

# A City's Disaster Recovery: The role of a Healthy City Initiative



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*A CDHB led intersectoral partnership  
with 200+ signatory organisations*

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# A City's Disaster Recovery: The role of Healthy Christchurch

## 1 Introduction

This report describes the response of a healthy cities initiative to the first two years of disaster recovery. In 2010 and 2011 Christchurch, New Zealand, experienced five major seismic events, two of which resulted in widespread destruction. While this report focuses on Christchurch the events affected the wider Canterbury region and many of the initiatives identified have a wider reach.

Following the first event in September 2010, Healthy Christchurch (HC) recognised that it had a role to play in assisting community organisations to subsequently support their communities in the recovery.

Healthy Christchurch is a Canterbury District Health Board (CDHB) led collaboration of groups from a variety of sectors who are committed to working together to promote the health of the people of Christchurch. The focus of our current work programme is on the recovery of Christchurch. This involves wide collaborative efforts providing support and advice to policy and planning processes, supporting community resilience initiatives, and ensuring a sustainable, accessible information portal for recovery practice and strategies.

The focus of this report is on the contributions made by HC to the maintenance of community resilience in the city. This work was informed by a review of the literature around community recovery initiatives carried out by the CDHB in 2010<sup>1</sup> which concluded that recovery happens best when it is community owned and driven.

### **The report touches on a range of initiatives under the following headings:**

(Note some initiatives impact on more than one area)

- **Needs Assessment**
  - Community Wellbeing & Resilience Meetings & Report
  - Commemoration of the February 2011 event
  - Christchurch City Health and Wellbeing Profile
  - Literature Review – The Social Integration of construction workers into a recovery setting
- **Communication**
  - Community Wellbeing & Resilience Meetings & Report
  - One Stop Shock
  - The Healthy Christchurch Website
  - Warmer Canterbury
- **Psycho-social Recovery**
  - The Wellbeing Game
  - The Wellbeing Campaign
  - Take Time to Smell the Roses
  - River of Flowers
  - Wellbeing & Resilience Hui
  - Places of Tranquillity
  - Community Dinners

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<sup>1</sup> Review of Community Recovery Initiatives, Community & Public Health, CDHB, 2010. [http://www.healthychristchurch.org.nz/media/42273/eq\\_reviewofcommunityrecoveryinitiatives101008.pdf](http://www.healthychristchurch.org.nz/media/42273/eq_reviewofcommunityrecoveryinitiatives101008.pdf)

- **Recovery Tools**
  - The Wellbeing Game
  - Integrated Recovery Planning Guide

## **2 An Earth Quaking Christchurch**

For those out of town and more so out of New Zealand it is difficult to understand the impact of the multiple events and continual aftershocks occurring in Christchurch since the first in September 2010. The loss of lives and injuries is life changing, the impact to the buildings and infrastructure significant and the psychological effect to community wellbeing is enormous and on-going.

On September 4<sup>th</sup> 2010 the first earthquake hit at 4.35am striking the Canterbury region in New Zealand's South Island. This 7.1 earthquake was centered near rural Darfield just outside of Christchurch and caused damage to buildings, injuries and loss of power and sewer lines for many across Canterbury. The earthquake was reported to be felt across the South Island and the lower and central North Island. The fact that it occurred in the night time which contributed to no fatalities.

On Boxing Day 26<sup>th</sup> December 2010 a 4.9 hit the central city and was one of many largely felt shallow aftershocks that day damaging some buildings and closing streets in the central city.

The most damaging earthquake, a magnitude 6.3 earthquake hit at 12:51 pm on Tuesday, 22 February 2011. The intensity felt in Christchurch was Mercalli 8. The peak ground acceleration (PGA) in central Christchurch exceeded 1.8g times the acceleration of gravity and a shaking intensity equivalent to Mercalli 10+. This is the highest PGA ever recorded in New Zealand, is also one of the greatest ever ground accelerations recorded in the world and the highest in a vertical direction.

The government immediately declared a state of national emergency, which stayed in force until the 30 April 2011. There were 185 fatalities including nationalities from more than 20 countries. 133 people were lost when two modern buildings collapsed, eight were killed when masonry fell on a bus in a central city street and an additional 28 people were killed in various places across the city centre. 12 were killed in suburban Christchurch. Between 6,600 and 6,800 people were treated for injuries. The earthquakes downed phone lines, triggered wide spread power and water outages for days and left many without sewerage for months. While the final figures are not yet completed it is likely that at least 10,000 houses will need to be demolished, and well over 100,000 have some level of damage. Significant liquefaction occurred in saturated soil areas across eastern suburbs causing the ground to behave like liquid. The silt pouring out of the ground like mini volcanoes produced around 400,000 tonnes of silt, flooded suburbs, opened sink holes and caused massive damage to roading, infrastructure and limited access to areas by vehicle. Liquefaction damage and potential future aftershocks mean that some parts of Christchurch cannot be rebuilt on.

The next major event following February 22<sup>nd</sup> was a large aftershock on 13 June which caused considerable additional damage including significant liquefaction. The earthquake caused power outages, which left around 54,000 households without power. Forty-six people suffered injuries, and one elderly man died after being knocked unconscious. The fifth main event occurred on 23 December 2011 where many hard hit suburbs were impacted again with liquefaction.

In total since September 2010 a total of 10, 569<sup>2</sup> aftershocks have hit Canterbury with those over magnitude 3.0 (easily felt) totaling 3398. The aftershocks continue with 1063 since the last major event in December<sup>3</sup>.

The total cost to insurers of rebuilding has been estimated at NZ\$20–30 billion, making it by far New Zealand's costliest natural disaster, and the third-costliest earthquake (nominally) worldwide.<sup>4</sup>

### **3 Needs Assessment**

#### **3.1 Community Wellbeing & Resilience Meetings and Report**

Following the September 2010 earthquake, the Ministry of Social Development (MSD) convened a series of meetings for the community and voluntary sector in Christchurch. The purpose was to identify the needs of the sector so they could contribute effectively to both the recovery and maintenance of community resilience. At the first of those meetings it was recognised that small, locally-based groups and agencies had a key role in supporting the recovery of their local communities.

A subsequent meeting requested that the Council of Social Services in Christchurch (CoSS) take responsibility for finding out about the needs of groups and their communities and to capture what was happening. The project was developed by CoSS and HC, with support as requested from Christchurch City Council (CCC), Mental Health Foundation (MHF) and the Department of Internal Affairs (DIA). A number of other agencies contributed to the meetings, including Community & Public Health (CPH), Civil Defence Emergency Management, MSD and Earthquake Support Coordinators.

The seven meetings held from December to February 2011 had two purposes. The first was to provide groups with information about building personal and community resilience, recovery management and recognising potential times of higher community stress. Secondly to support attendees in small groups to describe how their communities and their group or organisation had been affected by the earthquake and what they had done to respond to community need. They then identified the support their community was still seeking and what capacity they had to meet that need.

The majority of those who attended were representatives of community groups and NGO service providers. These included social service providers, community development groups, churches, schools, pre-schools, and neighbourhood groups. Other attendees included individuals from affected communities, city councillors and community board members, and central or local government staff.

The total number of participants at the meetings was approximately 119, representing 74 individual non-governmental organisations. Feedback from the participants was positive with a high number expressing that they appreciated the opportunity to share their stories and experience. They also highly valued the recovery information provided.

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<sup>2</sup> <http://www.christchurchquakemap.co.nz/> Accessed 7<sup>th</sup> August 2012

<sup>3</sup> <http://www.geonet.org.nz/canterbury-quakes/aftershocks/> Updated August 7<sup>th</sup> 2012

<sup>4</sup> Facts are still being collected for these ongoing events but this report has used information from online media releases as well as a collection of facts on Wikipedia [http://en.wikipedia.org/wiki/2011\\_Christchurch\\_earthquake](http://en.wikipedia.org/wiki/2011_Christchurch_earthquake) . Other useful sites are [www.eqc.govt.nz](http://www.eqc.govt.nz) and [www.cera.govt.nz](http://www.cera.govt.nz)

A report was written about the needs of community agencies in supporting community wellbeing and recovery<sup>5</sup>.

### **3.2 Commemoration of the February 2011 event**

The first anniversary of the February 22<sup>nd</sup> earthquake that took 185 lives, injured many and would leave thousands with broken homes required a sensitive approach. In order to better understand the communities needs the Canterbury Earthquake Recovery Authority (CERA)<sup>6</sup>, who has established strong links with and signed up to Healthy Christchurch, requested an online poll.

The Healthy Christchurch website provided the tool and the poll was promoted through the network and by CERA through its website and Facebook. The poll covered topics such as whether people were wanting to go to the large community event, have a day off work, a local event or stay at home.

A TradeMe (online auction site) message board was also started by the community and the comments made were considered along with the poll. The poll showed that many Cantabrians expected an event in Hagley Park (the major city park) similar to a memorial service held in 2011. A significant number of respondents however supported having local events that allowed communities to be together to commemorate and to look to the future (see River of Flowers below).

### **3.3 Christchurch City Health and Wellbeing Profile**

The Christchurch City Health and Wellbeing Profile has two parts to it. The first is a snapshot capturing information about Christchurch's population and the factors that influence their health and wellbeing. The data collection for this was largely undertaken prior to the earthquakes (from September 2009-2010) but now provides an even more timely snapshot of what people valued about life in Christchurch. The Profile was developed through the Healthy Christchurch interagency network and included a survey and public consultations.

The second part is producing up a number of key issues papers based on the things that were raised in developing the profile. These issues were identified as factors which influence people's health and well-being in the city. Health begins where we live, work, learn and play. The Profile is a reminder that everyone has some role to play promoting Christchurch as a good place to live. A wide range of data about what influences health and wellbeing in Christchurch has been gathered and as such is a useful tool for planners, government and other agencies, communities and individuals to identify priorities. The conversation started in the consultations will continue as people respond to the Profile. The key issues summaries will be updated regularly as new data becomes available to provide a reliable source of information of over 40 key issues identified.

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<sup>5</sup>Supporting community resilience in post-quake Christchurch, Council of Social Services and Healthy Christchurch, July 2011. <http://ccoss.org.nz/wordpress/wp-content/uploads/Supporting-Community-Recovery-Final-Report-July-2011.pdf>

<sup>6</sup>Christchurch Earthquake Recovery Authority. <http://cera.govt.nz/>

The profile and all key issues papers are available from the HC website<sup>7</sup>. As Christchurch rebuilds both socially and structurally from the devastation of the September 2010 and February 2011 events this body of work will offer insights and evidence which can help shape a recovery that prioritises health and wellbeing of Christchurch citizens as the measure of success.

### **3.4 Literature Review – Social Integration of workers**

As part of the rebuild of wider Canterbury there will be a large workforce arriving in the city. Social integration of workers during rebuild is a priority for CERA. Healthy Christchurch is working alongside CERA to provide support. The first stage is for a literature review that will both inform the planning process and assist in designing integration strategies.

## **4 Communication**

### **4.1 One Stop Shock**

The provision of information at the community wellbeing and resilience meetings was highly valued. However many commented there was a plethora of information around but many people and agencies were not in a state to wade through it to find what they needed. There was also some criticism of many information sources suggesting to go to a web address for more information, when thousands were without power.

In this context HC created a printable one page two sided flyer with an essential list of key contacts, services, funding and financial support and free counselling. This was updated weekly over the first few months then monthly. It was downloadable via the Healthy Christchurch website for community organisations to hand out and distributed at many public meetings.

After a year with multiple earthquake events a One Stop Shock Flyer was created for the Refugee & Migrant background communities<sup>8</sup>. This was undertaken in collaboration with the Culturally & Linguistically Diverse Communities inter-agency committee.

### **4.2 Healthy Christchurch Website**

With many communities and community organisations reiterating the lack of effective communication and information, HC identified a clear role in distributing information through its website and weekly news posts which are sent to around 200 signatory organisations and over 400 key contact people.

Website information included links to resources such as the literature review of 'best practice literature and other significant international recovery documents'<sup>9</sup>. While web

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<sup>7</sup>The Christchurch City Health Profile, Canterbury District Health Board, 2011 <http://www.healthychristchurch.org.nz/city-health-profile.aspx>

<sup>8</sup>One Stop Shock, Earthquake Recovery Information sheet [http://www.healthychristchurch.org.nz/media/45847/onestopshock\\_111208cald.pdf](http://www.healthychristchurch.org.nz/media/45847/onestopshock_111208cald.pdf)

<sup>9</sup>Long Term Planning after Disasters. Community and Public Health, CDHB, 2011 [http://www.healthychristchurch.org.nz/media/42276/eq\\_ltplanningafterdisastersfull.pdf](http://www.healthychristchurch.org.nz/media/42276/eq_ltplanningafterdisastersfull.pdf)

access was still an issue for some members of the public most agencies were able to access this information.

Weekly news posts were already a key aspect of HC communication strategy however the system was overhauled to be more effective and became a core component of the website. Approximately 20 relevant items covering recovery and earthquake information, services, links, events and funding were posted each week and available immediately on the website. They were also emailed weekly directly to HC signatories to distribute throughout their organisations and networks.

### **4.3 Warmer Canterbury**

Keeping warm and well for this winter (2012) is the current focus for many Canterbury organisations and individuals. Christchurch traditionally has a hard winter but on top of this many people are still living in damaged houses and temporary accommodation.

Healthy Christchurch wanted to support this by acting as a portal to share information and planning activities. One aspect involved facilitating a collaborative working group of key agencies to ensure they were able to support each other's initiatives thereby increasing reach and reducing any potential duplication. This project also involved agreeing key messages for distribution and CERA and HC co-ordinated the production and distribution of a range of winter warmth resources<sup>10</sup>.

When thinking about warmth and wellness during winter, it is about more than just warm homes. Other things to consider and plan for include: fuel security, social isolation, mental well-being, immunisations, and effective transport.

The HC website aims to provide accessible and relevant information so that agencies and individuals have a way of knowing what winter-related services are available within the community. It is also a place to share existing or upcoming winter-focussed programmes that can assist individuals and communities to manage during the cold months.

## **5 Psycho-social Recovery**

### **5.1 The Wellbeing Game**

The inaugural Wellbeing Game began during Mental Health Awareness Week (10th - 16th October 2011) and went for four weeks. It was pretty easy. People joined as an individual or formed a team of up to ten people; they logged their hours and activities, under the 5 strategies below, onto the website and watched the hours grow. Together we logged **7,410** happiness/wellbeing hours for Christchurch!

The 5 strategies for wellbeing are based on international evidence researched by The Foresight Project in the UK<sup>11</sup>. Applying these five easy things to your life will improve your wellbeing and help you on the way to happiness.

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<sup>10</sup>Winter Warmth brochures.<http://www.healthychristchurch.org.nz/winter-warmth-and-wellbeing.aspx>

<sup>11</sup>The Foresight Project, UK <http://www.neweconomics.org/projects/five-ways-well-being>



In 2012 the Wellbeing Game is getting an overhaul so it can be the best online game ever. We are also piloting the game in two settings – a school and a workplace over June/July to further input into the development of the game, ready for October's Mental Health Awareness Week. We have interest from several large government organisations to be involved this year as well as many smaller NGOs.

## **5.2 Five Winning Ways to Wellbeing Campaign**

This is a Public Health social marketing wellbeing campaign. The key partners are the MHF, CPH, and CERA and it is funded by MSD and the Ministry of Health. The campaign aims to increase wellbeing in the wider Christchurch population during the recovery. Multi sector planning and advisory groups have both been established and a market research company has been contracted to undertake the research which the groups have identified is required in order to shape appropriate social marketing of the 5 ways to wellbeing in the Canterbury context. The aim is to launch this in early December 2012.

## **5.3 Take Time to Smell the Roses**

In May 2011, HC hosted an afternoon tea for volunteers, community leaders and community based managers to give a little time out and some much needed inspiration and laughs. Two signatories CoSS and MHF got together with HC to make this happen.

These are the wonderful people who are looking after our communities, neighbourhoods, streets, neighbours, friends and family. Many of these people had been working evenings and weekends since September. Over 8 months! Recovery is going to be a long haul and we do not want these people to get exhausted and burn out.

There were opportunities to share stories of resilience and to celebrate successes with peers. The MHF presented some practical strategies for building flourishing communities and looking after your wellbeing.

Peter Fitzsimons, a high calibre International Speaker gave his time and had the nearly seventy guests in hysterics in about 1 minute of starting to talk. He gave it his all giving line after line of hilarity and finishing off with some inspirational words told to him by Sir Edmund Hilary.

## 5.4 River of Flowers

The River of Flowers was initiated and led by HC in collaboration with the Avon-Otakaro Network (AvON)<sup>12</sup>. The project was a direct response to the Commemoration day poll (see above).

The Prime Ministers Office and the Christchurch City Council were in the midst of planning a memorial event at the largest central city park, Hagley Park. However, a significant number of respondents had requested local events that allowed communities to be together to commemorate, and to look to the future.

The River of Flowers was our collaborative attempt to provide these opportunities for people to commemorate the day in their own way and with their community. Fifteen sites were hosted by local community groups along the Avon, the cities major river which flows through the central city and out to the eastern side of Christchurch where the most devastation occurred.

At any time during the day of the 22 February 2012, people brought flowers to drop in the River and wrote messages on a Tree of Hope. From 12.30 to 1.30pm, local community groups hosted the sites and included speeches, singing, silence and connectedness. At 12:51 two minutes silence was held, followed by the release of red helium-filled biodegradable balloons.

The River of Flowers<sup>13</sup> was an opportunity to:

- come together as a city through a river of flowers
- let go through dropping flowers into the river
- hold two minutes of silence to remember those who have died, been injured, or who have lost their homes
- write notes of hope and post them on a tree of hope
- acknowledge the importance of the river(s) in the life and heritage of the city
- give a token of respect back to the river(s)
- show the connections between communities - particularly those most affected
- celebrate our strength - resilience and supporting one another.

## 5.5 Wellbeing & Resilience Hui

Six months after the national emergency finished and the disaster response phase had moved forward into recovery, HC hosted a collaborative Hui (meeting) with the MHF, CoSS and CPH. This was an opportunity for community organisations and sectors working with communities to get together and network while also learning about four effective recovery tools. Three of these were HC initiatives included in this paper : The Wellbeing Game, Community Wellbeing and Resilience Project and the Integrated Recovery Planning Guide. Another resource The 'Before, During & After' – Emergency preparedness resource was presented by CPH.

Workers appreciated some time out, real tools helpful and relevant to their work and a lovely lunch.

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<sup>12</sup>Avon-Otakaro Network.<http://www.avonotakaronetwork.co.nz/index.html>

<sup>13</sup><http://www.healthychristchurch.org.nz/focus-areas/wellbeing/river-of-flowers.aspx>

## 5.6 Places of Tranquility

Imagine the tranquillity of a Japanese garden, a Buddhist fountain meditation area, a walking meditation circle or a Korean undulating park and playground. Or perhaps a green maze leading to an area of contemplation, a place of tranquillity and stillness amidst the chaos and impact of the disaster that has occurred in Christchurch.

Healthy Christchurch led this innovative collaboration which will create six gardens of beauty and peace to fill in some of the gray demolition sites across Christchurch.

This has been undertaken in partnership with Maori, Pacific and the ethnic minority communities and as such incorporates important traditions, cultures and spiritual philosophies. This will ensure that these communities' voices and presence is more visible in the rebuild of our city.

Lincoln University landscape architecture students created 40 beautiful designs as entries for the Places of Tranquillity<sup>14</sup>. The competition concluded with awards being presented to the successful students at the HC Hui on May 31 2012. Six winning designs were chosen through voting via the HC website or in person at two venues in the city. In total 990 votes were cast. Over winter the students will be allocated to two mentors. One will be an established landscape architect to support the students taking the drawings to practical designs. The other will be a community development mentor to ensure that the Maori, Pacific and cultural diverse communities are engaged with appropriately and effectively as the end users. They will also be supported by Greening the Rubble<sup>15</sup> who have expertise in temporary site development. The intersectoral project team will confirm sites and access sponsorship ready for a spring start.

## 5.7 Community Lunches

Mid-winter 2012 community lunches are being provided as a treat to ten NGOs who regularly provide community lunches to those in the hardest hit in the east of the City. Richard Till a celebrity chef, the Volunteer Student Army<sup>16</sup> along with the HC team are giving the staff a day off and a treat to the community who come along. So far the response has been tremendous with numbers requiring extra ovens, plates and cutlery being brought in. Numbers are averaging 80 coming for the community lunches.

Opportunities like these offer many resiliency outcomes. Community workers are acknowledged and get some respite, the community feels valued and for the mostly older community there is some intergenerational connection with young student volunteers. Volunteers also get the opportunity to give and earn a ticket to a volunteering concert<sup>17</sup>. Everyone has a wonderful time and leaves with a happy heart and warm tummy. Photos available on the HC website<sup>18</sup>.

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<sup>14</sup> <http://www.healthychristchurch.org.nz/focus-areas/places-of-tranquillity.aspx>

<sup>15</sup> <http://greeningtherubble.org.nz/wp/>

<sup>16</sup> [www.sva.org.nz](http://www.sva.org.nz) This is a student led recovery initiative following September 4<sup>th</sup> earthquake

<sup>17</sup> [www.theconcert.co.nz](http://www.theconcert.co.nz)

<sup>18</sup> [www.healthychristchurch.org.nz](http://www.healthychristchurch.org.nz)

## 6 Recovery Tools

### 6.1 Integrated Recovery Planning Guide

Integrated planning involves taking an holistic approach to addressing needs of communities to determine the most appropriate course of action. The earthquake recovery process, although complex, presents a unique opportunity to work towards improving the health and well-being of the community.

The Integrated Planning Recovery Guide<sup>19</sup> builds on existing work of the Canterbury District Health Board and the Christchurch City Council. Targeted questions aim to enhance constructive thinking and encourage innovation. It is designed to help us:

- plan in ways that build stronger more sustainable social, environmental and economic outcomes
- promote the health of all, and
- keep sight of the shared vision for stronger, healthier and more resilient communities.

Essential components of the guide are Health Promotion and Maori Health (Te Pae Mahutonga) frameworks. Free training in use of the Guide is available and able to be targeted for individual organisations.

8<sup>th</sup> August 2012.

Michelle Whitaker, Healthy Christchurch Co-ordinator



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<sup>19</sup><http://www.cph.co.nz/Files/IntegratedRecoveryGuideV2-Jun11.pdf>