

DEADLY TSUNAMI

On Sunday 26 December 2004, an earthquake measuring 9.3 on the Richter scale caused a deadly tsunami, bringing devastation for hundreds of thousands of people living in areas bordering the Indian Ocean.

The earthquake and ensuing tsunami caused damage throughout southeast Asia and far beyond. The countries most affected include Indonesia, India, Thailand, Sri Lanka, Somalia, Myanmar and Malaysia. There were a large number of popular tourist destinations that were affected, increasing the disaster's reach to many other countries, including New Zealand.

The quake's epicentre was located roughly 160 kilometres off the coast of Indonesia's Sumatra Island and occurred at a depth of about 10 kilometres. The Institute of Geological and Nuclear Sciences reports that the earthquake was the second largest ever recorded by scientific instruments and ruptured an area that extends for 1200 kilometres. It is estimated that the huge rupture caused a vertical rise of roughly five metres to the seabed and a horizontal shift of about ten metres. This movement of the sea floor caused the water to quickly rise up, above normal levels, and then spread out, forming a tsunami.

The resulting massive currents travelled quickly across the Indian Ocean, eventually impacting upon land and causing severe damage. The impact of the intense currents created waves over 12 metres high and spread far inland, reaching between 3 – 5 kilometres

from the shore in some areas.

The Indian Ocean Boxing Day tsunami is the deadliest in recorded history. The number of people killed as a result of the disaster is reported to be over 296,000 and millions have been left injured or homeless. The Ministry of Foreign



Areas affected by the tsunami



The damaged remains of long-boats in the fishing village of Ban Nam Khem, southwest of Bangkok.

Affairs & Trade has confirmed the deaths of six New Zealanders. Indonesia was the country which was most devastated by the disaster with deaths totalling over 243,000 people. Previously, the deadliest recorded tsunami was in 1703, and was caused by an earthquake near Japan, which killed 100,000 people.

In January 2005, a seven-member team comprising scientists, earthquake engineers and disaster managers from New Zealand conducted a reconnaissance mission along the west coast of Thailand.

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Piles of debris and rubble fill this street on Ko Phi Phi, a popular tourist island in Thailand.



Structures and Lessons Reinforced

Since our last IMPACT in September 04, several key things have occurred which bring a focus to our business. The February '04 flood review report (the Reid Report) was released in November, the Indian Ocean Tsunami occurred on Boxing Day and local earthquakes and minor flood events raised the temperature in our local communities. During this time many CDEM Groups are working to complete their first CDEM Group Plans.

The Reid Report concluded amongst other things, that:

- The CDEM Act 2002 provides an appropriate framework for managing large-scale events
- The CDEM arrangements, although only partially in place and requiring further development and commitment of resource, worked.
- The community and individuals are not well informed of their role and what they can expect in a disaster from the various agencies involved in CDEM.
- The February flood event, while being the biggest in New Zealand in 20 years, was nevertheless a rural-based, regional event. [Disasters an order of magnitude bigger can be expected and the new arrangements must continue to develop to be able to manage such events].

There is a strong commitment from the Minister and Government to take the lessons from this event and the subsequent July floods. The Reid Report contained 78 findings and 39 recommendations. The Ministry is reviewing these recommendations and will be reporting on them in due course.

The Indian Ocean Tsunami shocked the world by its impact and unexpectedness. It prompted a well-coordinated international relief response, by the United Nations, the International Federation of Red Cross and the World Food Programme with inputs from many agencies and countries. The relief operation nevertheless encountered significant difficulties in assessment of impacts and support into local communities.

The World Conference on Disaster Reduction in Kobe, Japan from 11-15 January was set to acknowledge the 10-year anniversary of the Great Hanshin Earthquake in Kobe in January 1995. The Boxing Day Tsunami framed this conference, which continued 15 years of dialogue on risk reduction and the new emergency management framework. Key comments from this conference included:

- We now know what needs to be done to address reducing disaster impacts – the challenge now is to convert that to action on the ground
- Coordination of international agencies is crucial to these issues and connection into national and local arrangements in communities
- The activity of preparedness (readiness) must be intimately linked with the reduction activity for them to be effective.

The Indian Ocean Tsunami has created the window for action – the opportunity must be taken.

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February Floods - One Year On

On 16 Feb 2004, a series of intense storms caused concentrated rainfall and gale force winds to batter the lower North Island and the top of the South Island. Rivers throughout the affected regions reached record highs and many overtopped their banks, sending floodwaters raging through homes, businesses and farmland.

The force of the storms and winds was felt across a number of regions. Civil defence emergencies were declared in the Rangitikei, Manawatu, and South Taranaki Districts, as well as in the Manawatu-Wanganui and Marlborough regions.

The harsh weather brought about significant damage to transportation infrastructure, causing the closure of roads, bridges, and rail lines. In addition to homes and property being damaged, many people were temporarily deprived of lifeline utilities, including gas, power, water, and telecommunications. At the peak of the event over 2,000 people had to be evacuated. Despite the severity of the storms, wind and floods, no lives were lost.

To provide relief to those affected, Government provided nearly \$162 million in assistance packages. Coordinated through key agencies, some of the standard policy assistance packages included:

- Repairing local roads and bridges (\$59.2 million).
- Repairing state highways (\$12.7 million).
- Partial reimbursement of essential council infrastructure repair and response costs (\$16.3 million).

Government also provided a series of discretionary assistance packages, including:

- Agriculture recovery programme to restore essential on-farm infrastructure and new start grants (\$29.1 million).
- Compensation to councils for rates remission (\$11.3 million).
- Enhanced Taskforce Green to assist with clean-up and repair (\$9.2 million).
- Matching donations to relief funds (\$7.7 million).

The all-of-Government effort to help the affected regions continues. There are still around 18 families out of their homes. Twelve of these families are in the Rangitikei District. Other ongoing recovery efforts include Task Force Green, rural assistance payments, special needs programmes, and community meetings to provide an opportunity for community members to raise any issues and to share information.

The February floods provided a valuable opportunity to learn for the ongoing development of the new civil defence emergency management environment in New Zealand. Government organised an independent review of the event to identify lessons around the overall management of the event, through the response and initial recovery phases. Headed by Piers Reid, Senior Lecturer at Massey University's Centre for Defence Studies, the review was not intended to consider liability issues. The report focuses on issues and processes, rather than individual lessons and responses. Highlights of the report's findings include:

- The response and initial recovery to the February floods has confirmed that many of the elements of an effective emergency management capability are in place at local, CDEM Group and national levels.
- The Civil Defence Emergency Management Act 2002 (CDEM Act) provides an appropriate structure and

methodology for dealing with large-scale emergency events.

- The public understanding of the new civil defence environment is still not high and they commonly do not understand their role in it.
- The geographic and communications challenges of farming communities need to be accorded greater consideration in emergency planning.

Some of the review's key recommendations include:

- The communications and information systems available to the public and agencies involved in emergency management be significantly improved.
- The special nature and requirements of rural residents be given recognition in the operational plans developed by CDEM Groups and their constituent local authorities.
- The identification and adoption of a single consolidated mapping system showing all residential dwellings, infrastructure and geographical features, accessible to and agreed upon by all levels of emergency management.
- There is need for public education on the new civil defence environment and a rekindling of community commitment to civil defence.

The Ministry of Civil Defence & Emergency Management will be reporting to the Minister in May 05 on how it will be managing the recommendations in the report.

Director of Civil Defence Emergency Management John Norton said that there is a strong commitment from the Ministry and the agencies involved in the flood events to take the lessons from this event as well as the July Bay of Plenty floods and improve the arrangements for dealing with such events.

"The individual volunteers, the emergency service and military, councils and everyone involved in saving life and property and restoring communities can be justly proud of their efforts a year ago," Mr Norton said.

See editorial on pg 2.



At the release of the review in Feilding, (left to right) Hon George Hawkins speaks with the Chair of the review team, Piers Reid, and the Chief Executive of the Department of Internal Affairs Chris Blake

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The members of the team included:

- Dr Hugh Cowan (Team Leader) - Institute of Geological and Nuclear Sciences (GNS);
- Dr Rob Bell - National Institute of Water and Atmospheric Sciences (NIWA);
- Dr Erica Dalzeil - University of Canterbury, Department of Civil Engineering;
- Noel Evans - A structural engineer involved in engineering lifelines projects;
- Mike O'Leary - Manager Readiness and National Controller, Ministry of Civil Defence & Emergency Management;
- Bernie Rush - Emergency Management Advisor, Ministry of Civil Defence & Emergency Management; and
- Lawrence Yule - Representative of the National Council of Local Government New Zealand and Mayor of Hastings.

"There are topographical and infrastructure similarities which make this an area of interest for a team looking for lessons applicable to New Zealand. New Zealand faces significant tsunami threats in some regions and we are working to develop more effective strategies for detection, warning and mitigation of this hazard," says National Controller Mike O'Leary. "As a learning experience therefore, there will be opportunities to gain and share insight into common problems of concern to both countries," he said. Beginning in late February, the members of the team held a series of meetings in Napier, Auckland, Christchurch and Wellington on the findings of their trip.

Massive amounts of rubble can be seen in this image, taken from the second level of Charlie's Beach resort in Ko Phi Phi.



"The tasks of response and recovery have been assigned to Provincial Governors, who have set the priorities within their own Provinces. As a result, there has been some observable variation in efforts," says Mike O'Leary.

"When we visited, about four weeks after the tsunami, there had been very little recovery cleanup on Ko Phi Phi. The large amount of rubble was fairly consistent throughout the island. The variation in priorities was highlighted by the much higher level of cleanup that had taken place in Khao Lak."



A Thai naval patrol vessel left aground, 1.5 km inland at Khao Lak.



A collapsed beach resort on Thailand's Khao Lak coast.



UNDAC Responds to the Asian Tsunami Disaster

Following the Boxing Day earthquake and tsunami, the United Nations' Office for the Coordination of Humanitarian Affairs (OCHA) deployed four teams from the United Nations Disaster Assessment and Coordination (UNDAC) programme. The UNDAC teams comprised 47 disaster management professionals from 21 countries. Three of these professionals were from New Zealand. Shane Bayley (Taranaki Regional Council) and Jim Dance (New Zealand Fire Service) were sent to Indonesia, and John Titmus (Ministry of Civil Defence & Emergency Management) was sent to Sri Lanka.

Indonesia

Raising the number of UNDAC members on the ground in Banda Aceh to seven, Shane Bayley was deployed from 30 December 2004 -14 January 2005. During the early period of deployment, the team's focus was coordinating information and activities for many of the non-government organisations (NGOs) and United Nations' (UN) agencies. The team also worked to provide a link to the government coordinated response.

Despite the extremely trying conditions, the UNDAC system for coordinating the international relief effort was largely successful. Many NGO and UN agencies actively participated in sector oriented planning groups and multi-sector coordination meetings. In turn, these provided the Government and relief agencies the opportunity to share information and expectations about the response. Shane's primary areas of focus during deployment were identifying a new location for the UN agencies to operate from, developing a system to collate information on Internally Displaced Peoples (IDPs) and contributing to a multi-agency assessment of impacts on the west coast of Sumatra. Significant issues were communications, security, coordination and the large amount of incoming aid.

Jim Dance's deployment to Indonesia was from 8 - 24 January 2005. Initially, Jim was sent to Jakarta to work with OCHA staff and other UNDAC team members in the Indonesian capital. From there, he travelled with a five-person UNDAC team to Banda Aceh to take part in the assessment and coordination of humanitarian relief. Jim was then deployed to Meulaboh, located on the west coast of Aceh province. The role was to support the OCHA team leader

in Meulaboh in providing coordination support for the UN agencies working on the sector's aid, and recovery.

Sri Lanka

John Titmus joined a replacement UNDAC team in Colombo from 14 - 30 January 2005. Positioned within the Sri Lankan Centre for National Operations, the team helped with managing the government's response and recovery efforts. The team began by providing international coordination on behalf of the Government of Sri Lanka. After a short period, the team's focus changed to carrying out rapid environmental assessments. Several significant environmental issues necessitated this change, including mass graves, lack of a waste management strategy, and debris removal/disposal.

For further information on these missions, please contact John Titmus (john.titmus@dia.govt.nz).

For information on UNDAC, visit www.reliefweb.int



The Sri Lankan UNDAC Team, sitting (left), Joe Bishop (Gibraltar) and John Titmus (New Zealand), and standing Christoph Lang (Switzerland) and Raquel Negrelle (Brazil).



In Banda Aceh, a ruined fishing boat sits amidst the rubble that has been pushed inland.



The force of the tsunami destroyed this apartment building in Banda Aceh.

Project RAPID Update

By Chris Schraders, Project Support Officer

The goal of the Response And Preparedness In Disasters (RAPID) Project is to enhance the capability to manage emergencies by nationally leading and facilitating the development of community emergency response within Civil Defence Emergency Management (CDEM) Groups.

One of the project outputs is the development of training packages based on a national level training needs analysis, developed with CDEM Group input.

The identification of roles and associated competencies have been known as the RAPID Pathway. The Pathway document provides a logical progression for the training of staff in the competencies for CDEM response at an operational level.

Local Government Industry Training Organisation (LGITO) is a key partner in Project RAPID. As the New Zealand Qualifications Authority (NZQA) standard setting body for CDEM, LGITO oversees the development of competencies and national qualifications for the CDEM sector. LGITO also provides industry training funding from the Tertiary Education Commission to financially assist CDEM Groups effectively participate in training such as RAPID.

The RAPID Pathway was approved by the LGITO Civil Defence Advisory Group in December 2004 and is available to view on the RAPID website (www.rapid.org.nz). The RAPID Pathway was also mailed out to all CDEM Officers along with application forms for people interested in being Subject Matter Experts (SMEs) for the project.

At the same time, the Ministry called for tenders for the development of a number of RAPID training packages through the Government Electronic Tendering Service (GETS).

At the beginning of February all applications for SMEs were collated and assigned to groups of packages. Tenders for the package development were also evaluated and a successful tenderer chosen. The tender was awarded to Learning Design Group.



The new RAPID flood safety and response training package was piloted earlier this year with the assistance of several of the USAR Response Teams (NZRT1, 2, 3 and 4).

Training packages will be developed with the assistance of the SME groups and wider sector consultation; it will be launched through a series of Approved Training Provider workshops in late 2005 or early 2006.

For further information on RAPID, visit the project website at www.rapid.org.nz.

USAR Update

On October 12 2004, the National Certificate in Urban Search And Rescue (USAR) was added to the National Qualifications Framework (NQF). This qualification offers additional training pathways, beyond the USAR Responder level (CAT1-1R) and meets the international training standards that have been set by the United Nations International Search and Rescue Advisory group (INSARAG).

Trainees wishing to achieve the National Certificate will be required to complete the same unit standards as for CAT-1R, as well as units relating to personal safety, fitness and cultural awareness. Trainees then choose one or more strands to specialise in from the following options; Canine Search, Response Leader, Response Medic, Rope Operations, Technician and Training.

Employers of trainees can apply for generous training subsidies through a Fire and Rescue Services Industry Training Organisation (FRSITO) Structured Training Programme (STP). For information on subsidies contact FRSITO on (04) 801 9469 or visit their website www.frsito.org.nz

Work towards developing a National Diploma in Urban Search & Rescue (CAT-3) aimed at Task Force Leaders and National Support Team personnel, has already commenced.

USAR Responder and Task Force Orange Cards

The Orange Card system has taken a step forward with the introduction and endorsement of Task Force cards, in addition to Responder cards. Task Force cards will be issued to personnel of the three USAR Task Forces for the duration of their operational membership. Endorsements can now be printed on Orange Cards, and can include Canine Search Specialist, Response Team Medic and Confined Space Technician.

"The new Orange Cards and endorsements will assist incident controllers to easily identify competent specialist personnel at urban search and rescue incidents, ensuring the right people for the right task are selected with confidence" says Tom Roche, of the USAR Training & Standards Working Group.

Full details of criteria required for each endorsement, as well as application forms, are available in the Best Practice Guideline: Orange Cards & Endorsements on www.usar.govt.nz.

Orange Card holders with cards showing signs of delamination can fill out a card application form for free replacement of their card.

View updates on www.usar.govt.nz.

Integrated Flood Management in Thames-Coromandel

By Joe Lenihan, Senior Policy Analyst

Efforts to reduce the risks from flooding on the Thames Coast of the Coromandel Peninsula received a major boost in September 2004. The Government announced a \$10 million package of measures to support a flood protection plan developed by Environment Waikato (EW) and the Thames Coromandel District Council (TCDC).

Records show that flooding has always been a fact of life for Thames Coast residents but events have been particularly destructive over the last 20 years. In the last few years, there have been three 1-in-100 year rainfall events, including the "weather bomb" of June 2002, which caused loss of one life and severe property and infrastructure damage. Since 1981 five major events have caused two deaths and about \$56 million worth of damage.

The steep and hilly catchments of the west coast of the Coromandel Peninsula experience high annual rainfall, much of which occurs as intense downpours. Along the Thames Coast, a number of small urban centres are located on the narrow coastal plains at the bottom of the catchments. These communities are very vulnerable to flooding during periods of heavy rain. Flash floods often occur with little warning.

This hazard is compounded by the fact that the vegetation cover in upper catchments is in poor condition due to the activities of goats and possums. As a result, floodwater drains very quickly, washing away soil and vegetation and depositing the resulting debris lower in the catchments where it creates a barrier to efficient drainage. Further, many of the bridges and culverts across State Highway 25 are unable to cope with the volumes of water produced during heavy or even moderate rainfall and the build up of logs and other debris produces a damming effect. Many homes are located in the middle of floodplains, putting property and lives at risk.

Recognising that disasters provide an opportunity to adapt to future needs and reduce future vulnerability, TCDC and EW have developed the Peninsula Project to improve soil conservation, river management and flood protection on the Coromandel Peninsula. Within this, the priority is the Thames Coast Flood Protection Plan, which is designed to improve the resilience of the community for a 1-in-100 year rainfall event.

The government's contribution to the flood protection plan includes:

- \$690,000 (30 per cent of the estimated total cost) for purchasing 25 properties located in high risk flood areas.
- \$890,000 (25 per cent of the estimated total cost) for flood protection works to establish 100-year flood pathways and flood controls.
- Integrated pest control on Department of Conservation land to improve the integrity of vegetation in flood prone catchments and reduce run-off in times of heavy rain. This will consist of both aerial and ground-based operations, at a cost of \$365,000 in the current financial year, and with funding rising to \$1.366 million in 2005/6 and \$955,000 in subsequent years. Environment Waikato is coordinating similar pest control work on private land.
- A Taskforce Green programme to undertake some of the ground-based pest control work, to be funded out of the Ministry of Social Development. This will provide a number of new opportunities for jobseekers in the area.



The "weather bomb" of 2002 took one life, and caused damage to property and infrastructure.

- Transit NZ has approved in principal the councils' proposals for upgrading bridges on SH25 in order to improve floodwater drainage.

Specific initiatives being undertaken by Environment Waikato and Thames Coromandel District Council to help address the flood risks include:

- Flood protection works (including stopbanks and channel maintenance).
- Catchment management works (including fencing and planting to stabilise slips and riverbanks to minimise erosion).
- Updated civil defence procedures (including evacuation plans and warning systems).
- Planning and building controls (to prevent inappropriate development).

This work will cost the councils about \$6.7 million (incl GST).

Risk to life

The councils are responding to a need to reduce risk to life to an acceptable level. A quantitative assessment of flooding risks on the Thames Coast has concluded that in a 1-in-100 year flood affecting Coromandel Township, Tararu, Te Puru, Tapu and Waiomu-Pohue up to four lives could be lost. This is well above internationally recognised guidelines for acceptable risk.

The councils concluded that to make the community safe a suite of mechanisms is necessary. The risk analysis has shown that if all the measures proposed in the plan were put in place, there would be a tenfold reduction in the risk to life. However the level of risk reduction anticipated is dependent on the whole plan being implemented. The project is therefore unique in that it brings together local councils (EW and TCDC) and central government agencies (the Ministry of Civil Defence & Emergency Management, the Department of Conservation, the Ministry of Social Development, and Transit New Zealand) with the aim of reducing the exposure of the community to flooding risks and reducing the call on government to support response and recovery activities.

The Thames-Coromandel solution is the first time such an integrated approach to flood management had been utilised in New Zealand and is consistent with the 4Rs approach espoused in the new CDEM Act. As a successful example of a 'Special Policy' case under the existing National Civil Defence Plan, the policy lessons will be reflected in the new National CDEM Plan. The Thames-Coromandel flood mitigation project demonstrates that where a continuing, compelling risk to society exists after all practicable measures across the 4Rs have been taken at a local level, then an integrated solution can be found through local and national partnership.

Welfare Provision Following Disasters

By Sara Williams, Project Coordinator

CDEM Group Welfare Coordination

Under the Civil Defence Emergency Management Act 2002, each CDEM Group must plan for the delivery of welfare services in its CDEM Group Plan, its supporting documentation and through the plans of welfare sector partner agencies. In general, a Welfare Advisory Group (WAG) undertakes welfare planning for CDEM Groups. In most situations the most appropriate bodies to provide welfare services are those voluntary and professional agencies that perform welfare functions on a daily basis. WAG planning arrangements assist with providing a structure to support these agencies to perform during and after an emergency.

WAGs operate with local Work & Income Regional Commissioners acting as chairs, and involve other agencies as appropriate. In addition, they involve numerous local non-government organisations as support agencies. Local providers are the most appropriate people to assist in an emergency as they have knowledge about local conditions, social issues and existing relationships with government departments and welfare providers.

Likely Welfare Response

In an event where a welfare response is required, there are a number of areas in which the WAG would be active. These are likely to include: coordinating outreach services to affected communities; providing public information about services available; coordinating long-term alternative housing; supporting donated goods efforts; overseeing distribution of benefits and grants; coordinating support services; providing information to national agencies on issues and actions, and; coordinating animal welfare services.

Other activities may be required depending on the scale and type of the event. One of the benefits of using the WAG structure is the involvement of senior welfare personnel in planning, response and recovery, which will reduce pressures on CDEM Groups to cope.

Emergencies can impact upon the physical and emotional well being of large numbers of people. Some may suffer bereavement, physical injury, or separation from families. They may also experience losses of clothing, homes and other property, as well as employment and/or income. The emergency may require care for the homeless following evacuation of all, or part of, a population from an affected area.

'Welfare' includes supporting people in their homes and workplaces. Provision of shelter, accommodation, food, clothing financial assistance, personal support and advice, may be required by people affected or threatened by an emergency. Welfare activities begin with readiness planning and extend through an emergency for the duration of the affected populations recovery.

Disaster events in 2004, in New Zealand and overseas, have demonstrated the importance of a cohesive integrated welfare response, which has the capacity to sustain recovery efforts over months or years.

National Welfare Coordination

National level assistance with the provision of welfare will be required when an affected CDEM Group cannot meet this need themselves and requires assistance. The level of assistance required will depend on the resources of the affected area/s and could range from coordinating welfare support for dozens to thousands of people.

The National Welfare Recovery Coordination Group (NWRCG) was established in late 2003 and is led by the Ministry of Social Development. The primary support agencies that sit on the national group are Housing New Zealand Corporation; Child, Youth & Family; Ministry of Civil Defence & Emergency Management; Inland Revenue Department; Ministry of Education; Ministry of Agriculture and Forestry; Ministry of Health; Salvation Army and the Red Cross. Several of these agencies perform lead agency roles in relation to certain functions. Additional support agencies include the Department of Labour; Department of Internal Affairs; Victim Support; Te Puni Kōkiri; the Ministry of Health; Federated Farmers and the Royal New Zealand Society for the Protection of Animals.

Members of the NWRCG are responsible for: planning for welfare response at a national level; acting as an advisory and coordination group; identifying multi-agency and individual agency deficiencies in CDEM planning and resources, bringing deficiencies to the attention of agency senior management along with proposed solutions, and; ensuring these solutions are implemented and maintained within and across agencies.

The primary purpose of the NWRCG is to act as a welfare planning, response and recovery resource for any event that affects the welfare of New Zealanders. During 2004 and early 2005 the NWRCG has activated and operated to support regional responses to flooding in the lower North Island, the eastern Bay of Plenty and the Kapiti coast. The group can also assist with response to events that are not directly civil defence related – for example, they have been involved in a whole of government response to the Asian Tsunami, coordinating services for affected New Zealanders returning from overseas.

For more information on the WAG structure, advice or support please contact sara.williams@dia.govt.nz.



After being flooded out of their usual offices, Work and Income staff help clients at their temporary location in Feilding during the February 2004 Floods.

Auckland Region Welfare Group Formed

The Auckland Region Welfare Advisory Group, part of the regional Civil Defence Emergency Management (CDEM) Group, signed a Memorandum of Understanding with its members on 4 March 2005.

The newly established group, which will be responsible for ensuring the overall welfare of the wider community in the event of a regional emergency, brings together a range of agencies.

Members include representatives from the Ministries of Social Development, Civil Defence & Emergency Management, and Education; Housing NZ; Child, Youth & Family; Auckland Region District Health Boards; Inland Revenue; Salvation Army; NZ Red Cross; SPCA; Victim Support; Citizens Advice Bureau; Neighbourhood Support; Local Welfare Advisory Groups; and representatives from the Auckland Civil Defence Emergency Management Group.

CDEM Group Chair, Cr Neil Morrison, says that the formation of the group will help to build and strengthen relationships between different agencies, and that will mean better coordination in an emergency.

The group will look to fill any existing gaps in the coordination and delivery of a range of activities including: support for people displaced from their homes,

the provision of shelter, accommodation, food, clothing and other financial assistance, and personal support and advice for people affected or threatened by a civil defence emergency.

More information about the Welfare Advisory Group, and the CDEM Group is available at www.auckland.cdemg.org.nz.



Signing the MOU, (left to right) Seated: Cr Neil Morrison, Chair of Auckland Region CDEM Group; Isabel Evans, Regional Commissioner, Ministry of Social Development (Work & Income) and Chair of the Auckland Region Welfare Advisory Group. Standing from left to right, Margaret Cozens (CAB), Sarah O'Donnell (Neighbourhood Support), Dr Dean Myburgh (Manukau City Council), Kathryn Lawlor (Victim Support), Ross Gower (Salvation Army), Ross McLeod (Chair, Coordinating Executive Group), Jane Lodge (Auckland City), Richard Philp (Inland Revenue Department), Madhavan Raman (Housing NZ Corporation), Bob Kerridge & Merlin (SPCA).

United Nations Disaster Assessment and Coordination

By John Titmus, Emergency Management Advisor (Liaison)

New Zealand's part in the United Nations Disaster Assessment and Coordination (UNDAC) Programme has been especially busy. New Zealand hosted the UNDAC Pacific Refresher Course in Wellington in September and the UNDAC resources provided coordination for international USAR teams to support Exercise Pegasus, an earthquake scenario based on the Alpine fault. This was the first time in the Pacific that UNDAC was exercised in this role. The lessons learned were many and, through the OCHA Disaster Response Adviser in Suva, a programme of improvement will be developed.

The Ministry of Civil Defence & Emergency Management is also establishing Standard Operating Procedures (SOP) for coordination of international support. The UNDAC mission to support Exercise Pegasus was further supported by an UNDAC Mission Module from the Swedish Rescue Services Agency, providing communications and IT equipment, together with technical expertise. MCDEM in consultation with Emergency Management Australia, the Australian Agency for International Development (AusAID) and UN OCHA has been developing a similar module to support response in the Pacific and at home. It is expected that this module will be fully operational by June 2005.

MCDEM has also boosted its UNDAC Team Member capacity. Shane Bayley (Taranaki Regional Council) and Ian Pickard (New Zealand



Shane Bayley (Taranaki Regional Council) and Ian Pickard (New Zealand Fire Service) attend an UNDAC induction course in China

Fire Service) recently completed an UNDAC Induction Course in China. MCDEM and New Zealand's International Aid & Development Agency (NZAID) recently signed a Memorandum of Understanding, which includes support to UNDAC. MCDEM would like to acknowledge and thank NZAID for the support given to the refresher course and to the ongoing provision of UNDAC services in this region.

National Warning System Review

By David Coetzee, Emergency Management Planner (Intelligence)

The second draft of the revised National CDEM Warning System was sent to all CDEM Groups for further consultation at the end of October 2004. Apart from some final comments or suggestions, CDEM Groups commented favourably on the adjustments made to the first draft.

The two main issues that arose from the first draft were:

- How will the National CDEM Warning System fit into and link with the new National CDEM Plan?
- While the System described procedures for certain hazards/threats, it lacked procedures for others (lack of an all hazards approach).

To address these issues, the format of the second draft has changed considerably by adopting the intended format of the new National CDEM Plan, also currently being drafted. Under the title 'National Threat Warnings' (one of several functional plans in the draft National CDEM Plan) the requirement for warnings on all types of hazards/threats is stated and responsible agencies identified. Provision is also made for the issue of generic National Warning Messages under a National CDEM Warning System.

The National CDEM Warning System is maintained by MCDEM

for warnings issued by the Director of Civil Defence Emergency Management under the CDEM Act 2002. The National CDEM Warning System is also offered as a mechanism for passing on warnings of any type of threat where specific procedures are not in place or procedures deemed inappropriate.

In the second draft, the detailed principles and procedures underlying a National CDEM Warning System distinguishes between standards and procedures for Primary Participants (CDEM Sector) and Secondary Participants (departments, media & other organisations).

The consultation process with the Primary Participants has concluded with a final draft of the revised National CDEM Warning System that is now being discussed with Secondary Participants to ensure their effective participation. Meanwhile it is also taken up and considered within the framework of the new National CDEM Plan project.

Finalisation of the revision process is expected by the end of May 2005. The revised National CDEM Warning System principles and procedures will, however, only be implemented following sign-off by the Director of Civil Defence Emergency Management. Sufficient notification will be given to all participants when that stage has been reached.

National CDEM Exercise Programme

During 2004, MCDEM embarked on a project to develop a National CDEM Exercise Programme (NEP). The requirement for a NEP arose from the current absence of a national framework directing the exercising, testing and development of CDEM plans on all levels. A NEP will link all levels of CDEM within a continuum of exercises based upon collective and purpose driven planning. It also establishes a framework for advanced exercise budgeting at both CDEM Group and national levels.

It is intended that exercises within the Programme will focus on:

- The response to a disaster by one or more CDEM Groups and the provision of mutual aid by other groups;
- The coordination of government departments and other agencies such as lifeline utilities in support of CDEM Groups and each other;
- National coordination arrangements.

The project includes consultation with the CDEM sector and a NEP discussion paper has been compiled with the assistance of sector representatives. Official consultation with all CDEM Groups started in February 2005, aiming at conclusion by the middle of 2005. Agreement will pave the way for the formation of a representative NEP governance group and the setting of an exercise programme, possibly to commence in the 2006/07 financial year.

It is anticipated that the new National CDEM Plan will include or refer to the NEP as the framework to exercise, test and develop CDEM stakeholders' capabilities to respond to their responsibilities under the National CDEM Plan. If you have any enquiries, contact david.coetzee@dia.govt.nz

Taupo Hosts Search Dog Assessments

The fourth National Canine Readiness Evaluation Process (CREP) was held in Taupo over Labour Day weekend in October 2004. The assessment event included two milestones: Brenda Woolley and her dog Milo became the first advanced Urban Search And Rescue (USAR) search dog team in New Zealand, and Malcolm York and his dog Jack becoming the first certified USAR dog (basic) team in the Auckland area.

A highlight of the weekend was the contribution of American dog handler and assessor Shirley Hammond, a lead search dog evaluator for the United States Federal Emergency Management Agency (FEMA) and a veteran of the World Trade Centre and the 1995 Oklahoma bombings. Assisting Mrs. Hammond with the assessment of the advanced dog candidates was Sergeant Paul George from the New Zealand Police's dog division.

The new advanced USAR dog standards are based on the FEMA model, and require the handler and dog to search through three

separate rubble piles with up to three victims in each. The teams are presented with a number of realistic distractions including food, clothing, smoke and some "road-kill."

With the inclusion of the newly assessed dogs, New Zealand now has seven operational USAR dogs available. Following the event, Mrs. Hammond reported that she is pleased with the standard of New Zealand search dogs and was impressed with how far the programme has progressed in the last few years. The event organisers acknowledge and thank Phil Parker, Taupo Civil Defence, and New Zealand Rescue Team 6 (NZRT-6) for their assistance and support.



Brenda Woolley, her dog Milo, and assessor Shirley Hammond

National CDEM Plan – the assembly is advancing

By Peter Wood, Emergency Management Planner

The national CDEM functions and contingencies required for the readiness, response, recovery, and reduction tasks before, during, and after an emergency are being developed for the National Civil Defence Emergency Management Plan (National CDEM Plan). This is to be in place by December 2005. The formal publication of a draft and the call for public submissions on it will occur in mid 2005, as required by the CDEM Act 2002. Consultation with the CDEM sector is increasing and more will be actively sought through March and April 2005. As with CDEM Group Plans, National CDEM Planning encourages the coordination of emergency management, planning, and activities related to civil defence emergency management across a wide range of agencies and organisations.

The National CDEM Plan is to be owned by the CDEM Sector. The sector and others are increasingly engaged in developing the Plan, initially through the Reference Working Group and more recently through interactions between a growing number of local, national, and international agencies. Several clusters are collaborating to develop the functional parts of the plan that relate to their national CDEM activities. The Welfare Cluster is a good example; its membership includes representatives from: Ministry of Social Development (chair); Child, Youth and Family Services; Ministry of Civil Defence & Emergency Management; Housing NZ Corporation; Ministry of Education; Inland Revenue Department; Ministry of Agriculture and Forestry; Community Employment Group (DOL); Salvation Army; NZ Red Cross; Local Government Representation.

CDEM Group Planning is helping identify hazards/risks of national significance. Groups are communicating this information in a number of ways and a MCDEM compilation is growing. The draft generic functional plans within the draft National CDEM Plan are being tested against these. If generic functions do not appear sufficient, then contingency plans are being considered.

The National CDEM Plan is addressing CDEM information management. Information management practices by key CDEM partners is being surveyed to identify best practice for communicating necessary data and information to enable effective CDEM. "Business-as-usual" arrangements are being sought

where possible. Draft templates and specifications are to be incorporated into the National CDEM Plan drafts.

CDEM Groups will be supported by National CDEM Plan arrangements. The national arrangements to support Group CDEM will be indicated in the National CDEM Plan. The Minister's review of Group CDEM Plans, being carried out by MCDEM staff, is an important part of this process and has been aiding alignment of Group and National expectations and plans.

The National CDEM Plan is to support and be supported by other National Emergency Management plans.

MCDEM is responsible for leading the development of the National CDEM Plan. Other agencies are mandated to maintain or lead development of other National EM plans. An example is the Ministry of Health's development of the National Health Emergency Plan (available at www.moh.govt.nz/nhep). Eliminating overlap, and more importantly, gaps, between the National CDEM Plan and other EM plans (e.g. Health, Agriculture, Fire, Police, Transport) is being actively addressed.

Electronic management and publishing of the National CDEM Plan includes managing the files of content and also includes hard-copy printing and electronic publishing. Trials have been completed and an electronic publishing process has been identified. The hardcopy printing and electronic publishing is expected to use software which allows for electronic outputs in a variety of formats, for printers, for printing, and for electronic publishing, including via web-browsers and hand-held computers.

Consultation with the CDEM Sector about the National CDEM Plan will be focused in March - April 2005.

Key CDEM staff, at both Group and national levels, should plan on reviewing, commenting on, and work-shopping, the National CDEM Plan over March - April 2005.

Contributions or submissions regarding the development of the National CDEM Plan can be made at anytime via a member of the Working Group or through Peter Wood, Emergency Planner, National Plan (Peter.Wood@dia.govt.nz).

Students Examine Emergency Services Training

By Chris Webb, Corporate and Development Manager

As part of a third year Human Resource Development course, a group of Victoria University students, in association with New Zealand Association for Training and Development (NZATD), undertook research to identify trends in the local training industry. Four students, with an interest in the emergency services sector, interviewed representatives from the Ministry of Civil Defence & Emergency Management, Police, Fire Service, and St. John.

Overall, they found that needs assessment within the emergency services is characterised as a thorough, systematic, and continuous process with a strong emphasis on task analysis. Competency modelling is becoming commonplace, and there is a trend towards greater use of new technology in training, such as virtual reality simulators and e-learning. A wide variety of training services are provided, most of which are delivered in-house. Of



The participating students and MCDEM staff pictured above: (from left) Chris Webb, Fox Liu, Melanee MacPhee, Kelly-Rose Cowan, Rachel Dawson, and Tom Roche.

the small percentage of training that is delivered via external providers, the key content focus is on leadership development. The organisations' approach to training assessment tends to focus on formal examination. However, there is a move towards greater workplace assessment that is linked to the New Zealand Qualifications Authority (NZQA) Unit Standards Framework.

Raising Awareness and Preparedness

CDEM in Schools project out for tender

The CDEM in Schools project is progressing well. The project was submitted for tender via the Government Electronic Tender Service (GETS). The invitation to tender will be open until 15 March 2005, and the successful tender will be selected in April 2005.

The CDEM in Schools project will focus on the creation and review of a resource that is curriculum appropriate, interesting to children, and inspires "practical action that children can take to promote preparedness." The project will be implemented in three phases over several years.

Phase One includes the development of a brand and strategy, identifying promotional opportunities with schools and the educational sector, enhancing the existing Kids World section of the www.civildefence.govt.nz website, with materials written for the target audience, and developing strong working relationships with the Ministry of Education.

Phase Two includes further development of the Kids World website and promotion of the website materials to schools in January 2006. Also covered is working with partners and independent writers to develop a series of curriculum based text resources

written for specific audiences, which teachers can download, print and incorporate into existing curriculum and teaching schedules.

Phase Three covers the development, production and distribution of printed handbooks and/or CD-ROMs, further development of online and interactive resources, and training and professional development workshops for regional civil defence staff and teachers to maximise use of the resources.

A full version of the request for tender can be viewed at www.gets.govt.nz. Current updates on progress with the project can be viewed on the Ministry website under the CDEM in Schools project.

Update on Docudrama

A television production company (Isola Productions) has been awarded NZ On Air programme development funding for a TV One docudrama to be called "Are You Ready". It is expected to air in mid-2005 and will be a two-hour programme that tests New Zealanders' awareness and preparedness for earthquakes, severe weather events and volcanic eruptions. The format will centre on a quiz format studio event with celebrities and include the use of actual events footage, mock scenarios, interviews with relevant agencies and people in their homes. The Ministry has been working with the producers on content development and providing contacts within the sector, as well as leads on civil defence activities at the various councils.

Civil Defence in High Schools

By Jock Robinson, Palmerston North City Council

Presenting civil defence education programmes to high school students can be a challenge. Without exciting videos to grab their attention, this particular age group is not the easiest to talk to about being prepared for emergencies.

In an attempt to get the CD message to these young teenagers, Palmerston North City Council has been running Civil Defence modules with high schools for a number of years. Designed to provide life skills, with an emphasis on the practical hands-on elements of basic CD rescue, the scope of these modules covers:

- Communications
- Teamwork
- Leadership
- Map reading / navigation
- Initiative
- Safe working practice
- Light rescue
- Personal preparedness

The modules have been structured to fit into the



Students taking part in a two-point stretcher lower activity

school term's timetable and have been part of the Girls High and Awatapu College curriculum since 1993.

The reward for the training is the extension of an invitation to local secondary schools to enter a team in the Inter-Secondary Schools Civil Defence Rescue Competition. This year, three high schools, Freyberg, Awatapu & Girls High, took up the challenge.

Teams took part in search and rescue activity, a two-point stretcher lower activity, and a mass casualty activity. Palmerston North Girls High was awarded with CD Rescue Trophy, along with the CD Initiative Cup. Josh Daniel of Awatapu College won the CD Leadership cup.

A positive spin off of these modules is that some students go on to volunteer with their local CD organisations.



The winning team of Palmerston North Girls High carry an injured worker from the servicing tunnels of the wastewater treatment plant

Tsunami Interactive Display Opening

The Minister of Civil Defence Hon George Hawkins was in Napier at the National Aquarium on 9 November 2004 to open the first tsunami display and interactive learning centre in New Zealand. The display has been developed to inform visitors to the aquarium of the risks caused by tsunami.

The display is interactive and shows how tsunamis develop and how they travel to the coast. Users can view different levels of information showing maps, diagrams and photographs, all through a touch screen. The display also has information on what action



The new interactive tsunami display was officially opened by Hon George Hawkins on 9 November 2004.

people should take in the event of a tsunami affecting New Zealand.

The Mayor of Napier Barbara Arnott, and the Chairman of Hawke's Bay Regional Council Eileen von Dadelszen attended the opening.

Also at the opening were Bill Pendlebury and his wife Gill. On May 24 1960, Bill, age 11, and his family survived the tsunami that hit the

inner harbour of Napier. Asleep in the family's caravan, the family awoke to find a flood of seawater.

"I was floating around in some water and I didn't have a clue what on earth was going on so it was a little bit scary." Bill recalls.

Hawke's Bay Regional Council developed the tsunami display, with assistance from the Institute of Geological & Nuclear Sciences, the National Institute of Water & Atmospheric Research, the Earthquake Commission, and the Ministry of Civil Defence & Emergency Management.



(From left) Gill & Bill Pendlebury, Lisa Pearce, and Chairman of Hawke's Bay Regional Council Eileen von Dadelszen

Drop, Cover and Hold still the best advice

The advice from civil defence emergency management and the NZ Society for Earthquake Engineering was issued in response to a widely circulated email by a self-professed rescue expert. Information in the email contradicts current advice on what to do in an earthquake.

The email source has been discredited in the US, where it originated but the emails have been virulent enough to create some public concern both in the US and in New Zealand. This prompted the Ministry, in cooperation with the New Zealand Society for Earthquake Engineering to take steps to clarify the best practice advice for New Zealand.

Standard advice in New Zealand for what to do in an earthquake is to drop, take cover under a sturdy piece of furniture, and hold on, or shelter against an interior wall away from windows, bookcases etc. That advice still holds true and has not changed says John Norton, the Director of Civil Defence Emergency Management.

"This practice will protect people in most earthquake scenarios. This is the drill practiced by schoolchildren, and what civil defence agencies have consistently promoted around the country.

"In a severe earthquake it is absolutely vital that people respond immediately. Confusion about what to do can result in people getting seriously injured or killed."

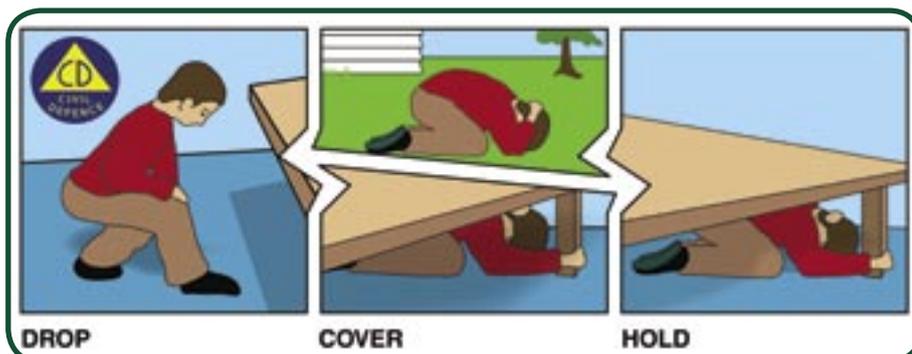
Mark Stirling, President of the NZ Society for Earthquake Engineering and a scientist with Geological and Nuclear Sciences says that the 1931 magnitude 7.8 Hawke's Bay earthquake caused significant damage and resulted in the introduction of the first New Zealand earthquake-resistant design standards.

"In New Zealand we are fortunate to have sound building codes and earthquake resilient structures and can have some level of confidence in our buildings.

"But we know from recent international tragedies such as the ones in Kobe, Japan in 1995, and in Taiwan in 1998, that the best building codes in the world do nothing for buildings built before modern codes were enacted. Fixing problems in older buildings—retrofitting—is in most cases the responsibility of the building's owner. However, small improvements can make big differences."

"Ground vibrations during an earthquake are seldom the direct cause of death or injury. Most earthquake-related injuries and deaths result from collapsing walls, flying glass, and falling objects caused by the ground shaking," says Mr Stirling.

Detailed information on what to do, as well as a flyer for civil defence staff to download and distribute is available at www.civildefence.govt.nz. Also, the www.gns.cri.nz and www.nzsee.org.nz sites offer information on earthquakes.



Ministry Hosts Hong Kong Delegation



(From left to right) Daniel Y.C. Leung, Pak K. Kwan, Chris Webb, Robert M.K. Chan, David Coetzee, James W.S. Ho, and Tom Roche

In January 2005, New Zealand's emergency services and civil defence organisations were given the opportunity to share operational and professional development expertise with members of Hong Kong's Civil Aid Service (CAS).

The Hong Kong delegation visited to study New Zealand lessons learnt in operational command, and in the management and training of volunteers. Led by Robert MK Chan, Chief Staff Officer and Deputy Commissioner (Operations) of the Civil Aid Service, the group explored training opportunities in New Zealand for the permanent staff and volunteer members of the CAS.

During their visit, the CAS members met with staff of the Ministry of Civil Defence & Emergency Management, and toured the National Crisis Management Centre in the Beehive.

The group also explored educational, training and professional development opportunities with the New Zealand Fire Service, Urban Search & Rescue, Wellington Emergency Management Office, Massey University, Environment Canterbury, and the Institute of Geological & Nuclear Sciences.

Recovery Workshops

By Tom Roche, Emergency Management Advisor (Education & Development)

During October - November 2004, the Ministry of Civil Defence & Emergency Management delivered four 'Recovery Workshops' in Auckland, Wellington, Christchurch, and Dunedin. The workshops, entitled 'Community-Based Recovery Awareness,' were a planned initiative to follow up on the successful 'Recovery Symposium' held in Napier in July 2004. It was also an opportunity to reinforce the importance of recovery while the impact and visual images of recent emergency events were still in the focus of the wider community.

The purpose of the workshops was to provide a brief overview of disaster recovery, emphasising key principles and concepts which underpin all aspects of recovery planning, management and service delivery; and to explore what was needed for a community to fully recover from the impact of a major disaster; to identify gaps in community planning, and to determine who needs to be involved in the process.

The target audiences for the workshops were national, regional and local representatives of organisations and agencies in the community who have a role in disaster recovery management, planning and service delivery.

Keynote speakers were drawn from representatives of local and central government that have had operational experience in recovery management during the emergency events, including the recent flood events in the lower North Island and the Bay of Plenty.

Following a disaster, affected communities depend on an effective and efficient recovery process. It is a complex social process and is best achieved when the affected community exercises a high degree of self-determination. The delivery of these Community-Based Recovery Awareness Workshops is a significant step in developing regional capability.

The workshops have raised an awareness of the issues involved in recovery, but more importantly have reinforced the precept that while recovery must happen through the affected community, central government has a significant role to play. In a major disaster the majority of central government agencies will be involved.

In the near future a number of documents will become available to support recovery planning activities. Many of these documents will be available on the MCDEM website www.civildefence.govt.nz.

New CDEM Appointments

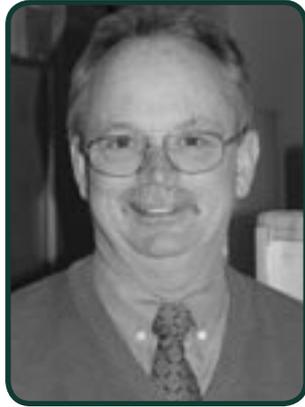
Jim Stephens, Project Manager, Auckland CDEM Group

With over 30 years of NZ Fire Service experience, Jim Stephens brings a comprehensive knowledge of operations within the public service to his new role as Project Manager, Emergency Management Office with the Auckland Civil Defence Emergency Management Group.

While at the Fire Service, Jim acted as Fire Service Inspection Officer, Principal at the Fire Service College, Area Chief Fire Officer (Area Commander) Northland, Area Chief Fire Officer BOP, and Regional Manager – Commander Bay Waikato Fire Region.

Some of Jim's key accomplishments include the formation of a home fire safety education course involving a partnership with external communication companies, completion of the first rural fire suppression contract to be completed since the review, launching of "Operation Home Guard", a fire safety in the home initiative, and the establishment of a fire safety education trailer in Northland.

Jim's immediate priorities in his current role are to complete the Auckland CDEM Group plan on time, enhance the Group's relationships in and outside the CDEM sector, and to provide leadership in coordination of the Group's activities.



Barbara Gladding Emergency Management Advisor (Professional Development)

Barbara Gladding joins the Ministry's professional development team as an Emergency Management Advisor. Barbara brings a varied background including roles in education, social marketing, visual production and industry training.

Since leaving teaching in 1986, Barbara's roles have included CEO of an Industry Training Organisation (ITO) in the emergency sector, an advisor at Avalon, TVNZ and various community education roles. She retains a minor role in a social marketing company.

Barbara is looking forward to enhancing the sector's professional development opportunities. 'I like to carry out structured consultation throughout the life of a project or initiative – from concept to evaluation, and I look forward to working with people in the sector to engage them in the work I do', said Barbara. 'Being appointed to the Ministry coincided with the Boxing Day tsunami and the series of earthquakes felt in New Zealand. It made me realise just how vulnerable each household can be. It occurred to me that much of the emergency management work done on a day-to-day basis goes unnoticed – and even in a crisis the training and skill development is an area that is undervalued. So I look forward to helping the sector make a difference where and when it counts', says Barbara.



Emergency Averted in Seaside Town

By Jacqui Ferrel, Horizons Regional Council

Horizons Regional Council had been monitoring river levels in Manawatu – Wanganui closely over the weekend of the 16 – 17 October 2004. Local residents alerted Horizon's emergency management staff to a stop bank on the lower reaches of the Manawatu River, near the Foxton Beach settlement, that was struggling to hold water.

High river flow and flooding in February 2004 and subsequent months caused erosion that changed the river alignment, resulting in flows attacking the river bermland and the adjacent stop bank.

Horizons Emergency Operations Centre was activated at 1930 on Sunday 17 October and remained established until the next day. Foxton Beach residents, Horizons District Council staff, Horowhenua District Council staff and contractors worked throughout the night.

To help protect the township, earthmoving equipment was acquired and, under temporary lights, an 80m long interim



The changing river alignment resulted in erosion of the original stopbank.

stop bank was created behind the failing stop bank. Horizons' supplies of sandbags were made available and the Linton Army Camp was on 2-hour notice to respond. Residents were made aware of the situation and the potential need to evacuate. Local radio broadcasted regular updates to the area. Fortunately, high tide passed without major incident and both stopbanks held.

The temporary stop bank remains in place and five and a half thousand tonnes of concrete riprap have been stockpiled for repairs. A haul road is also to be constructed across farmland to provide access to the area for workers

reinforcing the stop bank. During the construction season, both the original and temporary stop banks are to be torn down and a new one built to accommodate the new river alignment.

In several sites around the region, changing river alignment and the riverbed raising caused this incident, and is a direct result of exceptionally high flows travelling down waterways over the past year. Because of this, Horizons technical and emergency management staff face big challenges in predicting and responding to potential flood events.

“Earthquake Day” at Maoribank School

By Esther Griffiths,
Upper Hutt City Council

Upper Hutt City Council and Maoribank School have piloted a new education programme for the Hutt Valley. Pupils, parents and staff of the school planned and operated a Civil Defence exercise based on a post-earthquake scenario. Some students were made up as casualties while others participated in teams carrying out different emergency roles such as welfare and first aid. Upper Hutt’s emergency services community with support from Hutt City Council, Wellington Emergency Management Office, Hutt Valley District Health Board and Victoria University Rescue team, aided with the exercises planning and execution,



Constable Chris Best escorts a group of students during the exercise

“It was the organiser’s enthusiasm and support that initially got the school’s staff excited about piloting this programme and it was an excellent learning experience for everyone” says principal Ruth Nicholas, “All the kids learned a lot about emergency management and also enjoyed themselves, particularly the ‘victims’.”

The scenario called for an earthquake to hit at 9.45am, during a school assembly. All of the staff and students performed the ‘turtle drill’ until the shaking stopped and then conducted an emergency evacuation. Following morning tea, a Civil Defence Centre was established. The Fire Service’s ‘Brown Watch’ crews from Trentham and Rimutaka stations arrived at the school and assisted the rescue teams with the location and transport of casualties to the first aid station. The casualty simulation’s make-up was applied by Victoria University Rescue team members and proved a major highlight for many of the pupils.

The exercise, devised by Southland District Council and Invercargill City Council, provides schools with the opportunity to test emergency procedures in their specific environment, and involves their staff, students, families and local community. As a part of the exercise, participating schools are issued a CD-ROM that contains exercise schedules and a collection of emergency management resources to help inform and educate pupils and staff.

The Maoribank School exercise was positively evaluated by all of the agencies that were involved. In the future, Upper Hutt City Council intends to extend the programme to two schools per year and will be encouraging other councils to make a similar commitment.



David Etchells from Upper Hutt City Council coaches a group of students during an injury simulation.



A student participating in an injury simulation is carried to “first aid” by school staff and members of the fire service.