



CDEM Resilience Fund project application form

This form provides the minimum of information for the application; a detailed project plan should be developed to inform this application and may be attached.

Project title	Tsunami Evacuation Area Upgrade and Hazard and Risk Modelling.
Date of application	30 September 2016

Details on application

Applicant	Tairāwhiti Civil Defence Emergency Management Group - Gisborne District Council
CDEM Group/s affected	Gisborne District Council
Other local authorities, Groups or organisations supporting this proposal	CDEM community link groups

Project description

The Gisborne District Council has had a tsunami evacuation area (GNS 2009/233) for the city and some smaller towns (GNS 2012/158) however these have only been done in the one zone and this causes confusion for tsunami warnings such as "tsunami beach and marine threat".

Coastal areas have been populated by people returning to the area and during summer the population more than triples with tourists, whanau and summer residents (Loisels Beach, Anauro Bay, Onepoto Bay, East Cape and Whangara) –currently there is no information regarding tsunami evacuation areas for these seas side areas.

Using the same information gathered for the evacuation zones for the townships The Natural Hazards Team can work out the hazard and risk modelling for compliance with the Building Code and the Resource Management Act 1991. This will then be used in the District Plan with areas permitted or resource consent required for building and activities as well as what is required when building.

Challenge/opportunity

For people who live in the city and coastal towns in the Gisborne District Council area, they want to know if their homes are in the tsunami inundation areas and what to do if they are- not all coastal areas are affected (Okitu end of Wainui is not in the inundation area however the city end is)

Coastal areas like Loisel's Beach, Whangara, East Cape and Onepoto Bay have increased in permanent residents with people returning home and during summer months numbers can increase two fold again. People living there are also unaware if their homes/properties are at risk – when they ask we have no scientific information to back up our advice.

The Director's Guideline (DGL 08/16) states that "Use of a single tsunami evacuation zone could have offered some advantages for simplicity in evacuation planning, and for public awareness and understanding. However, because a single zone would have to accommodate for a full range of tsunami risk scenarios, it can result in frequent 'over-evacuation' of a larger area than is necessary for more likely, smaller scale events. As well as having extra people to manage during the evacuation, it creates more inconvenience for the public. As such, repeated 'over-evacuation' could result in decreasing levels of community trust in, and compliance with, emergency response arrangements."

The use of the 2 or 3 zone map would be in line with the rest of New Zealand and this is important that the same format is being used for when people move or travel.

In September 2015 (after the Chile earthquake) and September 2016 (after the Te Araroa earthquake) when a "beach and marine threat" warning was given people were confused what this meant and what action should be taken especially when an agency trying to be helpful put our evacuation maps up on their Facebook page. The 2 or 3 zone areas would help with this confusion.

Alignment with identified goals and objectives identified in the CDEM Sector.

The proposed project is in line with:

1. The objectives of the National Civil Defence Emergency Management Plan 2015
 - The objective of reduction in is "to take preventative steps to avoid or mitigate adverse consequences"

- The objective of readiness is “to build capacity and capability and to enable an effective response to and recovery from emergencies” and
 - The objective of response includes the preservation of life and the prevention of escalation of the emergency.
2. The National CDEM Strategy Goals one and two.
 - Increasing community awareness, understanding of the risks from the natural hazards
 - Improving individual, whanau, community and business preparedness
 - Encouraging and engaging community participation in hazard risk management
 3. The principles of the Tairāwhiti CDEM Group
 - Taking action to reduce the risk to communities is an essential part of managing hazards
 - A balanced approach to hazard risk reduction is required, which considers both the level of risk (potential likelihood and consequences of the hazard) and the costs of risk reduction
 - In determining the level of risk reduction required, risks to human life and safety will be given high priority.
 4. The priorities of the Sendai Framework
 - Understanding disaster risk
 - Investing in disaster risk reduction for resilience
 - Enhancing disaster preparedness for effective response

Dissemination of benefits to sector

Through education and delivery of the maps with an action plan of the natural warnings and what to do. These plans are currently on the Council website and after the 7.1 earthquake in September 2016 were delivered to the household in the coastal towns.

The updated maps would also be on the GDC website and the Tairāwhiti CDEM Facebook page. The maps would also be used by other sections of Council for LIMs and PIMs and by Tairāwhiti Roads for traffic management.

Project design

Project manager	W Louise Bennett
Other project members	David Wilson, Kim Smith and Paul Stuart
External providers/contractors	Dr William Power and other GNS staff

Deliverables

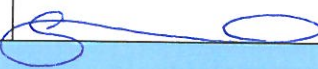
Milestones	Date for completion	Cost
Stage 1 Level 3-4 evacuation modelling for Poverty Bay and Coastal Towns plus Tolaga Bay and Tokomaru Bay hazard and risk modelling (Poverty Bay including Wainui and Muriwai hazard and risk modelling has been done).	0-3 months	\$160,000
Sage 2 Education and Engagement	Ongoing	BAU

Identified risks

Risks	Suggested management
The use of the 3 zone inundation maps may be needed and communities get confused with the national tsunami warnings e.g beach and marine threat	The one zone maps would be used and clarity to the public given about what the messaging meant. e.g beach and marine threat

Funding request and use

CDEM resilience fund contribution	\$100,000
Local authority/organisation contribution	\$60,000 plus administrative and engagement costs
Other sources of funding or support	NIL
Budget	

Applies if application exceeds \$100,000 over the life of the project	Do you wish to attend a hearing in support of this application?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Application confirmation			
Approval of Chief Executive			
CDEM Group comment			
Comment	we fully support this application.		

