

Inquiry into Climate Adaptation:

Submission to the Environment Committee - Komiti Whiriwhiri Take Taiao.

November 2023



What is Taituarā?

Taituarā – Local Government Professionals Aotearoa is an incorporated society of nearly 1000 members drawn from local government Chief Executives, senior managers, and council staff with significant policy or operational responsibilities. We are an apolitical organisation. Our contribution lies in our wealth of knowledge of the local government sector and of the technical, practical, and managerial implications of legislation.

Our vision is:

Professional local government management, leading staff and enabling communities to shape their future.

We help local authorities perform their roles and responsibilities as effectively and efficiently as possible. We have an interest in all aspects of the management of local authorities and supporting communities from planning and infrastructure to civil defence and emergency management. We are therefore extremely interested in the Inquiry into Climate Adaptation.

Local government is the key delivery partner for adaptation planning and we encourage you to work with Taituarā, LGNZ and the local government sector to ensure a joined-up response to climate adaptation across all of government.

We would like to be heard in support of our submission if there is an opportunity to do so.

Executive Summary

Thank you for the opportunity to submit. This Inquiry is of the utmost importance. Not least because of two-thirds of our population live in areas prone to flooding and rising sea levels and the massive devastation, cost and community suffering caused during the Auckland Anniversary Weekend floods and Cyclone Gabrielle events. Urgent progress on climate adaptation – particularly managed retreat is needed.

It is excellent to see a cross-party approach given what is at stake. While risk assessments are technical exercises, decisions around adaptation and managed retreat are political. A cross-party, enduring and certain solution will be needed.

We need to identify the quantum of the challenge. There needs to be a clear national framework and legislation that enables communities to adapt to the impacts of climate change, including retreat and relocation. It needs to address all hazards, have long term planning horizons, take a wellbeing approach, and create the social licence, tools and funding arrangements for a nationally consistent and affordable approach to climate adaptation. One that improves equity and enables a just transition, particularly for iwi, hapū, Māori.

National direction needs to specify the methodologies and metrics to be used, including the incorporation of te Ao Māori perspectives and mātauranga Māori. Consistent terminology must be used. Institutions, roles and responsibilities and legislative frameworks affecting climate change, natural hazard and resource management need to be clearer and they need to be integrated. Liability should be limited and appeal rights curtailed.

A nationally enabled, regionally supported and locally led process is required. Communities must be enabled to understand, participate and shape the decisions that will ultimately affect them. That said, we prefer a term other than community led retreat given central and local government, lenders, insurers and the market will inevitably play a critical role in decisions that get made.

The critical issue of funding and financing must be tackled. It must be based on solid principles, including distributive justice, with co-investment from central and local government. A Climate Adaptation Fund needs to be established urgently and a shared platform for investment in local and national priorities must be agreed whether that be spatial strategy investment plans, or regional and city deals.

All of this will require collaboration with local government. This collaboration should include the peak bodies Taituarā and LGNZ, and existing groups such as Te Uru Kahika, the Aotearoa Climate Adaptation Network and the Local Government Steering Group – for Resource Management Reform – to gather a range of perspectives and technical expertise to ensure the final package provides an enduring solution.

We have had the benefit of working with LGNZ, Te Uru Kahika, the Aotearoa Climate Adaptation Network and NZPI on this submission and support their respective individual submissions.

The Importance of a Climate Adaptation Framework and this Inquiry

A national framework and legislation that enables communities to adapt to the impacts of climate change, including retreat / relocation, is urgently needed. It needs to address all hazards, and create the social licence, tools and funding arrangements for a nationally consistent and affordable approach to climate adaption that improves equity.

WHAT'S AT STAKE?

Two-thirds of our population live in areas prone to flooding and rising sea levels. Estimates of the costs associated with the risk this poses vary. One estimate is that \$145 billion of private and public assets and infrastructure are already at risk from climate change in Aotearoa New Zealand - that is around 750,000 people and 500,000 buildings near rivers and in coastal areas are already exposed to extreme flooding.¹ Another recent estimate (August 2023) is that more than 282,00 homes (with an estimated replacement value of more than \$213 billion) and associated structures (garages, decks, driveways, fences etc worth \$5 billion) are in flood hazard areas.²

Auckland, Christchurch, Lower Hutt, Napier and Palmerston North cities are the most exposed to flood hazards in absolute terms. But per head of population Buller, Thames-Coromandel District, Wairoa, Central Otago and Gore districts are the worst affected. Northland (particularly Hokianga), Tairāwhiti (East Cape), Waikato, and Bay of Plenty have clusters of vulnerable communities exposed to flood hazard, meaning that a significant proportion of the population of seven territorial authorities – South Waikato, Waitomo, Buller, Gisborne, Opotiki, Rotorua, and the Far North – may be in vulnerable communities that are potentially exposed to flood hazard.³

These worst affected areas and vulnerable communities are also some of those least able to pay to defend themselves or move from their current location, creating a situation of winners and losers in Aotearoa New Zealand. Richer communities and cities will be able to defend themselves and work out options but the poorer, coastal and rural and potentially Māori communities⁴ could be left in '*property purgatory*' without options - as insurance cover becomes prohibitively expensive or is withdrawn, property values fall, services decline and those with the means to move away do so.⁵

¹ Ministry for the Environment, 2023, [Our-atmosphere-and-climate-2023.pdf \(environment.govt.nz\)](#)

² Paulik R, Zorn C, Wotherspoon L, Sturman J., 2023, Modelling national residential building exposure to flooding hazards. International Journal of Disaster Risk Reduction, p.94.

³ Department of Internal Affairs, 2022, [Vulnerable-Communities-Exposed-to-Flood-Hazard-August-2022](#)

⁴ 'Around Aotearoa, 191 marae are within 1km of the coast.' For the 'Bay of Plenty alone, 41 urupā are within 1km (Bailey-Winiata, 2021)' Ministry for the Environment, 2023, [Our-atmosphere-and-climate-2023.](#)

⁵ 2023, [Report of the Expert Working Group on Managed Retreat: A proposed System for Te Hekenga Rauora/Planned Relocation](#), p. 44.

A study undertaken by Bell, Paulik and Wadwha⁶ for the Parliamentary Commissioner for the Environment that found that there are at least 43,683 homes and 1,448 commercial properties within 1.5 metres of the average spring high tide. These properties have a replacement value of around \$20 billion (in 2011 dollars!). The number increases significantly within the 0-3m elevation zone.

Tonkin and Taylor have estimated the cost of sea-level rise on local authority owned infrastructure. Their report concludes that at a mean sea level rise of 1.5 metres some 6000km of pipe is exposed, as well as more than 2000km of roads and almost 2000 buildings or facilities. The estimated replacement cost of this infrastructure is around \$7.8 billion. At the 3 metre increment the estimated replacement cost is some \$13.4 billion.⁷

In Auckland, Wellington, Christchurch and Dunedin full insurance retreat as a result of sea level rise is likely to occur for at least 10,000 properties by 2050. Partial insurance retreat will likely occur from 2030 in Wellington and Christchurch and only a few years later for Auckland and Dunedin. These figures are likely to be conservative ones.⁸

New Zealand has experienced more than 150 severe weather events and natural disasters since ICNZ began keeping records in 1968. The damage and economic cost from extreme weather events has intensified due to climate change. A recent study⁹ found that \$140M of the total \$470M in damages from the 12 worst flood events in New Zealand over the period 2007-2017 were directly attributable to climate change. Extreme weather event losses for the four years prior to this year were:

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|------------|--------------|-----------------|-----------|
| 2022 Jan 1 | Annual total | Extreme weather | \$324.94m |
| 2021 Jan 1 | Annual total | Extreme weather | \$274.27m |
| 2020 Jan 1 | Annual total | Extreme weather | \$206.28m |
| 2019 Jan 1 | Annual total | Extreme weather | \$226.3m |

The wider economic and social costs extend into the billions.¹⁰

The immediate costs of damage to physical assets during Cyclone Gabrielle and the Auckland Anniversary floods is estimated to be between \$9 billion and \$14.5 billion, with 'significant losses experienced across households, businesses and infrastructure'.¹¹ In addition to the Auckland Anniversary Weekend floods and Cyclone Gabrielle events, extreme weather in the North Island between 21 and 28 February (2,801 claims, \$20,780,996) and

⁶ [PCE National coastal risk exposure NIWA Client report](#)

⁷ See Simonson and Hall, 2019, Vulnerable – *The Quantum of Local Government Infrastructure Exposed to Sea Level Rise*.

⁸ [Insurance-Retreat-December-2020-Final-Report.pdf \(deepsouthchallenge.co.nz\)](#) p.3.

⁹ Frame et al, 2020, [Climate change attribution and the economic costs of extreme weather events: A study on damages from extreme rainfall and drought](#).

¹⁰ [Insurance Council of New Zealand Cost of Natural Disasters](#)

¹¹ New Zealand Treasury, 2023, [Impacts from the North Island Weather Events](#).

again over 9-10 May (3,822 claims, \$41,399,639) bring the total for climate related claims in 2023 to 119,435 – worth around \$3.563 bn.¹² And the year is not over.

The immediate damage also has consequential impacts. For example, ‘the wastewater treatment plant in Napier was seriously damaged and unable to operate. This meant untreated sewage was released into the sea.’ Events can also cause economic and social disruption. ‘They can damage homes, infrastructure, crops, and disrupt access to healthcare and essential supplies such as drinking water’, and there are ‘long-term health and wellbeing implications for individuals and entire communities’.¹³

QUANTIFY THE SIZE OF THE ADAPTATION CHALLENGE

We know very little about the overall size of the adaptation challenge, in part because we lack a robust understanding of the climate science and public acceptance of that science and in part because we have not done the detailed work that such an exercise necessitates. Most estimate of the costs of adaptation focus on sea-level rise given the priority this has been given in our current planning regime.

The question around the likely funding required to adapt as a nation akin to asking ‘how long is a piece of string’. Public acceptability of any funding arrangements will be enhanced in the long-run by gaining some better understanding of the risks and costs of adaptation and where these lie.

THE RISK IS INCREASING

With a high level of confidence, we can say that it is highly likely (between 75% and 85%) that extreme weather events will become increasingly frequent and severe. While the frequency of tropical cyclones might decrease slightly, we expect that there will be an increase in their severity. River flooding will increase. As sea level rises, the frequency of coastal overtopping and inundation due to storm surge and wave run-up will increase, alongside and compounding more frequent and extreme coastal flooding.¹⁴ With these increases the costs of recovery will rise. Climate change is projected to increase the fiscal cost of floods and storms, with storm damages due to climate change increasing 3–7% and 4–12% for floods from now until 2050.¹⁵

There is evidence that the indirect costs are between 2 – 10 times the direct costs depending on the nature of the hazard.¹⁶ The costs won’t just be in dollars. We know that elevated levels of anxiety, depression and post-traumatic stress follow extreme climate events and the

¹² September 15, 2023, [2023 climate disaster payouts top \\$2 billion - ICNZ | Insurance Council of New Zealand](#)

¹³ Ministry for the Environment, 2023, [Our-atmosphere-and-climate-2023](#)

¹⁴ Ministry for the Environment, 2023, [Our-atmosphere-and-climate-2023](#)

¹⁵ [Insurance Council of New Zealand Cost of Natural Disasters](#)

¹⁶ Frame et al, [Estimating financial costs of climate change in New Zealand](#)

increased frequency of these events take an emotional toll and exhaust the resilience of individuals and communities.¹⁷

Affected communities turn to central and local government to provide support and enable them to recover and while we can say that previous events do not set a precedent, psychologically for communities they do. Cyclone Gabrielle and the Auckland Anniversary floods have shown that we are not in the best position to respond to the aftermath of disaster, making ad hoc decisions in times of crisis, nor are we in the best position to adapt to known risks prior to events occurring.

THE INQUIRY IS IMPORTANT AND NEEDS TO DELIVER CHANGE

This Inquiry is therefore timely and very important. As a nation we must increase our efforts to adapt to climate change and move away from crisis led response and recovery. The time for planning is running out. '(W)ell designed measures taken early, will reduce future costs'.¹⁸ We are on the record urging the Government to accelerate the Climate Adaptation Act, as are many councils, industry bodies, particularly in the insurance field and our colleagues at Local Government New Zealand.

We need, as a nation, to urgently develop a nationally consistent framework and legislation to enable it, including enabling proactive (managed) retreat and relocation where the circumstances require it. Such an approach must be enduring and certain. It will therefore require cross-party support and collaboration with local government. This collaboration should include the peak bodies Taituarā and LGNZ, and existing groups such as Te Uru Kahika, the Aotearoa Climate Adaptation Network and the Local Government Steering Group – for Resource Management Reform – to gather a range of perspectives and technical expertise.

RECOMMENDATIONS

That the Select Committee agrees

1. The size of the adaptation challenge needs to be quantified.
2. There needs to be a nationally consistent framework, legislation, tools and funding for climate adaptation and managed retreat.
3. The Framework, legislation, tools and funding arrangements should be developed collaboratively with Taituarā, LGNZ and other local government groups.
4. The national approach requires cross party support to be enduring and provide certainty.

¹⁷ Ministerial Inquiry into Land Use in Tairāwhiti and Wairoa, 2023, [Outrage to optimism CORRECTED 17.05 \(environment.govt.nz\)](#)

¹⁸ [Report of the Expert Working Group on Managed Retreat](#), p. 38 .

Risk Assessment

MANDATORY, NATIONALLY CONSISTENT RISK ASSESSMENT

Robust, nationally consistent, mandatory risk assessments are the cornerstone of a new national framework for climate adaptation. Currently there is no national direction (outside of the coastal environment) and significant variation in the methodologies, scope and quality of risk assessments for adaptation planning. There is also inconsistent terminology used – low, medium, high, extreme, significant, acceptable, tolerable and intolerable – and difficulties in dealing with uncertainty in decision-making. We need a standardised risk assessment methodology and nationally agreed descriptors of risk thresholds – for example defining low / medium/ high.

We agree with the Expert Working Group's approach to establish a standardised assessment of risk.¹⁹ Alongside the national climate change risk assessment there needs to be regional risk assessments and local – community level – assessments to provide the requisite detail for decision making. Risk assessments at the development level are also necessary. While ideally the regional level risk assessment would occur first as per the Expert Working Group's recommendations, there may be instances where the need is so great that a local assessment must occur before a comprehensive regional assessment has occurred. In this case we would expect the local risk assessment to inform the regional one and any future action.

There needs to be a clear, specific requirement to reduce risk through adaptation planning and implementation. National direction needs to specify the methodologies and metrics to be used, including the incorporation of te Ao Māori perspectives and mātauranga Māori. The National Climate Change Risk Assessment methodology provides a good basis to build on. Robust risk assessments and national direction should establish the context of the hazard, identify exposure and vulnerability, assess the likelihood (probability) of the risk occurring – recognising that the risks will be changing over time – identify the impacts (consequences), any uncertainty, and confidence levels.

Given the risk likelihood will change because of climate change it will be appropriate to regularly review risk assessments to ensure they reflect the latest data and information.

An all-hazards approach must be taken, including compounding and cascading hazards, to reduce unintended consequences of directing new development away from one hazard towards another. We read the MfE Issues and Options paper as limiting risk assessments to physical hazards and the impacts on the built environment. If this was the intention, we disagree with this approach and note that it is out of step with the Climate Change Response Act, the National Climate Change Risk Assessment and EQC guidance. We prefer the wellbeing approach adopted by the Expert Working Group²⁰, which considers the impacts on people's health and wellbeing, their livelihoods and the environment. Risk assessments must also involve local knowledge to ground truth the results.

¹⁹ [Report of the Expert Working Group on Managed Retreat](#), pp. 139-142.

²⁰ Ibid, p. 141.

We prefer new legislation over trying to retrofit the resource management system given the number of gaps and inconsistencies. National direction on managing risk needs to apply to both the resource management planning system and to any adaptation planning system. The final methodologies should be provided for in secondary legislation so they can be updated easily as new information comes to light – like national direction for Resource Management is currently. Local government is here to help develop this to ensure it is implementable on the ground and provides a clear mandate for future decision making.

PROFESSIONAL EXPERTISE

The robustness of risk assessments would therefore need to be underpinned by professional qualifications and expertise. Currently we do not have sufficient capacity within the country to do these. Taituarā is exploring with the Aotearoa Climate Adaptation Network the potential for qualifications ranging from post graduate diplomas to micro credentialing as part of an adaptation professional development programme (National Adaptation Plan Action 3:29) to enhance capability and provide assurance. We welcome Government support for workforce development to address both current capacity and capability constraints.

RESOURCING

As acknowledged in the National Adaptation Plan Aotearoa New Zealand needs better risk related data and information for decision making and this costs money. Climate policy is heavily information-dependent. Co-investment from Government for data and information to underpin risk assessments is likely to be required to ensure they are done at the rate and quality needed and inequities are not exacerbated.

Risk assessments of the type we envisage are very resource intensive and costly. It cost the Whakatāne District Council \$1 million to compile the evidence to identify the level of debris flow risk to residents of the Awatarariki Fanhead – and \$17 million to deliver a programme of managed retreat for 34 residential properties as a consequence of this risk assessment with \$15 million of this shared evenly between the Crown, Bay of Plenty Regional Council and Whakatāne District Council. The ability of councils to raise this money from rates is currently constrained – competing responsibilities, debt ceilings and affordability challenges. Given the number of communities that face the greatest risks per head of population and have vulnerable communities within them, relying on rates raises the potential for significant inequities to arise.

The Expert Working Group concluded that:

*“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”.*²¹

We are a small nation and there are efficiencies to be gained in collecting the necessary data and information to populate risk assessments collectively with a contribution at the national

²¹ [Report of the Expert Working Group on Managed Retreat](#), pp. 197-198.

level. LiDAR topographical data is a case in point. Government funding and national coordination significantly boosted the nation's ability to make good decisions. This needs to continue for priority data and information collection.

LIMITED RIGHTS OF APPEAL

We consider that risk assessments as envisaged above are largely technical exercises – with a mātauranga Māori lens applied – and if carried out using nationally consistent methodologies the outputs should be subject to limited appeal rights – on questions of law. The process would thereby be streamlined, avoid delay and be less costly. Judicial review would remain an option at the risk assessment stage to ensure there was compliance with the national direction.

This approach would not affect community participation and political decision making on the adaptation options and risk tolerance that go into local adaptation plans, plans that are informed by the risk assessments.

We consider this approach strikes a balance between the urgent need to develop robust risk assessments and move forward with adaptation planning and the needs of individual property owners and communities. Our approach aligns with the Expert Working Group and the position of LGNZ, Te Uru Kahika and NZPI. If the Committee was inclined to accept merit-based appeals – despite the advice of these bodies – we envisage significant litigation and cost will be added to the system.

We also support an independent peer-review or audit process undertaken by an independent national body. This would give the Government certainty over the risk assessments that will underpin local decision making on options for adaptation – which will be important for future action and co-funding.

RISK TOLERANCE

Once an assessment of the known risk has been completed, then it will be important to complete an assessment of the tolerance to the risk. Currently we do not have a consistent approach to assessing risk tolerance or risk thresholds. To be effective we need to identify the boundaries between 'acceptable', 'tolerable', and 'intolerable' risks and set risk thresholds for the consideration of different treatment options. As we know, different communities and individuals within them have different tolerances to risk. Understandably people are attached to their homes and communities and are likely to discount future risk, particularly if there are significant financial implications for options to avoid or reduce this future risk.

What experience has taught us about this process is that it is extremely fraught, particularly in the light of uncertainty and long-term risks and most of our experience with relocation of communities is post event – Matatā²², Christchurch etc.

Determining risk tolerance requires engagement with affected communities and stakeholders. Contrasting views may be impossible to reconcile. Therefore, the process must

²² Whakatane District Council report, [policy committee 2 july 2015.pdf \(whakatane.govt.nz\)](#)

be robust and transparent. As in the Matatā example, where risk tolerance was introduced by the Bay of Plenty Regional Council in its Regional Policy Statement – 2017 – following public consultation – it may be that the council seeks a local course of action based on an investment logic and the assessment of risk tolerance that all in the community are not in agreement with – that is where ‘the individual and cumulative risk to society is intolerable to government at all levels’²³. There is a case therefore for nationally set risk tolerance levels to give confidence to all, including global insurers, that there is a nationally consistent risk framework in place. NZPI puts forward interesting proposals on how this could be achieved – with risk tolerance set nationally for key dependencies such as infrastructure and emergency responders, and maximum levels of risk, with communities able to choose lower levels of risk if this was more appropriate for their local context.

The EQC Risk Tolerance Methodology²⁴ and its associated literature review provides useful information that could be the basis for a consistent methodology and consideration of risk tolerance in a ‘local’ context. This includes community engagement on risk tolerance, thresholds and criteria.

LIABILITY

We recommend that liability for Risk Assessments is similar to that for the provision of natural hazard information on Land Information Memoranda – that is, liability should be limited. Work undertaken in good faith should not attract liability and independent review of risk assessments should be sufficient to ensure their robustness as the basis for future adaptation decisions.

RECOMMENDATIONS

5. Mandate the need for risk assessments for climate adaptation.
6. Develop consistent terminology.
7. Develop consistent but flexible methodologies and metrics that incorporate te Ao Māori perspectives and mātauranga Māori and take an all-hazards approach to risk assessment.
8. Consider a review timeframe for risk assessments that reflects the change in risk over time and ties in with other planning cycles – an appropriate timeframe might be every 10 years or following a significant event, although we are not opposed to a shorter timeframe if the evidence supports it.
9. Provide national direction in secondary legislation.
10. Work with Taituarā to develop and support professional qualifications and a workforce plan to build climate adaptation capability and capacity including the carrying out of robust technical risk assessments.
11. Provide central government funding to support risk assessments and prioritise national investment in data and information collection.
12. Provide for an independent technical peer-review or audit process for risk assessments.
13. Provide guidance on how to assess risk tolerance consistently.

²³ Ibid.

²⁴ [Risk tolerance methodology :: Toka Tū Ake EQC](#)

14. Identify the boundaries between 'acceptable', 'tolerable', and 'intolerable' risks (or other suitable terminology)
15. Provide an accepted, robust, and transparent methodology for setting risk thresholds and/or criteria and tolerance assessments.
16. Appeals against risk assessments should be limited to questions of law.
17. Local authorities should not be legally liable when they have prepared risk assessments in good faith.

Adaptation planning that includes proactive relocation

Adaptation planning is currently ad hoc and there are insufficient powers and tools available to undertake it. As mentioned above, much of our planning is post-event and crisis led, which is not sustainable and risks sub-optimal solutions. It also risks the deferral of the hard decisions – because post event there is at least the potential for an insurance payout or a 'government'²⁵ bailout. This situation, and the moral hazard it creates, must be reversed.

MANDATORY REQUIREMENT TO PLAN

We support a requirement to reduce risk through planning and the implementation of adaptation pathways, including relocation options. Adaptation planning should be mandated where regional – or sub-regional – risk assessments trigger intervention. Threatened communities should not be left in limbo, to respond, recover or retreat, when the risks are known in advance. There should be a planned approach to managing these known risks, even if there is uncertainty. We also note that the need for a local adaptation plan could also be triggered post an event.

COMMUNITY CENTRED AND NATIONALLY ENABLED

It is important that the options for adaptation are consistently explored across the country and that they and an adaption package or pathway is developed with the community – to gain their understanding and eventual buy-in to the problems and the solutions. Optimism bias, short term thinking, preference for the status quo all come into play when involving the community. But there needs to be a social licence for action, particularly for planned relocation where value judgements are being made.

Decisions can significantly affect individuals and families' livelihoods, financial and social wellbeing. They will be contextual. It is therefore important that adaptation planning is conducted with those that will bear the consequences of action and that local decision making occurs.

This year we recognised Thames Coromandel District Council's Shoreline Management Plans in our LGFA Taituarā Local Government Excellence Awards. The Council undertook shoreline management planning for its 400km of coastline to reduce risks to people, property, the

²⁵ Local, central or combined.

environment and taonga associated with coastal hazards. The result was a set of 138 adaptation pathways specific to the aspirations and concerns of each community and the principles of kaitiakitanga. The process involved extensive community engagement and four coastal panels – advisory boards – made up of Community Board representatives, citizens, manawhenua, community organisations, local businesses and asset owners. The Council is now in the processes of prioritising the work and looking at ways of funding it.

Community panels might be a key ingredient of the future system, ensuring there is strong local voice in the adaptation planning process.

The results of inclusive engagement – the preferred adaptation pathways – should be contained in a draft local adaptation plan, that is then formally consulted on giving everyone the opportunity to be heard. The ultimate decision-making power should lie with the council, unless this is Māori led adaptation, on behalf of the whole community and decision makers should receive specialist training to support their important role. We envisage something like the Making Good Decisions training that is offered to those participating in resource management hearings or alternatively – along the lines suggested by Te Uru Kahika and NZPI – certification in the same way as for freshwater decision makers.

The local adaptation plan should assign responsibility for adaptation actions to appropriate entities.

SUPPORTING ALL OPTIONS INCLUDING PROACTIVE RELOCATION

Planned or proactive relocation is one of the options that could respond to the risks of climate change. For this to happen local government needs access to a wider range of powers. The limitations of the current suite are accurately documented in the Expert Working Group's report, and we emphasise again that 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.'²⁶ This is particularly pertinent for planned relocation, where current planning laws and the Public Works Act is insufficient – particularly for managed retreat²⁷, roles and responsibilities are unclear, and the financial and social costs of action are significant. There also need to be powers that enable the exclusion of Māori freehold and customary land from the normal process.

There needs to be an ability to direct development away from hazard prone areas and extinguish existing use rights, alongside the ability to withdraw services, including water and roading services. Councils and other entities cannot afford the cost and risk associated with maintaining assets when the risks are too high. Asset management decisions must be part of adaptation planning and there needs to be a simpler process for local government – and others – to withdraw services.

Experience has taught us that a purely voluntary system for managed retreat will not work and that risk, particularly for vulnerable communities, will not be reduced if a voluntary

²⁶ [Report of the Expert Working Group on Managed Retreat](#), p.96.

²⁷ Managed retreat is not a public work

system is pursued. People should not be able to choose to stay once a retreat process ends. Ratepayers and taxpayers should not have to continue to meet the cost of providing services to a small number of people who desire to remain, nor should they have to pay for the response and recovery when disaster strikes. While voluntary buyouts and relocation are preferable, a mix of voluntary and mandatory parts will be required in the new system. We agree with the Expert Working Party that this can still provide choice – albeit it will be limited to when and how to leave rather than whether to leave. Ultimately, we are talking about instances where society has deemed the risk is intolerable and must be avoided.

Councils will need enhanced land use controls and stronger powers to acquire land. Once land is retreated from it needs to be cleaned up – for example buildings will need to be demolished – and activity limited to all but a few exceptions such as recreation, nature-based systems, ceremonial events, forestry or farming without residences etc. This will be expensive as the Hawkes Bay Coastal Hazard Risk Strategy in the next section and the costs that are involved in the wake of the Christchurch Earthquake, Auckland Anniversary Floods and Cyclone Gabrielle demonstrate.

In addition, there needs to be land to be retreated to and housing for people to occupy. If spatial planning remains a feature of the resource management system – and we hope it will in some form or another – spatial strategies or plans would provide an effective tool for identifying future low risk development areas and ensuring future community infrastructure is planned for and timed to occur alongside other land use, infrastructure, adaptation and place-making plans.

When you consider that to date most cases of managed retreat globally, including in Aotearoa New Zealand, have been relatively small-scale but in the future we'll need much larger relocations. This will 'test the capacity of even well-resourced local authorities'²⁸. As we discuss in the funding section, central government assistance will be required.

We also support the PARA framework (protect, avoid, retreat, accommodate) being used to explain the types of actions communities might take to adapt. We encourage an approach that prioritises avoidance for new activities or development in areas.

Adaptation plans should use the Dynamic Adaptive Policy Pathways (DAPP) approach - considered best practice for developing climate risk action plans. Identifying adaptive pathways and trigger points to undertake particular work programmes will make plans more resilient in the uncertain decision-making context of climate adaptation. The Expert Working Group's proposed approach of utilising designations for adaptation areas to support local adaptation planning deserves further consideration by the Committee.

The system and process for adaptation planning also needs to send strong signals for nature-based solutions, which will be a key response for the future.

²⁸ Boston, J, 2023, [Funding Managed Retreat](#), p.74.

LONG-TERM AND ALL HAZARDS

In the context of climate change, adopting a consistent long-term timeframe for planning – 100 years – is imperative. There are currently conflicting time-periods – 10 years for a Long Term Plan, 30 years for an Infrastructure Strategy, 50 years for a building, 100 years for coastal hazard plans. However much of the homes and infrastructure we have has ‘outlived’ its anticipated life. Adopting a consistent long term planning horizon enables communities to look out beyond the current generation and think of whole of life costs and potential economic losses.

The Hawkes Bay Coastal Hazard Risk Strategy is a case in point, where the present-day value of potential economic losses from coastal erosion and inundation over the next 100 years exceeds \$1 billion and planned retreat options are actively being investigated, with an estimated cost of over \$1.9 billion – which ranges from planning to the eventual clean-up of original sites.²⁹

While significant progress has been made in the coastal environment, long-term planning horizons are needed for all hazards to avoid locking in sub-optimal adaptation options and to deal with cumulative risk.

THE RELATIONSHIP BETWEEN ADAPTATION AND EVENT PLANNING

Adaptation plans should include a disaster response plan – as we have learnt from recent events it is important to consider ahead of time the proximity and provision of alternative communication channels, electricity sources, transport routes, and water supply. It also makes sense to include a pre-disaster recovery plan if a disaster occurs before the adaptation plan is implemented – as recommended by the Expert Working Group.³⁰ This will reduce the likelihood of short term, crisis led, maladaptive decision making in the immediate aftermath of an event.

ROLES AND RESPONSIBILITIES

‘Adaptive capacity ... depends on having the necessary decision-making processes and policy frameworks in place to resolve (or at least manage) the inevitable societal conflicts, enable informed and prudent decision-making, and mobilise the required financial and other resources.’³¹

Wherever the Committee lands on roles and responsibilities there needs to be a clear allocation of them.

‘Managed retreat is mostly a political, not a technical, challenge.’³²

The Future for Local Government Review provides some direction on how the roles and functions should be allocated and provides principles that start with a local first approach.

²⁹ [Planned-Retreat-Implementation-Costs-Report-2022.pdf \(hbcoast.co.nz\)](#)

³⁰ [Report of the Expert Working Group on Managed Retreat](#)

³¹ Boston, J, 2023, [Funding Managed Retreat](#), p.73.

³² Ibid, p.179.

With some uncertainty surrounding the future resource management system we see benefit in centralised and regionalised data and information gathering at the regional council level, regional or sub-regional spatial planning that identifies areas of risk and opportunity, and local engagement and decision making on local risk assessments and adaptation plans.

A collaborative entity – such as a joint committee or similar arrangement – that includes the regional council, territorial authorities, and iwi, hapū and Māori representatives should conduct regional risk assessments and spatial planning to identify the areas for more fine-grained work at the local level, areas for adaptation planning, and the priority of this work.

Local councils are best placed to work with communities, iwi and hapū and stakeholders to assess the risks, and determine the local adaptation pathways in a fair and transparent process with their community(ies).

We're not convinced that a central body would be capable of carrying out local risk assessments and gathering local and lived experience as part of the process. But we support the establishment or repurposing of a central agency to ensure consistent standards are developed and met and there needs to be national support – and funding coordination - for adaptation plans and any relocation programmes. There is also a good case for centralised technical support, given current capacity and capability constraints.

We see the potential for a Ministerial call-in power, where local mechanisms fail, or decision making is not able to occur.

In the post-event situation pre-determined processes for identifying at risk land and formulas for funding managed retreat and other risk reduction options are preferable to ad hoc decision making under pressure and within an adversarial and often distressing environment. We also see a role for a centralised recovery agency / structure.

PRIORITISATION FOR INVESTMENT

Mandatory adaptation plans could provide a consistent platform for national prioritisation of investment potentially through regional or 'city' deals, alongside local investment and action. If spatial planning remains a feature of the resource management system then spatial strategies or plans and agreed implementation plans offer another platform for investment, alongside risk management, including areas for community relocation.

LIABILITY

While we support robust community engagement – we still recommend limited appeal rights on an adaptation plan and the actions contained therein, including the decision to retreat or relocate and how to do it.

Given the lengths councils go to maintain services in the face of retreat, exclusion of all liability where decision makers make decisions in good faith appears most appropriate.

Judicial review should be possible. It is therefore imperative that the new framework provides a robust methodology that if followed can be beyond reproach.

SHOULD THE PROCESS BE CALLED COMMUNITY-LED RETREAT?

A nationally enabled, regionally supported and locally led process is required. But calling the process community-led retreat or relocation is unlikely to be the best term. The name chosen shouldn't mask the fact that for many individuals and communities this is not an easy journey – 'managed retreat is invariably a complex, controversial, and difficult enterprise'³³ and the community – or at least some members of it – might not agree with the final decisions. Whatever the term, the reality will be the same – central and local government, lenders, insurers and the market will inevitably play a critical role in decisions that get made – and we should manage community expectations about the process. We recommend an alternative term is chosen to reflect the reality of the situation.

RECOMMENDATIONS

That the Select Committee agrees

18. There should be a nationally consistent approach to local adaptation planning and proactive retreat/relocation.
19. Local adaptation plans should be mandatory based on an agreed risk threshold.
20. Options for adaptation and any adaptation package or pathway must be developed with the affected community. Community Panels could be an important tool in a process.
21. There should be formal consultation on a draft local adaptation plan.
22. Planning should be long term – 100 years.
23. Local government needs access to a wider range of powers to enable proactive relocation/retreat.
24. Those affected should have as much choice as possible during the relocation/retreat process, but people should not be able to choose to stay once a retreat process ends. A mix of mandatory and voluntary parts to the system are required.
25. Adaptation plans should include a disaster response plan and a pre-disaster recovery plan.
26. Roles and responsibilities should be clear reflect a local first approach, harness the strengths of regional and territorial authorities, as well as central government stewardship.
27. Spatial strategies or plans provide a useful tool for adaptation planning including identifying areas to retreat too and the sequencing of infrastructure development.
28. There should be limited appeal rights and limited liability for councils where decisions are taken in good faith.
29. A consistent term for planned/managed/proactive retreat/relocation should be developed, one that is not misleading.

³³ Ibid, p. 73.

Te Tiriti and te Ao Māori

The Expert Working Group and the Ministry for the Environment's Issues and Options paper³⁴ clearly outline the disproportionate effects climate change is already having on iwi, hapū, and Māori communities and their taonga. They outline historical dispossession, limited resources, institutional barriers, power imbalances and impacts of colonisation well and the need to ensure there is a te Tiriti-based approach to adaptation in the new system.

As the Expert Working Group note 'Māori are already planning for climate change. A framework for planned relocation must enable this work to continue, rather than interrupting or changing it.'³⁵ We agree that the system should provide the ability for iwi, hapū and Māori communities to decide when adaptation planning is required, and for them to be technical advisors and decision-makers responsible for preparing their own local adaptation plans. Where adaptation planning is not Māori-led, a partnership approach should be taken as the Expert Working Group outlines. Clear national direction on engagement with iwi/hapu/Māori throughout the process would also be valuable.

Significant investment and resource sharing will be needed from the Crown to uphold Māori rights and interests, Te Tiriti obligations and enable Māori to participate as they choose.

RECOMMENDATIONS

That the Select Committee agrees

30. The new system must provide for Māori-led adaptation and devolved decision-making.
31. Community-led adaptation must be done in partnership with Māori.
32. Ownership of Māori land should not be affected.
33. Māori-led adaptation and Māori participation requires substantial investment from the Crown.

Funding

A CERTAIN FUNDING FRAMEWORK IS A NECESSITY

Outside of doing nothing, the ad-hoc 'solution' to funding climate change adaptation and relocation / retreat poses the most significant risk. If a risk assessment leads to an adaptation plan, which in turn leads to future interventions as part of spatial strategies and implementation plans – should these proceed – and/or investments in Long Term Plans, communities will have an expectation that once thresholds are met, the planned intervention will occur. This requires certainty of funding. That is adequate funds that are not contestable. As we have identified, many of the areas that are coming to the fore as particularly vulnerable to the weather-related risks from climate change, or those where sea-level rise is

³⁴ Ministry for the Environment, 2023, [Community-led retreat and adaptation funding Issues and options](#).

³⁵ [Report of the Expert Working Group on Managed Retreat](#), p.110

a pressing concern, are areas where the ability to pay is lower. Given the scale of the challenge a national fund will be essential.

The ad-hoc solution tends to favour those local authorities and other agents that are the best at lobbying, bigger communities over smaller ones, those that have a lower degree of deprivation – that is no articulate middle class – and, bluntly, those that are better ‘connected’ politically. Ironically it favours supporting communities that are almost the opposite of those communities that are likely to have higher ‘need’ and can create further inequities.

In addition, ad hoc decision making undermines the clarity and certainty the system needs. For instance, in Christchurch the Government funded 100% of the retreat, in Matatā it was 33%, in the recent weather events the proportion was 50% for vastly different communities of need – especially in the case of Wairoa. The lack of contribution certainty and the lack of a clear decision-making process for it can delay much needed, long-term proactive investment and delay much needed recovery plans. In both cases, it is important to enable people to get on with their lives. It also perpetuates ‘a politically-salient policy asymmetry ... increase(ing) the incentives for the public to demand protective structures, even in situations where their cost-effectiveness is questionable’.³⁶ It also risks unequal treatment and ‘agreement’ under duress, for example when a crisis is unfolding.

A clear formula outlining the share of costs councils, the government, and others will be expected to pay pre and post an event is required, particularly for managed retreat/relocation.

THE ECONOMIC CASE FOR CENTRAL GOVERNMENT’S CONTRIBUTION TO THE COSTS OF ADAPTAION IS STRONG

Previous reviews and reports have advanced the following arguments in support of central government co-funding part of the costs of adaptation:

- different regions have marked differences in their ability to raise revenue to pay for service
- different regions will face different levels of need to undertake different forms of adaptation. Some may face a high or short-medium term need, others may largely be immune or not face any real need for some years. Those with high need aren’t necessarily those with a high level of financial capacity to address these those needs³⁷
- in the words of the Expert Reference Group

“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

³⁶ Boston, J, 2023, [Funding Managed Retreat](#), p.64.

³⁷ For example, rural councils with a small rating base will struggle to meet the financial expectations.

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.”³⁸

- co-funding provides central and local government with a degree of ‘skin in the game’ that better supports an ability to encourage optimal decision-making. For example, by ensuring that the best long-term option is not supplanted by short-term cost considerations. This reinforces the need for a clear funding framework.

We note the overseas examples of public compensation or buyouts in the context of managed retreat provided by Jonathan Boston, which typically involves ‘either the central government, sub-national governments, or some combination’.³⁹

The Expert Reference Group noted that a central government contribution to adaptation costs provides it with a ‘seat at the decision-making table’. A decision-making right without a contribution would amount to spending someone else’s money – in itself, arguably a form of moral hazard.

While the state of the future resource management system is currently in flux, a central government presence at the decision-making table is consistent with the current process and expectations for the development of regional spatial strategies under the Spatial Planning Act. It would also be consistent with an approach to regional and city deals for national and local priorities. While we appreciate the desire to limit the Crown’s fiscal exposure, likewise, limiting local government, and community and individual exposure is equally important.

While funding for adaptation actions and compensating landowners will be key parts of the system, we are attracted to the proposed summary of costs and responsibility for funding proposed by the Expert Working Group.

We turn specifically to the range of adaptation costs below – using the classification developed by the Expert Group on Managed Retreat. While developed specifically for managed retreat conversations there is some degree of crossover with other adaptation projects or processes and the funding framework will need to cover a significant number of activities to reduce long-term costs.

Data and information

We have earlier recommended that central government funding is provided for relevant data and information. This is further supported by the recommendations of the Productivity Commission -

“Central and local government should jointly develop and provide a centralised source of knowledge and guidance about climate-change adaptation for councils. It should be

³⁸ [Report of the Expert Working Group on Managed Retreat](#), pp.187-188.

³⁹ Boston, J, 2023, [Funding Managed Retreat](#), p.65-66.

authoritative and up to date on science and data, regulation and planning, risk management, legal issues and community engagement.”⁴⁰

Engagement costs

The costs of public engagement will be significant and ongoing. Some centralised support for these processes is justified and may involve mechanisms other than direct funding support.

As the Committee will be aware adaptation processes are both highly complex and subject to a high level of public interest. The ideal community engagement process starts with, and seeks consensus on the nature of the issue, the options for resolving the issues and solutions. Done well these processes can take months or even years – retreat out of the post Canterbury earthquake red-zone is a good example. In the case of climate change the process will be resource intensive given the range of engagement tools - tactile models, simulations (such as virtual reality), face to face meetings, expert input – that are required.

Adaptation costs – including managed retreat

Despite considerable discussion in the past the critical issue of funding and financing climate adaptation has remained unresolved – in particular the appropriate balance of private and public contributions⁴¹ and the share between local and central government. As we have indicated the costs of adaptation, including managed retreat – especially where the community needs to relocate en masse – are likely to be large and likely to grow in future.

As stated, we are attracted to the Expert Working party’s conclusions around funding allocation. We accept that councils should have some responsibility for funding adaption, and new infrastructure. We note that Boston and the Expert Working Party have recommended that local government should not fund managed retreat – ‘there is likely to be merit in minimising, if not avoiding altogether, any cofunding arrangements, certainly those involving sub-national government’.⁴² We recognise that this is unlikely to be politically palatable to central government and therefore accept that local government may need to contribute. However, current funding tools and financing settings mean that councils are unable to meet the upfront costs of early adaptation alone, and in some cases will be unable to meet ‘their share’. We therefore recommend alongside Crown investment that some form of differential will need to be applied to take account of factors such as deprivation, and council’s ability to pay – not dissimilar to funding formulas for local roads.

It is highly desirable that any agreed funding split should incentivise early action, which implies it should be better than waiting for a disaster to strike. It will therefore be important to signal the appropriate funding splits for adaptation pre and post an event and offer an adequate level of financial assistance to encourage voluntary relocation that is not

⁴⁰ Productivity Commission, 2019, [Local Government Funding and Financing: Report of the Productivity Commission](#), p. 232 recommendation 9.1.

⁴¹ Boston, J, 2023, [Funding Managed Retreat](#), p.64.

⁴² Ibid, p.175.

unfavourable to compulsory purchase arrangements. It will be most important to ensure that the framework is both fair and seen to be fair if it is to endure.

We also note there are also some perverse incentives within the system – such as Waka Kotahi funding for replacement like for like but a lack of funding for much needed improvements, which may ultimately provide better long-term outcomes. We agree with LGNZ that guidance should be developed and policy settings changed to incentivise building back better post-event.

We also support a more generous approach to homeowners that must relocate and a system that differentiates between primary places of residence and second homes and prevents undue hardship.

Support for communities

The Expert Working Group recommended that funding for managed retreat build in funding for the provision of independent advice including legal support for affected parties. We note that where these services are provided at all under current practice, they are almost all privately funded (and generally rely on collectivisation or donation of work 'pro bono').

We see a need for some element of public funding - access to due process is critical to public acceptance of any decisions. The Committee may want to consider whether any funding support should be subject to means-testing (or other means of targeting) alongside appropriate safeguards (for example, a financial cap, or the limit on appeals we suggest).

A CLIMATE ADAPTATION FUND

We are on record in supporting a national climate adaptation fund - one that is designed in such a way as to:

- minimise the long-run costs of adaptation – decisions to protect or to relocate should be made with the knowledge of the total long-term cost (for example the total life cycle cost of any protective infrastructure such as stopbanks, sea walls etc)
- provide incentives to avoid activity that would add to these costs
- incentivise decision-makers to avoid or reduce those activities that contribute to emissions
- support personal responsibility and minimise moral hazard
- align with signals sent by other agents such as finance and insurance
- (in the words of Boston and Lawrence⁴³) support distributive justice, including the fair opportunity requirement – that people should not be unduly disadvantaged for those things that they have little control over – need and ability to pay

⁴³ Policy Quarterly – Volume 14, Issue 2 – May 2018, [Funding Climate Change Adaptation the case for a new policy framework \(victoria.ac.nz\)](https://www.victoria.ac.nz/policy-framework)

- align with the policy and regulatory framework for climate adaptation and for land-use planning in general.

Any climate adaptation fund should support, and be supported by, the National Adaptation Plan, regional (or sub-regional) spatial strategies and planning under resource management law.

The sources for a climate adaptation fund are as important a design consideration as others but appear to be treated as a 'second-order' issue.

A great deal of the discussion to date has centred on whether a climate adaptation fund is needed, and the activity or activities that should be funded. Of course, both are important, but neither can be divorced from the equally important policy decision of how adaptation should be funded and financed. The Ministry for the Environment's issues and option paper is silent on this issue, as – to a lesser extent – is the Expert Working Group's report.

A balance must be struck between present and future adaptation needs. The bulk of climate adaptation will fall in the future, but adaptation needs to start now. For example, retreat from known areas of short-medium term high risk.

There is an economic case for prefunding future liabilities, in much the same way as the present-day New Zealand Superannuation Fund operates.

First, the exacerbator pays principle suggests that those responsible for harm or damage (in this case the emission of gases that have created climate change) should contribute towards the cost of adaptation. Second, with the right design, the mechanism for contribution could be used to send at least some signal about the cost of activities that gave rise to climate change or avoid locating in areas at risk etc.

A fully functioning Emissions Trading Scheme would be the first place to start. A significant increase in the price of emissions units under the scheme will be required to better factor in the long-term cost of emissions. Exemptions from the scheme should be few, and minor. From both the financial and the environmental standpoint Aotearoa New Zealand can no longer afford to leave agriculture out of the coverage of the scheme. Enforcement must be enhanced, including a deterrent increase in penalties.

We note that there will be micro and macro-economic effects from such a change. And on one level, it is these impacts that provide the spur to de-carbonise. A transitional path will be required.

Another immediate, but contentious step that can be taken is to place further taxation on automotive and other fossil fuel use. It is the act of burning of fossil fuels that create carbon emissions, not the actor.⁴⁴

⁴⁴ From the climate standpoint, policy-makers should attach little weight to arguments suggesting that 'a lot of diesel use is off-road' etc.

'Pricing' in this way should avoid sending disincentives for actions that support adaptation or internalise some cost, for example funding by a levy on insurance would be as good an example what **not** to do. It would likely exacerbate current affordability challenges for low income earners, and lead to less insurance or lower cover / higher excesses. Those without insurance would of course not contribute.

Some other form of national levy or tax may be appropriate on the basis that all New Zealanders ultimately benefit from managed retreat due to the minimisation of economic and social costs that would otherwise occur. Additionally central government has unlimited revenue raising power – unlike local government. We need to be careful not to place the burden of implementing managed retreat 'at the mercy of the funder with the least resources'⁴⁵.

We caution against requiring all councils to contribute annually regardless of whether they have areas that need to be retreated from as this would violate the ability to pay principle.⁴⁶

In the short-term there will be considerable pressure exerted on local authorities to select engineering solutions. Local authorities should be wary of these. The ultimate policy judgement will be one around the cost (over the life-time of the asset) and scale, the degree of risk and confidence in that assessment (or lack thereof), the degree of public benefit from protection, ability and willingness to pay and so on. While there may be some economic benefits such as growth that derive from some infrastructure investment, of necessity local authorities will need to be robust in their assessment of these proposals to avoid locking in maladaptive solutions.

RECOMMENDATIONS

That the Select Committee agrees

34. Further investigation and refinement of the total cost of climate adaptation need to be undertaken.
35. A coherent funding and financing framework that provides support to communities and increases incentives for people and organisations to begin adapting now.
36. Policy settings need to be changed to incentivise building back better post-event and not like-for like.
37. A Climate Adaptation Fund be set up.
38. The design principles for a climate adaptation fund as set out above are adopted.
39. There should be a fair and equitable funding split between central and local government for climate change adaption implementation, not just managed retreat, that incentivises early action.
40. Some form of differential within the funding split – or as a top up – for vulnerable communities and councils with a limited ability to pay should be applied.

⁴⁵ Boston, J, 2023, [Funding Managed Retreat](#), p.175.

⁴⁶ [Ibid](#), p.170.

41. Legal, social and business assistance and post-relocation costs as part should be part of the framework.
42. The recommendations of the Expert Group on Managed Retreat and the Productivity Commission regarding the establishment of a centralised source for climate science.
43. Central government should co-fund costs of data gathering and analysis to support managed retreat.
44. Central government should pay for independent advisory services and legal advice for those affected.
45. Cross-party commitments to the funding are necessary to ensure long term certainty and allow policy changes and frameworks to be implemented.

Monitoring

A DAPP process is dependent on regular monitoring and evaluation both of progress against the plan's objectives, and the effectiveness of the plan in promoting climate change adaptation. Feedback loops that are critical.

Useful indicators would include:

- exposure – for example number of buildings in the coastal inundation zone, number of houses built in a floodplain
- capacity – for example, number of alternate routes available to replace a main route at risk of flood inundation, percentage of people with insurance
- risk mitigation e.g. managed retreat process, length of new sea wall or stopbank, use of and investment in nature based solutions
- readiness e.g. community led adaption plans in place etc

In addition to these types of indicators we again⁴⁷ recommend that outcome level indicators are used to confirm that the things we are doing are delivering what we thought they would, and that there are additional indicators at the system level to inform us of the health of the system. For example, indicators that illustrate how mindsets have shifted, what we value has been enhanced, the nature and quality of relationships, and how the system is learning and evolving.

It will be important to design the monitoring framework with local government given it is at the forefront of adaptation planning and response.

RECOMMENDATIONS

46. That the Select Committee agrees to work with local government on a monitoring and evaluation framework that assesses the effectiveness of the action taken to adapt to climate change.

⁴⁷ As we did in our submission to the Ministry for the Environment on the 2022 Draft National Adaptation Plan.

Alignment and integration with existing legislation

Improved legislative alignment would improve planning and funding, reduce confusion and uncertainty, provide consistency, and reduce communities' exposure to climate hazards.

The current planning framework can't require proactive action to reduce existing risk. Throughout this submission we have noted gaps in the existing legislation that we think the new legislation needs to fill – most notably new national direction, consistent time horizons for planning, new powers of acquisition, compensation and changing ownership of property, existing use rights and funding. There are also tensions between risk management and national policy statements on urban density and housing that need to be resolved. The proposed National Policy Statement on Natural Hazard Decision Making needs to address the issue of housing infill and further subdivision within areas of high risk.

The Building Act and whatever resource management acts we have in future need to work better together and we strongly recommend that spatial planning is part of a strengthened framework for climate adaptation and ties in with central and local government investment plans. Recent changes to Land Information Memorandums will provide people with better information on natural hazard and climate change risks – usually at the point they are looking to purchase a property – but there is a case for wider awareness raising. There needs to be greater emphasis on natural hazard education and preparing people and communities for the inevitable changes ahead.

RECOMMENDATIONS

That the Select Committee

47. ensures the suite of legislation is consistent and actively reduces the risks associated with natural hazards and climate risk
48. recommends that spatial planning is part of the toolkit for addressing climate adaptation.

Conclusion

We commend the Committee for its inquiry and for its cross-party approach – it will be necessary to have cross-party support for the solutions if they are to endure. Climate change is one of the most important challenges facing Aotearoa New Zealand today. The size of the challenge is large and finding a solution is urgent.

We need new legislation on adaptation that contains all the responsibilities, powers, and tools for consistent, high quality risk assessments and local adaptation planning and delivery. We support a centrally enabled, regionally supported, locally led model. To achieve this there needs to be clear roles and responsibilities, certainty and consistency, and the current funding issues need to be sorted out, with enhanced contributions from the Crown. Liabilities also need to be reduced.

It is a large task. Taituarā and its members are here to help.