



*The huge changes that have happened in Canterbury since the 2010/11 sequence of earthquakes are reflected in the increased focus on teaching and research around disaster risk and resilience in Lincoln University's Department of Environmental Management. Hamish Rennie outlines these changes in the department's programme whilst, Alex McCormack, one of the first graduates of the Master of Environmental Policy and Management degree who went on to work for the Kaikoura District Council, describes his 'up close and personal' experiences of the 2016 Kaikoura earthquake from both a council and a community perspective.*

## **Disaster Risk and Resilience: Now a key part of Lincoln University's offerings and research**

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Hazard risk and mitigation has always been a part of planning programmes and while sustainability is not the same as resilience, the two have much in common, especially in the context of climate change. Planners working with frameworks like the sustainable livelihoods framework incorporate core components of resilience into their everyday thinking. However, it is clear that the Canterbury earthquake sequence that commenced in 2010 has led to a much more active and sharper focus on disaster risk and resilience in Lincoln University's degrees, as is noted by Alex in the following comments on his experiences. Most of the staff in the Department of Environmental Management have experience in pre-disaster 'business as usual' planning and the disaster itself, and are living through and contributing to the subsequent recovery. In fact, one of our planning staff is a long-serving member of the Volunteer Fire Brigade. Much of our research and that of our students addresses issues related to planning for greater resilience to disasters, whether at the national policy level or the individual level, both in New Zealand and overseas (see publications list in this

issue). Notably, Lincoln University has established specific undergraduate and post-graduate courses on risk and resilience and now includes greater emphasis and case material on risk and resilience in most of its courses, including those contributing to the Master of Environmental Policy and Management and the Master of Planning.

Partly as a result of the collaborative research environment at Lincoln and the relationships developed with Canterbury University through the government's ten-year National Science Challenge – Resilience to Natures' Challenges, Lincoln and Canterbury Universities now offer a joint- degree (a 180 credit Masters in Disaster, Risk and Resilience) to develop students as specialist practitioners in this discipline. Canterbury focusses on the physical hazards and their direct management, while Lincoln provides courses relating to planning, policy, socio-political issues framing risk and resilience and building resilient communities. Lincoln also offers a 120 credit Post-Graduate Diploma and a 240 credit research-oriented Master of Applied Science (DRR), each with some courses taught by the University of Canterbury. These specialist

degrees are in addition to the ability to specialise in risk and resilience through course choices and a research dissertation in our New Zealand Planning Institute-accredited Master of Planning.

Would this have happened without the Canterbury earthquake sequence? Possibly, but our recent national survey of planning academics<sup>1</sup> shows that it would not have been to the same extent as it does when you have

living laboratories of urban and rural disaster and resilience on your doorstep, especially Christchurch, one of the Rockefeller Foundation's 100 Resilient Cities. It has been and continues to be 'interesting times' at Lincoln University, and offers wonderful opportunities for risk and resilience study, research and action.

### **Master of Disaster Risk and Resilience**

If you're interested in a rewarding career that involves helping people to become more resilient in the face of adversity, the Master of Disaster, Risk and Resilience degree at Lincoln University can get you there. It's impossible to predict disasters before they happen, but vital to manage community responses to them after they have occurred.

Canterbury-based students are in a unique position to understand how to do this, and with the region still focused on disaster recovery and urban renewal following the 2010-2011 earthquakes, plenty of career opportunities are opening up.

The Master of Disaster, Risk and Resilience programme is jointly delivered by Lincoln University's Department of Environmental Management and the University of Canterbury's Department of Geological Sciences.

These institutions are well-equipped to teach the mechanics of disaster risk and resilience, having gained a large amount of practical knowledge from the Canterbury earthquakes.

You'll gain a well-rounded education in natural science, social science, and planning and policy processes in order to understand the fundamental causes of disasters and how to reduce the risks of unexpected stresses to people and communities.

The programme also involves building the resilience of rural communities to threats such as drought, wildfire and flooding, and considering the increased risks of hazardous natural events that are created by climate change.

At the Third UN World Conference on Disaster Risk Reduction in March 2015, the Sendai Framework for Disaster Risk Reduction was adopted and disaster reduction protocols are being developed around the world. This is your chance to become part of a new frontier in disaster risk reduction.

Visit [www.lincoln.ac.nz](http://www.lincoln.ac.nz) to enrol now in the [Master of Disaster Risk and Resilience](#)

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<sup>1</sup> Rennie, H.G. & J. Forsyth 2017 "The bad, the ugly and the good: Locating the consequences of the Canterbury earthquakes on the map of planning academia" paper presented to the Australian and

New Zealand Association of Planning Schools (ANZAPS) conference *ANZAPS 2017 Locating places, locating planning*, 2-4<sup>th</sup> November 2017, University of Tasmania, Hobart.