

COMMUNITIES AND CLIMATE CHANGE: VULNERABILITY TO RISING SEAS AND MORE FREQUENT FLOODING

An Executive Summary of Motu Note #29 - April 2018

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SUMMARY HAIKU

Sea creeps up, storms surge.
Wet feet look to higher land
But pause, loving home.



Centre for Sustainability
Kā Rakahau o Te Ao Tūroa



EXECUTIVE SUMMARY

Many communities and iwi in coastal and flood-prone locations face an uncertain future because of climate change, with rising sea levels and a greater frequency and magnitude of extreme weather events.

We do not yet have a good understanding of how these long-term changes will affect people in these exposed locations, but we can learn from studies of the impacts of short-run natural hazards such as major floods and earthquakes. It is clear that individuals and households can suffer both directly and indirectly, and stressors even from single events can extend over years. These include significant financial impacts, loss of assets and resources, loss of access to valued places, loss of physical and mental health, and loss of identity and sense of belonging.

Some individuals and groups may be more vulnerable to these impacts, while others may be more resilient. It is not yet clear who will be more vulnerable, nor what kinds of steps need to be taken to build resilience for the long term.

Decision-making institutions such as councils will need to be proactive in working with exposed communities, anticipate the support that may be required, and offer equitable solutions.

Iwi and community members will need to be involved in climate change adaptation processes, and to be in a position to make informed decisions about their future.

Sometimes, people may already be facing financial, physical and mental stresses from impacts such as flooding and erosion, and at the same time may need to be involved in planning for a changing future. The social, cultural and psychological challenges could be immense, so response and adaptation processes need to be carefully designed and delivered, especially for the more vulnerable.

Law and policy need to be adjusted to be fit-for-purpose for the new challenges of climate change, including the roles of government agencies, limiting exposure to hazards, and financing of adaptation.

Knowledge gaps identified include:

- understanding vulnerability and resilience in a climate change context;
- how decision-making roles and responsibilities should be allocated especially in relation to more vulnerable people and communities;
- the extent to which flood mitigation schemes will be effective in protecting communities under climate change conditions;
- how iwi and community groups are already anticipating and responding to climate-related challenges;
- how councils are and should be working proactively to reduce impacts on the more vulnerable; and
- how information about climate change impacts can be more effectively communicated.