

Devastation to infrastructure resulting from a tsunami

RiskScape is multi-hazard risk assessment system that has developed out of a joint-venture research programme between GNS Science and NIWA. It involves the development of a generic model that allows local authorities and emergency management groups to analyse their regional risks from multiple natural hazards, thus assisting with community

resilience and public safety.

RiskScape enables groups to: (i) Estimate probable losses; (ii) Identify priorities for the minimisation of disruption to society at local/regional/government levels; (iii) Inform a comprehensive risk management process. The Riskcape model can also inform district/city planning of the responses and investments needed for hazard mitigation.

RiskScape calculates damage and loss to buildings and infrastructure (including roads, cables and pipelines) exposed to earthquake, flooding, volcanic ash fall, wind and tsunami using either scenario or probabilistic hazard models. It also calculates causalities from events using census data. RiskScape can produce comprehensive predictions on many facts of hazard impacts.

Find out more about the RiskScape Model at: www.riskscape.org.nz

Project Description

Project: The Regional Riskscape Model

Location: New Zealand

Client: Foundation for Research, Science and

Technology (FRST)

Total Project Value: Confidential

Start Date: July 2004

End Date: Ongoing

Lead Company: Joint Venture

Associated Consultants: GNS Science National Institute of Water and Atmospheric

Research (NIWA)

Key Features:

- Disaster and Emergency Planning
- Risk Management Advice
- Land-use Planning
- Soil Mechanics, Earthquake, and Wind Engineering
- Flood, Tsunami, and Volcanic Hazards and Mitigation