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Environment Committee Wellington Via the web portal

Tēnā koutou katoa

Inquiry into Community-led Retreat and Adaptation

Water New Zealand (Water NZ) welcomes the opportunity to provide input to the Parliamentary Environment Committee Inquiry into Community-led Retreat and Adaptation.

Water NZ is a national not-for-profit organisation which promotes the sustainable management and development of New Zealand's three waters (drinking water, wastewater and stormwater). Water NZ is the country's largest water industry body, providing leadership and support in the water sector through advocacy, collaboration and professional development. Its ~3,100 members are drawn from all areas of the water management industry including regional councils and territorial authorities, consultants, suppliers, government agencies, academia and scientists.

Water NZ supports the inquiry and its aims into how to best progress community led adaptation. We understand 'community-led retreat' includes homes, businesses, sites of cultural significance and taonga.

Our submission provides commentary intended to inform the inquiry. We also respond to the questions raised in the Ministry for the Environment paper which considers options for community-led retreat and adaptation funding.

Our submission is written from the perspective of drinking water, wastewater and stormwater services which support and enable communities and their wellbeing. It is integral water services are part of all conversations and pathways to adaptation, including retreat.

We note that the Inquiry's recommendations will support the development of the proposed Climate Change Adaptation Bill and that this Inquiry also sits alongside the Government Inquiry into the Response to the North Island Severe Weather Events (RNISWE). Water NZ have presented to the RNISWE Inquiry.



Any legislation or regulation introduced should have cross-party support. Cross-party support is highly desirable to ensure that, once a rigorous and economically viable framework has been developed, the legislation will not likely be subject to significant change.

The relative vulnerability of people, property and infrastructure is growing.

The water sector in Aotearoa New Zealand is already under stress and there are significant vulnerabilities across drinking water, wastewater and stormwater. For example

- The historic under investment in the assets manifests as vulnerabilities; no back-up plans in the event of failure or compromise, need to build redundancy into the networks, or lack of flexibility to meet changes in supply or demand.
- While access to safe water, sanitation and hygiene is the most basic human need for health and well-being the water sector, relative to electricity or telecommunications, they often appear to be an after-thought in wider legislative or regulatory discussions. For example, the terms of reference for the Government Inquiry into the response to the 2023 North Island severe weather events is silent on all three water services.
- The 2019 National Climate Change Risk Assessment (NCCRA) identified potable water supplies as the number one of the top 10 priority risks (risk to potable water supplies (availability and quality) due to changes in rainfall, temperature, drought, extreme weather events and ongoing sea-level rise). The risk to wastewater and stormwater systems (and levels of service) due to extreme weather events and ongoing sea-level rise was also within the NCCRA top 10 priorities.

Without significant investment, the situation will worsen due to neglect, aging assets, increasing growth, public expectations of higher levels of service, and the challenges of climate change adaptation and mitigation and a carbon-neutral future.

An overarching comprehensive approach is required

Water NZ believe the component technical and policy programmes to enable community adaptation are in place or in progress across multiple departments and agencies. What communities, business and utilities require is overarching guidance and direction to draw together these component parts.



Most essentially, help is required on how to start, build and maintain deliberate conversations with communities.

From an infrastructure perspective, there is a need for conversations with communities regarding retiring and relocating assets and services in high hazard areas. Communities need to understand the level of risk the services are exposed to and the corresponding costs that will likely be incurred to manage these risks.

Programmes already underway will enable better risk-informed decisions

Recent changes to the Local Government Official Information and Meetings Act (LGOIMA) incentivising greater sharing of natural hazard and climate risk information. The amendments direct territorial authorities and regional councils working together to ensure Land Information Memorandums (LIMS) provide holistic and nationally consistent information about natural hazard risks.

Water NZ note that the LGOIMA amendments provided certainty for local authorities sharing natural hazard information in LIMs and reducing their exposure to legal liability.

Action 4.5 of the National Adaptation Plan 2022 (NAP) lays out how agencies should work together to support climate adaptation planning.

There are currently no national standards for flood protection, or mapping flood hazard, or forecasting. Introducing national standards for flood protection, mapping flood hazard and flood forecasting should ensure an equitable provision of service across the country.

There are several proactive All of Government work programmes underway to achieve improvements in natural hazard risk data and consistency of information and national design and policy standards – this includes work by the Department of Internal Affairs, Three waters National Transition Unit (e.g. National Engineering Design Standards and National Urban Stormwater Modelling guide).

These amendments and initiatives, will enable clear, concise, nationally consistent hazard information to be included on LIMs to support people to make informed decisions.



Effective and consistent risk assessment and planning is vital to support a future adaptation system

(Q16 - Do you think local risk assessments should be carried out or reviewed by a centralised agency or a local organisation?)

(Q 17 Should risk assessments be carried out only by technical experts or should other people also have a role? What role should other people and organisations have?)

Risk management is the process of identifying, assessing, managing and monitoring risk that may disrupt the achievement of objectives. Management of risks can help determine what actions will most effectively and efficiently, mitigate the risks to delivering on the objectives.

As a recognised profession, there are registered and certified practitioners with a range of skills and experiences.

ISO 31000 Risk Management is a family of standards relating to risk management codified by the International Organization for Standardization. ISO 31000:2018 provides principles and guidelines on understanding and managing risks. A consistent ISO 31000 risk approach applied across the country and communities will enable comparison of risks.

We **recommend** risk assessments are carried out by risk professionals with input from iwi, community, water service providers and other stakeholders to provide a structured approach to a risk based decision making about when to retreat and when to adapt.

Water NZ do not believe risk assessment to be a barrier to adaptation.

Kaupapa Māori risk reduction framework is one approach to systems-based adaptation planning.

(Q11 What is your perspective on the Crown's te Tiriti obligations to support community-led retreat? Are there existing examples of what that should or should not look like?)

Water NZ agree Te Ao Māori and local Mātauranga should be central to the development of risk assessments and adaptation planning at place. We consider such an approach that recognises and creates space for rangatiratanga and kaitiaki roles and considers impacts on people's health, livelihoods, whenua and taonga emphasise approaches would be most enduring.

Given the generations of local Mātauranga, connection and knowledge of the whenua iwi - hapū have, along with and holistic and interconnected Māori perspectives, insight that integrates cultural, environmental and social dimensions. A multi-faceted approach to adaptation could be more successful than a one-dimensional (e.g. economic) approach.



We support the approach of iwi, hapu and Māori producing a statement that details their aspirations for adaptation plans. These would be similar to the Te Mana o te Wai statements under Water Services Entities Act 2022 and proposed Te Oranga o te Taiao statements under Natural Built & Environment Act 2023.

The approach would work well with the new resource management system ropu approach where regional boards and planning committees made up of Mātauranga Māori and taiao practitioners make land use and funding decisions.

Clear understanding of the risks to inform rational decision making

Before considering who decides, who pays, how ability and amount to pay is decided, Aotearoa New Zealand must clearly understanding the risks (to both property and life) in order to inform rational, risk based decision making. Communities must understand how vulnerable people, property and infrastructure are to hazards.

We believe that establishing how many communities, houses, livelihoods, assets are at risk and estimating how much it is going to cost is a priority, concurrent with working out how, who and what to pay for.

Co-designed central government direction with local delivery

(Question 18 Do you think there should be a requirement to undertake local adaptation planning?)

There is currently no system in place setting nationally consistent standards or direction across natural hazard risk assessment and planning.

Ideally, adaptation response planning will combine the resources and powers of central government with the knowledge and networks of local organisations and groups. We support a nationally consistent framework which requires community input and guides local flexibility to produce a set of actions and options that guide local adaptation and communities' different contexts. A 'one-size fits-all approach' should be avoided. Local solutions for local problems should be encouraged wherever possible.

Such a process and resulting plans won't be identical for every community – because impacts will be felt by different people and regions in different ways, and all communities will have different abilities to respond and co-design solutions that will work for them.



Governance and accountability is a precursor to guaranteed delivery

In designing a new system, clarity is required on who makes the decision to retreat and how it is made.

Without a clearly defined approach and allocation of roles and responsibilities, we are concerned that Aotearoa New Zealand risks seeing a "responsibility deficit" where there is failure to deliver due to the relevant parties not understanding who is responsible for what.

Any framework should clearly articulate roles and responsibilities of local authorities and central government, as well as individuals and communities, iwi/hapū, banks and insurers and other key stakeholders will play in locally-led adaptation planning, and in delivery.

Community consensus and negotiation is to be preferred over regulatory takings and restrictions on land use. However, if negotiation is not feasible and there is no other reasonable solution, government should use the Public Works Act to compulsorily buy out property owners.

Water NZ consider it prudent that if a community cannot reach consensus in face of well-established risk, there are ministerial powers provided for, to intervene to ensure appropriate and/ or timely response.

Water NZ **recommend** guidance that addresses liabilities, existing use rights, at risk infrastructure retirement and arrangements for finance, funding and governance.

Adaptation must be proactive and planned

(Q20 what happens if there is a disaster?)

Proactive retreat is more prudent than reactive responses – especially as this will become increasingly unaffordable as the number of extreme weather events – including flooding and slips – increases.

Adaptation though recovery is one way to progress retreat, however it is not an effective risk or asset management approach and unaffordable overtime. There is an increasing need to focus on risk reduction.

The Civil Defence Emergency Management Act (CDEM) calls for CDEM Groups to prepare "Strategic Recovery Plans". Such blueprints allow risk based, good decisions about how to adapt before a disaster.



Several CDEM groups have pre-disaster recovery plans in place. For example, in 2019, Wellington Region Emergency Management Office (WREMO) developed the Wellington Region Framework for post event recovery based on overarching agreed priorities.

Based on partnerships approach, the framework and its implementation emphasise the building of local capacity, networks and relationship to lead and sustain recovery, decision-making, activities and operations post event.

Clarifying priorities, partners, and responsibilities before an event -

- Minimises the time deliberating over decisions, to do the right things faster.
- Improve collaboration by pre-identifying activities and, partners and developing those relationships.
- Have a clearer idea of where to spend limited money.

We **recommend** that local adaptation plans include a pre-disaster recovery plan or objectives.

Providing and maintaining infrastructure is more expensive in places subject to frequent flooding and land slips

Over the last century buried and above ground assets and services, as well as houses and buildings, have been constructed which are now at increasing risk from climate and natural hazards. Following an event these assets often require maintenance and replacement, and often on a repeated event basis.

Constantly reinstating such assets is time consuming and costly to the owner, customers, or community. While councils can currently 'stop' local roads when it is no longer cost-effective to supply them, services such as water supply are much more difficult to stop.

Asset owners require a pathway guiding when protect, avoid, retreat or retirement of a repeatedly at risk asset or service is most prudent and/or inevitable and what options can be applied is essential.

Communities where the cost of continuing to provide infrastructure services is prohibitive and cannot reasonably be funded by the beneficiaries of those services should be prioritised for retirement and retreat.

Clearer options are needed for councils to risk rate service provision so existing residents can have a choice - either through higher rates and/or the gradual withdrawal of council provided services to reflect changing risk over time.



Together, water service providers, local, region and central government, iwi/Māori and communities should determine when certain areas, infrastructure and properties would need to adapt – either at a particular point in time or when a particular threshold is reached – and develop a plan to action this.

Co-funding resilience

Q5 - Are there other issues with the way we fund adaptation? How can we improve our approach?

Cyclone Gabrielle illustrated the regional council's flood protection schemes are vital to protect both rural and urban economic, environmental and social wellbeing.

Broadly, the current approach is based on the principle of beneficiary pays. This means that those who benefit from risk management measures are the people who should pay for them.

Crown-owned and related assets (rail, state highways, communication and electricity transmission, hospitals and education facilities) all receive flood protection at a cost to regional and targeted local ratepayers, with little contribution from the Crown. The benefits of protection to central government assets vastly exceed their costs.

Regional councils' current annual maintenance and capital investments in flood protection schemes total close to \$200 million. However, the estimated annual capital cost of building further resilience into flood protection schemes would be at least \$150m beyond their current budgets.

We **recommend** co-investment from central government of approximately \$150m per annum to support programmed investment from regional councils.

Currently, flood protection schemes are not considered Lifeline Utilities/ Critical Infrastructure. We **request** the definition of critical water infrastructure is expanded to include river control and flood protection schemes, including their flow and rain gauge monitoring network.

Needed; science communicators and facilitators

(Q21 How can we make sure that local adaptation planning is inclusive and draws on community views?)

A major risk to our adaptation planning is the capability and capacity of the workforce to deliver.

There are insufficient practitioners to do this skilled facilitation and communication work the topic desperately needs.



To have these community adaptation conversations, Aotearoa New Zealand needs facilitators and communicators who are able to work with scientists, risk professionals and communities to understand the risks, establish what is a tolerable level of risk and triggers for action.

Guidance on starting the hard conversations is key for success

Despite the significant implications of adaptation actions (including community-led retreat), there is no nationally consistent communication or engagement process or direction that councils can use to talk with communities.

The hard and emotional nature of adaptation means that conversations can get caught up in situations where communities challenge attempts to get adaptation planning underway – which doesn't help make the progress needed. Having a clear national direction on starting engagement with affected communities will make getting underway with the job of planning easier for councils and communities.

Any adaptation framework must include national guidance on how to progress adaptation conversations and planning within communities including:

- Practical guidance on how to effectively engage communities on and in adaptation.
- Guidance and methodologies on how to move from risk analysis to risk mitigation and options identification.
- Principles, scenarios and priorities to inform adaptive planning.
- A decision-making framework for the PARA framework (protect, avoid, retreat, accommodate).

Improving and communicating natural hazard awareness

We see an opportunity for improving natural hazard awareness and communicating natural hazard information through education, participation and service delivery.

Community understanding of risk can be problematic – low frequency – high consequence risk is not well understood (e.g. the misconception that the '100 year flood' only occurs once in a hundred years). Education and clear communication of risk is key, and this needs to be in advance of an event to ensure community preparedness.



It might be possible to reduce risk but beyond a certain point the cost of acting becomes progressively higher, while the potential returns reduce. It is not possible to it is not engineering or economically practical to eliminate all risk.

The Government might also look at developing information resources, messaging and engagement programmes targeted at businesses, families and whānau to support improving their climate resilience – be that in a personal or commercial capacity. This could take a similar format to the Civil Defence and Emergency Management's guidance, 'Get your household ready for an emergency'.

Conclusion

Water NZ support requiring a proactive, centrally-funded, regionally-informed, catchment-specific, mana-enhancing approach with clearly defined allocation of roles and responsibilities is essential.

We thank the Committee for the opportunity to provide input to the Inquiry into Climate Adaptation.

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Ngā mihi nui

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