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## **Report 02.428**

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Report to Environment Committee  
from Rylee Pettersson, Hazard Analyst

## **Options for managing risks from Tsunami in the Wellington Region**

### **1. Purpose**

To report the findings of an options study considering the management of the risks of tsunami in the Wellington Region.

### **2. Background**

In June 2001 a scoping report was completed that summarised the state of knowledge of information on tsunami and the potential risks and likelihood of an event affecting the Wellington Region. The report also touched on the options for mitigating tsunami risk.

It was decided that, to complement the progressing scientific knowledge of tsunami generation, occurrence and risk, there needed to be a study investigating the options for managing and responding to the tsunami hazard in the Region.

The objectives of this study were to:

- *Identify and assess options for managing risks from tsunami to the Wellington Region*
- *Recommend a management approach for each distinct section of the coastline or community*

Tonkin and Taylor Ltd Consultants were commissioned to undertake this study. A copy of their report will be tabled at the Committee meeting.

### **3. Findings**

#### **3.1 Elements of Risk**

Seven 'elements at risk' (land uses) were classified for the Wellington Region:

- Lifelines/essential infrastructure
- Urban residential
- Urban industrial/commercial
- Semi rural/semi urban
- Potential/future development
- No development/rural
- Coastal infrastructure

The study essentially provides a 'tool kit' or template for territorial authorities, enabling them to mix and match the *elements at risk* with seven *management options* and principles that best suit the characteristics, policies and objectives of their district. Management options were determined from the literature review, a review of district and regional plans, RMA case law and knowledge of management options.

### 3.2 Management Options

- (1) **Identification of risk:** hazard, vulnerability and exposure
- (2) **Avoid new development** in tsunami hazard areas
- (3) **Control the location and nature** of new development
- (4) **Regulate the design and construction** of buildings in tsunami hazard areas
- (5) **Protect** existing natural and physical resources
- (6) **Planning and design** of key infrastructure and critical facilities
- (7) **Emergency response** plans

There was extensive input from the territorial authorities in the formulation of the report. Two meetings with the emergency management officers were held and one meeting with the policy/planning/asset management staff. A workshop was also held on 24 May 2002 for representatives of the territorial authorities to discuss the recommended management options and draft report.

## 4. Study recommendations

The study makes a series of recommendations for the territorial authorities to put appropriate management options 'into practice'. The report also suggests that the Regional Council review the progress of the recommendations 12 months after receipt of the report.

## 5. Communication

The findings of this report will be presented to the emergency management, planning and consent officers of the eight territorial authorities. It is hoped that the territorial authorities will take the recommendations on board to assist them with their management and mitigation of tsunami hazard.

The study will also be communicated through:

- Distributing the written reports and digital information to the territorial authorities
- Presenting a summary of the results of the report in poster form to the 5<sup>th</sup> New Zealand Natural Hazards Management Conference 2002, to be held at Te Papa from 14-15 August 2002.

6. **Recommendation**

*It is recommended that the Committee:*

- (1) *receives the report; and*
- (2) *notes the contents.*

Report prepared by:

Approved for submission

RYLEE PETTERSSON  
Hazard Analyst, Resource Policy

JOHN HOLMES  
Acting Manager, Resource Policy

JANE BRADBURY  
Divisional Manager, Environment