



Natural Hazard Risk Planning: Progress and Challenges in New Zealand

Suzanne Vallance, Nicholas Kirk, Peter Edwards and Gradon Diprose from Manaaki Whenua – Landcare Research New Zealand

Key Messages

1. Delays and inconsistencies across regions in managing hazards through risk-based planning leaves some communities more vulnerable than others.
2. Regions (and Districts) that have experienced significant natural hazards have adopted stronger risk-based planning approaches. While experience can be a trigger for improved disaster management, proactive and pre-emptive improvements would be preferable.
3. To ensure all regions can implement risk-based planning, central government should provide a more stable and consistent legislative framework and on-going support for science, research (particularly around impact assessments) and technology.
4. Enhanced collaboration, sharing of good practices and consistent policy between neighbouring and different tiers of local government are important for enabling risk-based-planning.
5. Proactive land-use policies can mitigate future risks (e.g. by prohibiting or limiting new developments in high-risk areas). There are planning tools available to help councils, but they are not being used as well as they could.

Natural hazard planning is an essential component of New Zealand's land use management, which was reinforced by the 2017 Resource Management Act (RMA) amendments. The amendments emphasised a 'risk-based planning approach' that incorporates land-use planning, and reduced dependence on structural solutions to hazard management, such as sea walls and stop-banks. Regional

Policy Statements and District Plans were to reflect the RMA amendments.

A risk-based planning approach to natural hazard management involves three core elements.

1. Assessment of threat likelihood.
2. Assessment of threat impact.
3. Mitigation and management primarily through land-use planning and secondarily through infrastructure provision.

This brief presents findings from qualitative content analysis of 16 Regional Policy Statements and 10 District Plans from the Canterbury region to explore alignment with the RMA 2017 amendments. The RMA has been subject to various amendments and reforms since its introduction in 1991. The findings and recommendations outlined here are relevant to any reforms to New Zealand's resource management legislation.

KEY FINDINGS

General Findings

About half of New Zealand's Regional Policy Statements have incorporated a risk-based planning approach that reflects the 2017 amendments. However, the language used in these documents varies, leading to inconsistent policies and rules between councils. The other half addressed only one or two of the three core risk-based planning elements. Of the three elements, reference to threat impact assessments was least common.

District Plans must give effect to Regional Policy Statements and, according to the National Planning Standards (2019), contain a Natural Hazards Chapter. Only

35 out of 67 District Plans had a dedicated natural hazards chapter as stated in the National Planning Standards, 29 had a sub-chapter/sub-section, and 3 Territorial Authorities had no specific section related to natural hazards.

Findings for the Canterbury Region

Canterbury's Regional Policy Statement was updated in 2017 and clearly adopted the risk-based planning approach. Given this and other drivers – such as the National Planning Standards, the Greater Christchurch Partnership and the 2010-2012 earthquake sequence – it was anticipated the Territorial Authorities' District/City Plans in the Canterbury region would be reasonably consistent in giving effect to the updated Regional Policy Statement. However, only half of Canterbury's 10 District Plans clearly articulated a risk-based planning approach to natural hazards. Three of these – Christchurch, Selwyn and Waimakariri – fell within the Greater Christchurch area which has a strategic spatial plan (facilitated by the Greater Christchurch Partnership). The ability to share resources may have promoted quicker adoption of the 2017 RMA Amendment and the updated Regional Policy Statement.

Canterbury has been significantly affected by natural disasters over the last decade. District Plans from Hurunui, Waimakariri, Kaikōura, Selwyn and Christchurch City demonstrated some of the most consistent alignment with the Canterbury Regional Council's updated Regional Policy Statement and demonstrated clear risk-based planning approaches. This suggests that disasters may catalyse the adoption of risk-based planning, possibly by creating public appetite and/or mobilising the necessary resources.

RECOMMENDATIONS

1. **Stabilise the legislative framework:** To ensure appropriate adoption and application of a risk-based planning approach and the three core elements, central government needs to provide a consistent policy framework with clear guidance. Risk-based planning approaches can be enabled by reviving options like a National Policy Statement on Natural Hazard Management or a similar mechanism within the resource management reforms.
2. **Promote sharing of good practices:** Mechanisms to facilitate consistency and the sharing of expertise and methodologies for hazard likelihood *and* impact assessments should be enhanced. Impact assessment methodologies and the extent these are embedded in the planning framework is inconsistent at present. Sharing of good practice and resources would help councils with limited capacity and capability adopt defensible and effective risk-based planning approaches.

3. **Improve use of existing statutory tools:** Councils should be supported and enabled to use the statutory powers they already must mitigate risk. The reasons why councils are not using their existing statutory tools needs further examination.
4. **Prioritise vulnerable communities:** Certain populations are often disproportionately affected by natural hazards, and risk mitigation efforts must explicitly address these inequities. Further research and planning must investigate the uneven distribution of capability, capacity and disaster impacts to elevate the inequities.

IN CONCLUSION

New Zealand's approach to natural hazard planning has improved with the promotion of risk-based planning since 2017. However, significant disparities in adoption and implementation remain, possibly due to differences in capability, capacity and recent experiences of disaster. To ensure the safety and resilience of communities, there is a pressing need for more consistent application of these risk-based approaches across and between all tiers of government; better coordination between statutory and non-statutory planning tools, including Iwi Management Plans; and a focus on protecting vulnerable communities from the adverse effects of natural hazards.

FURTHER READING

Kirk N, Vallance S 2024. Natural hazard planning by New Zealand's local government: a review of regional policy statements and district plans. Manaaki Whenua – Landcare Research Report LC4510 for Manaaki Whenua – Landcare Research and National Science Challenge' Resilience to Nature's Challenges'. Available from <https://resiliencechallenge.nz/outputs/natural-hazard-planning-by-new-zealands-local-government-a-review-of-regional-policy-statements-and-district-plans/>

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CONTACTS

Suzanne Vallance: VallanceS@landcareresearch.co.nz

Nick Kirk: KirkN@landcareresearch.co.nz

Peter Edwards: EdwardsP@landcareresearch.co.nz

Gradon Diprose: DiproseG@landcareresearch.co.nz