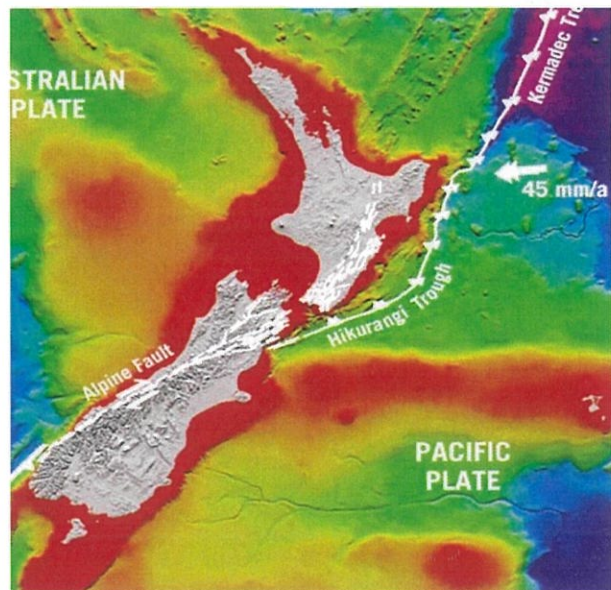




CDEM Resilience Fund project application form

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		'Know your zone'
Date of application		18 th October 2018
Details on application		
Applicant		Hawke's Bay CDEM Group
CDEM Group/s affected		Hawke's Bay CDEM Group
Other local authorities, Groups or organisations supporting this proposal		East Coast LAB & Joint Centre for Disaster Research
Project description		
Executive summary <i>[200 words maximum description.]</i>		
<p>All of New Zealand's coast line is at risk of a tsunami. Local source tsunami generated by the Hikurangi subduction zone has the potential to inundate heavily populated coastal areas with hardly any warning time.</p> <p>Despite well-publicized tsunami hazard zones there remains a lack of understanding within New Zealand communities of what tsunami hazards zones they reside in and what this means for evacuation. For example, there is clear evidence of public confusion during tsunami warning events across New Zealand over the past decade.</p> <p>In addition, recent Napier studies highlighted that although residents can demonstrate the correct response to an earthquake, they don't always extend this to appropriate tsunami evacuation response (Fraser et al., 2013), and that some residents still are not aware they are in tsunami evacuation zones, (Dhellemanes et al., 2016).</p> <p>These findings are concerning as inappropriate and delayed response to tsunami warnings can be fatal for those within inundation areas, as unfortunately seen and evidenced following the Great East Japan Earthquake in 2011 (Fraser et al., 2012). Confusion regarding evacuation procedures also leads to delay, as evidenced recently in Wellington during the 2016 Kaikoura Earthquake despite being 'Long and Strong' (Blake et al., 2018).</p> <p>As there is clear evidence that individuals' situational awareness at times of decision-making influence decisions, the aims of this application are:</p> <p>AIM 1: To develop and pilot a public education campaign to promote awareness of tsunami evacuation zones "Know your Zone".</p> <p>AIM 2: To evaluate the effectiveness of the methods used for the public education campaign to inform future campaigns.</p> <p>The purpose being to further increase awareness and embed knowledge of tsunami evacuation zones in at risk communities, research the effectiveness of the methods employed, and identify further opportunities to increase individual and community situational awareness.</p>		
Challenge/opportunity <i>[200 words maximum description.]</i>		



All of New Zealand's coast line is at risk of a tsunami. Local source tsunami generated by the Hikurangi subduction zone has the potential to inundate heavily populated coastal areas with hardly any warning time

A New Zealand Institute of Economic Research (NZIER) Report which examined tsunami risk facing New Zealand reported that at the 50% percentile, GNS Science estimates 17,000 potential fatalities from a 1/500-year tsunami event assuming limited evacuation (Table 1, NZIER, 2015). Although tsunamis have the potential to cause substantial fatalities, behavioural mitigation options such as improving self-evacuation (for warning times under 1 hour) has the potential to help mitigate tsunami risk (NZIER, 2015). Education is listed as a 'long-march' and low-cost option for mitigating the risk of tsunami to a tolerable level (NZIER, 2015).

The opportunity exists to build on previous public engagement work by East Coast LAB and the Hawke's Bay CDEM Group to further embed tsunami evacuation knowledge in at risk communities by identifying the most effective public education methods, and then developing and piloting a public education campaign to 'Know Your Zone' (AIM 1). If successful the campaign could then be rolled out across New Zealand, to compliment the effective 'Long or Strong, Get Gone' campaign that was initially piloted in Bay of Plenty.

Additional to AIM 1, AIM 2 also presents an opportunity to research the effectiveness of the methods employed in a New Zealand context and identify further opportunities to increase community situational awareness which will inform future public engagement in the Hawke's Bay and the rest of New Zealand.

Alignment with identified goals and objectives identified in the CDEM sector *[200 words maximum description.]*

The Hawke's Bay CDEM Group Plan (2014-2019) has a vision: A Resilient Hawke's Bay Community, He Aumangea Hapori ki Te Matau a Māui. This project aligns with the following objectives within the plan:

Reduction Objectives

RED1: Improve our understanding of hazards in Hawke's Bay and the associated risks and consequences.

RED3: Communities and individuals area aware of the hazards they face.

RED4: Continue to identify, document and share current best practices and identify methods of improving and measuring Hawke's Bay community resilience through hazard reduction.

Readiness Objectives

REA7: Improve the level of awareness and preparedness of business to enable them to respond and recover from an emergency as quickly as possible.

REA8: Continue to improve awareness and preparedness through consistent and relevant public education, messages and engagement.

REA9: Identify and prioritise vulnerable sections of the Hawke's Bay community and improve their preparedness for an emergency.

Please note that this project also aligns with Goal One and Goal Two of the National CDEM Strategy 2008.

Dissemination of benefits to sector *[200 words maximum description.]*

This project has two anticipated outcomes:

- A) Increased awareness and knowledge of tsunami evacuation zones and lifesaving earthquake/tsunami responses of residents living in tsunami evacuation zones in Hawke's Bay.
- B) Evidence based research results regarding the effectiveness of the methods employed in the public education campaign to inform future campaigns.

Increased community resilience has the benefit that in the event of tsunami evacuation there will be improved self-evacuation of residents. Measuring the success of this campaign will inform Hawke's Bay CDEM Group and other Groups future community education campaigns. Additionally, findings will be published in a report, available online, to enable the entire sector to take away key learning from the campaign.

By creating and running the public education campaign (AIM 1), this project will:

- Increase the level of community/individual awareness and understanding of the risks and consequences from tsunami (RED1, RED3),

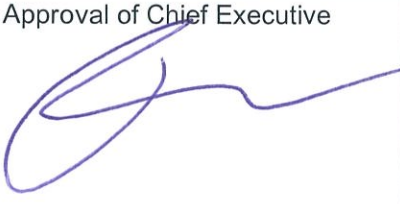
- Improve individual, community and business preparedness and improve community response from a tsunami event (REA7, REA8)
 - Re-enforce existing public messaging created by MCDEM, i.e. Long or strong get gone (REA8)
- By evaluating the success of the public education campaign (AIM 2), this project will:
- Document and share best practise regarding improving community resilience (RED4)

Project design

Project manager	Rachel Schicker
Other project members	Kate Boersen (EC LAB), David Johnston, Julia Becker and other JCDR Staff.
External providers/contractors	Communications Company

Deliverables

Milestones	Date for completion	Cost
AIM 1: Project Manager to develop the project and comms plan	30 June 2019	\$4,000/ 90 hours of Hawke's Bay CDEM Group time to coordinate project
Using a communications company, create educational materials to educate households within evacuation zones about their zone and required response actions.	01 December 2019	\$30,000 to employ a communications company to develop materials on behalf of Hawke's Bay CDEM Group.
Deliver campaign	Late Feb/March 2020	\$10,000 to communicate to urban homes in the Hawke's Bay region (within evacuation zones population 66,246)
AIM 2: Develop survey working with East Coast LAB and Joint Centre for Disaster Research (JCDR),		
Survey homes within evacuation zones before and after the campaign to measure effectiveness.	'Before' survey- 01 February 2020	\$7,500 to communicate to urban homes in the Hawke's Bay region (within evacuation zones population 66,246)
	'After' survey- 01 April 2020	\$7,500 to communicate to 56,000 urban homes in the Hawke's Bay region (within evacuation zones population 66,246)
Complete research report	30 June 2020	\$15,000 of science research to create the survey and compile findings.
		Total= \$74,000

Identified risks					
Risks	Suggested management				
<p>Commitment to timeframes and completion of milestones</p> <p>A tsunami event occurs before the campaign is finished</p> <p>Final survey results show no increase in community awareness regarding tsunami evacuation zones.</p> <p>Capability/Capacity to complete the project</p> <p>Communications company hired to create educational materials becomes unavailable/unsuitable</p>	<p>The project manager will oversee all work and report quarterly to the resilience fund regarding commitment to timeframes, budget and completion of milestones.</p> <p>Any preparation will be of benefit as starting the conversation with communities will increase their awareness of tsunami evacuation and therefore resilience.</p> <p>A survey will be conducted before and after the campaign is run to measure effectiveness and incorporate learning into the next campaign. If survey results show no increase in awareness, this will be considered in the design of future campaigns and shared with other groups.</p> <p>Involve other CDEM Staff as appropriate to support and guide project. Hire external assistance if required.</p> <p>Project Manager will work closely with the Communications company to create materials which align with the project requirements.</p>				
Funding request and use					
CDEM resilience fund contribution	\$ 70,000				
Local authority/organisation contribution	\$4,000 plus in-kind staff time for project management, and staff time for assistance in developing and reviewing materials created.				
Other sources of funding or support	n/a				
Budget <i>[Please supply spreadsheet]</i>					
Applies if application exceeds \$100,000 over the life of the project	Do you wish to attend a hearing in support of this application? <table style="display: inline-table; vertical-align: middle;"> <tr> <td>Yes</td> <td>No</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> </table>	Yes	No	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Yes	No				
<input type="checkbox"/>	<input checked="" type="checkbox"/>				
Application confirmation					
Approval of Chief Executive 	James Palmer CEO Hawke's Bay Regional Council				
CDEM Group comment					
<p>The CDEM Group strongly supports this application. This project links the work done both nationally and regionally on consistent identification and categorisation of tsunami evacuation zones; and the community. Recent events have proven that there is a poor understanding by individuals of which evacuation zone they reside/work in and the actions they must take on "long or strong get gone". This confusion has also shown to make official communication of which areas need to be evacuated difficult.</p> <p>Ian Macdonald Group Manager/Controller Hawke's Bay CDEM Group</p> 