

8 August 2023

National Security Group
Department of the Prime Minister and Cabinet
Level 8 Executive Wing
Parliament Buildings
Wellington 6011

Emailed to: infrastructureresilience@dpmc.govt.nz

Dear members,

Submission from the Manawātū District Council on Strengthening the Resilience of Aotearoa New Zealand’s Critical Infrastructure System

The Manawātū District Council (MDC) thanks the Department of the Prime Minister and Cabinet (DPMC) for the opportunity to provide feedback on the discussion document titled *“Strengthening the resilience of Aotearoa New Zealand’s critical infrastructure system.”*

Background

The Manawātū District Council (MDC) is currently responsible for providing local roading and three waters infrastructure (drinking water, wastewater treatment and disposal and stormwater disposal). Based on Government’s current intentions, MDC’s role with three waters infrastructure will change with the establishment of new Water Services Entities, sometime between 1 July 2024 and 1 July 2026.

Local Government is also responsible for providing community infrastructure that is not within the scope of this discussion document. In addition to our role as infrastructure provider, MDC also plays a regulatory role under the Resource Management Act, and advocates on behalf of the Manawātū Community with other utility providers to ensure that the current and future infrastructural needs of the community are met.

General Feedback

MDC understands that the key drivers for this engagement on reforming New Zealand’s existing regulatory approach to delivering a resilient critical infrastructure system include:

- New Zealand’s ‘hazardscape’, vulnerabilities (including aging infrastructure);
- outdated or relatively insecure technologies used by some operators; and
- the four ‘megatrends’ of:
 - o climate change;
 - o growing national security risks; a fragmented global economy; and
 - o technological change.

While MDC agrees that these vulnerabilities and megatrends are relevant and require addressing by critical infrastructure operators, MDC is concerned that the focus on reforming

the regulatory approach to delivery of critical infrastructure will only lead to additional reporting requirements and cost on network utility providers. MDC questions the benefit of another layer of regulation and reporting when network utility providers already operate in a highly regulated and audited environment. MDC considers this reform proposal to be ideological, centralised and bureaucratic. **MDC recommends that the National Security Group not proceed any further with this reform pending the outcome of the 2023 General Election.**

The work programme's objective to *"enhance the resilience of New Zealand's critical infrastructure system to all hazards and threats, with the intent of protecting New Zealand's wellbeing, and supporting sustainable and inclusive economic growth"* is generally supported by MDC. In particular, MDC supports the recognition given to the contribution that critical infrastructure makes to wellbeing. The work programme's objective is generally consistent with MDC's strategic goal from the 2021 Infrastructure Strategy which was: *"To provide the Manawatū community with resilient infrastructure in a cost-effective way, meeting both current needs and future growth and demand."*

As noted in the discussion document, the proposed reform of the Civil Defence and Emergency Management Act 2002 includes a shift from 'lifeline utilities' to 'critical infrastructure.' MDC agrees with the inference that the Emergency Management Bill will go some way to enhancing New Zealand's critical infrastructure resilience.

The availability of funding is the biggest constraint on Council's ability to enhancing the resilience of our infrastructure. MDC agrees with Taituarā that affordability is a key consideration when making investment decisions, particularly given our ageing population and the current cost of living crises. MDC recommends that a greater proportion of tax revenue be transferred from central to local government to reduce reliance on rates for funding infrastructure resilience. MDC is also concerned about the declining FAR rate and the amount of funding being redirected away from Waka Kotahi. If the current trend of declining funding continues, roads (including State Highways) across the country will degrade to a standard that means they will take years to recover.

MDC also generally supports Taituarā's submission. MDC shares Taituarā's concerns that the introduction of a regulatory regime based on minimum standards could open infrastructure providers up to increased political risk. However, MDC does not support the introduction of a regulatory regime. As outlined above, MDC is of the opinion that providers of critical infrastructure are already sufficiently regulated and that an additional layer of planning and reporting would be of little benefit.

What MDC is already doing to increase the resilience of its infrastructure

Resilience is a central theme (or driver) of Council's Infrastructure Strategy. Council anticipates that the effects of climate change will include increased likelihood of more frequent severe weather events such as storms, floods and droughts and may affect infrastructure capacity in areas.

To mitigate the flood risk, the District's major infrastructure assets, including the Manawatū Wastewater Treatment Plant, have been located outside the area likely to be affected by a 1 in 200 year (0.5% Annual Exceedence Probability (AEP)) flood event. Major flood protection works (stop banks) have been completed for the Lower Manawatū, the Kiwitea Stream and

the Ōroua River flood control scheme. These stopbanks are designed to withstand the current 1% AEP flood event (1 in 100-year flood). In addition to this, Council is working with Horizons Regional Council on the Reid's Line spillway flood protection scheme to increase the level of flood protection provided to Feilding.

The roading network in the Manawatū District has a significant level of exposure to flood hazard. Even without taking into account the exacerbating effects of climate change, it is estimated that 226 km of roading infrastructure is exposed to flooding. Overall, the length of road exposed to flooding is significantly higher than road exposed to coastal inundation. Roding infrastructure is also particularly at risk from slips and landslides associated with heavy rainfall. A resilience plan (non-routine work to minimise the threat of road-closure) is in place and operational for roading infrastructure. This resilience plan focuses investment in structures maintenance and drainage to reduce the cost of emergency works.

Generally, the District is well-placed in terms of exposure of water infrastructure to inundation as a result of the range of sea level-rise scenarios, and in terms of current projected flood risk. Forward planning for maintenance and renewal budgets have factored in the effects of climate change. Council will be working to identify where current and future assets and level of service are at risk from the effects of climate change, including higher intensity rainfall, extended droughts and sea level rise. Council is improving the resilience of the three-waters networks through new works and renewals and by using resilient design materials and pipe-laying techniques. Critical infrastructure assets are prioritised for renewal over other assets of a similar age to increase resilience and reduce our risk profile.

Increased frequency and intensity of rainfall events results in infiltration and inflows that increase wastewater volumes to be treated. Programmes to address this, including leak detection and stormwater works, are underway.

The Manawatū District is well-placed in terms of water security (adequacy of supply into the future) but some rural communities are already experiencing water scarcity during prolonged periods of drought, which are anticipated to increase in frequency. Water supply for firefighting is also an area of vulnerability for these communities. Council is working with relevant organisations including Fire and Emergency New Zealand, to help ensure these communities are well-positioned to meet foreseeable demands for both drinking and general/firefighting water supplies. Under Council's future plans to extract more of Feilding's drinking water supply from groundwater, less pressure will be placed on the Ōroua River.

In light of the predicted increase in frequency and severity of storm events and extreme weather, Council has taken measures to ensure it has the financial means to respond to such events. These measures include investing in externally sourced insurance, while also maintaining a self-insurance reserve of \$1 million, building resilience reserve funds over the life of the Long-term Plan, and a self-imposed \$5 million debt cap buffer to ensure there is capacity to borrow if required.

Council applies flood modelling data to consenting processes for future development. Land Use decisions must be consistent with the Regional Plan, which includes a requirement to avoid or mitigate the 0.5% Annual Exceedance Probability (1 in 200 year) flood. Council also considers natural hazard risk when identifying growth areas as part of the District Plan Review.

However, the current inconsistency between the definition of “Natural Hazard” in the Resource Management Act 1991 and the Building Act 2004 continues to create confusion.

Council has had some initial information sharing hui with local marae around improving their reliance to extreme weather events. Council has partnered with Powerco to look at each Marae with regards to electrical supply. The intention is to enable better connection to generator supply for use during emergency events.

The Rural Connectivity Group is working to build the 4G broadband and mobile infrastructure needed to meet government targets. The focus is to increase high-speed broadband connectivity in rural areas and to address mobile ‘black spots.’ Despite the progress made in recent years by the Rural Connectivity Group, equality of access to digital services remains an issue in the Manawatū District. Fiber internet is currently only available in some towns across the region such as Feilding and parts of Sanson, Kimbolton, and Rongotea. There is fiber planned for Himatangi Beach. The majority of rural Manawatū only have access to wireless or in some cases ADSL which are significantly slower and less reliable.

MDC has commenced its programmed roll-out of ultrafast broadband in the Kawakawa Road Industrial Growth Park. There is an Ultra-Fast Broadband infrastructure targeted rate that applies to all rating units in Kawakawa Road/Darragh Road industrial area within 10 metres of the Ultra-Fast Broadband infrastructure. This will be extended to the new Turners Road extension as it is developed in the next few years.

Does more need to be done to improve the resilience of New Zealand’s critical infrastructure system?

It appears to MDC that Waka Kotahi attempt to reduce Emergency Works claims from local authorities by interrogating every detail provided to them. The prescriptive requirements that local authorities must meet to secure central government funding adds cost that would be far better invested in physical works ‘on the ground.’

The approval of emergency works claims by Waka Kotahi can take many months. Meanwhile, damaged roading infrastructure remains vulnerable to further damage from future weather events and continues to degrade, adding further cost to restoration works. Funding for recovery after emergency events needs to be more proactive and arrive more promptly so repair works can be completed quickly.

Sufficient Emergency Works funding needs made available, in a timely manner, to make the necessary resilience improvements for the local roading network. If this was done then those vulnerable sections of the road network would be more likely to withstand future adverse events.

MDC does not wish to provide comment on the resiliency needs of other critical infrastructure that is not the responsibility of local authorities.

Expenditure on critical infrastructure damaged by emergency events

MDC spent a total of \$9,285,041 (an average of \$1,547,507 per annum) on emergency works over the period of 2016/17 to 2021/22. This total includes expenditure in response to the following emergency events:

- 2016/17 – Cyclone Debbie (May 2017) and June 2015 flood event - \$3,450,469
- 2017/18 – September 2018 flood event and June/July snow event - \$2,548,605
- 2021/22 – Severe weather event from 13 – 15 December 2021 - \$1,500,000.

The severe weather event from 13 – 15 December 2021 caused flood damage to a number of areas in the Manawatū amounting to \$1,500,000. The Emergency Works Funding was not approved by Waka Kotahi until May 2022. The costs had to be contained within the maintenance budget (the total maintenance budget for the 2021/22 financial year was \$5,485,889) until the funding was approved. This has the effect of reducing the resilience of the roading network to future extreme weather events as money from Council’s maintenance budget has to instead be used for the restoration of emergency works.

The following table provides a summary of emergency works claims made to Waka Kotahi for the 2022/23 financial year, including in response to Cyclone Gabrielle. The \$3,475,605 of the Emergency Works Funding was not approved by Waka Kotahi until March 2023. The costs had to be contained within the maintenance budget (the total maintenance budget for 2022/23 was \$6,281,219) until the funding was approved.

Also of note, there is an outstanding claim of \$9,775,000 to Waka Kotahi for the reinstatement of three bridges that were destroyed by heavy downpours associated with Cyclones Hale and Gabrielle.

Table 1: Emergency Works Claims

Event Type	Approved Funding	Under review	FAR %
EW - May Event 2023. Recovery Phase		\$2,900,000	
EW - May Event 2023. Response Phase		\$501,000	
EW - Cyclone Gabrielle February 2023 Recovery Phase		\$6,374,000	
EW - Cyclone Gabrielle February 2023 Response Phase	\$2,139,338		92
EW - January 2023	\$325,802		52
EW - January 2023	\$259,752		72
EW July 2022 Events	\$295,647		52
EW June 2022	\$127,426		52
EW May 2022	\$201,827		52
EW November 2022	\$125,813		52

	Total	\$3,475,605	\$9,775,000	
Total 2022-23			\$13,250,605	

Table 2: Actual expenditure on emergency works for the 2022/23 financial year

Emergency Works			FAR	June (EoY)
141	EW - Cyclone Gabrielle February 2023	\$2,139,338	92	\$1,918,742
141	EW - January 2023	\$325,802	52	\$325,802
141	EW - January 2023	\$259,752	72	\$259,752
141	EW July 2022 Events	\$295,647	52	\$295,647
141	EW June 2022	\$127,426	52	\$127,426
141	EW May 2022	\$201,827	52	\$201,827
141	EW November 2022	\$125,813	52	\$125,813
			Actual	3,255,009
Emergency Works - Totals		3,475,605	Budget	3,475,605

Of the \$3,475,605 budget approved by Waka Kotahi, \$3,255,009 was spent in the 2022/23 financial year.

How MDC expects a resilient critical infrastructure system to perform during adverse events

MDC agrees with the statement in the Critical Infrastructure Emergency Management Bill consultation document, that we would expect that *“Critical infrastructure entities are able to function to the fullest possible extent, even though this may be at a reduced level, during and after an event.”* MDC would expect critical infrastructure to perform in line with each entities emergency levels of service.

Willingness to pay higher prices for a more resilient and reliable critical infrastructure system

Willingness to pay is subjective and communities differ in their ability to pay. While some people may be willing to pay higher prices for more resilient and reliable critical infrastructure, this will not be universal.

The consultation document recognises that enhancing resilience can be in tension with other objectives for the infrastructure system, including efficiency, affordability, sustainability and

high levels of competition between critical infrastructure entities. MDC's strategic goal for infrastructure delivery (as outlined in the Infrastructure Strategy 2021) highlights the need to balance resilience with affordability when meeting current and future needs of the Manawatū Community.

MDC agrees with the Taituarā submission that the availability of funding acts as the most significant practical and political constraint on the policy choices available to local government. As noted above, MDC recommends that a greater proportion of tax revenue be transferred from central to local government to reduce reliance on rates for funding infrastructure resilience.

Proposed Criteria for Assessing Reform Options

MDC generally agrees with the three criteria proposed by government to test each option for amending New Zealand's regulatory and organisational settings for critical infrastructure resilience. However, we are generally unconvinced that reform is necessary.

MDC is concerned that additional regulatory requirements on infrastructure owners and operators will result in increased reporting requirements and compliance costs, which will ultimately result in increased costs for end-users and government.

MDC asks that any proposals to shift responsibilities, including to local government as an infrastructure owner, operator and regulator, include a detailed analysis of additional expenses that would be incurred. This is necessary to inform options analysis.

Megatrends

MDC agrees with the four megatrends identified in the consultation document. MDC also agrees with the submission by Taituarā that New Zealand's aging population should be included as an additional megatrend that should be considered when making decisions about enhancing resilience of critical infrastructure.

MDC forecasts a significant increase in the 80-84 years and 85+ years age groups, with both increasing by over 100% by 2054 (Infometrics high scenario population forecasts, May 2023). The proportion of residents aged 65 and over is forecast to increase from 19.1% of the population of the Manawatū District in 2023 to 23.1% of the population in 2054. With an aging population, we are anticipating a higher proportion of residents on a fixed income, raising concerns about the affordability of services.

One additional megatrend that MDC recommends for consideration is "inequity." MDC considers that there is inequity in the priority that central government places on infrastructure in metropolitan areas compared to rural/provincial areas. For example, as a rural district, MDC is concerned about the amount of central government attention and investment given to combating congestion in metropolitan areas, at the expense of keeping the lifelines of primary production open in our rural areas. The residents of the Manawatū District, especially those on unsealed roads, are impacted by lower economic, social and environmental outcomes.

There are also inequities in ratepayers' ability to pay. The current reliance on rates as the primary revenue source for local government is unsustainable, and exacerbates inequality between urban and rural areas.

The consultation document identifies climate change as one of the megatrends that is expected to undermine the resilience of New Zealand's critical infrastructure system. MDC is forecasting an increase in the frequency and intensity of extreme weather and climate events.

Inequities exist in forecast climate change impacts. For example, in the Manawatū District, Māori will likely be disproportionately affected by climate change. Approximately 84% of Māori-owned land within the Manawatū District is next to waterways such as the Manawatū, Rangitīkei and Ōroua Rivers and their tributaries that have a long history of flooding. Approximately 18% of Māori land in the Manawatū District is within a “Flood Channel Zone” in the Manawatū District Plan.

Financial implications of enhancing resilience

Multiple responses of council to repair or replace infrastructure after climate change events has consequences for Council’s debt limit for incurred costs. In adhering to the principles outlined in the Sendai Framework, Councils should be supported in claiming back costs to repair and build back better. Financial support is also needed to appropriately fund emergency management to build the resilience of the community and other response agencies.

Additional information needed to support critical infrastructure owners and operators and improve resilience

MDC is in support of a national hub that holds all available climate data and natural hazard information across all hazard environments. MDC recommends that this national hub including information on (but not limited to): re-modelled tsunami zones, flood zones, wind zones, storm surge zones, drought risk indicators, water storage/ dams sites, improved forestry zones in terms of fire risk hazard and improved land zoning in preparedness to climate change risks.

Having access to the best available climate and natural hazard information will enable critical infrastructure providers to be better prepared to avoid climate risks and to increase the resilience of existing and planned critical infrastructure.

Resilience Standards

The discussion document recognises that the dependencies and interdependencies between critical infrastructures mean that weaknesses in one entity can adversely impact the entire infrastructure system. MDC recognises that this is valid.

However, MDC considers that the current regulatory approach to critical infrastructure regulation, being asset and sector-centric with some roles and responsibilities set out in legislation, is generally appropriate.

MDC has reservations about the government being able to set, and enforce, minimum resilience standards across the entire infrastructure system. If standards were to be introduced, MDC’s preference would be for those standards to be principle-based. If process-based resilience standards are to be introduced, MDC recommends that those be tied to existing legislative requirements so as to not create an additional reporting burden on critical infrastructure providers.

Government responsibility for the resilience of New Zealand’s critical infrastructure system

MDC would not oppose giving overarching responsibility to an existing government agency to provide oversight of critical infrastructure resilience. MDC’s preference is that an existing agency take on this new responsibility, rather than a new regulatory agency being created.

The submission by Taituarā suggests that Te Waihanga – the New Zealand Infrastructure Commission might be the best agency to take on this new responsibility.

MDC recommends that this agency have overarching responsibility and provide direction to infrastructure providers to assist with developing nationally-consistent approaches to risk management and resilience. However, MDC would not support this agency taking on compliance and enforcement mechanism to ensure compliance with minimum standards. We do not consider this necessary given the high level of regulation that already exists for critical infrastructure providers.

If not already done, MDC recommends that the National Security Group engage with the New Zealand Lifelines Council (NZLC) as a key stakeholder when confirming roles and responsibilities for the agency. The mission of the NZLC is *“connecting lifeline utility organisations across agency and sector boundaries to improve infrastructure resilience.”* MDC is already connected to the NZLC through the Civil Defence Emergency Management Regional Lifelines Advisory Group.

Yours sincerely

A handwritten signature in grey ink, appearing to read 'Helen Worboys', with a large loop at the end.

Helen Worboys, JP
Mayor