, because these costs will be sensitive to the relocation decisions made. Therefore, in this section, we only outline the *kinds* of costs that a planned relocation scheme may entail, where responsibility for those costs currently rests, and where the costs might rest in the future.
- 5.15. We identify the overarching considerations relevant to the question of who should meet different types of costs. We identify the activities involved in planned relocation, who currently meets the relevant costs, and our suggestions for meeting those costs in the future. Table 6 provides an overview.
- 5.16. This discussion is set in the context that the scheme we recommend for planned relocation is for a community-centred process, but one in which national, regional and territorial government all have responsibilities.²⁴⁸

²⁴⁵ For completeness, we note that the principles applied in relation to the Canterbury earthquakes were: certainty of outcome for property owners as soon as possible; create confidence for property owners to move forward; create confidence in decision-making processes – for homeowners, business owners, insurers and investors; use the best available information to inform decisions; have a simple process to provide clarity and support to those affected (avoid lengthy negotiations); provide a fair outcome for all parties; and minimise moral hazard.

²⁴⁶ Treasury. 2023. Impacts from North Island weather events– information release. Wellington: The Treasury.

²⁴⁷ The path of global greenhouse gas emissions (especially carbon dioxide) over the coming decades will be particularly critical, as will the sensitivity of the climate system and the effectiveness of technologies to reduce atmospheric concentrations of carbon dioxide later in the century.

²⁴⁸ See in particular, chapter 3 and chapter 6.

Who pays?

- 5.17. When determining who should pay for a specific kind of cost, important considerations are as follows.
- 5.17.1. In principle, the funding source²⁴⁹ should match the level at which decisions are made or responsibility and accountability is located. This implies that central and local government should expect to provide input into decisions that entail costs that will be shared by both. Because many of these decisions will involve multiple stakeholders, we do not foresee a one-to-one match between funding and decision-making. Instead, we anticipate that a significant commitment of funds will also entail an expectation of involvement in the decision-making process.
 - 5.17.2. A specific mix of funding sources may be necessary to create the right incentives for all decision-making entities.
 - 5.17.3. Because entities that will provide funding raise their funds differently, the mix of funding sources will also have equity and fairness implications that should be considered.
 - 5.17.4. Different sources of funding have different levels of administrative complexity and collection costs associated with them.
- 5.18. In addition, the objective of reducing hardship due to the impacts of climate change is relevant. Some local authorities will have a greater capacity to meet the costs of planned relocation than others. Some disadvantaged areas may require greater support than others. Accordingly, we envision a supporting mechanism from central government that will provide grant funding to local government to pay for specific planned relocation projects and/or specified costs, on an 'ability of local government to pay' basis.
- 5.19. The five main arguments supporting a transfer of resources from central government to local government to fund planned relocation projects are as follows.
- 5.19.1. Areas and regions differ widely in their institutional capacity to pay for public services, and this heterogeneity is also reflected in differences in the capacity of local government to generate revenue.
 - 5.19.2. Some areas and regions will face a much higher need to conduct planned relocation, while others will mostly be immune from this burden. Areas that will face the greatest burdens in terms of planned relocation will not necessarily be those with the most resources. They may also be disadvantaged in other respects.
 - 5.19.3. On their own, councils may, for short-term cost considerations, limit their policy options or delay their decisions in ways that are sub-optimal. For example, in circumstances where planned relocation is the best option, a council may choose a cheaper short-term adaptation or protection option, which may increase residual risk and be less desirable in the long term. This disincentive to relocate will be exacerbated if the financial consequences of the failure to relocate are largely born

²⁴⁹ That is, the entity that provides funding.

by the Crown (through Toka Tū Ake EQC, a Crown-owned entity whose cover is constrained by monetary caps and the hazard types set out in the relevant legislation, for example). Rather than preparing for and implementing planned relocation expeditiously, the sub-optimal, short-term solution may thus be to defer it, thereby leading to greater societal costs overall.

- 5.19.4. The danger is that without a coordinated, cost-sharing approach, central government will only make adaptation decisions on an ad hoc basis under urgency following disasters. Thus, government is likely to invest primarily in locations where disasters have occurred recently, which may not necessarily be the places that face the greatest risk or need. This creates equity risks and can lead to poorer investment decisions than would be made if pre-emptive action is taken.
- 5.19.5. A long-standing tradition in Aotearoa New Zealand is of central government helping to fund local government to deal with natural disasters and emergencies, and to co-fund larger public infrastructure projects.
- 5.20. For costs divided between central and local government (regional or territorial), more specific and explicit arrangements should be set up for cost-sharing, and more broadly for major infrastructure projects that relate to protection, prevention and adaptation. To maintain the optimal incentive structure, the same division of costs should apply to all choices, so it does not skew the incentives of local or central government to prefer, pre-event, protection over relocation, or vice versa. Currently, central government funds any pre-event investment only on an ad hoc basis but provides 60 per cent of costs (at least) in post-event cases. This creates a disincentive for local government to consider pre-event investment in protection, prevention (including planned relocation), or other forms of adaptation.
- 5.21. Currently, local government largely funds investment in protective or defensive structures, except for larger projects that are sometimes also funded by central government on an ad hoc basis. This funding uncertainty is unhelpful, and the allocation of costs should be clarified. Clarity will enable better decision-making, and, at least in principle, the current 60/40 split for major post-disaster infrastructure costs provides this clarity. However, for destructive events, such as the January and February 2023 weather events in the North Island, some local authorities may not be able to afford their 40 per cent share.

Recommendation 31

We recommend that:

- the funding source should match the level at which decisions are made or at which responsibility and accountability is located
- there should be a supporting mechanism from central government that will provide grant funding to local government to pay for specific planned relocation projects and/or specified costs, on an 'ability of local government to pay' basis.

Costs

- 5.22. To identify where costs arise, we address four phases of planned relocation: initial information gathering, risk assessments and planning, implementation, and post implementation. We identify activities relevant to those phases, who currently funds them and how they might be funded in the future. This is not a comprehensive list of costs, but it includes most of the major costs associated with a planned relocation programme.

Initial process of information gathering

- 5.23. This stage will involve the collection of data (eg, hazard maps) and evidence (eg, past events and sea-level rise projections), the maintenance and analysis of the data, and the wide dissemination of the available data. This will include significant public consultation, engagement and facilitation.
- 5.24. These types of data collection costs are currently borne significantly by local government, although Crown entities, such as the National Institute of Water and Atmospheric Research (NIWA), collect and analyse relevant data. Because of significant economies of scale, and the need to maintain national consistency in the quality and availability of the data, we think this initial data gathering should not remain the responsibility of local government. It should be managed by a central government entity, possibly a Crown research institute (eg, NIWA or the Climate Change Commission) or another Crown-owned entity (possibly the one that will also be in charge of the operational side of a planned relocation, such as Toka Tū Ake EQC, or a spatial data agency, such as LINZ). We address this further in chapter 6.

Recommendation 32

We recommend that a central government entity should manage initial data gathering.

Risk assessments, relocation decisions and planning processes

- 5.25. Chapter 3 describes how this stage, which will require significant additional funding, could be run. In 'business-as-usual' situations, local government pays for this stage. In the case of climate change adaptation, these costs may be too large, especially for smaller councils and councils in coastal regions. Accordingly, we consider that a mix of local and central government funding should be used for this stage. This will also give central government a 'seat at the table' for the process of determinations and decisions. We think this 'outside' or national-level perspective is essential.
- 5.26. Another important component of this stage is the process of public engagement, including the dissemination of information and consultations with the public and other stakeholders. These should be jointly funded.
- 5.27. An important exception will be the independent advisory services and legal advice for those affected. Central government should pay for these costs, thus keeping the operational institutions involved in the implementation of relocation, including local government, at arm's length from these services.

Recommendation 33

We recommend that:

- a mix of local and central government funding should be used for risk assessments, relocation decisions and planning processes
- central government pay for independent advisory services and legal advice for those affected.

Implementation

- 5.28. This stage mostly involves implementing the planned relocation process, the provision of social support (including ad hoc hardship grants and loans, relocation allowances, and any business-interruption payments) and any legal costs arising. These costs should be paid for from a mix of sources, with a bigger role for central government than in the status quo, because these activities are currently underfunded.
- 5.29. Property payments are likely to be a significant component of any planned relocation programme, at least where insurance payouts are not available, and they may be contentious. If private insurance payouts are not available (either because insurers have withdrawn from the relevant market or because no insurable damage has yet occurred), central government (and possibly by Toka Tū Ake EQC) will probably have to pay for these costs. Exceptions may occur in the case of relatively small, planned relocations, especially where they are necessary components of larger coastal or riverine flood protection projects. The risk that the relevant local authorities would be disincentivised from making decisions to undertake planned relocations because of the costs can be mitigated if such relocations are integral to larger projects.
- 5.30. Whatever the source of government funding, the same principles and entitlements for support should be applied. As we discuss in the next section, if available, support to property owners will be given on a specified basis, up to a cap (per property). Any costs above the cap will be borne by the individual property owners, without any government involvement and possibly with some debt forgiveness by lenders in appropriate circumstances.

Recommendation 34

We recommend:

- a mix of funding sources for implementing the planned relocation process, the provision of social support (including ad hoc hardship grants and loans, relocation allowances, and any business-interruption payments) and any legal costs arising, with a bigger role for central government than it currently has
- that central government mainly pay for property payments, but exceptions may occur in the case of relatively small, planned relocations, particularly in the context of larger projects
- support to property owners is given on a specified basis, up to a cap (per property), and any costs above the cap would be borne by the individual property owners.

Post implementation

- 5.31. Another set of costs will arise in the aftermath of the relocation. These will possibly include demolition and clean-up costs, post-relocation land rehabilitation and management, development of new sites for communities that have decided to move through land swaps, and the provision of new public facilities serving affected communities. Central or local government should pay for these costs, depending on the details and relevant needs of each planned relocation implementation.
- 5.32. This phase should also include monitoring, reporting, evaluation and policy lessons. These aspects are currently not being undertaken nor being funded. We recommend central government undertakes a continuous programme of monitoring and evaluation to verify that the programme is achieving its long-term goals.

Recommendation 35

We recommend central or local government pay for post-implementation costs (demolition and clean-up costs, post-relocation land rehabilitation and management, development of new sites for communities that have decided to move through land swaps, and the provision of new public facilities serving affected communities), depending on the details and relevant needs of each planned relocation implementation.

Table 6: Summary of costs and responsibility for funding

Item	Currently funded by	Proposal	Reasons for change	
A. Initial information gathering				
1	Research and evidence gathering	Local	Central	Scale efficiency, consistency
2	Development, maintenance and publication of databases, tools and models	Local	Central	Scale efficiency, consistency
3	Public consultation, engagement and facilitation	Local	Local + central	Maintain local control with funding assistance from central
B. Risk assessments and planning				
4	Regional risk assessment		Central	Consistency, completeness
5	Local adaptation plan	Local	Local + central	Maintain local control with funding assistance from central
6	Planning processes	Local	Local + central	Maintain local control with funding assistance from central
7	Legal costs	Local	Local + central	Maintain local control with funding assistance from central
8	Support for public advocacy, hearings and consultations, and mediation	Local	Local + central	Maintain local control with funding assistance from central
9	Independent advisory services and legal advice for those affected	Not currently funded	Central	Maintain independence of these services from local decision-making
C. Implementation				
10	Social services, including hardship grants and loans	Ad hoc; mostly central	Central	Provide consistency and clarity on what is provided
11	Legal challenges	Local	Local + central	Maintain local control with funding assistance from central
12	Business disruption	Local	Local + private	Maintain local control
13	Property payments, including purchases, leases or change-use arrangements	Ad hoc	Central + private	Consistency and transparency
14	Relocation allowances	Ad hoc	Central + private	Consistency and transparency
15	Administration of property-related payments and other funding	Local	Local	

Item	Currently funded by	Proposal	Reasons for change	
D. Post implementation				
17	Demolition and removal of assets	Ad hoc	Local or central	Choice will depend on what is to be done with the area
18	Acquisition of land for land swaps	Ad hoc	Ad hoc	Items 20–24 may be required before actual implementation of the relocation
19	Building new locally provided public infrastructure to serve relocated communities	Local	Local	
20	Building new centrally provided public infrastructure to serve relocated communities	Central	Central	
21	Temporary housing	Central	Central	
22	Social housing	Kāinga Ora – Homes and Communities and private providers	Kāinga Ora – Homes and Communities and private providers	
23	Post-relocation land rehabilitation and management	Local and Department of Conservation	Local and Department of Conservation	
24	Monitoring, reporting, evaluation and policy learning	Not currently funded	Central	

Supporting homeowners and others for the costs of moving

- 5.33. In this section, we discuss the issue of government support to homeowners and other building owners who must move following a decision to undertake a planned relocation. While we consider various principles, we give particular weight to the goal of avoiding hardship and ensuring adequate housing by reducing the risk from the impacts of climate change.
- 5.34. We begin by highlighting the important role of insurance cover in ameliorating financial risks, and its relevance to the issue of government support for homeowners and others.

Insurance cover

- 5.35. Recent planned relocations in Aotearoa New Zealand have generally arisen in response to some form of a disaster from a natural hazard, such as the Canterbury earthquakes of 2010–11 or the storm damage at Matatā in 2005 (both places were assessed to also be vulnerable to future damage).²⁵⁰ As climatic changes accelerate, however, planned relocations may be better undertaken before any harm has occurred, but where expert analysis indicates the harm will be substantial and is certain or highly probable in the near future.²⁵¹
- 5.36. While planned relocations following a disaster (post-event relocations) and planned relocations in anticipation of a disaster (pre-event relocations) have common features, they do have important differences.²⁵² One pertinent difference is that the sources of funding for support to homeowners and others affected by a planned relocation are likely to differ.
- 5.36.1. In post-event situations, at least in the near future, most (but not all) owners of homes (and other buildings) are likely to have insurance cover for sudden-onset natural hazard damage caused to their homes. In the case of insured homeowners, some of this insurance cover may be with Toka Tū Ake EQC.²⁵³ Any government funding to support homeowners (or the owners of other property) will be undertaken in the context that many will be entitled to insurance payouts.²⁵⁴ That said, not every homeowner will be insured, and some houses may not have suffered any damage, in which case there will be no insured loss.
- 5.36.2. Because pre-event relocations occur before anticipated damage has occurred, there will be no insurance payouts, because no insurable loss will have occurred.²⁵⁵ In the absence of any funding through insurance, there will be greater pressure – and a stronger case – for government funding.²⁵⁶

²⁵⁰ According to current government plans, the impact of storm and flood events in early 2023 will also result in planned relocations from some badly affected areas.

²⁵¹ Even where decisions to relocate are made before the predicted harm (an anticipatory intention to relocate) probability analysis suggests the likelihood is high of a destructive event occurring in the relevant locality before the relocation is implemented. See appendix A for a discussion of accumulated probabilities.

²⁵² See chapter 1 at paragraph 1.30.

²⁵³ These insurance policy cover settings may change in the future if a private insurance retreat occurs.

²⁵⁴ The insurance payouts could be absorbed into the amounts paid by the Crown, as occurred in the Residential Red Zone in Christchurch. There, owners were able to choose between compensation from the Crown or compensation from the insurer (but not both). Under the first option, the Crown became entitled to any insurance payout associated with any damage to the property.

²⁵⁵ As noted in footnote 252, it is possible that after an area is designated for planned relocation but before relocation has actually occurred, the area will suffer major damage from a natural disaster. If that occurs, and homeowners have insurance cover, there may be insurance payouts that could be used to fund relocation.

²⁵⁶ We note that in cases of 'true' pre-event planned relocations (ie, where no natural disaster occurs between the decision to retreat and its implementation), remedial options may be available that would not be available in post-event relocations, such as moving all or most of the homes and other buildings from their original location to a new, safer location. This may be more cost-effective than building new in another location.

- 5.37. We believe that because of the more demanding risk criteria necessary for identifying communities for anticipatory relocation,²⁵⁷ and the nature of cumulative probabilities,²⁵⁸ most planned relocation programmes implemented over the foreseeable future will be either straightforward post-disaster relocations, or anticipatory ones that happen earlier than planned because of an intervening natural disaster (thus becoming post-disaster relocations). As a result (and assuming insurance cover is not withdrawn), non-trivial insurance payouts are likely to be available in many planned relocation situations over the next decade or longer.
- 5.38. Any financial support provided by government to homeowners or other building owners in planned relocation situations should consider any private or public insurance payments for property loss or damage, where these are available. However, the scheme for homeowners that we propose will also be relevant to planned relocation situations where no insurance cover exists because no triggering event occurred or because the properties were uninsured.
- 5.39. In the future, no insurance cover may be in place for post-event situations if private insurance retreat occurs in areas of greater perceived risk, possibly increasing risks associated with climate change. We return to the issue of insurance later in the chapter.

Government support: A spectrum

- 5.40. Given that planned relocation means some people will have to leave their homes and relocate, the issue of government support is critically important. It is particularly significant for low-income and vulnerable households, who are likely to be affected disproportionately by the loss of housing following natural disasters. Research overseas has shown that disasters disproportionately affect housing for low-income people and vulnerable households, such as sole-parent families.²⁵⁹ If international experience is a useful guide, this will happen in Aotearoa New Zealand as well, and is possibly already happening. If so, low-income housing is likely to become less affordable, potentially leading to increases in over-crowding, and to people living in temporary housing (such as improvised or mobile dwellings).²⁶⁰
- 5.41. Addressing the needs of people who must be rehoused because of planned relocation is therefore vital. The Treasury's Living Standards Framework contains 12 well-being domains relevant to this discussion.²⁶¹ These domains are "what research and public engagement have shown are important for the well-being of both individuals and collectives, such as families, whānau and communities of place, identity and interest".²⁶² One domain is "having a

²⁵⁷ Before a decision is made that anticipatory planned relocation is necessary, a detailed process will be undertaken involving hazard identification, risk assessment, risk prioritisation, and analysis of possible adaptation strategies. In post-event situations, the natural disaster identifies the hazard; the issue is how to respond to it. Post-event relocation is in some sense cheaper, because money needs to be spent anyway on reconstruction of damaged or destroyed properties, irrespective of the decision to relocate.

²⁵⁸ See appendix A.

²⁵⁹ See, for example, Wisner B, Blaikie P, Cannon T, Davis I. 2004. 2nd ed. *At Risk: Natural hazards, people's vulnerability and disasters*. New York: Routledge.

²⁶⁰ Goodyear R. 2014. Housing in greater Christchurch after the earthquakes: Trends in housing from the Census of Population and Dwellings 1991–2013. Wellington: Statistics New Zealand. p 34.

²⁶¹ The Treasury. 2021. *The Living Standards Framework (LSF) 2021*. Wellington: The Treasury.

²⁶² The Treasury. 2021. *The Living Standards Framework (LSF) 2021*. Wellington: The Treasury. p 11.

place to call home that is healthy, suitable, affordable and stable”.²⁶³ This reflects article 25(1) of the Universal Declaration of Human Rights 1948, which provides a right to an adequate standard of living, including housing.²⁶⁴ We see this as relevant to the issue of funding for planned relocations, both pre- and post-event.

- 5.42. Aotearoa New Zealand’s legal tradition is, however, also relevant in this context. English common law has long protected private property from interference by the state, except where the interference is authorised by law and, where appropriate, compensated.²⁶⁵ A corollary is that risks to private property are generally borne by the owner. This creates an incentive for building owners not to settle in hazardous locations, and to adopt measures or technologies that will reduce these risks (eg, by taking out appropriate insurance cover and undertaking other adaptation measures, such as raising floor heights).
- 5.43. As discussed in chapter 4, this ‘owner responsibility’ model is reflected in the Building Act 2004. Under that Act, owners are liable to fix – or reimburse the relevant territorial authority for the costs of fixing – dangerous, unsanitary or earthquake-prone buildings. This is an obligation that extends to include any relevant costs incurred by ‘affected’ buildings.²⁶⁶ This approach was used in the Canterbury Earthquake Recovery Act 2011, under which building owners were responsible for the costs of demolishing dangerous buildings.²⁶⁷ It is also implicit in the Earthquake Commission Act 1993 and in its replacement legislation, the Natural Hazards Insurance Act 2023 (NHI Act).
- 5.44. Given the opposing considerations described in paragraphs 5.40–5.43, it is helpful to think of government support for relocating homeowners as falling on a spectrum.
- 5.44.1. At one end of the spectrum is full compensation for the value of the homes and land that homeowners have been or will be forced to abandon because of the impact of climate change (based on pre-disaster or pre-designation values). This was, in effect, what the Crown offered to insured homeowners in the Residential Red Zones in Canterbury, and it was also the approach adopted in the relocations in Matatā.²⁶⁸
- 5.44.2. At the other end of the spectrum, little or no government support is given to property owners, reflecting the common law’s traditional ‘owner responsibility’ approach (assuming no claim is made against a third party in respect of the damage).
- 5.45. In our recommendations, we reject both extremes.

²⁶³ The Treasury. 2021. *The Living Standards Framework (LSF) 2021*. Wellington: The Treasury.

²⁶⁴ For further discussion, see Malloch H. 2021. Building a Secure Fence and a Well-Functioning Ambulance: Reforming New Zealand’s Natural Disaster Insurance Scheme. *Victoria University of Wellington Law Review* 52(1): 137–163, p 147.

²⁶⁵ This approach is reflected in the old adage “An Englishman’s home is his castle”, which dates back at least to Lord Coke’s *Institutes on the Laws of England* published in 1628.

²⁶⁶ Building Act 2004, s 126, s 129, s 133AS, s 133BV, s 133BW, s 133BX.

²⁶⁷ Canterbury Earthquake Recovery Act 2011, s 40.

²⁶⁸ In some cases, governments end up offering more than the full current value of the relocated property. This was the case in Canterbury because the Government based its valuations on the 2007 RV and not on the 2010 one (because the latter included the decline in property prices associated with the 2008 Global Financial Crisis). In the United States of America, after Hurricane Sandy, the Government offered a buy-out scheme in which owners received 110 per cent of the value of the property if they agreed to relinquish it to the state.

- 5.46. We consider that the first approach raises questions about social legitimacy, personal responsibility, equity and affordability. Payments to homeowners who must relocate should not be aimed at wealth preservation or protecting people's property from risk. That would not only preserve existing socioeconomic inequalities but also likely exacerbate them, especially given the likelihood that some of those in lower socioeconomic groups will be renters (rather than owners) and will suffer the greatest housing deprivation in planned relocation situations. An approach that preserves existing wealth, and thereby existing disparities in wealth, is not consistent with the emphasis on reducing hardship due to the impacts of climate change. We consider that this approach would undermine the necessary social licence for government intervention. In addition, the fiscal costs will become increasingly large under this approach and may not be politically sustainable.
- 5.47. We acknowledge that this approach to compensating affected homeowners was adopted in the Residential Red Zones in Canterbury and in Matatā.²⁶⁹ Naturally, people tend to see the approach adopted in those instances as establishing a precedent for the future. We do not accept that they create a precedent. The way central or local government has responded to the need for planned relocations in the past, particularly when confronted by a catastrophic event, should not determine the approach taken in the future. This is especially so when future conditions are likely to be materially different from conditions in the past, especially relating to sea-level rise, and relevant policy settings are announced and known to everyone before any event occurs. The Government is presently seeking to develop policies that will provide certainty and be durable for the future. The Government's past actions are relevant but cannot determine what the Government should do in the future.
- 5.48. As for the second approach (complete owner responsibility), we consider it is too austere and may be counter-productive. It is inconsistent with the objective of reducing hardship due to the impacts of climate change. It will also create a strong disincentive for voluntary participation in any planned relocation, and thus will create a significant barrier to any successful attempt to reduce exposure to natural hazard risks. This will be detrimental to the public interest. Moreover, it does not accord with Aotearoa New Zealand's social values and commitments, as shown to date in a variety of settings (such as accident compensation, government superannuation, the provision of subsidised public insurance for natural hazard damage, and successive governments' responses to disasters of various types).
- 5.49. Accordingly, we recommend a middle course, although one that is relatively more generous to homeowners, for reasons we explain later in the chapter. Importantly, as we discuss below, our proposals distinguish between different types of building, specifically:

²⁶⁹ We also acknowledge that others favour a generous approach. For example, the Canadian Task Force on Flood Insurance and Relocation said:

The compensation offered to homeowners has also varied across Canadian programs, with some programs providing payments based on fair market value, tax assessed value, or a pre-determined capped limit. At the household level, compensation should also consider what would be required to purchase a comparable property, in a comparable neighbourhood, but in an area with less risk. Support for additional expenses such as moving costs and legal fees is also warranted, particularly for vulnerable groups such as low-income Canadians, to ensure that no one is made worse off as a result of a buyout.

Task Force on Flood Insurance and Relocation. 2022. *Adapting to Rising Flood Risk: An Analysis of Insurance Solutions for Canada*, Government of Canada, p 97. While it may be a legitimate consideration in an insurance context, we do not consider ensuring that no one is left worse off should be an objective of the funding for planned relocations in Aotearoa New Zealand, for the reasons already given.

- residential properties that are principal places of residence for their owners (owner-occupied homes)
- tenanted properties that are principal places of residence for their tenants (tenanted residential properties)
- second homes that serve as holiday homes (eg, baches), or may be rented occasionally or for short periods (eg, in the holidays) but are not principal places of residence for their owners or those who rent them (second homes)
- commercial buildings
- buildings owned by non-governmental organisations and used for their 'not-for-profit' activities
- properties owned by iwi, hapū and Māori communities.

What principles should be applied?

- 5.50. Returning to the statement of objectives and principles for funding planned relocation approved by Cabinet, two points relevant to compensation for home and other building owners are worth restating.
- 5.50.1. The first objective is to “reduce hardship due to the impacts of climate change”. While in one sense damage from natural disasters causes hardship for all those affected, evidence suggests that disasters disproportionately affect housing for low-income and vulnerable communities. The effect of a financial support scheme for homeowners who must move from their homes under a planned relocation scheme should therefore provide the greatest assistance where the need is greatest. However, as discussed shortly, this does not mean the amount of support should be based on some form of means testing.
- 5.50.2. Second, simplicity and certainty are important attributes of any system of payments for those who must move from their homes as part of planned relocation. Given the psychological, social, cultural, environmental and other disruptive impacts of planned relocation, whether after a disaster or in anticipation of one, people should not be left in a state of a financial limbo, with uncertainty about what help will be available to them.
- 5.51. We consider that the NHI Act can provide guidance in terms of relevant policy principles. The NHI Act, like the Earthquake Commission Act 1993 it will replace in July 2024, provides state-backed insurance cover (public insurance) for certain types of natural disaster damage to residential buildings and the land on which they are located, up to a cap for residential buildings and a separate cap for the land covered.

5.52. For residential buildings, the coverage provided is as follows:

- If the underlying private insurance contract specifies a replacement sum-insured (most insurance contracts today are fixed sum contracts and meet this requirement), the building cover is the *lesser* of the replacement sum or \$300,000 plus Goods and Services Tax (GST).²⁷⁰
- If that does not apply (ie, the private insurance contract does not specify a sum-insured), but the private insurance contract specifies an amount for which the residential building is insured under the NHI Act, the building cover is the *greater* of (i) the specified sum or (ii) the insured floor area²⁷¹ multiplied by \$2,500 plus GST, but only up to a maximum of \$300,000 plus GST.²⁷²
- If neither of these two options applies, the cap is \$300,000 plus GST.²⁷³

5.53. As we see it, three relevant points emerge from the NHI Act cover.

5.53.1. First, an underlying premise of the statutory scheme is to help affected homeowners to rebuild or replace their homes, possibly in another (safer) location. Section 4(1) of the NHI Act states that the “primary purpose of natural hazard cover is to contribute to the replacement or reinstatement of dwellings that suffer natural hazard damage”. This explains the use of the replacement sum in the first option above and the reference in the second option to the insured floor area multiplied by \$2,500 plus GST. As we understand it, the \$2,500 plus GST figure is intended to reflect an estimate of the per square metre cost of building an ordinary home.²⁷⁴

5.53.2. Second, at least in theory, the effect of the cap is that those with lower value homes should receive a higher proportion of the value of their homes from public insurance than those with higher value homes will receive.²⁷⁵ In that sense, the public insurance scheme is intended to favour those who are likely to need it most rather than seeking to maintain existing inequalities.²⁷⁶

5.53.3. Third, in principle, the scheme is simple and certain, which is an important design feature. The relevant cap for land cover specified in the NHI Act is less simple, however. We return to that issue below in paragraphs 5.167–5.169.

5.54. We turn now to the meaning of hardship.

²⁷⁰ Natural Hazards Insurance Act 2023, s 35.

²⁷¹ Relevantly, the floor area is defined as the “internal floor area in square metres” (Natural Hazards Insurance Act 2003, s 5).

²⁷² Natural Hazards Insurance Act 2003, s 35. The \$2,500 is intended to approximate the cost of new construction and will be updated periodically to reflect changes in the costs of construction.

²⁷³ Natural Hazards Insurance Act 2003, s 36.

²⁷⁴ The \$2,500 per square metre figure would fund a 120 square metre home (assuming \$300,000 was the amount available to spend). Given regional differences and recent cost escalations, the \$2,500 figure is at the low end of the range.

²⁷⁵ The shortfall from public insurance may, of course, be made up by the private insurance the homeowner holds.

²⁷⁶ Research indicates, however, that in fact the scheme operates with a significant degree of regressivity. See Owen S and Noy I. 2019. Regressivity in Public Natural Hazard Insurance: A Quantitative Analysis of the New Zealand Case. *Economics of Disasters and Climate Change* 3(3): 235–255.

Preventing undue hardship

- 5.55. Everyone who is affected significantly by a natural disaster, or by the worsening effects of climate change, is likely to suffer some form of hardship. Some people, however, are much better placed to absorb or manage it with their own resources, for various reasons. As we see it, the hardship principle is directed at more significant hardship, what might be called ‘undue’ or ‘material’ hardship. But that immediately raises at least two important issues.
- First, how should this type of hardship be measured? What are the relevant criteria?
 - Second, what level or degree of material hardship is socially unacceptable? Where should the threshold be drawn below which it is undesirable for individuals and whānau to fall?
- 5.56. Unsurprisingly, these issues have generated much debate, both locally and internationally. In Aotearoa New Zealand, the one place where hardship is defined is in relation to child poverty. Under the Child Poverty Reduction Act 2018, the Government Statistician is required to define ‘material hardship’ and ‘severe material hardship’ and then to measure both concepts annually using surveys.²⁷⁷
- 5.57. The goal of minimising material hardship, as manifested in the Child Poverty Reduction Act 2018 and the associated measurement approach, appears to reflect widely shared societal values. Accordingly, this goal has been central to our approach in developing our proposals for funding planned relocation. As noted in paragraph 5.11, three of the principles we endorse are concerned directly or indirectly with minimising hardship.
- 5.58. From a policy perspective, therefore, the question is not whether hardship should be minimised, but how to best achieve this objective while also giving proper weight to various other important policy principles and objectives. We believe our funding proposals will ensure that those directly affected by planned relocation will not suffer significant or undue material hardship, while also adhering, as much as possible, to other principles and objectives.
- 5.59. We emphasise that our proposal (which is, arguably, generous in some respects) is not aimed at the preservation of existing wealth nor at the protection of privately held assets from risk. We believe it is generally not the role of government to protect property owners from the risks of owning a property, and this is not our intention.

A role for means testing?

- 5.60. It is sometimes suggested that most, if not all, public assistance to those affected by planned relocation should be means tested, perhaps based on income or wealth (or some combination of the two). Such proposals are typically motivated by a genuine concern for distributive justice and a desire to minimise the fiscal costs of planned relocation.

²⁷⁷ A deprivation index, known as Dep 17, is constructed based on a list of 17 items. Those households surveyed that lack at least 6 of the 17 items because they cannot afford them are deemed to be in material hardship; those lacking at least 9 items are deemed to be in severe material hardship. See Stats NZ. *Measuring child poverty; Material hardship*. Retrieved 1 July 2023. This, or a similar framework, can form the basis of a long-term evaluation of the efficacy of the planned relocation scheme.

5.61. While we consider a case exists for means testing some forms of public assistance provided in the context of planned relocation (eg, temporary rental assistance), we do not favour any *extensive* use of means testing. This is especially so in the context of determining whether residential property owners should receive assistance for the loss of their properties. The main objections to an approach based on means testing include:

- the risk of high administrative and compliance costs to undertake means testing
- the greater than usual information demands involved in means testing, which raise privacy concerns
- the difficulties in determining the income and/or wealth of many households (eg, due to family trusts, properties with multiple owners, or other complex household arrangements)
- the generation of strong incentives for strategic wealth and income management that aim to reduce perceived wealth and income (ie, gaming activities)
- the mobilisation of opposition to relocating from households that will not receive support
- increased pressure (mostly advocated for by more affluent households) for public investment in the construction or extension of defensive structures, such as sea walls.

Importantly, as we explain next, we think that distributive justice concerns can be met in other ways.

5.62. Despite our view that means testing should not have an extensive role in planned relocation, we accept it could be relevant in the context of loss of commercial property, business-interruption payments, and for social assistance. In these instances, many of our reservations do not apply, so the case for means testing is much stronger. A significantly smaller number of eligible claimants will be in these categories, so a careful assessment of every individual case could be undertaken more easily. In the case of businesses, the issue is not so much one of hardship to the business (especially for limited liability companies), because businesses, after all, face many risks for which no public intervention is warranted. Rather, the issue concerns the benefits to the community (or society more broadly) from businesses continuing to operate and the public benefits they generate (including providing employment and essential services). These benefits will be particularly significant when a whole town or suburb must relocate.

Limits on the extent of financial assistance

5.63. Our view is that distributive justice is better met through measures other than means testing, in particular:

- the application of a 'per property' financial cap on the level of public assistance
- providing lower payments for properties other than principal places of residence.

These measures are discussed further below. They will limit the level of assistance available to those who own more valuable homes (which is consistent with focusing support on those who need it most) and to some investors and business operators, reflecting that the primary concern of government must be to get people housed safely. These measures focus not on what has been lost but on what is needed to enable people to move on and re-establish their lives elsewhere.

- 5.64. We expect that our recommended programme will be affordable if the Government adopts it as a significant political priority. If further consideration concludes that the programme is too expensive, it would be possible to reduce the overall cost by lowering the cap and/or narrowing eligibility for assistance.

Incentives

- 5.65. The incentives that any funding arrangement creates must also be considered. A planned relocation scheme should provide the *incentives to reduce risk*, rather than to increase it. Such a scheme should not create (or strengthen) moral hazard (ie, an increase in risks that will eventually be covered by payments from a planned relocation scheme). This is particularly important because a planned relocation scheme ought to be part of a wider adaptation programme that will include significant funding for other adaptation and risk reduction measures, including limiting new development in high-risk locations. Temporary protective measures may create a disincentive to risk reduction through relocation and thus increase the burden on communities over time.
- 5.66. An additional concern is that the implemented programme inadvertently might speed up retreat by the banking and insurance sectors. We therefore think the programme could only be effective if it provides *certainty* with respect to the amount that will be paid. Uncertainty may trigger retreat by financial institutions, because of concerns about possible mortgage default. The insurance sector will also be trying not to take on difficult-to-quantify risks, so the programme should try to remove any unnecessary uncertainty. Perhaps more significantly, certainty is also important to enable property owners, tenants and businesses to make informed decisions and get on with their lives.
- 5.67. We also believe the programme should be voluntary, as far as possible, so that property owners will choose to opt in and join it (if their properties are eligible), rather than being coerced into it.²⁷⁸ As a consequence, the design of the proposed programme creates incentives for most (but not all) owners to participate. An important incentive is the generosity of the scheme for moderately priced principal places of residence. Simplicity, transparency and certainty will also contribute to voluntary participation.

Three issues with property-related payments

- 5.68. Three issues exist with property-related payments that we must address.
- 5.68.1. **Lenders and mortgages:** For property owners who have mortgages on their property, compensation at less than full value (ie, pre-event or pre-designation value) may create financial difficulties.

²⁷⁸ As noted in chapter 4, we accept there may need to be a power to compel planned relocation so as to further incentivise voluntary compliance. See chapter 4 at paragraph 4.43.

- 5.68.2. **Insurance, especially insurance retreat:** This is particularly important for the owners of mortgaged properties, who are required as a term of their mortgages to take out insurance cover for their properties. The absence of insurance is an event of default. If insurers decide that the risks in certain locations are too great and make a commercial decision to withdraw insurance cover, mortgagors may find themselves in default under the terms of their mortgages, which could have significant ramifications.
- 5.68.3. **Uninsured properties:** The issue of what approach to take with uninsured properties will only arise in post-event planned relocations. In pre-event or anticipatory planned relocations, insurance will be irrelevant because there will have been no insurable loss.

We discuss each aspect in turn.

Lending sector and mortgage implications

- 5.69. Over half of the properties that become subject to planned relocation are expected to have mortgages registered against them, many of which have loan to house value ratios (LVRs) above 50 per cent. Accordingly, we considered what impact mortgage arrangements might have on the design of funding for planned relocation.
- 5.70. The contractual relationship between a homeowner or mortgagor and a first-ranking lender or mortgagee is such that, regardless of the underlying value of the property, lenders are entitled to full repayment of the debt plus any interest due.²⁷⁹
- 5.71. The underlying principle behind these contractual terms is that any financial implications from increases or decreases in property values are borne by the property owner. Changes, whether up or down, do not affect the owner's contractual obligations to the lender. This arrangement is a central pillar of the financial system, with residential first-ranking mortgages accounting for over 60 per cent of banks' lending.²⁸⁰ Banks and other lenders also routinely use housing loans as collateral for their own borrowing in domestic and international wholesale markets. This practice is necessary to ensure lenders' liquidity so they can meet the needs of depositors and borrowers.²⁸¹ Unravelling significant contractual elements of first-ranking residential mortgages could therefore weaken this funding source for lenders and undermine the stability of the domestic financial system.

²⁷⁹ The interest costs could include 'break costs' in the event of prepayment of the debt in full or part before the expiry of any fixed-interest rate term. If the underlying lending contract is a 'consumer credit contract' for the purposes of the Credit Contracts and Consumer Finance Act 2003, the 'break costs' will be subject to the prepayment provisions of that regime (eg, s 43). Such costs would be considerable if prevailing market rates drop during the course of a fixed term, but could also result in a net gain if interest rates rise during the same period.

²⁸⁰ According to the Reserve Bank of New Zealand, banks' total housing lending is \$340 billion, as of February 2023. Non-bank lenders account for an additional \$6 billion in housing debt (less than 2 per cent of the market). See: *Reserve Bank of New Zealand. 2023. Registered banks and non-bank lending institutions: Sector lending (C5). Accessed 1 July 2023.*

²⁸¹ Bank deposits, both from consumers and customers, account for about 65 per cent of bank loans. The balance is met from other funding sources (eg, bonds, primarily through offshore debt markets).

- 5.72. Under mortgage arrangements, banks and other lenders are legally entitled to the full proceeds from a sale of a property for the purpose of debt repayment. This means that, depending on (i) the amount of payment provided in a planned relocation programme and (ii) the amount of a borrower's outstanding mortgage debt, owners will only receive what is left after the mortgage debt has been fully repaid. If the compensatory payment is significantly lower than the property's rateable value, some borrowers could be left with residual debt for which they remain personally liable.²⁸² This residual liability could undermine owners' financial positions and create additional hardship.
- 5.73. Accordingly, depending on the level of compensatory payments received under the planned relocation scheme, some homeowners in a pre-event planned relocation may find that:
- they lose all or most of their equity in their homes
 - their compensatory payments go to their lenders to meet their mortgage repayment obligations
 - despite this, they are left with residual debt under their mortgages
 - they have insufficient funds to put a deposit on a replacement property.
- 5.74. Moreover, if the borrower is left with any residual debt:
- lenders would need to take this outstanding debt into account when assessing the borrower's ability to service a new home loan²⁸³
 - if no new home was purchased against which the residual debt could be secured, the residual debt may attract higher levels of interest than under the original lending arrangements (because the debt is no longer secured against a collateral)²⁸⁴
 - a risk exists that any other financial support provided as part of a planned relocation scheme (eg, relocation grants or costs for demolition) could be viewed by lenders as a source of repayment for the outstanding residual debt. While this may be difficult to enforce in practice, this view could see lenders demand a share from other payment streams or other government support.
- 5.75. While this reflects a 'worst case' scenario and depends on the level of compensatory payments available, little doubt exists that some borrowers will, despite having received compensatory payments, find themselves with little or no funding for a deposit on a replacement home and perhaps with residual debt to pay off. This suggests that, to facilitate planned relocations:

²⁸² This differs from other jurisdictions (eg, the United States of America) where mortgages over properties are not supported by personal covenants to repay, so that the property is the sole security, allowing borrowers to 'hand the house keys' to the bank without continuing to carry any residual debt obligations.

²⁸³ This servicing analysis would be relevant to a lender's own credit risk servicing assessment but also, for consumer credit contracts, would be relevant to a lender's assessment as to whether the borrower could repay any new lending without suffering substantial hardship (Credit Contracts and Consumer Finance Act 2003 s 9C(3)(a)(ii)).

²⁸⁴ For example, unsecured residual debt attracts higher interest and requires faster repayment (eg, 5 years compared with up to 30 years for a residential mortgage). This means even a relatively small residual debt would attract a higher monthly repayment that would need to be accounted for when a bank assesses customers' ability to service their debt.

- some flexibility may be needed on the minimum deposit and debt servicing requirements for replacement properties
 - lenders must be prepared to write off some debts. The funding principles approved by Cabinet express an expectation that banks will contribute to planned relocation²⁸⁵
 - the development of a mechanism to encourage the transfer of mortgages from one property to another may need to be considered, in a way that protects the debt from the lenders' perspective but enables homeowners to use their compensatory payouts to obtain replacement properties.
- 5.76. Regardless of the contractual arrangements defining mortgages, we believe that banks and other lenders have a shared interest in an equitable planned relocation system that avoids undue hardship. Without such a scheme, banks and other lenders stand to lose because:
- house values will fall in the face of heightened risk from natural hazards, which may be exacerbated by insurance retreat
 - borrowers may become unwilling or unable to service their mortgage debt and unable to sell their properties to repay debt
 - widespread erosion of property values would increase lenders' cost of capital because they would have to account for the increased credit risk. This is an immediate financial cost to lenders, regardless of whether any credit losses are realised.
- 5.77. A planned relocation system could avoid widespread mortgage default and enforcement actions. Moreover, lenders benefit from the long-term financial success of their customers and have a commercial interest in their long-term financial well-being and prosperity, including their ability to 'move on'. Additionally, we believe lenders should be increasingly mindful of the need to maintain social licence, including enhancing positive social and environmental impacts.
- 5.78. Our expectation is therefore that it will be in the self-interest of lenders to support a successful planned relocation system. Even where a planned relocation scheme results in some financial losses to lenders (eg, by writing off residual debts), lenders are still incentivised to support such a scheme to avoid much higher future losses.
- 5.79. It may be that issues relating to mortgages and planned relocation are temporary. In the future, the lending appetite of banks and others should adjust to account for climate-related risks, thus leading to adjustments in lending practices. This will be supported by use of improved risk data and the already heightened regulatory focus (eg, the stress testing requirements imposed by the Reserve Bank of New Zealand and the mandatory climate-related disclosures imposed by the External Reporting Board).
- 5.80. Nevertheless, in the context of the potential risk of hardship for borrowers, we believe that a robust planned relocation scheme should include consideration of mortgages, provide as much certainty as possible for homeowners with mortgages and attempt to balance appropriately risks and responsibilities between mortgagees and mortgagors.

²⁸⁵ See paragraph 5.4.

- 5.81. Given the importance of first-ranking mortgages in New Zealand's financial system, we do not recommend an approach that would undermine their first-ranking status. Accordingly, we do not recommend the introduction of legislation that would impose any legal limit on the ability of lenders to continue enforcing the terms of the lending arrangements already in place.²⁸⁶
- 5.82. Instead, we recognise that banks and other lenders should remain in a position to evaluate customers' individual circumstances, including consideration of other assets, such as investment properties.
- 5.83. In relation to residual debt, under current practices (and considering the responsible lending obligations to which consumer credit contracts are subject under the Credit Contracts and Consumer Finance Act 2003), lenders may be unlikely to pursue any residual debt where repayment of the debt is unlikely and/or is unaffordable to the borrower. Some past evidence exists of banks supporting their customers in unforeseen circumstances.²⁸⁷
- 5.84. Notwithstanding this history, we are concerned that leaving the treatment of matters such as residual debt to the discretion of lenders could heighten anxiety among affected property owners. Furthermore, lack of a clear and transparent direction risks inconsistent treatment among different lenders and different borrowers, and it will generally undermine confidence in the fairness of the planned relocation system. More broadly, the public's perception that a significant part of the payments for affected homeowners could end up with lenders, and their perceived refusal to participate and share in any losses, would undermine public support for both the planned relocation scheme and lenders' social licence to operate.
- 5.85. Our recommendation, therefore, is for the Government to consider introducing amendments to the Credit Contracts and Consumer Finance Act 2003 and/or the Responsible Lending Code to support a more consistent and certain framework for mortgagors with consumer credit contracts in a planned relocation situation. This could be done in various ways.
- 5.86. In addition to changes to the Credit Contracts and Consumer Finance Act, two further steps could be taken.
- 5.86.1. A memorandum of understanding (MoU) could be agreed between the Government and lenders (potentially via industry bodies such as the New Zealand Banking Association and the Financial Services Federation) that outlines a consistent approach to be applied across all lenders for loans secured against properties subject to planned relocation. This MoU could address various matters that may become problematic in planned relocations, such as minimum deposit requirements, debt servicing requirements, the ability to transfer mortgage debt between properties, residual debt liabilities, and problems resulting from insurance retreat. Agreements on these topics could facilitate relocations by reducing uncertainty, complexity and hardship for borrowers.

²⁸⁶ Among other things, this approach is consistent with the principle that legislation should not be retrospective or interfere with accrued rights or obligations.

²⁸⁷ For example, banks have previously supported customers participating in the Financial Assistance Package for leaky homes, under which costs were shared between homeowners and local and central government even where it resulted in additional debt outside banks' conventional risk appetite.

- 5.86.2. A formal mediation process could be included in the planned relocation compensatory payment process in circumstances where a mortgagee is involved. That is, a process like the mechanisms within the Farm Debt Mediation Act 2019 could be included to help ensure better outcomes for individual customers, even without agreement on the underlying principles. Under the Farm Debt Mediation Act 2019, secured creditors must offer mediation before taking any debt enforcement action against farmers and other eligible primary production businesses. Farmers can ask for mediation at any time.

Recommendation 36

We recommend the Government considers:

- introducing amendments to the Credit Contracts and Consumer Finance Act 2003 and/or the Responsible Lending Code, to support a more consistent and certain framework for mortgagors with consumer credit contracts in a planned relocation situation
- entering a memorandum of understanding with lenders (potentially via industry bodies such as the New Zealand Banking Association and the Financial Services Federation) that outlines a consistent approach across all lenders for loans secured against properties subject to planned relocation
- introducing a formal mediation process within the planned relocation compensatory payment process in circumstances where a mortgagee is involved.

Public insurance and private insurance withdrawal

5.87. We have noted the importance of insurance to the issue of government support for relocating home and other building owners. In this section, we make general observations about insurance within the context of the implementation of planned relocations.

5.88. Four factors are at the heart of the provision of private insurance:

- the likelihood of an insurable damaging event occurring
- the amount of damage it generates
- the correlation of the likelihood of this event among the different properties in an insured portfolio
- the resources that the insured can allocate toward insurance (ie, affordability of insurance for the insured).

None of these parameters is static, and the extent and speed with which they change will have implications for the viability and presence of private insurance cover. Climate change, specifically, may exacerbate all four factors. These changing risks will be reflected in the price of insurance cover, and in the increasingly granular way in which these prices will be set.

5.89. In addition, because insurance reflects the underlying risk, an important factor is the extent to which natural hazard risk is managed well. In some locations, it may be possible to cost-effectively manage this risk and maintain or reduce it to an acceptable level through investment in adaptive or protective measures. These measures will help keep private insurance in place. In other locations, this may not be desirable or affordable. These locations are obvious candidates for a planned relocation.

- 5.90. As the risk in a specific location becomes sufficiently likely and thus salient, it will be reflected in the level of insurance cover available, with cover for some risks no longer offered by private insurers (or offered at high prices). In short, some hazards in some locations will become uninsurable.²⁸⁸
- 5.91. These factors make the pace and scale of change in the availability and uptake of insurance uncertain. They create a significant risk that private insurers could retreat from some high-risk locations ahead of any planned relocation or even ahead of the decision to undertake it. Thus, private insurance will become unavailable to protect the owners and mortgage holders of properties in these high-risk locations and owners would be in breach of their obligations under their mortgages. This would not only have immediate material financial consequences in the case of a damaging event, it would also have implications for the design of planned relocation and how it is funded, including:
- putting pressure on the timing, pace or sequencing of relocations
 - increasing the fiscal costs of any post-disaster relocation
 - reducing the value of properties relocated from and complicating the calculation of any property-related payment
 - undermining some of the principles used to guide planned relocation, including avoiding material hardship.
- 5.92. Currently, there is no evidence of a widespread problem with the availability and affordability of private insurance in locations exposed to natural hazard risks. However, some temporary insurance retreats have occurred in the past in Aotearoa New Zealand.²⁸⁹
- 5.93. Ideally, insurance should remain in place throughout the process of planned relocation. However, there is a high level of uncertainty about the changing perceptions of risk and the pace and impact of commercial and underwriting changes by insurers and reinsurers. Thus, an event like the catastrophic flooding of early 2023 in the North Island may well accelerate this process of private insurance withdrawal from some locations.
- 5.94. In most instances in high-income countries overseas, when natural hazard insurance has become unavailable from private providers (typically when a catastrophic event triggered such retreat), the government stepped in to provide an alternative insurance cover. Therefore, in most countries, including Aotearoa New Zealand, most significant natural hazard risks to homes are insured, at least partially and sometimes indirectly, by a public entity (Toka Tū Ake EQC in Aotearoa New Zealand since the 1940s).
- 5.95. Possible scenarios, with respect to the private and public provision of insurance, the identification of a planned relocation plan, and the occurrence of an extreme weather event, are described in table 7.

²⁸⁸ Factors, other than the increasing risk, will also affect this trajectory, because they affect the degree of insurability. These factors include recent occurrences of catastrophic events that make risks more salient, insurers' decisions about their risk tolerance, the global cost and availability of capital and reinsurance, the prevailing macro-economic conditions, the presence and quality of regulation, and political and public sentiments.

²⁸⁹ For example, in some low-lying areas of Christchurch after 2011 and in Wellington after the 2016 earthquake.

- 5.96. Some of the scenarios in table 7 are more desirable and align better with a robust adaptation regime that follows the principles noted earlier, particularly preventing hardship. Primarily, it is in the public interest to maintain the provision of insurance. This is why we labelled the scenarios in which insurance is unavailable as deviating from an optimal adaptation path, and as scenarios that are unlikely and unwelcome (marked red).
- 5.97. Ideally, private insurance will continue to be provided; but this is unlikely to be the case when risk becomes high, for example, for those properties identified as subject to planned relocation. For these properties, we think it is in the public interest to continue maintaining insurance cover even if the private insurers retreat. Maintaining cover will prevent the need to decide on the treatment of uninsured properties, a difficult conundrum that in the past has led to expensive litigation (in the *Quake Outcasts*²⁹⁰ case after the Canterbury earthquakes).
- 5.98. We note that at-risk properties, which are not designated as likely candidates for a planned relocation, may still be subject to a private insurance retreat or to the actual impact of catastrophic events (marked yellow in table 7). Of course, this does not mean that any 'yellow' property should be relocated, but it does point out the possibility of misidentifications. Risk analysis is complex and is not always robust and reliable enough to anticipate either private insurance coverage decisions or planned relocation designations.
- 5.99. Given the above, and to minimise the number of residential properties that are not insured and ultimately will become owned by local or central government, we recommend that all homeowners of properties that have been explicitly designated for planned relocation should be required to maintain a stated minimum amount of natural hazard insurance until their relocation occurs. This insurance can be provided through private insurers (if they decide to keep offering cover), purchased directly from Toka Tū Ake EQC, or provided through some other mechanism.
- 5.100. The decision whether and how to offer public insurance to properties scheduled for planned relocation will depend on policy-makers' choices with respect to non-planned relocation properties that also are unable to access affordable private insurance. This decision – how to deal with non-relocated properties that cannot obtain private insurance – is outside the scope of this report.
- 5.101. One option for homeowners whose homes are scheduled for planned relocation would be that those who cannot obtain a standard fire insurance with a private sector insurer, and are thus currently ineligible for the standard limited EQC cover, should be required to obtain a more comprehensive natural hazard cover from Toka Tū Ake EQC directly. Toka Tū Ake EQC should be required to provide this as a standardised stand-alone cover for natural hazards (possibly conditional on the unavailability of private insurance) that also includes those hazards not currently covered by the Toka Tū Ake EQC scheme and subsidised for some owners for affordability reasons (and thus subject to a needs assessment).²⁹¹




²⁹⁰ *Quake Outcasts v Minister for Canterbury Earthquake Recovery* [2015] NZSC 27, [2016] 1 NZLR 1 and the subsequent decision of the Court of Appeal in *Quake Outcasts v Minister of Canterbury Earthquake Recovery* [2017] NZCA 332, [2017] 3 NZLR 486.

²⁹¹ We note that this recommendation requires an amended version of the Natural Hazards Insurance Act 2023, so that EQC can provide a comprehensive natural hazard insurance product (currently, it does not cover damage to dwellings from storms or floods).

- 5.102. We view this requirement as a desirable component of the programme. The rationale for making this coverage compulsory for properties already designated as subject to planned relocation is that such properties are certain to become the property of the Crown if a damaging event occurs (ie, the retreat will be 'triggered' by such an event) or by the time the planned relocation is scheduled to occur. It is therefore legitimate for government to demand that its future property be insured. Without this mandatory insurance, these properties will likely be neglected during this transition period. This is especially true if we believe that uninsured properties will be compensated similarly to insured ones – as was eventually the case in Canterbury and elsewhere – and if we are concerned that a decision not to compensate the uninsured as generously as the insured will lead to costly legal conflict (as was initially the case in Canterbury).
- 5.103. Furthermore, such a mandate allows government to shift some of the implementation costs of its planned relocation programme to insurers (as long as they stay in this market) and to reinsurance markets (if private and public insurers manage to purchase reinsurance).
- 5.104. This mandate for relocation-designated properties to purchase a natural hazard cover may be difficult to sustain when affordability of the insurance contract is a limiting factor. We think therefore that any such plan needs to be coupled with a specific programme to tackle affordability challenges through direct support for the affected owners who cannot afford insurance.
- 5.105. Because these mandates will only apply to the small number of properties that will be explicitly designated as planned relocation, we do not think these mandated insurance requirements will have market-wide consequences on residential insurance availability and affordability in Aotearoa New Zealand. A relatively small number of properties will make compliance monitoring of this mandate easier.
- 5.106. We acknowledge that mandating cover deviates from the common approach that views insurance as a voluntary contractual arrangement. However, we view this requirement as more akin to Accident Compensation Corporation (ACC) coverage, which is mandatory and supported by levies in car registrations and for employers. The motivation for making the ACC levy compulsory is that government provides this insurance automatically for any employer or driver; the motivation here is similar. Ultimately, government will lose more if uninsured damage occurs in these relocation-designated properties, so requiring that insurance (public or private) shares these costs seems appropriate.
- 5.107. The presence of subsidised public insurance for high-risk properties (designated properties will necessarily be high risk) could lead to the undesirable scenario seen elsewhere, where subsidised insurance is provided, and repeated damage claims are made for the same property. We therefore suggest that this compulsory natural hazard insurance should include a clause that once a property experiences a damage event above a certain threshold (say damage worth at least 30 per cent of the property's value), this will automatically trigger the plan to relocate immediately, even if it was originally planned to happen at some future date. Thus, designated properties that experience substantial damage will not be rebuilt in place but automatically relocated, and many of the associated costs will be paid for by their insurer (or reinsurer).

Table 7: Possible scenarios for properties at risk

Scenario	Private insurance	Public insurance	Programme in place	Catastrophic event	Relocation outcome
a	Yes	Status quo ²⁹²	Yes	Yes	Relocation follows event (insurance contributes to the cost) ²⁹³
b			No	No	Relocation occurs at end of plan ²⁹⁴
c			Yes	Yes	Rebuild or urgent reassessment ²⁹⁵
d			No ²⁹⁶	No	Status quo ²⁹⁷
e	No (or major policy exclusions ²⁹⁸)	Yes ²⁹⁹	Yes	Yes	Relocation follows event (public insurance contributes to Crown purchase) ³⁰⁰
f				No	Relocation occurs at end of plan ³⁰¹
g			No	Yes	Rebuild or urgent reassessment
h				No	Status quo ³⁰²
i		No	Yes	Yes	Relocation following event
j				No	Relocation occurs at end of programme ³⁰³
k			No	Yes	Ad hoc ³⁰⁴
L				No	Status quo

 **Supportive** of planned relocation policy objectives
 **Partially supportive** of planned relocation policy objectives
 **Unsupportive** of planned relocation policy objectives

²⁹² Includes limited public insurance currently provided by Toka Tū Ake EQC.

²⁹³ Assumes insurance payments can contribute to the cost of relocation of affected properties.

²⁹⁴ Mortgages remain available. Properties can also be sold to non-cash buyers.

²⁹⁵ Rebuilds could occur where risk suppression is put in place. Urgent risk reassessment would be needed. If risk is high, properties could be included in the post-disaster planned relocation programme.

²⁹⁶ Assumes no relocation programme despite insurers concluding the property faces uninsurable risk. Private insurer retreat should trigger an evaluation if a planned relocation is required.

²⁹⁷ In the absence of a relocation plan, and no event, councils will struggle to prevent redevelopment of existing properties and other development generally.

²⁹⁸ This may include any reduction in insurance availability for hazards that will impact on the risk profile of affected properties. This will likely constrain the availability of banking credit for the affected property.

²⁹⁹ There may be strong public pressure on the Government to offer public insurance. This could be delivered, for example, via: a) vouchers to private insurance policy holders; b) policy coverage by Toka Tū Ake EQC; c) Crown reinsurance back-stop for catastrophic events; or d) a private consortium with government backing.

³⁰⁰ Assumes the public insurance includes a mechanism to purchase properties.

³⁰¹ Mortgages remain available so properties can be sold to non-cash buyers.

³⁰² In the absence of a relocation programme, councils will struggle to prevent redevelopment of existing properties unless the public insurer is involved in these decisions.

³⁰³ With no insurance, mortgages will not be available. Properties can only be sold to cash buyers.

³⁰⁴ Central government will likely face pressure to purchase properties from affected owners. Councils are likely to face litigation for failing to activate a planned relocation programme.

Recommendation 37

We recommend all homeowners of properties that have been explicitly designated for planned relocation should be required to maintain a stated minimum amount of natural hazard insurance (from private insurers, Toka Tū Ake EQC, or some other mechanism) until their relocation occurs.

We also recommend this compulsory natural hazard insurance should include a clause providing that once a property experiences a damage event above a certain threshold (say, damage worth at least 30 per cent of the property's value), this will automatically trigger the planned relocation, even if it was originally planned to happen at some future date.

Uninsured properties

- 5.108. By 'uninsured properties', we mean properties not insured at the time of a damaging event. Uninsurance can come about because of affordability issues, the difficulty of obtaining specialised policies (eg, for communally held Māori land), oversight by the owners, and for other reasons.
- 5.109. Natural disasters often cause damage to some properties but not others within a single area. Whether an undamaged property does or does not have insurance is irrelevant, because even insured properties that do not experience damage are not eligible for any insurance payments. Accordingly, in the case of planned relocations where properties have not suffered any damage, the distinction between insured and uninsured properties is irrelevant.
- 5.110. As detailed above, we support a mandate for insurance purchase (if necessary, subsidised) for relocation-designated properties. As such, uninsurance can only become an issue for undesignated properties that become subject to a planned relocation designation suddenly when a disaster occurs and damages them.
- 5.111. In previous programmes, most notably the relocations in Matatā and the Residential Red Zone in Canterbury, the treatment of uninsured properties ended up being similar to insured properties (ie, the owners were compensated similarly, following court decisions in the Canterbury case). This approach raises concerns about disincentivising the purchase of insurance (a sub-type of moral hazard sometimes referred to as a 'charity hazard'). On the other hand, during the first phase of implementation of the Residential Red Zone in Christchurch, the Government tried to adopt the opposite strategy, motivated by this concern about charity hazard, and did not provide any payments to the uninsured. That strategy failed once this distinction was litigated, and the Government ended up treating the uninsured and the insured practically the same.³⁰⁵
- 5.112. We believe government should try to ensure that the number of uninsured properties is minimised. Achieving that goal will become increasingly complicated as private insurers become reluctant to provide insurance for high-risk properties at affordable rates. For reasons described above, we think that government should mandate natural hazard insurance only for relocation-designated properties. How to provide insurance for properties that are not designated for relocation, but are still unable to access private insurance, is contentious and

³⁰⁵ See *Quake Outcasts v Minister for Canterbury Earthquake Recovery* [2015] NZSC 27, [2016] 1 NZLR 1 and the subsequent decision of the Court of Appeal in *Quake Outcasts v Minister of Canterbury Earthquake Recovery* [2017] NZCA 332, [2017] 3 NZLR 486. In the first decision, the Supreme Court accepted that insurance status could be a basis for discriminating between affected homeowners, but held, by a majority, that in the particular circumstances (including the relevant legislation) the fact that some homeowners were uninsured could not, by itself, be the determinative factor.

complicated, and is outside the scope of our work. It is, however, an issue that government will have to consider in the future, given the likelihood of private insurance retreat from various high-risk locations.

- 5.113. Despite all this, catastrophic natural disasters may still damage uninsured residential properties. What to do about these properties will merit specific consideration, and it may also depend on the reasons that the properties were uninsured. We do not believe that the concern about any moral or charity hazard merits a denial of all payments (as was attempted in the Residential Red Zone in Canterbury) in a planned relocation scenario. However, we accept that government is free to decide to reduce the amounts of payments if the failure to get insurance was determined to be largely voluntary.³⁰⁶
- 5.114. Incidentally, uninsured commercial property (including rental units) poses an additional challenge, given our view that risk more clearly falls on the owners in this case (rather than on government). Whether uninsured businesses should nevertheless be compensated may need to be decided on a case-by-case basis, including a strong needs-based assessment and examination of the interests of the relocated community with respect to that business. We believe a mechanism to make this decision should be set up pre-emptively.

Separating and valuing land and buildings

- 5.115. Like the Earthquake Commission Act 1993, the NHI Act draws a distinction between land and buildings in terms of public insurance cover and between certain types of property, in the sense that residential dwellings are eligible for cover but commercial properties are not. Similarly, our proposals distinguish between land and buildings and among different building types, although the latter distinctions do not exactly match the NHI Act's approach. We explain our proposals below, starting with buildings. Note that the payments of compensation we suggest would occur in the context of an acquisition or retirement of the land, as discussed in chapter 4.

Buildings

- 5.116. Our proposals in relation to buildings distinguish between:
- residential properties that are principal places of residence for their owners (owner-occupied homes)
 - tenanted properties that provide principal places of residence for their tenants (tenanted residential properties)
 - second homes that serve as holiday homes (eg, baches), which may be rented occasionally or for short periods (eg, in the holidays) but are not principal places of residence for their owners or those who rent them (second homes)

³⁰⁶ The value of an uninsured property that is damaged in an event may be significantly lower than its RV (it will depend on the extent of damage). Undamaged, uninsured properties should be treated similarly to other properties (whether principal places of residence, rental or holiday homes), because insurance is irrelevant if no damage has occurred. Damaged and 'voluntarily' uninsured properties could receive only partial payment for the dwelling (maybe tied to the value of the damaged asset once damages were incurred).

- commercial buildings
- buildings owned by non-governmental organisations and used for their ‘not-for-profit’ activities³⁰⁷
- buildings owned by iwi, hapū and Māori communities.

5.117. Before we discuss our proposals for these various building types, we make four initial points.

5.118. First, we consider that, in principle, the distinctions between these categories are workable. ‘Principal place of residence’ is, after all, a concept used in several existing statutory settings.³⁰⁸ A rental property that provides a permanent place of residence for its tenants is distinguishable from a property that provides, for example, temporary holiday accommodation to various short-term tenants. It is important, however, that the system be carefully designed to identify properties in the various categories.

5.119. Second, some properties may have multiple units that have different uses, which might place them in multiple categories. Examples could include a building with multiple residential units, some of which are used as principal places of residence and others rented out for long- or short-term periods; or a corner shop where the upstairs unit is a residence (rented out or as the owner’s principal place of residence). Toka Tū Ake EQC manages similar complications after insured natural hazard events (because it insures only dwellings), and so does the Inland Revenue Department in its tax assessments. We therefore do not think this makes our distinctions unworkable.

5.120. Third, in anticipatory planned relocations, no funds from insurance will be available because no insured loss will have occurred. However, where the relocation follows an insured event (eg, a flood), the compensatory payment will either be the dwelling value determined, as discussed below, or the insurance claim payment (whichever is larger). If the insurance payment is smaller than the determined dwelling value, the compensatory payment will only be a ‘top up’.

5.121. Fourth, because the compensatory payments differ among the various categories of building, the risk of ‘gaming’ exists, in the sense that owners may try to move buildings to more favourable categories in anticipation of a planned relocation. We discuss this further below at 5.157. In addition, the identification of a property as subject to a planned relocation scheme may cause changes in the use of the property and its valuation. Therefore, we suggest that a property’s designation status, and its value in accordance with the approach set out below (if accepted), be set at the time the property is identified as part of a planned relocation scheme.

Payment options for principal place of residence

5.122. We believe that considering the housing services each building category provides, principal places of residence (ie, owner-occupied homes) should be treated differently from holiday

³⁰⁷ Buildings within this category could be community-owned properties, such as community halls; churches and properties owned by non-profit organisations and used for the organisation’s activities. A property owned by a non-profit but rented out to a for-profit entity would be treated as a commercial property, and so would a commercial for-profit property rented out to a non-profit entity.

³⁰⁸ Tax legislation (eg, the Goods and Services Tax Act 1985 and Income Tax Act 2007) uses this and similar concepts, as does the PWA.

homes, houses that are rented out as short-term rentals, and other commercial properties. In this section, we explain our proposal for owner-occupied homes.

Two methods of valuing dwellings

5.123. Assessing the value of a dwelling can be done in two distinct ways for the purposes of calculating compensation for planned relocation. One approach is to use the financial market value of the property as reflected in the RV district valuation roll. The second method is to assess the value of the property by reference to the housing function it fulfils.

Rateable value of improvements

5.124. Adopting the first approach, the 'value of a house' is the 'capital improvement' rateable value (RV) of the property as assessed for rating purposes. The relevant RV should be assessed immediately before the decision is made that the locality will be subject to a planned relocation, or immediately before a natural disaster occurs (assuming the disaster leads to an explicit planned relocation decision). Any government intervention is bound to change house prices in the locality, potentially leading prices to collapse. We think it is important to maintain stability, certainty and transparency in the market, and most importantly to prevent hardship, by establishing the amount that will be paid at the outset of the programme (rather than setting it at some future date after the houses have already been 'condemned').³⁰⁹

Building size multiplied by the cost of construction per square metre

5.125. The second approach, treating 'value' as the 'housing service' value of the house, sets the value based on the size of the house multiplied by a standard building cost. In this framework, the value of the property can be thought of as the size of the house (in square metres) multiplied by a fixed amount (a per square metre figure) that is equivalent to the per square metre cost of building an average new house of standard quality. For example, if the figure in the NHI Act of \$2,500 (plus GST) per square metre was adopted,³¹⁰ the owner of a 120 square metre house would receive \$300,000 (plus GST).

5.126. Under both approaches, a cap would be applied, as we discuss below.

How the options would operate

Option A: payment on basis of RV, up to a cap

5.127. This approach compensates owners for the value of the property assessed based on its RV for capital improvements, but subject to a cap on the amount that owners can be paid.

³⁰⁹ In the Christchurch Residential Red Zone programme, the Government used the 2007 RVs rather than the most recent 2010 values, as the 2010 values were generally lower because of the 2008 Global Financial Crisis and its impact on house prices. We see this approach as too generous because it shielded the Red Zone homeowners from a risk that other property owners in Aotearoa New Zealand were not shielded from. We return to this at paragraph 5.134.

³¹⁰ See paragraph 5.52. It is unclear whether this figure was intended to reflect the likely cost of construction or intended to serve essentially as a price floor. Presumably, however, it will be adjusted from time to time to reflect changes in construction costs.

- 5.128. The reason for using the RV is it is an easily accessible and publicly available figure that is intended to reflect the market value of the property. It has been the basis for compensatory payments in other similar situations in the past. We note in footnote 309 that, in Christchurch, current RVs were not used because they were generally lower than the previous RVs and the Crown decided to base its offers on the older RVs. As this example indicates, market values fluctuate, and RVs may not accurately reflect them at any specific time. If RVs are used, however, it is important they be treated as fixed. Certainty about the level of compensatory payment is critical, and there should be no scope for undermining the validity of current RVs in a planned relocation context. In the longer term, adopting this approach may incentivise homeowners to ensure their RVs are accurate.
- 5.129. The cap can be defined in various ways, but we think it should be set relatively high, so that 80 per cent to 90 per cent of property owners are fully compensated up to the RV of their homes. But should this percentile of property owners be for households nationally, regionally or locally? This is a significant choice.
- 5.130. In appendix B, the tables show the RVs of land and improvements (principally, houses) for residential properties (excluding lifestyle blocks) by region at the 70th, 80th and 90th percentiles. The data show that, for dwellings, the 80th percentile equals \$255,000 for the West Coast of the South Island compared with \$570,000 for Auckland. In most regions, the dwelling value is higher than the land value, but there are five North Island regions and one South Island region where the land is more valuable than dwellings. Auckland is the stand-out in this respect; at the 80th percentile, land value is more than double the dwelling value.
- 5.131. Adopting a national cap at the 80th percentile would result in values of:
- \$460,000 for dwellings
 - \$800,000 for land.
- 5.132. The data indicate that, for some regions, a significant difference will exist between using a national rather than regional figure for the value of dwellings.
- 5.132.1. If a national figure is used, the cap for affected homeowners in Auckland would be less than the 80th percentile for Auckland (\$460,000 compared with \$570,000). In contrast, some affected homeowners in the West Coast region would be compensated at a higher level than the 80th percentile for their region (\$460,000 compared with \$255,000).³¹¹ For those in Auckland, this may not meet one of the outcomes for planned relocation, namely, to get people rehoused adequately. Moreover, if some homeowners are compensated beyond the 80 per cent figure for their region while others are undercompensated for their region, that may be perceived as unfair.
- 5.132.2. If a regional figure is used, affected Auckland homeowners would receive significantly higher amounts in compensation than similarly affected homeowners in the West Coast region (up to \$570,00 in Auckland but only up to \$255,000 in the West Coast region). The effect may be to preserve existing inequalities; but even if it is not, the differences in the compensatory payments available between regions for

³¹¹ For people in the West Coast region, whose RVs fall between \$255,000 and \$460,000, the cap will become 100 per cent of RV.

similarly affected people may cause resentment and undermine the social licence for planned relocations.

- 5.132.3. Given that natural hazards are not confined by regional boundaries and may affect more than one region at a time, a regional figure might mean affected homeowners would be treated differently depending on which side of a regional boundary their property is on. This may cause anomalies.
- 5.133. Ultimately, the decision as to whether the percentile should be regionally or nationally based may best be determined by considering the outcomes sought for planned relocation. If primary weight is given to enabling people to rehouse themselves in the general area where they are currently living, a regional percentile will have to be used. In previous instances where compensation payments have been based on RVs, the actual values of affected properties have been used. Obviously, these were local valuations reflecting regional differences. To adopt a national figure for the future would be a significant change, which would create winners and losers.
- 5.134. Fixing the level of compensatory payment so that 80 per cent to 90 per cent of owner-occupiers receive full compensation in terms of their RVs may seem overly generous. However, the following should be noted.
 - 5.134.1. It is not as generous as the approach adopted by the Government towards homeowners in the Christchurch Residential Red Zone or in Matatā.
 - 5.134.2. Without close to full compensation (albeit with a cap), families whose property is their biggest (and perhaps only substantial) asset are likely to suffer significant deprivation. This will be particularly acute if the property has a large mortgage (ie, has a high LVR). As described earlier, less generous compensation may not only eliminate any equity that the owners have in the property, it may also leave them with a residual unsecured debt to their lender. First-time and younger homeowners, who typically have higher LVRs, are likely to fall into this category. Such owners may find themselves unable to afford to buy replacement homes. Without a generous payment, therefore, the equity implications of the programme will be serious.
 - 5.134.3. Because a primary goal of a system for planned relocation is alleviating hardship, we believe providing a payment that allows people to move on to a new location (in rented or owned property) and minimises the loss and trauma that relocation can engender is important. This seems to have been a powerful motivation behind the Crown's offers to homeowners in Christchurch.
 - 5.134.4. As emphasised in earlier chapters, we believe planned relocation programmes should be voluntary, although compulsory powers will necessarily exist in the background. Without a payment that allows people to 'move on' and that avoids leaving owners with high residual debt, it seems unlikely there will be much, if any, voluntary participation. Accordingly, without relatively generous payments, compulsion may be required and significant legal wrangling may ensue.
- 5.135. We envision that the use of a cap will limit the amount of fiscal and political risk in the programme. Other ways could be used to establish a cap besides basing it on providing full

compensation to the 80th or 90th percentile of homeowners based on RVs. For example, the cap could comprise several graduated steps. Compensation could be 100 per cent up to a specific cap, then only 50 per cent paid to a higher threshold and, above that, no additional compensation. However, such an approach may create unnecessary complications in the programme.

- 5.136. As noted, where a cap is based on an RV, the relevant RV would be the one that applied immediately before the decision to relocate, or the natural disaster leading to a planned relocation. In the case of pre-event or anticipatory planned relocations, there may be a gap of some years between the decision to relocate and its actual implementation. In that situation, the amount of the compensatory payment should not be adjusted for inflation. Rather, the dollar amount identified at the outset will remain as the amount available to the homeowner. This will create an incentive for homeowners to relocate sooner rather than later.³¹² It will also serve as a price signal for other at-risk areas and help reduce government's financial exposure.

Option B: square metre-based payment

- 5.137. The second option is to set the value of a house by reference to the 'per square metre' cost of building an average house multiplied by the square metre size of the house, as the NHI Act does in one of its settings.³¹³ Under this option, the cap could be based on a maximum house size, such as the size of an average new-build, stand-alone home, which is around 180 square metres nationally, or on some other size-based cap.
- 5.138. In this approach, the payment to an affected homeowner would be calculated by reference to the size of their house in square metres (up to a maximum of 180 square metres) multiplied by a measure of the cost of construction (say, \$2,500 plus GST as in the NHI Act). Using the \$2,500 per square metre figure³¹⁴ would give a *maximum* compensation for a stand-alone house that is a principal place of residence of \$450,000 plus GST (ie, \$2,500 × 180 square metres).
- 5.139. The justification for option B is that the compensatory payment reflects the cost to people of rebuilding an equivalent sized home of standard quality (up to the maximum compensable size). It also has the advantage that it is reasonably straightforward and transparent, so should not be complex to administer. Two issues that would have to be determined are whether the per square metre building cost figure should be a conservative figure or a more generous figure, and whether it should be a national, regional or local figure. If the NHI Act's approach is followed, it would be a national figure, conservatively set. A decision would also be needed about the calculation of the cap, and whether the 180 square metre figure should be adjusted up or down. One feature of this approach is it does not distinguish between well and poorly maintained properties. The owner of a poorly maintained 120 square metre house

³¹² The Government could facilitate the relocation process by buying out owners at an early stage and then renting their properties back to them until their new properties are ready, although, as noted in chapter 4, this raises complexities. See also Storey B. 2017. *Conversion to Leasehold as a Methodology to Price Sea Level Rise Risk*. Master's Dissertation. Christchurch: University of Canterbury.

³¹³ See paragraph 5.52.

³¹⁴ The 2022 data indicate that the average cost per square metre for new residential buildings is \$2,821. However, this likely underestimates the true cost of construction currently, given recent inflationary cost increases.

would receive the same amount as the owner of a well-maintained 120 square metre property.

- 5.140. As with the RV valuation-based approach, the figure payable on a planned relocation would be fixed when the decision to relocate is made and would not be increased thereafter, again to encourage early relocation and discourage 'gaming' behaviour.
- 5.141. We have data showing the floor areas of residential dwellings, by region, at the 70th, 80th and 90th percentiles. They show significant regional differences. While these regional differences could be reflected in the cap, this could produce significant regional disparities that may be hard to justify. People living in regions with comparatively low-value housing could receive higher compensatory payments than people living in regions with comparatively high-value housing (given the relevant floor area percentiles in their respective regions). This indicates that the floor area cap should be a national one.

Recommendation 38

We recommend that principal places of residence (ie, owner-occupied homes) should be treated differently from second homes (eg, baches and holiday homes), commercial buildings and short-term rental properties.

We recommend that whether the value of the principal places of residence is assessed using market values (ie, rateable values) or 'per square metre' costs, a cap is applied.

Payments for commercial properties, residential rental properties, second homes and other properties

Commercial property

- 5.142. Another type of property is commercial, or properties used for a for-profit business. In many cases, the owner of the property and the owner of the business are different (although they may be two separate entities belonging to the same individual). In the discussion that follows, we only refer to the property and its owner, rather than the business itself. The business might require a separate stream of assistance, as described towards the end of the chapter.
- 5.143. By 'commercial property', we mean any constructed property that serves a commercial, non-residential purpose.³¹⁵ This does not include undeveloped land or land used for pasture, horticulture or any other agricultural use. Commercial property can include various buildings and uses, from a local corner dairy or a proprietor-run art gallery to a large-scale commercial manufacturing facility with many employees.
- 5.144. We see a more limited role for compensatory payments in the case of commercial properties. Public insurance cover for commercial property through the earthquake legislation was withdrawn in 1993,³¹⁶ on the basis that the primary concern of government should be to

³¹⁵ The reference to 'non-residential purpose' was not intended to exclude hotels and motels from the commercial property category.

³¹⁶ The Earthquake Commission Act 1993 repealed the Earthquake and War Damage Act 1944 and provided transitional provisions for non-residential cover until the end of 1996.

ensure that people have adequate housing, and owners of commercial properties could take care of their own interests by, for example, taking out private insurance or self-insuring.³¹⁷

5.145. However, in the context of planned relocation, at least in pre-event situations where there will be no insurance cover because no insurable loss has occurred, there is some public interest in facilitating the transition of business services (and employment) to the new location when a community relocates. We therefore propose more limited support payments for commercial properties, at levels significantly lower than for principal places of residence, reflecting the view that businesses are generally subject to business risk that is not socialised.

5.146. Our proposal has three elements.

- First, any payment would be based on need, which would be assessed by some form of means testing.
- Second, the payment would be some proportion of the RV valuation for the building, say 50 per cent (or some other ad hoc level).
- Third, the payment would be conditional on the commercial premises being re-established, either in the new location of a community-wide planned relocation or elsewhere. if no community-wide relocation is planned.

We address each point in turn.

(i) Needs-based assessment

5.147. Two arguments exist for means testing in this instance. The first is that the main rationale for not introducing means testing for payments for homeowners is the difficulty and cost involved in undertaking a robust and verifiable process for means testing. This is easier for commercial property owners and could be based on their IRD filings. The second reason is that the number of commercial property owners who will be subject to means testing is much smaller, making it more feasible to undertake.

(ii) A proportion of RV

5.148. As with residential buildings, the RV of a commercial building (ie, the structure) included in the district valuation roll can serve as the basis for determining the amount of any payment. We suggest payments reflect possibly 50 per cent of the RV. This suggestion is an ad hoc proportion of the valuation; it is not based on any assessment of the future commercial viability of the business, nor on the services it may be providing to the relocated community (in terms of the provision of goods and services or employment). This approach may merit further investigation.

(iii) Payment conditionality

5.149. Any payments for commercial property should be made conditional on the re-establishment of the same (or similar) commercial property either in the new location if a community-wide relocation is undertaken or elsewhere. This conditionality is important because the main

³¹⁷ See Hon Maurice McTigue on behalf of the Minister of Finance. 15 December 1992. *Hansard* Vol 532; and The New Zealand National Society for Earthquake Engineering. 1993. Changes to Disaster Insurance in New Zealand. *Bulletin of the New Zealand National Society for Earthquake Engineering* 26(4): 437–444.

justification for providing these payments is the re-establishment of these commercial services, rather than the protection of a commercial entity from exposure to natural hazard risks.

- 5.150. A further possibility that could be explored is providing at least some (if not all) of these payments to businesses as loans rather than grants. As loans, repayment could be based on the future profitability of the relocated business, so the owners are not fully exposed to the risk created by the relocation programme (this is not dissimilar to the way student loan repayments are structured).

Recommendation 39

We recommend limited support payments for commercial properties at levels that are significantly lower than for principal places of residence.

- Any payment would be based on need, which would be assessed by some form of means testing.
- The payment would be some proportion of the ratable value of the building.
- The payment would be conditional on the commercial premises being re-established, either in the new location if there was a community-wide planned relocation or elsewhere if there was not.

Rented residential property

- 5.151. In principle, residential rental properties that provide long-term rental accommodation could be viewed as a business and/or commercial property for the purposes of determining their treatment. However, such rental properties are often principal places of residence for their tenants and so are providing a similar housing service to owner-occupied homes. We consider a strong public interest exists in maintaining long-term rental housing stock, given the proportion of New Zealanders who live in rental accommodation (about 35 per cent)³¹⁸ and the current lack of sufficient housing in Aotearoa New Zealand (to serve both existing and potential tenants). These two reasons suggest that the approach for rental properties that provide principal places of residence for their tenants (as opposed to short-term holiday and other similar rentals, such as Airbnbs) should be more generous than for commercial properties but less generous than for owner-occupied principal places of residence.

- 5.152. Accordingly, we suggest payments to the owners of rental properties that are principal places of residence for their tenants:

- not be means tested but rather be available to all property owners who provide this type of long-term rental accommodation
- be calculated on a more generous basis than applies to the owners of commercial buildings
- be subject to a similar reinvestment obligation as that applying to commercial building owners who receive compensatory payments; in this case, payments received would

³¹⁸ See Stats NZ. 2020. *Housing in Aotearoa: 2020*. Wellington: Stats NZ, p 29.

have to be reinvested into the provision of long-term rental accommodation. The mechanism for this reinvestment should be flexible.³¹⁹

- 5.153. About a third of the population are renters, and they include a large proportion of low-income Māori and Pasifika (so the share of renters in a specific community might be higher than the national average). A reasonably generous compensatory payment programme, which includes a mandated conditionality of reinvestment in the rental housing stock, will further protect the availability of affordable housing in these and other communities.

Recommendation 40

We recommend that payments for residential rental properties should be more generous than for commercial properties, though they could be less generous than for owner-occupied principal places of residence.

- Any payment should not be means tested but rather be available to all property owners who provide this type of long-term rental accommodation.
- The payment would be subject to a similar reinvestment obligation as applies to commercial building owners who receive compensatory payments.

Second homes

- 5.154. Natural hazard cover under the NHI Act does not distinguish between principal places of residence and second homes, such as baches, both are covered as 'dwellings' (assuming appropriate insurance policies are in place). In a planned relocation context, there is likely to be pressure on government to provide support to the owners of baches and other second homes, especially because many planned relocations will occur along coastlines where a lot of baches are located.

- 5.155. In principle, we do not see a compelling public interest that requires such support in a planned relocation context. Rather, we think the risk to baches and other second homes should largely be borne by the owners and see no ethical justification for providing any compensatory payments. That said, we accept there may be a case for providing modest assistance with removal, demolition and/or land clearing costs.

- 5.156. The reasoning underlying our position is as follows.

5.156.1. Consistent with our funding principles,³²⁰ funding for planned relocation should be directed at the outcomes identified for planned relocation. Two outcomes are relevant: people must have access to adequate and affordable places to live and socioeconomic inequalities must not be exacerbated and need not be preserved. Given that the owners of second homes will have principal places of residence, the first of these outcomes is not served by providing compensatory payments for second homes. Further, providing compensatory payments for second homes is inconsistent with the second outcome; it is more about helping people preserve their

³¹⁹ Examples of possible avenues for this reinvestment include: 1) in Kāinga Ora – Homes and Communities (maybe through targeted issuing of long-term bonds by Kāinga Ora – Homes and Communities); 2) in shares, bonds or annuities of another public or private developer of high volume housing units (possibly a non-profit one), with a requirement that the investment be held for a certain amount of time; or 3) personally in purchasing another rental residence (of similar or greater value). The last option is similar to the arrangement in the United States of America that allows people not to pay capital gains when they sell a rental property.

³²⁰ See paragraph 5.10.

wealth than meeting housing needs following, or in anticipation of, a natural disaster that makes a locality unliveable. As noted, it is not a purpose of funding for planned relocation to preserve people's wealth or insulate them from risks of property ownership. This is not the type of hardship that needs to be avoided through funding for planned relocation.

- 5.156.2. Not providing compensatory payments for second homes may have positive incentive effects. It should be a disincentive for people to build or buy properties as second homes in places at significant risk of natural hazard damage. For those who do decide to build in such areas, it may incentivise them to build relocatable homes. However, the non-provision of compensatory payments to owners of second homes may also have negative incentive effects, as we explain below.
- 5.157. The arguments against adopting this approach to second homes and instead treating them similarly to principal places of residence, although perhaps less generously, are as follows.
- 5.157.1. The distinction we have drawn may encourage gaming. Owners of second houses will have a strong incentive to try to arrange their affairs so the second home becomes a primary place of residence (eg, by organising a suitable legal structure with family members). While techniques will likely be available for addressing this, as there are in other areas where such gaming occurs,³²¹ this will make the process more complex. However, even if challenges exist in maintaining this distinction, the principles outlined here should at least protect government from being expected to pay for multiple properties that are effectively owned by the same individual or group.
 - 5.157.2. The exclusion of second-home owners from compensatory payments will create a powerful lobby group that will be incentivised to object to planned relocation and may try to prevent them through the courts or community mobilisation. This group will have strong incentive to argue for protective measures (eg, stopbanks) and other adaptation measures (eg, raising the floor levels of buildings), rather than supporting relocations. In communities with high proportions of second homes (such as beach communities), it will therefore be difficult to rely on community-centred decision-making, which is an important feature of the proposals made in chapter 3.
 - 5.157.3. Providing no compensatory payment for second homes may mean that a greater requirement exists to rely on the coercive powers described in chapter 4.
- 5.158. With all this considered, our position on second homes is that their owners should not receive compensatory payments, although they might receive modest assistance with removal, demolition or clean-up costs.
- 5.159. We acknowledge that this will disincentivise such owners from participating in planned relocations and incentivise them to support other adaptation responses, such as the building of sea walls, groynes and other protective devices. These adaptation responses may, in the long term, simply exacerbate matters, forestalling an inevitable decision to relocate and

³²¹ In relation to tax affairs, for example.

incurring greater cost. A further result may be that government has to resort to compulsory powers.

- 5.160. However, it is difficult to see how second homeowners could be compensated at a sufficient level to change the incentive effects without distorting the system of compensatory payments for planned relocation. As we see it, that would require ignoring some of the principles underlying the compensatory scheme, in particular that it is not intended to preserve existing wealth or to shelter property owners from the risks associated with property ownership. Moreover, providing sufficiently high enough compensatory payments to the owners of second homes to change the incentives would risk undermining public acceptance of the scheme. Given that all or some of the funding for compensatory payments for planned relocation will have to come from taxpayers, maintaining social licence is vital.

Recommendation 41

We recommend that second home (eg, bach and holiday home) owners should not receive compensatory payments, although they might receive modest assistance with removal, demolition or clean-up costs.

Buildings owned by not-for-profit organisations

- 5.161. A strong justification exists to provide full payment for properties owned and used by non-profit organisations for the conduct of their business (eg, organisations that are supplying assisted living to vulnerable populations, community housing providers, or providers of other social services).
- 5.162. Most not-for-profit organisations will already have an ongoing relationship with government, which in some cases will also be supplying much of their operational funding. As such, we think it is appropriate for government to also fund the relocation of these organisations (should their property be designated for planned relocation). Overall, our view is that government should not be concerned about moral hazard and similar disincentives in these cases but should aim to help in the continued provision of these valuable community services. We also appreciate that the specific decision for each property and organisation can be done ad hoc, because a relatively small number of such non-profit-owned properties will be in every community that must relocate.

Recommendation 42

We recommend that where not-for-profit organisations own buildings that they use to provide their services to the public, they should be compensated to the full rateable value of the building.

Buildings of iwi, hapū and Māori communities

- 5.163. As discussed in chapter 2, many iwi, hapū and Māori communities occupy locations that will be at risk of harm, near the coast, rivers or lakes, or areas likely to be affected by sea-level rise or flooding as a result of changing weather patterns. They will need considerable financial support to move from harm's way. Their relocation must be done in a way that respects their exercise of rangatiratanga.
- 5.164. The properties of iwi, hapū and Māori communities, such as marae (including the wharenuī, the wharekai and other buildings), housing or papakāinga and other physical structures should, in principle, be fully compensated for. However, in some instances, more desirable

options may exist, such as financial assistance to enable the relocation of culturally significant buildings and structures rather than their replacement, and to ensure the preservation of cultural infrastructure and significant historical sites.

- 5.165. What is required in terms of financial assistance for relocation of iwi, hapū and Māori communities will have to be resolved in case-by-case negotiations, which allow for historical practices of dispossession that have led to current ownership patterns. It may be that some statutory guidance could be given for such negotiations (eg, by identifying relevant principles to be considered), but the individual circumstances of the various communities will differ, perhaps significantly, so a tailored approach to funding is required. In this context, the important social function that marae can perform during emergencies should not be overlooked (by, for example, providing temporary accommodation and emergency meals).

Recommendation 43

We recommend a case-by-case negotiated approach for iwi, hapū and Māori-owned property, with a starting point of full compensation for lost value (as with not-for-profit organisations). The approach should take account of the historical practices of dispossession that have led to current ownership patterns and canvass different ways of enabling communities to maintain connections with culturally significant buildings and structures.

Land

- 5.166. Of the property types identified above, we consider that:

- the owners of owner-occupied homes should receive compensation for land in accordance with the scheme applying under the NHI Act
- the owners of tenanted properties that are principal places of residence for their tenants should also be compensated for loss of land, but on a less generous basis than applies to owner-occupied properties
- owners of commercial buildings may be entitled to modest compensation for land, but subject to the same limitations as apply to compensation for buildings, that is, the entitlement should be based on need and any payments received used to re-establish the commercial property in or near the new location
- 'not-for-profit' organisations should receive full compensation, either through land swaps, compensation or both
- iwi, hapū and Māori organisations should receive full compensation, through additional land being made available, financial compensation or both (although their connection to their existing land would be maintained).

We briefly comment on each category.

- 5.167. For owner-occupied homes, the compensation for land should relate only to the land covered under the NHI Act, that is, "the land under the home and outbuildings (eg, shed or garage)" in addition to "the land within eight metres of the home and outbuildings".³²²

³²² Generally, Toka Tū Ake EQC may also cover the land under or supporting the main accessway, bridges and culverts within the above areas, and some retaining walls that are necessary to support or protect the home, outbuildings or insured land. These, however, matter less for a planned relocation situation when the affected land is not being rebuilt on. See Toka Tū Ake EQC. *Land cover*. Retrieved 1 July 2023.

5.168. However, because the aim of any payment is to allow people to ‘move on’ and prevent undue hardship, any consideration of compensatory payments for land also needs to allow for the minimum plot size that can be permitted for residential development in the relevant territorial authority. Accordingly, the amount of land covered by these payments should be the larger of either the minimum plot size or the land fitting the definition used by Toka Tū Ake EQC.

5.169. The main rationale for not including land not directly ‘associated’ with the house is that payment for this land will not alleviate hardship and is more aligned with a goal of preserving wealth. This is particularly so where the value of land is high as a result of its location in a desirable suburb or its proximity to desirable amenities (such as a beach), or because it has access to sought-after views. We do not believe that wealth preservation justifies a public compensatory payment. In addition, given that, for higher-end residential properties, the main value lies in the land not the home on it, the fiscal implications of a more generous approach are likely substantial.

5.170. As to how that land should be valued, the most readily available record of land value is the RV in the valuation rolls maintained by councils. Several options are available.

- A pro-rata determination could be made of the value of the footprint of the house, based on the RV of the land parcel on which the house sits.
- The average RV of a minimum size plot of land in the same location (same territorial authority) could be used.
- The actual RV of a parcel could be used, but with a monetary cap.

An investigation of the likely implications of the different valuation methods for land is necessary to determine which approach will lead to better outcomes (in achieving the principles set out earlier in the chapter). We recommend the Government undertake this investigation.

5.171. For residential rental properties, we envisage a similar scheme for land as that applying to owner-occupied homes, but on a less generous basis. Any compensatory payment would be subject to the same reinvestment obligation as applies to compensatory payments for residential rental buildings.

5.172. Any compensation for land in relation to commercial properties should be based on need. It would be less generous than the scheme for owner-occupied properties and residential rental properties and would be subject to the same reinvestment obligation as applies to compensation for commercial buildings.

5.173. In relation to ‘not-for-profit’ organisations, we consider that a generous approach should be taken to compensation to land so they are able to relocate and continue their work.

5.174. Another possible strategy, instead of establishing a value for relocated land, is to arrange for land swaps. We believe that while community-wide land swaps are possible, they are probably plausible only in rare cases in which a small and spatially well-defined, tight-knit community is required to relocate, and most people within it prefer to preserve the community set-up. In areas such as Auckland, land swaps will probably not be possible, given the pressure on land. Moreover, it is likely people in some communities will not want to relocate as a community and will prefer to go their own way.

- 5.175. Turning to iwi, hapū and Māori communities, the issues arising out of the Crown's obligations under te Tiriti, with respect to land, are addressed in chapter 2. The issues are complex and nuanced, especially around Treaty land settlements. In terms of funding, this complexity justifies a case-by-case negotiated approach. As discussed in chapter 4, iwi, hapū and Māori communities would maintain their ownership and other connections with land that had to be relocated from. For these communities, the Crown will have to consider what is the best way of facilitating their access to alternative, safer land.
- 5.176. In summary, we believe that this approach to land aligns well with the goals of planned relocation to reduce material hardship by providing people with an alternative home. In addition, by paying compensation to the owners of commercial buildings who relocate, the programme seeks to encourage the development of viable communities in new locations. Because the aim of this programme is not to preserve wealth, we see no reason for the state to compensate for the loss of agricultural, horticultural or other land even if it has had commercial use.

Recommendation 44

We recommend that:

- owner-occupied homes should be compensated for loss of land on the same basis as they would be under the natural hazard legislation, or based on the minimum lot size in the relevant territorial authority, whichever is greater
- residential rental properties should receive compensation for land, but not on a more generous basis than applies to owner-occupied homes and probably on a less generous basis
- commercial properties should receive some compensation for land, but not on a more generous basis than applies to the first two categories
- not-for-profit organisations should be compensated for the value of the land associated with their building or offered a land swap
- iwi, hapū and Māori communities should be offered alternative land or funded to procure new land.

We recommend the Government undertake an investigation of the likely implications of the different valuation methods for land to determine which approach will lead to better outcomes.

What are the possible effects of the approach we have recommended?

- 5.177. It is important to consider the possible impact of our proposals, including on property markets, and to assess their incentives. Property markets are, of course, subject to various influences over time. Compensatory arrangements for planned relocations will be only one influence, and their precise impact is difficult to predict. As a result, we only provide high-level observations.
- 5.178. First, markets are likely to react differently depending on whether they view the policy approach to planned relocation (including its associated compensatory arrangements) as being reasonably stable and consistent over time or as volatile or applied inconsistently. This may be the case, for example, if policies are changed with new governments. A perceived risk of policy instability will add a further uncertainty that must be factored in by market participants. Such considerations underscore the need for any policy framework for planned relocation to have durable multi-party support.

- 5.179. Second, despite the point just made, it is likely that, if our proposals for compensating property owners are accepted, property values in areas known to be at risk of natural hazards would probably decline, especially at the top end of the market. This is because for all but one category of property types, our proposals involve less than full compensation across the board, with the extent of the shortfall between value and compensation varying from property type to property type. When these declines will occur is difficult to predict, but over time they may occur before planned relocation decisions are made and perhaps at an early stage in the planning process.
- 5.180. Third, the effect of our proposals will be more marked for some property types than others.
- 5.180.1. We recommend no compensatory payments for baches and other second homes. Accordingly, their value is likely to drop to a greater extent than owner-occupied homes. This may, as we note above, result in attempts to game the system. Equally, however, some baches or second homes may become genuine principal places of residence, which may serve to mute the fall in property values to some extent.
- 5.180.2. The absence of compensatory payments for baches may incentivise people who want to build new baches in coastal or riverine areas to build relocatable homes, so they can be moved in the event of a planned relocation.
- 5.180.3. Owner-occupied homes whose RV is above the cap are likely suffer a decline in value, especially if they are in at-risk localities. If such homes are on large residential sections, the limited compensation available for land may add to that reduction in value.
- 5.181. Fourth, we have recommended compensatory payments to residential property owners whose properties are principal places of residence for their tenants, with a requirement that the payments be invested in a rental property or an investment vehicle that provides long-term rental accommodation. Because these payments would be less than full compensation, the result may be some upward pressure on rents.
- 5.182. Finally, to the extent that our proposals focus on principal places of residence, for both homeowners and tenants, and on the need to provide facilities for businesses in new locations following relocations, they offer the opportunity to 'build back better'. We see this as being particularly significant for iwi, hapū and Māori communities. The approach we have recommended for their land and buildings should, if implemented properly, enhance the well-being of those communities by providing better housing and infrastructure while preserving connections with culturally important land, sites, buildings and other structures.
- 5.183. Table 8 summarises our proposals for different property types.

Table 7: Payments for types of properties

Types of properties	Land	Structure	Comments
Principal place of residence (owner-occupied home) (option A)	Payment for RV of land under house or minimum local plot size (whichever is larger).	Payment for RV of dwelling. Capped at the 80th or 90th percentile of the regional value of dwellings.	The RV may or may not accurately reflect market value at any point in time, but it is the best, readily available estimate and has been used in the past.

Types of properties	Land	Structure	Comments
Principal place of residence (owner-occupied home) (option B)	Payment for minimum local plot size for a house of the size to be built.	Payment for cost of rebuilding dwelling calculated as square metres (sqm) of dwelling times cost of construction per sqm (taking a national per sqm construction figure). Capped at 180 sqm per house (or some other figure).	Payment will not reflect condition of house, simply its size (up to the cap).
Commercial property	Some payment for land, but less than for owner-occupied homes and residential rental properties.	Fifty per cent of building value (or some other figure).	Means tested and subject to conditions as to use of funds. Could be provided as direct grants or loans (with conditional repayment).
Second home	No payment	No payment	Government could contribute to removal, demolition and/or clean-up costs.
Residential rental property	Payment on more generous basis than for commercial property, but not more generous than for principal place of residence	Payment on more generous basis than for commercial property, but not more generous than for principal place of residence	Like commercial property, should be conditional on the use of the funds for residential rentals.
Not-for-profit property	Ad hoc but generous funding	Ad hoc but generous funding	These payments would be ad hoc, taking need into account.
Iwi, hapū and Māori properties	Case by case negotiation	Ad hoc but generous funding	Ownership to remain with iwi, hapu and Māori. Financial assistance for relocation (or relocation of culturally significant buildings and structures) may be more appropriate in some cases.

Social assistance beyond payments tied to property

Assistance to individuals and households

5.184. Some people affected by a planned relocation programme will likely require additional assistance beyond the outright payment for their property (eg, for removal expenses or temporary accommodation). If they are renters, this will be the only assistance they can access. Because the main motivation of any provision of public financing is to reduce hardship, a significant need will be to provide this additional support. Therefore, the funding set-up needs to include a mechanism to decide who is eligible for additional support, what they are eligible for, and how this additional support interacts with (or contradicts) other social assistance available to them, or to others more generally.

- 5.185. Two general principles should guide these decisions: the alleviation of hardship caused directly by the planned relocation decision, and the alignment of any assistance with other assistance that the general population can access during periods of hardship (eg, temporary accommodation assistance). This assistance should be needs- and cost-based (based on costs actually incurred). We therefore do not anticipate that this stream of assistance will form a large part of the cost of a planned relocation programme, but it will be essential to maintain, and strengthen, public support for the programme as it is being implemented.
- 5.186. Government already has many programmes that aim to help those in need. We believe these should be strengthened, generally, and more specifically aim to ameliorate any hardship that is directly connected to planned relocation. The exact design of these programmes, including criteria for eligibility and the levels of compensation, are outside the scope of our mandate and expertise.
- 5.187. Groups that will especially need additional support are renters and others who live in houses they do not own (eg, in iwi, hapū or collectively owned Māori property), because they will have no access to the property payments described above.

Recommendation 45

We recommend the funding set-up include a mechanism to decide who is eligible for additional support; what they are eligible for; and how this additional support interacts with (or contradicts) other social assistance available to them, or to other people more generally. This assistance should be needs-based and cost-based (based on costs actually incurred).

Assistance to businesses

- 5.188. Businesses may also need additional support to move their operations. In many cases, affected businesses will be operating out of rented facilities, and will thus not be eligible for the payments described earlier. However, they may still require assistance to prevent hardship to their employees and the community they serve. In these cases, as well, this may be the only stream of funding they are able to access. We propose that notional amounts be offered to all businesses that require relocation, and larger amounts of support can be made on an ad hoc basis and based on applications to receive such funding.
- 5.189. The aim of this assistance is to provide a 'business-interruption' compensation for lost income that is temporary and associated with the actual period of the move itself (eg, like compensation that is sometimes offered to retail businesses affected by public construction projects, such as the City Rail project in Auckland).
- 5.190. Any additional funding can be delivered through subsidised loans and grants and be made conditional on the setting up of the business in a new location with conditionality around the continued service provision to the affected community.

Recommendation 46

We recommend some notional amount should be offered to all businesses that require relocation, and larger amounts of support can be made on an ad hoc basis and based on applications to receive such funding.

How to pay for planned relocation

Two issues

5.191. Two issues must be considered when thinking about how planned relocation should be funded. The first concerns the mechanism by which the funds will be raised, either from a targeted levy or general tax revenue. The second concerns how any funds raised for managed relocation will be managed, either through a dedicated fund or from tax revenue as required.

5.191.1. If funds are raised from some form of special levy, they could go into general tax revenue or a dedicated fund that would be managed and used when necessary. The latter occurs with the Natural Disaster Fund, which is managed by Toka Tū Ake EQC, subject to direction by the responsible Minister and with a Crown obligation to meet any shortfall.

5.191.2. If funds are raised through general taxation, periodic deposits could be made into a dedicated fund (as occurs with national superannuation, the so-called 'Cullen fund') to be managed and used as required. Alternatively, there could be no dedicated fund and government could rely on its available revenues (and any necessary supplementary borrowing) whenever it needs funds for planned relocation.

5.192. Among the matters that need to be considered are financial efficiency, intergenerational fairness, the desirability of using progressive (rather than regressive) fundraising mechanisms, and community and political perspectives.

General revenue versus targeted fiscal instruments

5.193. Multiple ways can be used for securing the revenue necessary for funding a planned relocation scheme. Each implies a different source of funding (a 'funder'), which might be present and/or future taxpayers generally, ratepayers generally, homeowners generally or in certain locations, users of certain services, or specific groups subject to specific levies.

5.194. Potential sources of funding could include:

- general existing taxation: tax on individuals, GST and on corporates (current taxpayers)
- new taxes (eg, capital gains tax, land tax, wealth tax)
- an additional levy on residential insurance policies or on homeowners directly through the collection of rates
- an additional levy on fossil fuels
- an additional levy on property or other transactions
- funding from the Climate Emergency Response Fund, which is funded from revenue obtained from the Emissions Trading Scheme.

5.195. We have different views about how central government obligations for planned relocation should be funded. The two possibilities are to rely on general tax revenues from time to time, or to create a special fund for planned relocation (or, perhaps, for adaptation more generally), funded by a levy, by contributions from time to time from general tax revenue or by both.

Whichever option is chosen, supplementary government borrowing will likely be required in some future circumstances.

- 5.196. Before we set out the principal arguments on either side, we should emphasise one point. Whatever funding technique is adopted, it should avoid making funding for planned relocation subject to the type of competition for funding that characterises annual budget rounds. Such a process may well result in the deferment of planned relocation projects, sometimes with dangerous consequences. Apart from that, delay may result in increased uncertainty, anxiety and discomfort for those affected and may mean that opportunities that could have been taken earlier have been foreclosed by the passage of time.

Arguments in favour of using general taxation

- 5.197. Five main arguments exist for using general tax revenue to fund planned relocation.
- 5.198. The first involves a hardship and equity lens. Most of the proposed fundraising mechanisms are regressive, whereby the burden of the tax falls disproportionately on lower income groups (eg, an increase in the fossil fuel levy). By contrast, existing general taxation through income tax is largely progressive, at least more progressive than most other revenue instruments. At the least, we believe the funding should not come from a regressive source (ie, a source that will exacerbate income or wealth inequality).
- 5.199. The second argument focuses on who benefits from a planned relocation programme. Some argue that the main beneficiaries are the people of Aotearoa New Zealand, because the programme aims, at least partially, to minimise the country's long-term fiscal liabilities. In this view, a reliance on a narrow base of funders (eg, property owners in hazardous locations or the residents of an affected region) would be unwarranted.
- 5.200. On the other hand, the beneficiaries can be seen as those eligible for compensation if they must participate in planned relocations (in particular, owners of owner-occupied homes, residential properties that are principal places of residence for tenants, and commercial premises). Arguably, they should make a greater contribution to the costs of the scheme than, for example, renters. Renters will derive some benefit from the scheme, in the sense that it seeks to encourage the building of replacement rental accommodation, but to a much lesser extent than the groups just mentioned.
- 5.201. The third argument supporting taxation as the main source of funding is efficiency. Any new tax mechanism will involve set-up and administration costs. Income tax is one of the cheapest taxes to collect (per dollar).
- 5.202. Fourth, arguably, any targeted tax directed to a fund whose purpose is to pay for planned relocation (eg, a climate change adaptation fund), will risk either being under- or over-funded. As a result, decisions about whether to relocate will not be taken based on long-term fiscal considerations but rather on short-term liquidity constraints (ie, does the fund have available resources at that point in time). Given the unknown cost of future planned relocation, and the even more uncertain timeline of the required spending, this risk may be especially acute for this type of programme. With a distribution of costs over time that is largely unknown and possibly unknowable, the only way to ensure optimal implementation of planned relocation is

to accumulate a significant surplus in the Climate Change Adaptation Fund. This is inefficient and costly.

- 5.203. Lastly, this programme could be treated like any other spending mechanism for entitlement or mandatory spending programmes. The number of properties relocated every year, the amount of payments their owners receive, and the funding for investment provided by local and central government should all be disconnected from any constraints on the amount of money available (in the same way that social assistance funding is determined, for instance). The easiest way to do that is to fund this programme in the same way as other support funding streams.

Arguments in favour of a dedicated fund

- 5.204. The following considerations support the use of a dedicated fund.
- 5.205. If a levy is used for planned relocations (and other adaptation measures), it seems likely that there will be a strong political imperative to have a dedicated fund to maintain social licence and transparency. If the levy simply goes into general tax revenue, it will likely be regarded as just another tax. Potentially, there will be more public acceptance of a levy if it goes into a fund dedicated to the objective that justified the imposition of the levy in the first place.
- 5.206. Second, for intergenerational fairness (based on the polluter-pays principle and notions of compensatory justice), present generations should be making a significant contribution to the costs of dealing with the effects of climate change now and in the future, particularly because they have contributed significantly to its causes. Simply relying on general tax revenue to fund planned relocations will place the financial burden on taxpayers at the time of the planned relocations. Relatively few relocations have been planned in Aotearoa New Zealand to date, but over time, many more will be required. Particularly due to sea-level rise, some future impacts are now 'locked in' although they may not become sufficiently significant to require planned relocations in some localities for several decades. It seems fair then that the funding mechanism should require current generations to contribute to these future costs. A dedicated fund will facilitate this, whether funded through a levy, periodic contributions from general tax revenue or both.
- 5.207. Third, given that planned relocations should take place before any significant harm occurs, a possible risk of relying on tax revenue from time to time for funding is that planned relocations that should be instigated immediately may be delayed for fiscal reasons. Equally, where a dedicated fund exists but it is built up entirely from contributions from tax revenue, the risk is that the Government will stop the contributions to the fund for a period for fiscal reasons. A levy going into a dedicated fund would limit the opportunities for this type of problem.
- 5.208. We note that, in its final report, the Future for Local Government Review Panel recommended that an intergenerational climate change fund be established for climate change adaptation:³²³

The Panel recommends establishing a fund for climate change adaptation efforts across the country (Rec 15). This fund, combined with the resources of local government, insurers, and

³²³ Future for Local Government Review Panel. 2023. *The Future for Local Government*. Wellington: Future for Local Government Review Panel. Future for Local Government Review Panel. 2023. *He piki tūranga, he piki kōtuku: The future for local government*. Wellington: Future for Local Government Review Panel. p 59.

private property owners, will need to bear the brunt of climate adaptation costs. The Productivity Commission has also recommended a fund, and this is consistent with other calls for change...

- 5.209. A fund like this would cover many adaptation strategies in addition to planned relocations. It would have similarities to the Natural Disaster Fund managed by Toka Tū Ake EQC. The capacity of this fund to meet the costs of earthquakes is built up through levies and investment income.
- 5.210. Of course, earthquakes are different from the effects of climate change, primarily in their frequency. The probability of a significant earthquake occurring in a particular locality in a given year remains relatively constant, even after an earthquake has occurred. In contrast, with no sea-level rise, the probability of a flood in a particular coastal area may be one in a 100 years; but with rising sea levels, those probabilities may increase dramatically, to the point that flooding is likely to be an annual occurrence.³²⁴ As a consequence, there are likely to be many more demands on a climate adaptation fund in the future than on the Natural Disaster Fund (although some withdrawals from the Natural Disaster Fund could be huge).
- 5.211. The object of a dedicated fund would not be to accumulate sufficient funds to meet all foreseeable demands of planned relocation or other forms of adaptation. Rather, the goal would be to accumulate funds steadily over time to smooth the shocks to the system because of recurring but irregular requirements for funding. If the fund is viewed as a smoothing device rather than a mechanism for accumulating all necessary funding for planned relocations, the point in paragraph 5.198 is less relevant.
- 5.212. Finally, the choice of funding mechanism will have a political component; financial efficiency considerations will be relevant but probably not determinative. This seems to have been the case with the Natural Disaster Fund. In its discussion document of July 2015, *New Zealand's Future Natural Disaster Insurance Scheme*, the Treasury noted two efficiency concerns in the Natural Disaster Fund. One was that finance theory suggests the most efficient approach to financing would be to close the Fund and finance natural disaster risk centrally through Treasury. Despite this concern, the Government decided the Fund should remain. The benefits of keeping it, in terms of the community's understanding and acceptance of EQC as a premium-funded insurance scheme, outweigh any efficiency gains.
- 5.213. This is not a direct analogy with a fund for planned relocation and climate adaptation generally, but it illustrates that public and industry perceptions and understandings are an important consideration. A critical issue in the context of climate change is intergenerational fairness. It is hard to see how this can be adequately addressed without the establishment of some form of dedicated fund.

³²⁴ See, for example, Parliamentary Commissioner for the Environment. 2015. *Preparing New Zealand for Rising Seas: Certainty and Uncertainty*. Wellington: Parliamentary Commissioner for the Environment, at p 29 for a table indicating the increasing probabilities of coastal flooding with different levels of sea-level rise in Auckland, Wellington, Christchurch and Dunedin.



Chapter 6

Institutional framework for
planned relocation

6. Institutional framework for planned relocation

Introduction

- 6.1. Adapting to the impacts of climate change and undertaking planned relocation will pose unprecedented governance challenges that will require a significant expansion of government's functions, powers and capabilities (see Table 9). This chapter explores how Aotearoa New Zealand might strengthen and reconfigure its public institutions to enable planned relocation, both on a proactive (ie, precautionary) basis and following damaging events.
- 6.2. It matters how public institutions are governed, structured, regulated and resourced.³²⁵ Institutional design affects organisational incentives, cultures, capacities and accountabilities. It also influences how organisations interact, collaborate and coordinate their activities, including their relationships with external stakeholders. These factors in turn influence organisational and system performance, as well as public trust and confidence in governmental decisions.
- 6.3. This chapter focuses mostly on central government institutions, particularly ministries (also referred to as departments or agencies) and Crown entities.³²⁶ While the institutions of local government (regional councils, territorial authorities and unitary councils) are 'on the front line' of climate adaptation, this report was commissioned by central government primarily to inform its development of a national planned relocation system.
- 6.4. Our focus on central government institutions also reflects the highly centralised nature of polity in Aotearoa New Zealand. For instance, around 90 per cent of public expenditure occurs at the central government level. This centralisation reflects the absence of an entrenched and justiciable constitution with a clear allocation of governmental functions between the different tiers of government, the lack of social movements based on politically salient regional differences, the limited funding and financing powers of sub-national government, and a long-standing reluctance by central government to devolve important public functions to local authorities.
- 6.5. The coming decades will likely witness stronger pressures towards centralisation. The destabilising impacts of climate change – and the adaptive responses and funding requirements they will necessitate – are likely to increase, rather than diminish, the overall role of central government. Planned relocation will impose significant coordination challenges across the three tiers of government and within each level of government. Accordingly, this chapter considers the options for improving both types of coordination.

³²⁵ Peters B. 2019. *Institutional Theory in Political Science: The New Institutionalism*. Cheltenham: Edward Elgar.

³²⁶ For details of the nature and roles of current public sector institutions, see Te Kawa Maaaho Public Service Commission. *Te hanga o te rangai tūmatanui: How the public sector is organised*. Retrieved 1 July 2023.

- 6.6. Chapter 1 notes that Aotearoa New Zealand faces a range of serious natural hazards other than climate change and recommends an all-hazard or hazard-neutral policy approach. This has important implications for the design of public institutions.
- 6.7. This chapter does not explore the role of informal institutions, such as policy networks, or societal norms and practices. Nor does it examine the role social capital is likely to play as an 'enabling asset' in effective responses to climate change. It should be recognised, however, that informal institutions have a major impact on how formal institutions operate. Therefore, any analysis that focuses exclusively on formal structures is necessarily incomplete.
- 6.8. Previous chapters recommend reforms to governance, planning, funding and regulation with an emphasis on regional spatial planning and regional risk assessments, along with new regulatory tools, such as local adaptation plans (LAPs) and relocation programmes. Implementing such reforms will likely have major implications for the design of some public institutions in Aotearoa New Zealand. We acknowledge that no ideal or perfect institutional arrangements exist, whether for planned relocation or any other complex governmental activity. Equally, it will almost certainly be necessary to adapt public institutions in Aotearoa New Zealand over time to reflect changing political priorities and societal needs, along with unexpected local or international shocks.
- 6.9. In this chapter, we outline the kinds of institutional reforms required to enable our proposed planned relocation system to be implemented efficiently, effectively and equitably. This includes changes to existing central government agencies and the creation of several new entities. Policy-makers may, of course, choose to adopt different planning, regulatory and funding arrangements. To the extent that 'form should follow function' (ie, the design of public institutions should reflect their intended functions), a different institutional arrangement may be necessary.
- 6.10. It will be important for policy-makers to make decisions about the essential features of the policy framework for planned relocation *before* undertaking significant institutional reforms. There would be merit in the Government adopting a two-step process: 1) in the short term (eg, one to three years), institutional changes should be limited primarily to those likely to be desirable irrespective of the long-term policy framework for planned relocation; and 2) the design of the long-term institutional arrangements should reflect the eventual legislative framework for the governance, planning, funding, implementation and oversight of planned relocation.

Structure of the chapter

- 6.11. The following analysis is divided into five sections that discuss:
- relevant contextual issues and policy challenges
 - principles and other considerations that ought to inform institutional arrangements
 - the range of governmental functions that planned relocation and related activities, such as coastal realignment, will likely entail³²⁷

³²⁷ Allan S, Bell R, Forkink A. 2023. Coastal Realignment: Another Coastal Challenge. *Policy Quarterly* 19(1): 50–57.

- the options for implementation of planned relocation, with respect to their institutional requirements and implications, including possible configurations with respect to governance, planning, funding, implementation and oversight of planned relocation
- concluding reflections on the need for periodic reviews of the institutional arrangements for planned relocation.

Planned relocation: Significant contextual issues and related challenges

- 6.12. As discussed in chapter 1, the impacts of climate change, especially sea-level rise, will likely require the relocation of many people in Aotearoa New Zealand over the coming century and beyond. This will affect numerous communities, with major implications for residential and commercial properties, as well as the properties of many public bodies and non-governmental entities. A significant amount of public infrastructure will also be affected.
- 6.13. Policy-makers in Aotearoa New Zealand will likely confront the following challenges:
- the need to conduct planned relocation over multiple generations and, likely, over several centuries
 - a high probability that the scope, scale, frequency and complexity of the required relocations will increase significantly as the 21st century advances, with the possibility of even greater population relocations in subsequent centuries
 - an increasing need to conduct planned relocation in multiple locations simultaneously
 - the need to conduct planned relocation in radically different geographic, socioeconomic and cultural contexts, as well as over markedly varied timeframes
 - the need to conduct planned relocation in the context of other natural disasters (eg, seismic events and tsunamis) and disruptive socioeconomic events (eg, financial crises and pandemics)
 - ongoing uncertainty with respect to the timing and impact of major hydrological and meteorological events, which in some cases will have a significant impact on the extent and timing of specific relocations.
- 6.14. Collectively, these challenges are unprecedented. Moreover, climate change is a risk multiplier and amplifier.³²⁸ It will generate various cascading, compounding and systemic risks (eg, to financial systems, energy systems and supply chains). The implications for governance and public sector management will be significant. Six matters relevant to the machinery of government deserve highlighting.

³²⁸ Lawrence J, Mackey B, et al. 2022. Australasia. In: IPCC, *Climate Change 2022: Impacts, Adaptation and Vulnerability*. Cambridge: Cambridge University Press; Lawrence J, Wreford A, Allan S. 2022. Adapting to Avoidable and Unavoidable Climate Change: What must Aotearoa New Zealand Do? *Policy Quarterly* 18(2): 51–60.

- 6.15. First, policy-makers will need to deal with significant, interconnected and multi-dimensional problems. Hazards are intensifying and some are uncertain, but some are happening now, and we can expect compounding and cascading impacts that accelerate and worsen. Complex, and at times chaotic, situations call for rapid experimentation, novel practice and agile institutions, as highlighted by the so-called *Cynefin framework*.³²⁹ This will include the need for rapid scaling up and down of organisational capabilities and, in some cases, rapid shifts in their operational locations.
- 6.16. Second, climate change will require lasting solutions. Institutionally, this implies the need for permanent, dedicated and highly capable government entities, ideally established and guided by statute. Temporary or ad hoc arrangements, such as those established in response to the Canterbury earthquakes and Cyclone Gabrielle, will not be sufficient.³³⁰ Temporary arrangements may be needed occasionally, but only to supplement the capacities of otherwise stable public institutions.
- 6.17. Third, planned relocation, especially if proactive, will require careful planning, risk management and anticipatory governance.³³¹ Such decision-making is hard conceptually, analytically, ethically and politically. It will require ongoing investment in foresight and policy analysis, and thus adequate funding for the institutions providing these services.
- 6.18. Fourth, planned relocation will be challenging for elected officials at all levels of government. Decision-makers will be under pressure from communities facing significant climate-related (or other) hazards to minimise the extent, and/or delay the timing, of any relocations. Accordingly, the risk is that short-term political considerations will override the long-term public interest. This may result in responses that are expedient in the short term but do not provide long-term solutions (eg, the building of protective barriers and ongoing consenting of housing in flood-prone areas and along the coast). Such considerations raise the question of how public institutions might be designed to help mitigate such risks.
- 6.19. Fifth, to be conducted effectively, efficiently and equitably, planned relocation will require extensive coordination within and across each tier of government and across the public, private and voluntary sectors. Equally, enduring partnerships with iwi, hapū and Māori communities will be vital. Effective coordination and partnering depend on institutional arrangements that can build and maintain the required level of trust. At the same time, multi-level governance of planned relocation, as discussed in chapter 3, will need a clear allocation of responsibilities and robust accountabilities.

³²⁹ See, for instance, Wikipedia. *Cynefin framework*. Retrieved 3 August 2023.

³³⁰ For example, the establishment of the Canterbury Earthquake Recovery Authority (CERA) in early 2011. CERA's mission was to lead and coordinate the city's recovery process. It was intended to exist only for a few years. CERA enjoyed substantial statutory powers along with a large budget, enabling it to direct the recovery operations and undertake significant planning and implementation functions. These included developing a recovery strategy for the city, overseeing the demolition of buildings in the central business district, and providing advice on the future of severely damaged residential communities. Administratively, CERA took the form of a government department during its first four years. In 2015, it became a departmental agency of the Department of the Prime Minister and Cabinet. It was abolished a year later, in April 2016.

³³¹ Ministry for the Environment. 2022. *Draft National Adaptation Plan*. Wellington: Ministry for the Environment, p 79.

- 6.20. Finally, to undertake planned relocation competently and humanely, and to ensure ongoing policy lessons contribute to continuous improvement, a reflective learning culture will be needed. This, in turn, will require robust monitoring and reporting, effective feedback mechanisms, and timely information-sharing across the wider policy-making system. The relocation experiences can then inform policy making over time and ensure better long-term outcomes. But this will require adequate investment in research and evaluation and a willingness to innovate and experiment, including an awareness that this may sometimes increase the risk of unsatisfactory outcomes.

Principles and considerations for institutional design

- 6.21. The following section outlines principles for institutional design and other considerations relevant to climate change adaptation, including planned relocation. Some principles relate to system-wide matters, while others are concerned with the design of specific institutions.

System-wide principles and considerations

- 6.22. Principles and considerations for the whole system include the following.
- 6.22.1. **Consistency with important constitutional provisions, conventions and principles**, including the provisions of te Tiriti: For example, certain regulatory and enforcement matters should be determined by entities independent of ministers and other elected officials. Iwi, hapū and Māori communities should be consulted in good faith on all matters affecting their rights and interests. Co-governance and co-management should ensure that Māori have a reasonable claim, based on te Tiriti, for this level of political or administrative responsibility.
 - 6.22.2. **Coherence**: Regardless of the specific functions of individual institutions, the whole system must be integrated.
 - 6.22.3. **Robust coordination**: The system must enable efficient and effective inter-agency and intergovernmental coordination, as well as coordination with key external stakeholders, including iwi, hapū and Māori communities.
 - 6.22.4. **Well-aligned incentives**: The system should be designed in ways that incentivise desirable behaviours at all levels, identify and anticipate problems, encourage learning, and enable proactive adjustments.
 - 6.22.5. **Resilience**: The system must be resilient in the face of multiple challenges and be able to respond and adapt.
 - 6.22.6. **High-quality advice**: The system must be able to deliver high-quality, integrated, forward-looking, contestable advice to those responsible for making decisions.

- 6.22.7. **Robust system oversight and system-wide learning:** Oversight of all advisory, planning and delivery mechanisms relating to planned relocation must be robust. Effective compliance monitoring and enforcement, and periodic evaluations of the performance of the overall system for planned relocation, will also be required.
- 6.22.8. **Regulatory stewardship:** The regulatory activities of government departments and agencies regarding planned relocation must be properly resourced, monitored and reviewed.
- 6.22.9. **Cultural responsiveness:** The system must take account of distinctive and important cultural norms, perspectives and values (eg, te ao Māori and mātauranga Māori).
- 6.22.10. **Citizen engagement:** The system should facilitate active citizen and/or stakeholder engagement, democratic participation and empowerment.

Principles relevant for the design of specific institutions

- 6.23. The relevant design principles include the following.
 - 6.23.1. **Form should follow function:** Institutions should be designed according to the requirements of their specified purpose and functions. Depending on these functions, there will be implications for governance arrangements; the competencies required; the size of the organisation, and its internal structures, systems and processes.
 - 6.23.2. **Clarity of purpose:** The specific roles and responsibilities of each organisation should be clear and transparent.
 - 6.23.3. **Avoiding policy or regulatory 'capture':** Conflicts of interest should be minimised and efforts made to avoid various kinds of 'capture'.
 - 6.23.4. **Robust accountability:** All organisations should have clear and robust systems of accountability, including regular monitoring, reporting and auditing of performance.
 - 6.23.5. **Adaptive capacity:** Institutions should be able to adapt to changing circumstances. Adaptive capacity is likely to require a measure of 'redundancy' (which implies some productive inefficiency in the interests of greater dynamic efficiency).
 - 6.23.6. **Learning organisations:** Institutions should have excellent feedback mechanisms and the capacity for reflective learning.

High-level design issues

- 6.24. The institutional architecture for planned relocation will need to reflect the nature of the overall policy framework that is adopted, especially with respect to governance, planning, funding, implementation and oversight. The high-level design issues include:
- the degree of **centralisation or decentralisation** of the main decision-rights
 - the extent to which decision-making is democratic or technocratic
 - the **role of iwi, hapū and Māori communities** in the process of decision-making and implementation
 - the extent to which the normal statutory **planning system** for relocation is used or bespoke arrangements adopted
 - whether **delivery and implementation** should be through existing or new institutional arrangements, or a combination of existing and new
 - the extent of public **funding and financing** for planned relocation and whether it is provided through existing or new funding instruments
 - the degree of political and administrative discretion, particularly for allocating funding
 - **institutional preferences** for combining or separating policy advice and delivery and/or operations functions, and combining or separating related functions (eg, cross-portfolio or narrowly focused institutions)
 - the extent of **political accountability or independence**
 - the extent to which institutional arrangements should be **designed to evolve and adapt** over time.
- 6.25. Several of these institutional choices, especially regarding public sector organisations, deserve clarification. The first concerns the relative merits of organisations directly accountable to a minister (ie, ministerial departments and departmental agencies) versus those with a greater degree of political independence (eg, various kinds of Crown entities). Both institutional forms have strengths and weaknesses, and both have an important role in any well-designed administrative system.
- 6.26. Ministerial departments (and departmental agencies) have the advantage of being flexible and responsive to changing ministerial priorities. Generally, they exhibit a high level of political accountability. On the other hand, ministerial departments typically have less political independence than non-ministerial entities (except on matters where chief executives have statutory responsibilities to act independently). Further, adaptability is a two-edge sword: it can enhance responsiveness to evolving political imperatives but also make it harder to ensure all the responsibilities of the ministry are properly funded and undertaken (eg, because of political pressure for resources to be reallocated to priority areas).
- 6.27. Establishing Crown entities with statutory functions and dedicated funding can help ensure that certain potentially vulnerable or controversial activities are undertaken, regardless of evolving ministerial priorities. But it is important to determine what level of independence from ministerial influence is desired (eg, whether the Crown entity will ‘give effect to government policy’ or simply ‘have regard to government policy’).

6.28. A second issue is what governmental functions should be linked together organisationally and what should be separated into discrete organisations. At a high level, the main issue is whether to favour cross-portfolio (or 'single-roof') organisations or single-purpose organisations. However, the matter is complicated, because of at least three separate design questions about:

- the relative merits of linking both advisory and operational responsibilities (eg, funding, purchasing and service delivery) within the same organisation or, alternatively, separating policy from operations
- the relative merits of cross-portfolio or multi-domain policy ministries and single-domain policy ministries
- the relative merits of multi-purpose operational entities and single-purpose entities.

6.29. The arguments for and against these options have been well canvassed in the academic literature. Each approach has strengths and weaknesses. Single-purpose organisations, for instance, enable a sharper focus on specific activities and a more unified organisational culture. On the other hand, a heavy emphasis on single-purpose entities can make coordination more difficult, exacerbate a 'silo mentality', reduce information flows and feedback across the system, limit the opportunities for economies of scope and scale, and generate unnecessary functional duplication. But large cross-portfolio organisations also have drawbacks, including greater inertia and internal conflicts of interest.

6.30. Another issue concerns the concentration of administrative power within a single public sector organisation. It might be argued, drawing on the experience of the former Ministry of Works and Development or the recovery process following the earthquakes in Canterbury, that planned relocation (on any scale) requires a multi-purpose, single-roof departmental entity. Such an entity could be mandated to provide advice to ministers on the full range of policy issues and to oversee and (where necessary) undertake all the required operational responsibilities (eg, planning, funding and land remediation). A single 'one-stop', all-purpose organisation has several potential advantages.

- There would be clear institutional responsibility for planned relocation in a single place. Potentially, this would provide greater accountability, reduce complexity and lower transaction costs.
- The Minister responsible for planned relocation is likely to have greater hierarchical control over operational matters.

In short, such arrangements make it easier to get things done.

6.31. On the other hand, placing a wide range of responsibilities within a single ministerial department or agency may result in specific functions being downgraded while others are prioritised. Having many significant functions also gives that organisation, and those who lead it, considerable influence. By contrast, a more disaggregated approach to institutional design necessarily spreads such power across multiple organisations. For those concerned that planned relocation and the wider impacts of climate change could contribute to a more frequent exercise of state coercion, a more disaggregated institutional approach has obvious attractions. That said, disaggregation can also exacerbate coordination issues and bureaucratic conflict, and may increase 'implementation deficits' (the gap between the goals of the policy and what happens in practice).

- 6.32. Regardless of how the machinery of government is ordered at the central government level, the experience both locally and internationally is that successful adaptation, including the relocation of vulnerable communities, requires the relevant community and institutions of local government to have close involvement in decision-making processes (see chapter 3). Hence, institutional arrangements at the local level also need careful consideration, including those that bring the full range of interests (eg, businesses; unions; civil society organisations; and iwi, hapū and Māori communities) together.
- 6.33. Another issue for consideration is the relationship between institutional arrangements for climate change adaptation and the arrangements for emergency management and disaster recovery. Across the Organisation for Economic Co-operation and Development, no single model or common approach is used. The differences reflect widely varying constitutional arrangements (eg, unitary versus federal states), diverse legal and cultural traditions, differences in the prevalent types of natural disasters, and contrasting preferences over institutional design.
- 6.34. In the United States of America, for instance, the Federal Emergency Management Agency undertakes a full suite of functions, including reduction, readiness, response and recovery.³³² Its mission is to help people 'before, during and after disasters'. Over the years, its focus has gradually evolved, with a greater focus recently on adaptation, including proactive risk mitigation measures, such as planned relocation. To facilitate this goal, new programmes, such as Building Resilient Infrastructure and Communities, have been developed.³³³
- 6.35. In other jurisdictions, such as Australia, responsibilities for adaptation, emergency management and disaster recovery are shared across the different levels of government and various organisations at the state level. At the same time, the reconstruction agencies that have been created in several states following major disasters (eg, the Queensland Reconstruction Authority) have a strong emphasis on risk reduction, investment in resilience and adaptive responses.³³⁴
- 6.36. For Aotearoa New Zealand, the combination of periodic damaging seismic events and more severe weather events will require a greater focus on reconstruction in the future, alongside increased investment in emergency management and planned relocation. This raises the question of how best to group the required governmental functions organisationally. In the long term, for instance, a case may exist for a permanent public institution focused on recovery and reconstruction.³³⁵

³³² See Federal Emergency Management Agency. *About Us*. Retrieved 1 July 2023.

³³³ Federal Emergency Management Agency. *Building Resilient Infrastructure and Communities*. Retrieved 1 July 2023.

³³⁴ See, for instance, Queensland Reconstruction Authority. *About us*. Retrieved 1 July 2023.

³³⁵ See, for instance, the findings of the Department of the Prime Minister and Cabinet. 2017. *Whole of Government Report: Lessons from the Canterbury earthquake sequence*. Greater Christchurch Group; Department of Prime Minister and Cabinet. See, especially, section 5 'Governance arrangements'.

Planned relocation: Required governmental functions

6.37. As indicated earlier, the institutional architecture for planned relocation will depend on:

- the nature of the governmental functions required for such activities to be pursued effectively and efficiently
- where these functions are located across the three tiers of government.

6.38. Table 9 outlines the kinds of functions that planned relocation will likely entail. Government is responsible for many of these to some extent already. Relatively few functions are new or unique to planned relocation. However, many are not undertaken currently to the degree, or in the manner, that planned relocation will likely require. Specific new functions may include preparing new planning instruments (eg, LAPs and relocation plans) and new funding instruments. Using policy to incentivise proactive relocation will be particularly challenging.

Table 8: Likely or required governmental functions for planned relocation

Stage	Groupings	Elements
1	Research, data and evidence	Research and data collection <ul style="list-style-type: none"> • Funding research on climate change adaptation and planned relocation • Funding research infrastructure, including developing and maintaining databases • Funding additional data collection, analysis and reporting • Funding research on new policy tools and instruments
2	Coordination: intergovernmental and within central government	Coordination <ul style="list-style-type: none"> • Advice on coordination among central government agencies on decision-making and implementation • Coordination among central government, local and regional governments and non-governmental entities
3	Policy advice to decision-makers at the various levels of government	Advice <ul style="list-style-type: none"> • Long-term strategic advice • Periodic foresight exercises • Advice on the policy and legislative framework for planned relocation, including planning, funding, implementation and oversight • Advice on institutional arrangements, including for the provision of independent expert scientific and technical advice
4	Capability building	Capability <ul style="list-style-type: none"> • Investment in training and development of skills and capabilities • Investment in building the capacity of key organisations at different levels of government

Stage	Groupings	Elements
5	Community engagement	Engagement <ul style="list-style-type: none"> • Provision of high-quality data and information • Communication of risk • Facilitation • Consultation on planned relocation processes and outcomes, including possible new deliberative mechanisms • Provision of advisory services for affected communities, including legal advice
6	Iwi, hapū and Māori community engagement and empowerment	Engagement and empowerment <ul style="list-style-type: none"> • As above, plus specific or tailored institutional arrangements to ensure that iwi, hapū, and Māori community rights and interests are protected and te ao Māori perspectives are integrated into decision-making processes
7	Planning and preparation	Planning <ul style="list-style-type: none"> • Spatial and regulatory planning • Regional risk assessments • Local adaptation planning and preparation of relocation programmes, including timing and sequencing (possibly over decades) • Scientific and technical advice • Planning to optimise co-benefits and opportunities for betterment • Identification and assessment of environmental, cultural and social costs and opportunities • Hearings processes (eg, independent hearings panels, boards of inquiry and Environment Court) • Options analysis, including business cases, if required • Plan and/or rule changes • Rebuilding and development restrictions • Valuing affected properties • Responding to legal challenges • Memorandum of understanding with banking and insurance industries (see discussion in chapter 5)
	Māori land and cultural assets	<ul style="list-style-type: none"> • Distinctive compensatory arrangements, including provision of alternative land
	Monitoring	<ul style="list-style-type: none"> • Monitoring • Establishing trigger points
	Revenue raising	<ul style="list-style-type: none"> • Securing revenue to meet the costs of planned relocation

Stage	Groupings	Elements
8	Enabling investment	Property acquisition and investment (buyouts, lease backs) <ul style="list-style-type: none"> • Property acquisition offers and negotiations • Development of transitional covenants on property during relocation programme • Disputes resolution and mediation services • Provision of compensation and other forms of assistance
	Regulatory takings	<ul style="list-style-type: none"> • Compensatory arrangements
	New community investment	<ul style="list-style-type: none"> • Acquisition of alternative land for relocation • Development of new community facilities and public services • Provision of new social housing • Provision of new physical infrastructure
	Public infrastructure – level of service reduction	<ul style="list-style-type: none"> • Reduction in maintenance of public infrastructure
9	Active relocation	Public infrastructure and structures relocations <ul style="list-style-type: none"> • Removal and/or relocation of public infrastructure
	Privately owned infrastructure	<ul style="list-style-type: none"> • Private companies begin to reduce, remove or relocate their infrastructure (eg, telecoms, ports and power)
	Private property relocation or abandonment	<ul style="list-style-type: none"> • Relocation or abandonment of residential and commercial property • Providing temporary housing • Dealing with stranded assets
	Legal issues	<ul style="list-style-type: none"> • Legal advice for affected residents and businesses • Appeals (when and if provided for)
	Social services and other transitional supports	<ul style="list-style-type: none"> • Information on housing options and availability • Provision of relocation allowances • Provision of means-tested hardship grants and loans • Assistance for businesses facing significant disruption due to planned relocation or other adaptive initiatives
	Marine structures	<ul style="list-style-type: none"> • Removal of marine structures
	Environmental protection and restoration	<ul style="list-style-type: none"> • Measures to minimise environmental harm • Investment in ecological restoration
10	Post-relocation management of residential and commercial assets	Property services <ul style="list-style-type: none"> • Rental agreements with previous owners or new renters • Temporary property insurance and property maintenance before removal or demolition • Security services in areas where relocation is occurring

Stage	Groupings	Elements
11	Clean up	Clean up <ul style="list-style-type: none"> • Demolition and removal of buildings and infrastructure • Decommissioning of hazardous sites and landfills
12	Resettlement of affected residents	Resettlement <ul style="list-style-type: none"> • Needs assessments • Targeted assistance for those with special needs
13	Post-relocation land management and repurposing	Repurposing <ul style="list-style-type: none"> • Land rehabilitation • Land maintenance • Coastal realignment • Habitat restoration and enhancement • Ongoing monitoring, reporting and evaluation
14	System oversight	Oversight <ul style="list-style-type: none"> • Monitoring • Reporting • Evaluation – internal and external • Auditing • Compliance and enforcement

Source: based on Samuel Eric Olufson, *Managed Retreat Components and Costing in a Coastal Setting*, Master's Thesis. Wellington: Victoria University of Wellington, 2019, p 5.

Current institutional landscape relevant to planned relocation

6.39. The current institutional landscape for climate change adaptation, including planned relocation, is extensive and complex. Multiple entities across the three tiers of government have responsibilities that are likely to play a role in determining where, when and how planned relocation is undertaken. Table 10 highlights the current roles of the main central government departments and Crown entities relevant to planned relocation.

Table 9: Current institutional landscape

Institution	Current function
Ministry for the Environment	<ul style="list-style-type: none"> • Advises ministers on climate change policy • Implementation and stewardship responsibilities (eg, environmental monitoring and reporting) • Secretary for the Environment chairs the Climate Change Chief Executives Board (ensures effective delivery of National Adaptation Plan and advises ministers) and Strategic Planning Reform Board (leads development of strategic planning legislation)
Ministry of Housing and Urban Development	<ul style="list-style-type: none"> • Advises ministers on all matters relating to housing and urban development policy, including ways to increase the supply of new housing (both public and private), enhancing the quality of existing homes, and supporting high-quality urban development

Institution	Current function
Department of Internal Affairs	<ul style="list-style-type: none"> • Oversees matters affecting local government • Advises ministers on all issues relating to the role, responsibilities and performance of local government • Engages with local authorities and the various peak organisations in the sector, such as Local Government New Zealand and Taituarā – Local Government Professionals Aotearoa • Led a cross-government work programme on increasing community resilience in the face of climate change, including efforts to reduce flood risk and changes to the land information management system, to improve the provision of information to property owners relating to natural hazards • Undertakes policy work on responses to major storm events (eg, floods in Westport during 2021–22)
Toitū Te Whenua Land Information New Zealand	<ul style="list-style-type: none"> • Provides property and location information • Manages Crown land
Kāinga Ora – Homes and Communities	<ul style="list-style-type: none"> • Functions include: <ul style="list-style-type: none"> – providing ‘rental housing, principally for those who need it most’ – providing ‘appropriate accommodation, including housing, for community organisations’ – providing ‘people with home-related financial assistance’ – making ‘loans, or providing other financial assistance, to local authorities and other entities for housing purposes’ – providing people with ‘help and advice on matters relating to housing or services related to housing’ – providing ‘housing or services related to housing as agent for the Crown or Crown entities’ • Powers include: <ul style="list-style-type: none"> – coordinating urban development projects – acquiring, developing and disposing of land – partnering with local government, Māori and community groups in the interests of undertaking urban development and reducing homelessness – initiating, facilitating, assessing and undertaking specified development projects
Toka Tū Ake – EQC	<ul style="list-style-type: none"> • Provides insurance cover against damage from natural disasters, such as earthquakes, for insured residential buildings • Provides direct EQC cover against natural disaster damage for residential property owners who are unable to secure cover from a private insurer • Administers the Natural Disaster Fund • Encourages research and education about matters relevant to natural disaster damage and methods of reducing or preventing natural disaster damage • Provides an information portal on natural hazards
Climate Change Commission	<ul style="list-style-type: none"> • Undertakes periodic national climate change risk assessments • Reviews implementation of the National Adaptation Plan

Institution	Current function
National Emergency Management Agency	<ul style="list-style-type: none"> • Lead agency responsible for emergency management • Builds capability and capacity for emergency management • Works closely with government agencies, local government, iwi, hapū, Māori, businesses and communities
Infrastructure agencies (Te Waihanga New Zealand Infrastructure Commission, Waka Kotahi NZ Transport Agency, Electricity Authority, Ministry of Business, Innovation and Employment, Ministry of Transport and Treasury)	<ul style="list-style-type: none"> • Provide advice about or undertake supply of public infrastructure

Engagement with, and empowering, iwi, hapū and Māori communities on adaptation issues

- 6.40. As discussed in chapter 2, climate change adaptation is likely to have a disproportionate impact on iwi, hapū and Māori communities.³³⁶ This is because adaptation initiatives, including planned relocation, will often affect Māori land and taonga, sites of cultural infrastructure (notably marae or meeting houses and urupā), and access to resources. In some cases, adaptation measures will impact on land that the Crown returned to iwi and hapū as part of a settlement under te Tiriti. The impacts of climate change will also increasingly affect the ability to pass down mātauranga Māori to future generations and enact cultural processes such as manaakitanga, whanaungatanga and kaitiakitanga.
- 6.41. New institutional mechanisms and processes may be needed to ensure the rights and interests of Māori are adequately considered in all matters relating to climate change adaptation, including planned relocation. This will entail incorporating te ao Māori approaches for risk assessments and community-led relocation. Above all, the principle of partnership under te Tiriti must be upheld.
- 6.42. Currently, several organisations provide a Māori perspective on climate change-related issues. At the national level, the Government’s principal adviser on all matters relating to Māori well-being and development is Te Puni Kōkiri. In practice, however, the Ministry for the Environment (MfE) plays the main role in adaptation matters, including liaising and consulting with various Māori organisations, along with iwi, hapū, Māori communities and Māori researchers. Among the main national non-governmental organisations are the Federation of Māori Authorities, the Iwi Leaders Group and the New Zealand Māori Council (which is a statutory representative body under the Māori Community Development Act 1962).
- 6.43. Important changes to policy-making processes with implications for the role and empowerment of Māori are currently in progress. Under the provisions of the Natural and Built Environment Bill (NBE Bill) (see Schedule 8 to the Bill), each regional planning committee must include at least two members “appointed by one or more Māori appointing bodies in the

³³⁶ See Awatere S, King DN, Reid J, Williams L, Masters-Awatere B, Harris P, Tassell-Matamua N, Jones R, Eastwood K, Pirker J, Jackson A. 2021. *He huringa āhuarangi, he huringa ao: A changing climate, a changing world*. Ngā Pae o te Māramatanga | Māori Centre of Research Excellence, Te Arotahi Series Paper 7.

region”. Accordingly, representatives of iwi, hapū and Māori communities will have a guaranteed voice in many of the crucial decision-making processes relevant to climate change adaptation.

- 6.44. Additionally, MfE has established a Māori climate platform to help embed te Tiriti across the full range of climate change issues and governmental responses, including both mitigation and adaptation. Among other things, it is envisaged the platform will help facilitate kaupapa Māori solutions and “embed te ao Māori through Aotearoa New Zealand’s climate response”³³⁷. It will also include a framework for allocating funding “at-place to enable Māori climate action”³³⁸, including resources for building capacity and capability. At the same time, the platform will endeavour to complement, rather than replace, existing institutional arrangements, networks and relationships. It will recognise the knowledge of Māori who are already exercising leadership regarding climate change. A ministerial advisory committee has been appointed to engage with Māori and lead the design phase of the platform. It is envisaged specific proposals will be put to Cabinet during 2023.
- 6.45. How these new institutional arrangements will operate in practice remains uncertain. Hence, it is too early to ascertain whether the platform will provide a durable and effective mechanism for enabling and empowering Māori participation in all aspects of planned relocation, including not only at the central government level but also locally.
- 6.46. Institutional arrangements at the local government level will also be crucial for enabling and empowering Māori participation in the decision-making processes for planned relocation. Currently, the representation of Māori in the elected councils (ie, unitary, regional and territorial) varies across the country. Councils also have different arrangements for consulting Māori in resource management and planning issues.
- 6.47. Under the proposed resource management reforms, Māori will automatically be represented on each of the new regional planning committees. Additionally, cl 4 of the NBE Bill requires that “All persons exercising powers and performing functions and duties under this Act must give effect to the principles of te Tiriti o Waitangi”. Hence, it will be essential to ensure that iwi, hapū and Māori communities are able to participate fully and effectively in all decision-making processes. These include the preparation of the National Planning Framework, regional spatial strategies, and regulatory plans, along with any specific LAPs and implementation plans (where these apply).
- 6.48. An important question is how to ensure, from an institutional design perspective, that such approaches are carefully considered and the requirements of te Tiriti are fully met. Potentially, this may entail the establishment of new partnerships or co-governance arrangements and new ways to ensure that mana whenua voices are represented in the relevant policy-making processes at all governmental levels.

³³⁷ Ministry for the Environment. 2022. *Māori Climate Platform*. Retrieved 7 August 2023, ‘About the platform’ section.

³³⁸ Ministry for the Environment. 2022. *Māori Climate Platform*. Retrieved 7 August 2023. ‘About the platform’ section.

Strengths and weaknesses of the existing institutional arrangements

6.49. To date little independent research has been done on the extent to which the current institutions are well designed for the challenges of the future. In the absence of such studies, caution is needed in assessing existing institutional arrangements. Nonetheless, we have identified the following strengths, gaps and weaknesses in the Government's existing systems, based on the governmental functions that planned relocation is likely to entail (see Table 11).

6.50. The strengths of the current arrangements include:

- having a government department with broad advisory and system oversight responsibilities for all climate change policy (MfE)
- robust sources of independent expert advice to government (ie, the Climate Change Commission and Parliamentary Commissioner for the Environment)
- institutions for housing and urban development (ie, the Ministry of Housing and Urban Development and Kāinga Ora – Homes and Communities)
- an institution to provide compensation for natural hazard events to insured residential property owners (ie, Toka Tū Ake EQC)
- local authorities with detailed local knowledge, expertise and experience in planning.

6.51. Gaps and weaknesses in the current system include the following.

6.51.1. **Governance issues:** Implementing planned relocation poses political risks, especially when done pre-emptively. Currently, however, mechanisms to reduce these risks are limited, which encourages short-term planning at all levels of government. The country also invests little in long-term foresight and has limited institutional capacity for anticipatory governance.³³⁹

6.51.2. **Te Tiriti o Waitangi:** The current policy framework gives insufficient weight to the principles of te Tiriti. For instance, provision is limited for direct iwi, hapū and Māori community involvement in the governance of climate change adaptation. To what extent this situation will change following the implementation of the Government's resource management reforms is uncertain.

6.51.3. **Misalignment of governance responsibilities and funding capacity:** The current policy framework places the main responsibility for planning and implementing planned relocation with territorial authorities. However, it fails to provide them with the necessary powers and tools to undertake these responsibilities. To compound matters, many territorial authorities lack the resources (including borrowing capacity) and capabilities to undertake such activities, certainly on the scale likely to be required in the future. This is complicated by the highly variable size and capabilities of territorial authorities, and the fact that risks from flooding and coastal inundation vary significantly across Aotearoa New Zealand.

³³⁹ Boston J. 2016. *Governing for the Future: Designing Democratic Institutions for a Better Tomorrow* (Public Policy and Governance, Vol 25). Bingley: Emerald Group Publishing Limited.

- 6.51.4. **Intergovernmental coordination:** The mechanisms for coordinating the roles and responsibilities of the three tiers of government for planning, designing, funding and implementing planned relocation are currently limited. To what extent the new regional planning committees will enhance such coordination remains uncertain.
- 6.51.5. **Whole-of-government leadership:** No central government department or Crown entity has the capacity, capability or mandate to oversee, coordinate, plan and assist in implementing planned relocation. Likewise, no entity has the responsibility to navigate the complex interdependencies between disaster recovery and reconstruction, resilience building and the planned relocation of human settlements.
- 6.51.6. **Conflicting or unclear responsibilities:** Multiple government bodies have overlapping and sometimes conflicting responsibilities relevant to planned relocation. For instance:
- Ministry for the Environment and the Department of Conservation have overlapping and sometimes conflicting responsibilities for coastal planning and management
 - the Climate Change Commission is responsible for producing national climate change risk assessments and for reviewing the Government's performance on climate change adaptation, which has the potential to create a conflict of interest
 - Ministry for the Environment and the Department of Internal Affairs have overlapping responsibilities for various climate change adaptation issues
 - territorial authorities and regional councils have overlapping responsibilities for the management of natural hazards.
- 6.51.7. **Risk assessment:** While the Climate Change Commission has a statutory mandate to undertake national climate change risk assessments, no equivalent independent body has the responsibility to undertake, or oversee the quality of, local risk assessments.
- 6.51.8. **Citizen engagement and advice:** Current mechanisms for enabling citizens to participate in matters relating to planned relocation are inadequate.
- 6.51.9. **System oversight:** Existing institutions have failed to ensure robust system oversight or the enforcement of planning rules and environmental quality standards. It remains uncertain whether the new resource management regime will address these problems adequately.

Designing an institutional framework for planned relocation

6.52. We recommend an approach to institutional reform that is informed by:

- a recognition, based on the best available scientific evidence, that the impacts of climate change will generate a series of formidable (and in some cases unprecedented) governance and policy challenges

- an assessment that existing institutional arrangements will not be adequate to enable governments to meet these challenges and protect the long-term public interest
- a judgement that the institutional arrangements for the governance, planning, funding, implementation and oversight of planned relocations should reflect the principles of institutional design discussed above and be consistent with existing constitutional arrangements and conventions, especially the principles of te Tiriti
- a preference for planned relocation, wherever possible, to be community-centred and locally led yet centrally supported and enabled (see chapter 3), which, in turn, implies a strong commitment to partnership and collaboration across the three tiers of government and with civil society organisations and iwi, hapū and Māori communities
- a desire to learn from relevant experiences and policy responses, both locally and internationally, regarding the management of natural hazards, the building of societal resilience and the implementation of climate change adaptation
- a recognition that any proposals for significant changes to the machinery of government, including the establishment of new public institutions, need to be well-founded and properly assessed
- a recognition that the nature and shape of the public institutions required to enable and support planned relocation will need to reflect the Government's decisions on significant aspects of the policy framework, including the location of decision-rights, the nature of the required statutory powers, the designated planning processes and the design of the funding and financing arrangements.

6.53. With these consideration in mind, we believe that the institutional arrangements for planned relocation should:

- support a coherent, holistic, system-wide and integrated approach, with effective horizontal and vertical coordination (ie, the capacity for undertaking a whole-of-government approach)
- seek to incentivise prudent long-term decision-making and encourage robust anticipatory governance
- support a hazard-neutral policy approach
- be designed to manage, and be responsive to, the highly variable and evolving contexts in which the relocation of settlements will occur, which implies the need for significant institutional flexibility and agility
- support the provision of rigorous, independent risk assessments; careful analyses of adaptation options; and high-quality, contestable policy advice
- ensure affected citizens; businesses; and iwi, hapū and Māori communities have reliable and timely information and appropriate advice and support
- support strong regulatory stewardship and system oversight (ie, rigorous monitoring, reporting, evaluation and reflective learning), along with robust political and administrative accountability
- seek to minimise transaction and compliance costs for all affected individuals, organisations and communities
- be adequately funded.

- 6.54. Three other matters deserve emphasis. First, incremental changes to existing institutional arrangements will often be preferable to creating new institutions. Radical reshaping of institutions requires a robust rationale, in part because of the likely fiscal cost and administrative disruption. That said, new institutions are often justified in the following situations:
- when major events (eg, large-scale natural disasters) require a significant, multi-year (or even permanent) governmental response
 - when new technologies generate major ongoing economic and societal changes or challenges (eg, radio, television, motor vehicles, aircraft and modern medicine)
 - when the Government decides to undertake new functions in response to cultural, economic or other societal changes or public demands (eg, the introduction of accident compensation, the desire for better health and safety regulation through WorkSafe New Zealand, and the desire to resolve te Tiriti grievances and historical injustices).
- 6.55. Climate change is generating new challenges for government at all levels. The challenges will increasingly be national in scope and persist for generations, requiring new functions and the expansion of existing ones (see Table 11). Such considerations justify designing new permanent institutional arrangements.
- 6.56. Second, regardless of the extent to which decision-making on climate change adaptation, including planned relocation, is devolved to local government, central government leadership and support will be imperative (see chapters 3 and 5). For this to occur, a strong ministerial leadership with robust support from government departments will be needed.
- 6.57. Third, the Government has enacted new legislation (the Severe Weather Emergency Legislation Act 2023)³⁴⁰ and made several institutional changes in response to Cyclone Gabrielle and the other damaging weather events that have affected Aotearoa New Zealand recently. These include the establishment of:
- a new portfolio responsibility, namely for cyclone recovery
 - a new Cabinet committee, the Extreme Weather Recovery Committee
 - a coordinating unit within the Department of the Prime Minister and Cabinet
 - a taskforce to advise ministers on recovery issues.
- 6.58. These institutional changes highlight the nature of the governance, regulatory and administrative challenges that severe storm events generate. This includes the imperative for robust coordination across multiple public agencies and among the three tiers of government (eg, to enable a rapid recovery in the regions affected, including rebuilding public infrastructure, providing additional public housing, and ensuring land-use planning provides sustainability and greater resilience). The recent weather events underscore the need to ensure public institutions in Aotearoa can effectively manage the required adaptive responses to ongoing climate change. Short-term responses, however well designed, will not be adequate. Permanent institutional arrangements will be vital. Further changes to existing institutional arrangements should therefore be broadly consistent with the long-term arrangements that will be required.

³⁴⁰ See Severe Weather Emergency Legislation Act 2023.

- 6.59. The impacts of the recent storms, although severe, have been mostly regional rather than national, with each region facing somewhat different challenges. Over the longer term, however, sea-level rise will have national impacts, so national-level responses will be necessary, albeit tailored to the needs of each affected community.
- 6.60. Recent storm events and the Government's responses provide an opportunity to learn by doing. The policy responses must be properly evaluated, including the quality of emergency management and post-disaster recovery.

Summary of our institutional proposals

- 6.61. As highlighted, an important principle of institutional design is that form should follow function. Based on this principle, a good case exists for adopting a staged, evolutionary process to institutional reform.
- 6.61.1. Staged means some steps should be taken in the near term (eg, one to three years) and others in the medium to long term. In the near term, institutional changes should be limited primarily to those likely to be desirable irrespective of the medium- to long-term policy framework for planned relocation.
- 6.61.2. Evolutionary means that, as Aotearoa New Zealand gains more knowledge of the precise impacts of climate change and develops its experience in addressing those impacts, relevant institutions will have to evolve. Learning lessons from experience will be critical. The design of the medium- to long-term institutional arrangements should reflect the eventual legislative framework for the governance, planning, funding and implementation of planned relocation, but it should be adaptable.
- 6.62. It may be that this framework diverges slightly from the recommendations in this report (eg, the nature of funding and financing). We outline below near-term institutional changes, and several long-term changes that would likely be required to give effect to our recommendations in chapters 2, 3, 4 and 5.

Recommendation 47

We recommend that the Government adopt a staged, evolutionary approach to institutional reform for planned relocation. The first step should be to implement modest institutional changes in the near term (ie, one to three years) that will likely be desirable, irrespective of the future policy framework for planned relocation. The second step will be to implement a further set of institutional changes in the medium term, to give effect to the new policy framework, recognising that the institutions must evolve over time to meet changing conditions.

- 6.63. Our main proposals for institutional arrangements in the near term can be summarised as follows:
- improving the foresight capacity of the public sector, particularly regarding the management of natural hazards

- mandating an existing ministry as the lead for all policy aspects of climate change adaptation, including planned relocation and natural hazard management. The Ministry for the Environment is probably best placed to undertake this role. On this basis, the current responsibilities of the Department of Internal Affairs for improving resilience to flood risk should be transferred to MfE
- mandating a ministry or Crown entity to oversee all aspects of risk assessment. Our preference would be either MfE or Toka Tū Ake EQC undertakes this role
- mandating an independent entity to audit and review all regional and other risk assessments (ie, a quality assurance task). Our preference would be for the Climate Change Commission to undertake this role
- extending the proposed public information portal for matters relating to risk and resilience and climate change adaptation to include all aspects of planned relocation
- establishing a 'one-stop' advisory service for affected communities
- expanding the scope of the New Zealand Claims Resolution Service to include various non-insurance related issues that are likely to arise during the implementation of planned relocation
- establishing bespoke arrangements for iwi, hapū and Māori communities, as required.

The relevant details are provided below.

- 6.64. For the longer term, we recommend the Government undertake a thorough assessment of the institutional options for implementing the agreed policy framework for planned relocation. This review should include possible changes to the roles of existing public institutions as well as the merits of creating one or more new public institutions to carry out specified functions.

Ministerial leadership

- 6.65. Strong ministerial leadership will be imperative over the coming years on all matters relating to natural hazard management, climate change adaptation (including planned relocation), emergency management and disaster recovery. As discussed in chapters 3 and 4, we envisage the creation of a range of new ministerial powers to enable planned relocation to be undertaken effectively. This would include call-in powers and requests from the relevant local authorities for the responsible Minister to lead the development of an LAP when the likely adaptation measures will exceed the capability of the relevant local authority.
- 6.66. This would best be achieved through the creation of a separate ministerial portfolio dedicated to the full range of policy issues surrounding planned relocation. It will be important for any such portfolio to be linked with one or more of the closely related portfolios, such as climate change, emergency management, resource management, housing, infrastructure and urban development.
- 6.67. Strong ministerial leadership will require timely, comprehensive and robust policy advice from a lead ministry with a statutory responsibility to oversee climate change adaptation, including planned relocation (see below).

Foresight and anticipatory governance

- 6.68. Climate change adaptation will require a greater capacity for long-term planning and anticipatory governance at all levels of government. This objective could be pursued in several ways.
- 6.69. One option would be to expand the functions of the Policy Project in the Department of the Prime Minister and Cabinet to include a stronger emphasis on strategic foresight and natural hazard management.³⁴¹ The unit could provide future-focused advisory services to government departments and local government, including on strategic planning and foresight methodologies (eg, strategic foresight, horizon scanning, and scenario analysis). It could also help departments (as has occurred recently) to prepare their three-yearly Long-term Insights Briefings, which are required under the Public Service Act 2020.
- 6.70. An alternative would be to establish a dedicated, stand-alone foresight unit, ideally within one of the three central agencies. Overseas experience suggests that foresight units are likely to be most useful to decision-makers if they are closely coupled institutionally with a Prime Minister's department (or equivalent) or the agency serving another senior minister.³⁴²

Recommendation 48

We recommend that the Government enhance the foresight capacity of the public sector, particularly with respect to the management of natural hazards.

Governance of planned relocation

- 6.71. Decisions to authorise planned relocation may need to be taken at different levels of government, depending on the scale and cost of the relocation (see chapter 3). Administrative support, policy advice and planning capability will need to be available to planners and decision-makers. Statutory requirements should be in place for central government to provide support for sub-national authorities to facilitate planned relocation (eg, via information provision, policy advice and planning assistance).
- 6.72. Bespoke governance arrangements should be set up if the rights and interests of iwi, hapū and Māori communities are significantly affected (see below and chapter 2).

Strategic and operational policy advice

- 6.73. In the near term, an existing ministry should be mandated to lead policy advice on all aspects of climate change adaptation, including planned relocation and natural hazard management. It should also coordinate the Crown's participation in sub-national planning processes with respect to planned relocation. Given the current allocation of departmental responsibilities, MfE is probably best placed to undertake this role. Accordingly, s 31 of the Environment Act

³⁴¹ See Department of the Prime Minister and Cabinet. *The Policy Project*. Retrieved 1 July 2023.

³⁴² See Boston J. 2016. *Governing for the Future: Designing Democratic Institutions for a Better Tomorrow (Public Policy and Governance, Vol 25)*. Bingley: Emerald Group Publishing Limited; and OECD. 2022. *Foresight and anticipatory governance Lessons in effective foresight institutionalisation*. Paris: Strategic Foresight Unit: Office of the Secretary-General.

1986 should be amended to include a provision specifying that MfE is responsible for such matters.

6.74. More specifically, the lead ministry should have the following functions:

- advising the Minister with responsibilities for planned relocation on all relevant policy issues, including flood risk
- preparing National Adaptation Plans under s 5ZS of the Climate Change Response Act 2002 and other long-term strategies to mitigate the risks of climate change
- coordinating the activities and responses of the public sector in relation to planned relocation and overseeing the responses across the different tiers of government
- providing advice on the methods and standards for risk assessments (eg, via the National Planning Framework) and overseeing the risk assessment processes
- coordinating government input and, where relevant, submissions on natural hazards management (including risk assessments) to regional planning committees as they prepare their regional spatial strategies and natural and built environment plans
- providing advice and support, as needed, to local government on the preparation of LAPs and reviewing draft plans, including, for example, associated designations and zoning
- providing advice to the responsible Minister on whether any relocation proposals in LAPs should be approved and whether relocation programmes should be approved
- ensuring all relevant information relating to natural hazards, including planned relocation, is properly gathered, assessed and disseminated
- investing in research related to natural hazards management
- investing in developing the expertise and skills required across the system to undertake the full range of tasks that planned relocation will entail
- exercising a range of stewardship responsibilities.

6.75. Stewardship in this context would include oversight of:

- long-term administrative, planning, risk assessment, foresight and advisory capabilities and capacities
- inter-governmental and intra-governmental coordination
- institutional knowledge, information, evidence, research and evaluation
- governmental systems and processes, including support for bespoke arrangements for iwi, hapū and Māori communities
- funding and financing arrangements
- all legislation and regulations relating to climate change adaptation and natural hazard mitigation.

6.76. To undertake these functions effectively, the lead ministry would likely need to develop a network of regional offices, especially in areas where major relocations are being planned. Such offices would need to expand and contract over time as circumstances change. In some cases, the offices may be temporary, while in others, they may be needed for a decade or more.

- 6.77. The lead ministry's chief executive should chair any interdepartmental executive board (such as the Climate Change Chief Executives Board established in 2022) or other inter-agency committees charged with coordinating the Government's involvement with climate change adaptation, including planned relocation.
- 6.78. We acknowledge many of the responsibilities outlined above could, at least in principle, be undertaken by a Crown entity. Nevertheless, only a ministry can provide the required strategic leadership, comprehensive policy advice and detailed oversight. Relevant considerations include:
- the responsible Minister will often need day-to-day advice from officials, which Crown entities are generally not designed or equipped to provide
 - planned relocation will often be politically controversial, requiring detailed ministerial engagement
 - Crown entities are not generally able to lead the work of interdepartmental executive boards, such as the current Climate Change Chief Executives Board.
- 6.79. For these reasons, the primary responsibility for providing the Government with policy advice on planned relocation (and related matters) should not be placed with a Crown entity such as Toka Tū Ake EQC or Kāinga Ora – Homes and Communities.
- 6.80. Another option is to locate the various advisory functions outlined above within a departmental agency (either existing or new), such as the National Emergency Management Agency (NEMA). However, we do not recommend NEMA because it lacks responsibility for providing advice on climate change adaptation or related policy issues (eg, resource management, spatial planning and regulatory planning). Hence, it would not be ideally placed to provide cross-departmental policy leadership or to oversee a whole-of-government approach to spatial planning or regulatory planning.

Recommendation 49

We recommend that there should be a lead ministry for planned relocation policy that should undertake the functions described in paragraphs 6.74–6.75.

We recommend in the near term, the Ministry for the Environment should be the lead policy ministry.

- 6.81. Regarding the long-term arrangements for providing ministers with policy advice on planned relocation, a separate issue of institutional design will, at some stage, require attention. As discussed earlier, this concerns the span of policy responsibilities that should be grouped together within a single policy ministry.
- 6.82. In other words, should the responsibility for providing policy advice on planned relocation (and related issues of climate change adaptation and natural hazard management) be undertaken by a ministry that is focused on a relatively narrow range of policy domains (eg, a Ministry for Climate Change Adaptation or a Ministry for Natural Hazard Management)? Or should these responsibilities be coupled organisationally with various related policy domains and, if so, which ones? Relevant policy matters include climate change mitigation, resource management, local government, infrastructure, housing and urban development and emergency management.

- 6.83. Our view is arguments can be made both for and against narrowly focused or single-domain policy ministries and cross-portfolio or multi-domain policy ministries. In the near term, as suggested above, a good case exists for locating the responsibility for providing policy advice on planned relocation in a cross-portfolio ministry like MfE.
- 6.84. Over the longer term, however, a different institutional configuration may be justified. For instance, if the country is largely successful in achieving its climate change targets by 2050, the policy issues surrounding decarbonisation will diminish in importance over the latter half of the century. Meanwhile, the governance and policy challenges posed by climate change adaptation will continue to escalate. If significant sea-level rise occurs later in the century and during the 22nd century, as projected (see chapter 1), the country will need to devote substantial resources to planned relocation. In these circumstances, a case may well exist for a ministry (or perhaps a departmental agency hosted by a ministry such as MfE) whose sole responsibility is the formidable policy issues surrounding climate change adaptation and natural hazard management.
- 6.85. We believe such matters warrant more detailed analysis as the Government develops its policy framework for planned relocation over the next few years.

Policy implementation, including funding and the development of new communities

- 6.86. In addition to giving policy advice, central government will likely need significant additional capabilities to help with the implementation and oversight of planned relocation, especially for substantial and complex relocations of people and property (and hence the development of new human settlements). This may include the provision of funding for various activities (such as property acquisition, public infrastructure and public housing), providing temporary insurance cover, assisting with the planning of new towns, overseeing coastal realignment and much more.
- 6.87. The precise nature of central governmental functions will depend on the details of the policy framework for planned relocation that is adopted. If policy-makers support a framework like the one proposed in this report, central government will acquire several significant responsibilities (eg, the funding of property acquisitions, whether directly or indirectly via sub-national government). Specific public institutions will be needed to undertake these responsibilities. In contrast, a policy framework that diverges in major ways from that proposed (eg, one that assigns more responsibilities to sub-national government) will necessarily have different implications for institutional arrangements at the central government level.
- 6.88. A significant institutional design issue, as noted earlier, is whether policy responsibilities should be coupled with, or separated from, operational responsibilities. A related question is whether any new operational responsibilities should be undertaken by existing ministries and Crown entities (ie, a mainstreaming approach) or whether some or all these new responsibilities should be allocated to a new government entity, be it a department, a departmental agency or a Crown entity.

- 6.89. Arguments exist both for and against linking the provision of policy advice institutionally with various operational tasks. Put differently, vertically integrated organisations have both advantages and disadvantages. Much the same applies to a mainstreaming approach.
- 6.90. Nevertheless, a mainstreaming approach will have greater implications for some existing government departments and Crown entities than for others. For instance, suppose Toka Tū Ake EQC is charged with administering a new fund for planned relocation and overseeing the process of property acquisitions. This would have a major impact on the role, size and structure of the Commission; indeed, it would be transformative. On the other hand, expanding the role of Kāinga Ora – Homes and Communities to include the planning of new housing developments to relocate at-risk communities would not entail a radical restructuring of the organisation.
- 6.91. We have carefully considered whether the proposed lead policy ministry for planned relocation (MfE) should also be assigned significant responsibilities for implementation (eg, funding and administering property acquisitions). On balance, our preference is for a degree of institutional separation. In particular, we do not favour the creation of an all-encompassing, and potentially all-powerful, ministry that would provide comprehensive advice across multiple policy domains as well as undertaking a wide range of operational tasks. This would be similar in some respects to the Canterbury Earthquake Recovery Authority earlier this century and the Ministry of Works and Development during the latter part of the 20th century. Instead, we believe many of the governmental tasks associated with planned relocation can and should be undertaken by existing central government organisations or sub-national government. Under such an approach, for instance, existing government departments and Crown entities could have their roles amended in various ways. This could include:
- expanding the role of Land Information New Zealand regarding: a) maintaining and sharing location information, including geographic, hydrographic and property information; b) managing Crown lands; and c) undertaking modelling of future hazards
 - expanding the role of Kāinga Ora – Homes and Communities to include the planning of new housing developments, to enable the relocation of communities affected by planned relocation and ensure adequate social housing is available for those lacking the resources to purchase alternative properties
 - expanding the responsibilities of the Climate Change Commission to oversee the quality of risk assessment processes relating to planned relocation and other adaptation options
 - expanding the responsibilities of the Department of Conservation (eg, for ecological restoration on Crown lands in coastal areas and coastal realignment initiatives)
 - expanding the responsibilities of the Environmental Protection Authority to include monitoring of the environmental impacts of planned relocation and post-relocation arrangements, and perhaps to undertake a broader system oversight role (instead of MfE)
 - expanding the role of the New Zealand Infrastructure Commission to provide advice to the Government on infrastructure needs and priorities in relation to climate change adaptation, including each case of planned relocation
 - expanding the role of various infrastructure providers to ensure that adequate new infrastructure is constructed for the relocation of affected communities and to demolish and remove infrastructure from areas designated for relocation

- providing additional resourcing for the Ombudsman, the Office of the Auditor-General, or the Parliamentary Commissioner for the Environment to respond to public concerns and complaints in relation to planned relocation and to undertake independent reviews.
 - Planning and implementing planned relocation will be increasingly challenging as the number and scale of the required relocations grow. Moreover, the impacts of climate change will likely become more damaging and disruptive. It will also be important to ensure the implementation of planned relocation is fully integrated with the management and mitigation of other natural hazards.
- 6.92. As discussed in chapter 5, various new funding instruments will likely be required if climate change adaptation, including planned relocation, is to be implemented efficiently, effectively and equitably. Given these considerations, a case may exist for creating a new government entity with overall responsibility for some (and perhaps many) of the operational aspects of planned relocation. We think such an approach should be considered by the Government as it develops its policy framework for planned relocation.
- 6.93. One possibility, for instance, would be to establish a new departmental agency under the Public Service Act 2020, such as a national resilience and recovery agency or a national resilience, relocation and reconstruction agency. (An alternative would be to create a new Crown entity.) A new departmental agency could be hosted by the Department of the Prime Minister and Cabinet, as is NEMA, or by the lead policy ministry. Either way, the new agency would work closely with NEMA, perhaps drawing on NEMA's sub-national networks. It would not be involved in emergency management, though. It would focus on proactive and post-event planned relocation, along with post-disaster recovery and reconstruction and enhancing the nation's long-term resilience. Its functions could include collecting levies and other sources of funding for:
- a range of adaptation responses and ways to enhance community resilience
 - specific protective structures where these are cost-effective
 - planning processes, including the cost of risk assessments, options analyses, public consultation processes and the planning of alternative sites for residential development
 - property acquisitions or retiring land
 - the removal expenses of affected residents
 - the removal of buildings and infrastructure
 - ecological and conservation activities
 - post-relocation land management, remediation and coastal realignment
 - administering temporary natural hazard related insurance (unless this is managed by Toka Tū Ake EQC)
 - business assistance programmes.
- 6.94. Under this approach, various public sector organisations would continue to have funding responsibilities relevant to climate change adaptation, including planned relocation, and natural hazard management (eg, the Department of Conservation, the Ministry for Primary Industries, the Ministry of Social Development and Waka Kotahi). The new departmental agency could help coordinate such activities.

Recommendation 50

We recommend that the lead ministry for planned relocation should focus primarily on policy matters and should not have extensive operational responsibilities.

In formulating its policy framework for planned relocation, the Government should evaluate the relative merits of:

- mainstreaming the new and additional operational responsibilities within existing government departments and Crown entities; or
- creating a new government agency, whether in the form of a departmental agency or a Crown entity, to undertake some the operational responsibilities.

Improving horizontal and vertical coordination

- 6.95. Given the large number of public sector organisations likely to be involved in planning and implementing planned relocation, significant coordination issues will arise (see also chapter 3). These will be both horizontal (ie, across a single tier of government) and vertical (ie, among the different tiers of government). Robust coordination will also be needed between governmental and non-governmental bodies. This includes organisations representing iwi, hapū and Māori communities along with business and community organisations. Coordination among bodies responsible for planned relocation and those involved in emergency management and disaster recovery will also be necessary.
- 6.96. An institutional design question is how to ensure robust coordination in the interests of effective planning and implementation. No single solution is likely to be adequate, and a range of mechanisms may well be required. Moreover, such mechanisms will need to evolve as the scope, scale, cost and wider impacts of planned relocation increase.
- 6.97. The regional planning committees proposed by resource management reforms may facilitate coordination, especially if central government exercises its right to participate in these committees for spatial planning. But these committees will not be adequate on their own for coordination purposes, especially for the detailed planning and implementation of planned relocation on a significant scale.
- 6.98. Having a lead ministry to oversee all aspects of climate change adaptation and planned relocation will help enable more effective horizontal and vertical coordination, especially if the Crown participates in the sub-national planning and implementation processes for planned relocation. Assuming the resource management reforms are implemented as currently intended, the Spatial Planning Reform Board (an interdepartmental executive board representing various departments established in 2021)³⁴³ is also likely to have an important role, particularly regarding the Crown's participation in the process of regional spatial planning and determining the nature and conduct of regional-level risk assessments.
- 6.99. Another mechanism that may help with coordination is the Climate Change Chief Executives Board. This board has a limited membership, though, and does not currently include representatives of Crown entities as full members. It therefore would not be suitable for coordination with sub-national government or non-governmental bodies.

³⁴³ See Ministry for the Environment. *New interdepartmental executive board for Spatial Planning Act*. Retrieved 1 July 2023.

- 6.100. In addition to the specific tasks of horizontal and vertical coordination, a special purpose forum or consultative body may be needed to bring together elected representatives of all three levels of government; representatives of iwi, hapū and Māori communities; and business and community groups. The forum could be chaired by the Prime Minister or the Minister responsible for planned relocation and could include other ministers with responsibilities for matters relevant to the design and implementation of planned relocation (eg, finance, resource management, public infrastructure, housing, social development and emergency management). Representation of sub-national government and other interests could change over time, depending on where planned relocation is occurring. As planned relocation becomes more widespread, several separate forums, or the creation of sub-committees of an overarching body, might be needed. A forum of this kind could meet periodically (eg, twice yearly) and would be serviced and attended by officials of each level of government. It would not be a decision-making body, but it could be instrumental in identifying important policy issues requiring governmental attention and in canvassing possible solutions.
- 6.101. Various models exist for consultative bodies of this nature, including the previous Auckland Forum and the long-established Central Government Local Government Forum. Currently, the latter body meets annually and is chaired by the Prime Minister. It is serviced by the Department of the Prime Minister and Cabinet and Local Government New Zealand. Any forum dedicated to the issues of planned relocation would likely benefit from the inclusion of a wider range of interests, especially representatives from affected communities, business organisations and Māori communities.

Recommendation 51

We recommend that the Government consider creating a special purpose consultative body to address important issues relating to planned relocation. Members should include elected representatives of all three levels of government; iwi, hapū and Māori representatives; and business and community groups.

Risk assessment and risk management

- 6.102. As discussed in chapter 3, high-quality regional risk assessments will be crucial for effective climate change adaptation, including planned relocation. From the perspective of institutional design, at least two separate issues require attention.
- 6.103. The first issue is where responsibility should reside for advising on risk assessment and risk management policy. This responsibility includes:
- developing standards and methodologies for risk assessment (ie, whether conducted at the national, regional or local levels)
 - setting risk thresholds for adaptation planning and default thresholds for considering relocation
 - setting principles and criteria for the prioritisation of adaptation measures, including planned relocation
 - providing advice to all bodies (central and local) undertaking risk assessments and adaptation planning
 - developing guidance for community engagement.

- 6.104. Responsibility for such matters could reside either with the lead ministry (MfE) or an independent Crown entity (eg, Toka Tū Ake EQC). On balance, we favour placing that responsibility with the lead ministry, because these are policy matters falling within the National Planning Framework that will operate under the Natural and Built Environments Act (NBE Act) (assuming the Bill is enacted).
- 6.105. The second issue relates to auditing and reviewing the risk assessments undertaken at the sub-national level to inform policy decisions on climate change adaptation (see chapter 3). Independent audits could help assure the public of their rigour and reliability (in other words, that each assessment is based on the best available evidence and methods and has been informed by mātauranga Māori). The Climate Change Commission would be the most appropriate body to undertake this audit function.

Recommendation 52

We recommend that the primary responsibility for policy advice on the regulatory framework for risk management should reside with the lead ministry for planned relocation. The Climate Change Commission should be mandated under the Climate Change Response Act 2002, with responsibility for independently auditing the quality of risk assessment processes relating to climate change adaptation, including planned relocation.

Empowering iwi, hapū and Māori communities and enabling partnership

- 6.106. While policy changes are under way with implications for the role of Māori through the NBE Bill and the new Māori Climate Platform, additional support for capacity building and participation by iwi, hapū and Māori communities may be required. This is particularly true where planned relocation will affect communities with significant Māori populations or interests.
- 6.107. One option, as noted in chapter 2, would be to appoint specialist ‘navigators’ or ‘advocates’ to help iwi, hapū and Māori communities to develop their own strategies and plans for planned relocation or to fulfil their partnership role in mainstream planning and decision-making processes. Navigators, for instance, are an integral feature of Whānau Ora.³⁴⁴ In the case of planned relocation, such people would need to have relevant expertise (eg, in planning, resource management and environmental law) and be publicly funded. At the same time, they would be independent of both central and local government and would be appointed by mana whenua via a suitable local governance entity.

Recommendation 53

We recommend that the Government ensure the principle of partnership under te Tiriti o Waitangi is applied consistently in all planning and decision-making processes with respect to planned relocation. The Government should also provide appropriate funding to help iwi, hapū and Māori communities develop the necessary expertise and capability to participate effectively in such processes.

³⁴⁴ Whānau Ora. *About Us*. Retrieved 1 July 2023.

Support for active citizen engagement and public participation in decision-making

- 6.108. To enable public participation in decision-making for planned relocation, information will need to be accessible to affected communities. Under the National Adaptation Plan, the Government is committed to developing online information portals to provide the public with natural hazard risk information, climate data, and information for decision-making.³⁴⁵ The Ministry for the Environment and Toka Tū Ake EQC have primary responsibility for this initiative.
- 6.109. We recommend all relevant information be available on a single site (or with easy links to other sites) and that it covers all aspects of planned relocation, such as risk assessment, the planning process, decision-making, funding and implementation. The portal should outline all relevant policies, the Government assistance available to affected citizens, and the rights and responsibilities of all parties.

Recommendation 54

We recommend that there should be an integrated online information portal for climate change and natural hazards and this should cover all aspects of planned relocation.

Advisory service for communities affected by planned relocation

- 6.110. Communities affected by planned relocation must have access to comprehensive and independent advice about matters that may affect their interests and well-being.
- 6.111. The Government should establish a 'one-stop' advisory service for individuals, property owners, tenants, businesses and community organisations. Advice should be available on planning processes and timeframes, opportunities for public participation, insurance, buyouts, and other matters. This would be separate from a dispute resolution service, as discussed below. It could be established as a stand-alone service or undertaken by an existing department (eg, the Ministry of Business, Innovation and Employment).

Recommendation 55

We recommend that the Government establish a 'one-stop' advisory service for communities affected by planned relocation.

Dispute resolution services

- 6.112. Given the contentious nature of planned relocation, especially proactive relocation, it is likely affected individuals and communities will contest some of the advice and decisions of policy-makers (whether central, local or both). While such contestation is inevitable in a free and democratic society, maintaining an adequate social licence for planned relocation will be important. This means, among other things, endeavouring to design the relevant governance, planning and institutional arrangements to minimise the grounds for objections. Equally, it would be desirable to avoid frequent recourse to litigation, which would likely cause delays and risk giving more affluent individuals greater access to the justice system.

³⁴⁵ See Ministry for the Environment. 2022. *Kia urutau, kia ora: Kia āhuarangi rite a Aotearoa, Adapt and thrive: Building a climate-resilient New Zealand*. Wellington: Ministry for the Environment

- 6.113. Accordingly, a case may exist for a dedicated dispute resolution service, particularly to manage issues that arise in the process of implementing a planned relocation. On the one hand, the procedural, funding and institutional arrangements that we are recommending will hopefully reduce the likelihood of decisions being contested. For instance, if the compensatory arrangements for affected properties are relatively mechanical (ie, because they are based on clear statutory criteria rather than discretionary judgements), then the scope for objections and complaints will be more limited. On the other hand, the experience of planned relocation processes, both in Aotearoa New Zealand (eg, Christchurch) and internationally, highlights that affected citizens often feel their views and interests have been ignored by decision-makers or that public authorities have behaved in an arbitrary or unreasonable manner, thereby breaching well-established principles of natural justice.
- 6.114. It is also widely recognised that situations involving natural disasters are highly stressful. In particular, the processing of insurance claims can be challenging, especially because the relevant contracts may be complex or confusing. This is why, for example, the Government established the Greater Christchurch Claims Resolution Service (GCCRS) and the Residential Advisory Service (RAS) following the Canterbury earthquakes in 2010–11. While the GCCRS provided expert advice to homeowners on resolving insurance claims (either through Toka Tū Ake EQC or private insurers), the RAS gave homeowners access to free legal advice on unresolved claims. In 2016, RAS was extended to cover natural disasters throughout the country.
- 6.115. Building on these initiatives, in early 2023, the Government created the New Zealand Claims Resolution Service (NZCRS) to replace GCCRS and RAS. NZCRS is hosted by the Ministry of Business, Innovation and Employment and supported by Treasury, Toka Tū Ake EQC, insurance companies, and various other organisations. The service provides homeowners, via case management, with free, timely and independent advice and support to help resolve residential insurance issues due to natural disasters.³⁴⁶ The service covers legal, technical and well-being issues.
- 6.116. A similar service is required for planned relocations. In our view, those affected by planned relocations should have access to the services of the NZCRS. A case may also exist for broadening the services provided by the NZCRS (eg, to the nature and timing of any withdrawal of public services, infrastructure and utilities). In addition, where parties are unable to reach an agreement, access should be provided to publicly funded mediation services. In the longer term, a dedicated independent tribunal may be needed to resolve disputes.

Recommendation 56

We recommend that the Government investigate expanding the responsibilities of the New Zealand Claims Resolution Service to include various non-insurance related issues that may arise in the process of implementing planned relocation.

³⁴⁶ New Zealand Claims Resolution Service. *Who we are*. Retrieved 1 July 2023.

Managing political risks

- 6.117. The political challenges associated with planned relocation, especially proactive measures, must not be underestimated. Elected officials at all levels of government are likely to face pressure from residents and businesses in vulnerable settlements to protect properties rather than relocate. While protection may be justified on cost-benefit grounds in some cases (eg, as a transitional measure), in many others it will not. Institutions must therefore be configured in ways that incentivise elected officials to support policy options based on the long-term public interest rather than short-term electoral considerations.
- 6.118. One way to manage political risks is to foster public confidence through the provision of high-quality information, options analysis and risk assessment. This will require transparency, consultation and independent advisory mechanisms. As discussed in chapter 3, risk assessments that have implications for planned relocation must be undertaken according to agreed guidelines, and the risks identified in specific locations must be sufficiently serious to justify planned relocation. The processes necessary to provide the public with confidence about such matters are outlined in chapter 3.
- 6.119. A related way to manage political risk is to ensure that elected officials (at the relevant level of government) are provided with transparent, independent and authoritative advice (eg, via an independent Crown entity or a standing expert panel) on the main policy issues they need to address (such as the relative merits of protection versus relocation and the timing and sequencing of relocation). This advice will help elected officials explain and justify their decisions publicly. It will also make it more difficult for officials to prevaricate or adopt risky or expensive policy options. In this context, there could be merit in codifying this process in an appropriate statute. This might include, for instance, a legal requirement for relevant elected officials to receive formal advice from a specified independent body, before making certain decisions, as is the case for specific policy matters covered by the Climate Change Response Act 2002.
- 6.120. Finally, political risks can be reduced by securing multi-party agreements (formal or informal) on major policy issues and options. Cross-party bargains could help to reduce the potential electoral losses associated with decisions to implement (a large-scale) planned relocation. Bargains of this nature will depend primarily on individual elected officials, rather than on government departments or Crown entities. Having said this, expert advisers (whether from government agencies or external bodies) may provide a helpful behind-the-scenes role in building cross-party support for specific policy initiatives.

Sub-national government: Institutional issues

- 6.121. The implications of planned relocation for local government will depend, at least in part, on where responsibilities for decision-making are located and the extent to which regional councils, unitary councils and territorial authorities are expected to contribute financially to the costs. Even if most functions (and their related costs) are centralised at the national level, though, inevitably substantial impacts will occur from planned relocation at the sub-national level, especially regarding the funding and provision of local infrastructure, local public goods (eg, parks and reserves) and local services (eg, transport). Equally, if local authorities are involved in the preparation of LAPs and relocation programmes, as recommended in chapter 3, major

additional costs will be incurred (eg, for planning capabilities and community engagement). Also, where substantial relocations occur, there will be implications for income from rates.

- 6.122. It is uncertain what impact, if any, planned relocation will have on the structure of local government or the internal organisation of individual councils. Nevertheless, it is the current Government’s intention to regionalise many of the planning functions of local authorities, and many smaller territorial authorities have limited capabilities. This means the imperative to adapt to climate change – and especially the increasing need for planned relocation – may increase the pressure for the amalgamation of some (smaller) territorial authorities.
- 6.123. The impacts of climate change are also likely to strengthen collaboration between regional councils and territorial authorities. At the same time, some territorial authorities are likely to require technical and other assistance from central government (especially those with limited resources but significant coastal settlements that are vulnerable to sea-level rise) to undertake their roles in planned relocation. The lead ministry will need to undertake periodic assessments of what assistance is required, by whom and when.

Summary of current and recommended roles for central government organisations

- 6.124. Table 11 summarises our preferred approach for institutional arrangements for planned relocation, assuming the policy proposals outlined in earlier chapters are adopted by the Government. As noted, any significant departures from our recommendations may warrant different institutional arrangements.
- 6.125. Several institutional design issues warrant further investigation. One of these is the possible case for establishing a new departmental agency or Crown entity to undertake some of the governmental functions that planned relocation will likely require (eg, funding and financing). The Government should first decide on the overall policy framework for planned relocation and only then assess whether significant institutional reforms may be warranted.

Table 10: Current and recommended roles of central government organisations

Institution	Current roles	Recommended additional roles
Ministry for the Environment	<ul style="list-style-type: none"> Advise ministers on climate change adaptation policy 	<ul style="list-style-type: none"> Be the lead agency for all policy aspects of climate change adaptation, including planned relocation and natural hazard management Develop a stronger network of regional offices Take over responsibility for improving resilience to flood risk from Department of Internal Affairs Oversee all aspects of risk assessment

Institution	Current roles	Recommended additional roles
Ministry of Housing and Urban Development	<ul style="list-style-type: none"> Advise ministers on all matters relating to housing and urban development policy 	<ul style="list-style-type: none"> Advise on the relocation of communities Help local government in the planning of new housing projects and related public infrastructure and facilities where such projects are required
Department of Internal Affairs	<ul style="list-style-type: none"> Advise ministers on all issues relating to the roles, responsibilities and performance of local government Engage with local authorities and organisations in the sector 	<ul style="list-style-type: none"> Play a lead role in intergovernmental coordination
Toitū Te Whenua Land Information New Zealand	<ul style="list-style-type: none"> Provide property and location information Manage Crown land 	<ul style="list-style-type: none"> Expand roles related to maintaining and sharing information, including geographic, hydrographic and property information and undertaking modelling of future hazards
Kāinga Ora – Homes and Communities	<ul style="list-style-type: none"> Provide housing, housing-related financial assistance, and housing-related advice Coordinate and undertake development projects 	<ul style="list-style-type: none"> Contribute to, or lead, many aspects of the planning and implementation of planned relocation Plan new housing developments, to enable relocation of communities affected by planned relocation Ensure adequate social housing is available for those lacking resources to secure alternative properties
Toka Tū Ake – EQC	<ul style="list-style-type: none"> Provide insurance cover against damage from natural hazard events for insured residential buildings Provide direct EQC cover against natural disaster damage for residential property owners who are unable to secure EQC cover from a private insurer 	<ul style="list-style-type: none"> Provide something like direct EQC cover on a temporary basis where residential properties are affected by a proposal to undertake planned relocation and therefore are unable to secure private insurance cover Administer Natural Disaster Fund Administer separate fund for planned relocation, to cover costs of providing (partial) compensation to private property owners Extended role in funding research relating to natural hazards and improving public understanding of natural hazards
Climate Change Commission	<ul style="list-style-type: none"> Review implementation of the National Adaptation Plan 	<ul style="list-style-type: none"> Review all national, regional and local risk assessments Review and evaluate implementation of planned relocation

Institution	Current roles	Recommended additional roles
National Emergency Management Agency	<ul style="list-style-type: none"> Be the lead agency for emergency management, including building capability and capacity for emergency management, and working with government agencies; local government; iwi, hapū and Māori communities; and businesses 	<ul style="list-style-type: none"> No new roles
Infrastructure agencies	<ul style="list-style-type: none"> Provide advice about, or supply, public infrastructure 	<ul style="list-style-type: none"> Be involved in planning and implementing planned relocation Ensure that adequate new infrastructure is constructed for the relocation of affected communities Demolish and remove infrastructure from areas designated for relocation New Zealand Infrastructure Commission to provide advice about infrastructure needs and priorities in relation to climate change adaptation, including each case of planned relocation
New Zealand Claims Resolution Service	<ul style="list-style-type: none"> To be established 	<ul style="list-style-type: none"> Expand services provided to include various non-insurance related issues that may arise in a planned relocation
Environmental Protection Authority	<ul style="list-style-type: none"> Administer applications for major infrastructure projects Resource Management Act 1991 enforcement 	<ul style="list-style-type: none"> Monitor the environmental impacts of planned relocation and post-relocation arrangements

Periodic reviews of the institutional arrangements for planned relocation

6.126. Regardless of what institutional arrangements are adopted over the coming years to help with the governance, planning, funding and implementation of climate change adaptation, including planned relocation, their effectiveness must be reviewed periodically. How might such reviews be undertaken and by whom?

6.127. One option is for Te Kawa Mataaho Public Service Commission to conduct such reviews or commission independent evaluations. Another option is for the Parliamentary Commissioner for the Environment or the Climate Change Commission to undertake the assessments. Both institutions have legislative mandates that are compatible with such an approach. However, institutional design issues are not commonly prioritised.

6.128. Yet another option is to include a provision in the proposed Climate Change Adaptation Act (or equivalent legislation) requiring the Government to commission an independent review of the performance of the climate change adaptation system, including planned relocation, roughly every decade. For instance, s 235 of the Intelligence and Security Act 2017 requires a

review of the Act and the intelligence and security agencies every five to seven years. A legislative provision is probably the best option because it would ensure the review takes place regularly to a high standard.

Recommendation 57

We recommend that the Government be required by statute to commission an independent review of the performance of the institutional arrangements for climate change adaptation, including planned relocation, every ten years.



Appendices

Appendix A: Accumulated probabilities and the probability of exceedance

Probability of exceedance is a statistic that defines the likelihood of an event occurring beyond a certain intensity threshold over a period of time. The probability of exceedance is dependent on two variables: the annual exceedance probability (AEP) and the number of years being considered.

The AEP is the likelihood, as a percentage, of an event of a certain size or greater occurring in any given year. For example, if a flood (of at least a certain intensity) has a 1 per cent AEP, there is a 1 per cent chance it will happen over a 12-month period.³⁴⁷

The following describes how to calculate the probability of an event with a 1 per cent AEP (or 1:100 annual recurrence interval) occurring at least once over a 50-year period:

- a. subtract the AEP from 1 to establish the probability of the event not occurring in a given year
- b. multiply 'a' to the power of the number of years
- c. subtract 'b' from 1.

Probability of exceedance = $1 - (1 - 0.01)^{50} = 1 - (0.99)^{50} = 1 - 0.605006 = 0.394994$ (or approximately 40 per cent).

Probability of exceedance for floods in historical patterns of development

Due to a combination of historical, geographical and socioeconomic factors, Aotearoa New Zealand has a significant proportion of its housing stock situated within 1 per cent AEP flood zones. The floor height requirements for houses built inside these flood zones are established by local government and vary across regions and territorial authorities.³⁴⁸ Using the formula described above it is possible to estimate the likelihood of floodwaters reaching a property based on the water depth historically observed in 1 per cent AEP floods. As noted in the calculation above, over a 50-year period, in a stable climate, a *property* in one of these flood zones has a 40 per cent chance of being inundated with floodwaters. Similarly, during a 30-year mortgage, the property has a 26 per cent probability of being inundated. However, the amount of damage caused by these floodwaters will largely depend on the minimum floor height of the *buildings* on the property.

³⁴⁷ Average recurrence interval (ARI) is the average time, in years, between events of a certain size or greater. For example, if a flood with a specific magnitude occurs 10 times over 1,000 years, it is described as happening, on average, once every 100 years, an ARI of 100 years. Both ARI and AEP describe event frequency and are inversely related; as AEP increases, ARI decreases.

³⁴⁸ Elevating the floor height of a house is one of the most effective ways of reducing damage incurred when flood waters reach a structure.

Probability of exceedance for flood defence design standards

While there is no single design standard for flood defences in Aotearoa New Zealand, a 1 per cent AEP is commonly used for stopbanks. This means a 1 per cent chance exists of a flood event exceeding the design capacity of the stopbank in any given year. In a stable climate, over a 50-year period, this means there is a 40 per cent probability of exceedance of the stopbank and the potential for flooding of properties situated behind the stopbank.

Probability of exceedance for earthquakes in our building code

Since 2004, Aotearoa New Zealand has adopted a design standard for a 1 in 475-year ARI earthquake in its building code for residential buildings (NZS 1170.5:2004).³⁴⁹ The 1 in 475-year ARI earthquake represents an event with a 10 per cent probability of exceedance in 50 years. In other words, over its 50 year design life,³⁵⁰ a home built to this standard has only a 10 per cent chance of being subjected to an earthquake of sufficient magnitude to cause structural failure.

Critical infrastructure like hospitals, emergency centres and bridges have higher design standards to ensure their continued functionality during and after a disaster. This minimises the risk to life, because these structures need to remain operational during the response and recovery phase.³⁵¹ For example, the earthquake design standard for a hospital is a 1 in 2,500-year ARI earthquake.³⁵² This means that, over a 50-year period, the hospital has only a 2 per cent chance of being subjected to an earthquake of sufficient magnitude to cause structural failure.

Influence of climate change on flood probability of exceedance

The probability of exceedance standards we use to assess earthquake risks assume that the frequency of these events remains constant over time. However, as the climate changes, extreme weather events of a given magnitude are also changing, and, in most cases, the AEP of these events is increasing.

In Aotearoa New Zealand, flood events can be represented by a Gumbel curve (a probability distribution function).³⁵³ Climate change is affecting these curves for some water catchments by shifting them to the right and making them flatter. When the Gumbel curve shifts to the right and its spread increases, the right-side tail of the curve becomes 'fatter', which indicates a higher probability of extreme events happening. This change means that events once considered rare and severe become more likely to occur, and the likelihood of even the most extreme events also increases. This results in an increase in the AEP of these floods, with the AEP of the most extreme floods changing the fastest.

³⁴⁹ Standards New Zealand. 2004. *NZS1170.5:2004 (Includes Amdt 1)*. Retrieved 20 July 2023.

³⁵⁰ 'Design life' is a term used in housing and building codes to refer to the expected lifespan of a structure, considering factors such as durability, quality of materials and maintenance requirements.

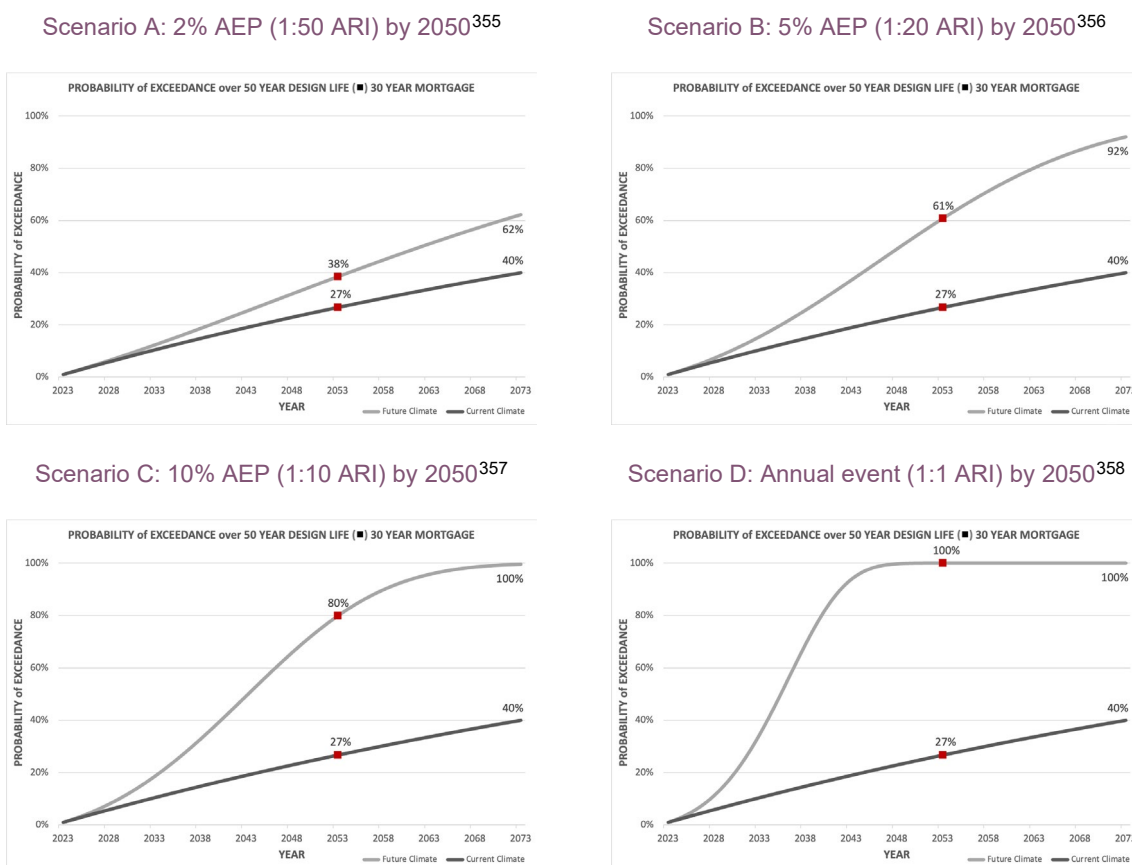
³⁵¹ These standards can also lower the cost of recovery, for example, by ensuring essential transportation routes remain open.

³⁵² New Zealand. 2004. *NZS1170.5:2004 (Includes Amdt 1)*. Retrieved 20 July 2023.

³⁵³ National Institute of Water and Atmospheric Research (NIWA). 2018. *Regional Flood Estimation Tool for New Zealand Part 2: Final report*. Prepared for Envirolink. Christchurch: NIWA.

Figure A1 shows how the probability of exceedance of a 1 per cent AEP flood changes over 50 years under four different rates of AEP change. Scenario A describes the change in flood AEP modelled in one North Island catchment with 2 degrees warming (relative to pre-industrial levels) occurring by 2050. Scenarios B and C describe possible changes in flood AEPs by 2050. Scenario D illustrates the change in ARI (and therefore AEP) for coastal flooding described in the Parliamentary Commissioner for the Environment report *Preparing New Zealand for Rising Seas* (with a Representative Concentration Pathway of 4.5).³⁵⁴

Figure A1: How the probability for exceedance of a 1 per cent annual exceedance probability (AEP) flood changes over 50 years under four different rates of AEP change



Note: ARI = average recurrence interval.

³⁵⁴ Parliamentary Commissioner for the Environment. *Preparing New Zealand for Rising Seas: Certainty and Uncertainty*. Wellington: Parliamentary Commissioner for the Environment.

³⁵⁵ Precise AEP in 2050 is 1.98 per cent. Assumes the rate of change continues past 2050 with a 2.60 per cent AEP (1:38 ARI) by 2070.

³⁵⁶ Precise AEP in 2050 is 4.88 per cent. Assumes the rate of change continues past 2050 with a 9.02 per cent AEP (1:11 ARI) by 2070.

³⁵⁷ Precise AEP in 2050 is 9.52 per cent. Assumes the rate of change continues past 2050 with a 22.03 per cent AEP (1:4 ARI) by 2070.

³⁵⁸ Precise AEP in 2050 is 63.21 per cent, which equates to a 1:1 ARI. Assumes the rate of change continues past 2050 with a 99.8 per cent AEP (1:0.2 ARI) by 2070.

Appendix B: Residential property values

Figure A2: Residential dwelling by percentile (inside and outside hazard zones)

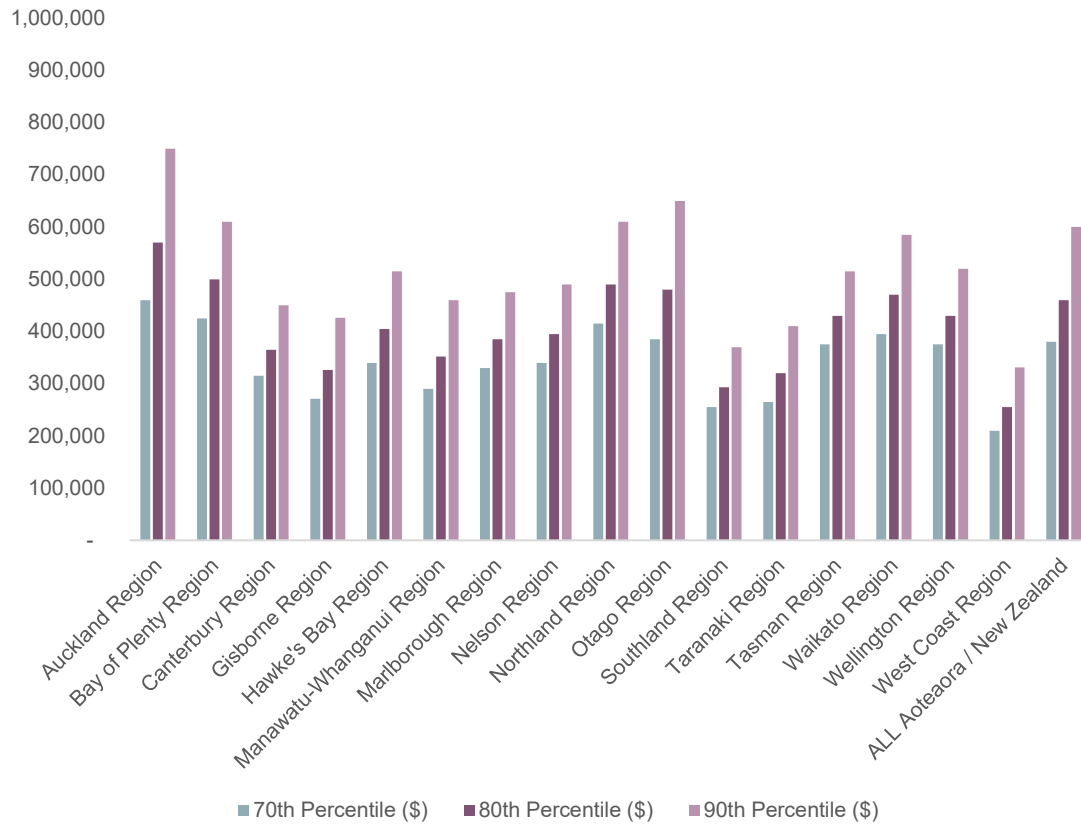
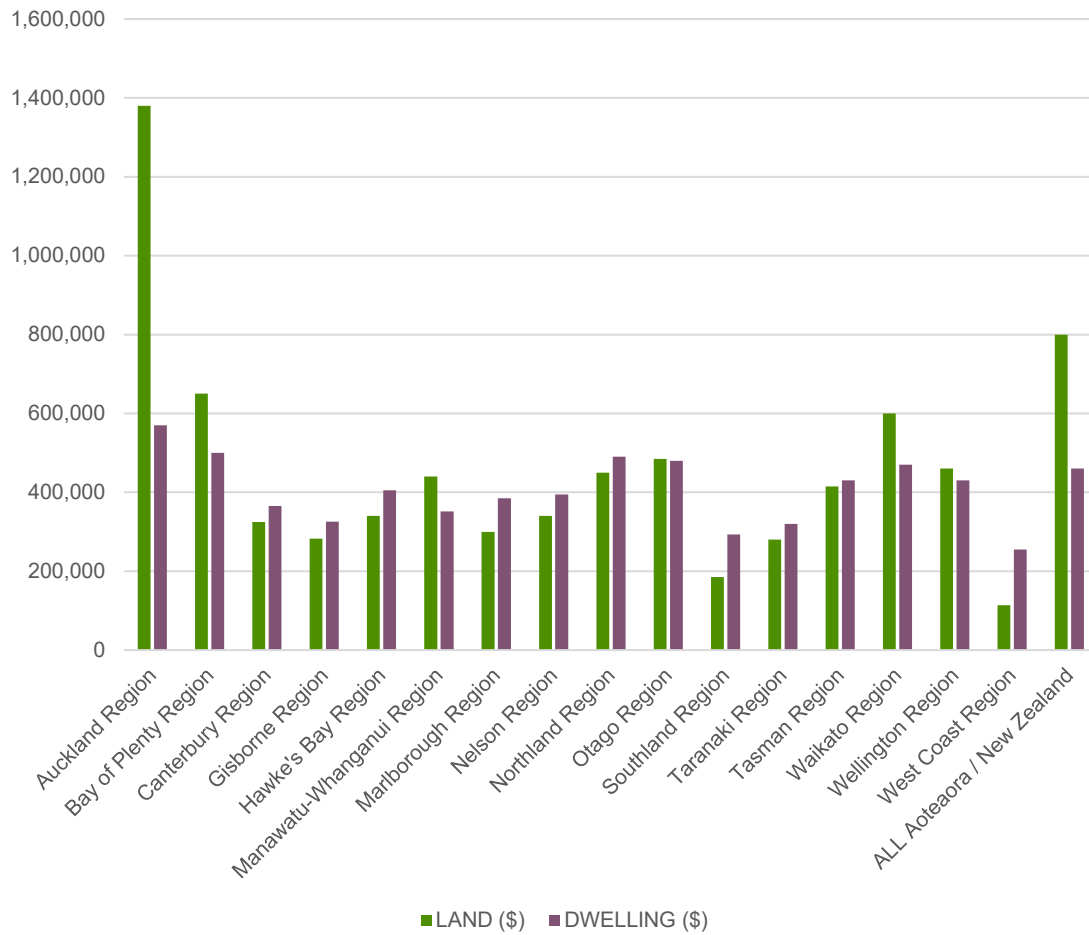


Figure A3: Eightieth percentile rating value of residential properties (inside and outside hazard zone)



See Appendix C for the statement of data limitations.

Appendix C: Data limitations

The following statement has been provided by Lynker Analytics, who supported the Group with the provision of raw data.

The provided District Valuation Roll (DVR) dataset exhibits several inconsistencies that have been identified in our assessment. We understand that weekly incremental updates are being applied but not full revaluations. Consequently, the valuation date and data is not consistent within territorial authorities with multiple current valuation dates.

The supplied DVR data did not include an assessment status. Therefore, we assume that all properties are current.

Territorial Authority 60, 'Christchurch City' has 1052 distinct current effective valuation dates. This is incorrect and likely a mistake in the data. We speculate that this date field may be getting incorrectly populated by load or edit dates rather than valuation dates.

109000 properties with positive capital value do not have parcel shapes associated with them through the property units table and so have not been placed in regions as there is no geospatial relationship. These properties are therefore not included in the region statistics.

Only two records contain gross rental data and so rental analysis has not been performed.

About 10 per cent of records have recorded number of bedrooms. For this reason, bedroom analysis has not been performed.

The DVR data does not include Dunedin City.

The NIWA coastal data does not cover Bay of Plenty.

Data sources

- Regional council boundaries from here: <https://datafinder.stats.govt.nz/layer/106666-regional-council-2022-generalised/>
- District Valuation Roll (DVR) data supplied by Toitū Te Whenua Land Information New Zealand (LINZ).
- Territorial council data from here: <https://datafinder.stats.govt.nz/layer/106691-territorial-authority-local-board-2022-generalised/>
- Coastal flood hazard maps from here: <https://niwa.co.nz/natural-hazards/our-services/extreme-coastal-flood-maps-for-aotearoa-new-zealand>
 - Note: selected the 100 cm sea level rise data
- "New Zealand Flood Hazard Map September 2022" was provided by Lynker as a classified raster image at a 50m resolution.

Bibliography

- Ajibade I, Sullivan M, Lower C, Yarina L, Reilly A. 2022. *Are managed retreat programs successful and just? A global mapping of success typologies, justice dimensions and trade-offs*. *Global Environmental Change* 76(102576).
- Allan S, Bell R, Forkink A. 2023. Coastal Realignment another coastal challenge. *Policy Quarterly* 19(1): 50–57.
- Armstrong D, Staal A, Abrams J, Winkelmann R, Sakschewski B, Loriani S, Fetzer I, Cornell S, Rockstrom J, Lenton T. 2022. Exceeding 1.5°C global warming could trigger multiple climate tipping points. *Science*. 377 (6611).
- Atlas Communications and Media Ltd. 2011. *Project Twin Streams case study: Large-scale property purchase without recourse to compulsory purchase*. Prepared for the Ministry for the Environment by Atlas Communications & Media Ltd on behalf of Waitākere City Council.
- Awatere S, Ngaru King D, Reid J, Williams L, Masters-Awatere B, Harris P, Tassell-Matamua N, Jones R, Eastwood K, Pirker J, Jackson A-M. 2021. *He huringa āhuarangi, he huringa ao: A changing climate, a changing world*. Prepared for Ngā Pae o te Māramatanga by Manaaki Whenua — Landcare Research.
- Bailey-Winiata A, Gallop SL, Hikuroa DCH, White I. 2022. The role of coastal marae in natural hazard response and climate change adaptation. In *Coastal Adaptation: Adapting to coastal change and hazard risk in Aotearoa New Zealand. Special publication 5*. Wellington: New Zealand Coastal Society. pp 41–44.
- Bargh M, Tapsell E. 2021. *For a Tika Transition: strengthen rangatiratanga*. *Policy Quarterly* 17(3): 13–22.
- Barth J, Bond S, Stephenson J. 2023. *Community engagement for climate change adaptation*. Research Summary for the South Dunedin Future Programme. Otago: Centre for Sustainability, University of Otago.
- Begum R A, Lempert R J, Ali E, Benjaminsen T A, Bernauer T, Cramer W, Cui X, Mach K, Nagy G, Stenseth N C, Sukumar R, Wester P. 2022: Point of Departure and Key Concepts. In: *Climate Change 2022: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* [H.-O. Pörtner, D.C. Roberts, M. Tignor, E.S. Poloczanska, K. Mintenbeck, A. Alegría, M. Craig, S. Langsdorf, S. Löschke, V. Möller, A. Okem, B. Rama (eds.)]. Cambridge, UK and New York, NY, USA: Cambridge University Press.
- Boston, J. 2016. Anticipatory Governance: How well is New Zealand Safeguarding the Future? *Policy Quarterly*. 12(3):11–24.
- Boston J. 2016. *Governing for the Future: Designing Democratic Institutions for a Better Tomorrow (Public Policy and Governance, Vol 25)*. Bingley: Emerald Group Publishing Limited.
- Boston J. 2023. *Funding Managed Retreat: Designing a Public Compensation Scheme for Private Property Losses: Policy Issues and Options*. Auckland: Environmental Defence Society.
- Boston J, Martin J, Pallot J, Walsh P. 1996. *Public Management: The New Zealand Model*. Auckland: Oxford University Press.
- Boston J, Lawrence J. 2018. Funding climate change adaptation: the case for a new policy framework. *Policy Quarterly*. 14(2).
- Boston J, Panda A, Surminski S. 2021. Designing a funding framework for the impacts of slow-onset climate change -insights from recent experiences with planned relocation. *Current Opinion in Environmental Sustainability*. 50.
- Brookie R. 2014. Governing the Canterbury Earthquake Recovery, 2010-2011: The debate over institutional design. in J. Boston, J. Wanna, V. Lipski, and J. Pritchard (eds.) *Future-Proofing the State: Managing Risks, Responding to Crises, and Building Resilience*. Canberra: Australian National University Press. pp.251–275.
- Building Act 2004.

Buller District Council, West Coast Regional Council and Ngāti Waewae Arahura. 2022. *Proposal to Hon Nanaia Mahuta, Minister of Local Government Co-Investment in Westport's Resilience*.

Canterbury Earthquakes Recovery Act 2011.

Canterbury Earthquake Recovery Authority (CERA). 2016. Residential Red Zone Survey (of those who accepted the Crown offer). Prepared for the Canterbury Earthquake Recovery Authority by Nielsen.

Canterbury Earthquake Recovery Authority (CERA). 2016. *Land Zoning Policy and the Residential Red Zone: responding to land damage and risk to life*. Wellington: EQ Recovery Learning.

Christchurch City Council. 2022. *Coastal Adaptation Framework*. Christchurch.

Christchurch City Council. 2022. Submission on *Te Mahere Urutaunga ā-Motu: draft National Adaptation Plan and Kia Urutau, and Kia Ora: Kia Āhuarangi Rite a Aotearoa, Adapt and Thrive: Building a Climate-Resilient New Zealand*. Christchurch: Christchurch City Council.

Climate Change Adaptation Technical Working Group. 2017. *Adapting to Climate Change in New Zealand: Stocktake Report*. Wellington.

Climate Change Adaptation Technical Working Group. 2018. *Adapting to Climate Change in New Zealand: Recommendations*. Wellington.

Cochrane W, Stubbs T, Rua M, Hodgetts D. 2017. *A statistical portrait of the New Zealand precariat*. In S Groot, C Van Ommen, B Masters-Awatere, N Tassell-Matamua (eds), *Precarity: Uncertain, Insecure and Unequal lives in Aotearoa New Zealand*. Auckland: Massey University Press. pp 25–34.

Controller and Auditor-General. 2011. *Government planning and support for housing on Māori land*. Wellington: Controller and Auditor-General.

Controller and Auditor-General. 2017. *Canterbury Earthquake Recovery Authority: Assessing its effectiveness and efficiency*. Wellington: Controller and Auditor-General.

Core Writing Team, H Lee, J Romero (eds). 2023. *Climate Change 2023: Synthesis Report*. Contribution of Working Groups I, II and III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change. IPCC: Geneva, Switzerland: IPCC.

Credit Contracts and Consumer Finance Act 2003.

Davies C, Timu-Parata C, Stairmand J, Robson B, Kvalsvig A, Lum D, Signal V. 2022. A kia ora, a wave and a smile: an urban marae-led response to COVID-19, a case study in manaakitanga *International Journal for Equity in Health*. 21(70).

Deep South Challenge. *Tangoio Marae adaptation pathways*. Retrieved 3 August 2023.

Department of Conservation. 2010. *New Zealand Coastal Policy Statement 2010*. Wellington: Department of Conservation.

Department of Internal Affairs and the Treasury. 2019. *Assessment of climate adaptation and related natural hazard management measures in other developed countries: Literature review*. Wellington.

Department of Internal Affairs. 2022. *Report: Vulnerable Communities Exposed to Flood Hazard*. Wellington.

Department of the Prime Minister and Cabinet. *The Policy Project*. Retrieved 1 July 2023.

Department of Prime Minister and Cabinet. 2017. *Whole of Government Report: Lessons from the Canterbury earthquake sequence*. Greater Christchurch Group: Department of Prime Minister and Cabinet.

Desai B, Bresch D, Cazabat C, Hochrainer-Stigler S, Mechler R, Ponserre S, Schewe J. 2021. Addressing the human cost in changing climate. *Science*. 372(6548).

Doberstein, B, Cottar S, Wong B, Anagnostou M, Hamilton S. 2021. *Government-sponsored home buyout programs and post-flood decisions to retreat: Case studies in Constance Bay, Ontario and Pointe Gatineau, Quebec*. ICLR Quick Response Program: Final Report.

Earthquake Commission Act 1993.

Ellis E. 2021. A just transition to climate-resilient communities in Aotearoa New Zealand. *Policy Quarterly*. 17(3): 23–30.

Ellis v R [2022] NZSC 114 (7 October 2022).

Fairfax Media. 2012. *Tuhoe Struggle Timeline*. Retrieved 3 August 2023.

Farquhar – Palmerston North Māori Reserve Trust [2016] NZMLC 79; (2016) 358 Aotea MB 19 (358 AOT 19) (31 August 2016).

Federal Emergency Management Agency (2021) *FEMA Resources for Climate Resilience*, US Department of Homeland Security.

Federal Emergency Management Agency. *About Us*. Retrieved 1 July 2023.

Federal Emergency Management Agency. *Building Resilient Infrastructure and Communities*. Retrieved 1 July 2023.

Forest & Bird. 2019. *Ocean Acidification: Implications for New Zealand*. Forest & Bird.

Future for Local Government Review Panel. 2023. *He piki tūrangā, he piki kōtuku: The future for local government*. Wellington: Future for Local Government Review Panel.

Glavovic, B, Kelly M, Kay R, Travers A. 2015. Towards Reflexive Adaptation at the Coast. In Glavovic B, Kelly M, Kay R, Travers A, (eds.) *Climate Change and the Coast: Building Resilient Communities*. CRC Press. pp. 519–542.

Goodyear R. 2014. *Housing in greater Christchurch after the earthquakes: Trends in housing from the Census of Population and Dwellings 1991–2013*. Wellington: Statistics New Zealand.

Government of Quebec. 2022. *Simplified Guide: Homeowners and Tenants – General Indemnity and Financial Assistance Program Regarding Actual or Imminent Disasters – Flooding*. Quebec.

Grace ES, France-Hudson BT, Kilvington MJ. 2019. *Reducing risk through the management of existing uses: tensions under the RMA*. GNS Science Report 2019/55. Lower Hutt: GNS Science.

Haasnoot M, Lawrence J, Magnan A K. 2021. Pathways to coastal retreat. *Science*. 372 (6548): 1287–90.

Grace – Ngarara West A25B2A (2014) 317 Aotea MB 268 (317 AOT 268) [2014] NZMLC 25 (27 March 2014).

Grace v Minister for Land Information [2014] NZEnvC 82 (8 April 2014).

Hanna C, White I, Glavovic B. 2017. *Managed retreat in New Zealand: Revealing the terminology, approaches and direction of local planning instruments*. Report for the National Science Challenge: Resilience to Nature's Challenges, University of Waikato.

Hanna C, White I, Glavovic B. 2018. *Managed retreat governance: Insights from Matatā, New Zealand*. Report for the National Science Challenge: Resilience to Nature's Challenges. New Zealand: University of Waikato.

Hanna C, White I, Glavovic B. 2019. *Managed Retreat in Practice: Mechanisms and Challenges for Implementation*. In BJ Gerber (ed). 2020. *The Oxford Encyclopedia of Natural Hazards Governance*. Oxford: Oxford University Press.

Hanna C, White I, Glavovic B. 2020. The uncertainty contagion: Revealing the interrelated, cascading uncertainties of managed retreat. *Sustainability*. 12(736).

Hanna C, White I, Glavovic B. 2021. *Managed retreats by whom and how? Identifying and delineating governance modalities*. *Climate Risk Management* 31(100278).

Hanna, C, Cretney R, White I. 2022. Re-imagining relationships with space, place, and property: The story of mainstreaming managed retreats in Aotearoa-New Zealand. *Planning Theory and Practice*.

Hansen J, Sato M, Simons L, Nazarenko L, Sangha I, von Schuckmann K, Loeb N, Osman M, Jin Q, Kharecha P, Tselioudis G, Jeong E, Lakis A, Reudy R, Russell G, Cao J, Li J. 2022. *Global Warming in the Pipeline*. under review.

Hayward M. 2019. *Christchurch council spends \$74k connecting water, sewerage to lone red zone house*. *Stuff* 22 February.

Health Act 1956.

Healy A, Malhotra N. 2009. Myopic voters and natural disaster policy. *American Political Science Review*. 103 (3): 387-406.

Maketu Iwi Collective. 2022. *He Toka Tū Moana Mō Maketu – Maketu Climate Change Adaptation Plan*. Retrieved 3 August 2023.

Hino M, Field C, Mach K. 2017. Managed retreat as a response to natural hazard risk. *Nature Climate Change*. 7.

Hoegh-Guldberg O, Jacob D, Taylor M, Bindi M, Brown S, Camilloni I, Diedhiou A, Djalante R, Ebi K L, Engelbrecht F, Guiot J, Hijioka Y, Mehrotra S, Payne A, Seneviratne S I, Thomas A, Warren R, Zhou G. 2018. Impacts of 1.5°C Global Warming on Natural and Human Systems. In: *Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty*. [Masson-Delmotte, V., P. Zhai, H.-O. Pörtner, D. Roberts, J. Skea, P.R. Shukla, A. Pirani, W. Moufouma-Okia, C. Péan, R. Pidcock, S. Connors, J.B.R. Matthews, Y. Chen, X. Zhou, M.I. Gomis, E. Lonnoy, T. Maycock, M. Tignor, and T. Waterfield (eds.)]. In press.

Hon Grant Robertson, Hon Michael Wood. 2023. *Govt to support councils with buyout and better protection of cyclone and flood affected properties* (release). *Beehive.govt.nz* 1 June. Retrieved 3 August 2023.

Hon Maurice McTigue on behalf of the Minister of Finance. 15 December 1992. *Hansard* Vol 532.

Hood C and Jackson M. 1991. *Administrative Argument*, London, Dartmouth.

Ihirangi. 2021. *Exploring an indigenous worldview framework for the national climate change adaptation plan – Summary document*. Prepared for the Ministry for the Environment by Irihangi.

Infrastructure Funding and Financing Act 2020.

Intergovernmental Panel on Climate Change (IPCC). 2021. *Climate Change 2021: the physical science basis, contribution of Working Group I to the sixth assessment report of the Intergovernmental Panel on Climate Change: Summary for Policymakers*. Cambridge: Cambridge University Press.

Iorns C. Wellington: Victoria University of Wellington Faculty of Law. 2019. *Treaty of Waitangi Duties Relevant to Adaptation to Coastal Hazards from Sea-Level Rise*. Victoria University of Wellington Legal Research Paper No. 63/2020.

Iorns, C. 2022. Climate Adaptation Law Reform: a lot of argument still to come. *Policy Quarterly*. 18(1) pp.14–21.

IPCC. 2022. *Climate change 2022: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* [H.-O. Pörtner, D.C. Roberts, M. Tignor, E.S. Poloczanska, K. Mintenbeck, A. Alegría, M. Craig, S. Langsdorf, S. Lösche, V. Möller, A. Okem, B. Rama (eds.)]. Cambridge University Press. Cambridge, UK and New York, NY, USA: Cambridge University Press.

IPCC. 2022. Summary for Policymakers [H.-O. Pörtner, D.C. Roberts, E.S. Poloczanska, K. Mintenbeck, M. Tignor, A. Alegría, M. Craig, S. Langsdorf, S. Lösche, V. Möller, A. Okem (eds.)]. In: *Climate Change 2022: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* [H.-O. Pörtner, D.C. Roberts, M. Tignor, E.S. Poloczanska, K.

Mintenbeck, A. Alegría, M. Craig, S. Langsdorf, S. Löschke, V. Möller, A. Okem, B. Rama (eds.]. Cambridge, UK and New York, NY, USA: Cambridge University Press.

IPCC. 2023. Climate Change 2023: Synthesis Report. Contribution of Working Groups I, II and III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [Core Writing Team, H. Lee and J. Romero (eds.]]. IPCC: Geneva, Switzerland.

IPCC. 2023. Summary for Policymakers. In: *Climate Change 2023: Synthesis Report. Contribution of Working Groups I, II and III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* [Core Writing Team, H. Lee and J. Romero (eds.]]. Geneva, Switzerland: IPCC.

James V, Gerard P, Iorns C. 2020. Sea Level Rise and Local Government: policy gaps and opportunities. *Policy Quarterly*. 16(1): 62–66.

Kemp, L, Xu C, Depledge J, Lenton T M. 2022. Climate Endgame: Exploring catastrophic climate change scenarios. *PNAS*. 119(34).

Kool R, Lawrence J, Drews M, Bell, R. 2020. *Preparing for Sea-Level Rise through Adaptive Managed Retreat of a New Zealand Stormwater and Wastewater Network. Infrastructures*. 5(11).

Kowhai TR. 2022. *Māori cultural sites among most vulnerable to climate change, rising sea levels*. Newshub 8 May.

Kulp S, Strauss B. 2019. New elevation data triple estimates of global vulnerability to sea-level rise and coastal flooding. *Nature Communications*. 10 (4844).

Land Act 1948.

Law CS, Bell JJ, Bostock HC, Cornwall CE, Cummings VJ, Currie K, Davy SK, Gammon M, Hepburn CD, Hurd CL, Lamare M, Mikaloff-Fletcher SE, Nelson WA, Parsons DM, Ragg NLC, Sewell MA, Smith AM, Tracey DM. 2018. Ocean acidification in New Zealand waters: Trends and impacts. *New Zealand Journal of Marine and Freshwater Research*. 52(2): 155–195.

Lawrence J. 2016. Implications of climate change for New Zealand's natural hazards risk management. *Policy Quarterly*. 12(3): 30–9.

Lawrence J, Reisinger A, Mullan B, Jackson B. 2013. Exploring climate change uncertainties to support adaptive management of changing flood-risk. *Environmental Science and Policy*. 33: 133–42.

Lawrence J, Blackett P, Cradock-Henry N, Flood S, Greenaway A, Dunningham A. 2016. *Climate Change Impacts and Implications for New Zealand to 2100. Synthesis report RA4: enhancing capacity and increasing coordination to support decision making*. Wellington: CCII.

Lawrence J, Allan S, Clarke L. 2021. *Enabling Coastal Adaptation: Using current legislative settings for managing the transition to a dynamic adaptive planning regime in New Zealand*. Wellington: Resilience to Nature's Challenges National Science Challenge – Enabling Coastal Adaptation Programme.

Lawrence J, Blackett P, Cradock-Henry N, Nistor BJ. 2018. *Climate Change: The Cascade Effect. Cascading impacts and implications for Aotearoa New Zealand*. Wellington: Deep South Challenge.

Lawrence J, Boston J, Bell R, Olufson S, Kool R, Hardcastle M, Stroombergen A. 2020. *Implementing pre-emptive managed retreat: constraints and novel insights*. *Current Climate Change Reports* 6: 66–80.

Lawrence J, Mackey B, Chiew F, Costello M, Hennessy K, Lansbury N, Nidumolu U B, Pecl G, Rickards L, Tapper N, Woodward A, Wreford A. 2022. Australasia. In: *Climate Change 2022: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* [H.-O. Pörtner, D.C. Roberts, M. Tignor, E.S. Poloczanska, K. Mintenbeck, A. Alegría, M. Craig, S. Langsdorf, S. Löschke, V. Möller, A. Okem, B. Rama (eds.]]. Cambridge, UK and New York, NY, USA: Cambridge University Press.

Lawrence J, Wreford A, Allan S. 2022. Adapting to Avoidable and Unavoidable Climate Change: What must Aotearoa New Zealand Do? *Policy Quarterly* 18(2): 51–60.

- Local Government (Rating) Act 2002.
- Local Government (Rating of Whenua Māori) Amendment Act 2021.
- Local Government New Zealand. 2016. *The 2050 Challenge: future proofing our communities*, Wellington: Local Government New Zealand.
- Local Government New Zealand. 2016. *Risk Financing in Local Government: a guide prepared by David Middleton ONZM, Kestrel Group*. Wellington: Local Government New Zealand.
- Local Government New Zealand. 2019. *Vulnerable: The quantum of local government infrastructure exposed to sea level rise*. Wellington: Local Government New Zealand.
- Local Government New Zealand. 2021. *Review of Land Information Memorandums: Achieving best practice Opportunity for a National Template*. Wellington: Local Government New Zealand.
- Mach K, Kraan C, Hino M, Siders A R, Johnston E, Field C. 2019. Managed retreat through voluntary buyouts of flood-prone properties. *Science Advances*. 5(10).
- Mach K, Siders AR. 2021. Framing strategic, managed retreat for transformative climate adaptation. *Science*. 372 (6548): 1294-99.
- Mahuta N. 2019. Supporting a Response to Natural Hazard Risk-to-life in Matatā. Cabinet Business Committee. Minute of Decision. BC-19-MIN-0028. Wellington.
- Maldonado J, Marino E, Iaukea L. 2020. *Reframing the language of retreat*. *Eos* 101.
- Malloch H. 2021. Building a Secure Fence and a Well-Functioning Ambulance: Reforming New Zealand's Natural Disaster Insurance Scheme. *Victoria University of Wellington Law Review* 52(1): 137–163.
- Māori Affairs Amendment Act 1967.
- Māori Maps. *Welcome to Māori Maps*. Retrieved 3 August 2023.
- Māori Reserved Land Act 1955.
- Marine and Coastal Area (Takutai Moana) Act 2011.
- Marr C. 1997. *Public Works Takings of Māori Land, 1840–1981. Rangahaua Whanui National Theme G*. Wellington: Waitangi Tribunal.
- Maungaharuru-Tangitū Trust. 2018. *Marae Options*. Retrieved 3 August 2023.
- Mead HM. 2003. *Tikanga Māori: Living by Māori Values*. Wellington: Huia.
- Menzies, M. 2022. Long-term Insights Briefings: a futures perspective. *Policy Quarterly*. 18(4): 54-64.
- Ministerial Inquiry into Land Uses in Tairāwhiti and Wairoa. 2023. *Outrage to Optimism - Report of the Ministerial Inquiry into land uses associated with the mobilisation of woody debris (including forestry slash) and sediment in Tairāwhiti/Gisborne District and Wairoa District*. New Zealand: Ministerial Inquiry into Land Uses in Tairāwhiti and Wairoa.
- Ministry for Culture and Heritage. 2021. *The year of the lamb*. Retrieved 3 August 2023.
- Ministry for the Environment. 2017. *Coastal Hazards and Climate Change: Guidance for Local Government*. Wellington: Ministry for the Environment.
- Ministry for the Environment. 2019. *Arotakenga Huringa Āhuarangi: A Framework for the National Climate Change Risk Assessment for Aotearoa New Zealand*. Wellington: Ministry for the Environment.
- Ministry for the Environment. 2020. *National Climate Change Risk Assessment for New Zealand: Arotakenga Tūrarū mō te Huringa Āhuarangi o Āotearoa. Main report: Pūrongo Whakatōpū*. Wellington: Ministry for the Environment.
- Ministry for the Environment. 2021. *New interdepartmental executive board for Spatial Planning Act*. Retrieved 1 July 2023.

Ministry for the Environment. 2022. *Draft National Adaptation Plan*. Wellington: Ministry for the Environment.

Ministry for the Environment. 2022. *Interim guidance on the use of new sea-level rise projections*. Wellington: Ministry for the Environment.

Ministry for the Environment. 2022. *Kia urutau, kia ora: Kia āhuarangi rite a Aotearoa, Adapt and thrive: Building a climate-resilient New Zealand*. Wellington: Ministry for the Environment.

Ministry for the Environment. 2022. *Managed Retreat from a Māori perspective*. Prepared for the Ministry for the Environment by Te Amokura Consultants (unpublished).

Ministry for the Environment. 2022. *Te hau mārohi ki anamata: Towards a productive, sustainable and inclusive economy: Aotearoa New Zealand's first emissions reduction plan*. Wellington: Ministry for the Environment.

Ministry of Foreign Affairs and Trade. 2023. Cyclone Gabrielle's impact on the New Zealand economy and exports. Wellington: The Ministry of Foreign Affairs and Trade.

Moss R, Reed P, Hadjimichael A, Rozenberg J. 2021. Planned relocation: Pluralistic and integrated science and governance. *Science*. 372(6548): 1276-79.

Naish T, Levy RH, Hamling IJ, Garner G, Hreinsdottir S, Kopp R, Golledge N, Bell R, Paulik R, Lawrence J, Denys P, Gillies T, Bengston S, Clark K, King D, Litchfield N, Newnham R, Wallace L. 2022. *The significance of vertical land movements at convergent plate boundaries in probabilistic sea-level projections for AR6 scenarios: The New Zealand case*. Manuscript submitted for publication.

Nalau J, Handmer J. 2018. Improving development outcomes and reduced disaster risk through planned community relocation. *Sustainability*. 10(3545).

National Institute of Water and Atmospheric Research (NIWA). 2018. *Regional Flood Estimation Tool for New Zealand Part 2: Final report*. Prepared for Envirolink. Christchurch: NIWA.

National Institute of Water and Atmospheric Research (NIWA). 2019. *News report highlight flood risk under climate change*. NIWA 21 August. Retrieved 7 August, 'Over 70,000 New Zealanders currently at risk' section.

Natural and Built Environment Bill 2022.

Natural Hazards Insurance Act 2023.

New M, Reckien D, Viner D, Adler C, Cheong S, Conde C, Constable A, Coughlan de Perez E, Lammel A, Mechler R, Orlove B, Solecki W. 2022. Decision making options for managing risk. In *Climate Change 2022: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* [H.-O. Pörtner, D.C. Roberts, M. Tignor, E.S. Poloczanska, K. Mintenbeck, A. Alegría, M. Craig, S. Langsdorf, S. Lösschke, V. Möller, A. Okem, B. Rama (eds.)]. Cambridge, UK and New York, NY, USA: Cambridge University Press.

New Zealand Claims Resolution Service. *Who we are*. Retrieved 1 July 2023.

New Zealand Coastal Society. 2022. In *Coastal Adaptation: Adapting to coastal change and hazard risk in Aotearoa New Zealand. Special publication 5*. Wellington: New Zealand Coastal Society.

New Zealand Government. 2023. *Govt to support councils with buyout and better protection of cyclone and flood affected properties*. Retrieved 20 July 2023.

New Zealand Productivity Commission (2019) *Report on Local Government Funding and Financing*. Wellington.

Nielson. 2016. *Residential Red Zone Survey*.

Noy I. 2020. Paying the price of climate change: who pays for managed retreat? *Current Climate Change Reports*. 6: 17–23.

NZ SeaRise. Predicting sea-level rise for Aotearoa New Zealand. Retrieved 3 August 2023.

O'Donnell T. 2022. Managed retreat and planned retreat: a systematic literature review. *Philosophical Transactions B*. 377(20210129).

- OECD. 2015. *Adapting to the Impacts of Climate Change: policy perspectives*. Paris: OECD.
- OECD. 2019. *Comparative approaches to sea-level rise: OECD country responses to tackling coastal risks*. Paris: OECD.
- OECD. 2022. *Foresight and anticipatory governance Lessons in effective foresight institutionalisation*. Strategic Foresight Unit: Office of the Secretary-General.
- Office of the Auditor-General New Zealand. 2004. *Māori Land Administration: Client Service Performance of the Māori Land Court Unit and the Māori Trustee: Report of the Controller and Auditor-General*. Wellington: Office of the Auditor-General of New Zealand.
- Office of the Chief Registrar, Māori Land Court. 2022. *Māori Land Update | Ngā Āhuatanga o te whenua. June 2022 | Pipiri 2022*. Wellington: Ministry of Justice | Te Kooti Whenua Māori.
- Olufson SE. 2019. *Managed Retreat Components and Costing in a Coastal Setting*. Master's Thesis. Wellington: VUW.
- Owen S, Noy I. 2019. Regressivity in Public Natural Hazard Insurance: A Quantitative Analysis of the New Zealand Case. *Economics of Disasters and Climate Change* 3(3): 235–255.
- Palmer G. 2001. *Westco Lagan v Attorney-General*. *New Zealand Law Journal*. 163.
- Palmer M, Knight D. 2022. *The Constitution of New Zealand: A Contextual Analysis*, Oxford: Hart.
- Parliamentary Commissioner for the Environment. 2014. *Changing climate and rising seas: Understanding the Science*. Wellington: Parliamentary Commissioner for the Environment.
- Parliamentary Commissioner for the Environment. 2015. *Preparing New Zealand for rising seas: Certainty and uncertainty*. Wellington: Parliamentary Commissioner for the Environment.
- Paulik R, Stephens S, Wadhwa S, Bell R, Popovich B, Robinson B. 2019. Coastal Flooding Exposure Under Future Sea-level Rise for New Zealand. National Institute of Water and Atmospheric Research (NIWA): Prepared for The Deep South Challenge.
- Paulik R, Heather C, Collins D. 2019. New Zealand Fluvial and Pluvial Flood Exposure. NIWA. 58 pp.
- Paulik R, Stephens S, Bell R, Wadhwa S, Popovich B. 2020. National-Scale Built-Environment Exposure to 100-Year Extreme Sea Levels and Sea-Level Rise. *Sustainability*. 12(4): 1513.
- Paulik R, Zorn C, Wotherspoon L, Sturman J. 2023. Modelling national residential building exposure to flooding hazards. *International Journal of Disaster Risk Reduction*. 94(103826).
- Peart R, Boston J, Maher S, Konlechner T. 2023. *Aotearoa New Zealand's Climate Change Adaptation Act: Building a Durable Future, Principles and Funding for Managed Retreat, Working Paper 1*. Auckland: Environmental Defence Society.
- Peart R, Tombs BD. 2023. *Aotearoa New Zealand's Climate Change Adaptation Act: Building a Durable Future – Current Legislative and Policy Framework for Managed Relocation: Working Paper 2*. Auckland: Environmental Defence Society.
- Peters B. 2019. *Institutional Theory in Political Science: The New Institutionalism*. Cheltenham: Edward Elgar.
- Property Law Act 2007.
- Public Works Act 1981.
- Quake Outcasts v Minister for Earthquake Recovery* [2015] NZSC 27, [2016] 1 NZLR 1.
- Quake Outcasts v Minister of Canterbury Earthquake Recovery* [2017] NZCA 332, [2017] 3 NZLR 486.
- Queen Elizabeth the Second National Trust Act 1977.
- Queensland Reconstruction Authority. *About us*. Retrieved 1 July 2023.
- Rating Valuations Act 1998.

Reisinger A, Howden M, Vera C, Garschagen M, Hurlbert M, Kreibiehl S, Mach KJ, Mintenbeck K, O'Neill B, Pathak M, Pedace R, Pörtner H-O, Poloczanska E, Rojas Corradi M, Sillman J, van Aalst M, Viner D, Jones R, Ruane AC, Ranasinghe R. 2020. *The concept of risk in the IPCC Sixth Assessment Report: a summary of cross-Working Group discussions. Guidance for IPCC Authors*. Geneva, Switzerland: Intergovernmental Panel on Climate Change.

Reserve Bank of New Zealand. 2021. *Climate Changed: 2021 and Beyond*. Wellington: Reserve Bank of New Zealand.

Reserve Bank of New Zealand. 2023. *Registered banks and non-bank lending institutions: Sector lending (C5)*. Accessed 1 July 2023.

Reserves Act 1997.

Resource Management Act 1991.

River Managers Special Interest Group. 2022. *Central Government Co-Investment in Flood Protection Schemes, Supplementary Report*. Te Uru Kahika Regional and Unitary Councils Aotearoa.

RNZ. 2023. *Cyclone Gabrielle: Flooded Hawkes Bay cemetery exposes graves, bones in Omaha*. *NZ Herald* 18 February.

Rolleston S, Awatere S. 2009. *Ngā hua papakāinga: Habitation design principles*. *MAI Review* 2(2): 1–13.

Rout M, Awatere S, Mika JP, Reid J, Roskruge M. 2021. A Māori approach to environmental economics: Te ao tūroa, te ao hurihuri, te ao mārama—The old world, a changing world, a world of light. In JR Kahn (ed). *Oxford Encyclopedia of Environmental Economics*. Oxford University Press.

Ryan E, Owen S, Lawrence J, Glavovic B, Robichaux L, Dickson M, Kench P, Schnelder P, Bell R, Blackett P. Formulating a 100-year strategy for managing coastal hazard risk in a changing climate: Lessons learned from Hawke's Bay. New Zealand, *Environmental Science and Policy*. 127: 1–11.

Saunders W, Smith G. 2019. *Spending to save: Investigating the property acquisition process for risk reduction in Aotearoa New Zealand*. GNS Science Report.

Schneider P, Glavovic B, Farrelly T. 2017. So close yet so far apart: Contrasting climate change perceptions in two "neighbouring" coastal communities in Aotearoa New Zealand's Coromandel Peninsula. *Environments*. 4(3): 65.

Schneider P, Glavovic B. 2019. Climate change adaptation in New Zealand. In B. Gerber, et al. *Oxford Encyclopedia of Natural Hazards Governance*. Oxford: Oxford University Press.

Schneider P, Lawrence J, Glavovich B, Ryan E, Blackett P. 2020. A rising tide of adaptation: Comparing two coastal regions in Aotearoa-New Zealand. *Climate Risk Management*. 30(100244).

Severe Weather Emergency Recovery Legislation Bill 2023.

Siders A. 2019. Managed retreat in the United States. *One Earth*. 1(2): 216-225.

Siders A, Hino M, Mach K. 2019. The case for strategic and managed retreat: Why, where, when, and how should communities relocate? *Science*. 365(6455): 761–763.

Siders A, Ajibade I. 2021. Introduction: Managed retreat and environmental justice in a changing climate. *Journal of Environmental Studies and Sciences*. 11: 287–293.

Simmonds J. 2020. *Rising from the Flood: Moving the Town of Grantham*. Bad Apple Press.

Smale A. 2023. *The long tail of Cyclone Gabrielle: Between the rivers*. *Newsroom* 13 June. Retrieved 3 August 2023.

Smart J. 2014. The role of post-disaster institutions in recovery and resilience: A comparative study of three disasters. In J. Boston, J. Wanna, V. Lipski, and J. Pritchard (eds.) *Future-Proofing the State: Managing Risks, Responding to Crises, and Building Resilience*. Canberra: Australian National University Press. pp 229–249.

Smith G, Saunders W, Vila O, Gyawali S, Bhattarai S, Lawdley E. 2021. A comparative analysis of hazard-prone housing acquisition programs in the US and New Zealand Communities. *Journal of Environmental Studies and Sciences*. 11: 392–403

Soil Conservation and Rivers Control Act 1941.

Spatial Planning Bill 2022.

Standards New Zealand. 2004. *NZS1170.5:2004 (Includes Amdt 1)*. Retrieved 20 July 2023.

Standards New Zealand. 2021. *ISO 14091:2021*. Retrieved 8 August 2023.

Stats NZ. *Measuring child poverty; Material hardship*. Retrieved 1 July 2023.

Stats NZ. 2020. *Housing in Aotearoa: 2020*. Wellington: Stats NZ.

Steele C, Williams N, Dawe I. 2019. *Preparing Coastal Communities for Climate Change – Assessing coastal vulnerability to climate change, sea level rise and natural hazards*. Mitchell Daysh Ltd.

Stephenson J, Barth J, Bond S, Diprose G, Orchiston C, Simon K, Thomas A. 2020. Engaging with communities for climate change adaptation: introducing community development for adaptation. *Policy Quarterly*. 16(2): 35–40.

Storey B. 2017. *Conversion to Leasehold as a Methodology to Price Sea Level Rise Risk*. Master's Dissertation. Christchurch: Canterbury University.

Storey B, Noy I, Owen S, Townsend W, Kerr S, Salmon R, Middleton D, Filippova O, James V. 2017. *Insurance, Housing and Climate Adaptation: current knowledge and future research, Motu note 27*. Wellington: Motu Economic and Public Policy Research.

Storey B, Noy I. 2017. Insuring property under climate change. *Policy Quarterly*. 13(4): 68–74

Tapsell P. 2002. *Marae and tribal identity in urban Aotearoa/New Zealand*. *Pacific Studies* 25(1): 31.

Taranaki Regional Council. 2017. Waitōtara Scheme Management Plan. Document No: 1794900.

Task Force on Flood Insurance and Relocation. 2022. *Adapting to Rising Flood Risk: An Analysis of Insurance Solutions for Canada*. Ottawa, Canada: Government of Canada.

Te Arawhiti: Office of Māori-Crown Relations. 2018. *Ka tika ā muri, ka tika ā mua — Healing the past, building a future' – A Guide to Treaty of Waitangi Claims and Negotiations with the Crown*. Wellington: Te Arawhiti: Office of Māori-Crown Relations.

Te Arawhiti: Office for Māori Crown Relations. 2021. *Takutai Moana Crown Engagement Strategy*. Cabinet Paper. Wellington: Cabinet Office, Department of the Prime Minister and Cabinet.

Te Kawa Maaaho Public Service Commission. *Te hanga o te rangai tūmatanui: How the public sector is organised*. Retrieved 1 July 2023.

Te Kāwanatanga o Aotearoa. 2023. *Māori climate adaptation – Brief to the Māori Affairs Select Committee 8 March 2023*. Retrieved 10 August 2023.

Te Puni Kōkiri | Ministry of Māori Development. 2013. *Discussion paper*. Wellington: Te Puni Kōkiri.

Te Puni Kōkiri | Ministry of Māori Development. 2014. *Report: Te Ture Whenua Māori Act 1993 Review Panel*. Wellington: Te Puni Kōkiri.

Te Puni Kōkiri | Ministry of Māori Development. 2023. *Māori Climate Adaptation: Briefing to Māori Affairs Select Committee- 8 March 2023*. Retrieved 10 August 2023.

Te Ture Whenua Māori Act 1993.

Thaler T. 2021. Just retreat—how different countries deal with it: examples from Austria and England. *Journal of Environmental Studies and Science*. 11: 412–419.

- Thaler T, Doorn N, Hartmann T. 2020. Justice of compensation for spatial flood risk management – comparing the flexible Austrian and the structured Dutch. *Journal of the Geographical Society of Berlin*. 151(1-2): 104–115.
- The Christchurch Earthquake Recovery Act 2011.
- The New Zealand National Society for Earthquake Engineering. 1993. Changes to Disaster Insurance in New Zealand. *Bulletin of the New Zealand National Society for Earthquake Engineering* 26(4): 437–444.
- The Treasury. 2021. *He Tirohanga Mokopuna 2021 The Treasury's combined Statement on the Long-term Fiscal Position and Long-term Insights Briefing*. Wellington: The Treasury.
- The Treasury. 2023. *Impacts from North Island weather events – information release*. Wellington: The Treasury.
- The Treasury. 2021. *The Living Standards Framework (LSF) 2021*. Wellington: The Treasury.
- Toka Tū Ake EQC. *Land cover*. Retrieved 1 July 2023.
- Toomey E, Finn J, France-Hudson B, Ruru J. 2017. *Report ER23: Revised Legal Frameworks for Ownership and Use of Multi-dwelling Units*. Porirua, Wellington: BRANZ.
- Truebridge N, Law T. 2018. *City council considering buying several red-zoned Christchurch properties*. Stuff 6 March. Retrieved 1 August 2023.
- Tubridy F, Lennon M, Scott M. 2022. *Managed retreat and coastal climate change adaptation: The environmental justice implications and value of a coproduction approach*. *Land Use Policy* 114(3): 105960.
- Tombs, BD, France-Hudson B. 2018. Climate change compensation: an unavoidable discussion. *Policy Quarterly*, 18(4): 50–58.
- Tombs BD, Stephenson J, France-Hudson B, Ellis E. 2021. 'Property Purgatory'. *Policy Quarterly* 17(1): 50.
- Tombs, BD. 2022. *Property Purgatory*. PhD Thesis. University of Otago, forthcoming.
- Uekusa S, Matthewman S, Glavovic B. 2022. *A Decade of Disaster Experiences in Ōtautahi Christchurch: Critical Disaster Studies Perspectives*. Palgrave Macmillan.
- United Nations Permanent Forum on Indigenous Issues. *Climate change and indigenous peoples*. Retrieved 20 July 2023.
- Urban Development Act 2020.
- Vandenbeld A, MacDonald J. 2013. *Fostering community acceptance of managed retreat in New Zealand*. In J Palutikof, SL Boulter, AJ Ash, MS Smith, M Parry, M Waschka, D Guitart (eds). *Climate Adaptation Futures*. Wiley-Blackwell.
- Waitakere City Council v Estate Homes Limited* [2006] NZSC 112; [2007] 2 NZLR 149.
- Waitangi Tribunal. 2010. *Wairarapa ki Tararua Report*. Wellington: Waitangi Tribunal.
- Waitangi Tribunal. 2015. *Undated brief of evidence of Moana Jackson: Wai 2470*. Document A11. Wellington: Waitangi Tribunal.
- Waitangi Tribunal. 2016. *He Kura Whenua ka Rokohanga Report on Claims about the Reform of Te Ture Whenua Māori Act 1993: Wai 2478*. Wellington: Waitangi Tribunal.
- Wara I. 2023. *How a marae supported its community during Cyclone Gabrielle*. *Consumer* 4 May. Retrieved 3 August 2023.
- Warren A. 2022. *Dispute Resolution*. Māori Land Court | Judge's Corner.
- Whānau Ora. *About Us*. Retrieved 1 July 2023.
- Wikipedia. *Cynefin framework*. Retrieved 3 August 2023.

Wiseman J, Williamson L, Fritze J. 2009. Community engagement and climate change: learning from recent Australian experience. *International Journal of Climate Change Strategies and Management* 2(2): 134–147.

Wisner B, Blaikie P, Cannon T, Davis I. 2004. 2nd ed. *At Risk: Natural hazards, people's vulnerability and disasters*. New York: Routledge.

World Bank. 2020. *The Adaptation Principles A Guide for Designing Strategies for Climate Change Adaptation and Resilience*. Washington D.C.: World Bank.