

Disaster Impact Assessment and Civil Defence and Emergency Management Planning

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Introduction

Part 1: Background on Civil Defence and Emergency Management

Part 2: Pre-event vulnerability (potential impact) assessment

Part 3: Disaster (post-event) impact assessment

Part 4: Concluding comments

Part 1: Background

- Active physical environment, high level of technological development & exposure

Civil Defence & Emergency Management Act 2002

- All-hazards, multi-agency approach across reduction, readiness, response and recovery

Part 1: The four “Rs”

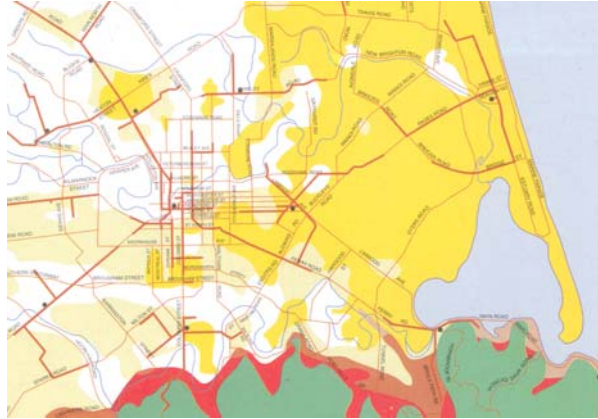
- **Reduction** – identify risks, eliminate or reduce their impacts
- **Readiness** – development of operational systems
- **Response** – actions taken during or directly after a disaster
- **Recovery** – activities to restore a community

Part 2: Vulnerability (pre-event) assessment

- Identify potential impacts and allows mitigation
- Usefulness depends on accurate hazard and *landuse* information
- Hazard events highly variable in nature, likelihood and magnitude
- Assists with readiness and response (& recovery)

Part 2: Vulnerability assessment example

Liquefaction hazard zones and main telephone cables



Part 2: Vulnerability assessment & reduction



Sand fences to reduce flood risk to beach settlement



Stopbanks to prevent flooding (up to a specific design level)

Part 2: Vulnerability assessment & response



Response plans for effective response to events

Part 3: Disaster impact assessment

- Collection & compilation of impact information (on individuals, communities, the built environment and natural environment)

- Information to be timely, accurate and concise
- Critical for effective response and recovery (at local, regional and central government levels)
- Many organisations collect relevant information – access to, & co-ordination of, can be difficult

Part 3: Key aspects of impact assessment

- Identify purpose of impact assessment
- Define nature of & scope of hazard event
- Establish scope of impact assessment
- Know information sources and key contacts
- Define impact assessment area and duration
- Complete pre-event impact assessment

Part 4: Concluding comments

- Disaster impact assessment is an essential part of emergency management planning
- The development and application of disaster impact assessment needs to be “formalised”
- Disaster impact assessment is complex, multidisciplinary, and systematic
- Understanding and being prepared for all disaster impacts is a significant challenge

Few headlines are so alarming, perplexing, and personal in their implications as those concerning safety. Frightening stories jolt our early morning complacency so frequently that we wonder whether things can really be that bad. We hardly know which cries of “Wolf!” to respond to; but we dare not forget that even in the fairy tale, the wolf really did come.”

W.W. Lawrance “Of Acceptable Risk”