

 Report
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Wellington region Resilience Fund Applications

1. Purpose

To inform the Co-ordinating Executive Group (CEG) of the four proposed projects for submission to the CDEM Resilience Fund.

2. Background

Since 1966 the government has made \$1 million per year available as a subsidy to local authorities for the support and development of their respective civil defence capabilities. Up to now the Ministry of CDEM has overseen the annual distribution of these funds to all local authorities on a pro rata basis (based on a percentage of their total civil defence emergency management operations expenditure).

Following a recent review, the funds allocated will now be directed towards local authority led projects that demonstrate a contribution towards resilience and address identified sector priorities. The goal is to ensure the allocation provides maximum value towards enhancing resilience, achieves a more strategic focus, and encourages collaboration across the CDEM Groups and local authorities. The Ministry will monitor the delivery of the projects and support collaboration across local authorities and CDEM Groups in undertaking projects.

On 17th November 2010 the four proposed projects were discussed at the national Chairs of CEG Forum. The projects were supported by the Chairs of CEG. The funding application process now requires the Wellington Region Co-ordinating Executive Group to approve these four projects for submission.

3. **Proposed projects**

3.1 Social media in an emergency

Social media and social networking are rapidly growing forms of communication that present an opportunity for emergency managers in the areas of information sharing and gathering in emergency events. In practice this technology is being used by CDEM both overseas and in New Zealand, however, no guide exists to ensure this resource is used consistently and to its full potential. This project will use literature reviews and workshops involving key stakeholders and social media experts to address potential issues in the use of social media and develop guidelines for CDEM practitioners to harness and evaluate this resource in New Zealand.

Outputs and benefits

The final output from this research will be the creation of a best practice guide for the CDEM sector, for the use of social media in an emergency. This guide will address the problems raised during the evaluation of overseas literature and experience and discussions with social media experts and emergency management practitioners in New Zealand. The guide will include elements for both the development of policy and examples of effective social media initiatives. It will also provide a framework for evaluating the success of these initiatives.

Ultimately this project will contribute to increasing community resilience as the guide will enable the CDEM sector to effectively use social media to engage the community and allow timely two-way information sharing during an emergency. In addition the information gathered will create a more flexible CDEM response which can be more tailored to meet the communities' needs (as determined by the community).

Costs

Total cost \$52,000

Resilience fund application \$45,000 (cost of Opus International Consultants).

Group contribution \$7,000 (cost for writing, designing and printing guide).

3.2 Flood forecasting system

Greater Wellington Regional Council looks after all major rivers in the region. There are a large number of rivers in the region, however only four (Hutt, Otaki, Waikane and Waipoua Rivers) of these pose a serious risk to urban / semi urban populations, the rest of the rivers run largely through rural areas.

Greater Wellington has recently purchased a software package produced by WorleyParsons called WaterRide. This software has the ability to take model results and combine these with river gauging to identify the predicted flood extent in real time.

In order for this software to do this, the existing Flood Protection Department models need to be modified/updated to cover a large enough extent that is useful for Emergency Management purposes and is compatible with the WaterRide software.

Outputs and benefits

Identifying the flood extent will be invaluable to emergency management staff who can use this information to prioritise Emergency Services staff etc to evacuate areas, prioritise sandbagging etc. Due to the steep and short nature of the streams/rivers in the Wellington Region, the warning time is very limited and any information that can be provided to emergency management staff in a short time period will be invaluable.

The funding request has been broken down in to the different river systems (should the decision be made to fund particular river(s)).

Total Cost \$337,300

*Hutt River \$109,000

Otaki River \$99,000

Waikane River \$52,800

Waipoua River \$73,500

Water Ride licences \$3,000

Resilience fund application \$334,300

Group contribution \$3,000 + *significant contribution by Greater Wellington Flood Protection staff.*

* The Hutt River upgrade is a 40 year programme that started in 2001. The CBD area will be completed by 2020. The flood forecasting system will be valuable for emergency management to cover the upgrade period.

3.3 Community resilience

A key component of community resilience is the ability to be self-reliant immediately following an emergency management event; this research will identify the needs of the community to achieve this level of independence. This will be achieved by utilising a community resilience tool developed by the DFID Disaster Risk Reduction Interagency Coordination Group (Twigg, 2007). This tool brings together multiple definitions of community resilience and provides a useful framework of the factors that characterise disaster-resilient communities. Increasing community resilience is best achieved through the simultaneous implementation of multiple methods. Three approaches have been identified below:

- **Physical Resources**: Identify and supply resources that CDEM could provide to the community, which will be of assistance in an emergency. Examples are water tanks, radios, medical/first aid supplies.
- Natural Leadership and Planning Resources: Aid facilitation between community leaders to create a plan that will empower the community to take leadership in an emergency event. The plan will be one that meets CDEM expectations of the community and the community's expectations of CDEM. For example, how medical facilities can best use their resources within a community in an emergency event.
- **Existing Social Networks**: Collaboration with the Neighbourhood Support Group for the purpose of strengthening their presence in the community, and to include emergency preparedness as one of the core messages.

Outputs and benefits

The key output is a community resilience measurement tool that can quantify resilience over time and is transferable to other communities. The tool operationally defines 'community resilience', providing definable and measurable indicators of optimal levels of resilience. The Community Resilience Measurement Survey Tool will be evaluated and made available for application in other New Zealand communities.

Adoption of this method will produce:

- A local emergency management plan that has community buy-in and aligns with CDEM expectations.
- A local overview of perceived physical resources and training needs.
- A process for utilising existing social networks to inform the community regarding emergency preparedness.

Costs

Total cost \$52,000

Resilience fund application \$50,000

Group contribution \$2,000

3.4 Vulnerable communities

Providing for vulnerable communities in a disaster situation is a prime concern for CDEM, however the identification of, and engagement with, these communities may be better served by utilising existing community networks. The aim of this project is to develop and implement a programme that will establish connections into our vulnerable community. This can be accomplished through partnerships with CDEM stakeholders and leading social agencies.

We therefore propose to analyse the connections between social and community agencies that currently exist, those that could be developed further, and those that could be established in order to assist vulnerable members of the community. Through this, we will identify agency gaps, as well as overlaps that could lead to vulnerable people not receiving the required care in an emergency. To do this, we will use a method known as social network analysis that is used to visually and quantitatively present the strength of relationships between people, groups or networks.

Outputs and benefits

The final output from this research would be the creation of a best practice guide for the facilitation of community group and agency networking to better provide for vulnerable groups in the community. It will also create a tested method for identifying gaps in the provision of services. This research will therefore allow CDEM groups to target their efforts at either increasing vulnerable community members' involvement in community groups or connections to social agencies, or at providing for vulnerable community members not otherwise included in these networks.

Costs

Total cost \$45,000

Resilience fund application \$43,000

Group contribution \$2,000

3.5 Conclusion

All of the proposed projects will benefit the Wellington Region CDEM Group and some CDEM nationally. The proposed projects align with the National CDEM Strategy's goals and objectives and, support the Wellington Region's vision that "the communities of the Wellington region are resilient".

4. Recommendation

That CEG:

- 1. receives the report;
- 2. *notes* the contents; and
- 3. *approves* the proposed projects for submission to the CDEM Resilience Fund.

Report prepared by:

Report approved by:

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