

Resilient Rural Backbone research programme – information sheet

Overview

“Resilience to Nature’s Challenges Kia manawaroa – Ngā Ākina o Te Ao Tūroa” (RNC) (<http://resiliencechallenge.nz>; Affiliation Guidelines Information Sheet: Figure 1) is one of 11 National Science Challenges recently funded by New Zealand’s Ministry of Business, Innovation and Employment. The challenges are strategic (10-year) investments in science capability and capacity focused on issues of national importance.

RNC seeks to work collaboratively with government, iwi, industry, communities and other stakeholders to build shared understanding of natural hazards and risks, and to develop practical risk reduction solutions that informed by and relevant to stakeholder needs. Researchers in all ten RNC programmes are currently building relationships with relevant stakeholders to collectively identify research needs and priorities in each focal area.

Resilient Rural Backbone programme

A **Resilient Rural Backbone** is one of four co-creation laboratories within RNC. We are inviting key stakeholders to work with us to develop resilience solutions aimed at supporting rural capability and capacity to respond to diverse hazards across social, ecological, economic and cultural domains, at multiple scales.

We aim to enhance rural resilience through:

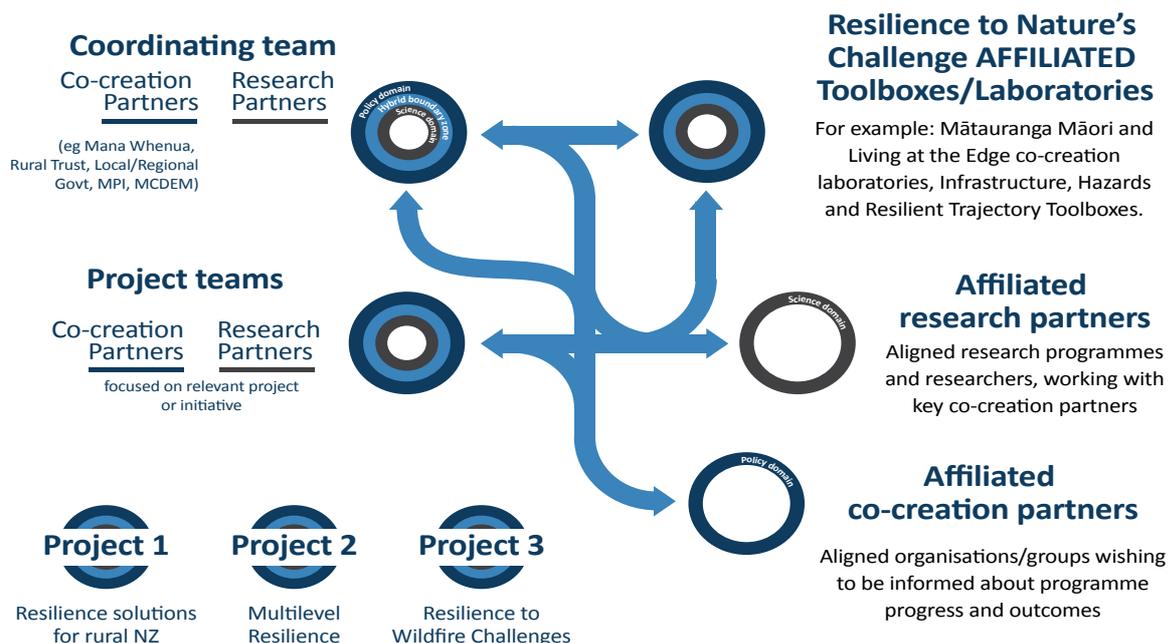
- **Developing an integrated framework for assessing resilience to natural hazards** (including earthquakes, rural wildfire, drought, and tsunami) across rural value chains: from households to regions and small to global-scale agribusinesses
- **Producing tools for resilience-interventions** through comprehensive engagement and scenario activities with key sectors, communities and regions
- **Building a researcher-stakeholder co-creation team and outreach network** to act as ‘honest brokers’ for policy and practice leadership, through the development of new networks and by linking existing land care, disaster management

The four-year Resilient Rural Backbone programme initially focuses on the Kaikōura district and Canterbury/West Coast region. In 2019 the focus will extend to include North Island case studies.

Stakeholder engagement

There are two options for potential co-creation partners. **Full membership** of the programme, at coordinating team, project or case study level will involve participation in all programme decision-making. For those lacking the time or capacity to engage as a programme member, **affiliation** makes it possible to remain involved, to keep up to date with programme progress, and to access tools to increase rural resilience.

Resilient Rural Backbone programme structure





Coordinating team members:

Co-creation partners

Dr Marion Schoenfeld

Marion Schoenfeld is the Hazards Analyst (Geological) at Environment Canterbury. She leads work on managing coastal and seismic hazards for the region.

James Thompson

James Thompson is the Regional Emergency Manager at Environment Canterbury, responsible for training in emergency operation/coordination, and coordinates emergency management for the region.

Jessica Petersen

Jessica Petersen is the Community Resilience Coordinator at Environment Canterbury.

Jo Horrocks

Jo Horrocks is Principal Advisor Emergency Management at Ministry of Civil Defence & Emergency Management

Researchers

Dr Nicholas Cradock-Henry

Nicholas Cradock-Henry is a Senior Scientist at Landcare Research. He is a programme co-lead, and leads the Resilience Solutions for Rural New Zealand project. His research focuses on the human dimensions of global and environmental change, with a focus on risks and hazards, climate change adaptation and freshwater management.

Lisa Langer

Lisa Langer is a Senior Scientist at Scion. She leads the Resilience to Wildfire Challenge project, and Scion's social wildfire research. Her interests include community resilience and recovery following wildfires, effective communication and mitigation measures to reduce the risk of human-caused rural fires, and traditional and Māori use of fire.

Dr Andrea Grant

Andrea Grant is a Social Scientist at Scion, specialising in risk and resilience. She is interested in communicating risk and uncertainty in a natural hazards context and is exploring the role of wildfire volunteering in reduction, readiness, response and recovery.

Dr Matthew Hughes

Matthew Hughes is a Lecturer in Geohazards, Risk and Resilience at the University of Canterbury. His interests include assessing hazard impacts on urban and rural environments and infrastructure, and consequent impacts on communities. Matthew is also involved in the Distributed Infrastructure programme of the Resilience Challenge.

Dr Hamish Rennie

Hamish Rennie is the Director of Post-Graduate Studies Disaster Risk and Resilience at Lincoln University. He has 25 years of experience in planning and policy. Hamish is also involved in the Living at the Edge programme of the Resilience Challenge.

Dr Thomas Wilson

Thomas Wilson is a Senior Lecturer in Disaster Risk and Resilience at the University of Canterbury. He is a programme co-lead, and leads the Multilevel Resilience project. His research aims to develop innovative methods to increase the resilience of rural communities, infrastructure and primary industries to a range of natural hazards.

Tyler Barton

Tyler Barton is a doctoral student in Disaster Risk and Resilience at the University of Canterbury. His doctoral research is concerned with building disaster resilience by bridging the gap between science, communities and organisations.

Dr Sarah Beaven

Sarah Beaven is an Earthquake Disaster Recovery Researcher at the University of Canterbury. Her research is focused on the active management of collaborations between organisations and sectors to achieve disaster response, recovery and risk reduction outcomes.

Dr Caroline Orchiston

Caroline Orchiston is a Research Fellow and Deputy Director of the Centre for Sustainability at the University of Otago. Her research interests include tourism disaster resilience and recovery, community and business resilience, and scenario planning for impacts to critical infrastructure and emergency management during earthquake disasters.

Affiliated RNC research programmes:

The Resilient Rural Backbone programme shares a strong South Island focus and presence with affiliated RNC Distributed Infrastructure and Hazards Toolbox programmes. To work effectively with regional stakeholders and communities, and align contributions to larger shared projects (such as the Canterbury/Westland case study), these three programmes have developed affiliated guidelines for engaging with stakeholders and collaborating on shared projects (see Affiliated Guidelines Information Sheet).