Flood Resilient Aotearoa New Zealand:

POLICY BRIEF NO.1

Flood risk management and land use planning

Strengthening flood governance in Aotearoa New Zealand: Achieving multi-level policy coherence

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KEY MESSAGE

Effective flood risk management in Aotearoa New Zealand requires more directive and coherent governance across all levels. This includes clear national direction and policy frameworks for natural hazards and climate change adaptation planning.

PROBLEM STATEMENT

Flood risk management in Aotearoa suffers from fragmented governance and the absence of clear national guidance, leading to inconsistent assessment, communication, and regulation across jurisdictions. This incoherence, compounded by varying local capacities and climate uncertainties, hinders effective planning and can result in inequitable and maladaptive outcomes.

KEY FINDINGS

- Regional authorities use different approaches to flood hazard identification and risk regulation, leading to inconsistencies in modelling, planning, and public information. Proposed national modelling and risk standards will improve consistency, but a coherent policy framework is required.
- Inconsistencies in language, tools, frameworks, data, and climate change influence hinder cohesive flood risk management and communication nationwide.
- Local authorities seek national support and guidance to manage flood risks, especially regarding development decisions in areas of significant risk.
- More directive risk avoidance policies are necessary to limit poor planning decisions.
- Risk-based flood management is emerging but remains uneven, with varying methods for assessing hazard, vulnerability and long-term risks. A nationally consistent approach is needed to integrate flood risk into land use planning.

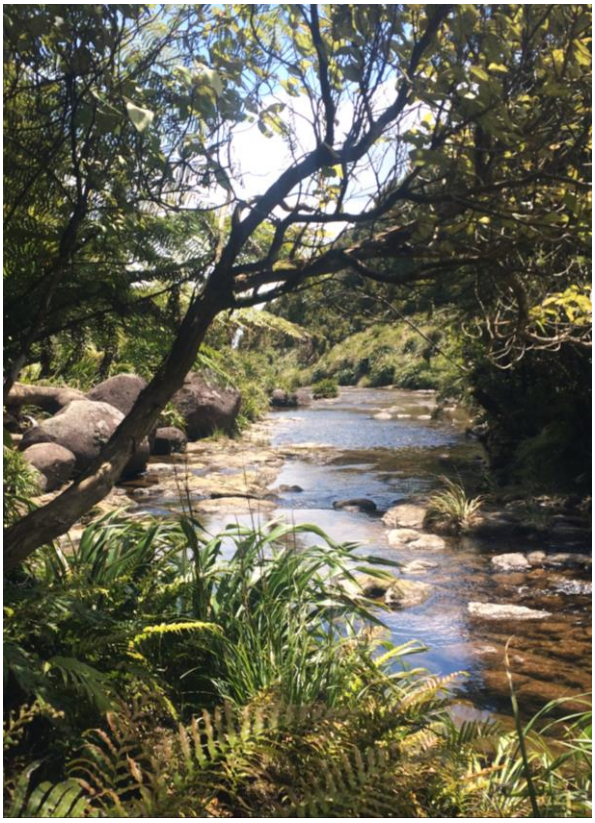

Image by Hanna, C. 2021

Policy Recommendations

1. Develop and implement **a National Policy Statement** for natural hazard and climate change planning, including standard definitions, and **directive** policy for **avoiding** and **reducing** risks to activities currently managed under the RMA. The policy framework should:
    a. Direct **risk-based** decision-making, integrating hazards, vulnerability (sensitivity and adaptive capacity) and exposure, and including minimum requirements for undertaking risk assessments, such as the range of hazard event likelihoods to be assessed.
    b. Standardise regulatory hazard mapping **and** risk communication, ensuring accessible, transparent, and consistent hazard and risk information with climate change influences and likelihoods identified. Ensure information is tailored to specific audiences (e.g., communication of risk across a lifetime or the life of an asset may be more meaningful to people and communities than AEP).
    c. Require coordinated, **long-term regional spatial planning strategies** for climate adaptation, with directions for dynamic, adaptive, and precautionary policy and decision-making to account for deep uncertainties.

2. Develop and implement a **National Environmental Standard** for natural hazards, with **avoidance controls** for zoning, designation, and resource consent decisions in areas of **significant risk**.

3. Maintain recent legislation amendments (in any future reforms) whereby rules relating to natural hazards have immediate legal effect from notification of a plan or plan change, and the ability for local authorities to decline or impose conditions on consent applications, where there is significant risk from natural hazards. These changes offer benefits related to the responsiveness of statutory planning maps.

4. **Align legislation**, reconciling inconsistencies, for instance between the Resource Management Act 1991 and the Building Act 2004.

5. **Build local capacity** and **provide targeted support** to address existing gaps in practice and jurisdictional disparity: Invest in training, technical support, and resources for local authorities with limited capacity to implement the policy framework.

6. Address critical climate change research gaps identified in the current (2020) and revised National Climate Change Risk Assessment relating to ecosystem responses, biodiversity and biosecurity, impacts on heritage, health, and use of mātauranga Māori to inform risk assessment, adaptation, and cascading impacts.

7. Support the development of risk assessment for Māori, by Māori, following kaupapa and tikanga Māori, to support the identification, evaluation, and management of risks.

8. Ensure the proposed national flood map and policy framework supports consistent policy and planning across Aotearoa.

KEY RESEARCH OUTPUTS

Hanna, C., Wallace, P., & Serrao-Neumann, S. (2025). Evaluating riverine flood policy: Land use planning trends in Aotearoa New Zealand. *Environmental Science & Policy*, *164*, 104006. https://doi.org/10.1016/j.envsci.2025.104006

Afsari Bajestani, S., Serrao-Neumann, S., Hanna, C., & Fu, X. (2024). Dealing with uncertainty in flood risk management and land use planning decisions: Insights from Aotearoa New Zealand. *Climate Risk Management*, *46*, 100666. https://doi.org/10.1016/j.crm.2024.100666

Serrao-Neumann, S., White, I., Dean, S. M., Paulik, R., Sleight, B., Stori, F. T., Wilson, M. D., & Lane, E. M. (2024). The need to reconfigure consistency and variability to best manage changing flood risks in Aotearoa-New Zealand. *Journal of the Royal Society of New Zealand*, *54*(4), 473–490. https://doi.org/10.1080/03036758.2023.2211777

Afsari Bajestani, S., Hanna, C. & Serrao-Neumann, S. (under review). The role of the spatial scale in flood hazard and risk mapping for land use planning: Insights from Aotearoa New Zealand

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