



impact

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Welfare innovations

Cover image: Teaming up – government agencies worked shoulder-to-shoulder with not-for-profits to help people in Canterbury following the February 2011 earthquake. Photo: Ministry of Social Development

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Common acronyms

MCDEM Ministry of Civil Defence & Emergency Management
CDEM Civil defence emergency management
NCMC National Crisis Management Centre
ECC Emergency Coordination Centre
EOC Emergency Operations Centre
EMO Emergency Management Officer

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EDITORIAL

John Hamilton, Director Civil Defence Emergency Management



Community response planning

This edition of Impact is published around the first anniversary of the devastating 22 February 2011 Christchurch earthquake. The memories of that day and the response remain vivid to all that have an association with Christchurch and the operation and we can reflect on a job well done.

With time we can also think about those parts of the response that went well and those aspects that deserve improvement. But we must not limit our focus to just the response as I am sure we can identify elements of readiness in communities that translate directly to the response.

The better prepared the community, the less response required. The better prepared and practised the civil defence response arrangements, the easier it will be to deliver swift and effective assistance to the community in need.

The formal process to review the response is well underway and scheduled to be complete at the end of June. It draws on the experiences of a wide range of staff and citizens that were involved. In addition, there have been opportunities to share personal observations, the most recent being the 11th Annual Emergency Management conference arranged by Conferenz and held in Wellington 28-29 February.

A key theme coming from that conference was the need to orient our civil defence emergency management thinking toward having the community more deeply involved in readiness and planning for an emergency, and to acknowledge that as a precursor to their participation in the response.

There is a growing list of initiatives that have been completed by councils and EMOs outlining aspects of community response planning which contributed to the objective. There are also case studies under development that show the factors that should be taken into account in developing community resilience based on groups in Christchurch and other areas.

Conference attendees were told of Project Lyttelton, a community initiative that assisted residents during the response and is now assisting the community to rebuild. Project Lyttelton draws upon local strengths, capacities and leadership "to help make this community a desirable and dynamic place to

The challenge for professional civil defence staff is to shift modes so that through our influence and facilitation, the community gets involved and takes responsibility for generating its own emergency plans

live." A slightly different approach was described by staff from Waimakariri but also indicating how existing community capacities can be utilised.

These are fantastic projects which I hope will form the foundation for an evolution of our approach to civil defence emergency management. The challenge for professional civil defence staff is to shift modes so that through our influence and facilitation, the community gets involved and takes responsibility for generating its own emergency plans and resilience, as opposed to us telling them what to do. ■

Comment from the Minister

Chris Tremain, Minister for Civil Defence

I was privileged to attend the February 22 earthquake commemorations in Christchurch last week. This was a very sad and moving occasion. Yet it also provided a chance to recognise the incredible efforts of so many people in the rescue and recovery efforts.

The Christchurch Earthquake Awards on the same day commended 140 individuals and organisations for their extraordinary service and heroism. These people oversaw evacuations, assisted the injured, provided emergency relief and supplies, supported their communities, and ensured services were maintained. The awards highlighted the huge range of actions that aided Christchurch people when they were in desperate need, from saving lives to simply showing kindness.

Many of them put themselves at risk pulling people out of the rubble, rescuing people from buildings, and going back to help the injured. Some of them lost their own lives in the process.

It was a privilege to also see John Hamilton receive an award for service on behalf of Civil Defence and all the staff who played a role in the response to the earthquakes. Congratulations to each and every one of you. Your hard work and commitment in the wake of the earthquakes was vital.

The day was a chance to reflect on the progress we are making and what we can learn going forward. By drawing on the lessons learned, we can continue to strengthen our Civil Defence Emergency Management framework, making our world class system even better. ■



Above: John Hamilton receiving an award from Christchurch Mayor, Bob Parker, on behalf of all civil defence staff who played a role in the response to the earthquakes.

Christchurch reflections

Jonathan Lowe is a member of New Zealand Response Team (NZ-RT) 5, a North Shore-based volunteer rescue team. He was deployed to Christchurch three times as well as to Queensland for the floods in January 2011. He returned to Christchurch for the commemorative services.

Most of our work was in the CBD Red Zone. Rescue Teams would escort engineers into the high rises and commercial buildings. We would stand in the street and listen to the aftershocks as they rattled towards us like a train coming. One engineering couple from the southern US, would pray before we entered.

It was totally dark in the stairwells of the buildings. Doors had to be wedged open. In unsafe buildings where we could not stay long, one kick with steel cap boots would usually get through a locked door. Basements were usually full of water, and sometimes gas. Water reservoirs at the top of the building would split open saturating the top floors. You never opened a fridge.



I believe there is a future for Christchurch. Time will heal the scars, the land will settle again, memories will shorten and the lessons learned about structures will become part of the future building codes.

The old unreinforced masonry is no longer a threat. New structures will be beautiful, innovative and safe. Eco awareness will make new buildings more efficient and user friendly.

Already at Latimer Square the new Latimer Hotel is being built, the foundation columns

go twenty two metres into the ground; most of them are already finished. Rubber sliding bearings will take the weight of the structure and ease the effects of any future shocks.

Christchurch still needs our support at all levels. Who knows, one day, some other part of New Zealand may need wisdom and support from Cantabrians. ■

Taking time to share

The recent Christchurch earthquakes and natural disasters in Japan have shaken more than Cantabrians. Everywhere in New Zealand individuals and businesses are asking themselves, “Am I prepared?” However surveys appear to indicate that only one in ten businesses say they have thought about preparedness and only one in twenty have taken action toward preparedness.

In May 2011, Ray and Jeanette Gover, who manage the Village Time Share Resort in Taupō, attended the 25th Annual Timeshare Managers Conference where they heard a presentation from the Taupō Civil Defence and Emergency Management Group.

During the presentation, speaker, Phil Parker, Taupō District Council’s Emergency Manager/Principal Rural Fire Officer, focused on the preservation of life, care for the injured, protection of property and recovery. He stressed having a plan saying that civil defence is about reduction, readiness, response and recovery.

What resonated with the Govers were the elements of readiness; being prepared, using a plan, knowing what to do and keeping safe. The Village Time Share Resort has 22 self-contained units, which, when at capacity, hold about 100 people weekly. In addition to their guests, the Govers are responsible for twenty-six staff. “It’s a big responsibility on your shoulder,” Ray says.

Wake up calls

Prior to the presentation, the Govers had only taken small steps to prepare for an emergency. On the evening of 26 April 2010, Taupō residents were in the dark when electricity was cut following heavy rain and strong winds. Ray and Jeanette were on holiday in Hamilton at the time. Jeanette recalls, “We were doing a bit of shopping and had no idea what was happening in Taupō, when we received a call from one of our team who sounded nervous.”

Ray and Jeanette made their way back to Taupō to find it in complete blackout. Jeanette says, “We didn’t have emergency lights in the resort, we had torches and small first aid kits only – nothing extensive. We offered the torches to the guests.”

Luckily for the Govers most of their guests just went to bed. According to the lines company about 10,000 people were initially left without power. MetService said that the heavy rain and wind which had pounded



Left to right: Phil Parker, Taupō District Council’s Emergency Manager with Jeanette and Ray Gover in front of a well-stocked civil defence cabinet.

the North Island caused power outages for most of the day. Without power and water, Taupō District was switched to an untreated water supply and households were required to boil water.

Jeanette says that after the massive storm, they realised that they weren’t prepared. “The storm gave us a wake up call that we needed a plan. Initially we panicked, but afterwards we bought torches for each unit.”

In September 2010 and again in February 2011, Christchurch experienced 7.1 and 6.3 magnitude earthquakes, respectively. The tremendous impact of the earthquakes, followed by Phil’s civil defence presentation in May, finally motivated the Govers to take action.

Ray says that the Christchurch earthquakes made them realise that an emergency can happen anywhere. “Had the earthquakes not happened we wouldn’t have paid as much attention. We’d still be saying ‘we’ve got to do something’ and that would have been as far as we would have got.”

Being prepared was placed in the “too hard basket”. Ray notes: “Previously we had torches and thought that meant that we were prepared. What Phil made us realise was that real preparation was doable.”

Preparing and sharing information

Today the Govers are leading the way as good examples of how businesses can prepare for an emergency. For the sake of their staff and guests, Ray and Jeanette began their journey to getting their resort emergency ready.

Over several months, they installed a civil defence cabinet in the reception area, placed an emergency backpack in every unit, purchased additional torches and placed them in easy to access locations and created an evacuation plan.

In addition, their management company, Monad Pacific Management Ltd, has joined in and has had the cabinets placed in all their New Zealand resorts.

The Govers say that before the conference they were not ready. “We didn’t have water or a first aid kit,” says Jeanette, “It felt as though we were waiting for something to happen, but we had nothing ready.”

Today, the Govers are fine tuning their preparations by hosting briefings for their guests, ensuring they have suitable water available, conducting a business audit and sharing what they have learned with other timeshares in the hopes that the information shared will result in greater levels of resilience. ■

More mobile sirens for Hastings coastal areas



Left: Two of The Stinger units mounted on vehicles.

Below: The Stinger control console showing several pre-recorded emergency messages on auto play USB sticks and PA microphone for manual announcements.



Hastings District Council is also considering developing a fixed version of this alerting system for areas where there are insufficient volunteers or where volunteers are not available 24/7.

The fixed version will be louder and not dependant on mains power, for example, utilising mains power to trickle charge a battery combined with solar power backup. The unit would be triggered remotely via radio either from the Emergency Operations Centre or from an Emergency Management Officer's vehicle.

Hastings District Council now has three mobile public alerting systems for use in the event of a Civil Defence emergency, with more soon to be delivered.

The system, named The Stinger, was developed in Hastings in collaboration with GNS Science for use in coastal areas during an emergency. Each unit is easily attached to the roof of any vehicle and broadcasts the civil defence 'sting' along with a voice message which alerts residents to the emergency and gives them details of what action they should take.

The new warning system has been developed after residents from the coastal communities raised concerns over how they would be alerted in case of an emergency. A number of other options, including fixed sirens were explored but the mobile sirens best met the needs of the coastal communities.

The new system is designed for use in high density urban areas and has a voice range of 200 meters in still conditions, while the siren can be heard up to 500 metres from the vehicle.

Leader of the Cape Coast Civil Defence Group, Stu Hastings says "Extensive testing of the new mobile units has shown they will provide a loud and easily understood message for residents during an emergency. Fixed sirens are limited in their range and effect but the new units can be deployed in the right place at the right time and the voice message can be altered to suit the emergency."

Hastings Civil Defence now has three of the units ready for use at a moment's notice while a further four will soon be delivered.

The Public Alert System will be given a further test on Sunday 1 April when New Zealand changes away from daylight saving. The units will broadcast a test message in the coastal areas of Whirinaki, Clive, Haumoana, Te Awanga, Clifton and Waimarama. Residents of those areas will be asked to report on whether they heard the message and if it was easily understood.

Some of the messages which could be broadcast by the mobile systems can be heard at www.hastingsdc.govt.nz/stings ■

Welfare on wheels

In early March 2012, when severe weather caused widespread damage in South Taranaki, the Ministry of Social Development loaded up a campervan and headed to Patea.

Inside the campervan were two Ministry case workers with laptops and the ability to make on-the-spot decisions. Their focus was to help people struggling in the aftermath of a storm that had ripped the roofs off about 80 houses and cut power to around 30,000 properties.

Providing mobile services is just one of the many practices the Ministry has instituted in recent times. These practices were tested in the response to the Canterbury earthquakes when, like other agencies, the Ministry was forced to look for innovative responses in every aspect of its work, from new ways to bring services to clients and the development of unique IT solutions for service delivery, to the power of co-location and leveraging off local relationships to help communities recover.

After any adverse event, the Ministry's first responsibility, as with any organisation, is to ensure its staff are safe. Within half an hour of the 12:51 earthquake on 22 February in Christchurch, the Ministry's Crisis Management Team had convened in Wellington and its Emergency Operations Centre set up to provide information on staff safety and wellbeing, damage to the Ministry's property and the resources required to contribute to the whole of government response to what was New Zealand's biggest disaster in 80 years.

"Christchurch was the Ministry's greatest challenge," says Steve Glassey, the Ministry's General Manager of Emergency Management. "The scale of the disaster meant the Ministry had to step up and use every network and relationship we had. Every part of the Ministry – Child, Youth and Family, Work and Income, seniors and students, Family and Community Services – had to find creative ways of delivering services to people in need."

The Ministry's response required innovative solutions that have helped it build resilience for the future. The



response can be described under three key areas: services to existing clients, services to new clients and contributing to the wider welfare response.

One of the first responsibilities the Ministry has after an emergency is to ensure that it can continue to look after its existing clients – around one million New Zealanders. These include children and young people in care, people receiving a benefit, superannuation or a Veteran's Pension, students with a student loan and the many community organisations the Ministry funds.

The severity of the situation after the Canterbury earthquakes required every part of the Ministry to respond. At the same time, the Ministry still had to continue to provide services to existing clients while stepping up to the extra demands created by the event.

Meeting new needs

A second role for the Ministry after an emergency is to help people who were not previously Ministry clients access assistance.

The Ministry rapidly deployed staff from all over the country to Christchurch to help with the response.



Above: Cross-agency staff travelled to hard-hit suburbs such as Aranui to help people in need after the Canterbury earthquakes.

At its height, up to 250 additional Ministry staff were based in Canterbury at any one time. In all, 800 staff were sent to Christchurch over the two months following the disaster.

One of the main challenges was reaching people in need. Central Christchurch was cordoned off, many major roads were blocked, public transport was interrupted, phone lines were down, many houses did not have electricity and thousands of people were homeless. Seven of the eight Work and Income Service Centres in Christchurch were closed because of the earthquakes.

To reach people who needed help, the Ministry converted eight campervans into mobile one-stop-shop service centres and drove them to the most affected areas. Inside were staff from Work and Income, Child, Youth and Family, Inland Revenue, Housing New Zealand and non-government organisations such as Victim Support and the

Salvation Army.

The vans – dubbed ‘welfare on wheels’ – helped the Ministry and partners deliver services despite the compromised infrastructure.

Services offered from these one-stop-shops included access to psychosocial support, financial assistance, support for children, young people and families and information on accommodation and housing.

They were able to help many people with complex needs. In one instance, a Child, Youth and Family social worker was instrumental in helping a family receive support in the badly-hit suburb Bexley. Working from one of the mobile service centres, the social worker spoke to a girl and her father collecting water at a tanker. The child seemed traumatised by the quake while her father told the social worker he was unable to get to work and had another family staying with them who could not live in their own home. In addition, his wife was due to give birth any day.

Representatives from Housing New Zealand, Work and Income, Inland Revenue and Child, Youth and Family worked together from the van to immediately help the family access the right services.

The vans proved a lifeline to the eastern suburbs. On 22 March 2011, one month after the quake, seven vans were still in use.

Wider welfare role

The third role of the Ministry is the planning and coordination of national welfare as described in Section 12 of the Guide to the National Civil Defence Emergency Management Plan. The Ministry chairs the National Welfare Coordination Group in events of national significance.

It also maintains the government helpline to give the public easy telephone access to a central source of information and advice. Within seven days of the February 2011 earthquake, the Ministry had received 45,000 calls to the helpline and made more than 56,000 outbound calls (see statistical box above).

In emergencies, the Ministry works with its partner organisations to ensure the welfare response is well coordinated and supported at all levels. This can require setting up new services in cooperation with other agencies. For example, to respond

Key statistics

A snapshot of the Ministry’s response to the event on 22 February, 2011:

- New payments of \$215 million made to 70,000 staff and employers, starting 2 March
- 18,000 superannuitants phoned to see if they needed help
- 1,000 vulnerable elderly people visited
- 3,500 sickness and invalid benefit clients contacted
- 650 caregivers and foster parents contacted to check on the safety of children and young people

Right: thousands of people needed to leave their homes and stay in temporary accommodation such as school gyms.



Increasing capability

Since the earthquake, the Ministry of Social Development has strengthened its emergency management structure under a newly created role, General Manager of Emergency Management.

Steve Glassey, who was appointed to this role in January, is well known in emergency management circles, having worked at the Ministry of Civil Defence & Emergency Management, taught emergency management at Massey University and worked on overseas disaster operations.

This new position brings business continuity and emergency management together under one executive function and will help MSD increase its integrated response capability and improve its effectiveness when coordinating a national-level welfare response.

Steve is responsible for providing clear direction and management support, oversight of business continuity and emergency management policies, standards and initiatives for the Ministry.

to the immediate housing crisis in Canterbury, the Ministry and the Department of Building and Housing set up the Canterbury Earthquake Temporary Accommodation Service, or CETAS, to help people find temporary accommodation after the earthquakes.

The Ministry quickly learned that co-location was an ideal mechanism for enabling agencies to work together. In future, the Ministry and Inland Revenue plan to co-locate their contact centres, which will provide opportunities to merge common functions and to provide even better services to shared clients.

Scaling up to meet wider welfare needs can require setting up new systems under time pressure. For example, on 28 February 2011, the Prime Minister announced the Government would pay an Earthquake Support Subsidy for employers and staff.

To deliver this, the Ministry developed a system for people to apply on a secure website. The payment information was checked against Inland Revenue records and successful applicants were advised of payment by text message and email. Enquiries about the status of applications could be made online and through the Ministry's Contact Centre.

The software went live less than a week after the earthquake, and payments of more than \$50 million were made in the first week. By the end of June 2011, payments to 20,000 employers and 50,000 staff totalled \$202 million were made with many of the applications being turned around in less than 24 hours. This innovation won ICT Project of the Year at the ITEX Computerworld Awards 2011.

The Ministry has since adapted the Earthquake Support Subsidy software to support people affected by the grounding of the Rena and its subsequent oil spill.

After the earthquakes, to make the most of a joined-up approach, the Ministry also trialled joint management and virtual teams. Several new forms of cross-welfare assistance were set up. These included:

- An 0800 Quake Support and Counselling Line provided a single point of entry to information about and access to social services, with organisations working together in a more co-ordinated way;

The Ministry quickly learned that co-location was an ideal mechanism for enabling agencies to work together.

- Police Trauma Liaison referred bereaved families to social support services in a timely and simple way through a counselling and welfare response that was managed collectively;
- Earthquake Support Co-ordination Service established a virtual team of co-ordinators from across organisations that used common information and systems to support people in need.

The future

Responding to the Christchurch earthquake required the Ministry to test new ways of working. In addition to positive community and partner feedback, the Ministry's actions were reviewed by the State Services Commission in its Performance Improvement Framework: Formal Review of the Ministry of Social Development report (May 2011) which stated:

There are a number of examples of MSD quickly innovating in response to the Christchurch earthquakes, including the use of mobile servicing from campervans ... to establish their needs and quick establishment of 'one stop shops' in the community...The initiative allowed the agencies to respond to specific needs and achieve wider all-of-government welfare aims.

As a result of this report and lessons learned in Canterbury reviews, the Ministry is boosting its capacity and capability by embedding emergency activation and management best practice into business as usual. It is also integrating business continuity and emergency management across the whole Ministry (see sidebar opposite). ■

Nelson Tasman calling

Following the 14 December 2011 flooding in Nelson and Golden Bay many roads and amenities and more than 500 properties were damaged. Many homes were 'red stickered'. Nelson Tasman EOC was aware of at least 765 directly affected individuals. These contacts were entered into a database.

Lack of information is an issue often faced by a community during and after emergencies. Therefore the Nelson Tasman Welfare team undertook to contact all those affected. This involved initial contact on 22 December 2011, a follow up on the week of 20 January 2012 and a follow up of those individuals with outstanding needs around the middle of February 2012.

To implement the calling programme the team followed some essential steps. Swift and accurate data input into a database that can still remain confidential; obtaining reliable and accurate details from Police,

response teams and Red Cross registration forms; callers with good communication skills from CAB, Salvation Army and Council customer services; and finally a co-ordinator who can monitor and manage the project.

The response was overwhelmingly positive. Most individuals were grateful and thankful to be contacted. Some felt others were far more deserving than themselves and those contacted by the media gave thanks to support agencies and callers. While many building issues were unable to be resolved, providing a listening ear and an assurance of a follow up was greatly appreciated.

What did we learn? Some calls take 15 seconds, some take over an hour. Most people are only contactable in the evenings, which adds pressure on outbound calling staff and a call back number needs to be set up which remains free. The data can provide valuable insight into a community, its economic impact and to track those



people that would otherwise slip through the cracks during emergencies.

So would we do it again? Without a doubt for long after this event those impacted may not remember the debris on the road, but they will remember that someone cared. ■

Response Teams hone skills in recent exercise

Several South Island-based New Zealand Response Teams (NZ-RTs) were recently able to capitalise on a unique opportunity to practice vital urban search and rescue skills. A significant number of residential properties in the Kaipoi region were marked for demolition following the February 2011 earthquake.

Prior to their planned demolition in February 2012 members of NZ-RT12 were able to successfully negotiate with the local authority, demolition company and insurance companies to conduct a training exercise, named Operation Woodstock. Due to public pressure to demolish these houses, the entire exercise had to be planned and conducted within three weeks of signoff.

Operation Woodstock allowed response teams and other key agencies to conduct a re-run of the February 2011 response within an incredibly realistic environment. Areas of the initial response that were noted for improvement were able to be refined, particularly inter-agency cooperation and collaboration. Important rescue techniques requiring partial, controlled demolition

could also be practiced without concerns about property damage.

The exercise also provided a unique opportunity to field test a recently commissioned Emergency Response Command trailer that NZ-RT12 team members built in 2011 through generous donations from the community.

Exercise writers incorporated several training scenarios noting that it was pitch black from the time the teams arrived. These included: two garages collapsed on cars with people trapped inside the vehicles ensuring more than one team could run through the scenario; mass casualties with age groups from 7-55; impalements and extrications through difficult surfaces; and a flooded house with multiple victims.

Response Teams involved in Operation Woodstock included NZ-RTs 10, 11, 12 and 14 along with members from Oxford Search and Rescue, the Red Cross response team and the Canterbury University response team. Other participating agencies included welfare and sector post teams, NZ Fire Service Kaipoi, Salvation Army and regional Emergency Management Officers. ■





Community resilience in Japan

In November 2011 Deirdre Nagle, Alternate Welfare Manager Taranaki CDEM Group, was a participant in a twelve day JENSEYS (Japan East Asia Network of Exchange for Students and Youths) Future Leaders Programme. The theme of the programme was Disaster Management and People: Working towards the Creation of a Strong Society. This provided a unique opportunity to travel to Japan along with 24 other participants from around Asia, and learn about the disaster prevention, preparedness, mitigation and recovery measures being employed across Japan. The programme also provided the opportunity to visit Iwate Prefecture to observe the effects of the 2011 8.9 magnitude earthquake and resulting tsunami.

What better place to explore the complexity of disaster management in all its phases than Japan, which is famous for its culture of preparedness, its ability to respond to events and its track record of recovery from events such as the 1995 Great Hanshin Earthquake. Japanese culture and society have developed a resilience which is apparent from the response to the 2011 earthquake and resulting tsunami. The social, community, health, economic, infrastructural and trade impacts of the tsunami have been enormous for Japan. The cost runs into the billions and the effects will continue to be felt in the national economy for many years to come.

Community response to the earthquake and tsunami

The 2011 tsunami was the highest in recorded history at more than 10 metres, breaking through the world's highest sea wall built to protect the communities in the coastal Iwate Prefecture. Analysis of the community response to the earthquake and resulting tsunami warnings revealed very different responses to that predicted. The earthquake was responded to methodically according to very clearly learned protocols by the majority of the population.

However Dr. Nori, from the Research Centre for Disaster Reduction Systems in Kyoto University, pointed out in a lecture that the response to the

Right: In a sign of solidarity, people throughout Japan observe a minutes silence in remembrance of those killed by the 2011 earthquake and tsunami.

tsunami warnings was not as simple. Firstly, the tsunami warning information received was not accurate enough to allow the populations affected to make decisions about evacuation. Some did not believe the warnings themselves. Others regarded the sea walls as sufficient protection and as a result, their response to the impending tsunami was too slow to enable them to evacuate to higher ground. In contrast in the city of Kamaishi, teachers moved children to a place higher than the agreed evacuation point on the ridge above their school which was located at sea level. Their decision saved the younger generation of this region. This was one of the successes of the disaster management community planning implemented by the Emergency Management Officer from Kamaishi City Council.

What has been learned is changing the pervading ideology surrounding emergency management communications. Instead of communicating set rules or protocols for communities to respond to, communities are now expected to make decisions based on their assessment of the risks and the information received and to respond accordingly. This was clear from a visit to Maiko High School where the disaster management curriculum focuses on teaching students how to analyse the information they receive and to use their personal experience and knowledge to determine their response.

Community resilience

The message from Kamaishi and from my visit to the Takatori East District in Kobe is that disaster management and effective preparedness and response is heavily reliant on networks and community solidarity. In the Iwate Prefecture neighbours saved neighbours achieving much greater outcomes from being at the scene and knowing who to attend to immediately, knowing who was old, vulnerable or infirm. While first response teams from Japan and other nations did come to assist, the majority of people, an estimated 90%, were saved by their neighbours and families.

Community strength and solidarity was a theme which permeated the program. Visits to our Japanese host families revealed stories of neighbours supporting each other and offering shelter and food following the 2011 earthquake.

The Tono City Disaster Relief Network, a non-government organisation, grew out of survivors of the tsunami event who were first responders and who became more and more involved in coordinating community recovery activities. The role this NGO is playing is to empower and ensure communities take responsibility for their own recovery with wider support.

The inclusion of affected communities in planning and rebuilding supports community dialogue, mental health and building solidarity, and is a mechanism for ideas for social, economic and community initiatives to be developed. The concerted, longer term welfare strategy for people displaced and people remaining in their homes was impressive, with visits to community members coordinated by local welfare agencies long after the event has occurred. The significant role the welfare function plays in large scale events was emphasised. It helps people recover better and quicker and also enables them to become part of the recovery process.

Recovery of the Takatori community in Kobe following the 1995 earthquake required a nine year consultation process. Building Back Better was developed collaboratively with the consensus of residents; a process which took over fifteen years in other Kobe communities. One of most significant examples of community solidarity in the Kobe recovery was the donation of 5% of each person's land back to their community in order to redesign their neighbourhood to create wider streets, community halls and community gardens and parks, bringing this community closer together and therefore stronger and more resilient. Here we learned that out of disaster communities can become more resilient through strong community leadership and long term rebuilding and planning.

Psychosocial aspects of recovery

The science behind the psychosocial aspects of recovery is relatively new. And yet these aspects recognise the significant and often intangible affects on a whole population's mood, mental health, productivity and ability to cope which results from its exposure to a disaster.

While in Kobe, we were given the opportunity to participate in the Illumination, a commemoration

“Communities are now expected to make decisions based on their assessment of the risks and the information received and to respond accordingly.”

Right: The Mayor of Kyoto (second from the left) participates in a ceremony of remembrance for those lost in the 1995 earthquake. A bell is rung ushering in a spectacular light show and procession (below)



service of the 1995 Kobe Earthquake where much of the city was destroyed, motorways toppled and communities burned in fires. This event was first designed 11 months after the earthquake to commemorate the loss to the local community. In a procession several kilometers long through illuminated streets, this event was cathartic and somber enabling the community to remember and gain hope.

Symbols of recovery and restoration of historical and cultural sites was clearly a significant part of the recovery process. The restored Sawanotsuro sake factory museum in Nada served as a symbol of recovery for this community. The restoration, though less practical, was important as the community could feel whole again. A cultural loss had been restored. The subtle importance of symbols of recovery for communities became apparent by the end of the visit. Real sustainable recovery is both about restoring the practical necessities required to live while at the same time building back hope and identity.

Lessons learned

Naturally the question in my mind during my time in Japan was how these can these lessons be applied to New Zealand? My work in emergency management in Taranaki involves developing capacity in the community and voluntary social services sector to build their preparedness and ability to respond and provide vital services in the event of an emergency.

Combining my New Zealand experience with the experience in Japan, the following are my personal and professional learnings which I will be bring back to my work.

→ To ensure emergency preparedness enables communities to use information and then decide upon their actions.

- The significance of awareness-raising activities for different demographic groups, targeting groups which may not access the generic media such as the elderly, new immigrants and young people.
- Within Japanese culture there is a solidarity which exists before an event and makes the response more effective. Our challenge is therefore to build strong communities pre-disaster to enable better response outcomes.
- The importance of culture and building a consciousness in the community of holistic recovery as opposed to just practical aspects of recovery.
- Land readjustment takes time. Local people make the decision and government backs this up. The survivors are the architects of their community recovery.
- The need to ensure there is a strong focus on mental health and social recovery. This can be achieved through special events such as the illumination ceremony in Kobe, or visits to people's homes and check-ups months after an event, or through research undertaken such as the Institute for Post Traumatic Stress.
- Fostering solidarity. In Japan this was achieved through the involvement and coordination of volunteers from other prefectures enabling the country to contribute personally to the recovery.
- The 5% investment from members of the Takatori community. Their contribution is an example of personal sacrifice for the common good in recovery. Building back better.
- The need to focus on communities who are at risk but have not been affected instead of channelling all the energy and resources into communities which are affected is important. ■

One million people doing an earthquake drill?

How you can help

New Zealand ShakeOut aims to have 1 million people in New Zealand do an earthquake drill at 9.26am on Wednesday 26 September (9:26-26:9).

You, your family, your school and your work can be involved and “own” your part of the drill. This will be the world’s first nation-wide ShakeOut drill and the biggest earthquake awareness campaign ever held in New Zealand. The focal point will be the nationwide, public Drop, Cover and Hold earthquake drill.

The drill will be supported by a dedicated website, accessed via www.getthru.govt.nz. This is where individuals, families, community groups, businesses and organisations can register to be involved and receive information about earthquakes, preparedness and the Drop, Cover and Hold earthquake drill. As we get closer to 9:26-26:9 more and more information and resources will be added.

The website and the drill will be promoted through a multi-media campaign that will use news media, paid advertising and social media.

Crucial to the success of New Zealand ShakeOut will be central and local government agencies (including mayors, councillors and chief executives) promoting New Zealand ShakeOut through the networks of organisations and communities they work with.

In turn, all these organisations and communities are encouraged to promote the drill to their own staff at work and at home, and to other organisations, sectors, and communities they work with. In short, we want New Zealand Shakeout to spread right through the country! The ultimate aim is for New Zealand to be better prepared to “Get Thru” an earthquake.

How can I, my business or organisation get involved?

Talk to people about New Zealand ShakeOut, spread word of the website, and take information from this article and show it to others, including your staff, friends and other organisations you work with.

Remember, not everybody has Internet access, so any way we can get information to those people will really help to share the ShakeOut.

Already, the Ministry of Education is working with all schools to encourage them to hold an



earthquake drill at 9:26-26:9 and to have lessons about preparing for disasters, and about historical disasters, during that week.

Why are we having a nationwide earthquake drill?

Everyone in New Zealand needs to know what to do in an earthquake. People could be on holiday, working or studying, away from home, in other parts of the country. The drill is the same wherever we are: Drop, Cover and Hold.

New Zealand began preliminary planning for a nationwide New Zealand ShakeOut two years ago. The Canterbury earthquakes showed what a terrible impact a large earthquake can have and reinforced the need for such a campaign.

The earthquakes have given people in New Zealand an increased awareness of the risk we all face. New Zealand ShakeOut aims to build on that awareness and have people learn what we need to do in our workplaces, schools, homes, or wherever we may be. That is why the drill is timed for a weekday morning when people will be going about their normal day to day business.

New Zealand ShakeOut encourages people to know what the drill is, practice it, and be able to do it quickly. This is also an excellent opportunity for businesses and organisations to develop, review or test their emergency plans. Families can write and test their household emergency plans.

Where does “ShakeOut” come from?

New Zealand ShakeOut is based on the highly successful Great California ShakeOut, which began in 2008 and is now an annual event involving over 8.6 million people in that State alone.

The ShakeOut concept is spreading to other states in the U.S.A and to other countries including Canada, New Zealand and Japan. In New Zealand, the West Coast held its own Great West Coast ShakeOut in 2009 as part of a civil defence exercise.





Who is organising New Zealand Shakeout?

New Zealand ShakeOut is coordinated by central and local government but is everybody’s drill. It is organised by a planning group from local and central government, with local government agencies being key players in encouraging public and corporate participation. The organisations involved in the planning group include local and central government, emergency services and science agencies. Secretariat support is provided by MCDEM. This includes the New Zealand ShakeOut Co-ordinators, Jo Guard and Anita Komen.

Get Ready Get Thru

New Zealand ShakeOut is part of the civil defence emergency management (CDEM) public education campaign, Get Ready Get Thru. This year the

annual “Get Ready Week” will focus on earthquake preparedness and has been moved to 23-29 September to include New Zealand ShakeOut.

Local government, MCDEM, Crown Research Institutes, universities, the insurance industry and others have worked together to ensure the information in Get Ready Get Thru is right for New Zealand.

Since the Canterbury and Christchurch earthquakes, New Zealand’s earthquake preparedness information has been reviewed to ensure lessons from those earthquakes have been captured and the information is up to date.

All New Zealand ShakeOut online information and printed material will be co-branded New Zealand ShakeOut and Get Ready Get Thru.

Get Ready Get Thru has been running since 2006 to provide New Zealand-specific information about what the safest things to do are before, during and after disasters.

For more information about New Zealand ShakeOut, you can email shakeout@dia.govt.nz to reach the New Zealand ShakeOut Coordinators or contact your local council for information about local hazards and what is happening in your area. ■

Things you can do to be involved in New Zealand ShakeOut include:

- Go to www.geththru.govt.nz and register – select the one of the 18 categories that best represents you, for example, individual and family, school, business, Local Authority etc.
- Show this article to your management at work and ask them to get your organisation involved
- Download information you could use as an organisation, for your own planning, and to inform staff and others
- Encourage staff and others to register and get involved as individuals and families
- Plan how you would do an earthquake drill at your work, home or school etc.
- Plan what you would do if there were customers at your work and there was a real earthquake
- Consider a “preparedness theme” for each of the months before the New Zealand ShakeOut drill - these could include:
 - practicing Drop, Cover and Hold
 - conducting an evacuation (especially if you are in a tsunami zone)
 - compiling emergency supplies at work
 - encouraging preparedness at home
 - indentifying key business information and off-site backup and storage
 - reviewing business continuity plans etc.
- Consider a business continuity exercise or simply look at a particular part or parts of your plan
- Think where your family members and loved ones would be at 9:26-26:9, then plan what you would do and how you would get in touch with each other.



Taranaki to undertake liquefaction study

A study to determine the risk of liquefaction in Taranaki after a severe earthquake will begin soon. The region's four councils as well as Powerco and Transpower are jointly funding the study by GNS Science. It will involve examining existing land data held by the councils in conjunction with geological information held by GNS to identify the potential for liquefaction and ground damage in the region.

New Plymouth District Council's Manager Quality Assurance, John Sutton, says the Christchurch earthquakes had shown the importance of knowing the liquefaction

hazards as part of planning for emergencies and infrastructure such as pipelines and electricity networks.

"We're taking a region-wide approach as this information will be valuable for Taranaki Civil Defence Emergency Management and its preparedness for emergencies," says Mr Sutton.

"As well, the councils will be able to see what the situation is in their local areas and plan accordingly, whether it's for liquefaction or ground disturbance. This will be useful for land use management such as

subdivisions and building requirements."

The GNS Science report is due by the end of the year. It will include information on the geology of New Plymouth and the Taranaki region, the history of earthquakes and recorded liquefaction events in the region, known faulting and the estimated recurrence of shaking of sufficient strength to cause liquefaction.

It will also address liquefaction and ground damage potential during a strong (Modified Mercalli intensity 7 to 10) earthquake, and mitigation options. ■

Waikato Group Mass Evacuation Project

Waikato Civil Defence and Emergency Management Group (WCDEMG) have instigated a Mass Evacuation Project to develop a comprehensive plan to better prepare the Waikato and neighbouring regions in an event of an emergency requiring mass evacuation.

The project was informed by the findings of Exercises Ruaumoko and Tangaroa that gave WCDEMG a better understanding of the role the Waikato region will play during a mass evacuation - particularly if an emergency occurs in Auckland or the Bay of Plenty.

The Waikato and neighbouring regions have a number of potential hazards that could lead to mass evacuation. These include tsunami, earthquake, flooding and volcanic eruption. During these events it might be necessary to mass evacuate across regions or areas instead of the preferred option of shelter-in-place.

During 2009 the idea was discussed by the Welfare Advisory Group (WAG) as a potential project. A submission was prepared for resilience funding that was approved for the financial year 2011/2012. The project started in September 2011 with the appointment of a project manager and a project team.

Consultation started in October 2011 with Regional Emergency Management Officers (EMO's) along with EMO's from

Neighbouring Regions and representatives from Lifelines Utilities, Emergency Services, Transport and Welfare Agencies convening for a series of workshops during February 2012.

The purpose of these workshops was to identify different evacuation scenarios, understand the parameters which may restrict regions from receiving evacuees and explore the capabilities of agencies and the resources available to support evacuation.

Discussions at workshops will be included in the plan that goes out for submission during April for finalisation of the plan by 30 June 2012.

The objectives of the mass evacuation project are:

- to identify potential triggers for mass evacuation
- confirm Group arrangements and information exchange amongst agencies
- confirm roles and responsibilities of responding agencies
- establish the framework for the formalisation of local arrangements, including identification of regional issues that should be considered.

The project will cover the processes to support external and internal regional evacuation and receipt of evacuees, the

relationships between agencies including Emergency Operating Centres (EOC), Welfare Agencies, Emergency Services and Lifelines and the liaison arrangements between regions and between EOC's.

The project will also explore local arrangements and operational processes of neighbouring regions and EOCs, the arrangements of government agencies to evacuate their own and client facilities (eg: Department of Corrections and Ministry of Health (DHB's), the recovery phase (after the decision to return has been made), the evacuations that are within the capabilities of the local EOCs and situations where the decision has been made to shelter-in-place instead of evacuate will be covered in agency or local plans.

The plan arising from the project will be deemed successful if it is supported by all agencies involved and enables agencies to develop operational plans to support the Group Mass Evacuation Plan and lead to an effectively coordinated response with neighbouring regions and between EOCs within Waikato Region. ■



NATIONAL EARTHQUAKE DRILL
9:26am, 26 September 2012
DROP, COVER, HOLD



Be part of New Zealand's largest
earthquake drill.

Visit

www.getthru.govt.nz

to register for ShakeOut and find out more information