

Catherine Iorns

Climate Adaptation Law Reform

a lot of argument still to come

Abstract

New Zealand's existing law and policy is not adequate to provide for appropriate adaptation to the effects of climate change. The government has adopted recommendations to replace the current Resource Management Act with a new suite of resource management laws, including for climate adaptation. The recommendations include bold measures to ensure that people and property are not subject to climate hazards in the future, and for funding mechanisms to enable the required changes. Much policy is still to be developed but the potential exists for better adaptation planning and decisions, with more certainty and lower litigation risks. This article summarises the proposed reforms and comments on how well they provide what is needed for better climate adaptation laws.

Keywords sea level rise, New Zealand, policy challenges, Resource Management Act, Randerson panel, law reform

Catherine Iorns is a professor of law at Te Herenga Waka Victoria University of Wellington. She has undertaken research for the Deep South National Science Challenge pursuant to its impacts and implications programme, available at: <https://deepsouthchallenge.co.nz/research-project/sea-level-rise-housing-and-insurance-liability-and-compensation/>.

Sea level rise due to climate change will substantially increase damage from flooding, storm surges and landslips (Parliamentary Commissioner for the Environment, 2015). Some coastal locations have already become uninhabitable, due to either sudden-onset disasters or a series of smaller events that accumulate to large losses, with coastal residents forced to relocate (James, Iorns and Gerard, 2020). We will need to prevent future development in hazardous areas, and reconsider the continuation of existing coastal development.

Unfortunately, it is not easy to achieve the necessary climate adaptation under existing laws and policies. Various researchers have identified that New Zealand's existing law and policy are not adequate to provide for appropriate adaptation to the effects of climate change. For example, Boston and Lawrence (2017, 2018) argued for a national mechanism to fund the costs of climate adaptation nationally and share them, both intra-generationally and intergenerationally. The Climate Change Adaptation Technical Working Group (2018) recognised the need for proactive planning, and improvements in leadership, funding, capability and capacity building, and information to support decision making. The New

Zealand Productivity Commission report on local government funding stated that a national legal framework for climate change adaptation was urgently required and stressed the need for central government funding for adaptation measures (Productivity Commission, 2019). Under the umbrella of New Zealand’s National Science Challenges, more detailed research has been conducted into the operation and evaluation of laws relating to EQC insurance (James, Iorns and Watts, 2019), adaptation decision making and options under the Resource Management Act (Iorns and Watts, 2019), managed retreat and other ways of dealing with existing uses (Grace, France-Hudson and Kilvington, 2019; Tombs and France-Hudson, 2018), and the overall equity of the sharing of risks (Ellis, 2019; Tombs et al., 2021). All of the recommendations focus on the need for better decision-making rules, standards and processes for adaptation to climate hazards in Aotearoa.

In 2019 the government commissioned an independent review of the Resource Management Act (RMA) by a Resource Management Review Panel, chaired by Tony Randerson, QC (frequently referred to as the Randerson panel). The panel’s terms of reference included a climate focus: increasing New Zealand’s resilience to manage climate change risks, enabling decision making that can better reflect the needs and interests of the wider community, including those of future generations, and ensuring that the RMA aligns with the government’s other work and institutions responding to climate change.

In June 2020 the panel produced an extensive, 531-page report which recommended comprehensive law reform, involving replacement of the current Resource Management Act with three separate pieces of legislation:

- a Natural and Built Environments Act, addressing the development and protection of our natural environment, with more effective protection of natural environmental limits and more mandatory national goals, guidelines, standards and rules;
- a Strategic Planning Act, to address uses of land and the coastal marine area across the country in a planned and more managed way; and

One unfortunate feature of the lack of national direction is the fear of ‘additional litigation’ challenging any council that tries to formulate plans and policies ...

- a Managed Retreat and Climate Change Adaptation Act, in order to provide for the complexities of climate adaptation, including particularised legal rules and a long-term funding mechanism.

In February 2021 the government announced that it would proceed with reform of the RMA in line with the panel’s recommendations. The drafting process has included the release of an exposure draft of part of the Natural and Built Environments Bill, to enable a parliamentary select committee to consider some key provisions early in the process (New Zealand Government, 2021). The Environment Committee reported in early November 2021, largely approving of these provisions (Environment Committee, 2021). It is intended that the Natural and Built Environments Bill and the Strategic Planning Bill will be introduced to Parliament in 2022, and the proposed Managed Retreat and Climate Change Adaptation Bill in 2023. While the timing differs, policy for all three will be developed closely so that ‘linkages between the proposed pieces of legislation are maintained’ (Minister for Climate Change, 2020).

This article summarises the climate adaptation reform proposals, and comments on how well they appear to meet the law reform needs identified.

Resource Management Review Panel report
The Resource Management Review Panel report identifies at a broad level all of

the significant issues that have caused insufficient adoption of appropriate climate adaptation measures. It notes the low priority of consideration of the effects of climate change in part 2 of the RMA, as well as a lack of a proper framework within the RMA for considering future risks. The effects-based approach of the RMA does not lend itself towards a proactive risk management approach (Resource Management Review Panel, 2020, p.171).

To solve these issues, the panel’s report proposes a comprehensive reform package with underlying principles that are different from those of the current legislative regime, plus significant reforms that are explicitly designed to better enable adaptation to the effects of climate change. Significantly, the proposals include some radical alterations to the protection of existing property rights and related measures to enable managed retreat from hazard risks. However, despite the report’s overall size, breadth and depth in some areas, only one chapter of 26 pages is devoted to ‘Climate change and natural hazards’, and this chapter addresses both mitigation and adaptation options. While it looks like all needed reforms will be addressed, success is not guaranteed: significant matters of principle have not yet been decided, let alone the eventual rules drafted.

National guidance

‘A lack of national direction and guidance from central government’ was said to be the primary failing of the current laws on climate adaptation. This lack of direction includes development at a national level of ‘science, data and information needed, as well as best-practice planning approaches’ (ibid., p.172). Without such guidance, local decision makers have had difficulty adopting climate adaptation measures, and thereby have not been reducing the risks of future natural hazards. One unfortunate feature of the lack of national direction is the fear of ‘additional litigation’ challenging any council that tries to formulate plans and policies: without clear standards there is more room for argument over the most appropriate and even legally correct option (ibid., p.196; see also Iorns and Watts, 2019).

The primary element of national guidance proposed is an extensive set of

principles within the Natural and Built Environments Act to help guide and interpret decision-making powers and standards under the Act. The most significant for our purposes is the explicit outcome statement in what is now clause 8 of the exposure draft:

Environmental Outcomes:

To assist in achieving the purpose of the Act, the national planning framework and all plans must promote the following environmental outcomes:

...

- (p) in relation to natural hazards and climate change,—
- (i) the significant risks of both are reduced; and
 - (ii) the resilience of the environment to natural hazards and the effects of climate change is improved.

Focusing on outcomes could be a key advantage over the current RMA balancing. Promoting an outcome is not simply taking a matter into account or even paying it ‘particular regard’ (RMA, s7); it instead suggests that these outcomes be achieved. This leaves less discretion to decision makers to balance out reducing coastal hazard risks with economic coastal development and its associated income, for example. This produces more certainty for councils and less room for challenge by those unhappy with provision for such outcomes.

To implement this directive, the panel proposed a section requiring the Minister to provide national direction to ‘identify and prescribe: ... methods and requirements to respond to natural hazards and climate change’ (Resource Management Review Panel, 2020, p.486). The exposure draft provides that the ‘national planning framework must set out provisions directing the outcomes described in’ clause 8(p) (13(1), emphasis added). The panel suggests the following matters for such national direction:

- adaptation and natural hazard risk assessment methods and priorities for risk reduction
- specific risk information and mapping to be relied on (for example, projected sea-level rise)

It is essential that adaptation options be identified for species and other aspects of nature that will be at risk from the effects of climate change; their habitat needs must be prioritised as environmental bottom lines, before human needs are attended to ...

-
- preference for nature-based solutions for climate change adaptation ...
 - approaches to facilitating the adaptation of indigenous species
 - best practices for accommodating uncertainty, for example dynamic adaptive policy pathways planning ...
 - other technical specifications. (ibid., p.181)

I suggest that such mandatory direction is exactly what is needed to fill some current gaps in direction to local authorities. It will remove the current difficulty with having only optional national policy statements under the RMA: the proposed outcomes must be promoted and the national direction on how to implement them must be provided; they are not optional. This on its own will assist the adoption of adaptation measures by reducing arguments over the balancing of different priorities and thereby likely reducing litigation options. Additional, more detailed guidance on climate

adaptation will still be necessary in the separate Managed Retreat and Climate Change Adaptation Act. For example, while the need to take a precautionary approach is recognised in the Natural and Built Environments Act (see the panel’s proposed section 9(2)(g) and the exposure draft clause 18(g)), this currently refers to the need to protect only the natural environment, rather than a more proactive approach to risk management to protect the built environment in the face of climate change. I therefore suggest that principles specifically tailored to climate adaptation will need to be devised for that legislation.

I applaud the inclusion of ‘approaches to facilitating the adaptation of indigenous species’ in the list of matters for national direction. A focus on non-human species has been lacking from the national debate on adaptation to climate change. It is essential that adaptation options be identified for species and other aspects of nature that will be at risk from the effects of climate change; their habitat needs must be prioritised as environmental bottom lines, before human needs are attended to, as they have less flexibility in where they live, forage and breed.

One matter not specified by the panel but that other research identifies as being needed is more guidance on specific adaptation mechanisms (Iorns and Watts, 2019). The panel’s stated preference for nature-based solutions addresses one aspect of choosing adaptation mechanisms. However, there are additional, specific mechanisms that could usefully be the subject of national guidance.

For example, specific guidance on how to best represent future risk information – such as on a land information memorandum (LIM) – would be a valuable topic. Doing this in the wrong way has already resulted in one council having its sea level rise science information ruled unacceptable and taken off LIMs in Kapiti.¹ Perhaps such guidance on specific options is expected to be included under ‘other technical specifications’, but it would be helpful to have it made clear that it would be so included, such as by adding ‘specific adaptation mechanism options’ to the above list.

For another example, to better handle retreat from future hazards, local

authorities need firm directives about the content of consents, including that the content of consents needs to be flexible so as to allow for conditions to relocate buildings when coastal hazard trigger points are reached (Iorns and Watts, 2019). While such flexible consent conditions were not specifically mentioned by the panel, enabling future retreat and changed options were explicitly provided for. For example, the recommended ‘dynamic adaptive pathways policy planning’ is based on different future scenarios and actions that could change depending on reaching pre-defined trigger points. Adopting this as best practice would (arguably) necessarily entail the adoption of mechanisms that enable such changes in choices, such as flexible consent conditions and other types of flexible instruments to apply to existing developments.

Even where detail is not provided – such as on the operation of activity status classifications – such hurdles are able to be overcome with attention to definition and the way they will function in plan making and other local authority decision making. Thus, the various different panel recommendations made – for both the adaptation-specific provisions in the Managed Retreat and Climate Change Adaptation Act and the more general directions in the Natural and Built Environments Act and Strategic Planning Act – make it look as though such matters *could* be resolved; it is just not clear yet that they will be.

One aspect of national guidance that is singled out for additional elaboration is that of appropriate planning processes. Adopting the right process for community decision making is essential in this area in order to achieve buy-in and adoption of the necessary time frames for achieving appropriate adaptation outcomes. The panel approves of the Ministry for the Environment guidance on the use of the dynamic adaptive policy pathways planning process (Resource Management Review Panel, 2020, p.182). This process provides a way for a community to identify the best adaptation options for the future, given different scenarios and trigger points for the emergence and eventuation of coastal hazards. The panel’s recommendation better provides for

The [Resource Management Review] panel recognises that one of the key criticisms of council plan making under the RMA is that it is ‘prone to litigation’.

building adaptive management into the plan-making process and embedding such pathways in plans, thereby better enabling flexibility and responsiveness when predicted hazards do arise.

Another key matter requiring new national guidelines is the ‘[l]ack of clarity in regard to roles and responsibilities’ between regional councils and territorial authorities, in relation to both powers and costs (ibid., p.172). This has not been clear under the RMA and has already caused difficulties in relation to managed retreat: for example, whether or not regional authorities can enable retreat by amending land use rules. It is helpful that the reform also proposes to make such responsibilities explicit in the Local Government Act; this assists with integration of climate adaptation with infrastructure, transport and long-term plans (ibid., p.183).

The second intended piece of legislation – the Strategic Planning Act – proposes to ‘provide a framework for mandatory regional spatial planning for both land and the coastal marine area’ (key recommendation 2, ibid., p.155). Such ‘[r]egional spatial strategies should set long-term objectives for urban growth and land use change, responding to climate change, and identifying areas inappropriate to develop’ (key recommendation 3, p.155). Spatial planning strategies will explicitly

address adaptation (p.28) through identifying within each region ‘areas that may be affected by climate change or other natural hazards, and measures that might be necessary to address such issues’ (p.143). The panel suggests that regional spatial plans will also ‘improve the alignment between the Natural and Built Environments Act and the CCRA [Climate Change Response Act 2002], including through consideration of national adaptation plans in regional spatial strategies and regional combined plans’ (p.29).

The significance of this kind of planning is that it will hopefully reduce post hoc, emergency-style decision making in response to coastal hazards and encourage early, proactive adaptation decision making. Especially with the integrated responsibilities – such as in respect of infrastructure, transport, long-term plans, and the national adaptation planning under the Climate Change Response Act – competing priorities can all be discussed with the benefit of more time than where a risk eventuates and requires immediate action. Proactive planning also produces a wider array of future adaptation options, through not closing off options due to inappropriate development approvals.

The final recommendation from the panel in respect of national guidance for climate adaptation is the provision of a ‘centralised pool of expertise to assist local government with policy development for climate change adaptation, including the ability to apply experience, broker partnerships, and supply templates, information and other common resources’ (p.190). Some of this assistance will come through the national direction mentioned above on environmental management and land use regulation; however, the rest will be matters for implementation assistance outside of that. This recommendation addresses comments that have been made by local and regional governments consistently over the last few years (James, Gerard and Iorns, 2019; James, Iorns and Gerard, 2020). It is possible that this central pool of expertise could provide guidance on specific adaptation mechanism options, and thereby obviate the need for it to be

included in the list of mandatory matters for national direction.

Litigation

Litigation is a recurring concern of local authorities in respect of all RMA processes (Iorns and Watts, 2019; James, Gerard and Iorns, 2019; James, Iorns and Gerard, 2020). The panel recognises that one of the key criticisms of council plan making under the RMA is that it is 'prone to litigation'. Uncertainties about the science and the hazard risks, and about the best planning approaches to them, have led to litigation and fears of it; this has paralysed adaptation planning and other measures (Resource Management Review Panel, 2020, pp.226, 172). As the panel illustrates elsewhere in its report, some aspects of the current law

are highly subjective matters which have led to considerable uncertainty and litigation. They are also commonly relied on by submitters as an argument for protecting the status quo. Our suggested way forward is to remove these references ... and to require [clearer ones] to be specified in mandatory national direction. (p.74)

The panel accordingly makes recommendations designed to clarify the rules around adaptation processes and results (on p.152, for example), to establish consistency and thereby reduce contention and litigation opportunities. (The panel does not, however, discuss whether there should or should not be any liability shield, such as has been raised by several New Zealand councils (James, Gerard and Iorns, 2019, p.29).)

I agree that the use of national direction and guidance as proposed will significantly reduce the litigation risk over what government is allowed to do. Admittedly, the actions that will be needed to adapt to climate change will likely produce fierce opposition, given what is at stake: the loss of homes, land, financial values, community assets and amenities. However, it is still possible to adopt rules that reduce the use of litigation as an opposition tool. It must be remembered that councils have barely begun to adopt adaptation measures, and that nearly every measure that has been

The key difficulty that local authorities have in planning for retreat from future climate hazards is overcoming the status quo bias caused by strong protections in the RMA for existing uses ...

adopted to date has been challenged in court. Therefore, if adaptation planning and measures were adopted under the current system, councils would face a paralysing number of lawsuits. Not only would this be extremely expensive; it would also significantly delay the adoption of the adaptation measures in question and – as with mitigation – cause greater pain through the need for faster adaptation in the future as climate hazard risks increased.

I therefore suggest that the biggest benefit of clarifying what measures can be chosen, through what process and by whom, is the prevention of litigation of such issues in the future. There will still likely be a greater number of challenges than there are today, because of the lack of actions taken by councils today. But the reforms will prevent or reduce the extent of the litigation that would have occurred in the absence of the proposed reforms. The benefit of addressing such significant issues in legislation is that the policy and rules are worked out in the political sphere in advance, rather than in an ad hoc, slow manner by courts.

For this to work, the various principles and rules have to be drafted properly. There is always a drafting choice between certainty and flexibility. When we are dealing with matters as important and expensive as people's homes and businesses, there will be legal challenges; lawyers on behalf of their clients will identify any uncertainty or terms with potential 'wiggle room' and try to push interpretations favourable to their clients. The need to discourage 'NIMBY'-type litigation suggests that certainty needs to outweigh flexibility. However, the uncertainty of how future hazard risks will eventuate suggests the need to be flexible in the choice of appropriate adaptation measures. The drafting of these new laws will have to navigate both these pressures, knowing that any misstep could result in maladaptation through litigation. While I suggest that there should be a lower litigation risk under the proposed legislation than there would be for adaptation continued under the current laws, there is still a lot riding on how these RMA reforms are drafted.

Existing uses and managed retreat

The key difficulty that local authorities have in planning for retreat from future climate hazards is overcoming the status quo bias caused by strong protections in the RMA for existing uses (Iorns and Watts, 2019). In a bold move, the panel recommends removing them.

The panel suggests that central government should have the power through national direction 'to modify or extinguish existing use protections and consented activities ... This will enable central government to address these issues when a centrally driven solution is thought necessary' (Resource Management Review Panel, 2020, p.186). The panel also suggests that both regional and territorial authorities should have increased powers to review and modify consents and conditions, and that territorial authorities should be able to 'modify or extinguish established land uses' for purposes of adapting to natural hazard risks (pp.186, 163). Key means for achieving this are the removal of existing use protection under section 10 of the RMA, removing some grounds for challenging plan provisions,

and changing the existing rules for compensation.

While these powers are essential in order to address existing uses for effective climate adaptation, they go against strongly held views about personal property rights in Aotearoa. This would be a major change from the current system, and is likely to produce considerable objection from those affected. Indeed, they are likely to be the most highly contested areas of the reforms.

Because the removal of existing uses is so complex and requires addressing so many different issues, the panel proposes the separate statute for them: the Managed Retreat and Climate Change Adaptation Act. This is proposed to include:

- a fund to support climate change adaptation and reducing risks from natural hazards, including principles for cost-minimisation and burden sharing, and cost-sharing arrangements
- power under the proposed Natural and Built Environments Act to modify existing land uses and consented activities
- power to acquire land, with potential compensation determined through specified principles rather than market-valuation
- power to use taxes, subsidies or other economic instruments to incentivise changes in land and resource use
- engagement with affected communities
- engagement with Māori to address cultural ties to land
- impacts on insurance arrangements for land owners and local authorities
- obligations on local authorities to provide infrastructure
- liability issues for local authorities
- the potential role of the Environment Court for aspects of the proposals. (pp.189–90)

Funding for change

Changing people's expectations around established uses of private property will be difficult, especially if it is in order to avoid future risks that might seem distant. There will be conflict with priorities for nature, such as the need to accommodate other species' climate adaptation. And there will be significant stress and conflict due to home and other property losses and business disruptions. Key to

The use of mandatory regional spatial plans, within an overall coordinated national framework, will enable planning to occur in ways that have been prevented to date.

dealing with existing uses (including housing, business and infrastructure) will be funding arrangements to enable the changes. There will also need to be rules and means for dealing with the inevitable conflicts, whether they are over the adaptation measures themselves or over the compensation levels for the measures chosen. Yet devising a scheme for compensation for property losses will in itself be controversial and politically difficult (Tombs and France-Hudson, 2018).

It is thus perhaps not surprising that, of all the matters to be addressed in the new Managed Retreat and Climate Change Adaptation Act, the panel provides the most guidance in relation to funding and compensation. The panel identifies that a lack of funding is contributing to 'policy inertia and uncertainty': 'the scale of response required and the ability to fund some decisions are likely to be beyond the means of local authorities', 'particularly in coastal areas' (pp.174, 175, 188). The panel thus recommends that '[c]entral government will need to assist' (p.175) and provides some guidelines for that.

The first step is establishment of a national funding mechanism; this is partly for funding adaptation measures more generally, but particularly to provide for retreat – i.e. compensation for removal of existing uses and their replacement elsewhere. The panel also recommends the development of economic instruments such as targeted rates, partly to incentivise landowner behaviour change.

After funding, guidelines and rules then need to be established for its distribution for managed retreat. For example, the panel recommends that current market valuation approaches (such as under the Public Works Act) not be used for compensation, and that instead the principles in Boston and Lawrence (2018) on managed retreat funding be adopted. This is because the valuation of a property may bear no resemblance to the cost of adaptation, and could contribute to 'moral hazard' if it remains high, or contribute nothing to adaptation costs if the property has lost its value. The Boston and Lawrence principles in particular aim to equitably share the financial burdens of adaptation.

However, apart from some brief statements of principle, the content of the proposed Act is left undeveloped. As the minister for climate change has noted:

the [panel's] recommendations for discrete adaptation legislation are one of the least developed areas within the Report. Significant policy work is required, using the Report's recommendations as a starting point, to determine the scope and develop the detail of the proposals. (Minister for Climate Change, 2020)

Unfortunately, part of the detail still needed is about fundamental principle, not just how well the chosen words and provisions achieve the reform goals identified. While I agree that the recommendations address current problems in relation to compensation and threats of legal action, these new measures will in themselves be highly controversial and politically contested, and their implementation likely legally contested. Comparisons will be made with other compensation schemes, whether in relation to housing (e.g., the Christchurch Red

Zone) or other property (e.g., culling due to mycoplasma bovis). There is thus a lot more detailed attention needed before the Managed Retreat and Climate Change Adaptation Act is even drafted. It might be that release of an exposure draft of some of the fundamental principles will be even more necessary here than it was for the Natural and Built Environments Bill, if only to socialise the policies.

Māori interests

Another key issue identified by the panel is in relation to the protection of Māori interests. The panel notes how important it is to 'consider the ability of Māori to determine how taonga and whenua are managed in response to climate change' (p.173). Such issues of process and substantive protection have been the subject of detailed consideration by other researchers (see, for example, Iorns, 2019).

The panel did not discuss solutions as part of the Managed Retreat and Climate Change Adaptation Act. However, its proposals for the protection of Māori interests in relation to the wider environmental law reform (pp.85–116) will provide significantly better protection than the current legal framework does.

Conclusion

The proposed Natural and Built Environments Act provides 'a much-needed reset of the planning framework for climate change adaptation and natural hazard risks. In particular, the shift to an outcomes-based approach better lends itself to planning for risk' (Resource Management Review Panel, 2020, p.181). But it is not just the outcomes approach that so sharply contrasts with the RMA regime. The use of mandatory regional spatial plans, within an overall coordinated national framework, will enable planning to occur in ways that have been prevented to date. The spatial planning will enable identification of appropriate areas for different activities, and where current activities might need to change in

order to reduce climate change hazard risks.

Overall, the recommended mandatory national planning and outcomes, coupled with guidance and other assistance for implementation, mean that there will be much greater consistency throughout the country than can be achieved under the current system. Further, there will be much clearer signalling to ratepayers and prospective developers of what is to be expected. With greater clarity there will be more certainty in the rules to be applied, and thus less room for legal challenge.

Seven particular problems were identified with the existing system for climate adaptation:

- a lack of national direction and guidance from central government;
- the need for more certainty, as uncertainties about the science, the hazard risks and best planning approaches to them have led to litigation and paralysing fears of it;
- a lack of clarity of roles and responsibilities between regional councils and territorial authorities;
- the difficulty in adopting measures to retreat from foreseeable risks due to the current protection for existing uses under the RMA;
- the need to better protect Māori interests;
- poor integration across the resource management system, both legislation and institutions; and
- not enough funding for local authorities to adopt the adaptation measures needed that they are responsible for.

The Resource Management Reform Panel has proposed attention to all of these aspects, even if not all have yet been addressed in the detail that will be necessary. The current proposals thus all appear to provide some necessary elements of the solution, even if not yet sufficient. Even if much is still to be developed, the national standards and direction, in conjunction with the wider reforms, will enable better risk identification and community choices

of future adaptation pathways. The proposals suggest that appropriate adaptation decisions will be much more likely to be made than they are under the existing system.

Unfortunately, some of the reforms needed will be extremely controversial. Changes to existing use protections will be challenged at all possible levels. Providing adequate funding is crucial and will be central to the success of any retreat from – i.e. removal of – existing uses. Moreover, even if the political battle is won in Parliament and the provisions are passed, how they are drafted and implemented will determine their success on the ground and in the face of potential legal challenges.

In early 2019 James, Gerard and Irons identified in our survey of local councils that:

If the key issues of community engagement, funding, specialist resourcing, climate adaptation decision-making for Māori land, cost apportionment and managed retreat are addressed at a national level, local authorities would be much better placed to manage the effects of sea-level rise at a local level. (James, Gerard and Iorns, 2019, p.5)

While this quote starts with a very big 'if', the Randerson panel's report has indeed recommended that all of these matters be addressed at a national level. The process will entail a lot of argument about the content; but, if it can be pulled off, then government at all levels in Aotearoa will be in a much better place to adapt to climate hazards peacefully and equitably.

¹ *Weir v Kapiti Coast District Council* [2013] NZHC 3522.

Acknowledgements

The material for this article was produced through work undertaken with funding from the Deep South National Science Challenge. The views expressed here are those of the author.

References

Australian Government Productivity Commission (2012) *Barriers to Effective Climate Change Adaptation*, Melbourne: Australian Government Productivity Commission

Boston, J. and J. Lawrence (2017) *The Case for New Climate Change Adaptation Funding Instruments*, Wellington: Institute for Governance and Policy Studies; New Zealand Climate Change Research Institute

- Boston, J. and J. Lawrence (2018) 'Funding climate change adaptation: the case for a new policy framework', *Policy Quarterly*, 14 (2), pp.40–9
- Cabinet Business Committee (2020) 'Minute of decision: Adaptation legislation: proposed timelines and process', CBC-20-MIN-0121, 9 December
- Climate Change Adaptation Technical Working Group (2018) *Adapting to Climate Change in New Zealand: recommendations from the Climate Change Adaptation Technical Working Group*, Wellington: Climate Change Adaptation Technical Working Group
- Department of Conservation (2017) *NZCPS 2010 Guidance Note: coastal hazards*, Wellington: Department of Conservation
- Earthquake Commission (2017) 'Briefing to the incoming minister responsible for the Earthquake Commission', Wellington: EQC
- Ellis, E. (2019) *How Should the Risks of Sea-Level Rise be Shared?*, Dunedin: Deep South National Science Challenge
- Environment Committee (2021) 'Inquiry on the Natural and Built Environments Bill: parliamentary paper – report of the Environment Committee', November
- Grace, E., B.T. France-Hudson and M.J. Kilvington (2019) *Reducing Risk through the Management of Existing Uses: tensions under the RMA*, GNS Science Report 2019/55
- Iorns, C. (2018) *Case Studies on Compensation after Natural Disaster*, Wellington: Deep South National Science Challenge
- Iorns, C. (2019) *Treaty of Waitangi Duties Relating to Adaptation to Coastal Hazards from Sea-Level Rise*, Wellington: Deep South National Science Challenge
- Iorns, C. and J. Watts (2019) *Adaptation to Sea-Level Rise: local government liability issues*, Wellington: Deep South National Science Challenge
- James, V., P. Gerard and C. Iorns (2019) *Sea-Level Rise and Local Government: policy gaps and opportunities*, Wellington: Deep South National Science Challenge
- James, V., C. Iorns and P. Gerard (2020) 'Sea level rise and local government: policy gaps and opportunities', *Policy Quarterly*, 16 (1), pp.62–6
- James, V., C. Iorns and J. Watts (2019) *The Extent of EQC's Liability for Damage Associated with Sea-Level Rise*, Wellington: Deep South National Science Challenge
- Minister for Climate Change (2020) 'Adaptation legislation: proposed timelines and process', Cabinet paper, CBC-20-SUB-0121, 9 December
- Minister for the Environment (2020) 'Reforming the resource management system', Cabinet paper, CBC-20-SUB-0120, 9 December
- Ministry for the Environment (2018) *Coastal Hazards and Climate Change: guidance for local government*, Wellington: Ministry for the Environment
- New Zealand Government (2021) 'Natural and Built Environments Bill: parliamentary paper on the exposure draft', <https://environment.govt.nz/publications/natural-and-built-environments-bill-parliamentary-paper-on-the-exposure-draft/>
- Parliamentary Commissioner for the Environment (2015) *Preparing New Zealand for Rising Seas: certainty and uncertainty*, Wellington: Parliamentary Commissioner for the Environment
- Peel, J. and H. Osofsky (2015) 'Sue to adapt?', *Minnesota Law Review*, 99, pp.2177–250
- Productivity Commission (2019) *Local Government Funding and Financing: final report*, Wellington: New Zealand Productivity Commission
- Resource Management Review Panel (2020) *New Directions for Resource Management in New Zealand: report of the Resource Management Review Panel*, Wellington: Ministry for the Environment
- Tombs, B.D. and B. France-Hudson (2018) 'Climate change compensation: an unavoidable discussion', *Policy Quarterly*, 14 (4), pp.40–9
- Tombs, B.D., J. Stephenson, B. France-Hudson and E. Ellis (2021) "Property purgatory", *Policy Quarterly*, 17 (1), pp.50–6

High quality professional development courses for the public sector:

STRATEGY BUILDER

-> Tue 15 February, 9am-430pm

MACHINERY OF GOVERNMENT

-> Thu 10 March, 9am-430pm

MĀORI CULTURAL COMPETENCY

-> Mon 14 March, 930am-430pm

FUNDAMENTALS OF HEALTH POLICY

-> Wed 16 March, 9am-430pm

We can deliver courses in-house, customise or design new programmes to suit your requirements at our Wellington and Auckland teaching spaces.

For information and to enrol visit: www.wellingtonuni-professional.ac.nz or call us on 04-463 6556.



Kāpuhipuhi
Wellington Uni
Professional

CROWN-MĀORI RELATIONS: TREATY AND MORE ->
Mon 28 March & Thu 31 March, 9am-1pm

EFFECTIVE WRITING FOR MINISTERS
-> Tue 5 April, 9am-430pm

PUBLIC POLICY FUNDAMENTALS
-> Wed 25 May, 9am-430pm