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Committee CDEM Group
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Group Tsunami Evacuation Planning

1. Purpose

To provide an update on progress with the Group Tsunami Evacuation Plan (the Plan).

2. Background

Tsunami is a recognized hazard for the Wellington region. Therefore as part of the Wellington Region CDEM Group's responsibilities under the Civil Defence Emergency Management Act 2002 it is necessary to plan for such an event. A project has been commenced to develop a Tsunami Evacuation Plan for the Wellington region.

The objective of the plan is *'To facilitate the evacuation of people from identified hazard zones in the Wellington region to minimize the impact of a tsunami'*. To achieve this, a large number of organisations will be required to support activities such as mass movement of people, communications and welfare support.

As a tsunami can be generated from a local, mid range (regional) or distant event it is important that the Plan can be scaled up or down dependent on the amount of warning that may be received. It is therefore necessary to understand the amount of time required to ensure the safety of the staff of the organisations that would be required to support the evacuation as well as the protection of key assets.

It should be noted that the Plan is focusing on the 'evacuation' element only i.e. pre event activities. It is anticipated that post event response is covered under existing CDEM or other plans.

3. Progress

A number of workshops are proposed to develop the Plan. The first was held in November 2007 with transport operators and a major multi agency workshop is scheduled for late April. The deadline for the completion of the Plan is June 2008.

As tsunami planning for New Zealand has only recently commenced at a national level, there are a number of limitations in our current planning process which we are looking to overcome.

Inundation Mapping

There is limited scientific data available to accurately map tsunami inundation for the region. Iain Dawe from Greater Wellington has commenced mapping based on what is known as 'bath tub' modelling. However, this does not take into account sea floor variations or the built environment. Discussions have taken place with GNS to establish a process to improve the mapping by utilizing a new algorithm and it is hoped these maps will be available to assist with the multi agency workshop due to be held in late April.

The limitation of these maps is that the hazard areas identified may be too large or too small which may result in the evacuation plan moving too many people from one area and too few from another.

It is intended to take a worst case scenario (1 in 500 year event) for our planning which will be revisited as improved modelling techniques are developed. It is understood a project to complete accurate mapping would take in the region of 3 years at a cost of approximately \$200,000.

National Tsunami Plan

A draft National Distant Source Tsunami Plan was released by the Ministry of Civil Defence Emergency Management in late 2007. There were a number of fundamental gaps within this plan, some of which impact on the region's planning process.

Most importantly is the anticipated warning process and timeframes. As we are planning to ensure that agencies required supporting an evacuation also have time to get their own staff and resources to safe areas, it is important to understand the time available to effect the evacuation.

The other area of concern is the lack of detail in the plan around the way in which the Ministry intends to manage public information.

A submission has been made to the Ministry on the draft plan. However, there is currently no known date for the revised version of the plan.

4. Conclusion

Overall the Group Tsunami Evacuation Plan has been progressing well. There are some planning limitations, some specifically relating to scientific data and

understanding the behaviour of a tsunami, whilst some are simply because this type of planning has not been done before. Positively, emergency management staff and other stakeholders in the Wellington Region are prepared to take the lead, and move ahead and work through these limitations to form a cohesive evacuation plan by the end of June 2008.

5. Co-ordinating Executives Group

The CEG group suggested that an exercise be planned to test the Tsunami Plan. This could coincide with the national tsunami exercise – Pacific Wave.

6. Recommendations

That the CDEM Group:

- 1. receives the report;*
- 2. notes the contents; and*
- 3. approves an exercise to test the Tsunami Plan to coincide with the national Pacific Wave tsunami exercise.*

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