Natural disasters can generate large volumes of debris. In some cases, many years worth of waste can be generated in a single event – often overwhelming local solid waste management facilities and personnel. However, the role of debris in disaster management is still largely under-estimated and misunderstood – presenting as more of a logistical technical exercise and road-block to recovery than an action integrated into both the emergency response/recovery and solid waste management system, with social, environmental and economic effects.

Disaster waste impacts almost every aspect of an emergency response and recovery effort. Disaster debris can impede rescuers and emergency services reaching survivors; inhibit provision of lifeline support; pose a public and environmental health hazard; and hinder the social and economic recovery of the affected area. Poor management of a clean-up effort can exacerbate these problems, and can result in a slow and costly recovery which is potentially risky to public and environmental health in both the short and long term. Surprisingly, the need to plan for disaster debris has only been recognised, internationally, in the last 15 years or so.

This research, as part of an international study on Disaster Waste Management, aims to develop a planning and decision-making guide for management of disaster waste in Wellington. It is estimated that millions of cubic metres of debris will be generated following a large scale earthquake in Wellington. The geography of Wellington, the predicted liquefaction, landslides and associated disruption to roads and services will compound the task of debris removal.

The research looks at the environmental, economic and social effects of potential waste management options. It also explores the organisational, funding and legal mechanisms which are currently in place, or should be in place to facilitate management of disaster waste.