CDEM Resilience Fund project application form

Application for CDEM Resilience Collaborative fund approval	
Project title	Tararua Coastal Tsunami Warning Systems
Date of application	2 February 2011
Details on application	
Lead local authority	Tararua District Council
CDEM Group	Manawatu – Wanganui
Other local authorities or Groups supporting the proposal	Aligns with agreed Group goal of implementing the Group Tsunami Plan
Project description	

Executive summary *[200 words maximum description.]*

Tararua District Council wishes to erect tsunami warning systems in both Herbertville and Akitio coastal villages. This involves one siren and remote trigger gear at Herbertville and two sirens and remote trigger gear at Akitio. The villages concerned are on the east coast of the lower North Island and are susceptible to tsunami, in particular a local source tsunami resulting from a major earthquake or undersea landslide in the Hikurangi Margin. Both coastal villages have high visitor numbers during the summer season and a smaller number of permanent residents. The outcome from providing tsunami warning systems will be more resilient coastal communities in the Tararua district and in the event of a local source tsunami, the reduction of casualties. It is envisaged that the project should be completed prior to the summer season of 2011/2012. The estimated cost of this project is $52,000 which includes a 5% contingency. An engineering assessment/design is proposed as part of the project and may reduce the overall cost by having only one siren at Akitio instead of the two proposed by increasing speaker size.

Problem/opportunity *[200 words maximum description.]*

Both Herbertville and Akitio are small coastal villages situated on the east coast of the Tararua District. The villages have up to 35 people living permanently on site with an influx of up to 400 people during the summer months and particularly during holidays. Both villages are situated on the flat beach area and are susceptible to tsunami. The offshore Hikurangi Margin runs parallel to the land in this area and there is high possibility of an undersea earthquake or mudslide occurring which will generate a local source tsunami with devastating effect on most east coast communities with estimated 6-8 metre waves. The installation of tsunami warning systems at Herbertville and Akitio which can be set off both locally and remotely will improve the resilience of both communities and provide the opportunity for them to run to high ground in the event of a local source tsunami or evacuate for a regional or distance sourced tsunami. It is anticipated that the "sting" sound will be used as the warning mechanism for tsunami which will differentiate from the rural fire sirens currently in place at both villages. If the bid is successful we will alter our current tsunami information on site to include the information on the warning system, test times etc so that visitors are aware of the sound and can re-act accordingly.

Alignment with identified goals and objectives *[200 words maximum description.]*

- The project supports Goal Two of the National Civil Defence Emergency Emergency Management Strategy: "Reducing the risks from hazards to New Zealand", and in particular objective 2C: Encouraging all CDEM stakeholders to reduce the risks from hazards to acceptable levels.
- The Horizons Hazard Risk Assessment for the Manawatu-Wanganui Region report identifies the Hikurangi Margin as a source of local tsunami with the most likely tsunami event expected to occur within a 500 year period as a wave,6-8m above mean sea level on the east coast.
- The project is in line with the key considerations for alerting the public of hazards at a local level as described in the MCDEM publication "Public Alerting: Options Assessment, Information for the CDEM Sector (IS 10/09)"
- The Draft Manawatu-Wanganui Tsunami Strategy requires local authlorities to outline local arrangements in a Community Action Plans. Both Herbertville and Akitio have identified the need for a public warning system be included in Their Community Action Plans. These plans are being written at the time of this application.
- The project supports the Reduction Principles and Objectives in the Manawatu-Wanganui CDEM Group Plan 2009-2014.

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

It is not known by the applicant how many communities have tsunami warning systems in place in New Zealand, however it is known that Wanganui City Council does have a system. We are happy to provide information on the success and progress made in increasing resilience for smaller coastal communities such as Herbertville and Akitio. The final cost and effectiveness of the warning systems could be used as bench mark for many other similar communities along the east coast should they wish to install similar systems.

Project design		
Project manager	Paddy Driver	
Other project members	CD Coordinators at Herbertville and Akitio Villages	
External providers/contractors	Will tender but will consider Meerkat Alert Systems Ltd for engineers assessment.	
Deliverables		
Milestone	Date for completion	Cost
Depends on date of approval: • Engineering Design • Final Quotes in based on Engineers Report • Purchase equipment and install/test Herbertville • Purchase equipment and install/test Akitio	 10 August 2011 1 September 2011 14 September 2011 20 September 2011	 $1,600 $0 $17,000 $27,400

Identified risks		
Risk	Suggested management	
• Project funding not approved • There are no other risks identified for this project	• Project delayed until it can be funded from Council • Not applicable	
Funding request and use		
CDEM resilience fund contribution	$46,000	
Local authority contribution	$6,000 (connectivity for remote control)	
Other sources of funding	Nil	
Expenditure *[Please supply details]*	$52,000 total cost of project	
Application confirmation		
Approval of Chief Executive	(Acting CEO)	
CDEM Group comment		
Comment		
Approval of Coordinating Executive Group Chair		