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WAIMAKARIRI DISTRICT COUNCIL SUBMISSION ON STRENGTHENING THE RESILIENCE OF AOTEAROA NEW ZEALAND'S CRITICAL INFRASTRUCTURE SYSTEM

1. Introduction

- 1.1 The Waimakariri District Council (the Council) thanks Department of the Prime Minister and Cabinet (DPMC) for the opportunity to provide comment on the Government's discussion document on how to strengthen the resilience of infrastructure across the county.
- 1.2 The Council is willing to further engage with DPMC, if required, on the matters raised in this submission.

2. Background

- 2.1 Waimakariri District is located in the Canterbury Region, north of the Waimakariri River. The district lies within the takiwā of Ngāi Tūāhuriri one of the primary hapu of Te Rūnanga o Ngāi Tahu. It extends from Pegasus Bay in the east to the Puketeraki Ranges in the west; sharing boundaries with Christchurch City to the south, Selwyn District to the south and west, and Hurunui District to the north.
- 2.2 Geographically, socio-culturally and economically Waimakariri District is primarily a rural district. People identify with and are attracted to a 'country lifestyle'. However, the district's proximity to Christchurch City means it has a significant and growing urban and 'peri-urban' population. Approximately 60 percent of residents live in the four main urban areas of Rangiora, Kaiapoi, Woodend/Pegasus and Oxford. The remainder live in smaller settlements or the district's rural area, including approximately 6000 rural-residential or rural 'lifestyle' blocks.
- 2.3 As a territorial local authority, the Council is the administering body for its locality. Bearing responsibility for functions alongside providing a range of services that directly impact on the lives and safety of its residents. The propositions of the discussion document and follow up action in this arena, has the potential to shape Council's infrastructure and levels of service provided to the community.

3. General Comments on the Discussion Document

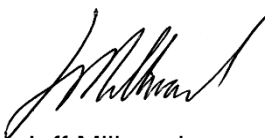
- 3.1 The Council does not agree that urgent reform is needed to deliver a more comprehensive and coordinated approach to critical infrastructure regulation. The Council acknowledges that there is significant room for improvement, however New Zealand has a long history of providing resilient infrastructure despite the financial constraints of a relatively sparse population, and challenging geography and climate. There are opportunities to build on the good work that has been done with the sector to date, but we do not endorse the call for urgent reform.
- 3.2 We agree that a robust and resilient critical infrastructure system will work to ensure that communities across the country are better placed to manage the many complex and intersecting challenges that are emerging across our cities and townships.
- 3.3 Councils and territorial authorities play a key role in the provision and maintenance of some critical infrastructure. We remain a provider of the critical infrastructure like potable water, wastewater treatment and disposal, stormwater detention and disposal, flood protection and control works, solid waste services as well as roads.
- 3.4 We think this fact is not adequately reflected in the discussion document and as a result, there has been little effort made to engage specifically with the sector on this vital topic beyond the information sessions held in the three large cities.
- 3.5 Specific feedback on the questions raised in the discussion document are provided in the document that accompanies this covering letter. Council's feedback is largely derived from its utilities and roading functions, particularly those around water.

4. Conclusions

- 4.1 WDC thanks DPMC for the opportunity to comment on its discussion document. We applaud the initiative that has been applied to the work thus far and look forward to partnering with the Government in delivering on the vision for robust and resilient critical infrastructure.

Our contact for service and questions is Gerard Cleary, General Manager Utilities and Roading (gerard.cleary@wmk.govt.nz or 021 480 839)

Yours faithfully



Jeff Millward
Chief Executive

Submission on Strengthening the resilience of Aotearoa New Zealand's critical infrastructure system - Discussion Document

Objectives for and principles underpinning this work programme

While we generally agree with the objectives of the programme, the scope of critical infrastructure when it comes to “water systems” is unclear in both the Discussion Document and current legislation. The current Civil Defence Emergency Management Act 2002 (CDEM) does not appear to recognise flood control structures (i.e.: river stop bank systems) as a lifeline utility. The CDEM Act only refers to water services provided by entities, as per the following extract from Part B of the CDEM Act:

- *An entity that supplies or distributes water to the inhabitants of a city, district, or other place.*
- *An entity that provides a wastewater or sewerage network or that disposes of sewage or storm water.*

There also does not appear to be any recognition of recognition of flood control structures as critical infrastructure in the Emergency Management Bill.

Furthermore, solid waste services, including refuse, recycling, and organics should be recognised as critical services and infrastructure. The criticality of these services became apparent during the Canterbury and Christchurch Earthquakes as well as more recently during the Covid Pandemic. These services were essential services that needed to keep functioning to protect the wellbeing, health and economic functioning of our communities and to allow people to continue to remain in their houses and keep business operational.

The Discussion Document refers to water services, water infrastructure and water systems, somewhat interchangeably where they are quite different, as set out below:

- *Water services covers drinking water, wastewater, and stormwater systems (typically provided by a council, but some private systems exist)*
- *Water infrastructure includes water services but also private individual systems (note some hazards can have widespread impacts on private individual systems that cumulatively can have a similar impact as a larger system) and also includes flood defences and flood control structures.*
- *Water systems includes both constructed and natural water systems (e.g. rivers) and the management (including maintenance) of these is important from a hazard management perspective.*

We believe that the scope of “water systems” need to be made clear and should include flood defences and control structures as well as natural water systems.

In terms of the criteria set out in this section for evaluating options for enhancing critical infrastructure resilience, namely ‘effectiveness’, ‘cost’ and ‘complexity’, this should also include

'benefit', to justify the investment in resilience and to also understand where the cost of investing in resilience should be borne.

The reference to resilience in the Discussion Document does not recognise the broad spectrum of resilience from the asset through to the end user. The list below sets out different levels that resilience needs to be considered.

- *Asset resilience – individual asset*
- *Infrastructure resilience – network of assets*
- *Service resilience – organisation agility (ability to respond quickly and potentially provide services in an alternative way)*
- *Critical infrastructure ecosystem resilience – interdependencies of multiple different systems*
- *Community resilience – preparedness and ability to adapt.*

The incorporation of resilience at the asset, infrastructure and service level predominantly benefits the entity providing the service, while the provision of resilience at the critical infrastructure ecosystem and community level also benefits interdependencies with other services and infrastructure, wellbeing, and economic recovery.

Accordingly, we believe, consideration should be given to allocation of cost between service providers and the government, for providing resilience at a critical infrastructure ecosystem and community level. We do note that there are economic drivers for providers to provide resilience at this level and there is some level of social responsibility incumbent on these service providers. We note that paragraph 26 of the Discussion Document, states that the government's annual contingency liability for natural hazards is \$3.3 billion, which would be reduced to some extent by investment in resilience.

Why a new regulatory approach may be required

While not a megatrend, there are ongoing changes to New Zealand society that this making the provision of critical water system infrastructure more important, in particular:

- *Higher urban populations with denser housing – increases exposure and reduces land for management of water (e.g.: conveyance of flood flows).*
- *More reliance on technology and services – less ability to access resources to cope for themselves (i.e., decreasing community resilience and increasing reliance on external support during and after an event).*

This trend makes it more important for infrastructure resilience compared to the past.

We disagree with that engaging the critical infrastructures system's resilience (i.e.: "critical infrastructure ecosystem resilience", referred to above) should be paid for exclusively by individual entities and their customers. We agree with Paragraph 65 that costs should be borne by the predominant beneficiary, and for critical infrastructure ecosystem resilience this could include the government as set out above. Additionally, the need for resilience in certain

infrastructure may actual be driven by need of a different entity – in such cases the costs would not necessarily be always borne by the beneficiaries of the investment.

Building a shared understanding of issues fundamental to system resilience

We agree that government partnering with critical infrastructure owners and operators is fundamental to system resilience and that a systems-based approach to critical infrastructure resilience is required.

We believe that government’s role should be more than just information collation and sharing. There is a need for information development in some areas, to ensure that critical infrastructure owners and operators are best placed to understand and management the risks facing their organisations. For example, currently there is no national standard for flood hazard modelling, mapping or level of protection, this leads to inconsistencies across the country and areas where no or limited flood hazard information exists. While acknowledging that flood and hazard mapping must be done at a localised level to ensure it is grounded on local conditions and as accurate as possible. This should be coordinated, and consideration given to funding this, at a national level such that vulnerabilities and interdependencies can be understood.

Setting proportionate resilience requirements

We agree that there is a need for minimum resilience standards, however this should recognise the difference between:

- *Asset, infrastructure and service resilience, which benefits and to an extent is driven by the expectations of the customer / end user in terms of what they are willing to pay for a reliable service, and*
- *Critical infrastructure ecosystem and community resilience, which benefits wider communities and the government through reduced natural hazard liability and wider wellbeing and economic growth.*

There is also a need to consideration given to setting different acceptable levels of service post an event, which are different to ‘business as usual’ levels of service. The post event levels of service may change as recovery progresses and services are restored. Understanding required levels of service is important to establishing the level of investment in resilience required.

Managing significant national security risks to the critical infrastructure system

We have no specific feedback on this section.

Creating clear accountabilities and accountability mechanisms for critical infrastructure resilience

There is a need to have clear understanding of which government agency or agencies is responsible for the resilience of New Zealand's critical infrastructure system. We note that no reference is made in this section of the Discussion Document to Te Waihanga, the New Zealand Infrastructure Commission, and the role they play in infrastructure resilience from a strategic perspective. Any new agency or agencies for infrastructure resilience will need to link in with the current government structure for oversight of infrastructure for each service sector, which is already complex.