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Resilience Planning for Natural Hazards in New Zealand

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Abstract

We live in times with a heightened sense of uncertainty and constant reminders of the risk of extreme natural hazard events, as evidenced by the 2010-2011 Canterbury earthquake series. *Resilience planning* is rapidly gaining salience as a promising approach for dealing with the complex challenge of uncertainty and escalating natural hazard risk. Yet, it is not clear what resilience planning means, beyond the assumption that it is good to be resilient and that we should plan to build resilience in practice. Despite the lack of clarity, there is a growing number of scholars exploring the approach, its potential and benefits. It is, however, in its conceptual stage and has yet to be widely adopted in planning practice, in New Zealand or elsewhere.

This begs the question that this thesis aims to explore: What are the barriers and opportunities for effectively institutionalising resilience planning and how can it be operationalised in planning practice in New Zealand? This question is explored through a case study analysis of experiences in the Waimakariri District in Canterbury after the 2010-2011 earthquake events.

The key findings of this research show there are nine barriers to institutionalising resilience planning (community priorities; cost versus benefit; high vulnerability; knowledge; leadership; responsibilities; time/timing; the legislative setting; and silos). The research revealed that each of these barriers will challenge resilience planning and its institutionalisation at different stages of the planning process. The barriers must first be overcome to allow for the operationalisation of the resilience planning characteristics through actions for practice. Opportunities for institutionalising resilience planning so as to overcome the barriers and allow it to become a reality in practice were explored. The opportunities included, for example, the following: the earthquake experiences; heightened awareness and interest in resilience planning; the recovery and rebuild period; relationships and connections made; ensuring a concerted effort and focus on resilience planning; undertaking vulnerability assessment; and placing focus on the culture of resilience planning. Six resilience planning characteristics required for operationalisation in practice were identified (leadership; social capital; social learning; community; reflection; and innovation). Based on these findings, a framework is proposed to institutionalise and operationalise resilience planning in New Zealand. The application of this framework will assist in shaping current thinking and planning practice and enable choices that will ultimately build more resilient, sustainable communities in the face of uncertainty and escalating natural hazard risks.

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