

**DATE:** 8 August 2023

**TO:** Department of Prime Minister and Cabinet

**FROM:** Te Uru Kahika Regional and Unitary Councils Aotearoa

**SUBJECT:** Discussion document – Strengthening the resilience of Aotearoa New Zealand’s critical infrastructure system.

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**Tēnā koutou katoa**

## Introduction

Te Uru Kahika - Regional and Unitary Councils Aotearoa represents the sixteen regional councils and unitary authorities of New Zealand. Te Uru Kahika is underpinned by a network of subject-matter experts organised into Advisory Groups. The role of these groups is to provide the regional CEOs with advice and expertise on a range of issues, as well as working with central government to achieve outcomes. The Te Uru Kahika network also plays a vital role in championing best practice, information sharing and collaboration across councils.

Regional government has a significant role to play in a number of areas of critical infrastructure – including a regulatory role, asset funding, ownership and management, natural hazard mitigation, and the integration of land use.

We support the government’s approach to analysing the barriers to resilience and offer our ongoing input into this vital workstream. Our strategic priorities include climate change resilience and we are working across our regional government functions to address not only the short and medium-term solutions to infrastructure resilience but, as importantly, long-term solutions that need to become part of our environment.

## Submission Summary

Our submission makes the following key points:

1. The definition of critical infrastructure must include the infrastructure associated with river management and flood protection schemes. This is separate to and in addition to that which might be considered as part of any definition of ‘water services’.
2. For flood resilience flood forecasting is another important tool in the toolbox. There has been underinvestment and a lack of clear roles and responsibilities for forecasting asset ownership and planning, for example rain radar.
- 3.
4. Regulatory instruments should be made available to speed up achieving resource consents for flood risk infrastructure and permit that infrastructure to be maintained at agreed ‘levels of service’ in the long term.
5. Confirmed, substantial and immediate Government co-investment (table one) should be made into a ten-year pipeline of river flood-risk resilience-improving infrastructure.

6. Clear departmental leadership and accountability should be established to achieve alignment of infrastructure resilience investment.
7. Government investment in other infrastructure, such as roads, needs to align with investment in flood resilience infrastructure.

The rationale for making these points is outlined in the remainder of this submission.

## Definition of Critical Infrastructure

The Emergency Management Bill (2023) defines critical infrastructure as “assets, systems, networks, and services that are necessary for the provision of public services and are essential to public safety, national security, economic security, or the functioning and stability of New Zealand”.

As the 2023 rain events and Cyclone Gabrielle have emphasised, the infrastructure associated with river control and flood protection operates to protect economic, environmental, and social wellbeing. As such, this infrastructure is essential to the functioning of our society, the economy, public safety and security, and the provision of public services. This infrastructure includes flood forecasting and river flow monitoring networks.

Loss, damage, or disruption to flood management infrastructure has— as demonstrated by the recent storm events - severely prejudiced the provision of other essential services, and has had a significant impact on the lives and livelihoods of New Zealanders.

Moreover, river control and flood protection infrastructure play a vital role in protecting other lifeline utilities. Simply stated, river management and flood protection schemes provide **infrastructure that protects other vital infrastructure.**

For example, during Cyclone Gabrielle power outages and telecommunications outages in Hawke’s Bay were caused by the overtopping of the Tutaekuri River and flood water inundation of a power transformer. This loss of power and telecommunications reduced the ability of regional authorities to provide effective and accurate warnings for communities thereby slowing appropriate response to the emergency as it developed. The loss of power and communications also quickly limited citizens’ access to payments systems (including Automatic Teller Machines) and reduced their ability to access critical supplies and up-to-date information during the emergency.

Flood risk management requires application of an integrated risk-based approach that includes emergency management, planning and regulation, construction of physical infrastructure and the application of nature-based tools.

Including river control and flood protection scheme infrastructure in the definition of critical infrastructure is essential. This will enable all New Zealanders, and the communities that they reside in, to have a much higher probability of being able to have confidence their essential needs will be met.

Including river control and flood protection scheme infrastructure in the definition of ‘critical infrastructure’ will ensure consistency with the provisions of other key legislation:

- The Infrastructure Funding and Financing Act 2020: In this Act, eligible infrastructure includes ‘environmental resilience infrastructure’ for ‘managing risks from natural hazards,

including by avoiding or mitigating those hazards and reducing those risks' (section 8 (3) (a)). In this Act, environmentally resilient infrastructure has the same legislative standing as water services infrastructure, but only the latter is identified as critical infrastructure in the discussion document. On that basis alone, river control and flood protection scheme infrastructure should be classified as critical infrastructure.

- The Local Government Act 2002: This Act requires local authorities to develop financial and infrastructure strategies to address flood protection and river control works, along with water services and roads and footpaths, and to address asset management funding in their respective Long-Term Plans.

## Critical Infrastructure Regulation

The current regulatory environment limits the ability of regional authorities to deliver effective and efficient flood risk resilience to their communities. Two elements of service delivery are affected here.

Firstly, regional authorities are limited in their ability to maintain and operate critical flood risk management infrastructure. Defining this infrastructure as 'critical' and providing a regulatory environment that enables flood risk management infrastructure to be constructed to agreed levels of service, without significant regulatory constraint, would significantly increase the security of flood management systems, and thereby enable these systems to optimise the role they play in contributing to a more sustainable, inclusive, and productive growth society. This challenge may be resolved by:

- Making it clear that regional authorities will be given a stream-lined path for the construction of flood management infrastructure, by including an appropriate provision enabling use of the 'fast track' provision in the Natural and Built Environment Act.
- Making provision in the National Planning Framework for the maintenance of flood management infrastructure (including forecasting and monitoring infrastructure) by designation that maintenance as a controlled activity.
- Protecting flood management infrastructure from activities such as farming and road construction that may reduce the effective operability of that infrastructure.

## Co-investment in flood management infrastructure

### Delivering a socially optimal level of resilience

As noted in the discussion document, enhancing the resilience of critical infrastructure can be an objective that is in tension with other objectives with influence on New Zealand's infrastructure system. These other objectives include efficiency and affordability, equity of access and sustainability. With these competing objectives in mind, government has stated it will commit to working with critical infrastructure owners and operators, and the public, to identify and deliver a 'socially optimal' level of resilience.

In the case of the infrastructure associated with river control and flood protection schemes, the primary mechanism to achieve a socially optimal level of 'infrastructure resilience' is Government committing to co-invest, alongside Te Uru Kahika / regional authorities, in river management and

flood protection schemes. All New Zealanders are the beneficiaries. The focus on regulatory solutions, as reflected in the discussion document, is not the right option for achieving this.

### Building New Zealand's flood risk resilience through co-investment

The devastating impacts of Cyclone Gabrielle was a stark call to government, at all levels, to build resilience to flooding - New Zealand's biggest natural hazard. Extreme weather events are now occurring more frequently. New Zealand needs government collaboration and a commitment to co-investment over the long-term to achieve this goal.<sup>1</sup>

The next cyclone may have an equally devastating effect on other parts of New Zealand. A step change is required to Government's attitude to investment in river-related flood-risk resilience-improving infrastructure in all regions – with an emphasis toward investment in risk reduction rather than recovery. The authorising environment and social licence to make this step change now has never been stronger.

The list of matters of national interest served by a return of Government to the co-investment table is long and is well documented in a Te Uru Kahika report '*Before the Deluge*' and in correspondence to the Prime Minister which may be accessed here [Greater Wellington Regional Council – Council Advocacy \(gw.govt.nz\)](#). Without significant additional investment in river management infrastructure, lives and livelihoods will continue to be at significant risk, as has been evidenced by Gabrielle.

1. Is more fiscally responsible than focussing on post-event response and recovery.
2. Reflects Treasury's new performance measurement and Living Standards Frameworks.
3. Supports wellbeing and social inclusion.
4. Better reflects equity / ability to pay considerations. That is, for more deprived communities who are otherwise unable to afford flood protection infrastructure, Government will be able to provide a level of protection from flood risk.
5. Supports job creation and lifts the productive potential of the regions.
6. Contributes to the security of the vital access routes (rail and road) for commerce.
7. Directly protects Crown assets including schools and hospitals.
8. Mitigates escalating insurance premiums and the risk of insurance companies failing to provide insurance cover in flood risk areas – with the long-term consequence of Government inevitably being required to step-up and stump-up to fill the gap occurring because of the absence of private insurance.
9. Provides for resilience and adaptation against the effects of climate change-induced 'above-design' storm events.
10. Above all else, provides resilience and increased levels of safety and security to existing and future individuals, communities, and businesses.

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<sup>1</sup> The focus of this submission is on flooding caused by the exceedance of the carrying capacity of river management and flood protection schemes. Other flooding effects also occur because of inadequate storm water management systems. Land slippage, coastal inundation, and the resultant damage to housing also occur during extreme weather events.

The shared goal should be to make New Zealand's river-related flood risk management infrastructure 'fit for purpose,' within a decade. This should be a headline objective for inclusion in Government infrastructure resilience policy.

### Investment proposition

Regional authority / Te Uru Kahika members have identified 92 projects able to be completed within three years if Government co-investment of \$257m was able to be immediately secured. Regional authorities will contribute over \$170m toward these projects.

Alongside this immediate opportunity to improve New Zealand's resilience against floods, it is equally important to achieve sufficient longer-term (10+ years) co-investment to enable all river management and flood protection schemes in New Zealand to provide a level of service capable of withstanding the effects of climate change within a decade.<sup>2</sup>

The cost of doing this is estimated to be in the vicinity of \$5billion. Half of this cost will be met by regional authorities, using rates and other local charging mechanisms. The other half should be contributed through Government co-investment.

A key driver behind the sector's concern is the growing insurance sector trend to apply risk-based premiums and / or to withdraw from providing cover from locations at significant risk of flooding.

The return on investment in risk reduction, compared to the cost of recovering from flood events, exceeds 1:5.

When the cost of the immediate 92 shovel ready flood management projects are combined with the longer term / ten-year needs, the rate of Government co-investment is \$200m pa for the next three years and then \$250M pa by FY 2026/27 forward.<sup>3</sup>

Regional authorities will match this commitment. They have already committed to investing \$200m pa toward flood-risk resilience improving infrastructure. They will work with their communities to ramp-up their co-investment share over the next few years to match that required from Government.

### Delivery proposition and benefits

A dedicated Government fund to support a pipeline of works for a decade would result in savings and more effective, efficient, and timely actions that substantially reduce flood risk at vulnerable locations.

Benefits (in addition to those listed above) include the following:

- Capacity and capability would be built and retained right through the chain of provision.
- Inter-regional cooperation and procurement savings would be optimised.

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<sup>2</sup> The \$5billion estimate is based on regional authority assessments of the cost to establish, maintain, and comply with a risk management program that identifies and mitigates river management and flood protection schemes to climate change vulnerabilities.

<sup>3</sup> This is over and above the \$100m committed to improve the resilience of river management infrastructure in cyclone ravaged regions.

- Consenting and community involvement activities would be more strategically approached.

Basically, more would be done consistently better. In addition, proven governance and delivery systems already exist within regional authorities alongside the Kānoa ‘Climate Resilience Flood Protection Programme Advisory Board’ to protect the interests of each party. These arrangements are capable of refinement to support and protect Government’s co-investment interests in an expanded ten-year programme.

### Make infrastructure a top Priority tool in the multi-toolbox

Over the last five years, Te Uru Kahika’s commitment to programmes that will build community resilience to flood risks has matured. This is recognised in their adoption of a three-pou approach:

- Flood management infrastructure: Get the right flood management infrastructure, in the right place, performing the right level of flood management service, with the right priority and with application of the right environmental / te Mana o te Wai sensitivity.
- Policy and strategy: Actively contribute to climate change adaptation planning / policy actions.
- Informed property owners: Make best use of the information held by councils (LIMs) to help property owners to make their own decisions about how to build resilience against flood risks and improve flood warning.

Spatial planning tools and managed retreat tools are critical parts of a necessary multi-tool and adaptive approach to the management of community resilience against flood risks. These tools will take some time before they have an effect compared to the intervention in the toolbox with most immediate, practical, affordable, and visible beneficial effects. This is to enhance Government and Te Uru Kahika co-investment in river-focused flood risk resilience-improving infrastructure.

### Summary – co-investment

In summary, confirmed, substantial and immediate Government co-investment (table one) in a ten-year pipeline of river flood-risk resilience-improving infrastructure is the priority means of ensuring Aotearoa New Zealand has a secure platform for a productive, sustainable, and inclusive economy.

**Table one: Government co-investment**

FY 2023/24	FY 2024 / 25	FY 2025 / 26	FY 2025 / 27	FY 2027 / 28	FY 2028 +
Co-investment for 92 projects described in ‘Before the Deluge’					
\$93m	\$88m	\$70m	\$6m		
Additional co-investment request - post Cyclone Gabrielle					
\$100m	\$100m	\$150m	\$200m	\$250m	\$250m
<b>TOTAL</b>					
<b>\$193</b>	<b>\$188</b>	<b>\$221</b>	<b>\$206</b>	<b>\$250</b>	<b>\$250m</b>

## Departmental leadership

In achieving the necessary river management and flood protection scheme enhancements, regional and unitary authorities are constrained by the absence of clear departmental leadership and the lack of clarity about the preferred Government process for the sector to follow.

Te Uru Kahika notes that: MfE addresses policy matters; DIA has an overview responsibility for local government (in one instance, this has had them stray into funding flood protection infrastructure in Westport) but no clear statutory mandate to progress solutions to natural hazard challenges; NEMA has a leadership role in the management of natural hazard events; DPMC has an intervention role when there are matters of national interest at stake but no clear departmental accountability to resolve them; Treasury has responsibility for funding supply and related accountability; and Kānoa (MBIE) has a role in protecting Government's investment interests in 56 'shovel ready' community climate-change flood resilience projects.

In the eyes of Te Uru Kahika and as demonstrated by the above list, the accountabilities, and processes for building infrastructure resilience across government departments, are unclear. Te Uru Kahika would welcome certainty about which department it should partner with to achieve flood management infrastructure solutions contributing to New Zealand's resilience. The challenges associated with decisions about co-investment in flood management appear too large and complex for existing agencies to effectively address. Recent experience suggests that only a piecemeal approach is possible. Without clear leadership, accountabilities and processes, solutions to the critical flood risk-management infrastructure problem faced by Te Uru Kahika and the nation, cannot be progressed.

Te Uru Kahika see the \$6b National Resilience Fund as the most likely source of funding for Government's co-investment in flood management infrastructure. Treasury and 'Rae Paenga' – the Crown Infrastructure Delivery Unit, appear to be the best agencies to help the sector access this fund. Te Uru Kahika recommend that these agencies be given leadership responsibility to work with Te Uru Kahika to get necessary flood management infrastructure in place.

## Align flood protection investment priorities across utility network providers

Many flood protection infrastructure projects throughout New Zealand are stymied by the absence of alignment with the investment priorities of network utility providers.<sup>4</sup>

Te Uru Kahika requests DPMC's leadership to achieve alignment between infrastructure utility providers and the sector's flood risk resilience programme. This is perhaps best resolved via development of a regulation<sup>5</sup> requiring Waka Kotahi and Kiwi Rail to have long-term asset

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<sup>4</sup> Westport provides a classic example of this challenge. The Carter's beach settlement and the Westport airport will not enjoy higher levels of flood risk resilience despite Government's decision to allocate \$23.9m. This is simply because Waka Kotahi has no intention of upgrading their upriver state highway bridge for at least forty years.

<sup>5</sup> Such a regulation could be expressed, for example via Government's Policy Statement (GPS) defining the matters for primary attention by Waka Kotahi.

management plans aligned to the 30-year asset management plans developed – as required by the Local Government Act, by regional authorities.

In brief, the dependencies within and interdependencies between infrastructure providers and critical assets, including how service disruptions may cascade across the infrastructure system and the vulnerabilities that this may create for other sectors, are not aligned. Mechanisms should be developed to 'require' this alignment to be achieved.

## Next steps

Te Uru Kahika would welcome the opportunity to meet with DPMC and relevant government departments to discuss the absolute importance of working together to resolve the critical infrastructure resilience issues identified in this submission. We see us working together on not just the immediate and medium term solutions but also long-term solutions that will require potential changes to the design of our system of planning and management.

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We have appreciated this opportunity to provide further feedback to you and look forward to ongoing discussions with you.

Nāku iti noa, nā

